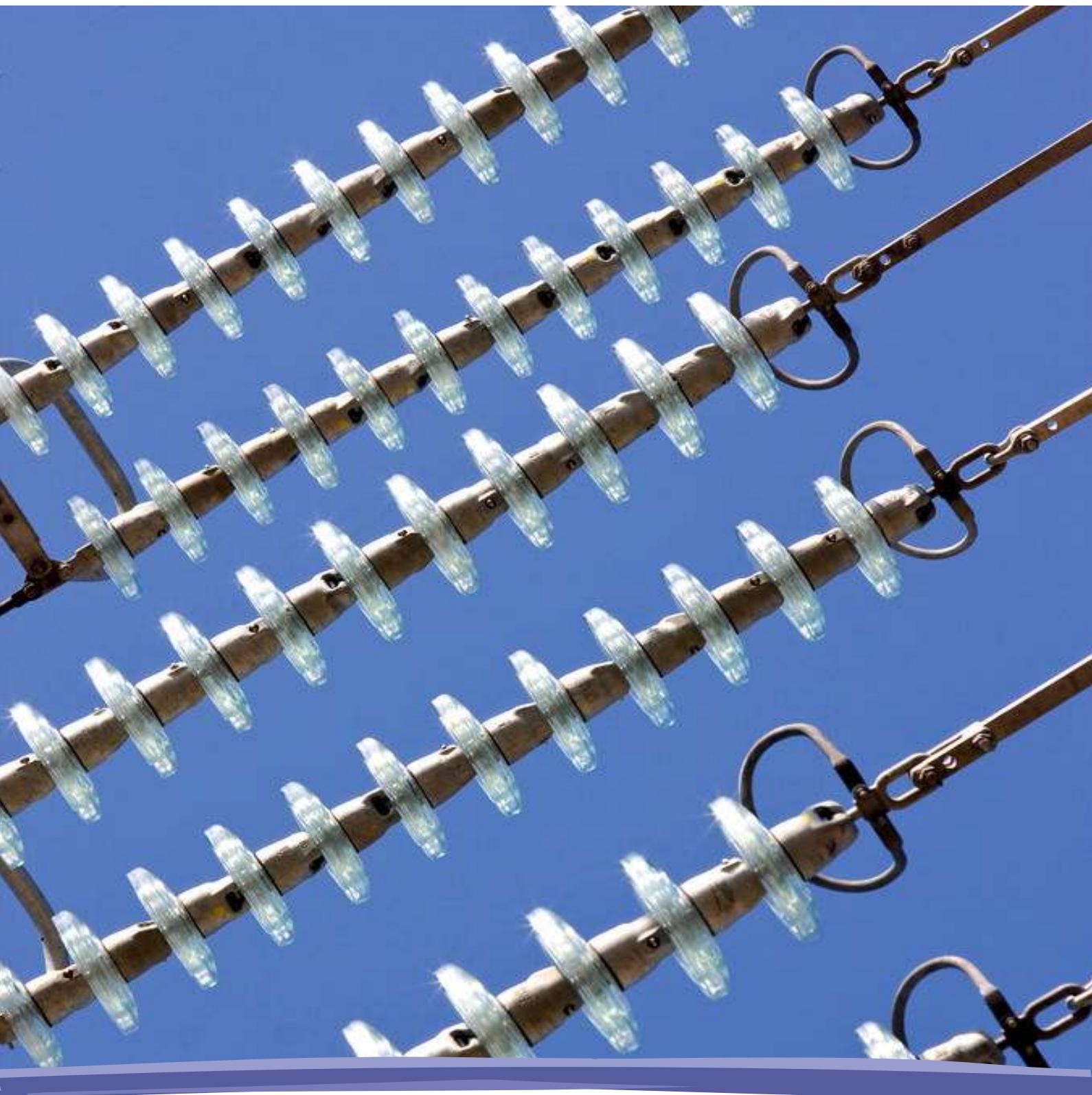


Monthly statistics



March 2013

Monthly provisional values as of 09 July 2013

European Network of
Transmission System Operators
for Electricity

entsoe

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1	Electricity supply situation of the countries	2
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General remarks and abbreviations used in the tables

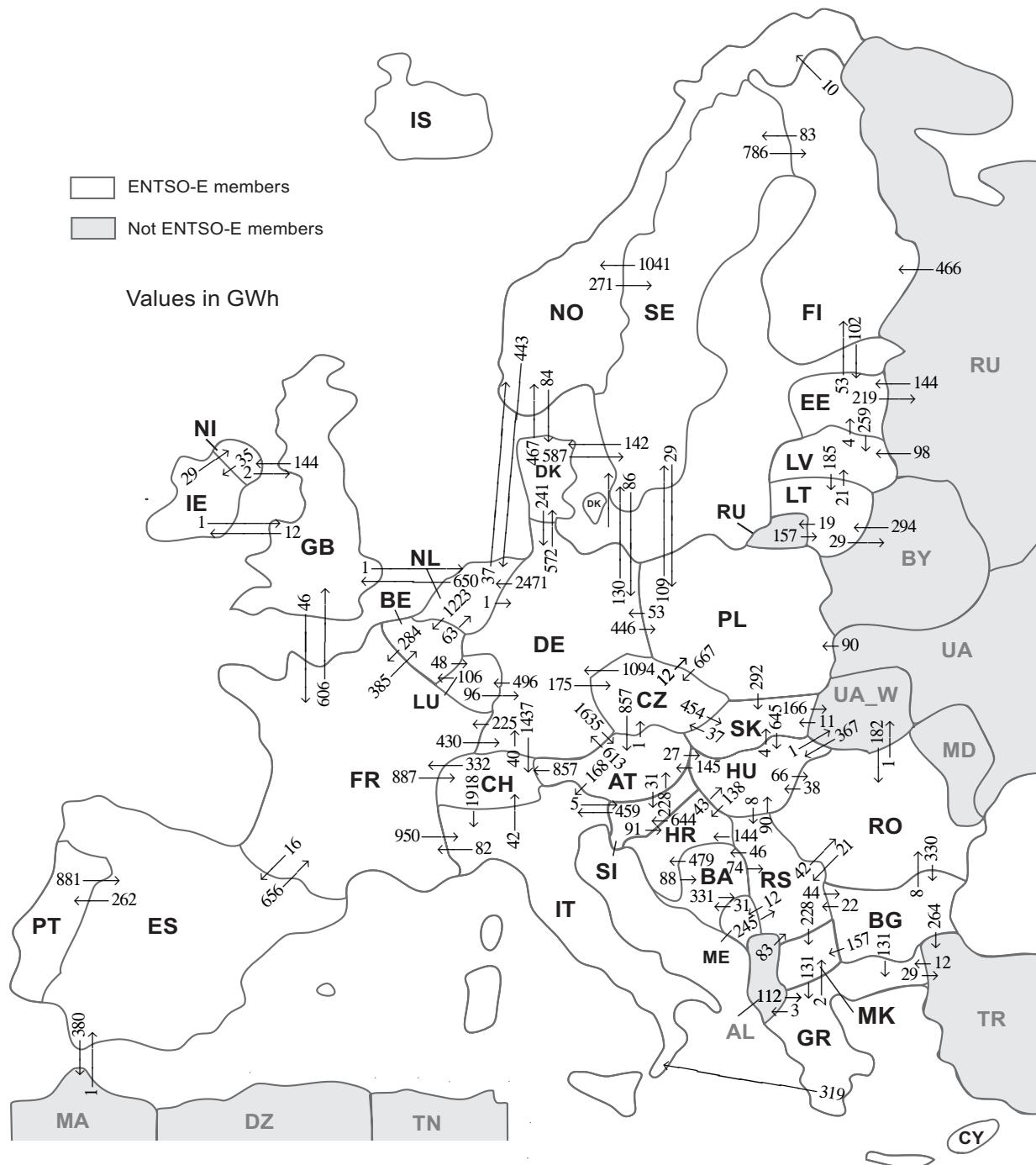
- All values of generation and consumption on page 2, 11 and 12 are calculated to represent 100% of the national values.
- All data with the country code GB represents monthly statistical data as sum of England, Scotland and Wales.
- All data with the country code NI represents the monthly statistical data of the Northern Ireland.
- CET Central European Time

