

Monthly report



June 2012

Monthly provisional values as of 02 October 2012

European Network of
Transmission System Operators
for Electricity



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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

Countries	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	Non identifiable	Total			monthly [GWh]	var. [%]
AT	0	885	4496	0	0	0	860	6241	-521	397	5323	2,5
BA	0	641	302	0	0	0	0	943	-30	0	913	0,6
BE ²	3311	2065	91	601	193	157	0	6068 ¹	566	90	6544	-3,1
BG	1235	1316	475	58	58	0	0	3084	-740	59	2285	-1,7
CH	1508	181	4486	112	6	0	0	6287 ¹	-1130	360	4797	0,1
CY	0	407	0	10	10	0	0	417	0	0	417	-4,4
CZ	2047	3612	174	285	26	261	0	6118 ¹	-1445	21	4652	-0,7
DE ³	6724	29956	2100	6223	873	3336	0	45003 ¹	-453	582	43968	2,0
DK	0	830	1	908	759	0	0	1739 ¹	827	0	2566	0,5
EE	0	617	3	131	24	0	0	751	-217	0	534	3,7
ES	3504	11850	2273	5354	3501	1447	24	23005	-625	323	22057	5,8
FI	1849	657	1499	658	25	0	52	4715 ¹	1003	0	5718	0,7
FR	26594	2260	6804	1843	993	414	0	37501	-3683	580	33238	-1,6
GB	5638	16234	392	1506	813	0	0	23770	765	320	24215	-1,5
GR	0	3375	450	447	270	162	0	4272 ¹	277	7	4542	7,2
HR	0	189	259	22	15	0	0	470	875	16	1329	-0,1
HU	1323	1389	0	0	0	0	0	2712	714	0	3426	7,5
IE	0	1559	93	248	240	0	10	1910 ¹	65	32	1943	-2,0
IS	0	0	997	342	0	0	0	1339	0	0	1339	1,1
IT	0	15916	5124	3207	727	2049	0	24247	3282	205	27324	-0,8
LT	0	189	63	48	31	0	0	300 ¹	532	52	780	-0,1
LU	0	204	91	11	4	3	0	306	309	117	498	-8,1
LV	0	93	246	29	8	0	0	368	179	0	547	10,1
ME ⁴	0	108	22	0	0	0	0	130	183	0	313	n.a.
MK	0	376	96	0	0	0	0	472	94	0	566	-2,2
NI	517	446	1	70	65	0	0	1034	0	0	1034	49,2
NL	359	5223	0	1375	375	n.a.	0	6957	2144	0	9101	-2,4
NO	0	265	10120	72	72	0	0	10457 ¹	-1814	316	8327	6,3
PL ⁵	0	10480	315	902	274	0	0	11697 ¹	-378	50	11269	0,5
PT	0	1842	464	968	723	35	0	3274 ¹	681	101	3854	-2,9
RO	714	1760	1585	159	143	n.a.	0	4218	-1	23	4194	0,5
RS	0	1843	1000	0	0	0	0	2843	-87	43	2713	-16,6
SE	4011	159	6155	1058	425	0	0	11383 ¹	-1592	0	9791	3,9
SI	494	303	355	0	0	0	0	1152	-129	0	1023	-3,3
SK	956	362	408	125	0	61	67	1918 ¹	145	3	2060	1,9
ENTSO-E	60784	117592	50940	26772	10653	7925	1013	257101¹	-204	3697	253200	n.a.

¹ Including deliveries from industry

² The reported figures are best estimates based on actual measurements and extrapolations.

