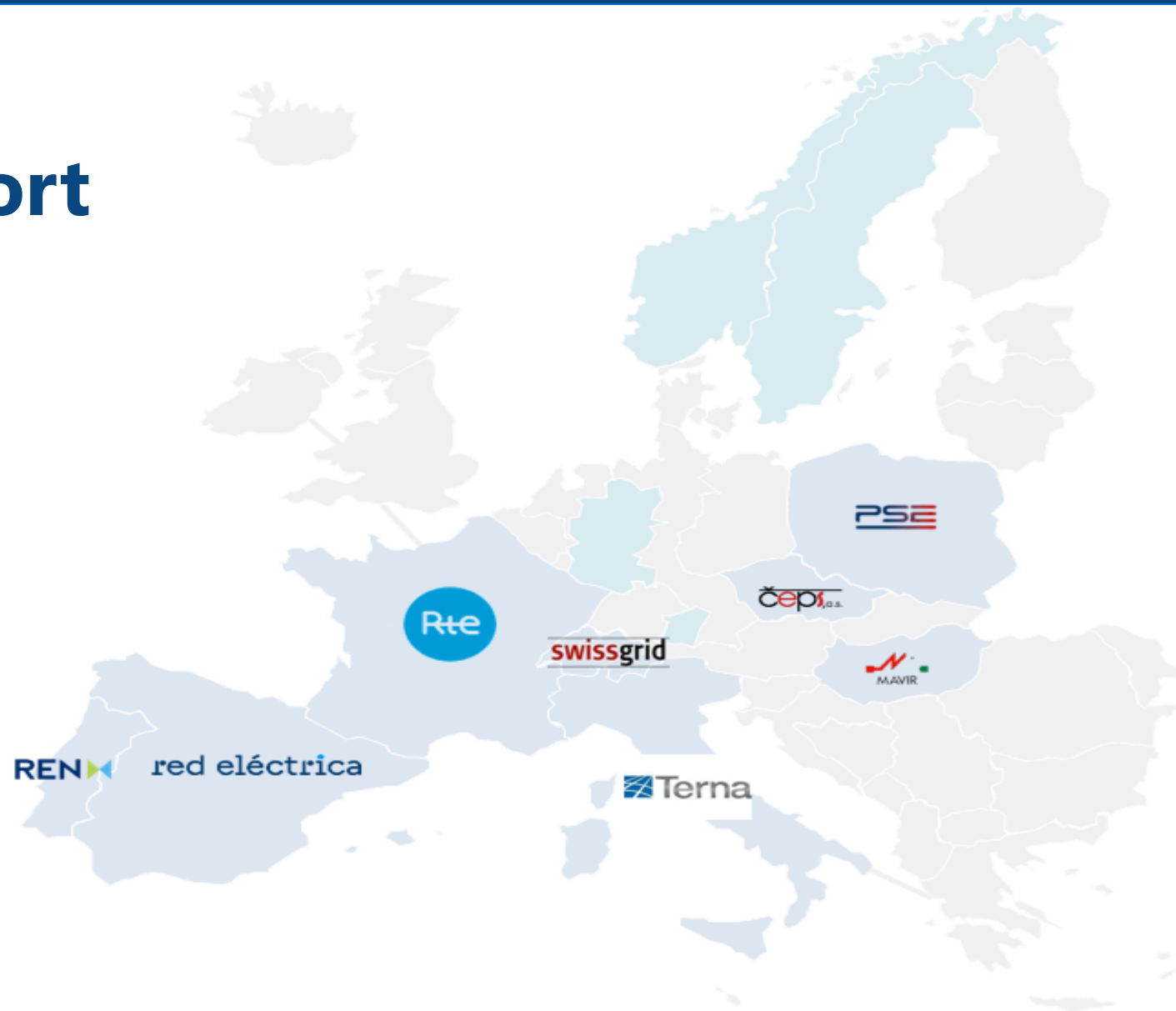


TERRE KPIs Report

April 2024



Introduction

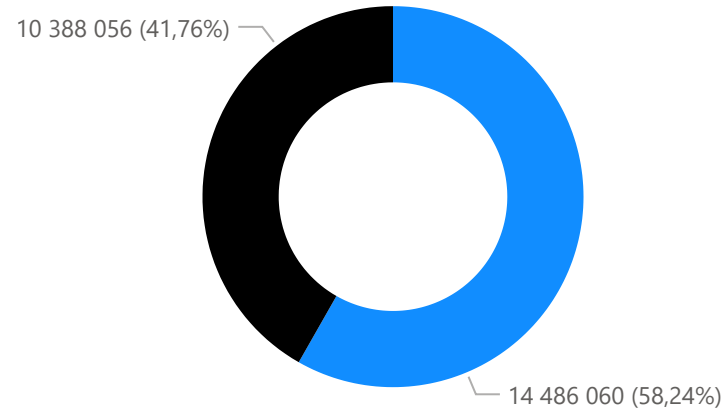
This report is prepared by TSOs participating in TERRE project based on the requirements set up in Article 15 of Implementation Framework for the exchange of balancing energy from Replacement Reserves in accordance with Article 19 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing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