Coun- tries	Net generation in GWh										Exchange balance in GWh	Pump in GWh	Consumption	
	Therm. nuclear	Fossil fuels	Hydro power	Other renew.	of which wind	of which solar	of which bio- mass	Non identi- fiable	Total	monthly [GWh]		var. [%]		
AT	0	1785	3050	0	0	0	0	831	5666	1104	504	6266	3,4	
BA	0	659	1119	0	0	0	0	0	1778	-718	0	1060	3,9	
BE ²	2896	2814	144	748	282	167	299	0	6602 ¹	1331	136	7797	4,1	
BG	1434	1051	503	216	131	85	0	0	3204	-210	114	2880	-3,3	
CH	2437	202	2309	148	9	0	0	0	5096 ¹	933	87	5942	5,1	
CY	0	275	0	25	25	0	0	0	300	0	0	300	-16,2	
CZ	2517	4451	391	206	47	159	137	0	7565 ¹	-1536	114	5915	5,7	
DE ³	8883	33046	2161	10103	4676	2303	2932	0	54193 ¹	-4919	609	48665	1,8	
DK ⁴	0	1378	2	1292	1073	0	219	0	2672 ¹	308	0	2980	n.a.	
EE	0	1004	2	90	45	0	46	0	1096	-285	0	811	7,7	
ES	5194	6604	5009	7029	5870	688	472	141	23977	-430	1052	22495	-0,3	
FI	2049	2689	1237	1183	63	0	1120	88	7246 ¹	1134	0	8380	8,5	
FR	36782	6440	6476	2189	1338	312	540	0	51887	-1787	597	49503	14,8	
GB	5398	14319	421	2806	1515	0	0	0	22944	1019	363	23600	-19,0	
GR	0	2369	1127	581	366	197	18	0	4077 ¹	32	0	4109	-2,9	
HR	0	388	1007	65	55	0	10	0	1460	73	9	1524	8,5	
HU	1523	1302	0	0	0	0	0	0	2825	847	0	3672	9,1	
IE	0	1885	78	438	432	0	0	12	2413 ¹	17	52	2378	7,0	
IS	0	0	1118	430	0	0	0	0	1548	0	0	1548	4,9	
IT	0	15939	3743	3827	1882	1506	0	0	23509	3685	216	26978	-1,6	
LT	0	262	79	89	64	2	23	0	430 ¹	567	48	949	3,5	
LU	0	210	110	20	6	4	4	0	340	342	132	550	-3,7	
LV	0	305	164	46	9	0	14	0	515	189	0	704	2,5	
ME ⁵	0	125	175	0	0	0	0	0	300	70	0	370	n.a.	
MK	0	282	209	0	0	0	0	0	491	260	0	751	-1,8	
NI	0	561	1	118	112	0	2	0	680	139	0	819	6,0	
NL	382	7135	0	1191	584	n.a.	n.a.	0	8708	1052	0	9760	-5,6	
NO	0	186	11951	170	170	0	0	0	12307 ¹	768	54	13021	13,0	
PL ⁶	0	12237	297	1031	456	0	464	0	13565 ¹	-543	69	12953	2,2	
PT	0	989	2243	1803	1545	25	232	0	5035 ¹	-620	110	4305	4,9	
RO	940	1987	1333	510	474	8	28	0	4770	-93	13	4664	-1,8	
RS	0	2593	1513	0	0	0	0	0	4106	-141	106	3859	6,7	
SE	6405	813	6115	1964	822	0	1142	0	15297 ¹	-936	0	14361	12,7	
SI	469	376	372	0	0	0	0	0	1217	-101	0	1116	4,6	
SK	1343	502	488	62	0	46	0	101	2496 ¹	-87	32	2377	0,9	
ENTSO-E	78652	127163	54947	38380	22051	5502	7702	1173	300315 ¹	1464	4417	297362	n.a.	

¹ Including deliveries from industry² The reported figures are best estimates based on actual measurements and extrapolations.³ The reported figures are best estimates based on actual inquiries, measurements and extrapolations.⁴ National monthly values as of March 2012⁵ National monthly values as of March 2011⁶ Operational data. Other renewable includes energy from biomass co-firing in conventional thermal units.

