



**Transelectrica®**  
Societate Administrată în Sistem Dualist

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# **MARKET MONITORING REPORT**

## **Market for Allocation of Cross-Border Capacities**

### **December 2019**

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ANRE - Romanian Energy Regulatory Authority

HHI - Herfindahl-Hirschman Index

BRP - Balance Responsible Party

BM - Balancing Market

DAM - Day Ahead Market

TSO - Transmission System Operator

DU – Dispatchable Unit

PN – Physical Notification

NDC - National Dispatching Center

C1 – The market share of the largest market participant

C3 – Total market share of top 3 market participants

NPS – Minimum number of residual generators

TTC – Total Transfer Capacity

NTC – Net Transfer Capacity

ATC – Available Transfer Capacity

Transelectrica, the Romanian Transmission System Operator, operates and monitors the activity of 3 types of markets: Balancing Market, Ancillary Services Market and Market for Allocation of Cross-Border Capacities.

Using the records from the markets data base, Transelectrica prepares daily, weekly and monthly monitoring reports. A part of the data included in these reports (those data which are not confidential) is published on the website **[www.transelectrica.ro](http://www.transelectrica.ro)**

# General Remarks

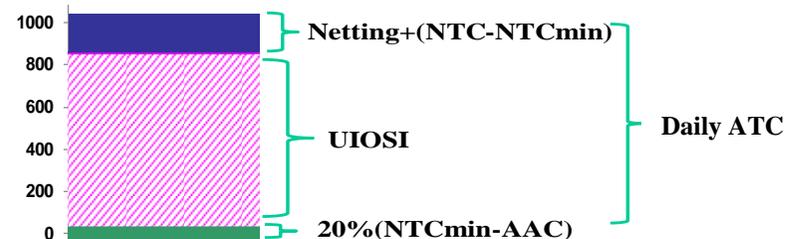


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- According to the agreements between Transelectrica and neighbors for year 2019 :
  - ✓ on the Bulgarian border, the bilateral coordinated allocation is done for 100% of total capacity by Transelectrica for daily auctions. Starting with 20.11.2019, implicit intraday allocation with continuous trading is organized on the Bulgarian border, due to the integration of Romanian intraday market in SIDC (Single Intra-Day Market). In the event of decoupling, no explicit intraday auctions are organized on RO – BG border; the “netting” is applied to daily and intraday allocation.
  - ✓ on the Hungarian border, starting with 20.11.2019 is organized implicit intraday allocation with continuous trading due to the integration of Romanian intraday market in SIDC (Single Intra-Day Market). In the event of decoupling, no explicit intraday auctions are organized on RO – HU border. Implicit daily allocations are held since the CZ-SK-HU-RO day-ahead market coupling. In the event of decoupling, MAVIR is in charge with the explicit daily auctions (shadow auctions) for RO-HU border. The “netting” is applied to daily and intraday allocation.
  - ✓ on the Serbian border, the bilateral coordinated allocation, is done for 100% of total capacity by EMS (Serbia) for daily auctions and by Transelectrica for long term and intra-day auctions. The “netting” is applied to daily and intra-day allocation. The intra-day allocation is done in six auction sessions for time intervals: 00:00-04:00, 04:00-08:00, 08:00-12:00, 12:00-16:00, 16:00-20:00, 20:00-00:00 CET.
  - ✓ UIOSI („ use it or sell it”) principle is applied on Hungarian, Bulgarian and Serbian borders.
  - ✓ starting with 01.01.2019, the long term auctions on Hungarian and Bulgarian borders are held by Joint Allocation Office (JAO) based on Allocation Rules for Forward Capacity Allocation (HAR) and border specific Annex. On these borders it is applied:

- ✓ reservation of a percentage of interconnection capacity for short term auction, offered capacity being calculated as 80% of the minimum of available capacities of all periods of the month;



- Transelectrica’s auctions are held on Damas platform, with euro currency trading;
- On Romania – Bulgaria, Romania – Serbia and Romania – Hungary border, the use of the physical transport rights is performed in accordance with the m:n nomination principle, for all time horizons.

# General Remarks



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- Long term auction results on the Hungarian and Bulgarian borders are provide by JAO and daily auction results on the Serbian border (auction prices, allocated capacities) are provided by the respective TSO.
- Usage of allocated capacity on Ukrainian and Moldavian border is restricted by Ukrainian TSO agreement and respectively by the approval of the distribution operator of the passive consumption islands.
- Monthly auctions for December 2019 were held as: import/export Hungary\*; import/export Bulgaria\*; import/export Serbia and import/export Ukraine for 01.12 – 31.12.2019.
- In December 2019 there were no auctions held on Moldavian border.

\* according to the allocation rules, monthly offered capacity was calculated taking into account the minimum of NTC's monthly values.



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# Market for Allocation of Cross-Border Capacities

## Monthly auction Results of 01 – 31 December 2019

	Prices [euro/MWh]	Capacities [MW]								
	Results	TTC	NTC	ATC	AAC	Reserved	Offered	Requested	Allocated	Final Rights*
<b>Hungary export</b> <i>01 - 31 December 2019</i>	0.75	600	500	150	350	34	154	1593	154	470
<b>Hungary import</b> <i>01 - 31 December 2019</i>	1.13	800	700	350	350	20	300	2247	300	630
<b>Bulgaria export</b> <i>01 - 31 December 2019</i>	0.35	650	550	401	149	20	340	1894	340	469
<b>Bulgaria import</b> <i>01 - 31 December 2019</i>	0.51	650	550	400	150	3	323	1705	322	469
<b>Serbia export</b> <i>01 - 31 December 2019</i>	0.43	500	400	200	200	-	200	629	200	400
<b>Serbia import</b> <i>01 - 31 December 2019</i>	0.41	800	700	500	200	-	500	1592	500	700
<b>Ukraine export</b> <i>01 - 31 December 2019</i>	0.21	150	50	50	-	-	50	95	50	50
<b>Ukraine import</b> <i>01 - 31 December 2019</i>	0.85	350	250	250	-	-	250	601	250	250
<b>Moldavia export</b> <i>01 - 31 December 2019</i>	-	-	-	-	-	-	-	-	-	-
<b>Moldavia import</b> <i>01 - 31 December 2019</i>	-	-	-	-	-	-	-	-	-	-
<b>RO_Vulcanesti</b> <i>01 - 31 December 2019</i>	-	-	-	-	-	-	-	-	-	-
<b>RO_Costesti</b> <i>01 - 31 December 2019</i>	-	-	-	-	-	-	-	-	-	-
<b>RO_Cioara</b> <i>01 - 31 December 2019</i>	-	-	-	-	-	-	-	-	-	-

Note: ATC values on Hungarian and Bulgarian borders are calculated before the reservation of capacity. Offered capacity includes reservation and returned capacity.

\* final rights = monthly allocated capacity + yearly allocated capacity after returns and withdrawals.

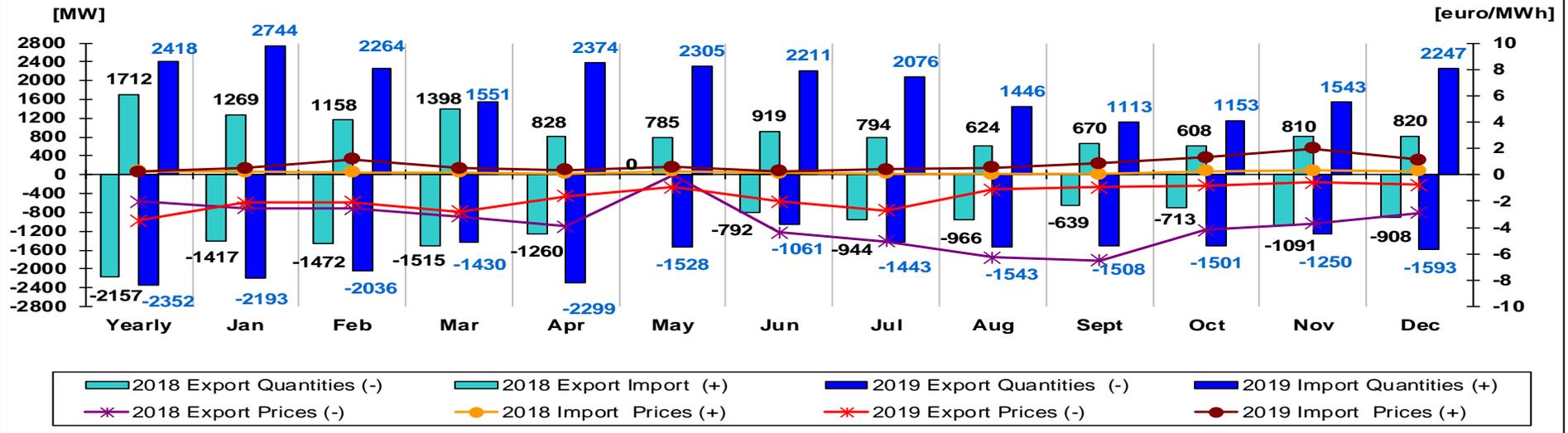


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# Market for Allocation of Cross-Border Capacities

Weighted average of requested capacities correlated with auction clearing price (weighted with allocated capacities) on Hungarian border



Border	Yearly	Jan. 19	Feb.19	Mar.19	Apr.19	May 19	Jun. 19	Jul. 19	Aug. 19	Sept. 19	Oct. 19	Nov.19	Dec. 19
Hungary export	3.46	2.14	2.07	2.81	1.61	0.96	2.02	2.71	1.13	0.94	0.81	0.57	0.75
Hungary import	0.24	0.51	1.19	0.49	0.37	0.59	0.27	0.42	0.56	0.87	1.31	2.00	1.13

Border	Yearly	Jan. 18	Feb.18	Mar.18	Apr.18	May 18	Jun. 18	Jul. 18	Aug. 18	Sept. 18	Oct. 18	Nov.18	Dec. 18
Hungary export	2.03	2.52	2.56	3.14	3.92	-	4.36	5.05	6.27	6.51	4.18	3.69	2.87
Hungary import	0.27	0.23	0.20	0.17	0.09	0.25	0.16	0.08	0.04	0.06	0.28	0.30	0.26

- Compared with previous year, in December 2019 the auction price significantly decreased on export direction, while offered capacity and capacity request were higher. On import direction, monthly auction price increased compared with similar period of previous year, while offered capacity and capacity request were higher.

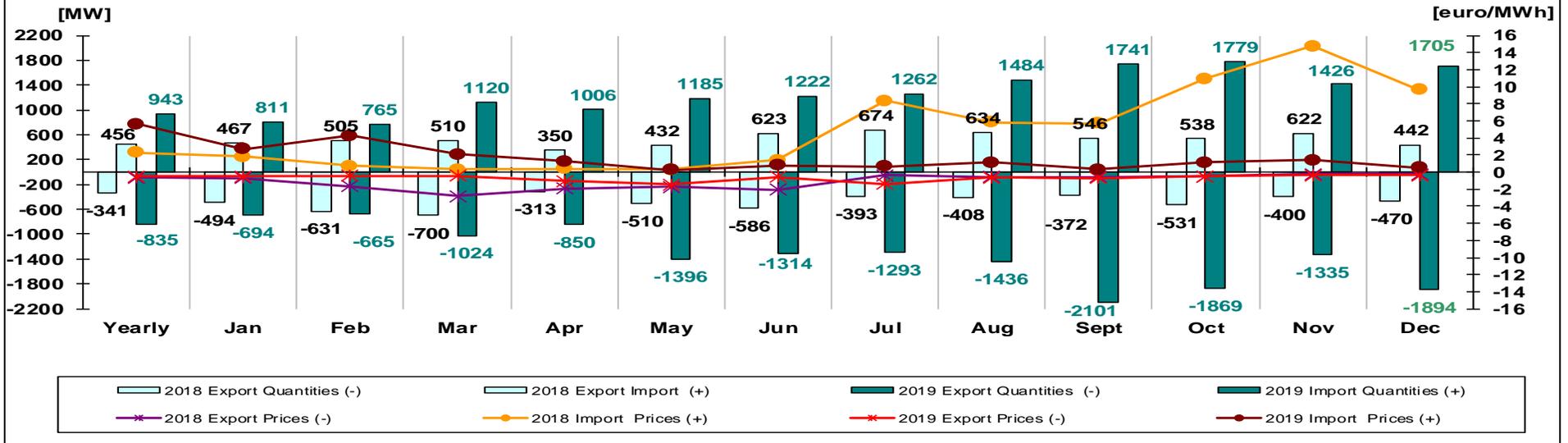


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# Market for Allocation of Cross-Border Capacities

**Weighted average of requested capacities correlated with auction clearing price (weighted with allocated capacities) on Bulgarian border**



Border	Yearly	Jan. 19	Feb.19	Mar.19	Apr.19	May 19	Jun. 19	Jul. 19	Aug. 19	Sept. 19	Oct. 19	Nov.19	Dec. 19
Bulgaria export	0.51	0.47	0.44	0.46	1.03	1.45	0.58	1.36	0.61	0.71	0.51	0.37	0.35
Bulgaria import	5.60	2.67	4.24	2.09	1.27	0.27	0.82	0.68	1.11	0.31	1.11	1.42	0.51

Border	Yearly	Jan. 18	Feb.18	Mar.18	Apr.18	May 18	Jun. 18	Jul. 18	Aug. 18	Sept. 18	Oct. 18	Nov.18	Dec. 18
Bulgaria export	0.62	0.69	1.67	2.81	1.92	1.75	2.05	0.33	0.55	0.55	0.49	0.26	0.22
Bulgaria import	2.27	1.83	0.72	0.33	0.40	0.30	1.40	8.33	5.85	5.69	10.96	14.78	9.63

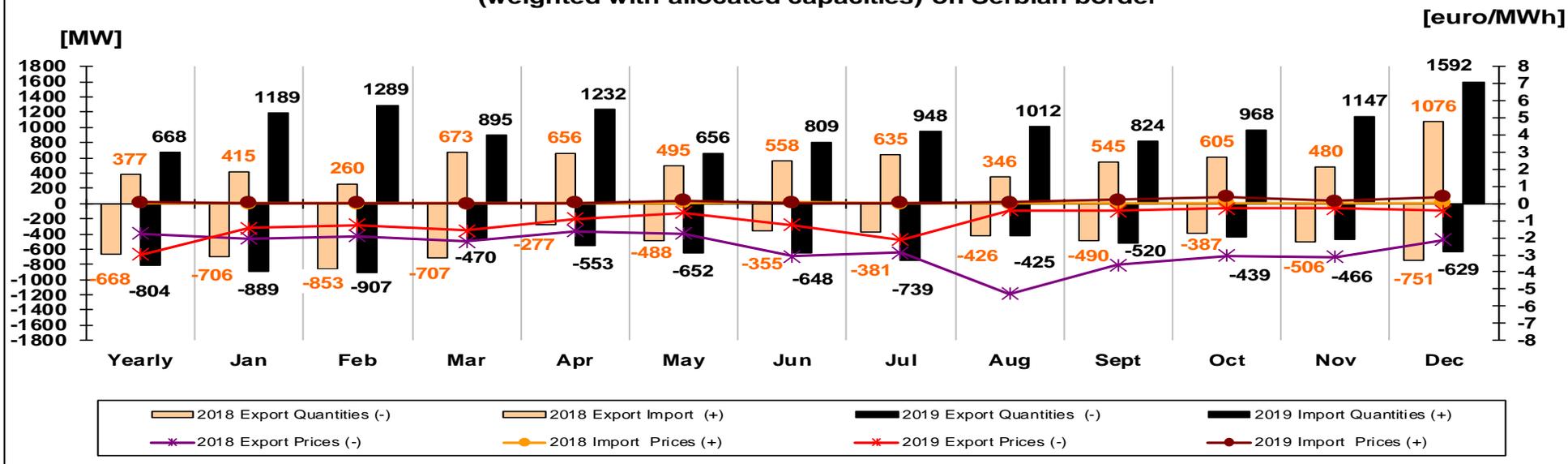
- Compared with previous year, in December 2019 the auction price slightly increased on export direction, while offered capacity and capacity request were higher. The auction price significantly decreased on import direction, while offered capacity and capacity request were higher.

# Market for Allocation of Cross-Border Capacities



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**Weighted average of requested capacities correlated with auction clearing price (weighted with allocated capacities) on Serbian border**



Border	Yearly	Jan. 19	Feb.19	Mar.19	Apr.19	May 19	Jun. 19	Jul. 19	Aug. 19	Sept. 19	Oct. 19	Nov.19	Dec. 19
Serbia export	2.97	1.42	1.27	1.58	0.88	0.55	1.24	2.13	0.38	0.45	0.28	0.29	0.43
Serbia import	0.07	0.03	0.03	0.01	0.03	0.16	0.04	0.03	0.06	0.21	0.39	0.13	0.41

Border	Yearly	Jan. 18	Feb.18	Mar.18	Apr.18	May 18	Jun. 18	Jul. 18	Aug. 18	Sept. 18	Oct. 18	Nov.18	Dec. 18
Serbia export	1.75	2.03	1.91	2.22	1.62	1.75	3.08	2.89	5.27	3.60	3.04	3.12	2.12
Serbia import	0.05	0.00	0.00	0.01	0.04	0.03	0.08	0.01	0.00	0.01	0.03	0.00	0.02

- Compared with previous year, in December 2019 the auction price decreased on export direction, while offered capacity and capacity request were lower. In December 2019, monthly auction price increased on import direction, while offered capacity decreased and capacity request increased.