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

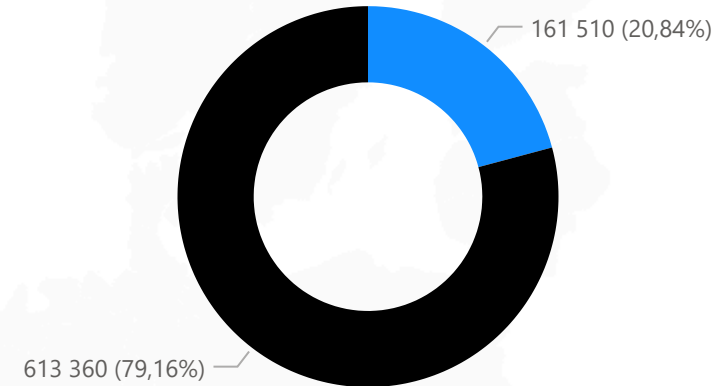
Volume of offered bids (MWh)

Direction ● UP ● DOWN



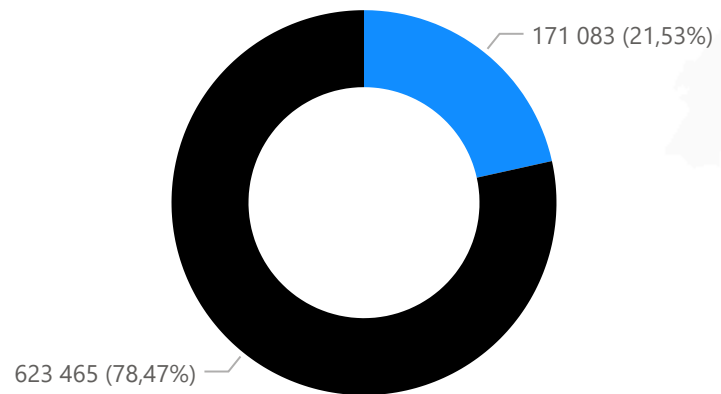
Volume of accepted bids (MWh)

Direction ● UP ● DOWN



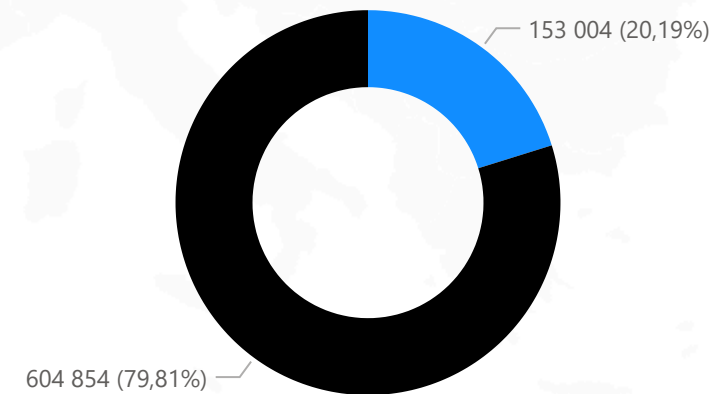
Volume of submitted needs (MWh)

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

1
Count of RR assistance+


88
Count of RR assistance-



RTE

19
Count of RR assistance+

27
Count of RR assistance-



Swissgrid

0
Count of RR assistance+

0
Count of RR assistance-



Terna

0
Count of RR assistance+

0
Count of RR assistance-




Using RR assistance



Not Using RR assistance

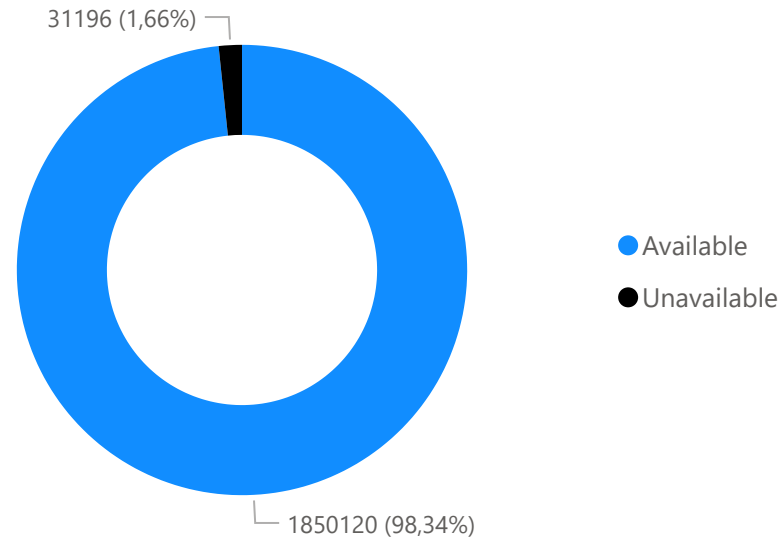
Month	Day	TSO	Total RR Assistance + (MWh)
April	1	RTE	18,50
April	2	RTE	4,00
April	3	RTE	26,00
April	6	RTE	38,00
April	11	RTE	58,00
April	12	RTE	25,00
April	15	RTE	39,00
April	16	RTE	40,00
April	27	RTE	34,00
April	28	RTE	125,50
April	29	REN	200,00
April	29	RTE	789,00