All representativities of the national generation and consumption values on page 2 used to calculate values at a representativity of 100% as stated in the table above:

Coun- tries	Representativities of the national values in %					
	Thermal nuclear	Fossil fuels	Hydro power	Other renewable except hydro	Non identi- fiable	Consumption
AT	100	100	100	100	100	100
BA	100	100	100	100	100	100
BE	100	100	100	100	100	100
BG	100	100	100	100	100	100
CH	100	100	100	100	100	100
CY	100	100	100	100	100	100
CZ	100	100	100	100	100	100
DE	100	100	100	100	100	100
DK	100	100	100	100	100	100
EE	100	100	100	100	100	100
ES	100	100	100	100	100	100
FI	100	100	100	100	100	100
FR	100	100	100	100	100	100
GB	89	100	100	54	100	100
GR	100	100	100	100	100	100
HR	100	100	100	100	100	100
HU	100	100	100	100	100	100
IE	100	100	100	100	100	100
IS	100	100	100	100	100	100
IT	100	100	100	100	100	100
LT	100	100	100	100	100	100
LU	100	100	100	100	100	100
LV	100	100	100	100	100	100
ME	100	100	100	100	100	100
MK	100	100	100	100	100	100
NI	100	100	100	100	100	100
NL	100	100	100	100	100	100
NO	100	100	100	100	100	100
PL	100	100	100	100	100	100
PT	100	100	100	100	100	100
RO	100	100	100	100	100	100
RS	100	100	100	100	100	100
SE	100	100	100	100	100	100
SI	100	100	100	100	100	100
SK	100	100	100	100	100	100



Sum of physical energy flows between ENTSO-E countries: **33507 GWh¹**

Total physical energy flows: **36635 GWh¹**

¹ Sum of physical energy flows without exchanges between ME-AL and NO-RU.

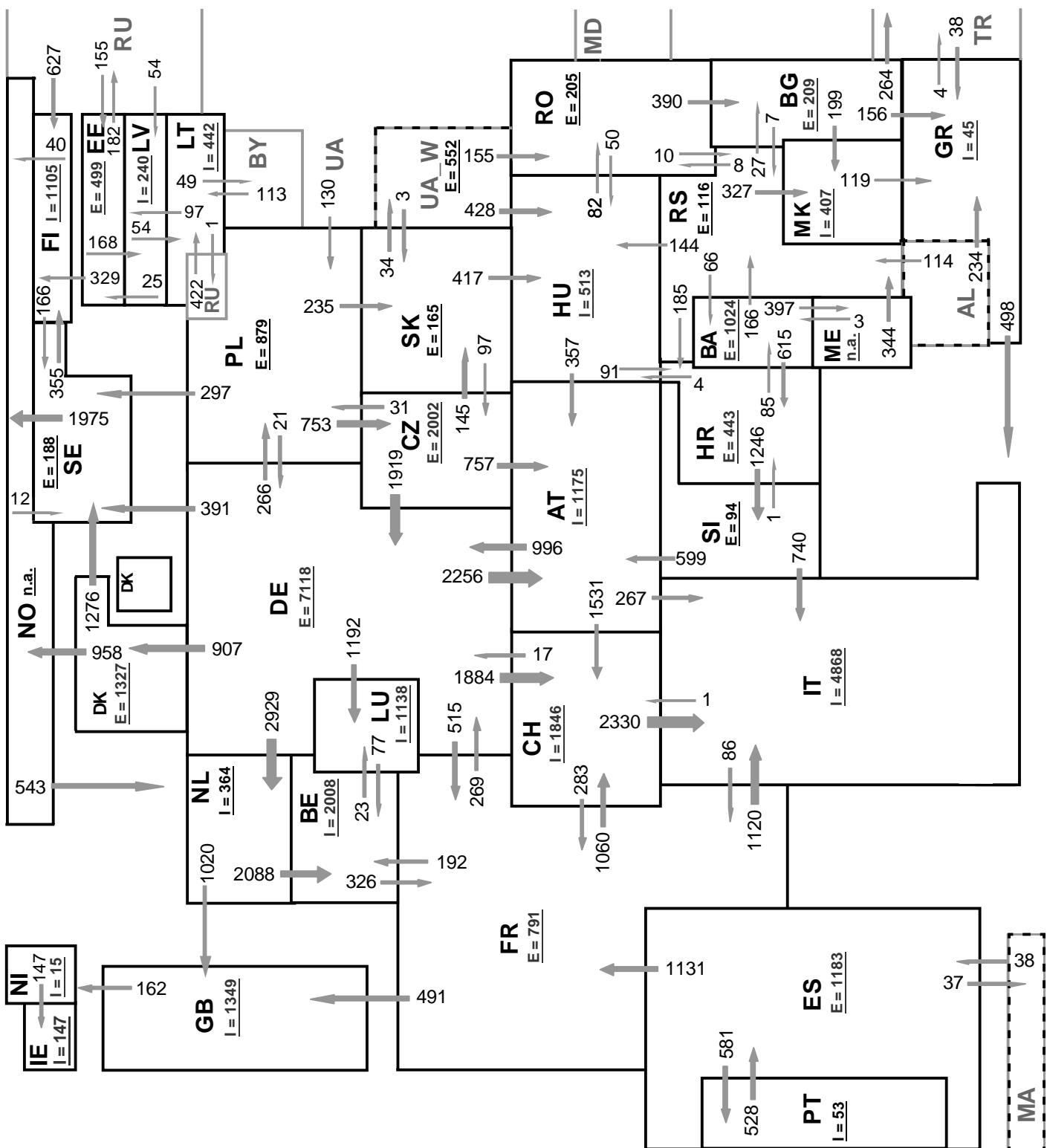
Not ENTSO-E members:

Albania, Belarus, Morocco, Republic of Moldavia, Republic of Turkey, Russia, Ukraine, Ukraine West

These physical energy flows were measured on the cross-frontier transmission lines (≤ 110 kV) listed in table characteristics of the cross-frontier lines published in the Statistical Yearbook. These values may differ from the official statistics and the exchange balances on page 2.

