

TERRE KPIs Report

February 2024



Introduction

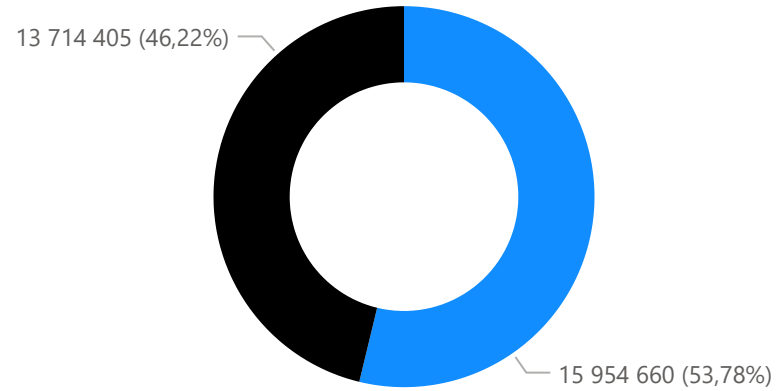
This report is prepared by TSOs participating in TERRE project based on the requirements set up in Article 15 of Implementation Framework for the exchange of balancing energy from Replacement Reserves in accordance with Article 19 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing



Volume of upward and downward bids submitted to the platform, requested by the TSOs and accepted by the AOF

Volume of offered bids (MWh)

Direction ● UP ● DOWN



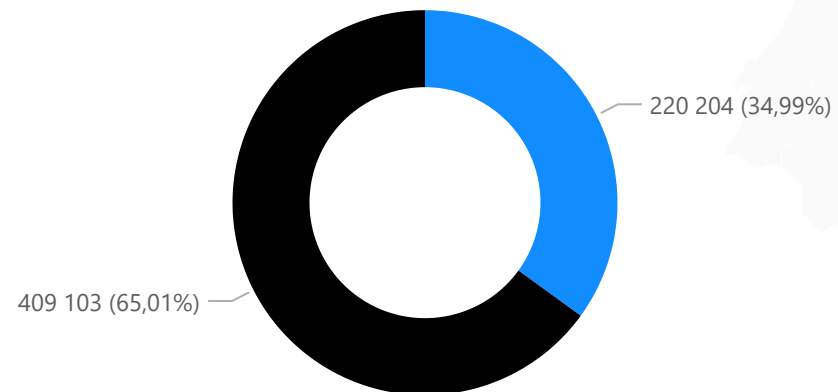
Volume of accepted bids (MWh)

Direction ● UP ● DOWN



Volume of submitted needs (MWh)

Direction ● UP ● DOWN



Volume of satisfied needs (MWh)

Direction ● UP ● DOWN




Use of RR assistance

REE

0
Count of RR assistance+


0
Count of RR assistance-



REN

4
Count of RR assistance+


38
Count of RR assistance-



RTE

24
Count of RR assistance+

19
Count of RR assistance-



Swissgrid

0
Count of RR assistance+

1
Count of RR assistance-



Terna

0
Count of RR assistance+

0
Count of RR assistance-



Month	Day	TSO	Total RR Assistance + (MWh)
February	1	RTE	1,50
February	2	RTE	74,00
February	3	RTE	12,00
February	4	RTE	29,00
February	5	RTE	13,00
February	6	RTE	26,00
February	7	REN	400,00
February	8	RTE	28,00
February	11	RTE	64,00
February	12	REN	148,00
February	12	RTE	1,00
February	14	REN	562,00
February	17	RTE	49,00
February	21	RTE	37,00
February	22	RTE	8,75
February	23	RTE	93,00
February	24	RTE	5,75
February	25	RTE	78,00
February	28	RTE	5,50

Month	Day	TSO	Total RR Assistance - (MWh)
February	3	RTE	6,00
February	4	RTE	56,00
February	5	RTE	22,00
February	6	RTE	98,00
February	7	RTE	66,00
February	9	RTE	8,00
February	10	REN	1 010,00
February	11	REN	237,00
February	12	REN	1 149,00
February	15	RTE	23,00
February	16	RTE	44,50
February	17	RTE	26,00
February	18	REN	220,00
February	20	REN	2 420,00
February	21	RTE	335,50
February	22	RTE	37,75
February	23	REN	4 300,00
February	23	RTE	24,00
February	24	REN	2 120,00
February	25	Swissgrid	3,50
February	26	REN	200,00



Using RR assistance

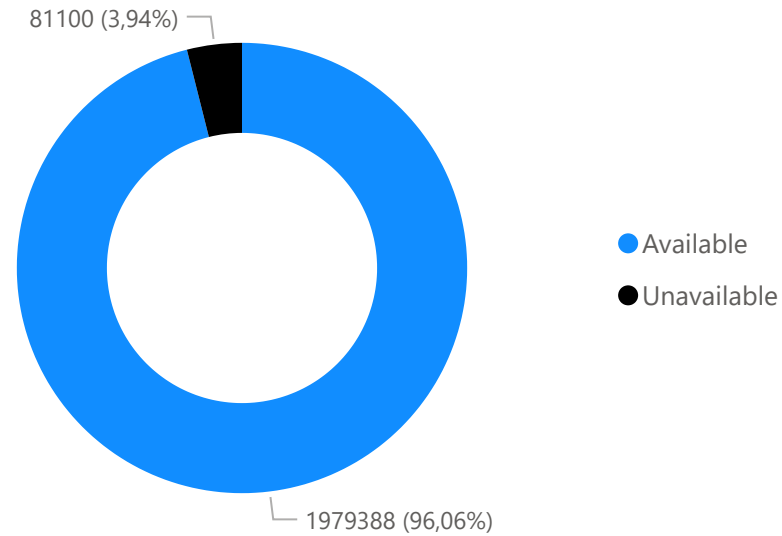


Not Using RR assistance

Note : RR assistance means that the TSO requested need exceeds submitted volume of bids in given direction