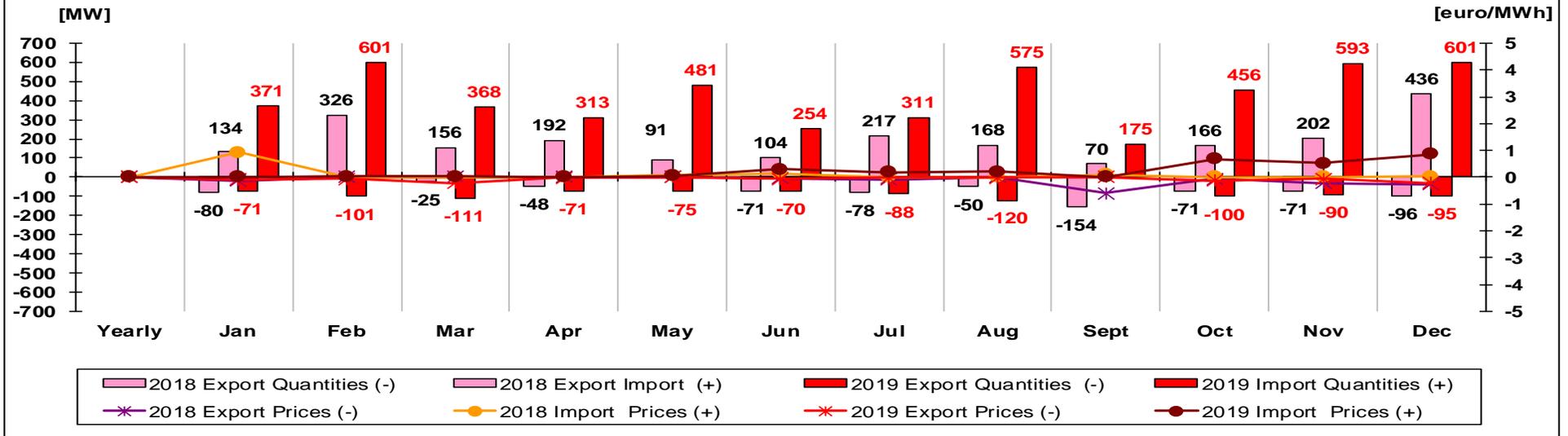
# Market for Allocation of Cross-Border Capacities



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Weighted average of requested capacities correlated with auction clearing price (weighted with allocated capacities) on Ukrainian border



Border	Yearly	Jan. 19	Feb.19	Mar.19	Apr.19	May 19	Jun. 19	Jul. 19	Aug. 19	Sept. 19	Oct. 19	Nov.19	Dec. 19
Ukraine export	-	0.08	0.07	0.22	0.01	0.00	0.07	0.02	0.01	-	0.13	0.07	0.21
Ukraine import	-	0.00	0.04	0.02	0.00	0.06	0.29	0.18	0.21	0.01	0.68	0.53	0.85

Border	Yearly	Jan. 18	Feb.18	Mar.18	Apr.18	May 18	Jun. 18	Jul. 18	Aug. 18	Sept. 18	Oct. 18	Nov.18	Dec. 18
Ukraine export	-	0.13	0.00	0.00	0.00	-	0.03	0.08	0.00	0.61	0.06	0.21	0.26
Ukraine import	-	0.92	0.01	0.00	0.00	0.07	0.15	0.01	0.01	0.10	0.00	0.001	0.03

- Compared with previous year, in December 2019 the auction price increased on import direction, while the offered capacity decreased and the capacity request was higher. On export direction, the auction price slightly decreased, while the offered capacity was the same and requested capacity did not vary.

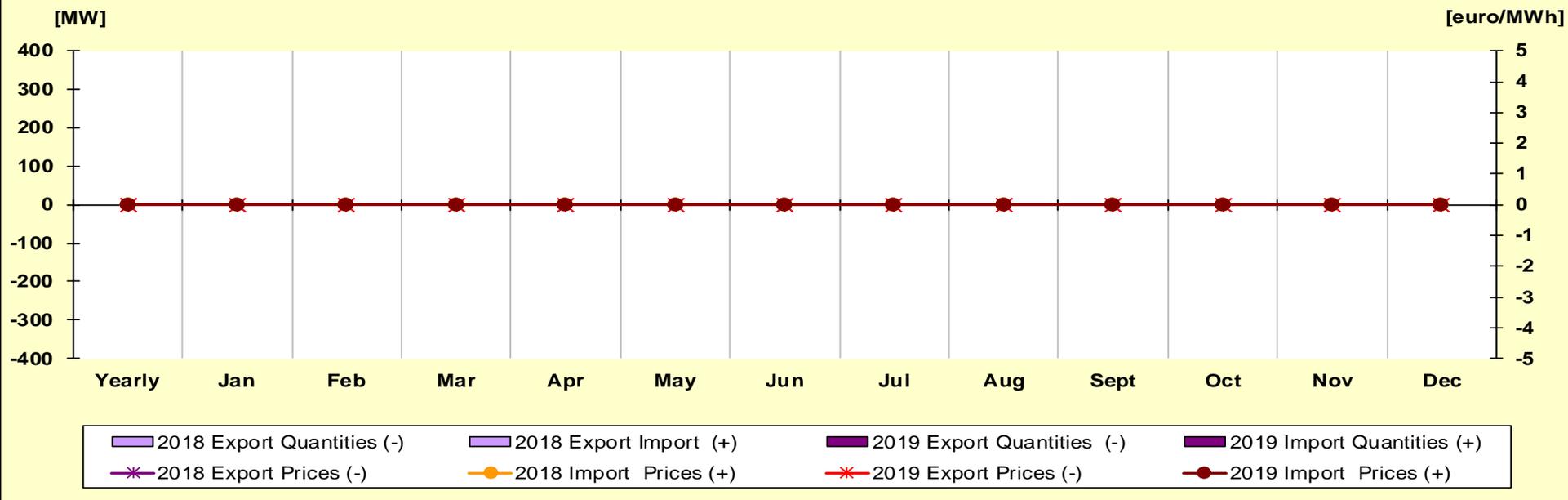
# Market for Allocation of Cross-Border Capacities



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Weighted average of requested capacities correlated with auction clearing price (weighted with allocated capacities) on Moldavian border



Border	Yearly	Jan. 19	Feb.19	Mar.19	Apr.19	May 19	Jun. 19	Jul. 19	Aug. 19	Sept. 19	Oct. 19	Nov.19	Dec. 19
Moldavia export	-	-	-	-	-	-	-	-	-	-	-	-	-
Moldavia import	-	-	-	-	-	-	-	-	-	-	-	-	-

Border	Yearly	Jan. 18	Feb.18	Mar.18	Apr.18	May 18	Jun. 18	Jul. 18	Aug. 18	Sept. 18	Oct. 18	Nov.18	Dec. 18
Moldavia export	-	-	-	-	-	-	-	-	-	-	-	-	-
Moldavia import	-	-	-	-	-	-	-	-	-	-	-	-	-

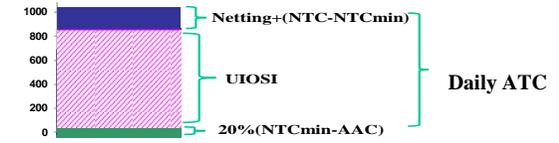


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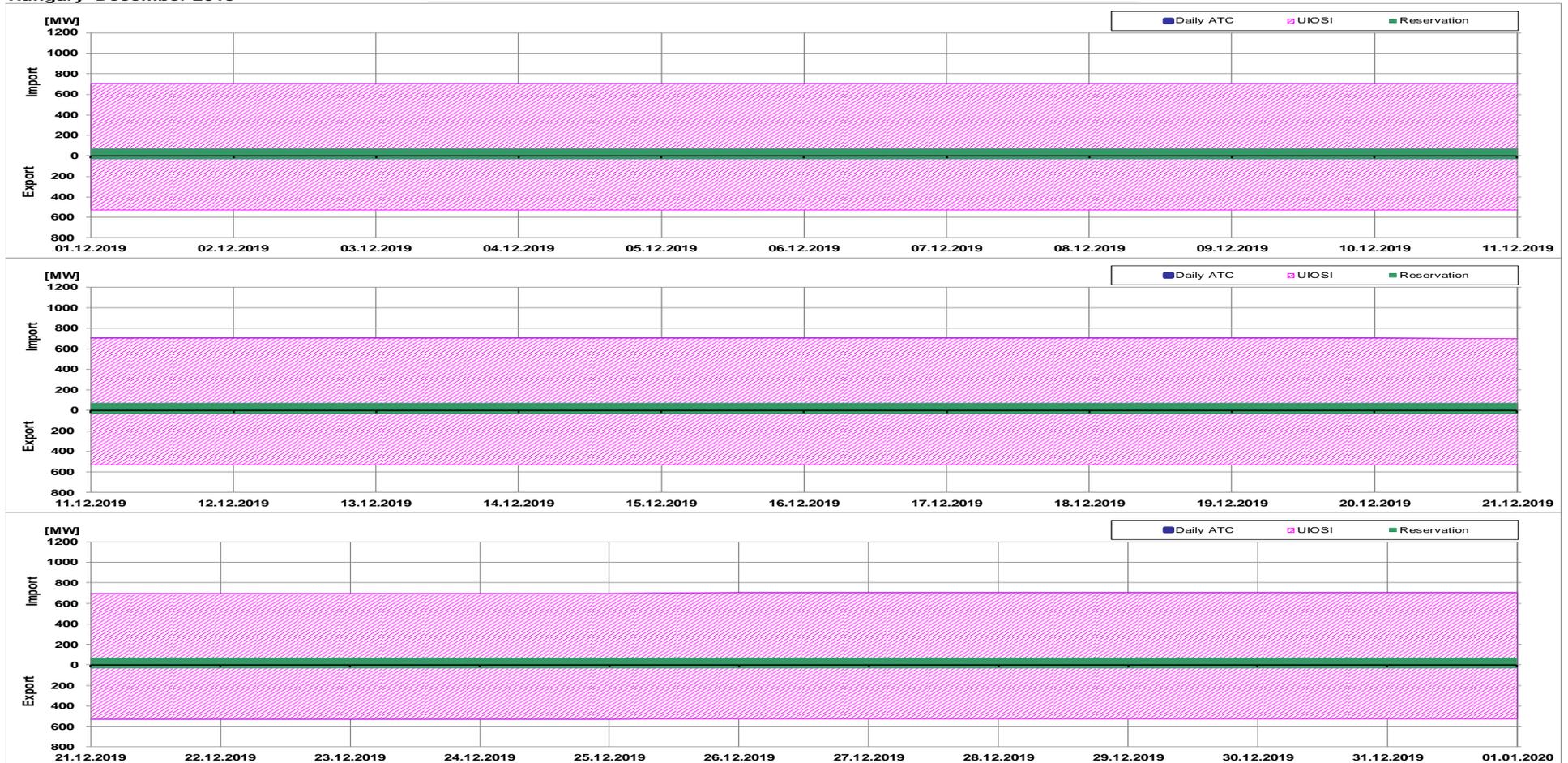
# Market for Allocation of Cross-Border Capacities

## Daily implicit Auctions on Romanian – Hungarian border

Reserved Capacity [MW] average value		Unused Capacity [MW] average value	
RO-HU	HU-RO	RO-HU	HU-RO
30	70	464	615



Hungary December 2019



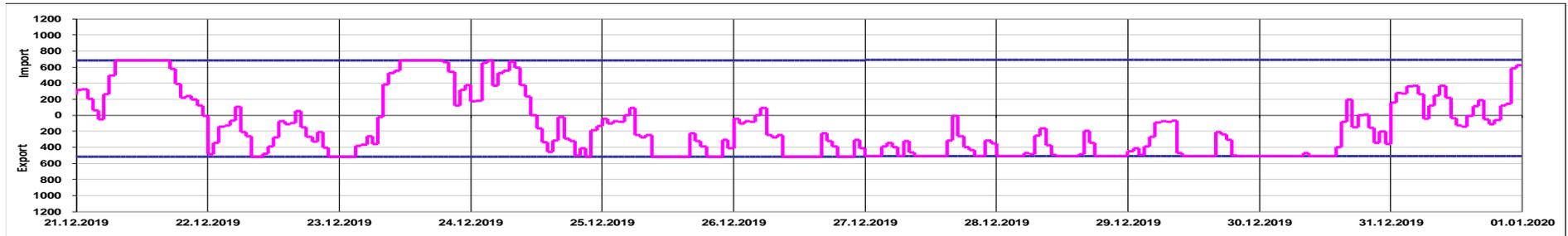
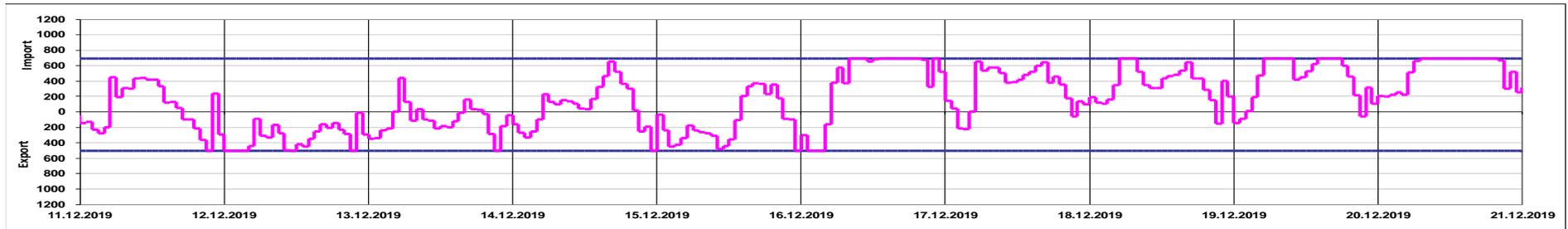
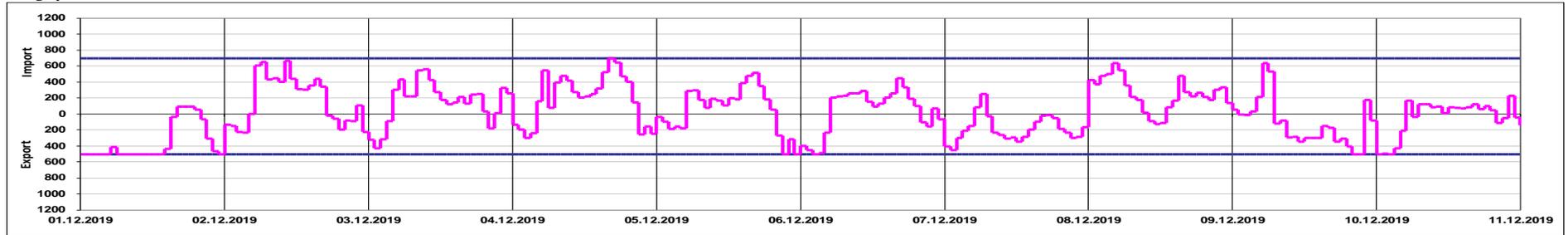


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# Market for Allocation of Cross-Border Capacities

## Daily implicit Auctions on Romanian – Hungarian border

Hungary December 2019



Offered Capacity on Daily Auction [MW]

Net Position Border RO - HU [MWh]

Public



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# Market for Allocation of Cross-Border Capacities

## Daily implicit Auctions on Romanian – Hungarian border

### DAM Prices RO [Euro/MWh]

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	19.05	15.70	15.70	16.74	24.28	34.97	23.70	22.81	30.97	34.41	35.45	37.25	38.63	37.27	42.90	44.16	50.25	53.98	53.81	52.00	49.70	44.10	42.60	34.40	53.98
2	36.79	35.08	32.86	32.45	33.87	37.14	45.00	56.09	58.50	57.73	52.84	51.13	50.53	50.02	50.05	52.73	59.86	61.01	58.18	54.65	50.90	45.14	43.02	38.68	61.01
3	41.07	39.55	38.01	38.05	39.09	42.50	53.95	69.97	73.04	70.00	63.63	61.70	59.80	59.92	60.78	69.27	100.04	96.69	72.43	63.04	53.59	47.02	44.87	38.69	100.04
4	41.93	40.91	38.36	37.21	39.45	45.72	53.24	61.10	68.15	64.07	59.97	59.61	58.20	60.20	62.51	65.28	98.37	79.99	74.64	69.07	61.17	55.01	52.65	46.20	98.37
5	41.59	38.82	37.23	36.67	37.93	42.91	50.56	67.57	73.07	66.79	59.78	60.09	58.98	60.81	61.92	66.79	70.03	75.90	71.22	66.02	59.07	45.24	43.79	37.48	75.90
6	37.28	34.48	29.97	30.67	33.30	38.33	48.00	58.90	67.47	63.31	56.80	56.20	55.90	56.50	56.75	57.89	62.69	64.98	60.21	56.13	52.14	44.96	41.94	36.97	67.47
7	37.27	34.67	30.75	28.70	30.09	36.93	39.95	62.18	68.88	82.17	75.73	70.97	74.36	68.88	66.79	90.01	125.40	100.07	100.01	68.88	59.41	49.00	47.80	36.69	125.40
8	35.58	27.77	16.99	15.70	17.98	26.49	27.04	32.88	41.23	45.83	46.99	50.00	50.02	45.10	48.16	50.02	70.10	73.04	70.94	67.98	65.93	50.02	45.83	31.23	73.04
9	33.48	29.87	23.02	22.42	27.95	40.09	48.76	55.14	59.05	56.73	55.62	59.15	62.74	65.06	63.01	63.01	68.85	64.46	58.76	56.08	50.02	43.98	45.07	36.90	68.85
10	33.48	31.99	27.87	28.68	31.30	37.80	48.29	57.22	60.73	59.02	56.08	55.65	55.40	54.99	56.29	59.08	70.86	69.93	67.91	63.52	56.08	48.89	48.47	42.99	70.86
11	36.19	33.49	31.97	31.96	32.83	40.50	48.39	54.98	59.00	56.08	54.53	53.74	52.33	51.98	52.33	54.42	60.07	60.26	58.19	56.59	52.88	46.05	41.69	36.23	60.26
12	35.57	33.48	33.48	33.48	35.30	41.93	49.04	59.94	65.15	64.00	61.70	61.00	62.90	62.28	60.70	61.97	71.90	69.94	66.40	62.56	57.30	50.01	45.96	41.22	71.90
13	37.66	34.11	32.79	31.41	32.29	40.83	47.63	57.97	62.14	60.15	57.96	58.35	58.17	57.05	55.30	56.55	60.59	60.05	54.67	52.67	51.90	41.99	39.78	34.52	62.14
14	32.56	30.87	27.58	25.09	25.93	28.23	31.98	39.13	43.80	45.82	46.48	45.82	43.95	43.11	43.28	45.82	50.84	51.98	52.30	47.92	45.82	39.13	35.17	26.05	52.30
15	31.92	25.66	22.00	17.21	18.31	21.26	22.71	28.69	32.07	34.00	36.31	37.04	36.80	34.24	36.62	41.37	52.32	54.75	55.02	51.99	48.04	36.80	34.18	27.69	55.02
16	31.92	26.26	20.93	23.16	26.84	34.68	48.10	53.74	61.51	60.06	56.08	56.92	57.50	60.06	66.76	88.94	104.63	98.36	70.94	62.99	52.32	47.00	45.56	36.95	104.63
17	35.89	33.77	31.74	30.01	31.01	34.50	45.41	52.43	52.32	52.19	51.40	51.35	51.90	51.00	51.42	53.65	58.18	60.90	51.25	50.00	47.05	40.01	36.09	30.51	60.90
18	31.97	29.49	28.28	27.06	29.19	43.44	45.83	52.32	51.90	51.91	51.20	50.61	50.42	50.04	51.00	52.32	58.01	59.07	56.65	52.94	49.44	41.50	39.14	35.10	59.07
19	31.71	28.72	26.25	26.42	29.01	48.15	51.92	68.87	52.34	50.03	48.07	45.91	44.39	43.93	45.28	47.94	56.10	52.48	47.54	43.58	38.04	33.23	32.28	28.02	68.87
20	28.75	24.02	20.58	18.17	21.01	25.06	30.39	38.29	45.01	44.85	41.45	39.14	38.32	34.60	35.67	41.24	51.91	45.31	41.66	41.66	32.73	29.73	28.89	25.31	51.91
21	26.56	22.53	19.51	18.00	19.50	21.93	22.72	37.29	45.87	47.97	47.97	45.87	45.87	45.87	41.27	47.97	51.95	41.94	40.70	38.60	35.16	27.54	26.51	21.97	51.95
22	15.71	10.50	6.16	3.08	3.03	5.83	9.01	14.50	21.93	29.06	30.50	32.28	32.81	31.88	31.23	32.61	35.82	38.01	37.29	35.50	33.20	28.18	23.22	10.47	38.01
23	2.09	1.18	1.05	0.41	0.51	3.79	12.35	27.43	31.00	33.59	34.13	37.22	41.27	45.88	50.07	51.95	62.22	57.48	49.44	40.06	33.63	26.95	25.21	17.80	62.22
24	8.29	2.93	0.03	0.02	1.00	4.85	10.47	20.84	28.91	32.42	32.59	32.54	31.53	30.50	32.00	34.00	37.00	37.48	34.93	32.01	28.76	23.17	24.70	16.68	37.48
25	10.36	8.38	4.02	2.10	1.73	3.41	6.29	11.45	20.15	22.04	21.80	20.96	19.45	17.01	20.96	22.41	32.00	34.07	34.00	29.37	25.45	27.03	29.22	23.05	34.07
26	10.36	8.38	4.02	2.10	1.73	3.41	6.29	11.45	20.15	22.04	21.80	20.96	19.45	17.01	20.96	22.41	32.00	34.07	34.00	29.37	25.45	27.03	29.22	23.05	34.07
27	27.70	26.61	26.98	26.91	28.21	31.65	28.74	38.80	43.19	42.89	39.13	39.13	35.66	35.15	39.15	46.00	48.94	51.80	49.48	46.54	40.43	35.15	36.87	32.63	51.80
28	29.41	24.90	23.02	22.00	23.01	26.71	25.92	30.17	34.99	37.00	37.70	35.15	31.92	29.20	32.51	38.86	42.14	44.62	41.22	38.54	34.24	28.36	27.51	20.92	44.62
29	27.00	24.91	24.80	22.00	21.22	21.56	21.87	24.90	26.80	29.48	27.01	26.99	24.00	22.80	22.80	29.08	37.96	41.00	41.20	39.84	29.29	20.92	20.29	14.64	41.20
30	8.37	6.28	2.09	5.23	10.04	16.32	16.32	22.80	32.01	26.99	24.00	24.00	26.99	28.93	37.20	38.90	45.82	50.39	47.78	44.99	42.86	35.94	35.38	29.52	50.39
31	34.02	26.99	16.31	10.25	10.67	18.49	22.92	28.52	34.45	36.13	33.91	34.14	33.98	32.84	34.50	37.00	41.21	44.32	43.00	40.16	35.52	34.50	36.55	36.11	44.32