Outside flows countries	Inside flows of the countries																											Other III ¹							
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	N	NL	NO	PL	PT	RO	RS	SE	SI	SK		
AT	-	-	-	-	857	1	613	-	-	-	-	-	-	-	-	27	168	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-			
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	479	-	-	-	-	-	331	-	-	-	-	-	-	74	-	-	-			
BE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	284	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-		
BG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131	-	-	-	-	-	157	-	-	-	-	-	-	8	22	-	-	264		
CH	0	-	-	-	-	-	40	-	-	-	-	-	332	-	-	-	1918	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CZ	857	-	-	-	-	-	1094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	454		
DE	1635	-	-	-	1437	175	-	572	-	-	-	225	-	-	-	-	-	-	-	496	-	-	-	2471	-	446	-	-	-	130	-	-	-		
DK	-	-	-	-	-	-	-	241	-	-	-	-	-	-	-	-	-	-	-	-	-	467	-	-	-	-	-	-	-	-	-	587			
EE	-	-	-	-	-	-	-	-	-	-	53	-	-	-	-	-	-	-	-	259	-	-	-	-	-	-	-	-	-	-	219				
ES	-	-	-	-	-	-	-	-	-	-	-	656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	380				
FI	-	-	-	-	-	-	-	-	-	-	-	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
FR	-	385	-	887	-	430	-	-	16	-	-	606	-	-	-	-	950	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
GB	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	12	-	-	-	-	-	144	1	-	-	-	-	-	-	-	-	-	32	
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	319	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HR	-	88	-	-	-	-	-	-	-	-	-	-	-	-	-	43	-	-	-	-	-	-	-	-	-	-	-	-	0	-	644	-	-		
HU	145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	138	-	-	-	-	-	-	-	-	-	-	-	66	8	-	4	1			
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-			
IT	0	-	-	42	-	-	-	-	-	-	-	82	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5			
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	48					
LU	-	106	-	-	-	96	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LV	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-		
ME	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.a.				
MK	-	-	0	-	-	-	-	-	-	-	-	131	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-					
NI	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
NL	-	1223	-	-	1	-	-	-	-	-	650	-	-	-	-	-	-	-	-	-	37	-	-	-	-	-	-	-	-	-	n.a.				
NO	-	-	-	-	-	84	-	-	0	-	-	-	-	-	-	-	-	-	-	443	-	-	-	-	-	-	-	271	-	n.a.					
PL	-	-	-	-	667	53	-	-	-	-	-	-	-	-	-	881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109	292	0
PT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RO	-	-	330	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-	-	-	-	21	-	-	1			
RS	-	46	-	44	-	-	-	-	-	-	-	-	-	-	-	144	90	-	-	12	228	-	-	-	-	-	-	42	-	-	0				
SE	-	-	-	-	-	86	142	-	-	786	-	-	-	-	-	-	-	-	-	-	-	1041	29	-	-	-	-	-	-	-	-	-			
SI	228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91	-	459	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SK	-	-	-	-	-	37	-	-	-	-	-	-	-	-	-	645	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166		
Other III ¹	-	-	0	-	-	144	1	466	-	-	124	-	367	-	-	451	-	98	n.a.	-	-	n.a.	90	-	182	83	-	-	11	-	-	-	-		

Other III¹: Albania, Belarus, Morocco, Republic of Moldavia, Republic of Turkey, Russia, Ukraine and Ukraine-West



Sum of load flows in MW

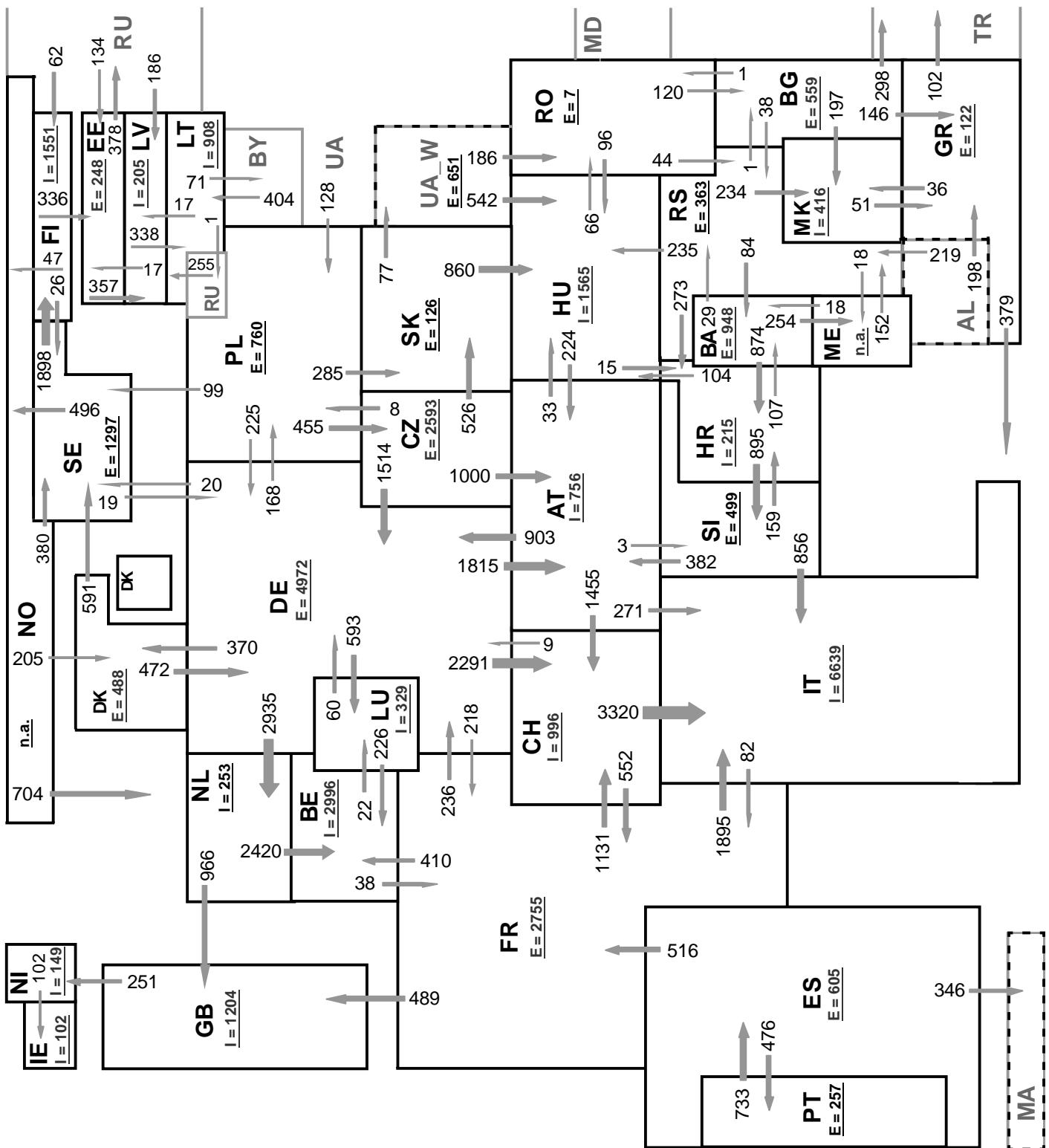
(Calculated sum without data between ME - AL and NO - RU)