Volume and ratio of unavailable bids per TSO (MWh)

Share of available and unavailable bids (%)



Reasons of unavailability of bids

TSO	reasonCode	reasonText	Count
REE	B47	Operational security constraints	2 935
REN	B46	Internal congestion	3 100
REN	B47	Operational security constraints	11 460
RTE	B47	Operational security constraints	63 605
Total			81 100

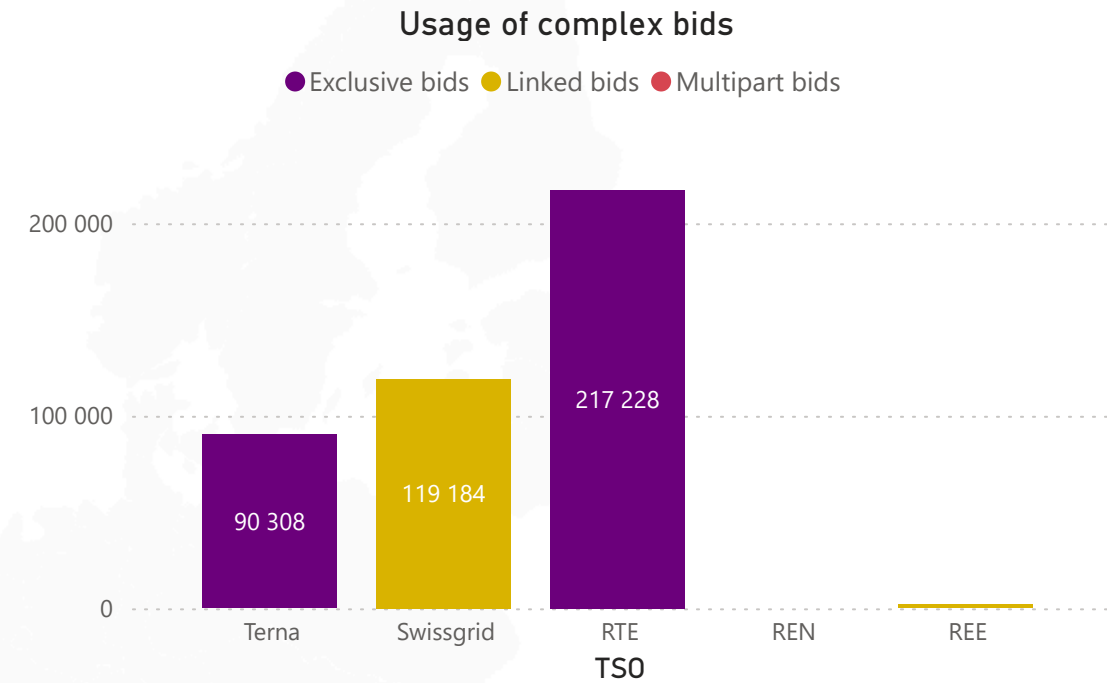
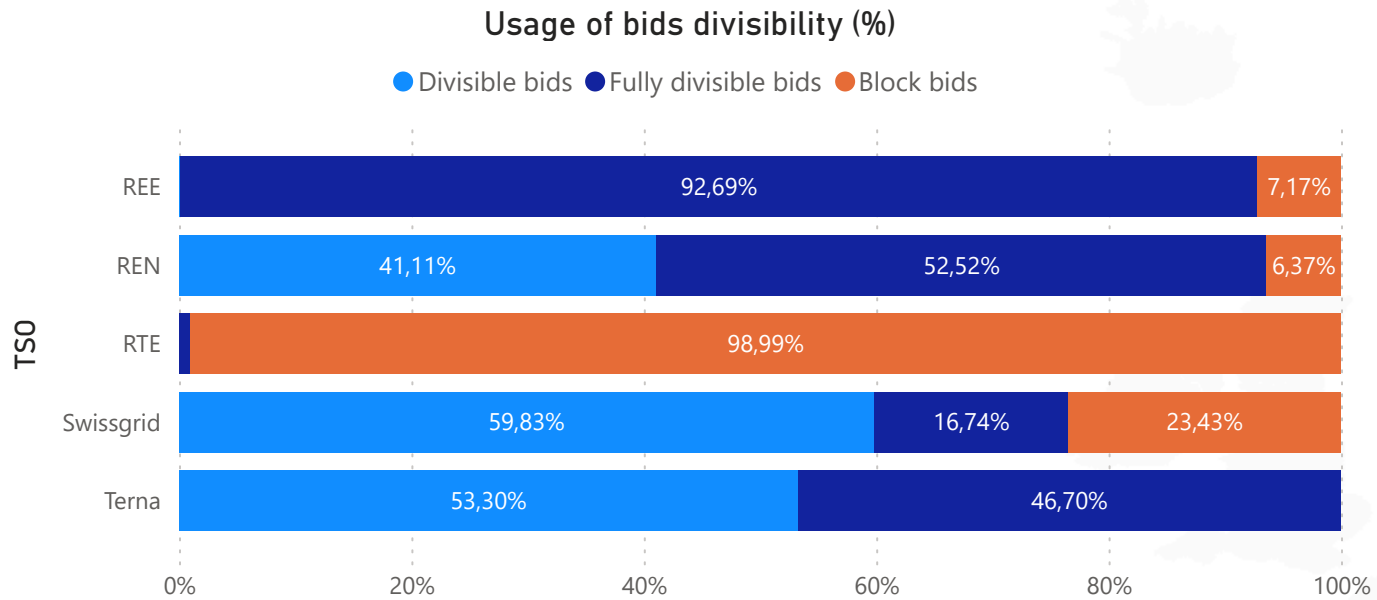
Volume of available and unavailable bids per area (MWh)