**Average 40.61 EUR/MWh**

**Public**



**Transelectrica®**  
Societate Administrată în Sistem Dualist

# Market for Allocation of Cross-Border Capacities

## Daily implicit Auctions on Romanian – Hungarian border

### Congestion Prices [Euro/MWh]

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	
1	17.24	20.24	19.61	17.93	10.21	-	11.35	13.13	7.28	6.79	6.73	6.33	4.87	5.11	-	-	-	-	-	-	-	-	-	4.57	20.24	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.26	-	-	-	-	-	-	-	-	23.26
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	-	1.55	2.70
6	-	-	2.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.36
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.06	1.92	-	-	2.06
10	2.92	-	1.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.92
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.99	-	-	0.99
12	1.95	2.15	0.82	0.09	-	-	-	-	-	-	-	2.98	-	-	-	-	-	-	-	-	-	-	-	1.27	-	2.98
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	-	-	0.06
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.17	3.17
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.02	1.02
16	-	1.75	5.32	0.34	-	-	-	-	5.23	3.10	0.61	-	-	4.07	11.26	29.89	41.14	30.45	10.35	6.85	-	-	-	2.28	-	41.14
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
18	-	-	-	-	-	9.78	1.10	1.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.78
19	-	-	-	-	-	15.02	12.84	21.78	2.23	-	-	-	-	-	1.21	2.20	7.15	2.54	-	-	-	-	-	-	-	21.78
20	-	-	-	-	-	-	-	1.04	7.51	8.28	7.45	6.14	5.83	1.98	3.13	8.01	15.88	7.22	5.68	6.67	-	-	-	-	-	15.88
21	-	-	-	-	-	-	-	6.97	9.33	9.49	8.62	6.53	7.32	8.32	5.66	10.49	9.02	-	-	-	-	-	-	-	-	10.49
22	-	-	-	-	-	-	-	-	0.57	0.43	-	-	-	-	-	-	-	-	-	-	-	-	-	2.39	9.47	9.47
23	6.11	1.82	-	-	-	-	-	-	-	-	-	2.15	6.77	12.46	16.23	16.95	19.26	7.60	4.24	-	-	-	-	-	-	19.26
24	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.84	1.84
25	-	-	-	-	-	-	-	-	-	3.39	5.01	6.41	6.20	6.47	2.84	5.49	-	-	-	3.71	7.15	2.51	-	-	-	7.15
26	-	-	-	-	-	-	-	-	-	3.39	5.01	6.41	6.20	6.47	2.84	5.49	-	-	-	3.71	7.15	2.51	-	-	-	7.15
27	4.59	3.52	1.02	-	-	-	-	-	3.32	-	-	2.21	6.86	6.96	8.28	7.85	4.84	-	-	-	-	-	2.23	3.00	-	8.28
28	1.55	4.38	4.95	4.18	3.43	-	-	-	-	-	-	-	1.95	4.87	6.70	4.28	-	-	-	2.35	3.60	3.58	6.34	4.73	9.03	9.03
29	-	-	-	-	-	-	-	-	-	-	3.57	4.22	7.30	7.30	8.03	3.52	-	-	-	-	-	6.39	11.10	9.71	10.60	11.10
30	13.83	10.83	11.87	5.76	1.86	2.28	6.63	5.98	-	8.20	10.58	10.02	8.37	5.12	-	-	-	-	-	-	-	-	-	-	-	13.83
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00

**Average 6.63 EUR/MWh**

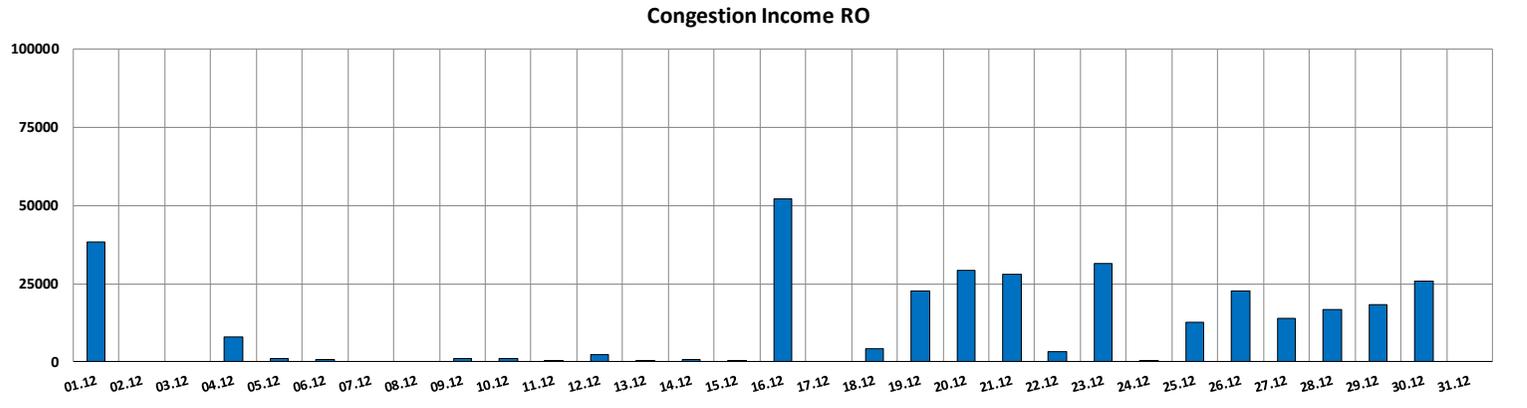
**Public**



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# Market for Allocation of Cross-Border Capacities

## Daily implicit Auctions on Romanian – Hungarian border



Day	Congestion Income border RO-HU [Euro]	Congestion Income RO [Euro]
01.12	76755	38377
02.12	0	0
03.12	0	0
04.12	16119	8060
05.12	2155	1077
06.12	1197	598
07.12	0	0
08.12	0	0
09.12	2018	1009
10.12	2119	1060
11.12	502	251
12.12	4695	2347
13.12	30	15
14.12	1607	804
15.12	517	259
16.12	104401	52201
17.12	0	0
18.12	8496	4248
19.12	45024	22512
20.12	58780	29390
21.12	55835	27918
22.12	6649	3324
23.12	62606	31303
24.12	965	482
25.12	25426	12713
26.12	45463	22731
27.12	27723	13861
28.12	33421	16711
29.12	36372	18186
30.12	51374	25687
31.12	0	0
<b>Total</b>	<b>670250</b>	<b>335125</b>

Daily Income [Euro]		Remuneration UIOSI [Euro]	
RO-HU	HU-RO	RO-HU	HU-RO
326831	343419	298454	305573
<b>670250</b>		<b>604027</b>	

TSO Income (Z-R) [Euro]	RO TSO Income (Z-R) [Euro]
<b>66222</b>	<b>33111</b>



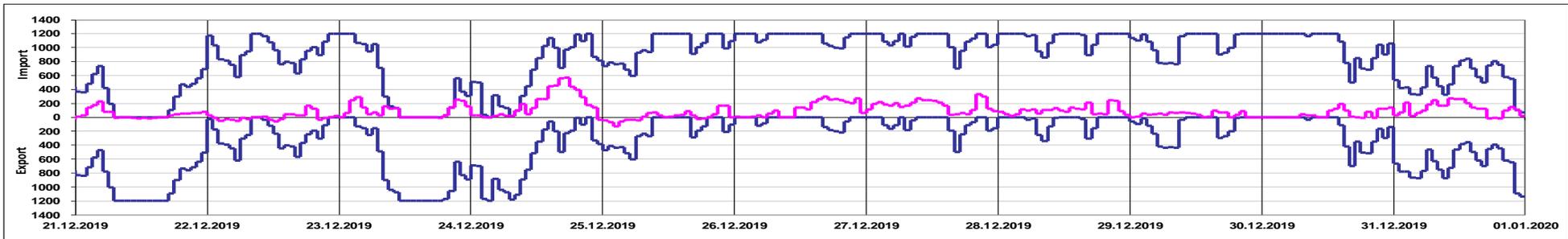
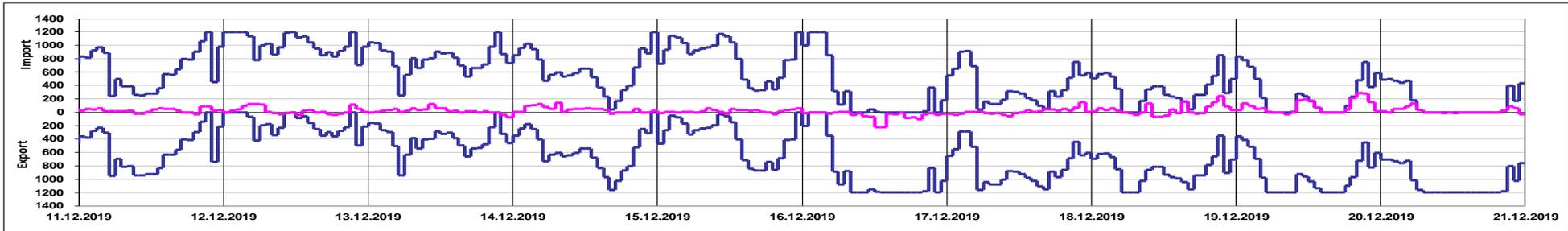
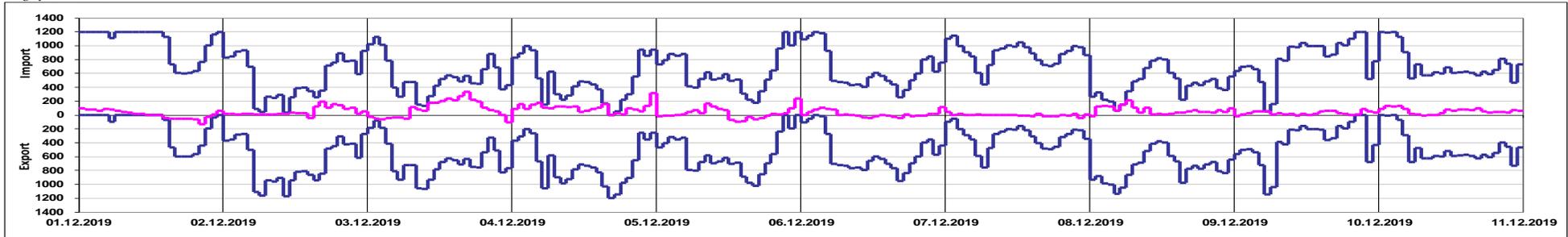
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# Market for Allocation of Cross-Border Capacities

## Implicit Intraday Auctions on Romanian – Hungarian border

Hungary December 2019



Offered Capacity on Intraday Auction [MW]

Net Position border RO - HU [MWh]

Public

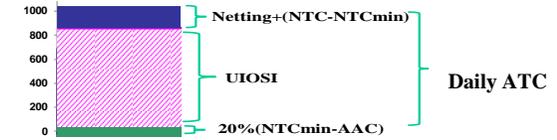


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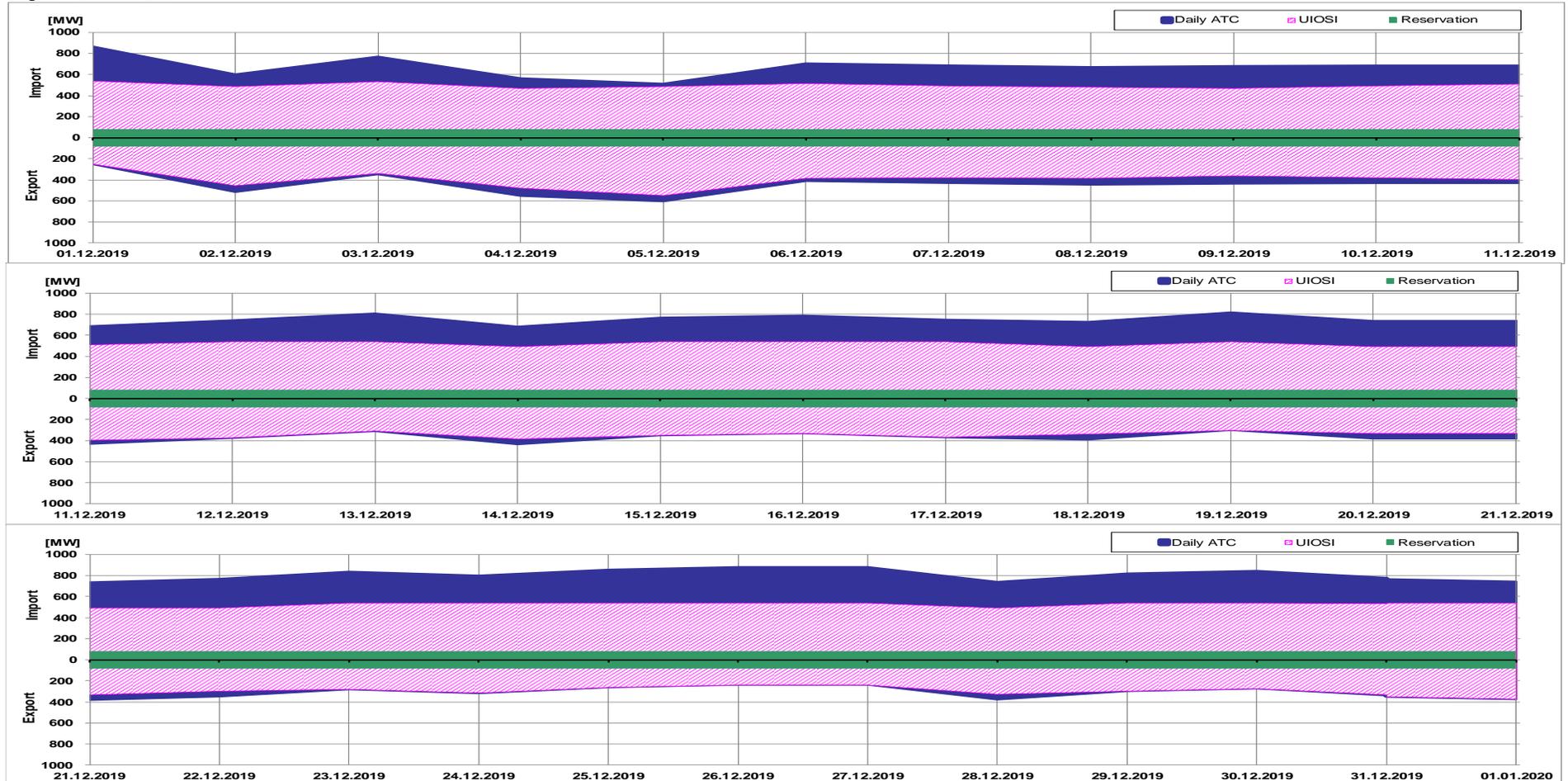
# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Bulgarian border

Reserved Capacity [MW] average value		Unused Capacity [MW] average value	
RO-BG	BG-RO	RO-BG	BG-RO
81	80	283	420