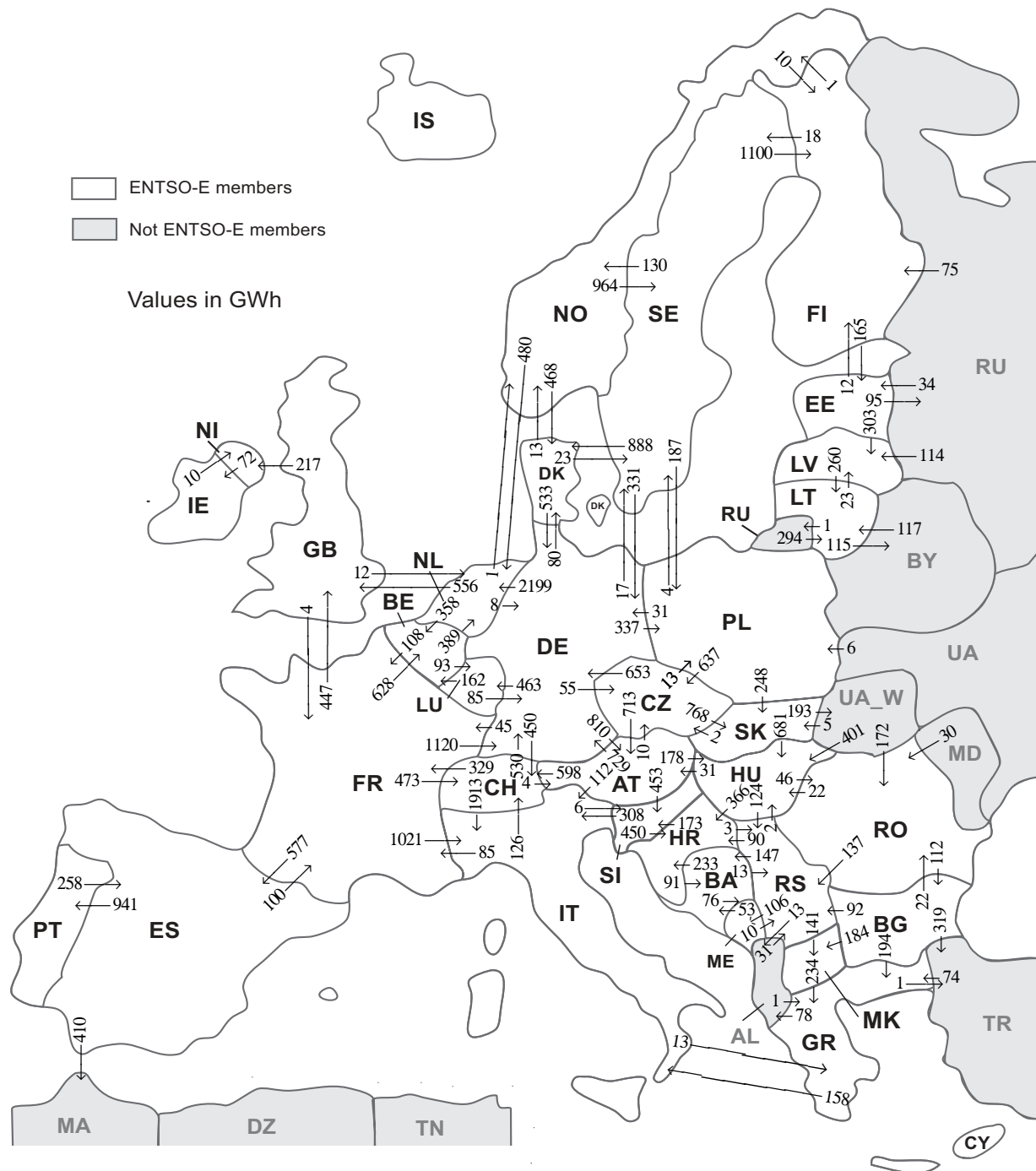
³ The reported figures are best estimates based on actual inquiries, measurements and extrapolations.

⁴ National monthly values as of June 2011

⁵ 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:

Countries	Representativities of the national values in %					Consumption
	Thermal nuclear	Fossil fuels	Hydro power	Other renewable	Non identifiable	
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	100	96	89	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: **30459GWh¹**

Total physical energy flows: **33038GWh¹**

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 and 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.