Month	Day	TSO	Total RR Assistance - (MWh)
April	1	REN	17 910,00
April	2	RTE	2 400,00
April	3	RTE	23,50
April	4	REN	3 560,00
April	4	RTE	592,25
April	5	REN	10 007,00
April	6	REN	12 799,00
April	6	RTE	2 566,75
April	7	REN	500,00
April	7	RTE	28,00
April	8	REN	11 335,00
April	9	REN	1 410,00
April	9	RTE	1 977,25
April	10	REN	4 945,00
April	10	RTE	1 698,25
April	11	REN	2 700,00
April	12	REN	400,00
April	13	RTE	19,50
April	14	REN	500,00
April	15	REN	1 500,00
April	15	RTE	383,00
April	19	REN	400,00
April	20	REN	3 460,00
April	20	RTE	737,00
April	21	REN	2 734,00
April	22	REN	500,00
April	26	RTE	9,00
April	27	REN	5 264,00
April	28	REN	488,00
April	29	RTE	21,50
April	30	REN	1 200,00
April	30	RTE	20,50

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	1 025
REN	B46	Internal congestion	2 380
REN	B47	Operational security constraints	2 864
RTE	B47	Operational security constraints	24 927
Total			31 196

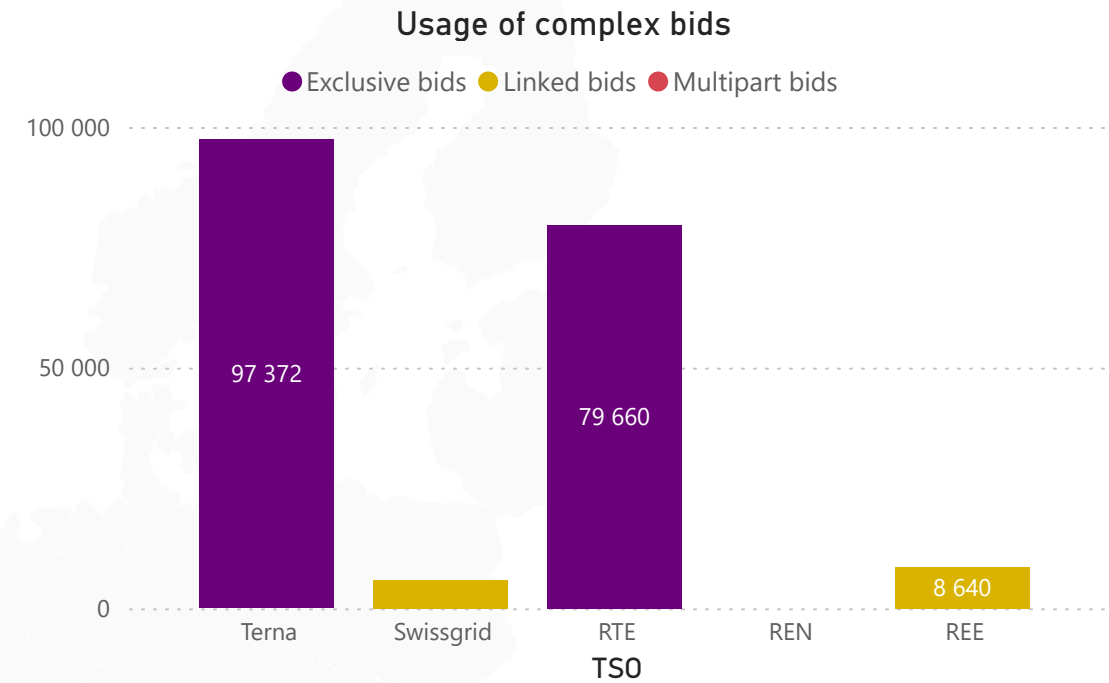
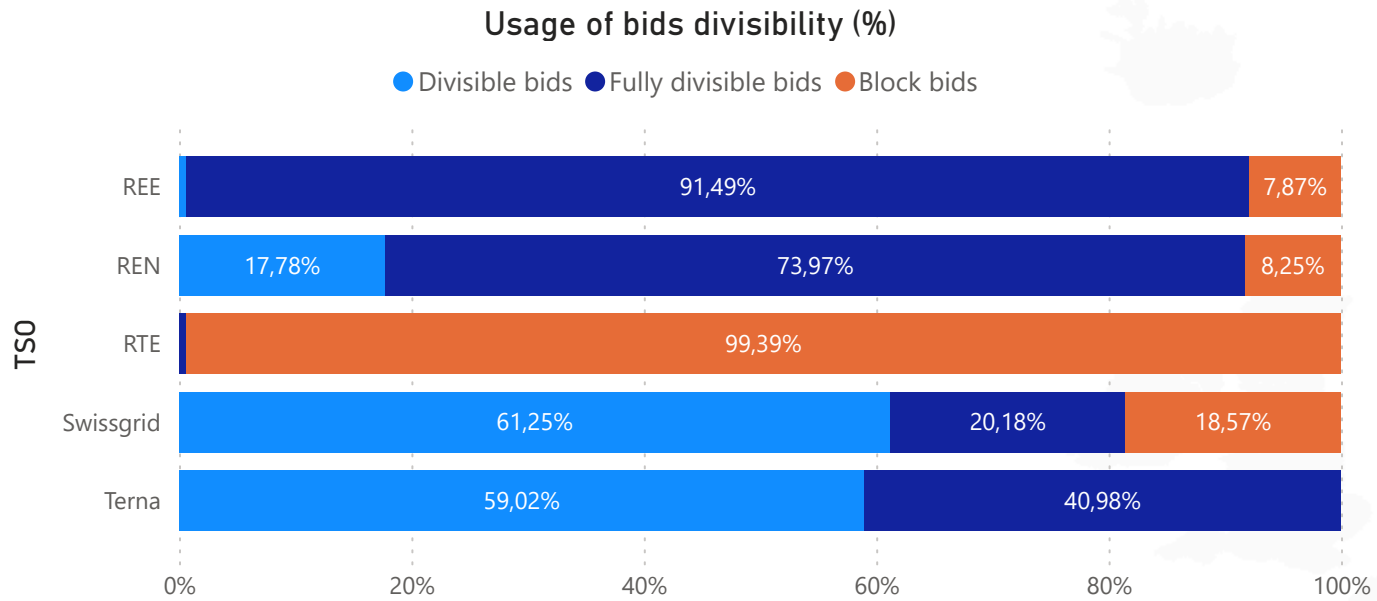
Volume of available and unavailable bids per area (MWh)