Bulgaria December 2019



# Market for Allocation of Cross-Border Capacities

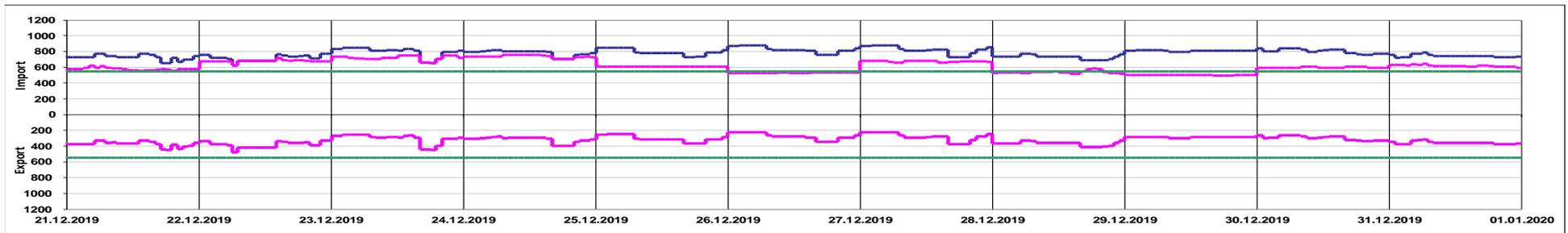
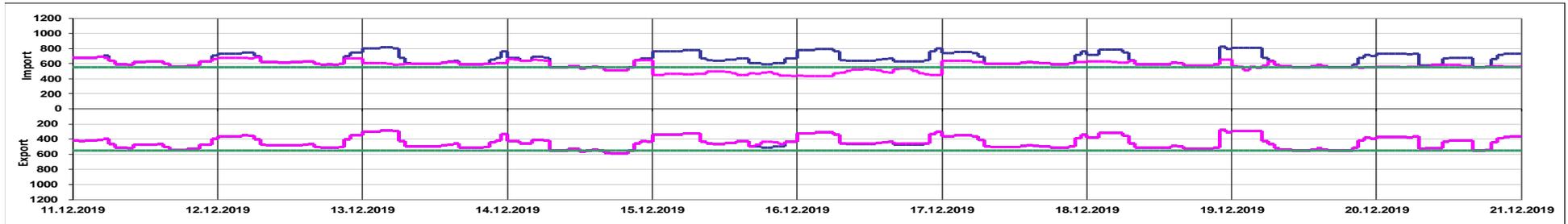
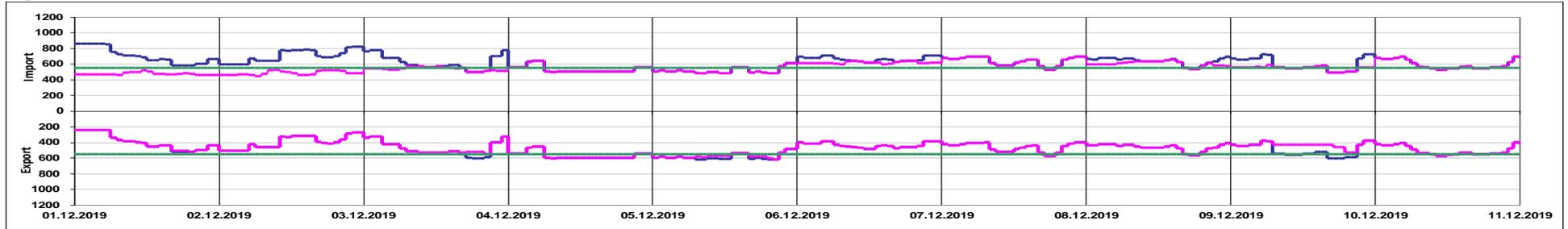
## Daily Auctions on Romanian – Bulgarian border



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Bulgaria December 2019



Offered Capacity on Daily Auction Import (+) / Export (-) [MW]

Allocated Capacity on Daily Auction Import (+) / Export (-) [MW]

Net Transfer Capacity (NTC) Import (+) / Export (-) [MW]

# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Bulgarian border

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### Auction Price [Euro/MWh] – Export

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	8.00	8.00	8.00	8.00	3.50	3.50	0.88	0.77	0.33	0.33	0.33	0.33	0.27	0.27	0.33	0.33	0.00	0.00	0.00	0.05	0.10	0.25	0.33	0.33	8.00
2	0.10	0.22	0.08	0.08	0.22	0.55	0.18	0.22	0.22	0.45	1.75	1.75	2.00	2.00	2.00	2.00	0.86	0.22	0.22	0.22	0.80	3.00	3.00	5.00	5.00
3	0.44	0.88	0.88	0.22	0.22	0.21	0.05	0.05	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.11	0.36	0.88
4	0.05	0.05	0.05	0.11	0.15	0.15	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.05	0.05	0.15
5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.04	0.05	0.05	0.05
6	0.35	0.35	0.27	0.27	0.54	0.54	0.33	0.17	0.25	0.18	0.18	0.15	0.15	0.17	0.17	0.27	0.17	0.17	0.17	0.17	0.33	1.01	0.72	0.77	1.01
7	0.85	0.85	0.85	0.85	0.95	0.88	0.66	0.55	0.33	0.25	0.25	0.25	0.37	0.37	0.43	0.43	0.20	0.17	0.17	0.20	0.37	0.85	0.95	0.95	0.95
8	1.44	1.50	1.50	1.50	1.50	1.21	1.50	1.50	1.00	0.95	0.45	0.45	0.95	0.95	0.98	0.45	0.33	0.30	0.30	0.44	0.85	1.00	1.44	1.50	1.50
9	0.29	0.22	0.22	0.29	0.56	1.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.56	0.56	1.00
10	0.66	0.66	0.66	0.66	0.66	0.55	0.31	0.13	0.13	0.07	0.05	0.05	0.07	0.07	0.15	0.15	0.08	0.05	0.05	0.15	0.18	0.24	0.44	0.88	0.88
11	1.10	1.10	1.10	1.10	1.10	0.89	0.69	0.50	0.45	0.45	0.55	0.69	0.69	0.89	0.89	0.69	0.41	0.23	0.23	0.31	0.53	1.55	1.55	2.70	2.70
12	2.00	2.00	2.55	2.55	2.55	1.50	0.55	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.45	0.45	0.45	0.50	0.88	2.00	2.00	2.55
13	1.22	0.55	0.55	1.25	1.55	0.84	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.10	0.10	0.10	0.12	0.12	0.16	0.48	0.88	1.55
14	0.88	0.88	0.40	0.56	1.03	1.03	1.03	0.20	0.20	0.20	0.20	0.20	0.06	0.20	0.20	0.20	0.06	0.05	0.05	0.05	0.16	0.55	0.56	0.88	1.03
15	0.35	0.57	0.57	0.57	0.35	0.55	0.35	0.35	0.20	0.05	0.05	0.05	0.20	0.05	0.34	0.60	0.05	0.00	0.00	0.00	0.00	0.00	0.53	0.53	0.60
16	0.75	0.75	0.66	0.75	0.75	0.75	0.38	0.01	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.05	0.66	2.28	2.28
17	0.77	0.77	0.77	0.77	1.20	0.88	0.25	0.15	0.09	0.09	0.09	0.09	0.09	0.12	0.15	0.12	0.09	0.09	0.07	0.07	0.12	0.22	0.44	1.30	1.30
18	1.11	1.00	1.51	1.50	2.01	2.01	0.69	0.37	0.25	0.25	0.25	0.25	0.25	0.25	0.37	0.37	0.25	0.25	0.25	0.25	0.37	0.37	3.11	2.78	3.11
19	4.11	5.00	4.11	4.11	4.11	4.11	0.88	0.38	0.10	0.07	0.05	0.10	0.10	0.10	0.10	0.09	0.05	0.01	0.05	0.01	0.12	3.00	3.00	3.75	5.00
20	0.69	0.69	0.69	0.69	0.69	0.69	0.74	0.16	0.16	0.21	0.21	0.69	0.76	0.76	0.76	0.76	0.05	0.03	0.05	0.88	1.35	1.35	2.15	1.49	2.15
21	0.56	0.76	0.76	0.76	0.78	0.78	0.76	0.76	0.56	0.56	0.56	0.76	0.56	0.78	0.56	0.76	0.44	0.23	0.33	0.55	0.76	0.82	0.82	0.88	0.88
22	0.77	1.27	0.89	0.89	0.89	0.77	0.24	0.38	0.35	0.35	0.35	0.35	0.35	0.38	0.44	0.44	0.44	0.38	0.38	0.44	1.40	1.50	2.00	3.00	3.00
23	2.00	2.55	1.55	1.55	1.55	1.55	1.15	0.93	0.88	0.69	0.88	0.69	0.69	0.69	0.69	0.69	0.23	0.23	0.22	0.23	0.56	0.56	0.93	2.55	2.55
24	0.34	0.34	0.33	0.33	0.34	0.33	0.34	0.34	0.21	0.13	0.12	0.08	0.34	0.06	0.06	0.06	0.06	0.06	0.05	0.03	0.08	0.19	0.20	0.33	0.34
25	4.15	4.15	4.60	4.90	5.66	5.66	4.11	2.80	1.12	1.23	0.92	0.92	1.12	2.56	2.56	1.23	1.12	1.06	0.33	0.20	0.43	0.86	0.86	1.66	5.66
26	4.16	3.77	3.77	3.77	3.77	3.77	3.77	1.22	1.25	1.66	2.97	3.00	3.00	3.00	2.69	2.69	0.89	0.89	0.58	0.85	1.23	1.22	1.23	2.69	4.16
27	1.88	2.11	2.11	2.11	2.50	2.50	2.50	2.50	1.11	0.86	0.70	0.70	0.70	1.11	1.27	1.27	0.33	0.21	0.20	0.20	0.23	0.70	0.88	2.11	2.50
28	0.63	0.63	0.63	0.63	0.88	0.95	1.30	1.55	0.99	1.08	1.08	1.35	1.35	1.35	1.55	1.55	0.49	0.39	0.39	0.39	0.39	0.44	0.79	0.99	1.55
29	2.72	2.31	3.00	3.00	3.54	2.15	2.51	0.41	0.55	3.00	3.00	3.00	3.67	4.08	4.11	4.11	3.55	4.11	3.31	3.51	3.00	5.30	5.50	5.00	5.50
30	10.00	7.00	7.00	6.40	6.40	6.08	7.00	4.00	4.84	3.00	3.51	4.00	2.00	2.00	1.75	0.66	0.39	0.31	0.25	0.25	0.25	0.27	0.44	0.44	10.00
31	0.54	0.32	0.39	0.54	0.76	0.87	1.39	0.76	0.76	0.95	1.00	1.00	1.00	1.00	1.06	1.06	0.95	0.66	0.66	0.66	0.63	0.66	0.68	0.76	1.39

Bulgaria

December 2019

# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Bulgarian border



Transelectrica®  
Societate Administrată în Sistem Dualist

### Auction Price [Euro/MWh] – Import

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00
4	0.02	0.02	0.02	0.00	0.01	0.01	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.08	0.08	0.05	0.05	0.04	0.04	0.08
5	0.02	0.02	0.02	0.02	0.02	0.05	0.05	0.11	0.38	0.22	0.26	0.26	0.05	0.03	0.02	0.02	0.10	0.04	0.05	0.05	0.03	0.01	0.01	0.01	0.38
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01
7	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.04	0.02	0.04	0.02	0.01	0.01	0.01	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.05
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.03
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15	0.30	0.30	0.30	0.16	0.01	0.01	0.01	0.05	0.05	0.05	0.05	0.01	0.00	0.00	0.00	0.30
10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.01	0.01	0.05
11	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.01	0.03	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.03
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01
14	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.01	0.03	0.03	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.03
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.01	0.01	0.00	0.00	0.03
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.01	0.01	0.00	0.00	0.05
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.02
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.03	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.05	0.01	0.00	0.00	0.00	0.00	0.06
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Bulgaria December 2019

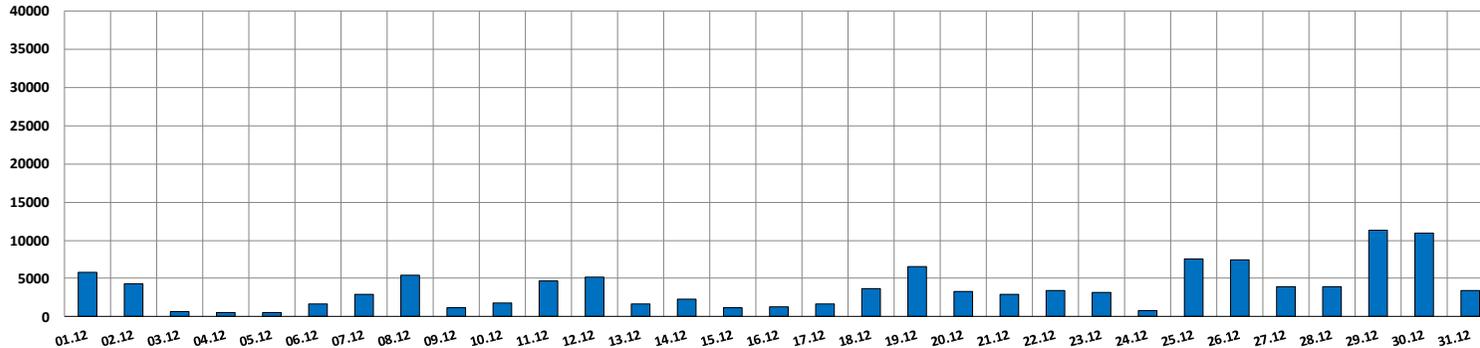


**Transelectrica®**  
Societate Administrată în Sistem Dualist

# Market for Allocation of Cross-Border Capacities

## Daily Allocation on Romanian – Bulgarian border

Congestion Income RO



Day	Congestion Income border RO-BG [Euro]	Congestion Income RO [Euro]
01.12	11575	5788
02.12	8729	4364
03.12	1347	674
04.12	985	493
05.12	1052	526
06.12	3310	1655
07.12	5953	2977
08.12	10789	5395
09.12	2404	1202
10.12	3691	1846
11.12	9362	4681
12.12	10240	5120
13.12	3236	1618
14.12	4618	2309
15.12	2385	1193
16.12	2510	1255
17.12	3468	1734
18.12	7391	3695
19.12	13129	6565
20.12	6604	3302
21.12	5871	2935
22.12	6953	3476
23.12	6357	3179
24.12	1482	741
25.12	15037	7519
26.12	14981	7491
27.12	7791	3896
28.12	7878	3939
29.12	22706	11353
30.12	21958	10979
31.12	6749	3375
<b>Total</b>	<b>230542</b>	<b>115271</b>

Daily Income [Euro]		Remuneration UIOSI [Euro]	
RO-BG	BG-RO	RO-BG	BG-RO
226155	4387	149740	3071
<b>230542</b>		<b>152811</b>	

TSO Income (Z-R) [Euro]	RO TSO Income (Z-R) [Euro]
<b>77731</b>	<b>38865</b>

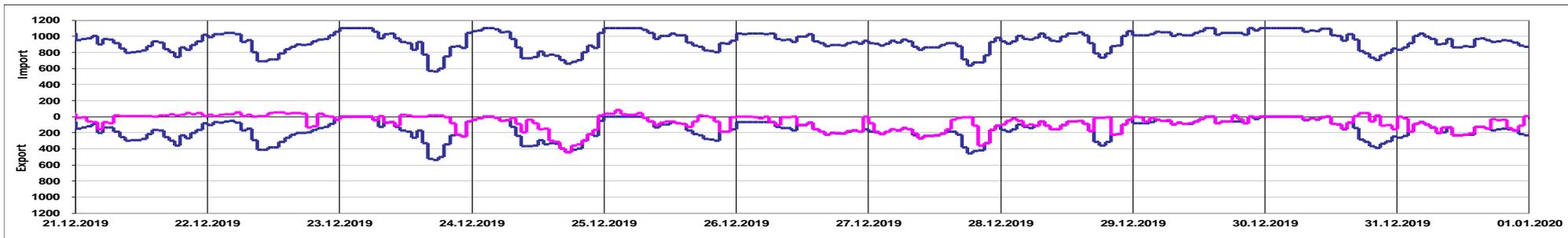
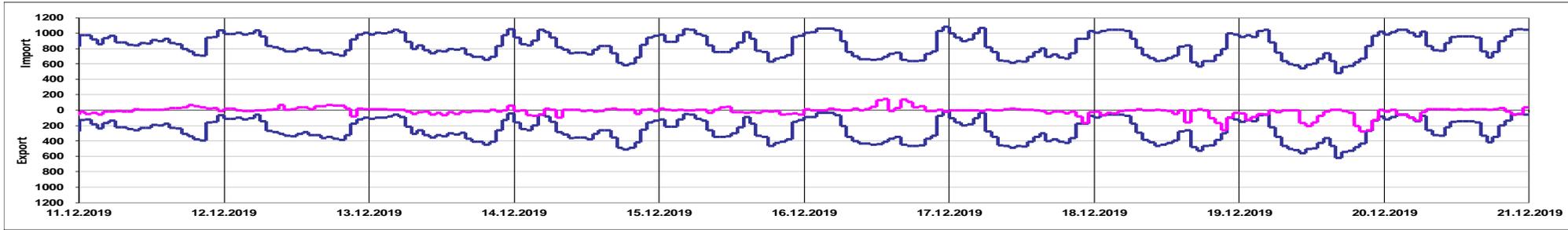
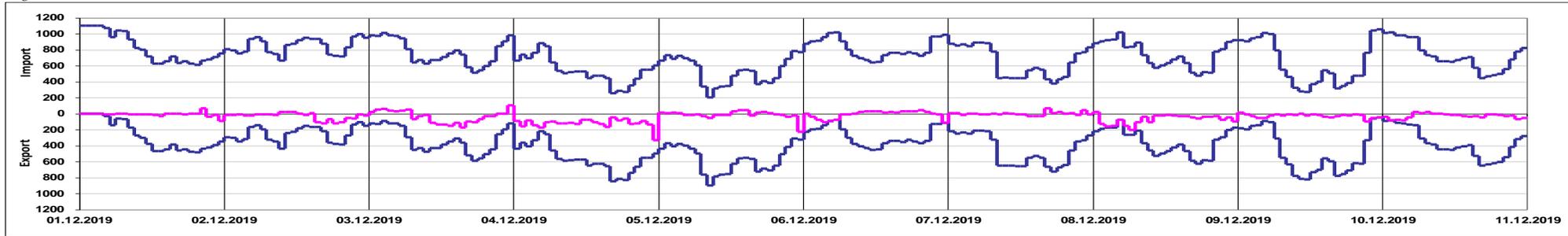


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# Market for Allocation of Cross-Border Capacities