4

Overview of the detailed physical energy flows in GWh

June 2012

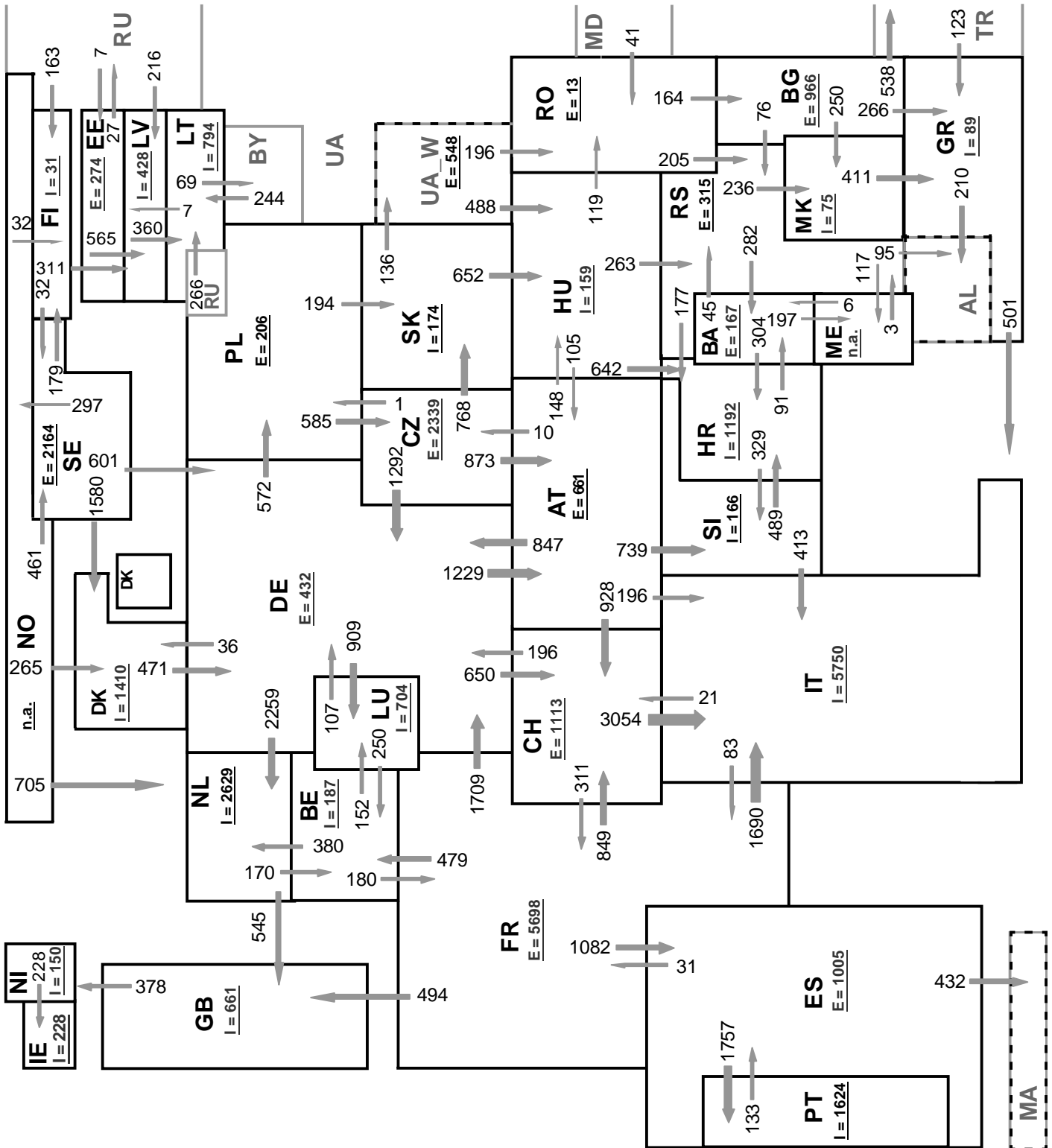
Outside flows	Inside flows of the countries																											Other III ¹							
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	NI	NL	NO	PL		PT	RO	RS	SE	SI	SK	
AT	-	-	-	-	598	10	729	-	-	-	-	-	-	-	-	178	-	112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	453	-	
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233	-	-	-	-	-	-	76	-	-	-	-	-	-	-	-	13	-	-	-	
BE	-	-	-	-	-	-	-	-	-	-	-	108	-	-	-	-	-	-	-	93	-	-	-	-	389	-	-	-	-	-	-	-	-	-	
BG	-	-	-	-	-	-	-	-	-	-	-	-	194	-	-	-	-	-	-	-	-	184	-	-	-	-	-	22	92	-	-	-	-	319	
CH	4	-	-	-	-	530	-	-	-	-	329	-	-	-	-	-	-	1913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CZ	713	-	-	-	-	653	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	768	-	
DE	810	-	-	-	450	55	80	-	-	-	45	-	-	-	-	-	-	-	463	-	-	-	-	-	2199	337	-	-	-	17	-	-	-	-	
DK	-	-	-	-	-	533	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	23	-	-	-	-	
EE	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	303	-	-	-	-	-	-	-	-	-	-	-	-	95	
ES	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	941	-	-	-	-	-	-	410	
FI	-	-	-	-	-	-	165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	18	-	-	-	-	0	
FR	-	-	628	-	473	-	1120	-	577	-	-	447	-	-	-	-	1021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GB	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	217	12	-	-	-	-	-	-	-	-	-	-
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	158	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	79