TSO	Available	Unavailable	Total
REE	7 976 217	29 248	8 005 464
REN	2 730 744	103 584	2 834 328
RTE	1 254 089	1 223 884	2 477 973
Swissgrid	2 271 850		2 271 850
Terna	9 284 500		9 284 500
Total	23 517 400	1 356 716	24 874 115

Share of unavailable bids per area (%)

TSO	Share of unavailable bids
REE	0,37 %
REN	3,65 %
RTE	49,39 %
Swissgrid	
Terna	
Total	5,45 %

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	954 815	19 858	7 030 792	8 005 464
REN	481 872	793 422	1 559 034	2 834 328
RTE	2 461 628	0	16 345	2 477 973
Swissgrid	402 900	1 406 634	462 316	2 271 850
Terna	0	7 180 061	2 104 439	9 284 500
Total	4 301 214	9 399 975	11 172 926	24 874 115

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	10,42	15,00	3,00	15,00	15,00
	REN	8,80	10,00	2,00	10,00	10,00
	Swissgrid	4,99	18,00	1,00	6,00	7,00
	Terna	91,41	1 309,00	2,00	29,00	474,00

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	10,00	10,00	10,00	10,00	10,00
	Swissgrid	5,39	12,00	1,00	6,00	7,00
	Terna	304,03	1 597,00	25,00	250,00	779,00

RR+	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	31,53 %	51,72 %	30,00 %	31,91 %	33,33 %
	REN	33,87 %	100,00 %	4,37 %	10,64 %	100,00 %
	Swissgrid	58,42 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	48,04 %	100,00 %	3,69 %	42,05 %	100,00 %

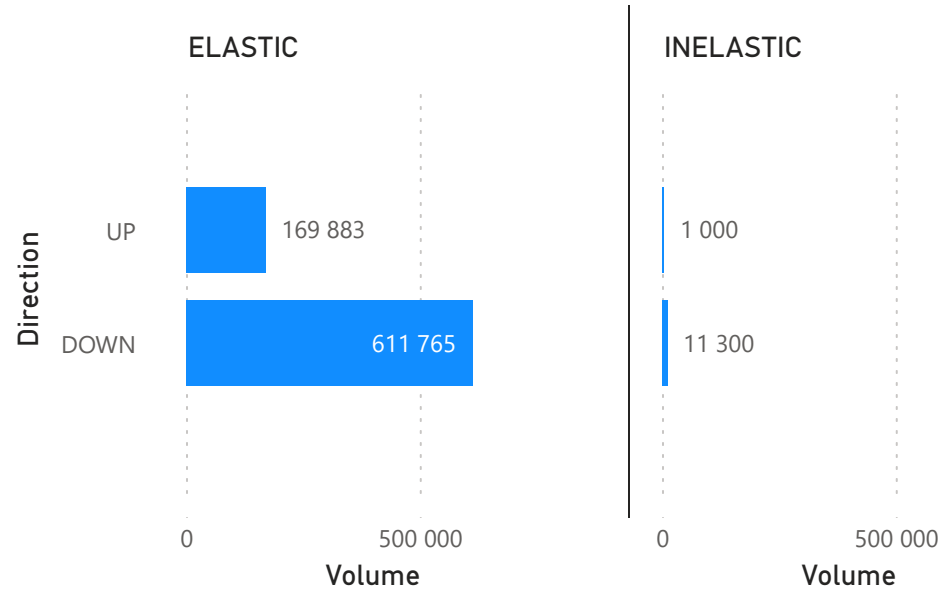
RR-	TSO	Avg. indivisible part (%)	Max indivisible part (%)	5% percentile (%)	50% percentile (%)	95% percentile (%)
	REE	19,15 %	100,00 %	10,00 %	11,11 %	100,00 %
	REN	11,32 %	90,91 %	2,35 %	6,06 %	35,71 %
	Swissgrid	63,27 %	100,00 %	20,00 %	50,00 %	100,00 %
	Terna	96,44 %	100,00 %	86,21 %	100,00 %	100,00 %