## Implicit Intraday Auctions on Romanian – Bulgarian border

Bulgaria December 2019



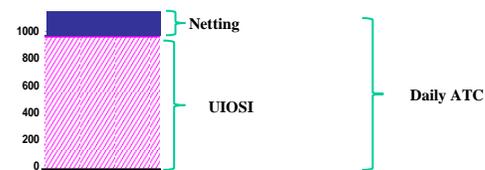
Offered Capacity on Intraday Auction [MW]

Net Position border RO - BG [MWh]

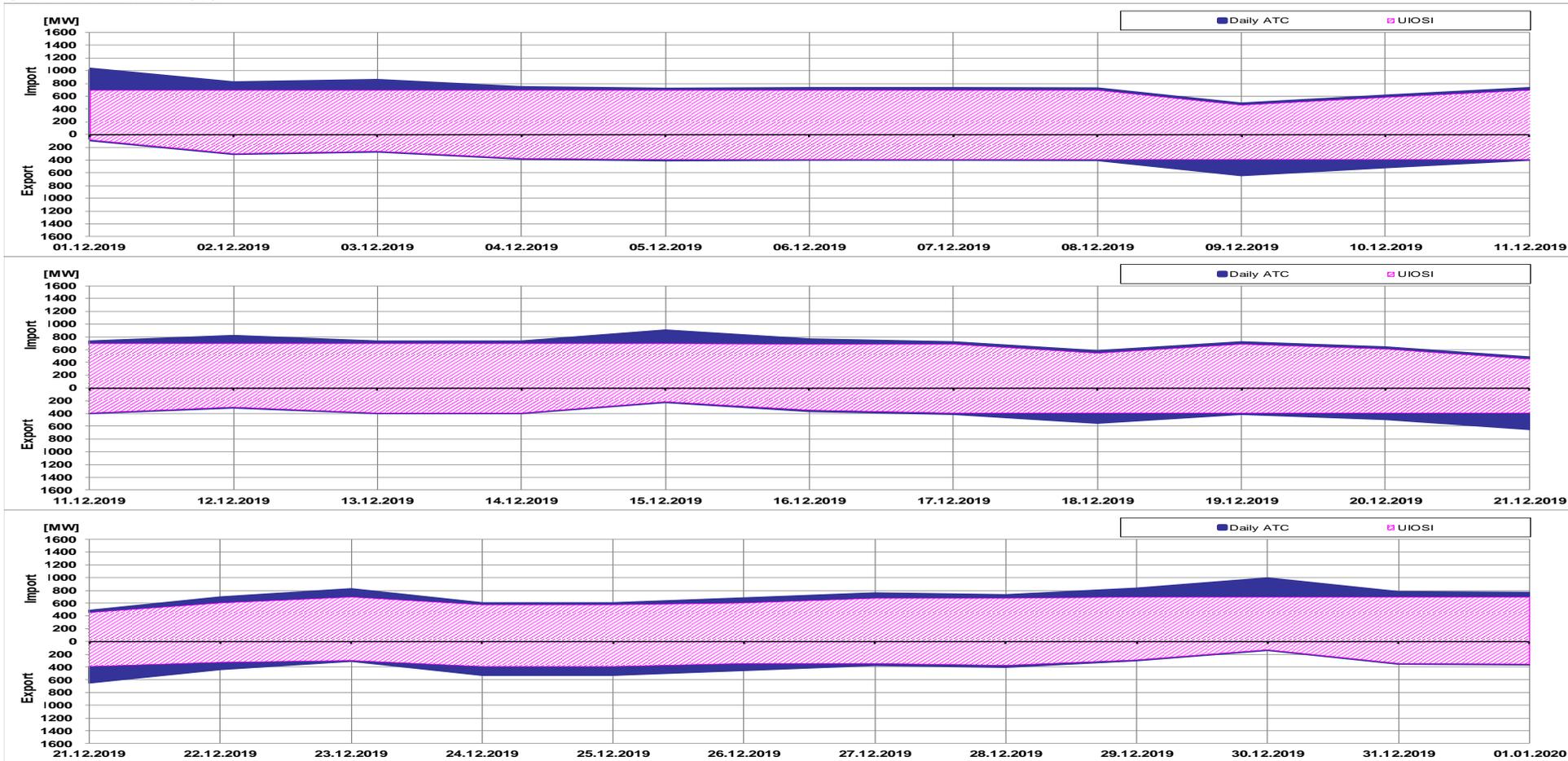
Public

## Daily Auctions on Romanian – Serbian border

Unused Capacity [MW] average value	
RO-RS	RS-RO
362	634



Serbia December 2019

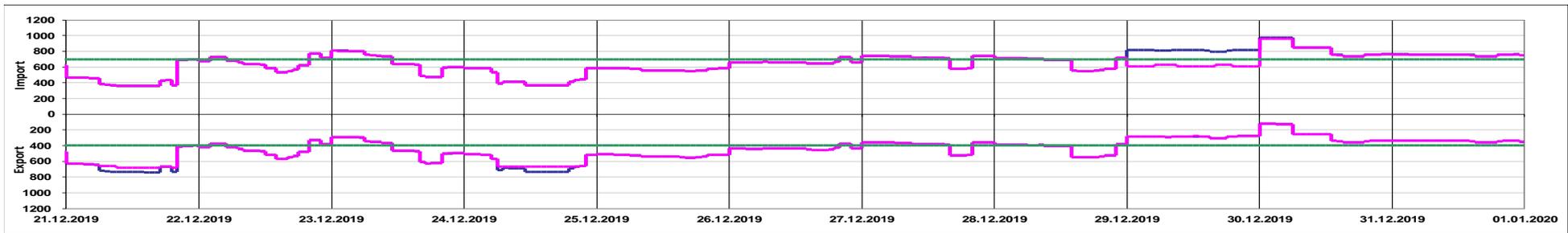
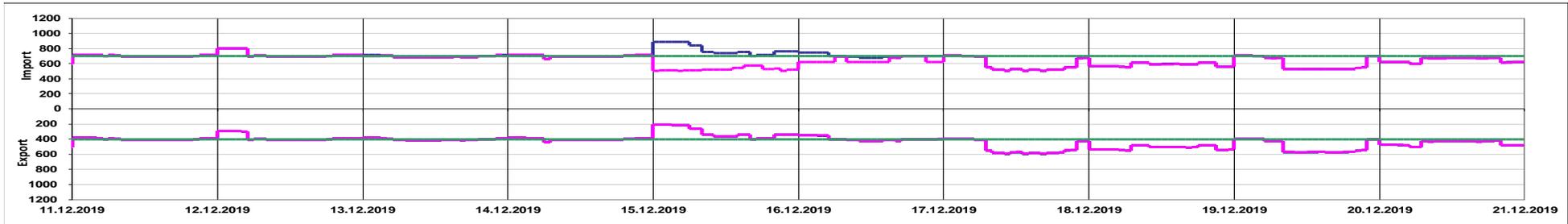
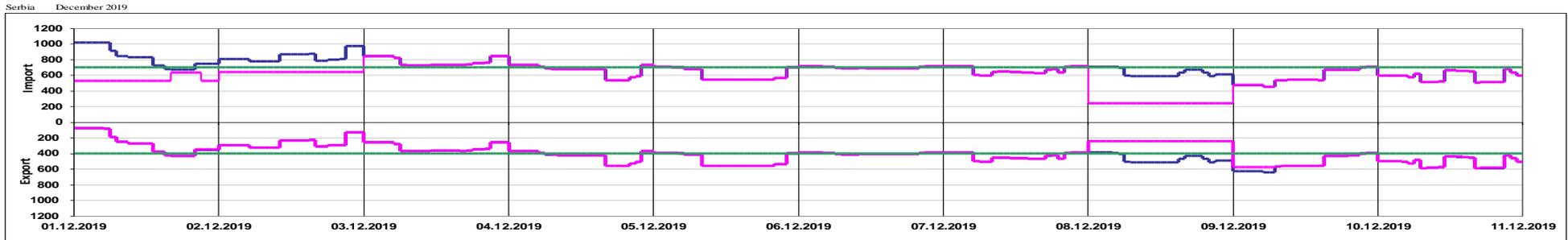




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# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Serbian border



Offered Capacity on Daily Auction Import (+) / Export (-) [MW]

Allocated Capacity on Daily Auction Import (+) / Export (-) [MW]

Net Transfer Capacity (NTC) Import (+) / Export (-) [MW]



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# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Serbian border

### Auction Price [Euro/MWh] – Export

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	8.00	8.00	8.00	8.00	4.50	4.50	0.88	0.71	0.71	0.71	0.71	0.71	0.32	0.11	0.11	0.09	0.05	0.09	0.09	0.07	0.09	0.09	0.09	0.09	8.00
2	0.45	0.45	0.45	0.45	0.45	0.44	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.25	0.25	0.25	0.38	5.00	5.00	5.00	5.00
3	0.38	0.38	0.38	0.38	0.38	0.17	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.38	0.38	0.38	0.38
4	0.13	0.13	0.13	0.13	0.13	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.07	0.07	0.07	0.07	0.07	0.07	0.11	0.11	0.13
5	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.01	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.07	0.07	0.07
6	0.14	0.14	0.14	0.21	0.21	0.10	0.07	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.11	0.10	0.10	0.21
7	0.10	0.10	0.14	0.15	0.09	0.03	0.03	0.03	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.05	0.08	0.08	0.05	0.08	0.14	0.14	0.14	0.15
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.33	0.33	0.33	0.33
10	0.05	0.08	0.08	0.08	0.08	0.05	0.05	0.03	0.03	0.03	0.03	0.08	0.08	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.15	0.12	0.12	0.15
11	0.15	0.15	0.15	0.15	0.15	0.10	0.10	0.10	0.10	0.13	0.13	0.13	0.17	0.17	0.17	0.15	0.10	0.15	0.15	0.15	0.27	0.80	1.10	1.10	1.10
12	2.00	2.00	2.00	2.11	2.21	0.44	0.33	0.44	0.44	0.27	0.27	0.27	0.27	0.27	0.24	0.24	0.24	0.27	0.27	0.27	0.33	0.33	0.33	0.33	2.21
13	0.15	0.15	0.15	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.15	0.15	0.15
14	0.11	0.11	0.11	0.11	0.11	0.11	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11
15	0.60	0.60	0.60	0.60	0.60	0.60	0.30	0.30	0.20	0.20	0.18	0.18	0.18	0.18	0.20	0.20	0.09	0.17	0.17	0.17	0.25	0.25	0.25	0.25	0.60
16	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03
17	0.15	0.15	0.15	0.15	0.15	0.12	0.12	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.12	0.12	0.15
18	0.16	0.16	0.15	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.16	0.30	0.30	0.30
19	0.12	0.12	0.12	0.12	0.12	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07	0.07	0.12
20	0.20	0.20	0.20	0.20	0.20	0.14	0.14	0.28	0.20	0.33	0.33	0.43	0.43	0.43	0.43	0.43	0.28	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.43
21	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.17	0.33	0.55	1.55	1.55
22	0.33	0.33	0.34	0.33	0.34	0.33	0.33	0.33	0.24	0.24	0.24	0.20	0.20	0.20	0.15	0.15	0.15	0.20	0.33	0.33	0.78	1.20	2.24	2.40	2.40
23	6.00	5.00	5.00	3.50	3.50	2.00	0.51	0.51	0.51	0.27	0.24	0.15	0.15	0.15	0.15	0.15	0.11	0.11	0.11	0.11	0.15	0.15	0.14	0.14	6.00
24	0.09	0.09	0.09	0.09	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.07	0.07	0.09
25	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05
26	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.44	0.65	0.65	0.65	0.65	0.64	0.44	0.44	0.44	0.54	0.38	0.64	0.64	0.38	0.38	0.65
27	0.53	0.53	0.53	0.44	0.48	0.36	0.20	0.20	0.20	0.16	0.20	0.20	0.20	0.20	0.20	0.20	0.09	0.09	0.09	0.09	0.20	0.20	0.30	0.35	0.53
28	0.16	0.15	0.15	0.13	0.09	0.09	0.05	0.05	0.09	0.05	0.15	0.16	0.16	0.16	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.15	0.15	0.16
29	3.00	4.45	3.69	3.09	3.00	1.66	1.99	1.00	1.23	1.23	2.56	6.00	6.00	6.00	6.00	3.76	2.56	3.71	4.70	5.56	6.00	7.76	7.76	10.00	10.00
30	10.10	10.10	10.10	10.00	4.00	7.50	5.62	5.89	6.21	3.75	4.15	4.28	2.70	1.87	1.47	0.50	0.21	0.21	0.22	0.22	0.22	0.22	0.29	0.35	10.10
31	0.20	0.35	0.35	0.35	0.35	0.25	0.44	0.44	0.51	1.05	1.62	1.67	1.67	1.62	1.51	1.28	1.01	0.88	0.84	0.88	0.93	1.05	1.55	1.91	1.91

Serbia December 2019

# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Serbian border



Transelectrica®  
Societate Administrată în Sistem Dualist

### Auction Price [Euro/MWh] – Import

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.01	0.01	0.01	0.03	0.03	0.10	0.21	0.25	0.25	0.25	0.25	0.25	0.25	0.16	0.16	0.21	0.21	0.21	0.16	0.16	0.16	0.01	0.01	0.01	0.25
4	0.07	0.07	0.07	0.07	0.07	0.23	0.31	0.63	0.65	0.65	0.65	0.65	0.66	0.80	0.80	1.56	2.53	2.53	2.10	1.58	1.25	0.69	0.22	0.22	2.53
5	0.15	0.15	0.15	0.15	0.20	1.78	3.00	2.25	2.00	0.78	0.76	0.76	0.69	0.69	0.76	1.75	1.76	0.76	0.76	0.76	0.66	0.30	0.12	0.12	3.00
6	0.05	0.05	0.05	0.05	0.05	0.05	0.11	0.35	0.35	0.35	0.12	0.12	0.12	0.12	0.12	0.12	0.30	0.30	0.30	0.17	0.06	0.06	0.05	0.05	0.35
7	0.08	0.08	0.03	0.03	0.08	0.18	0.35	0.88	0.69	0.62	0.35	0.35	0.33	0.33	0.33	0.35	0.69	0.43	0.35	0.43	0.31	0.26	0.17	0.09	0.88
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.44	0.44	0.44	0.44	0.44	0.94	0.94	0.70	0.70	0.70	0.44	0.44	0.44	0.32	0.32	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.94
10	0.05	0.05	0.05	0.05	0.05	0.25	0.32	0.55	0.55	0.66	0.66	0.48	0.48	0.48	0.66	0.66	2.00	2.00	2.00	2.00	1.55	0.25	0.25	0.12	2.00
11	0.06	0.06	0.06	0.06	0.08	0.44	0.22	0.25	0.25	0.22	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.08	0.08	0.06	0.06	0.06	0.06	0.44
12	0.01	0.01	0.01	0.01	0.01	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.05	0.05	0.08
13	0.00	0.00	0.00	0.01	0.01	0.09	0.10	0.11	0.15	0.15	0.11	0.11	0.11	0.10	0.10	0.20	0.34	0.34	0.37	0.37	0.34	0.10	0.01	0.00	0.37
14	0.01	0.01	0.01	0.01	0.01	0.08	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.01	0.01	0.10
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.05	0.03	0.03	0.00	0.00	0.00	0.06
17	0.15	0.15	0.15	0.17	0.22	0.31	0.51	0.58	1.05	0.66	0.55	0.51	0.51	0.55	0.55	0.55	1.01	0.66	0.66	0.45	0.33	0.15	0.09	0.09	1.05
18	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
19	0.34	0.34	0.34	0.34	0.34	5.50	5.00	4.23	6.00	6.29	2.87	2.87	2.95	2.53	4.23	6.95	7.50	5.00	5.00	4.00	2.87	1.00	0.34	0.43	7.50
20	0.20	0.12	0.12	0.12	0.21	2.18	1.70	0.75	0.90	0.21	0.21	0.21	0.21	0.21	0.58	1.01	1.01	1.01	0.58	0.58	0.36	0.31	0.16	0.22	2.18
21	0.33	0.33	0.33	0.76	0.76	1.80	3.00	3.00	3.00	2.11	2.11	2.11	2.11	2.11	2.11	1.25	2.40	1.25	0.88	0.76	0.12	0.08	0.06	0.06	3.00
22	0.12	0.12	0.11	0.12	0.12	0.22	0.22	0.15	0.15	0.15	0.15	0.12	0.15	0.15	0.21	0.21	0.21	0.12	0.11	0.11	0.08	0.08	0.08	0.08	0.22
23	0.13	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.26	0.37	0.37	0.37	0.67	1.35	2.69	2.69	2.69	2.55	0.55	0.55	0.28	0.28	2.69
24	0.56	0.56	0.56	0.56	0.56	3.00	3.00	4.00	3.56	3.56	1.60	1.06	2.09	2.11	2.11	2.89	2.25	1.66	1.08	0.88	0.66	0.62	0.23	0.22	4.00
25	0.18	0.18	0.18	0.18	0.18	0.30	0.76	0.62	0.55	0.55	0.55	0.30	0.30	0.30	1.12	1.56	1.56	0.92	0.92	0.62	0.30	0.15	0.15	1.56	
26	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.01	0.01	0.05	0.05	0.05
27	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.17	0.10	0.10	0.10	0.10	0.10	0.17	2.05	2.05	0.82	0.83	0.37	0.10	0.10	0.10	2.05
28	0.09	0.09	0.09	0.09	0.09	0.09	0.11	0.15	0.15	0.14	0.11	0.09	0.09	0.09	0.15	0.33	0.88	0.88	0.68	0.58	0.35	0.15	0.09	0.09	0.88
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.07	0.07	0.09	0.10	0.33	0.33	0.31	0.31	0.31	0.31	0.18	0.33
31	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03