HR	-	91	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	3	-	173	-	-	-	-	
HU	31	-	-	-	-	-	-	-	-	-	-	-	-	366	-	-	-	-	-	-	-	-	-	-	-	-	46	124	-	-	-	-	0	0	
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-
IT	0	-	-	-	126	-	-	-	-	-	85	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	116
LU	-	-	162	-	-	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LV	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
ME	-	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	n.a.
MK	-	-	-	0	-	-	-	-	-	-	-	-	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NI	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NL	-	-	358	-	-	8	-	-	-	-	-	556	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO	-	-	-	-	-	468	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	480	-	-	-	-	-	-	-	964	-	-	n.a.
PL	-	-	-	-	637	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	248	0	
PT	-	-	-	-	-	-	-	-	258	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RO	-	-	-	112	-	-	-	-	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
RS	-	147	-	0	-	-	-	-	-	-	-	-	90	2	-	-	-	-	-	-	-	106	141	-	-	-	-	0	-	-	-	-	-	-	13
SE	-	-	-	-	-	331	888	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	187	-	-	-	-	-	-	-	-	-
SI	0	-	-	-	-	-	-	-	-	-	-	-	450	-	-	-	308	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SK	-	-	-	-	2	-	-	-	-	-	-	-	-	681	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	193
Other III ¹	-	-	-	0	-	-	-	34	0	75	-	-	75	-	401	-	-	411	-	114	n.a.	-	-	-	n.a.	6	-	202	31	-	-	-	-	5	-