Detail indivisible bids

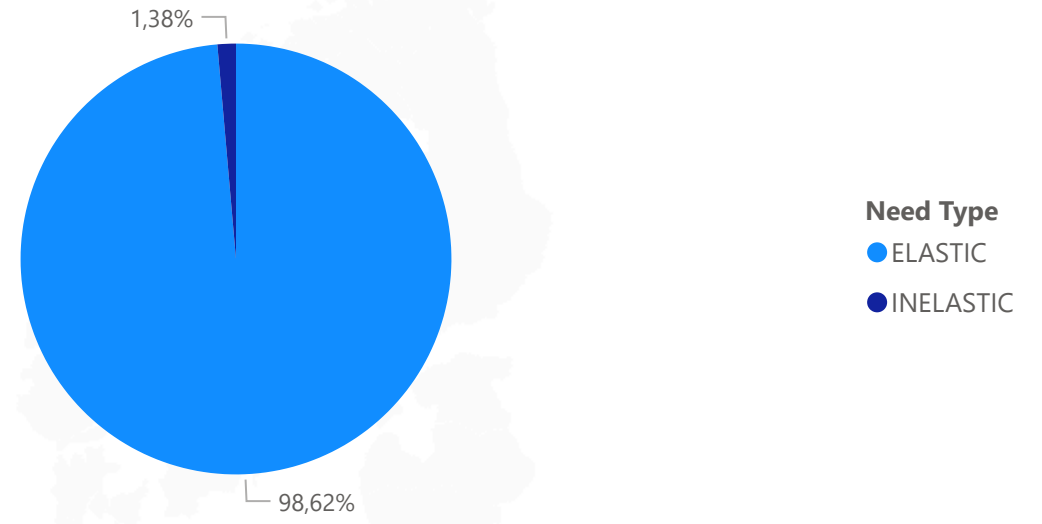
RR+	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	82	205	50,00	73,00	190,00
	REN	191	435	1,00	220,00	220,00
	RTE	145	1026	36,00	121,00	410,00
	Swissgrid	14	100	5,00	10,00	40,00

RR-	TSO	Avg. indivisible part (MW)	Max indivisible part (MW)	5% percentile (MW)	50% percentile (MW)	95% percentile (MW)
	REE	68	205	1,00	73,00	190,00
	REN	178	440	1,00	220,00	220,00
	RTE	138	964	21,00	90,00	501,00
	Swissgrid	14	100	5,00	5,00	46,00

Volume of elastic and inelastic demand per Direction (MWh)



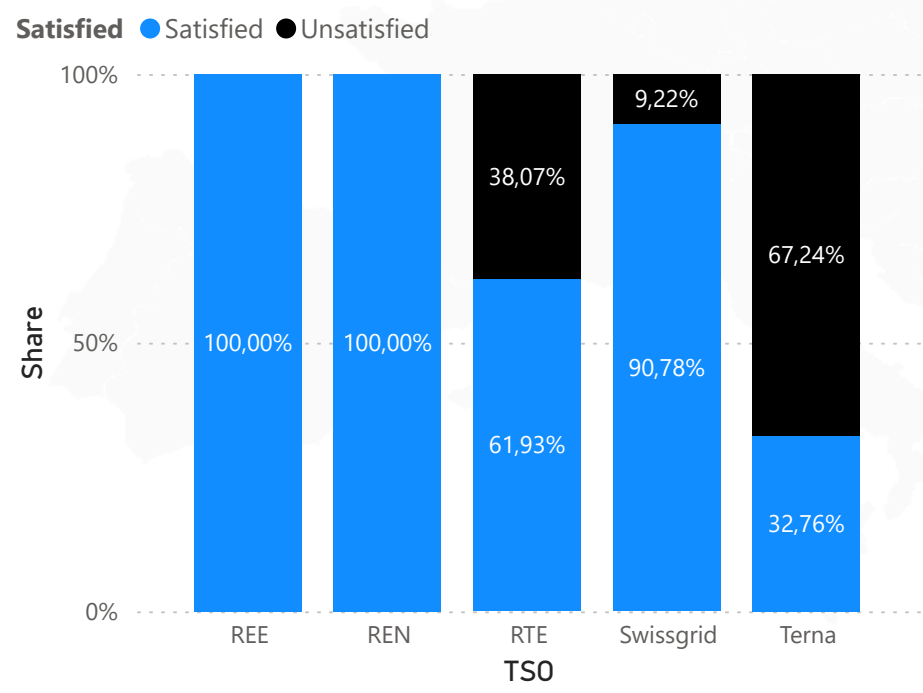
Use of elastic and inelastic demand (%)



Volume of elastic and inelastic demand per TSO (MWh)

TSO	ELASTIC	INELASTIC	Total
REE	450 650		450 650
UP	77 720		77 720
DOWN	372 930		372 930
REN	258 282		258 282
UP	40 592		40 592
DOWN	217 690		217 690
RTE	51 200	12 300	63 500
UP	37 200	1 000	38 200
DOWN	14 000	11 300	25 300
Swissgrid	15 225		15 225
UP	11 035		11 035
DOWN	4 190		4 190
Terna	6 291		6 291
UP	3 336		3 336
DOWN	2 955		2 955
Total	781 648	12 300	793 948

Share of satisfied needs per Area (%)



Usage of tolerance band

Use of Tolerance band need (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	400	200	600
Swissgrid			
Terna			
Total	400	200	600

Additional need satisfied by Tolerance band (MWh)

TSO	DOWN	UP	Total
REE			
REN			
RTE	82	10	92
Swissgrid			
Terna			
Total	82	10	92