Serbia December 2019

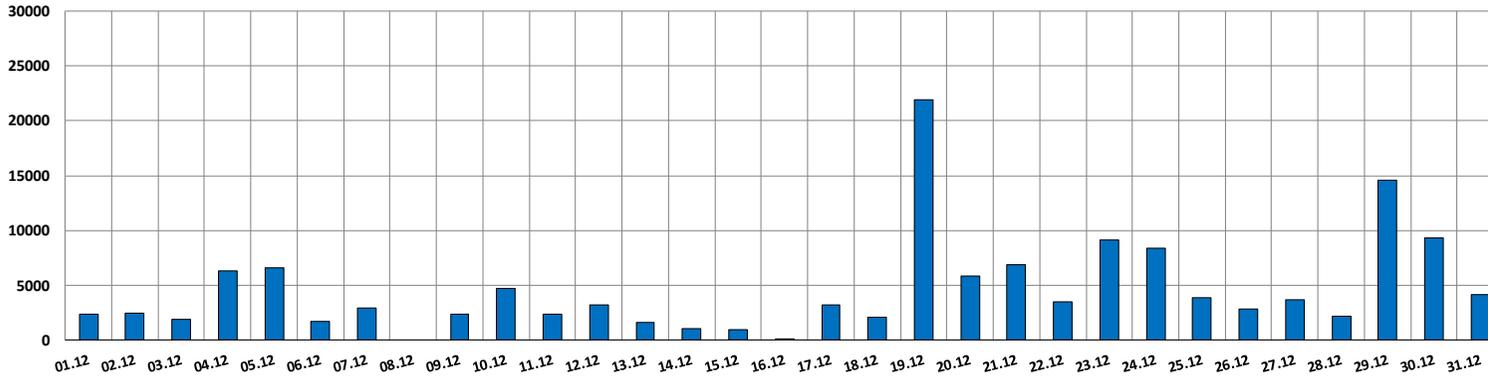


**Transelectrica®**  
Societate Administrată în Sistem Dualist

# Market for Allocation of Cross-Border Capacities

## Daily Allocation on Romanian – Serbian border

Congestion Income RO



Day	Congestion Income border RO-RS [Euro]	Congestion Income RO [Euro]
01.12	4767	2384
02.12	4971	2486
03.12	3893	1946
04.12	12619	6310
05.12	13237	6618
06.12	3465	1733
07.12	5821	2911
08.12	0	0
09.12	4855	2428
10.12	9534	4767
11.12	4723	2362
12.12	6459	3229
13.12	3286	1643
14.12	2054	1027
15.12	2023	1011
16.12	296	148
17.12	6409	3205
18.12	4160	2080
19.12	43925	21963
20.12	11664	5832
21.12	13806	6903
22.12	6941	3471
23.12	18383	9191
24.12	16796	8398
25.12	7715	3858
26.12	5663	2831
27.12	7454	3727
28.12	4296	2148
29.12	29251	14626
30.12	18688	9344
31.12	8262	4131
<b>Total</b>	<b>285417</b>	<b>142709</b>

Daily Income [Euro]		Remuneration UIOSI [Euro]	
RO-RS	RS-RO	RO-RS	RS-RO
111848	173569	107150	170838
<b>285417</b>		<b>277988</b>	

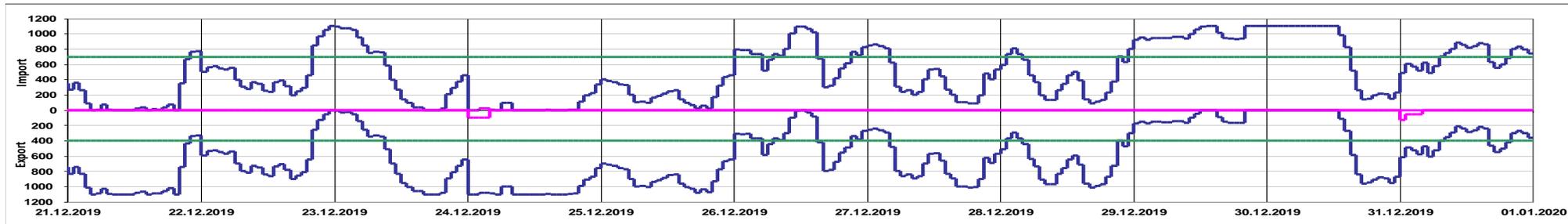
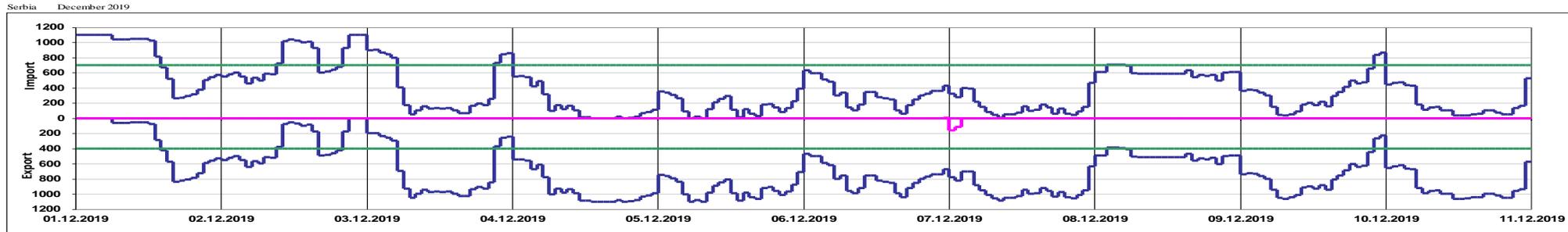
TSO Income (Z-R) [Euro]	RO TSO Income (Z-R) [Euro]
<b>7429</b>	<b>3715</b>



Transelectrica®  
Societate Administrată în Sistem Dualist

# Market for Allocation of Cross-Border Capacities

## Intraday Auctions on Romanian – Serbian border



Offered Capacity on Intraday Auction Import (+) / Export (-) [MW]

Allocated Capacity on Intraday Auction Import (+) / Export (-) [MW]

Net Transfer Capacity (NTC) Import (+) / Export (-) [MW]



Transelectrica®  
Societate Administrată în Sistem Dualist

# Market for Allocation of Cross-Border Capacities

## Intraday Auctions on Romanian – Serbian border

### Auction Price [Euro/MWh] - Export

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	-	-	-	-	0.00	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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# Market for Allocation of Cross-Border Capacities

## Intraday Auctions on Romanian – Serbian border

### Auction Price [Euro/MWh] - Import

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	-	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	-	-	-	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00
24	-	-	0.00	0.00	0.00	-	0.00	0.00	-	-	-	-	-	-	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Serbia

December 2019



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# Market for Allocation of Cross-Border Capacities

## Statistics on Monthly Auction

December 2019		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Hungary export	Number of Capacity Traders	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
	Number of Capacity Holders	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Number of Bids	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Hungary import	Number of Capacity Traders	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	
	Number of Capacity Holders	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
	Number of Bids	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	
Bulgaria export	Number of Capacity Traders	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	Number of Capacity Holders	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
	Number of Bids	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
Bulgaria import	Number of Capacity Traders	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
	Number of Capacity Holders	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
	Number of Bids	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	
Serbia export	Number of Capacity Traders	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
	Number of Capacity Holders	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
	Number of Bids	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	
Serbia import	Number of Capacity Traders	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
	Number of Capacity Holders	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
	Number of Bids	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	
Ukraine export	Number of Capacity Traders	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	Number of Capacity Holders	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	Number of Bids	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
Ukraine import	Number of Capacity Traders	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	Number of Capacity Holders	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	Number of Bids	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	
Moldavia import RO_Cioara	Number of Capacity Traders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of Capacity Holders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of Bids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Moldavia import RO_Costesti	Number of Capacity Traders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of Capacity Holders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of Bids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Moldavia import RO_Vulcanesti	Number of Capacity Traders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of Capacity Holders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Number of Bids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

December 2019	Maximum	Minimum
Number of Capacity Traders	27	5
Number of Capacity Holders	15	3
Number of Bids	111	14

# Market for Allocation of Cross-Border Capacities



## Statistics on Daily Auctions

December 2019		Daily Auctions																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Serbia Export	Maximum Number of Capacity Traders	8	8	8	8	8	8	8	4	8	8	8	8	8	8	7	7	8	9	8	8	8	8	8	8	8	8	8	8	9	8	8
	Maximum Number of Capacity Holders	5	5	5	7	7	7	7	4	8	7	6	6	5	6	6	6	8	7	7	6	8	5	6	8	7	5	7	7	5	6	5
	Maximum Number of Bids	20	23	28	29	26	26	27	5	17	23	23	26	20	19	17	16	18	26	20	25	22	30	28	24	24	26	26	22	34	25	31
Serbia Import	Maximum Number of Capacity Traders	8	7	10	10	10	9	10	4	10	10	9	8	9	9	7	8	9	8	10	8	10	8	8	9	8	8	10	8	7	8	8
	Maximum Number of Capacity Holders	8	7	10	10	9	8	10	4	8	9	8	7	8	7	7	7	8	6	6	7	7	7	7	7	6	7	9	7	7	8	7
	Maximum Number of Bids	19	19	41	42	44	31	34	7	28	37	32	27	32	26	19	25	35	27	49	37	42	32	33	46	30	25	32	34	23	30	26
Bulgaria Export	Maximum Number of Capacity Traders	15	14	16	14	14	14	14	12	12	15	15	15	14	14	13	12	15	15	14	15	13	13	15	14	13	13	14	14	13	14	15
	Maximum Number of Capacity Holders	11	11	13	12	12	11	11	8	9	12	12	11	11	12	11	10	11	12	10	12	11	11	12	12	11	11	12	12	9	10	12
	Maximum Number of Bids	32	26	29	28	30	32	34	28	20	28	34	33	29	32	24	25	33	37	31	29	33	28	32	25	25	28	27	32	29	33	32
Bulgaria Import	Maximum Number of Capacity Traders	12	14	15	16	16	15	16	13	12	14	14	15	13	15	14	14	16	15	15	13	15	13	13	15	13	12	15	13	11	14	15
	Maximum Number of Capacity Holders	12	13	14	15	13	13	12	11	11	13	13	13	12	15	12	12	15	13	14	11	14	12	13	14	12	11	13	13	10	13	15
	Maximum Number of Bids	21	22	23	30	28	25	28	22	23	25	25	24	25	26	21	21	29	27	28	20	24	24	24	25	23	19	23	23	18	22	24

Note: In the table are presented the daily maximum hourly values.

## Statistics on Intraday Auctions

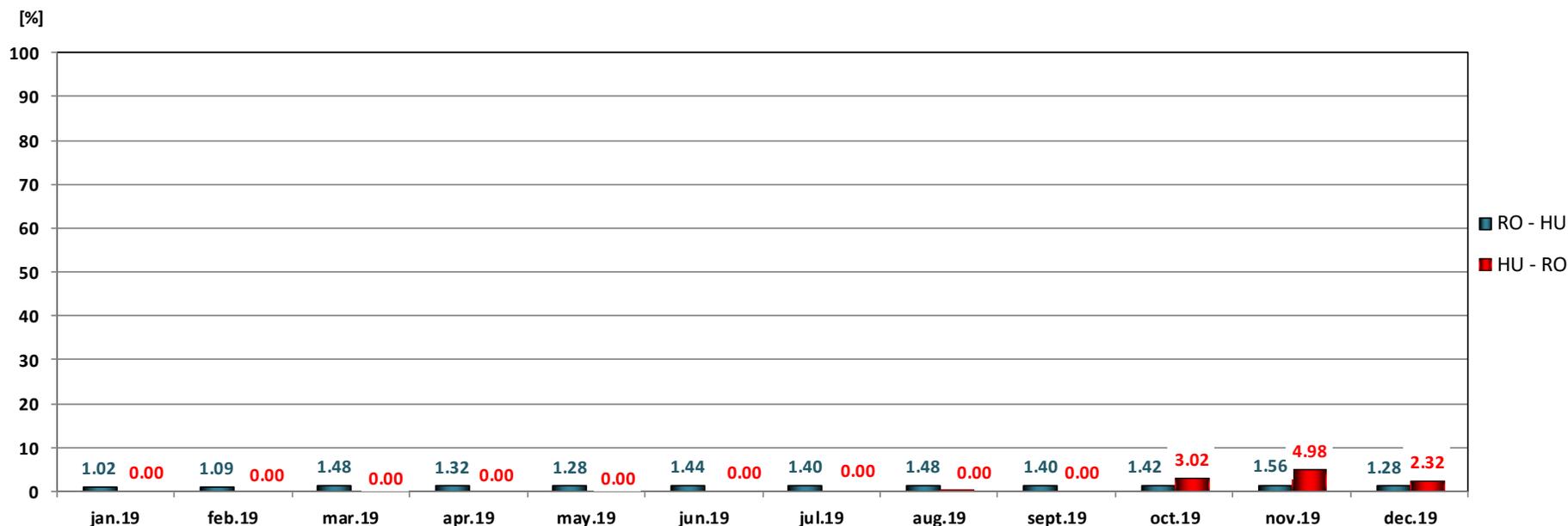
December 2019		Intraday Auctions		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Serbia Export	<b>Maximum Number of Capacity Traders</b>	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
	<b>Maximum Number of Capacity Holders</b>	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Serbia Import	<b>Maximum Number of Capacity Traders</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	<b>Maximum Number of Capacity Holders</b>	-	-	-	-	-	0	-	-	-	-	-	-	-	1	-	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-

Note: In the table are presented the daily maximum hourly values.

## Long term Auction on Romanian – Hungarian border

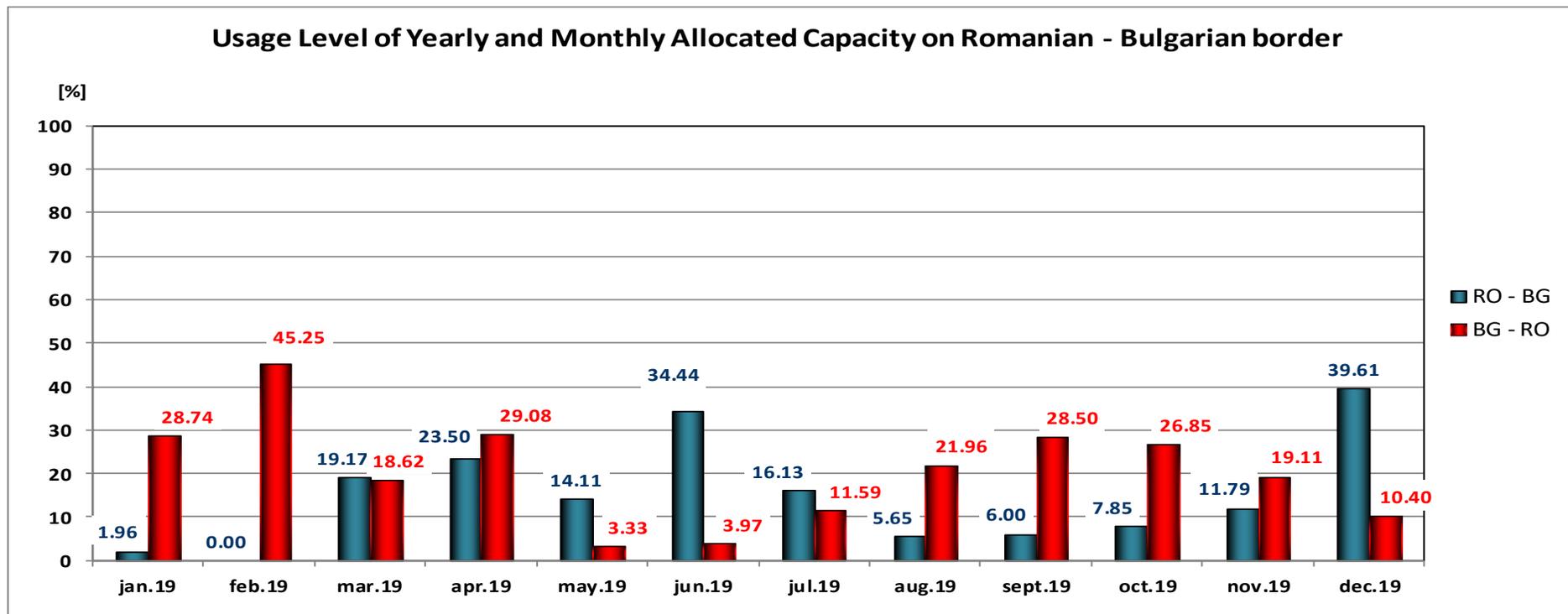
## Usage Level of Allocated Capacity

Usage Level of Yearly and Monthly Allocated Capacity on Romanian - Hungarian border



CET

Usage level of yearly and monthly allocated capacity was calculated as ratio between nominated capacity and sum of allocated capacity at yearly and monthly auctions. In 2019, the average values (arithmetic) of usage level are: 1.35 % on export direction and 0.86 % on import direction.



CET

Usage level of yearly and monthly allocated capacity was calculated as ratio between nominated capacity and sum of allocated capacity at yearly and monthly auctions after returns.

In 2019, the average values (arithmetic) of usage level are: 15.02 % on export direction and 20.62 % on import direction.