TSO	Available	Unavailable	Total
REE	8 852 278	62 528	8 914 806
REN	2 393 548	375 589	2 769 137
RTE	3 430 518	2 330 756	5 761 274
Swissgrid	2 594 989		2 594 989
Terna	9 628 859		9 628 859
Total	26 900 192	2 768 873	29 669 065

Share of unavailable bids per area (%)

TSO	Share of unavailable bids
REE	0,71 %
REN	15,69 %
RTE	67,94 %
Swissgrid	
Terna	
Total	10,29 %

Volume and ratio of fully divisible bids, divisible bids and block bids per TSO



Volume of indivisible, divisible and fully divisible bids (MWh)

TSO	Block bids	Divisible bids	Fully divisible bids	Total
REE	1 020 605	4 637	7 889 564	8 914 806
REN	486 650	465 851	1 816 636	2 769 137
RTE	5 676 439	0	84 836	5 761 274
Swissgrid	656 400	1 535 761	402 828	2 594 989
Terna	0	6 526 745	3 102 114	9 628 859
Total	7 840 094	8 532 994	13 295 977	29 669 065

Analysis of the size of the indivisible part of bids per TSO

Detail divisible bids - indivisible part

RR+	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	11,98	15,00	3,00	15,00	15,00
	REN	9,47	10,00	4,00	10,00	10,00
	Swissgrid	5,12	12,00	1,00	6,00	7,00
	Terna	51,01	1 254,00	2,00	15,00	265,00

RR-	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	1,00	1,00	1,00	1,00	1,00
	REN	9,95	10,00	10,00	10,00	10,00
	Swissgrid	5,05	12,00	1,00	6,00	7,00
	Terna	311,44	1 479,00	25,00	257,00	779,00

RR+	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	32,94 %	50,00 %	30,00 %	33,33 %	34,09 %
	REN	51,24 %	100,00 %	15,15 %	47,62 %	100,00 %
	Swissgrid	61,46 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	41,43 %	100,00 %	4,50 %	40,85 %	100,00 %

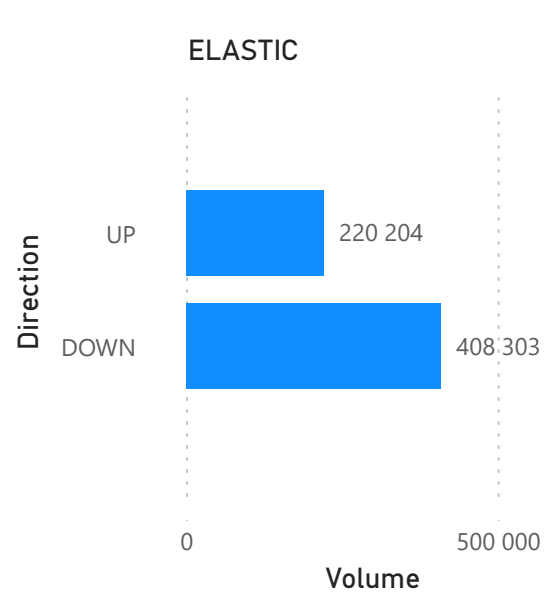
RR-	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	23,80 %	33,33 %	9,09 %	25,00 %	25,00 %
	REN	42,39 %	100,00 %	11,36 %	41,67 %	90,91 %
	Swissgrid	60,12 %	100,00 %	16,67 %	50,00 %	100,00 %
	Terna	97,20 %	100,00 %	86,21 %	100,00 %	100,00 %