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

Sum of the monthly energy flows inside and outside of each country in GWh

	flows inside	flows outside
AT	1558	2080
BA	291	322
BE	1148	590
BG	112	811
CH	1647	2776
CZ	704	2147
DE	4020	4456
DK	1436	569
EE	199	410
ES	835	1451
FI	1197	184
FR	671	4266
GB	1003	233
GR	516	237
HR	1139	267
HU	1284	567
IE	72	10

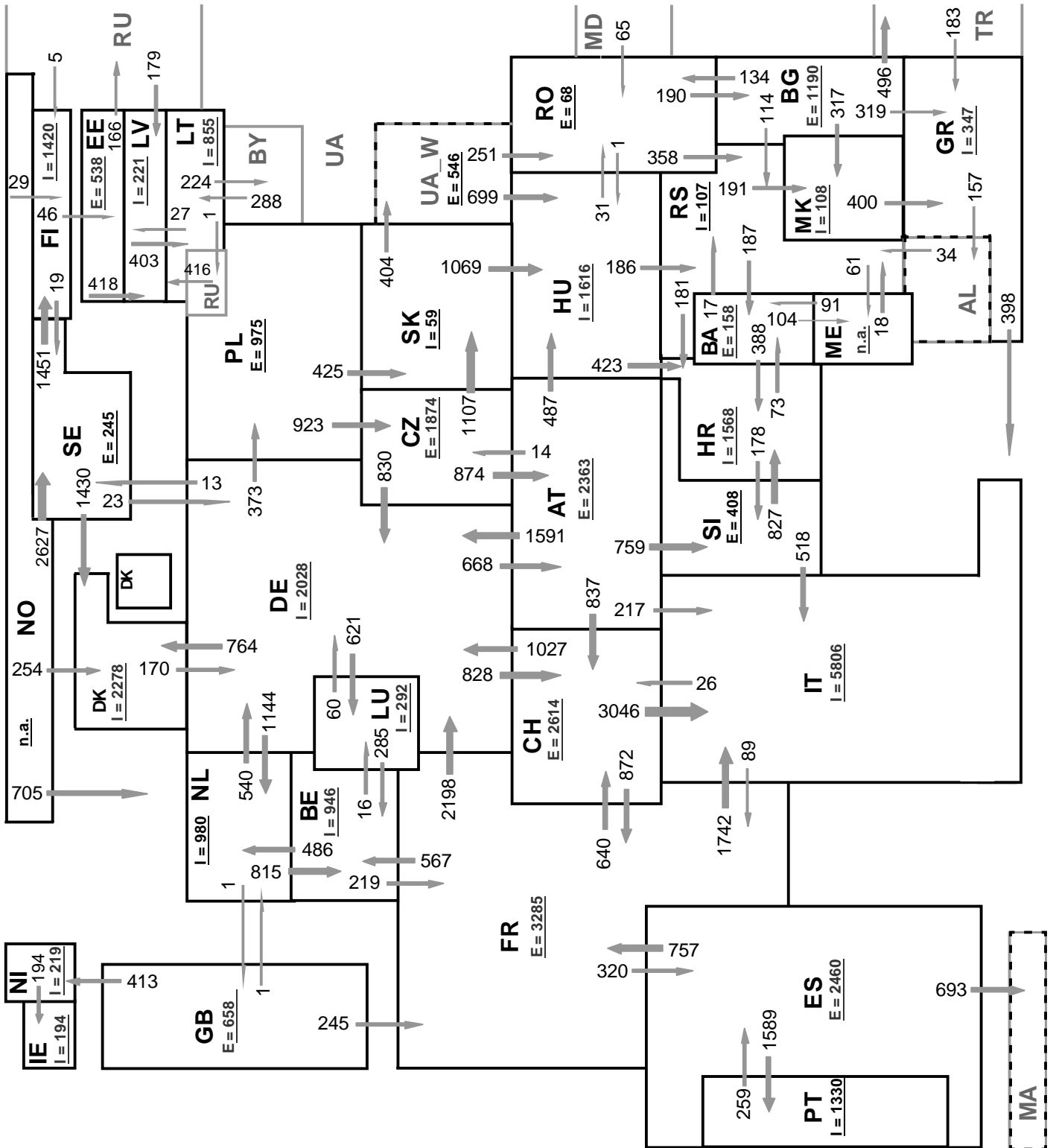
	flows inside	flows outside
IT	3512	230
LT	671	139
LU	556	247
LV	440	260
ME	n.a.	n.a.
MK	325	234
NI	227	72
NL	3080	923
NO	n.a.	n.a.
PL	543	920
PT	941	258
RO	270	271
RS	410	499
SE	1026	2636
SI	632	758
SK	1021	876
ENTSO-E	31813	31684



Sum of load flows in MW ENTSO-E = 38724 MW Total = 41975 MW
 (Calculated sum without data between ME - AL and NO - RU)