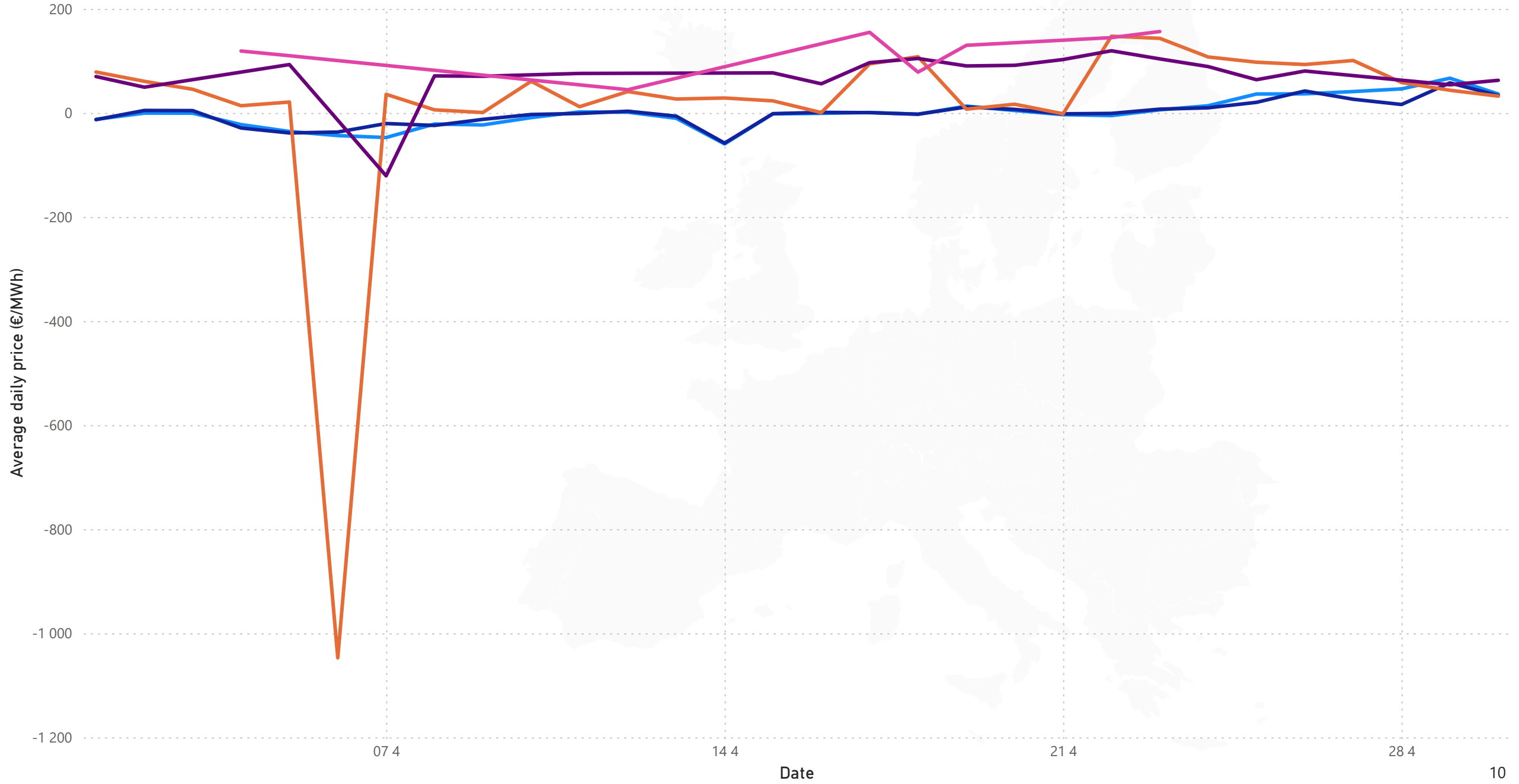
Usage of system constrains

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

0,72

Average Price

-164,67

Minimal Price

100,06

Maximal Price

REN

-1,52

Average Price

-164,67

Minimal Price

97,44

Maximal Price

RTE

14,30

Average Price

-14 017,09

Minimal Price

1 990,97

Maximal Price

Swissgrid

83,47

Average Price

-151,70

Minimal Price

183,00

Maximal Price

Terna

110,93

Average Price

1,00

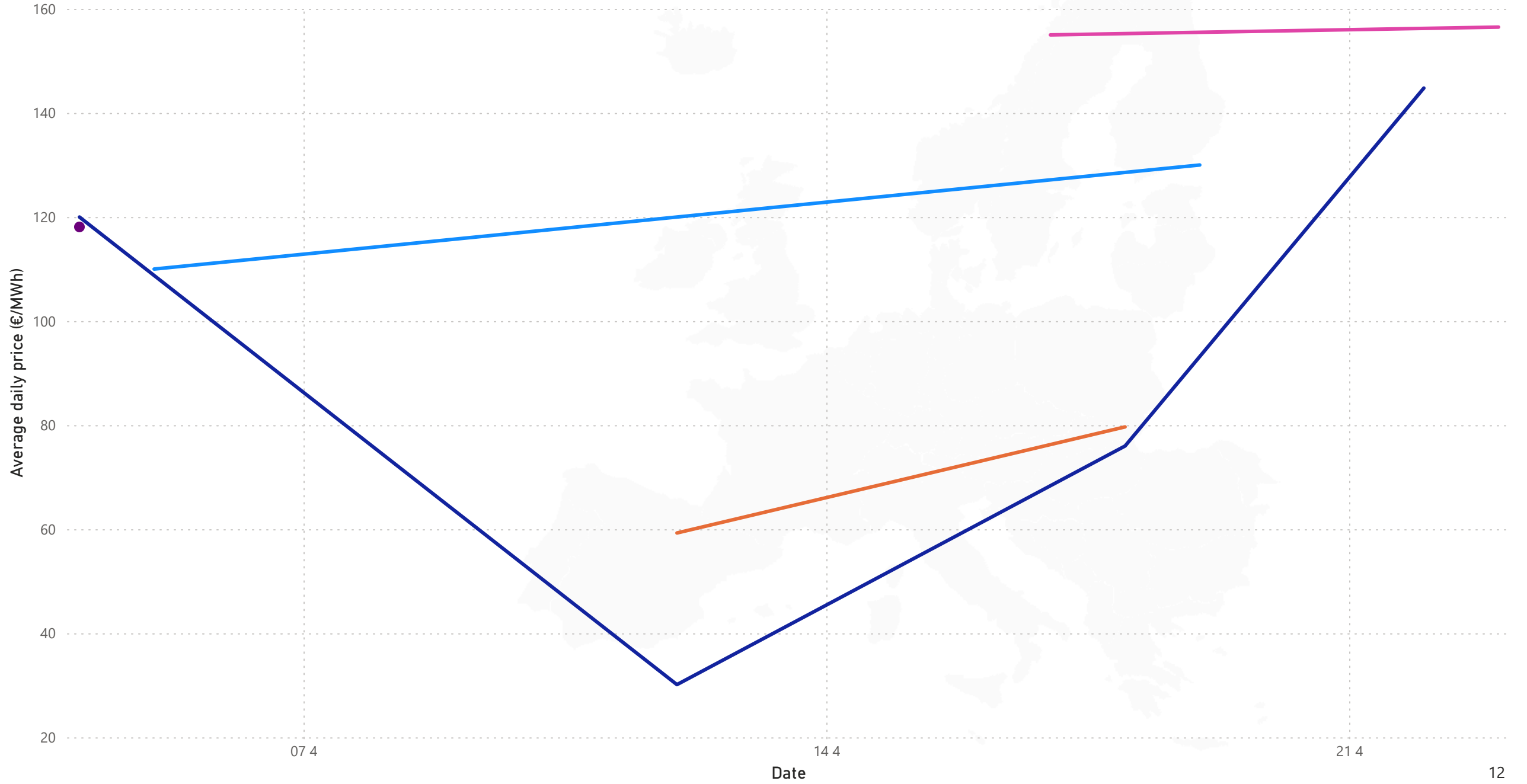
Minimal Price

180,00

Maximal Price

Average daily price of satisfied need - Italy areas

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



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

IT-CALABRIA

120,00

Average Price

110,00

Minimum Price

130,00

Maximum Price

IT-CENTRE_SOUTH

98,66

Average Price

1,00

Minimum Price

144,78

Maximum Price

IT-NORTH

69,48

Average Price

59,28

Minimum Price

83,34

Maximum Price

IT-SARDINIA

118,10

Average Price

118,10

Minimum Price

118,10

Maximum Price

IT-SOUTH

156,20

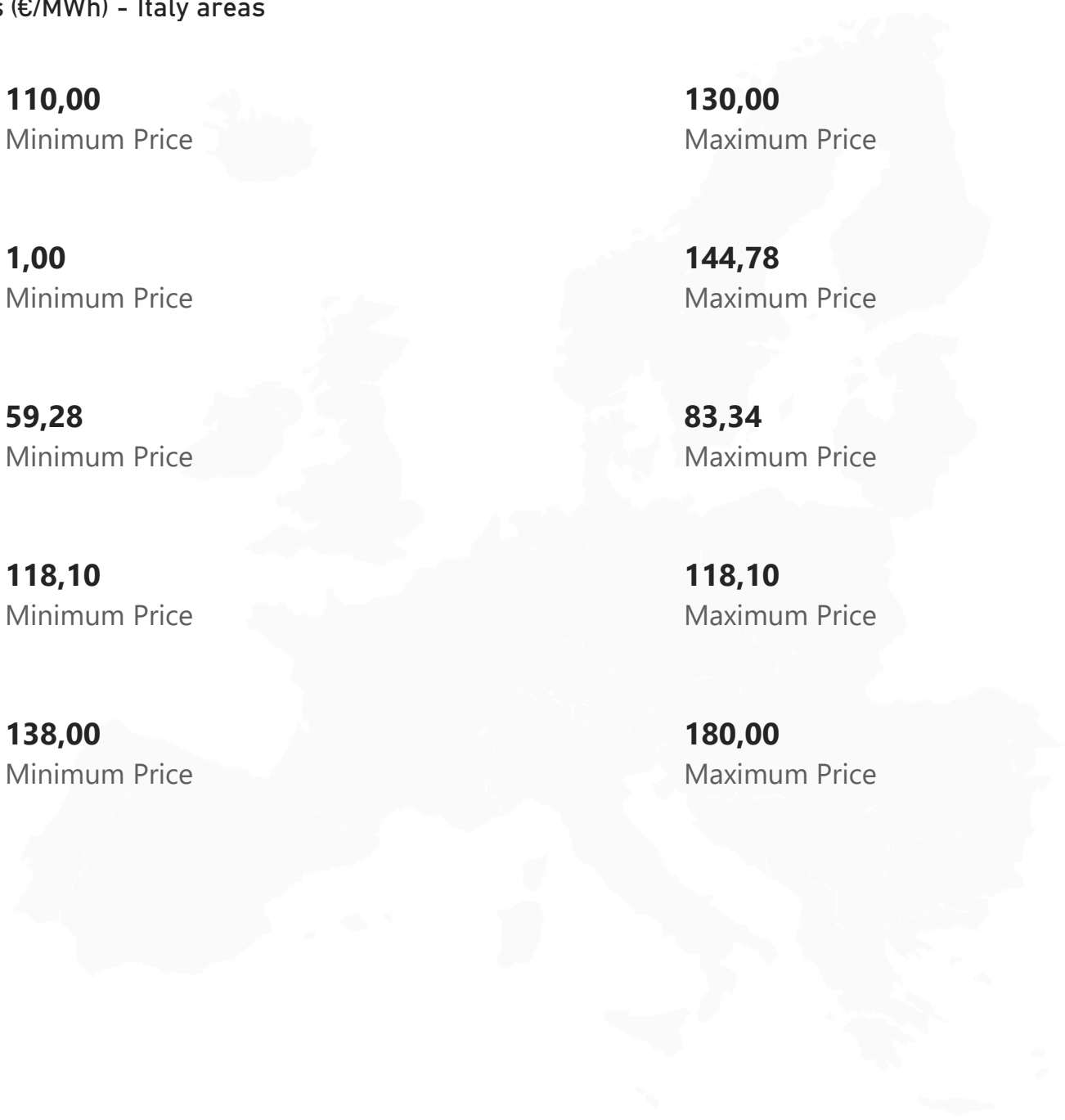
Average Price