ENTSO-E = 42652 MW

Total = 45734 MW

Synchronous operation with ENTSO-E region

 I = Import balance E = Export balance



Sum of load flows in MW

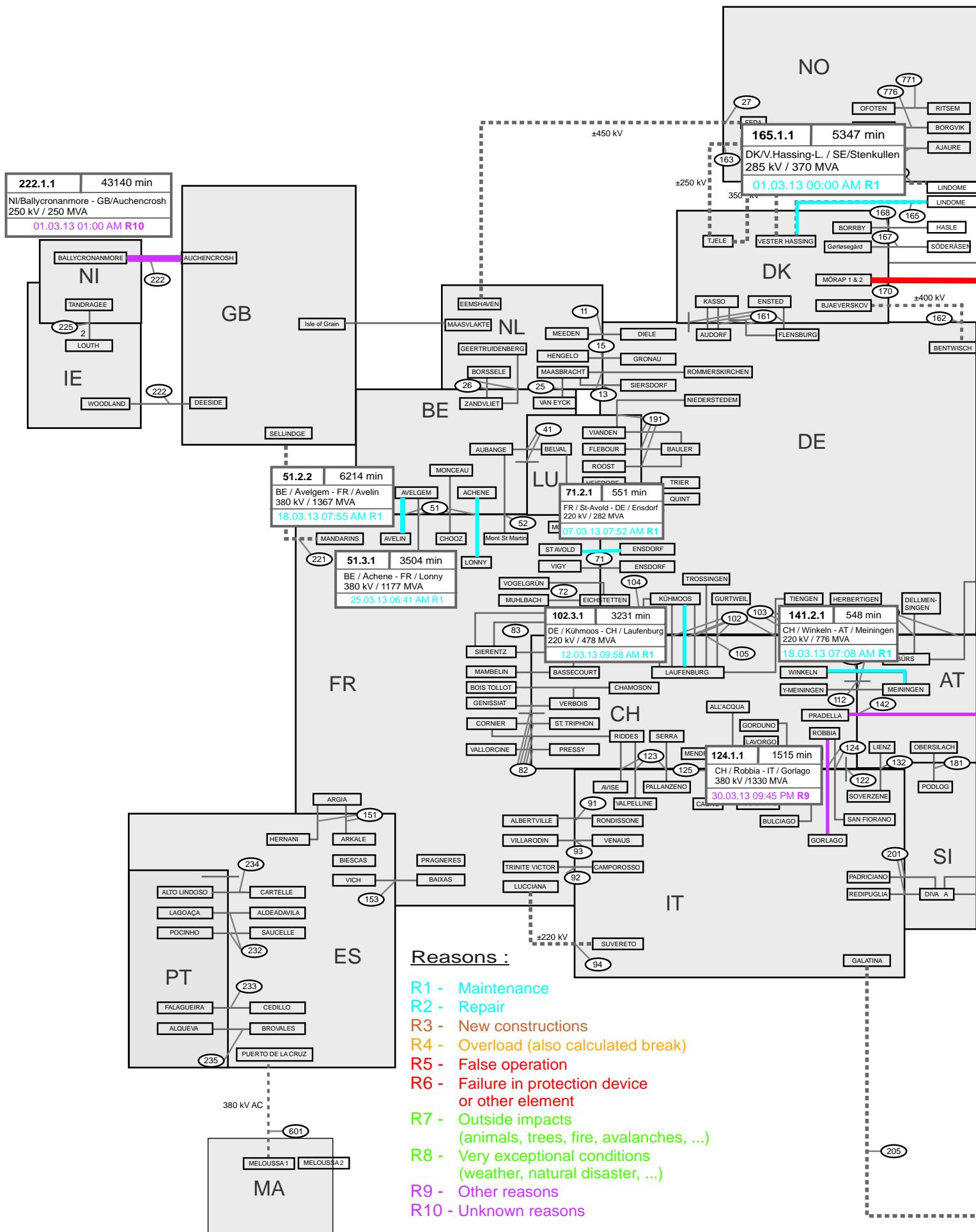
(Calculated sum without data between ME - AL and NO - RU)