Synchronous operation with ENTSO-E region

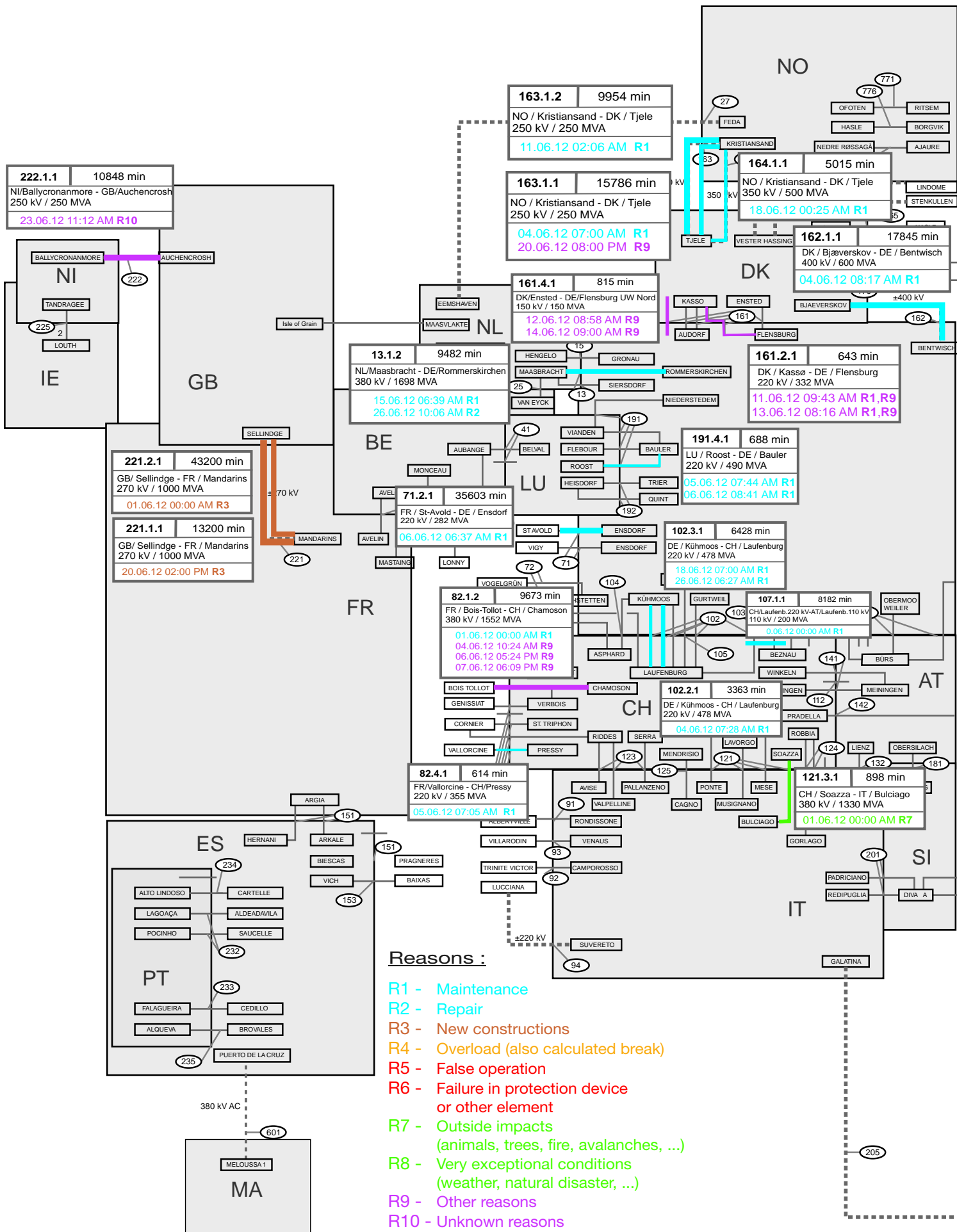