Detail indivisible bids

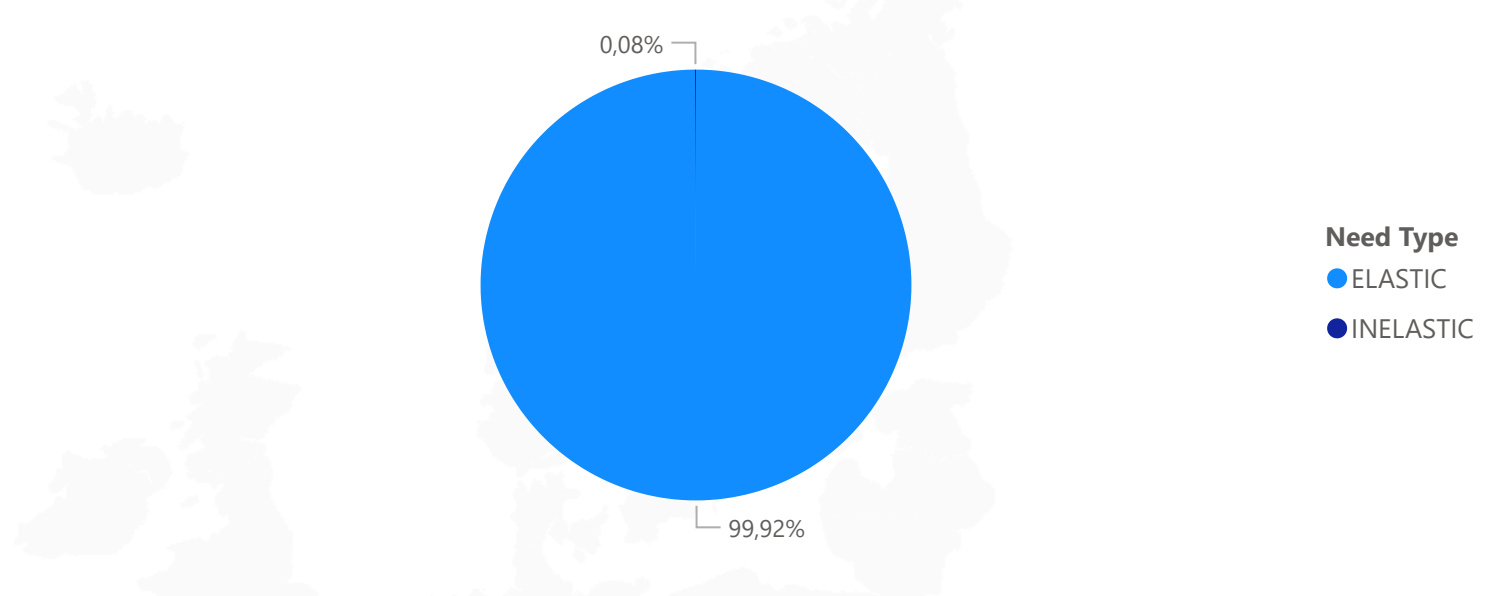
RR+	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	96	1028	50,00	85,00	190,00
	REN	179	320	4,00	220,00	220,00
	RTE	122	831	13,00	81,00	369,00
	Swissgrid	18	100	5,00	13,00	43,00

RR-	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	85	400	1,00	83,00	205,00
	REN	178	220	3,00	220,00	220,00
	RTE	134	967	22,00	102,00	362,00
	Swissgrid	21	100	5,00	7,00	99,00

Volume of elastic and inelastic demand per Direction (MWh)



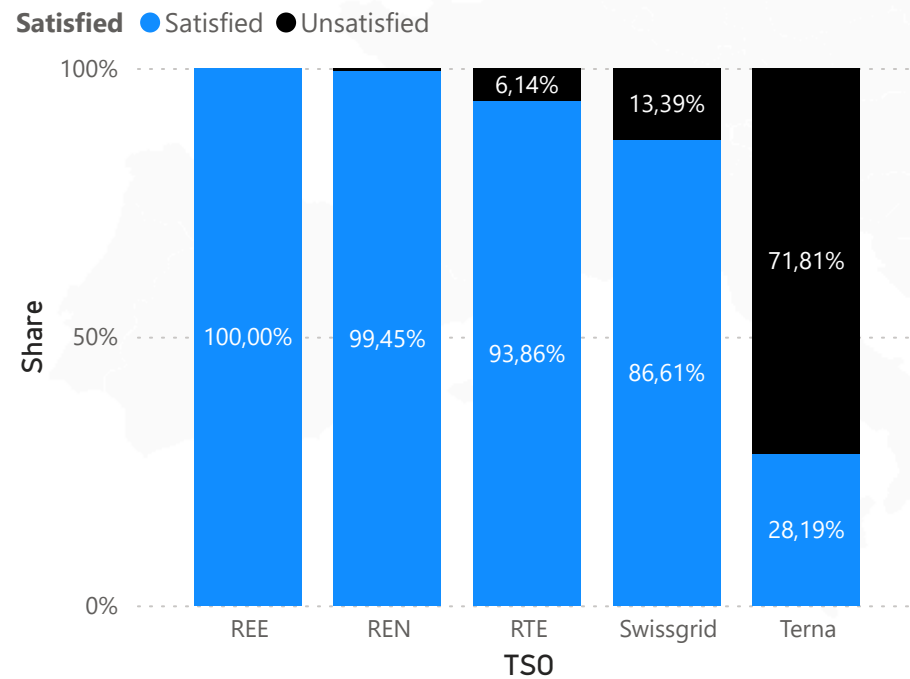
Use of elastic and inelastic demand (%)



Volume of elastic and inelastic demand per TSO (MWh)

TSO	ELASTIC	INELASTIC	Total
REE	359 247	0	359 247
UP	70 761	0	70 761
DOWN	288 486	0	288 486
REN	112 736	0	112 736
UP	36 420	0	36 420
DOWN	76 316	0	76 316
RTE	109 600	600	110 200
UP	80 000	0	80 000
DOWN	29 600	600	30 200
Swissgrid	7 425	0	7 425
UP	2 830	0	2 830
DOWN	4 595	0	4 595
Terna	39 499	0	39 499
UP	30 193	0	30 193
DOWN	9 306	0	9 306
Total	628 507	600	629 107

Share of satisfied needs per Area (%)



Usage of tolerance band

Use of Tolerance band need (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	200		200
Swissgrid			
Terna			
Total	200		200

Additional need satisfied by Tolerance band (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	65		65
Swissgrid			
Terna			
Total	65		65