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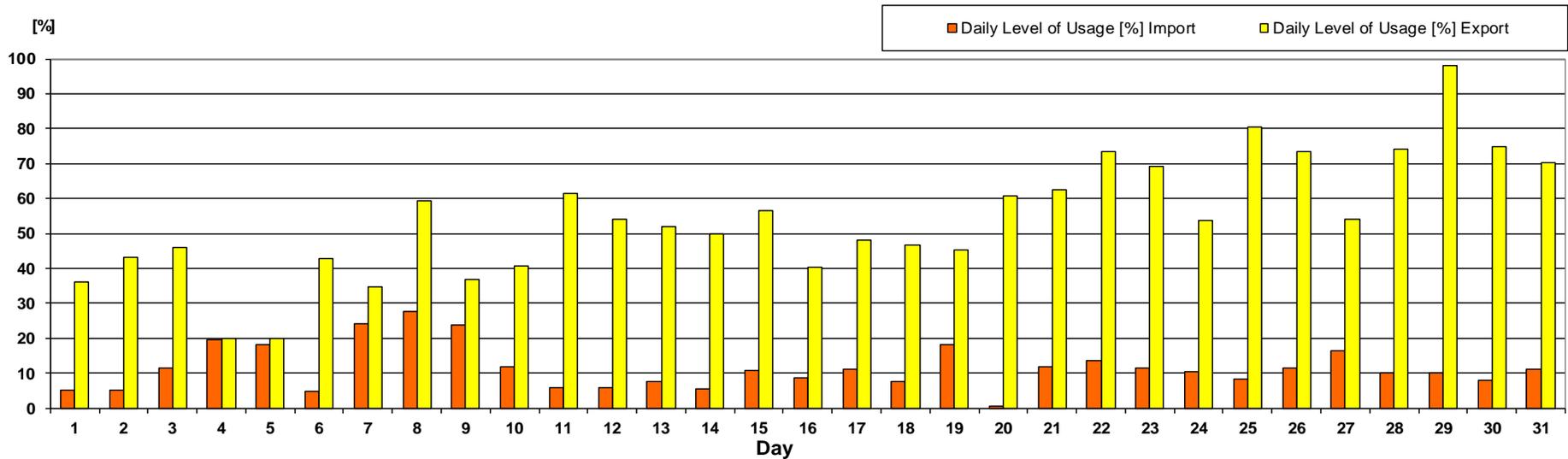
# Market for Allocation of Cross-Border Capacities

## Daily Auctions on Romanian – Bulgarian border

### Usage Level of Daily Allocated Capacity

RO-BG

December 2019

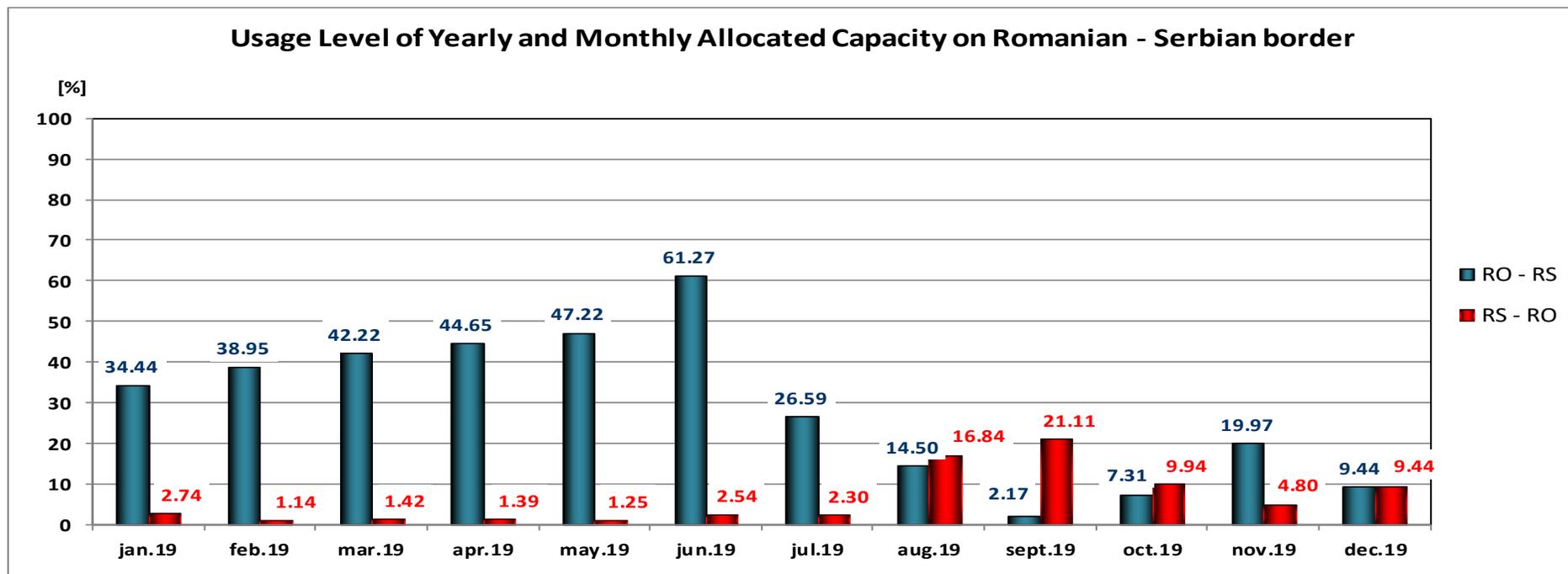


Daily Level of Usage [%]

December 2019	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Import	5.23	5.09	11.42	19.57	18.22	4.79	23.97	27.80	23.72	11.88	5.70	5.88	7.64	5.48	10.69	8.57	11.07	7.72	18.12	0.40	11.70	13.46	11.41	10.54	8.41	11.54	16.24	10.15	9.90	7.76	11.01
Export	36.21	43.20	46.01	19.78	19.74	42.83	34.58	59.22	36.73	40.70	61.55	54.17	51.98	49.70	56.44	40.39	47.91	46.57	45.31	60.58	62.37	73.55	69.19	53.73	80.41	73.37	53.89	74.24	97.93	74.70	70.10

Level of usage of daily allocated capacity, calculated at monthly level, as ratio between sum of nominated daily capacities and sum of daily allocated capacities, has the following values:

- Import 11.51 [%]
- Export 51.64 [%]



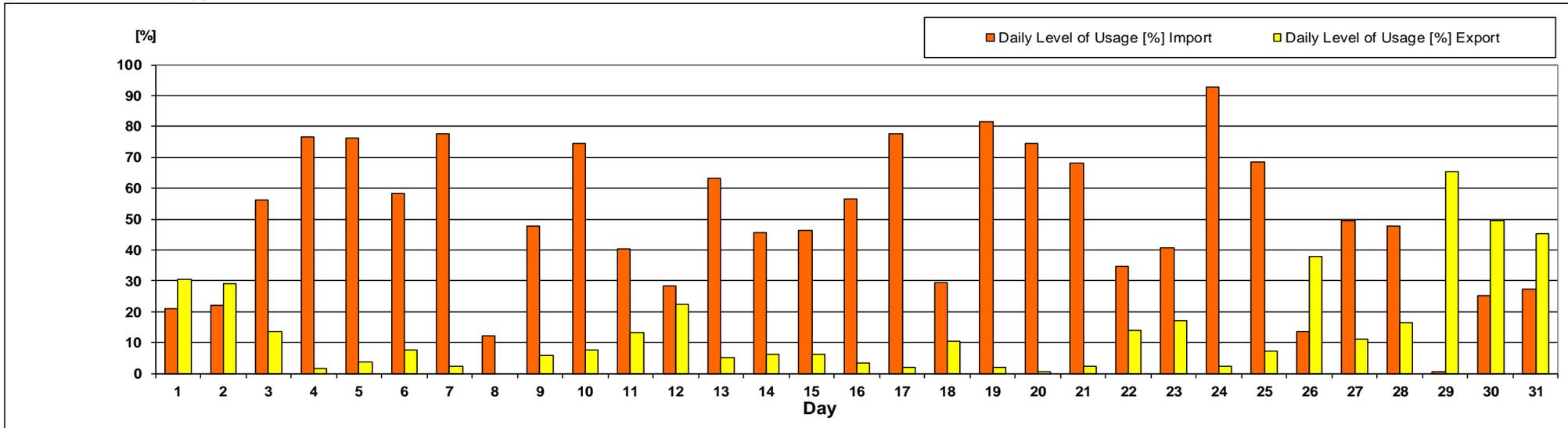
CET

Usage level of yearly and monthly allocated capacity was calculated as ratio between nominated capacity and sum of allocated capacity at yearly and monthly auctions after returns.

In 2019, the average values (arithmetic) of usage level are: 29.06 % on export direction and 6.24 % on import direction.

Serbia

December 2019



Daily Level of Usage [%]

December 2019	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Import	20.95	22.14	56.29	76.65	76.15	58.10	77.75	12.16	47.60	74.55	40.20	28.31	63.26	45.57	46.17	56.43	77.76	29.56	81.55	74.30	68.05	34.64	40.56	92.72	68.47	13.54	49.46	47.65	0.38	25.12	27.42
Export	30.31	28.95	13.48	1.57	3.78	7.50	2.12	0.00	5.69	7.44	13.31	22.36	5.14	6.18	6.19	3.21	1.88	10.29	1.77	0.55	2.46	13.83	16.93	2.35	7.18	37.71	11.20	16.40	65.24	49.54	45.42

Level of usage of daily allocated capacity, calculated at monthly level, as ratio between sum of nominated daily capacities and sum of daily allocated capacities, has the following values:

- Import 49.20 [%]
- Export 12.20 [%]



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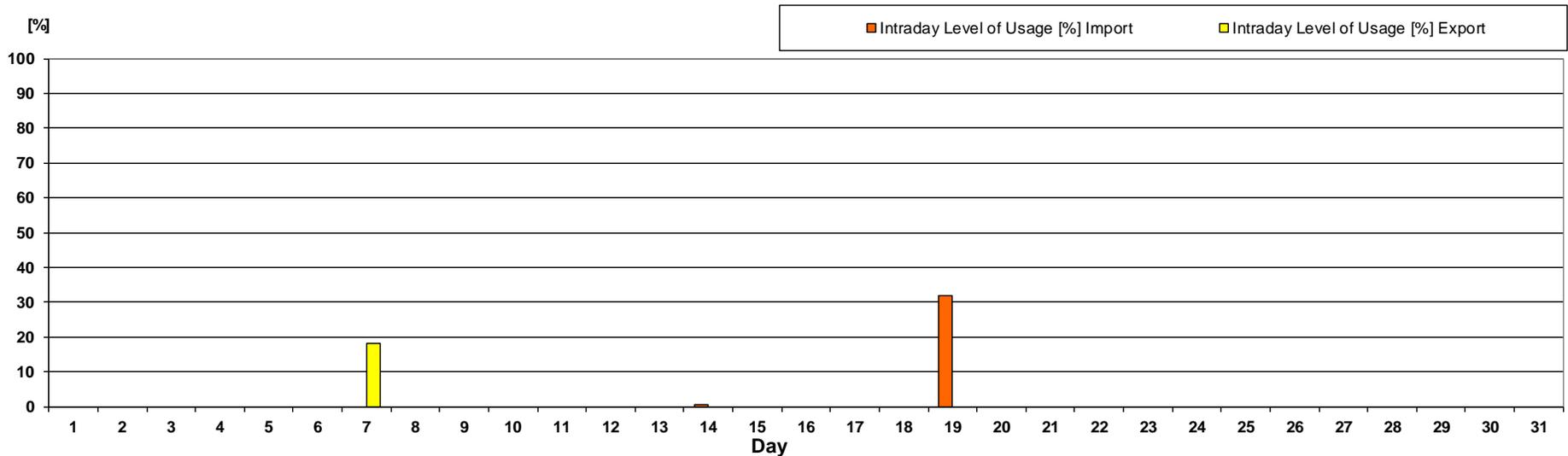
# Market for Allocation of Cross-Border Capacities

## Intraday Auctions on Romanian – Serbian border

### Usage Level of Intraday Allocated Capacity

Serbia

December 2019

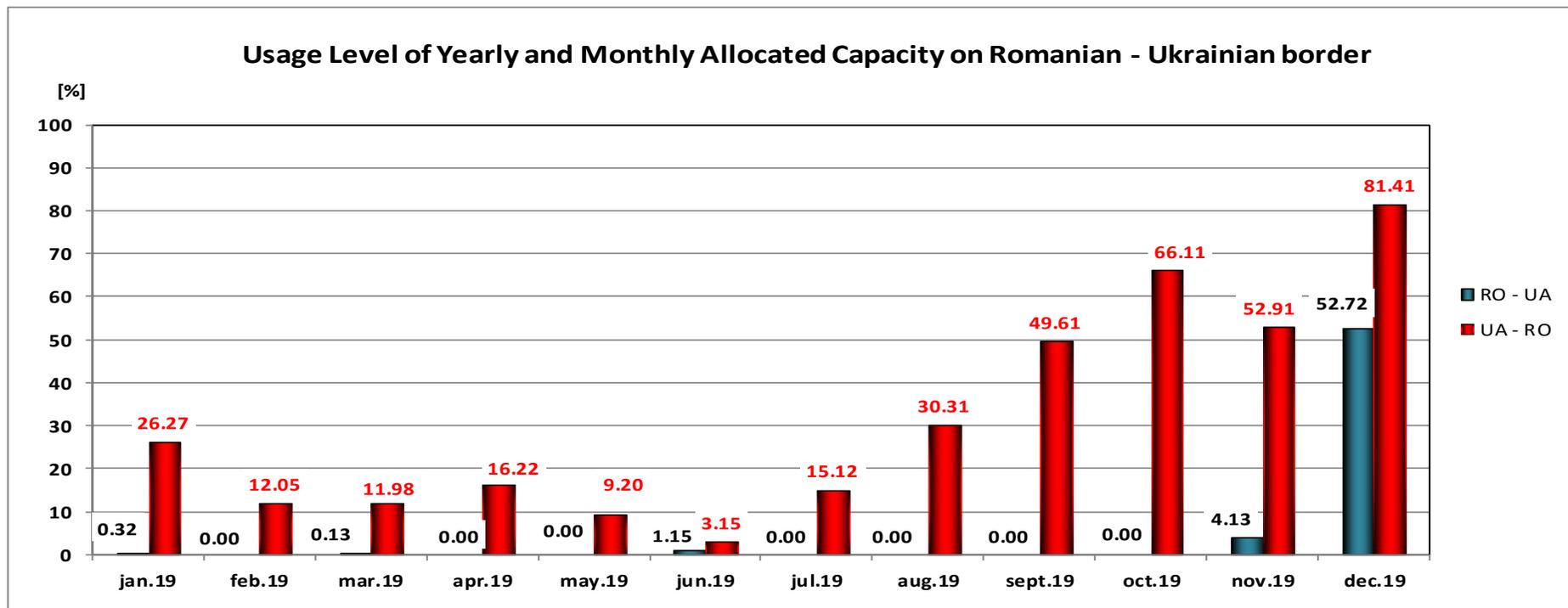


Intraday Level of Usage [%]

December 2019	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Import	-	-	-	-	-	0.00	-	-	-	-	-	-	-	0.40	-	0.00	-	-	32.00	-	-	-	-	0.00	-	-	-	-	-	-	
Export	-	-	-	-	-	-	17.98	-	-	-	-	-	-	0.00	-	-	-	-	-	-	-	-	-	0.00	-	-	-	-	-	0.00	

Level of usage of intraday allocated capacity, calculated at monthly level, as ratio between sum of nominated intraday capacities and sum of intraday allocated capacities, has the following values:

- Import 2.55 [%]
- Export 2.75 [%]



CET

Usage level of yearly and monthly allocated capacity was calculated as ratio between nominated capacity and sum of allocated capacity at yearly and monthly auctions.

In 2019, the average values (arithmetic) of usage level are: 5.31 % on export direction and 31.20 % on import direction.

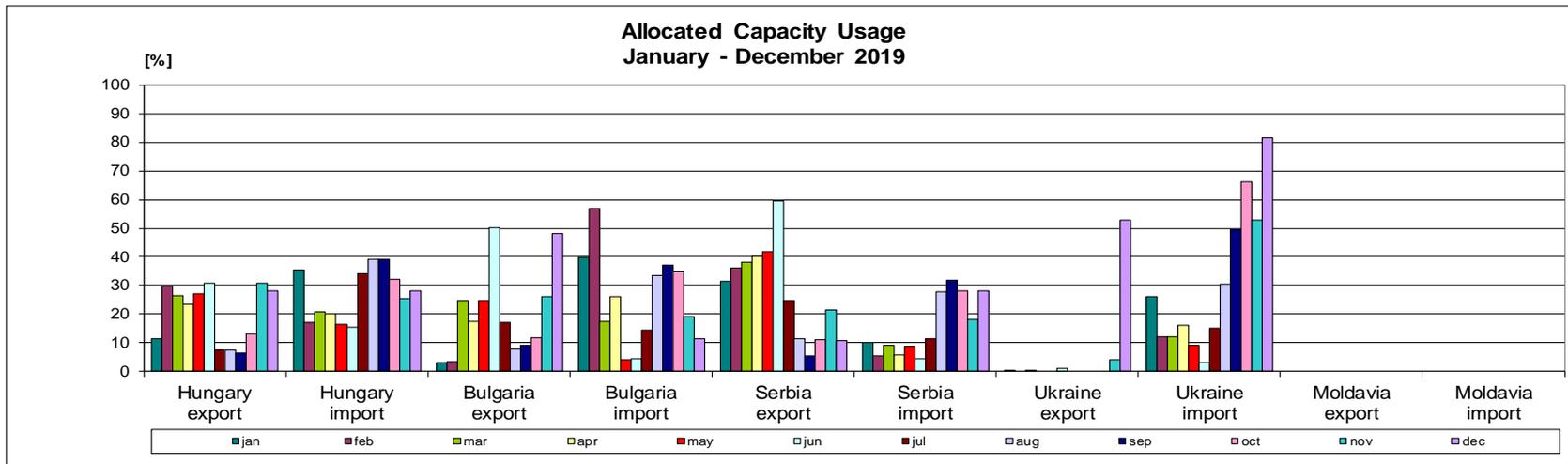


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# Market for Allocation of Cross-Border Capacities

## Usage level of capacity rights



The level of usage of total capacity rights on one border and direction represent the percentage ratio between the energy associated with the commercial transactions, nominated during a month, and the energy associated with the total capacity rights.

[%]	Hungary export	Hungary import	Bulgaria export	Bulgaria import	Serbia export	Serbia import	Ukraine export	Ukraine import	Moldavia export	Moldavia import
jan	11.45	35.42	3.24	39.66	31.42	10.17	0.32	26.27	-	-
feb	29.85	17.03	3.57	56.84	36.18	5.51	0.00	12.05	-	-
mar	26.58	20.84	24.84	17.56	38.13	9.26	0.13	11.98	-	-
apr	23.63	20.08	17.40	25.97	40.28	5.82	0.00	16.22	-	-
may	27.03	16.41	24.88	3.96	41.97	8.71	4.47	9.20	-	-
jun	30.80	15.36	50.17	4.33	59.52	4.47	1.15	3.15	-	-
jul	7.33	34.16	17.25	14.32	24.68	11.50	0.00	15.12	-	-
aug	7.36	39.32	7.79	33.64	11.36	27.96	0.00	30.31	-	-
sep	6.54	39.03	9.15	37.07	5.46	31.92	-	49.61	-	-
oct	13.26	32.12	11.88	34.85	11.17	28.25	0.00	66.11	-	-
nov	30.83	25.38	26.23	19.17	21.50	18.23	4.13	52.91	-	-
dec	28.08	28.21	48.00	11.58	10.82	28.20	52.72	81.41	-	-
<b>average</b>	<b>20.23</b>	<b>26.95</b>	<b>20.37</b>	<b>24.91</b>	<b>27.71</b>	<b>15.83</b>	<b>5.31</b>	<b>31.20</b>	-	-

Type B

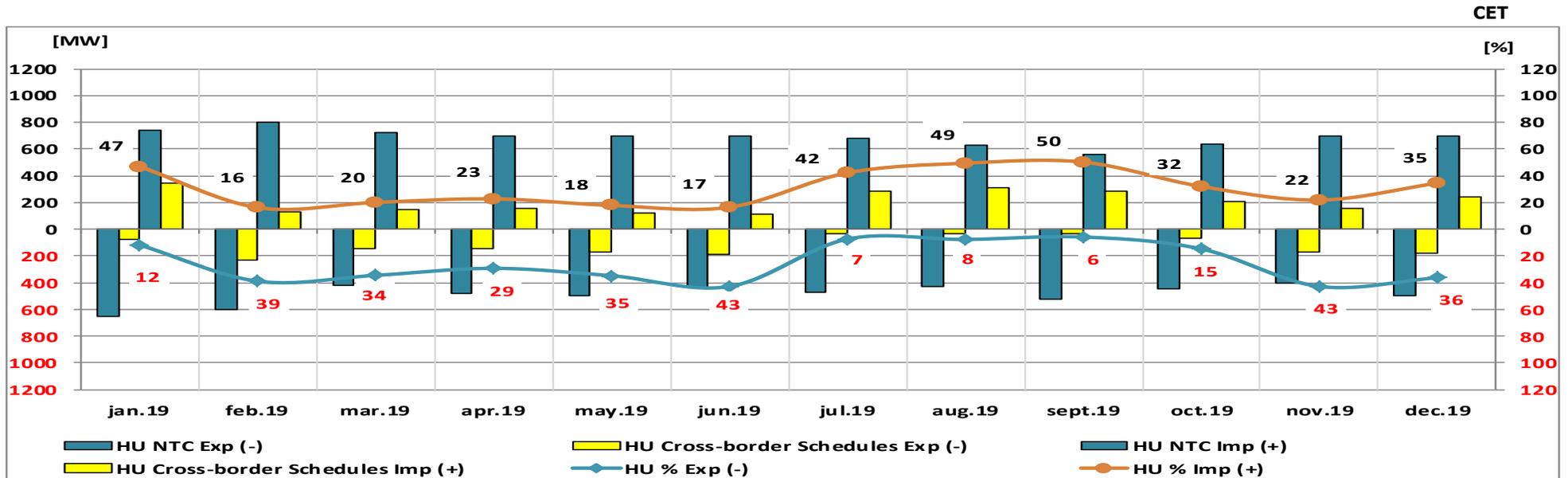
In December 2019, it was noticed a low level of capacity usage. On import and also on export direction the highest level of usage was on Ukraine border. In 2019, it was noticed a low level of capacity usage. On export direction the highest level of usage was on Serbian border and on import direction the highest level of usage was on Hungarian border.