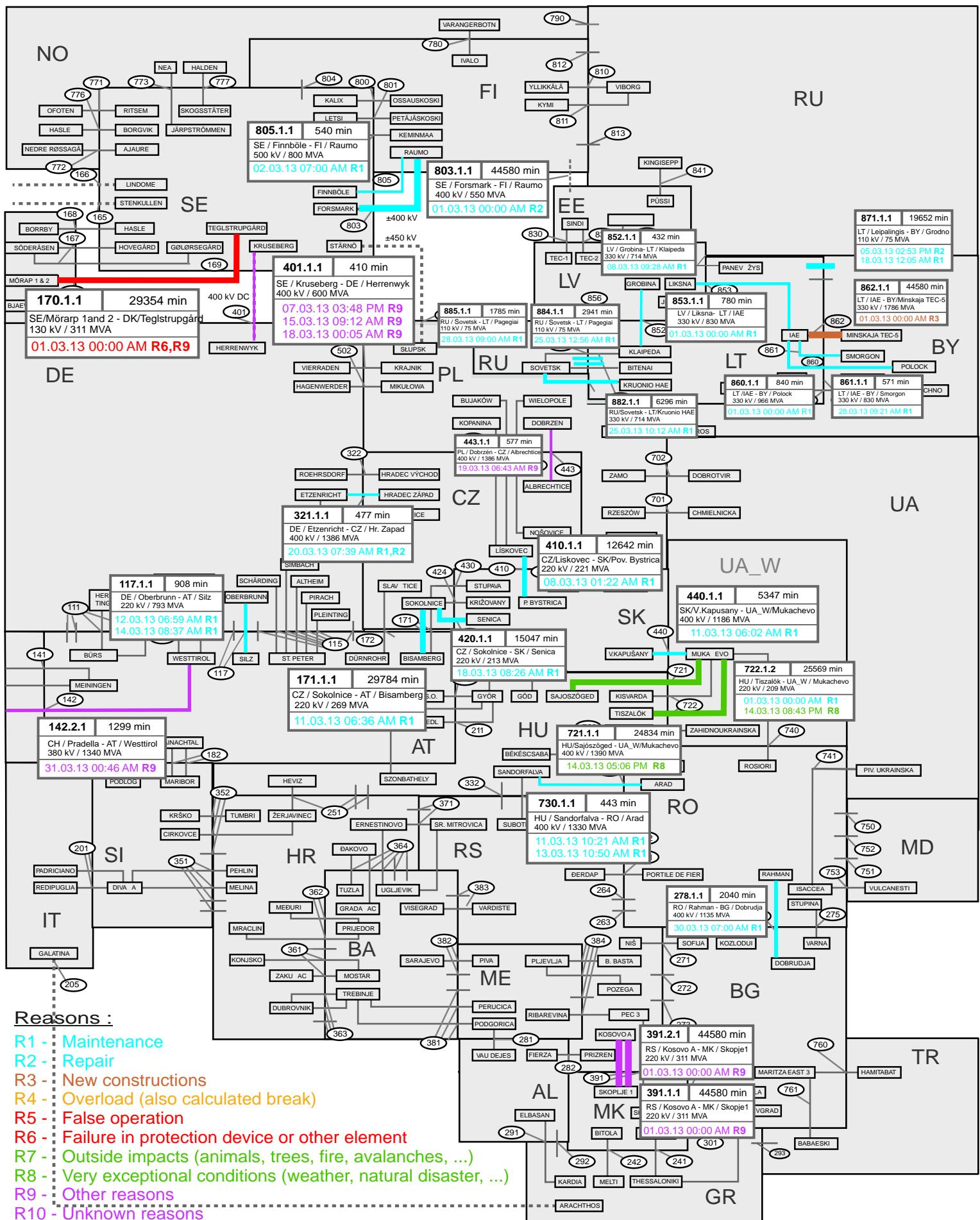
ENTSO-E = 41972 MW

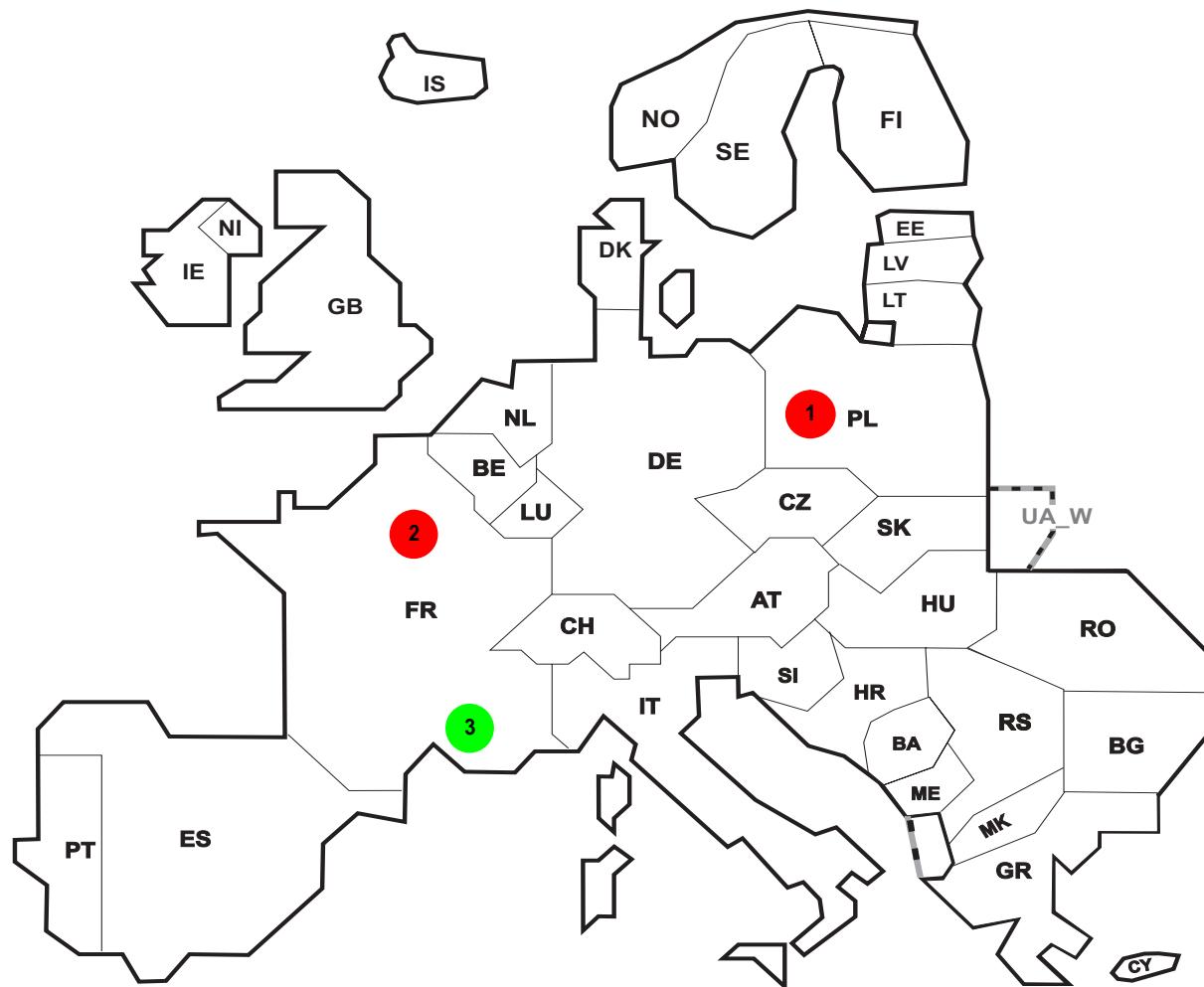
Total = 45559 MW

Synchronous operation with ENTSO-E region

I = Import balanceE = Export balance







Reasons:

- R4 Overload (also calculated break)
- R5 False operation
- R6 Failure in protection device or other element
- R7 Outside impacts (animals, trees, fire, avalanches, ...)

- R8 Very exceptional conditions (weather, natural disaster, ...)
- R9 Other reasons
- R10 Unknown reasons

No	Country	Substation	Reason	Energy not supplied [MWh]	Total loss of power [MW]	Average interruption duration [min]	Equivalent time of interruption ¹
1	PL	Klecina	R5	12	31	24	0,045
2	FR	ARRIGHI	R6	38	55	42	0,040
3	FR	ROGNAC	R8	22	40	33	0,023

Information about incidents in other countries are not shown with energy not supply equal zero or unavailable in the database.