138,00

Minimum Price

180,00

Maximum Price



Offered and used cross zonal capacity (MW)

Source TSO	Target TSO	Avg. Offered	Min. Offered	Max. Offered
REE	REN	3 212,53	0,80	7 346,00
REN	REE	2 741,06	11,90	7 670,00
REE	RTE	154,32	2,00	500,00
RTE	REE	433,38	1,00	500,00
RTE	Swissgrid	232,10	1,00	3 441,00
Swissgrid	RTE	3 025,09	186,00	3 685,00
RTE	Terna	50,90	2,00	2 738,00
Terna	RTE	3 162,37	5,90	4 560,00
Swissgrid	Terna	57,91	0,50	2 128,00
Terna	Swissgrid	3 857,63	200,00	6 143,00

Source TSO	Target TSO	Avg Used	Min Used	Max Used
REE	REN	78,30	0,00	1 233,00
REN	REE	247,21	0,00	2 500,00
REE	RTE	16,24	0,00	500,00
RTE	REE	21,45	0,00	500,00
RTE	Swissgrid	4,32	0,00	377,00
Swissgrid	RTE	16,03	0,00	500,00
RTE	Terna	4,16	0,00	500,00
TERNA	RTE	2,37	0,00	266,70
Swissgrid	Terna	0,73	0,00	133,30
TERNA	Swissgrid	1,95	0,00	200,00

Source TSO	Target TSO	Count of congestions
REE	REN	
REN	REE	8
REE	RTE	88
RTE	REE	64
RTE	Swissgrid	16
Swissgrid	RTE	
RTE	Terna	16
TERNA	RTE	
Swissgrid	Terna	16
TERNA	Swissgrid	

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	9	CH	17,00	CH	144,50
ES	329	ES	91,76	ES	30 212,25