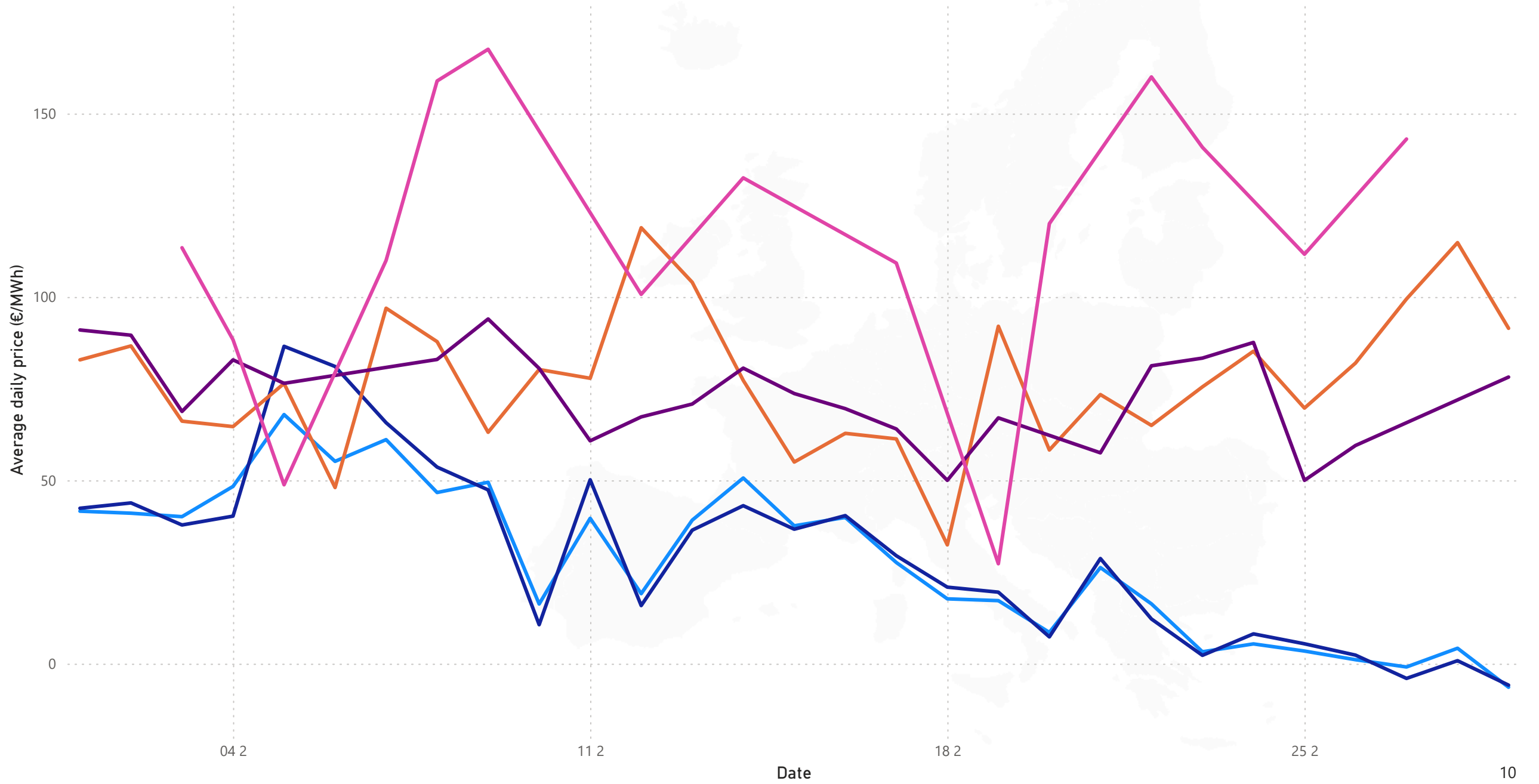
Usage of system constrains

System constrains are not used in TERRE platform at the moment.



Average daily price of satisfied need by TSO

TSO REE REN RTE Swissgrid Terna



Average, minimal and maximal prices of satisfied needs (€/MWh)