¹ (year [in min] * energy not supplied) / consumption last 12 months

Highest and lowest load on the 20.03.2013 CET of each country

	Highest		Low est		Load representativity
	load MW	variation % ¹	load MW	variation % ¹	
AT	8681	3,8	5901	8,7	100
BA	1788	4,4	1049	6,2	100
BE ²	12212	8,9	8962	7,3	100
BG	5112	-0,6	3467	7,2	99
CH	9024	0,0	6741	0,0	100
CY	544	-7,6	283	-11,8	100
CZ	9016	4,4	7011	9,9	100
DE ³	68383	-6,3	45127	-6,0	91
DK	5025	3,2	3141	5,0	100
EE	1304	11,4	937	16,0	100
ES	35826	-5,2	22694	-4,4	98
FI	12251	9,4	10397	10,3	100
FR	74972	9,2	59207	9,2	100
GB	55033	13,0	33233	13,5	92
GR	6821	3,9	4054	1,0	100
HR	2563	6,5	1455	2,5	100
HU	5353	3,1	3726	6,7	100
IE	4091	4,8	2457	13,9	100
IS	2180	6,1	2040	6,9	100
IT	46524	1,2	27811	-1,9	100
LT	1572	4,0	974	7,2	100
LU	932	2,9	650	-5,0	100
LV	1171	4,3	774	6,5	100
ME ⁴	515	n.a.	357	n.a.	100
MK	1244	18,0	782	15,3	100
NI	1505	8,7	790	8,7	100
NL	14891	0,2	8836	-4,9	100
NO	21327	27,4	16984	31,0	100
PL ⁵	21545	4,3	15070	6,3	100
PT	7355	5,4	4621	5,8	100
RO	7287	0,3	5227	-0,2	100
RS	6034	7,9	4143	27,0	100
SE	23321	31,1	18483	34,4	100
SI	1851	7,4	1328	14,9	100
SK	3820	0,9	3019	6,4	100
ENTSO-E	474433	n.a.	334674	n.a.	

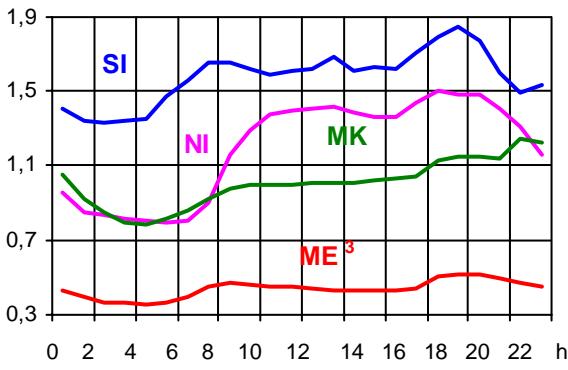
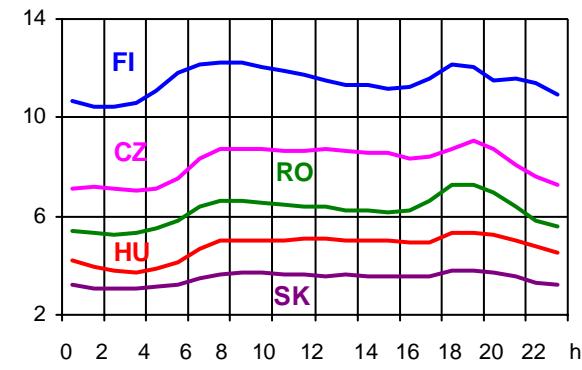
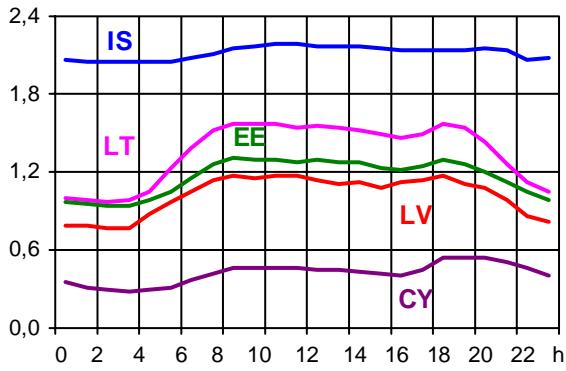
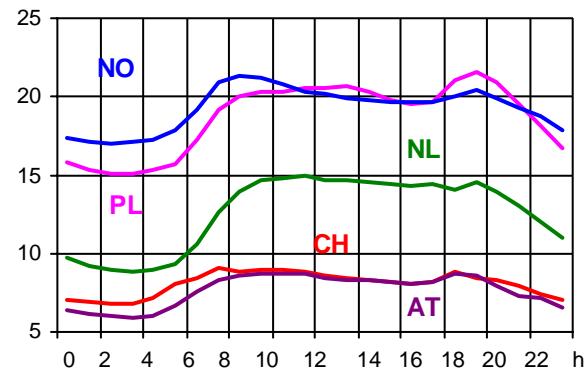
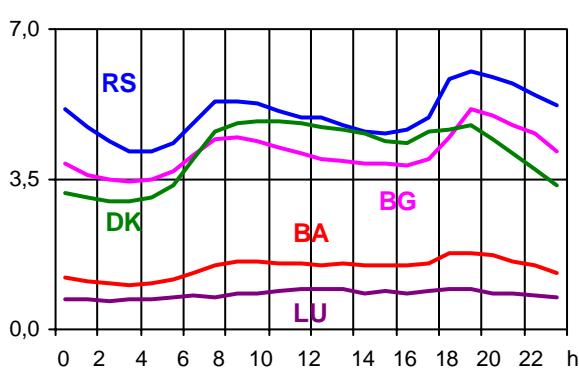
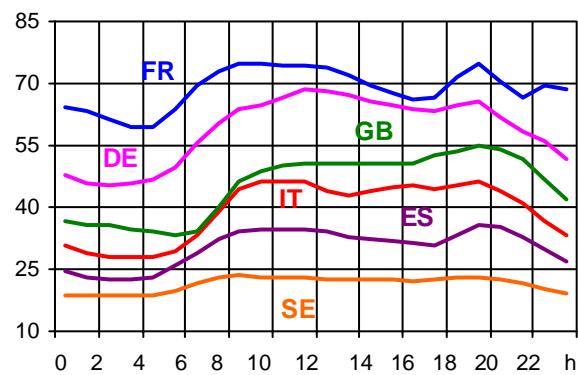
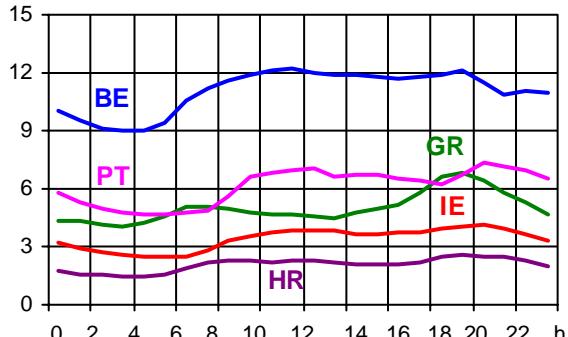
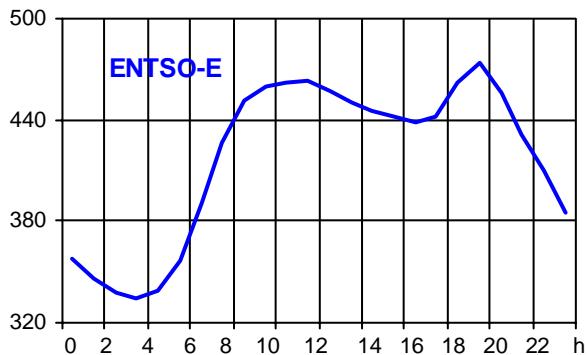
¹ Variation as compared to corresponding month of the previous year² The reported figures are best estimates based on actual measurements and extrapolations.³ A comparison with previous figures may be limited for statistical reasons related to renewable energies feed-in like direct marketing.