FR	5	FR	65,43	FR	343,50
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	1	IT-NORTH	7,00	IT-NORTH	7,00
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	6	PT	62,17	PT	373,00
Total	350	Total	88,80	Total	31 080,25

Ratio of CA per BZ

BZ	Ratio of CA to Available volume	Ratio of CA to Activated volume
CH	0,00 %	0,00 %
ES	0,03 %	0,97 %
FR	0,00 %	0,01 %
IT-CALABRIA		
IT-CENTRE_NORTH		
IT-CENTRE_SOUTH		
IT-NORTH	0,00 %	0,00 %
IT-ROSSANO		
IT-SACODC		
IT-SARDINIA		
IT-SICILY		
IT-SOUTH		
PT	0,00 %	0,01 %

Ratio of CA all BZ

Ratio of CA to Available volume	Ratio of CA to Activated volume
0,04 %	1,29 %

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	9 555,00	29 940,00	227 299,00	1 057 902,60	4,20 %	2,83 %
REN	0,00	28 996,00	33 078,00	144 054,40	0,00 %	20,13 %
RTE	0,00	27 095,00	14 625,50	7 323,50	0,00 %	369,97 %
Swissgrid	255,00	76 039,00	42 434,00	10 576,00	0,60 %	718,98 %
Terna	0,00	5 996,00	5 584,00	6 864,00	0,00 %	87,35 %
Total	9 810,00	168 066,00	323 020,50	1 226 720,50	3,04 %	13,70 %

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

● Divisible bids ● Indivisible bids