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# Market for Allocation of Cross-Border Capacities

## Usage Level of NTC on Romanian – Hungarian border



Hungary (monthly averages values, MW)	jan.19	feb.19	mar.19	apr.19	may.19	jun.19	jul.19	aug.19	sept.19	oct.19	nov.19	dec.19
HU NTC Exp (-)	-650	-600	-423	-482	-500	-437	-468	-429	-527	-447	-398	-500
HU Cross-border Schedules Exp (-)	-76	-233	-146	-141	-174	-187	-34	-33	-30	-66	-170	-181
HU NTC Imp (+)	745	800	725	700	700	700	684	634	560	636	698	700
HU Cross-border Schedules Imp (+)	350	130	146	160	125	116	289	314	282	204	153	242

The level of usage was calculated as ratio between total cross-border schedules (capacity nominated on long and short term) and NTC. In 2019, the average values (arithmetic) of usage level are: 25.51 % on export direction and 30.93 % on import direction.

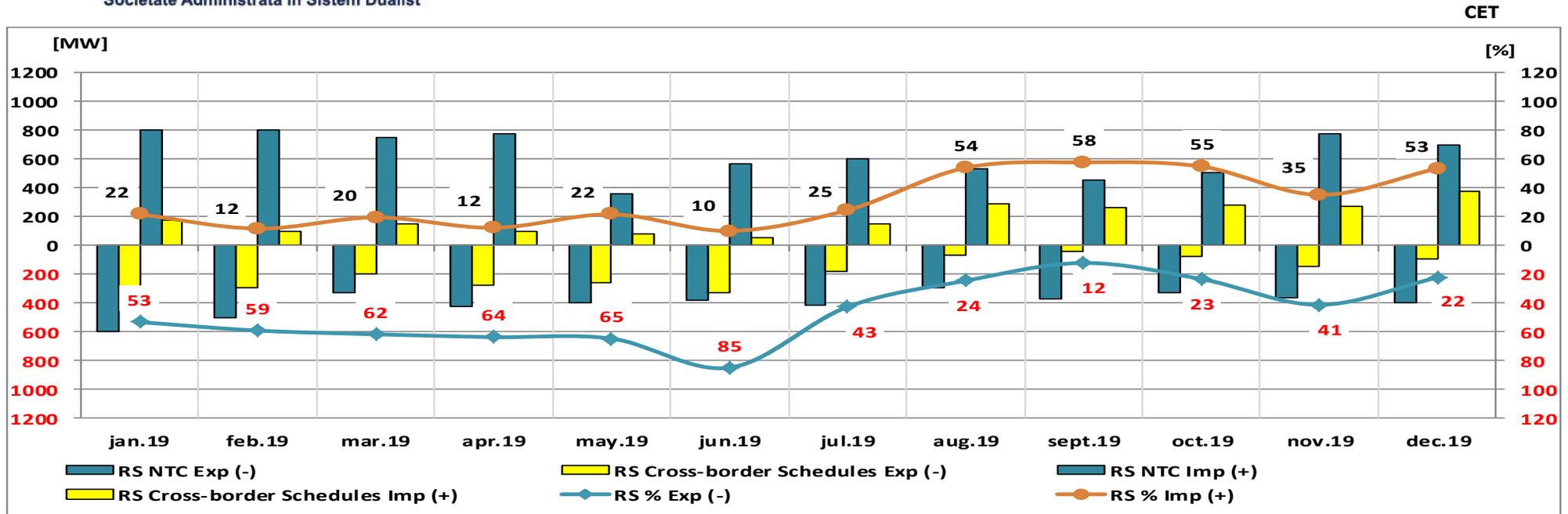


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# Market for Allocation of Cross-Border Capacities

## Usage Level of NTC on Romanian – Serbian border



Serbia (monthly averages values, MW)	jan.19	feb.19	mar.19	apr.19	may.19	jun.19	jul.19	aug.19	sept.19	oct.19	nov.19	dec.19
RS NTC Exp (-)	-600	-500	-325	-427	-400	-383	-416	-289	-372	-329	-358	-400
RS Cross-border Schedules Exp (-)	-319	-295	-200	-271	-258	-325	-177	-71	-45	-77	-147	-89
RS NTC Imp (+)	800	800	753	773	360	567	603	531	452	507	775	700
RS Cross-border Schedules Imp (+)	174	94	147	95	78	58	148	286	261	278	273	374

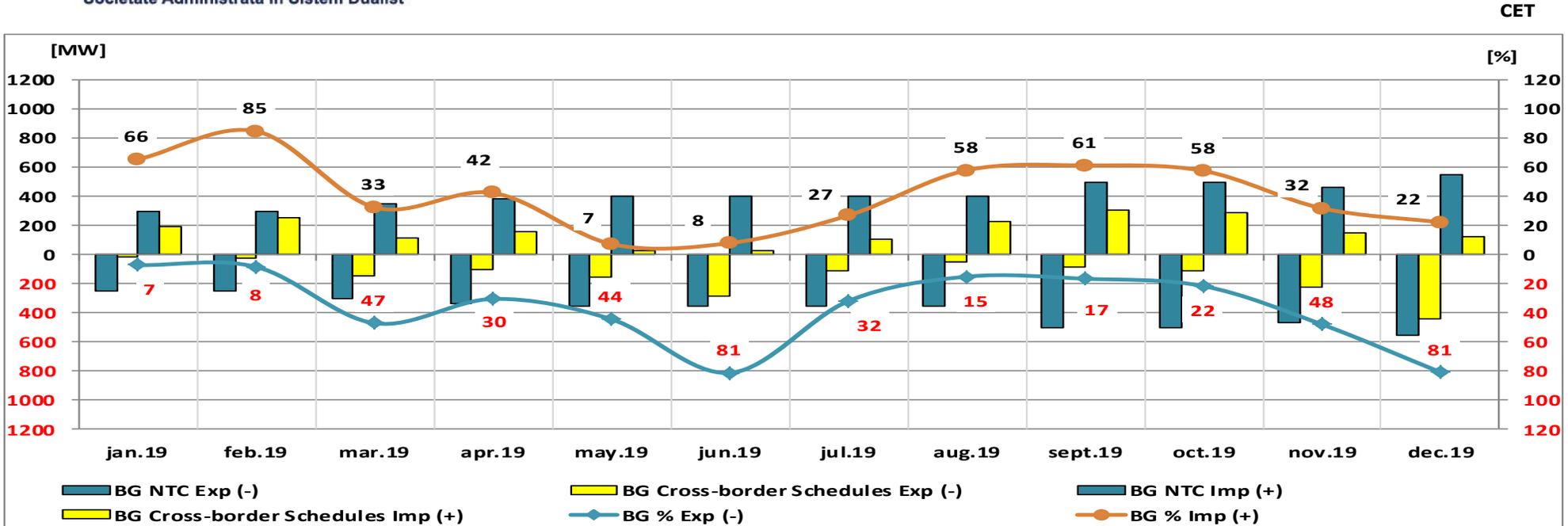
The level of usage was calculated as ratio between total cross-border schedules (capacity nominated on long and short term) and NTC. In 2019, the average values (arithmetic) of usage level are: 46.05 % on export direction and 31.42 % on import direction.



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# Market for Allocation of Cross-Border Capacities

## Usage Level of NTC on Romanian – Bulgarian border



Bulgaria (monthly averages values, MW)	jan.19	feb.19	mar.19	apr.19	may.19	jun.19	jul.19	aug.19	sept.19	oct.19	nov.19	dec.19
BG NTC Exp (-)	-250	-250	-300	-333	-350	-350	-350	-350	-500	-500	-463	-550
BG Cross-border Schedules Exp (-)	-18	-21	-142	-101	-155	-284	-112	-53	-83	-108	-222	-444
BG NTC Imp (+)	300	300	350	383	400	400	400	400	500	500	463	550
BG Cross-border Schedules Imp (+)	197	255	114	163	29	32	108	232	307	288	148	123

The level of usage was calculated as ratio between total cross-border schedules (capacity nominated on long and short term) and NTC. From the beginning of the year, the average values (arithmetic) of usage level are: 36.04 % on export direction and 41.59 % on import direction.

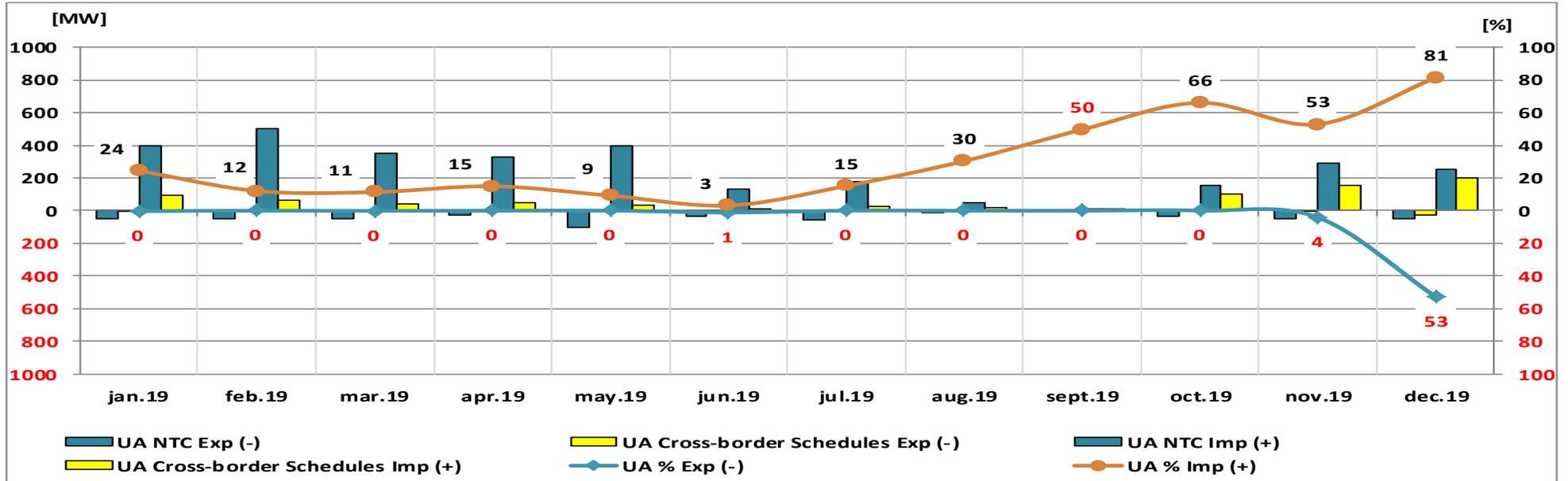


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# Market for Allocation of Cross-Border Capacities

## Usage Level of NTC on Romanian – Ukrainian border

CET



Ukraine (monthly averages values, MW)	jan.19	feb.19	mar.19	apr.19	may.19	jun.19	jul.19	aug.19	sept.19	oct.19	nov.19	dec.19
UA NTC Exp (-)	-50	-50	-50	-25	-100	-33	-58	-13	0	-34	-50	-50
UA Cross-border Schedules Exp (-)	-0.2	0.0	-0.1	0.0	0.0	-0.4	0.0	0.0	-	0.0	-2.1	-26.4
UA NTC Imp (+)	400	500	352	332	400	133	181	52	5	155	288	250
UA Cross-border Schedules Imp (+)	97	60	40	50	37	4	27	16	2	102	153	204

The level of usage was calculated as ratio between total cross-border schedules (capacity nominated on long and short term) and NTC. From the beginning of the year, the average values (arithmetic) of usage level are: 5.31% on export direction and 30.88% on import direction.



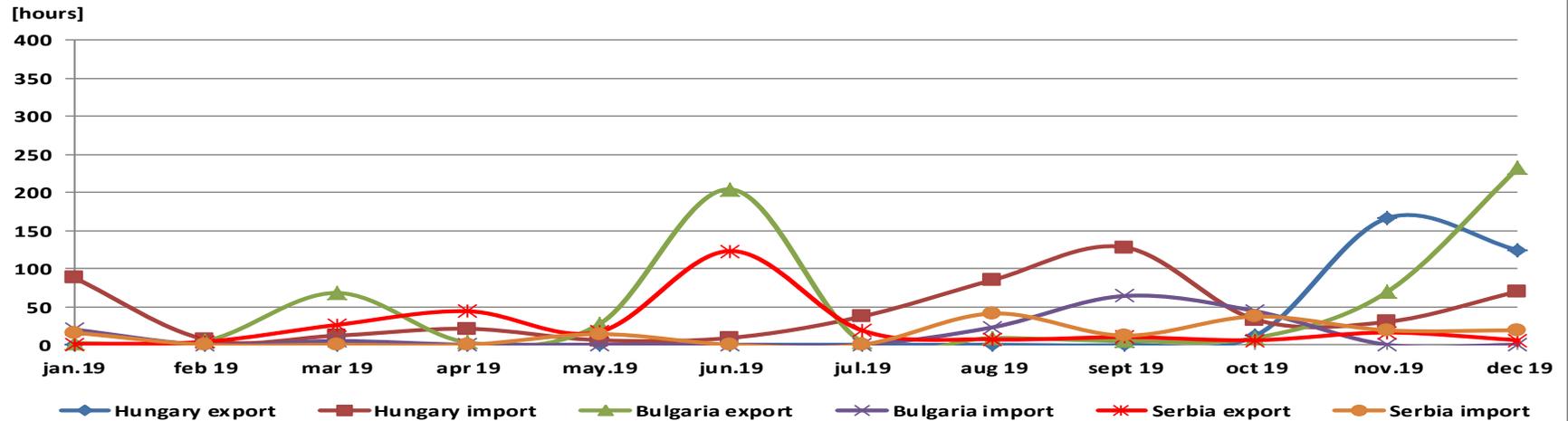
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# Market for Allocation of Cross-Border Capacities

## Maximization of NTC Usage

CET

Number of hours in which the sum of nominated cross-border schedules is higher than NTC



Number of hours	jan.19	feb 19	mar 19	apr 19	may.19	jun.19	jul.19	aug 19	sept 19	oct 19	nov.19	dec 19
Hungary export	0	0	0	0	0	0	0	0	0	12	166	124
Hungary import	88	7	12	21	6	9	37	85	128	33	30	70
Bulgaria export	2	5	68	3	27	204	4	9	5	9	69	232
Bulgaria import	20	0	5	0	0	0	0	23	64	44	0	0
Serbia export	1	4	26	44	17	123	19	7	10	6	16	6
Serbia import	16	0	0	0	14	0	0	41	12	37	19	19

By making efficient use of the interconnection (applying “netting” principle in daily and intra-day offered capacity calculation) there are some hours in which sum of nominated cross-border schedules is higher than the NTC.

# Market for Allocation of Cross-Border Capacities



## Synthesis (C1, C3, HHI) on type of auction and total values

December 2019

Border	Auction												Total		
	Yearly			Monthly			Daily			Intraday			C1 [%]	C3 [%]	HHI
	C1 [%]	C3 [%]	HHI	C1 [%]	C3 [%]	HHI	C1 [%]	C3 [%]	HHI	C1 [%]	C3 [%]	HHI			
<b>Hungary import</b>	37.14	65.43	1935	28.33	58.00	1479	-	-	-	-	-	-	33.08	58.15	1612
<b>Hungary export</b>	21.43	53.43	1261	25.97	54.55	1406	-	-	-	-	-	-	14.88	39.88	836
<b>Bulgaria import</b>	26.67	69.33	1904	31.06	59.63	1629	32.36	66.18	1788	-	-	-	25.65	50.35	1183
<b>Bulgaria export</b>	13.42	39.60	990	23.24	59.71	1455	29.88	59.15	1586	-	-	-	19.63	47.51	1037
<b>Serbia import</b>	24.50	64.00	1672	26.00	59.60	1673	36.89	68.18	2102	92.16	100.00	8547	17.41	44.31	1084
<b>Serbia export</b>	33.50	68.50	2027	29.50	67.00	1846	36.59	80.02	2410	100.00	100.00	10000	21.03	56.39	1400
<b>Ukraine import</b>	-	-	-	50.00	99.60	3784	-	-	-	-	-	-	50.00	99.60	3784
<b>Ukraine export</b>	-	-	-	48.00	100.00	3728	-	-	-	-	-	-	48.00	100.00	3728
<b>Moldavia import</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note:

- On the Hungarian border the implicit daily allocation is done through the market coupling mechanism of CZ-SK-HU day-ahead electricity markets (starting with 20.11.2014) and implicit intraday allocation is organized due to the integration of Romanian intraday market in SIDC - Single Intra-Day Market (starting with 20.11.2019).
- On the Bulgarian border implicit intraday allocation is organized due to the integration of Romanian intraday market in SIDC (Single Intra-Day Market) (starting with 20.11.2019).



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