REE

28,20

Average Price

-71,00

Minimal Price

162,19

Maximal Price

REN

28,16

Average Price

-25,55

Minimal Price

165,55

Maximal Price

RTE

79,55

Average Price

-115,75

Minimal Price

439,35

Maximal Price

Swissgrid

73,42

Average Price

50,00

Minimal Price

222,68

Maximal Price

Terna

125,83

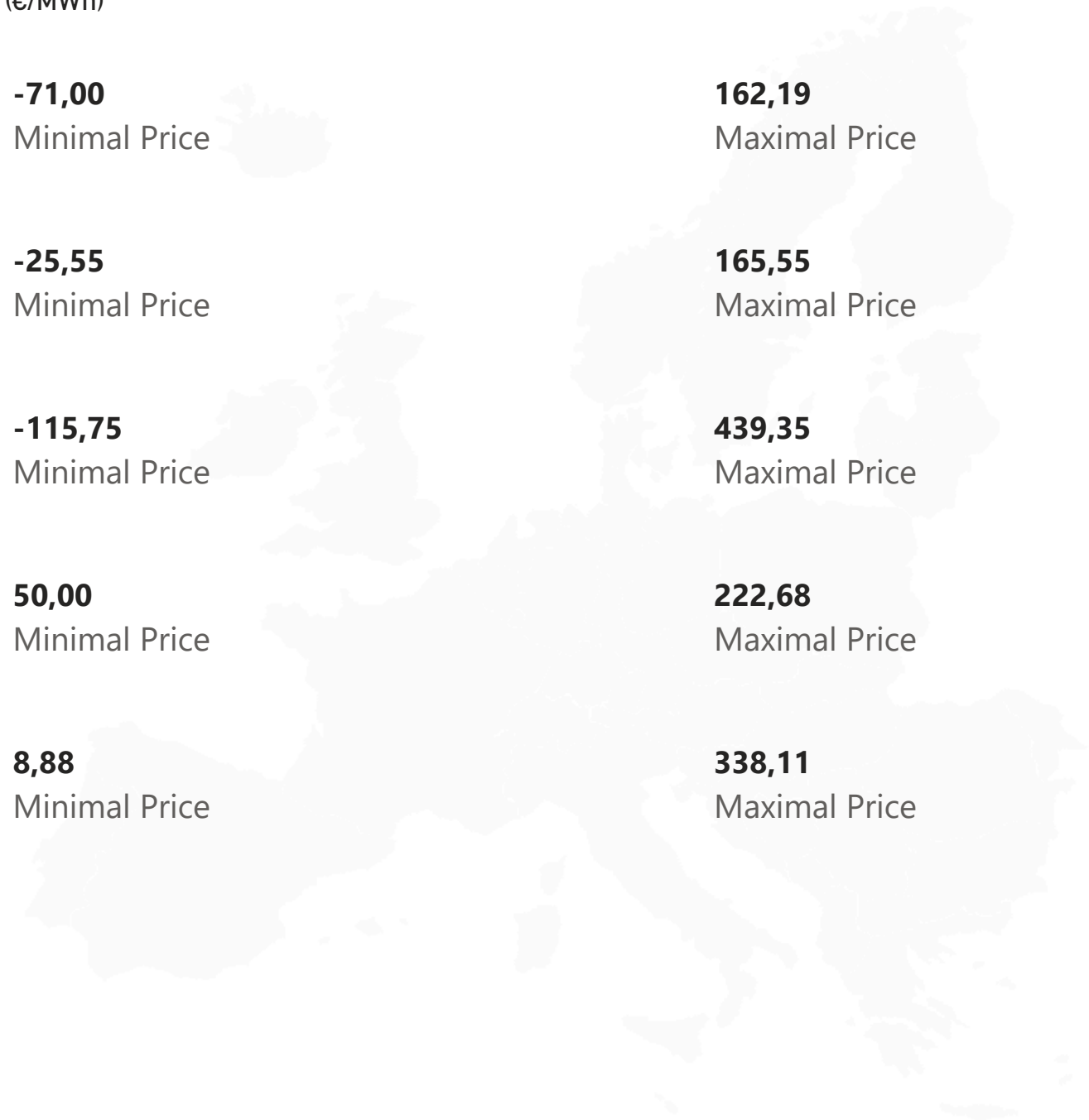
Average Price

8,88

Minimal Price

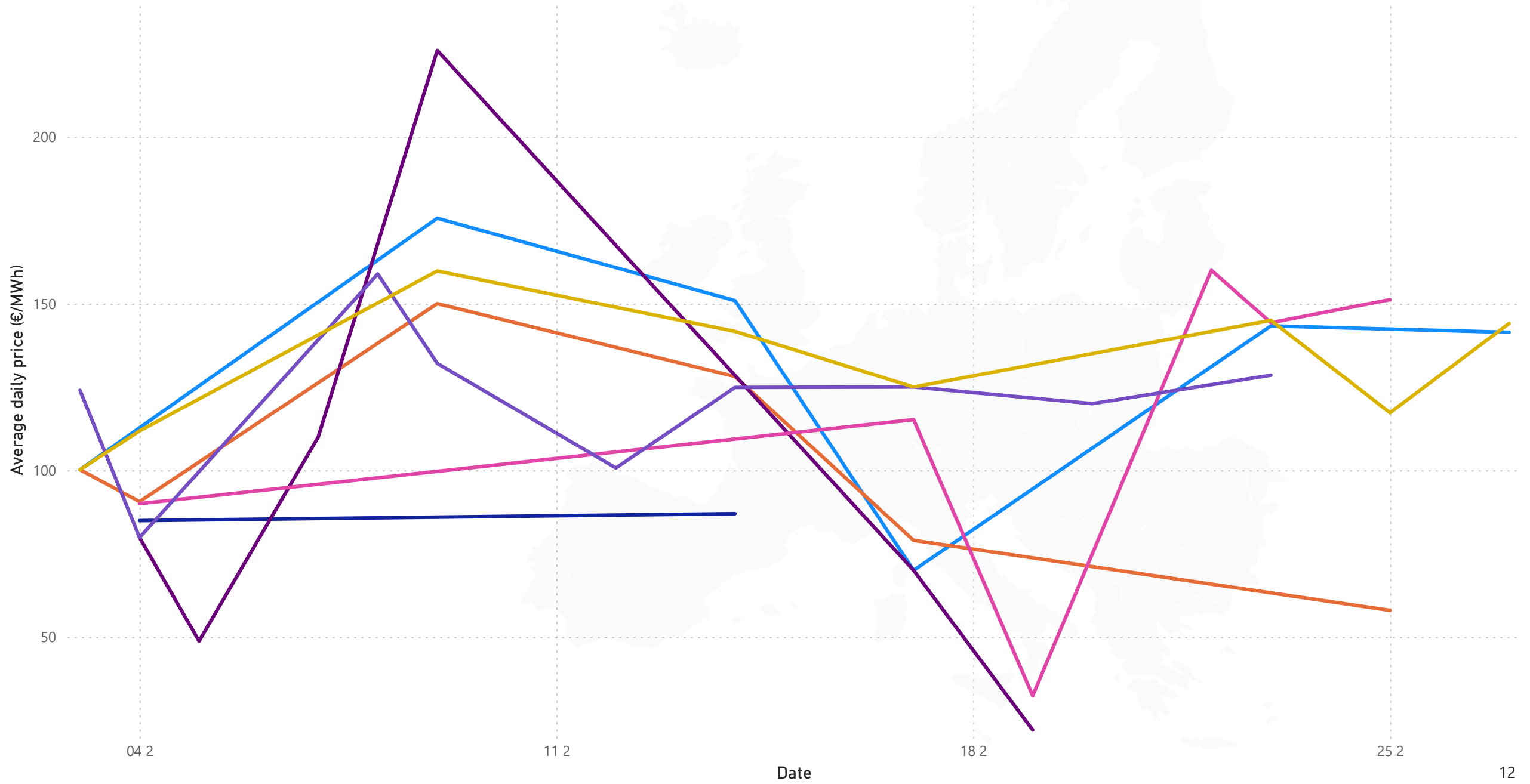
338,11

Maximal Price



Average daily price of satisfied need - Italy areas

Area ● IT-CALABRIA ● IT-CENTRE_NORTH ● IT-CENTRE_SOUTH ● IT-NORTH ● IT-SARDINIA ● IT-SICILY ● IT-SOUTH



Average, minimal and maximal prices of satisfied needs (€/MWh) - Italy areas

IT-CALABRIA

143,12

Average Price

70,00

Minimum Price

338,11

Maximum Price

IT-CENTRE_NORTH

85,11

Average Price

75,00

Minimum Price

90,00

Maximum Price

IT-CENTRE_SOUTH

103,96

Average Price

58,00

Minimum Price

170,00

Maximum Price

IT-NORTH

134,91

Average Price

8,88

Minimum Price

338,11

Maximum Price

IT-SARDINIA

125,33

Average Price

32,40

Minimum Price

160,00

Maximum Price

IT-SICILY

126,20

Average Price

75,00

Minimum Price

158,90

Maximum Price

IT-SOUTH

140,86

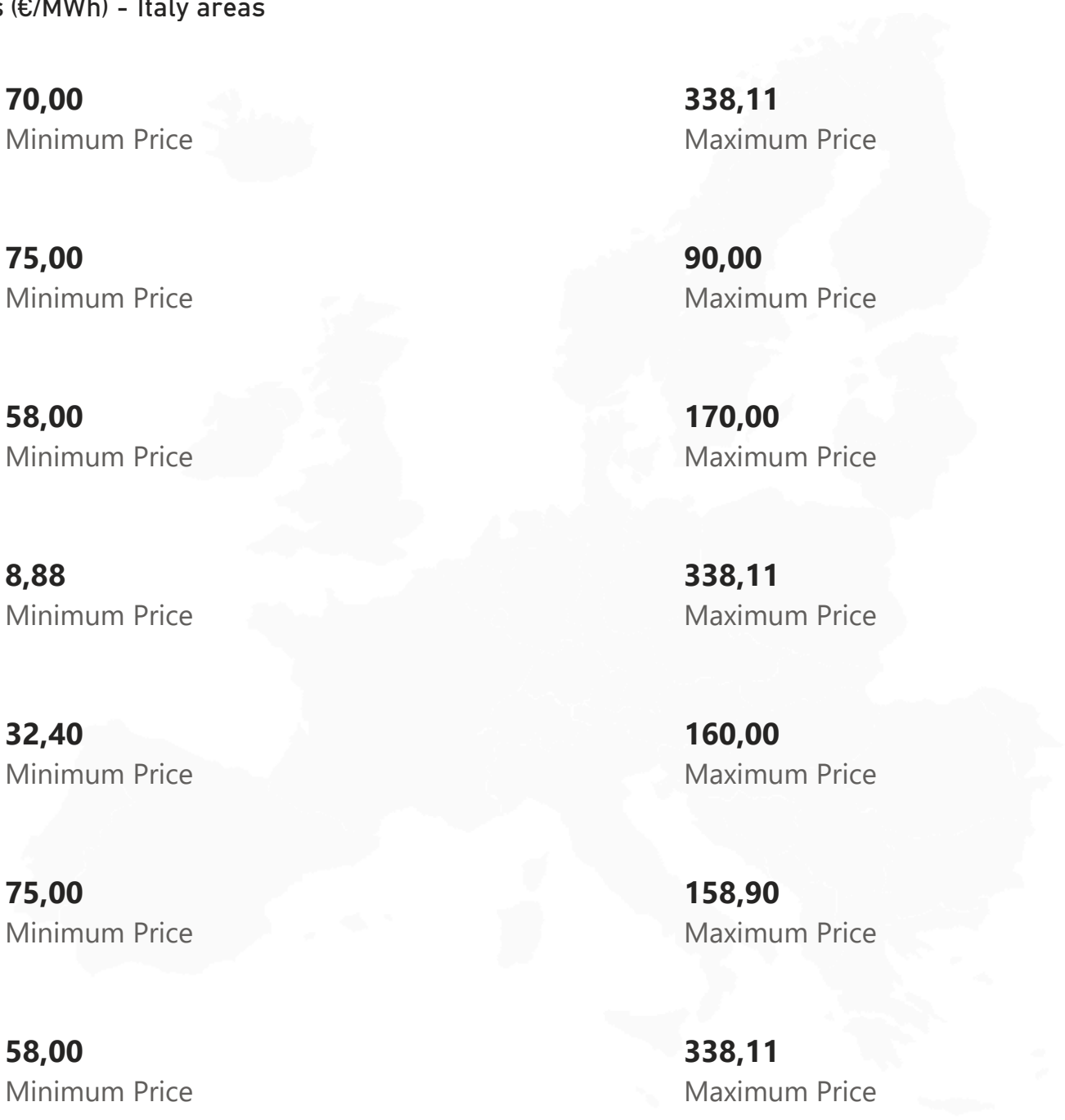
Average Price

58,00

Minimum Price

338,11

Maximum Price



Offered and used cross zonal capacity (MW)