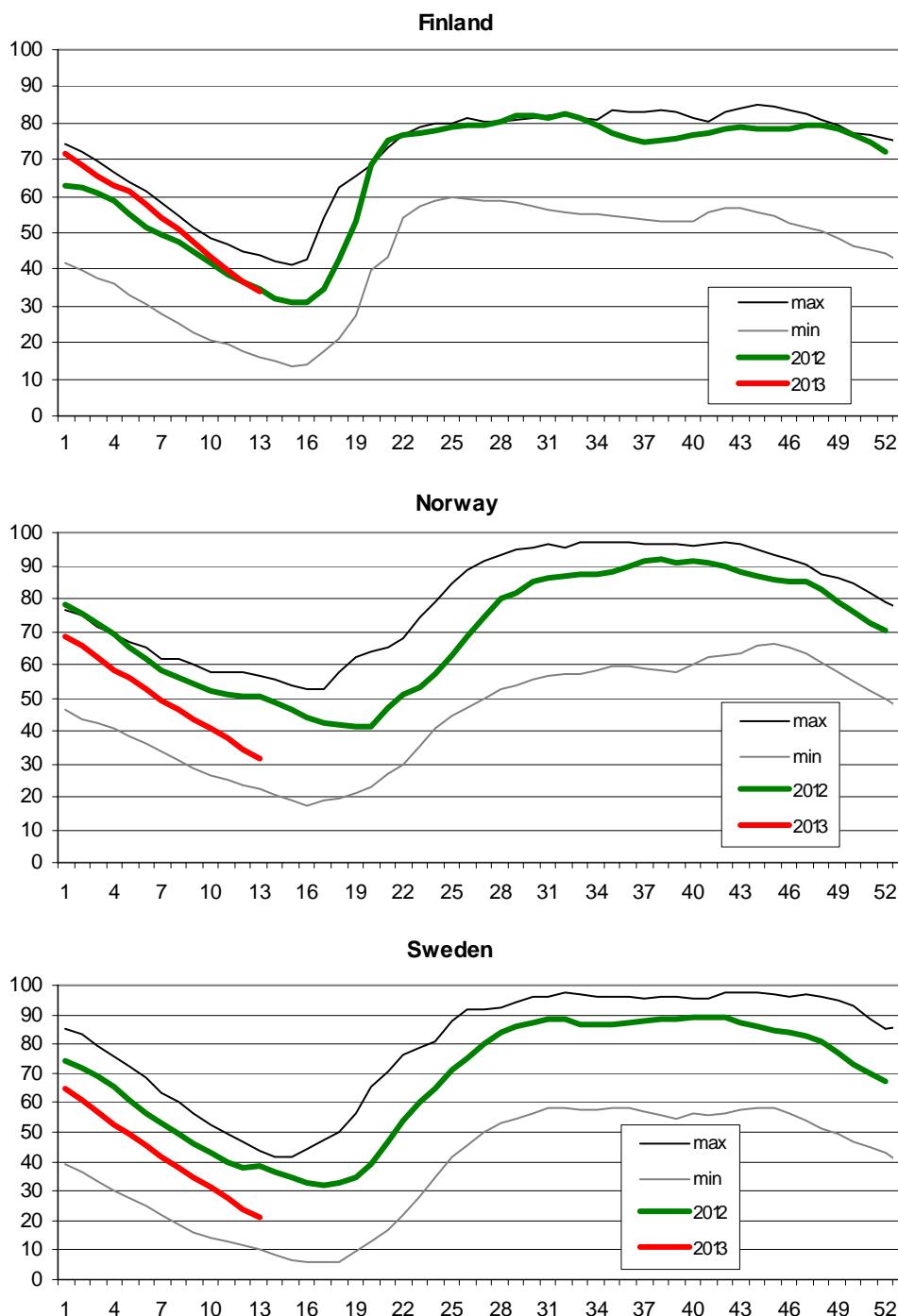
German TSOs are working on a modified system concerning gathering of data of voltage levels downstream the transmission grid. There may be remarkable deviations in future and current data might no longer be directly comparable with historical data. Also already available data for past periods may be changed retroactively and significantly in future.

⁴ Monthly load values as of 21 March 2012⁵ Operational data

Consumption hourly load curves on 20.03.2013 CET

Values in GW





Finland: Reservoir capacity: 5.530 GWh
 Minimum and maximum limits are based on values for the years 1990-2002

Norway: Reservoir capacity: 81.729 GWh
 The statistics are supposed to cover 97.1 percent of the total reservoir capacity.
 The total reservoir capacity is 84 147 GWh
 Minimum and maximum limits are based on values for the years 1990-2003

Sweden: Reservoir capacity: 33.758 GWh
 Minimum and maximum limits are based on values for the years 1950-2006

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