Source TSO	Target TSO	Avg. Offered	Min. Offered	Max. Offered
REE	REN	3 353,57	1,90	7 254,00
REN	REE	2 886,34	4,80	7 226,00
REE	RTE	149,50	5,60	500,00
RTE	REE	421,64	9,90	500,00
RTE	Swissgrid	247,53	0,50	4 500,00
Swissgrid	RTE	4 070,70	0,70	4 500,00
RTE	Terna	69,28	0,40	2 379,90
Terna	RTE	5 459,49	3 699,00	7 097,00
Swissgrid	Terna	56,01	1,00	1 443,00
Terna	Swissgrid	5 032,94	3 003,00	6 442,00

Source TSO	Target TSO	Avg Used	Min Used	Max Used
REE	REN	92,70	0,00	1 357,00
REN	REE	89,70	0,00	1 198,00
REE	RTE	36,54	0,00	500,00
RTE	REE	16,71	0,00	500,00
RTE	Swissgrid	14,80	0,00	500,00
Swissgrid	RTE	60,14	0,00	771,40
RTE	Terna	5,63	0,00	363,00
TERNA	RTE	9,00	0,00	541,00
Swissgrid	Terna	5,19	0,00	233,30
TERNA	Swissgrid	4,08	0,00	261,00

Source TSO	Target TSO	Count of congestions
REE	REN	12
REN	REE	8
REE	RTE	180
RTE	REE	24
RTE	Swissgrid	44
Swissgrid	RTE	76
RTE	Terna	112
TERNA	RTE	76
Swissgrid	Terna	112
TERNA	Swissgrid	76

Note: Count of congestions refers to quarterhours where given interconnector direction was congested.

Counter activations statistics per Bidding zone (MWh)

BZ	CA count	BZ	Average of estimate CA	BZ	Sum of estimate CA
CH	8	CH	43,42	CH	336,50
ES	403	ES	103,92	ES	41 879,90
FR	11	FR	74,29	FR	835,75
IT-CALABRIA		IT-CALABRIA		IT-CALABRIA	
IT-CENTRE_NORTH		IT-CENTRE_NORTH		IT-CENTRE_NORTH	
IT-CENTRE_SOUTH		IT-CENTRE_SOUTH		IT-CENTRE_SOUTH	
IT-NORTH		IT-NORTH		IT-NORTH	
IT-ROSSANO		IT-ROSSANO		IT-ROSSANO	
IT-SACODC		IT-SACODC		IT-SACODC	
IT-SARDINIA		IT-SARDINIA		IT-SARDINIA	
IT-SICILY		IT-SICILY		IT-SICILY	
IT-SOUTH		IT-SOUTH		IT-SOUTH	
PT	4	PT	1,75	PT	7,00
Total	426	Total	101,08	Total	43 059,15

Ratio of CA per BZ

BZ	Ratio of CA to Available volume	Ratio of CA to Activated volume
CH	0,00 %	0,01 %
ES	0,04 %	1,66 %
FR	0,00 %	0,03 %
IT-CALABRIA		
IT-CENTRE_NORTH		
IT-CENTRE_SOUTH		
IT-NORTH		
IT-ROSSANO		
IT-SACODC		
IT-SARDINIA		
IT-SICILY		
IT-SOUTH		
PT	0,00 %	0,00 %

Ratio of CA all BZ

Ratio of CA to Available volume	Ratio of CA to Activated volume
0,05 %	2,44 %

Volume of URBs and share of URBs to activated volume (MWh)

TSO	Upward URBs	Downward URBs	Upward accepted offers	Downward accepted offers	Share of upward URBs to accepted offers	Share of downward URBs to accepted offers
REE	38 746,00	79 520,00	265 355,85	669 022,55	14,60 %	11,89 %
REN	0,00	20 332,00	21 221,60	103 988,00	0,00 %	19,55 %
RTE	0,00	51 714,00	33 921,50	18 397,00	0,00 %	281,10 %
Swissgrid	827,00	205 430,00	92 473,20	28 996,60	0,89 %	708,46 %
Terna	0,00	4 816,00	19 411,80	7 673,80	0,00 %	62,76 %
Total	39 573,00	361 812,00	432 383,95	828 077,95	9,15 %	43,69 %

Share of indivisible bids submitted in the CMOL, per price interval

● Divisible bids ● Indivisible bids