I = Import balance
 E = Export balance

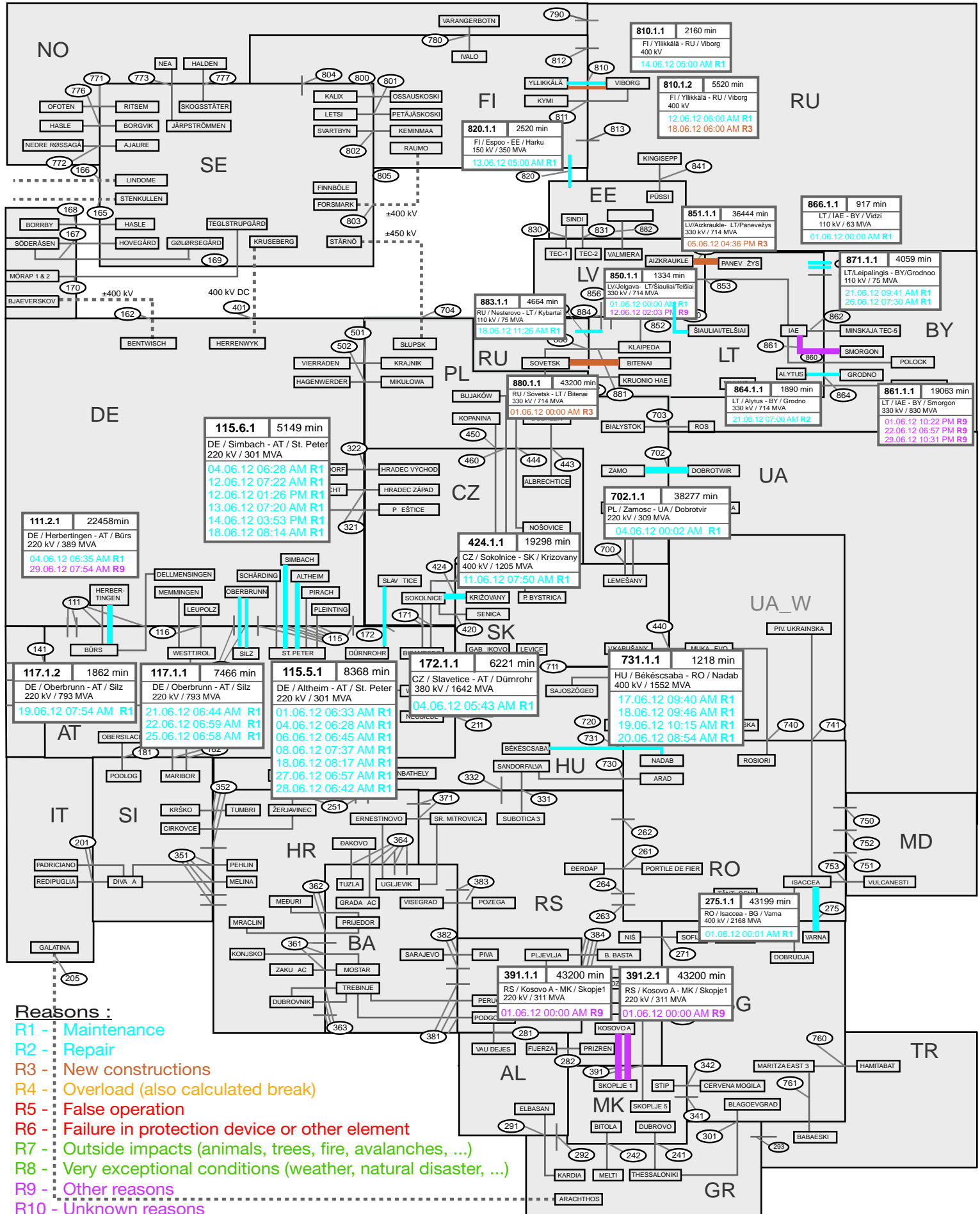


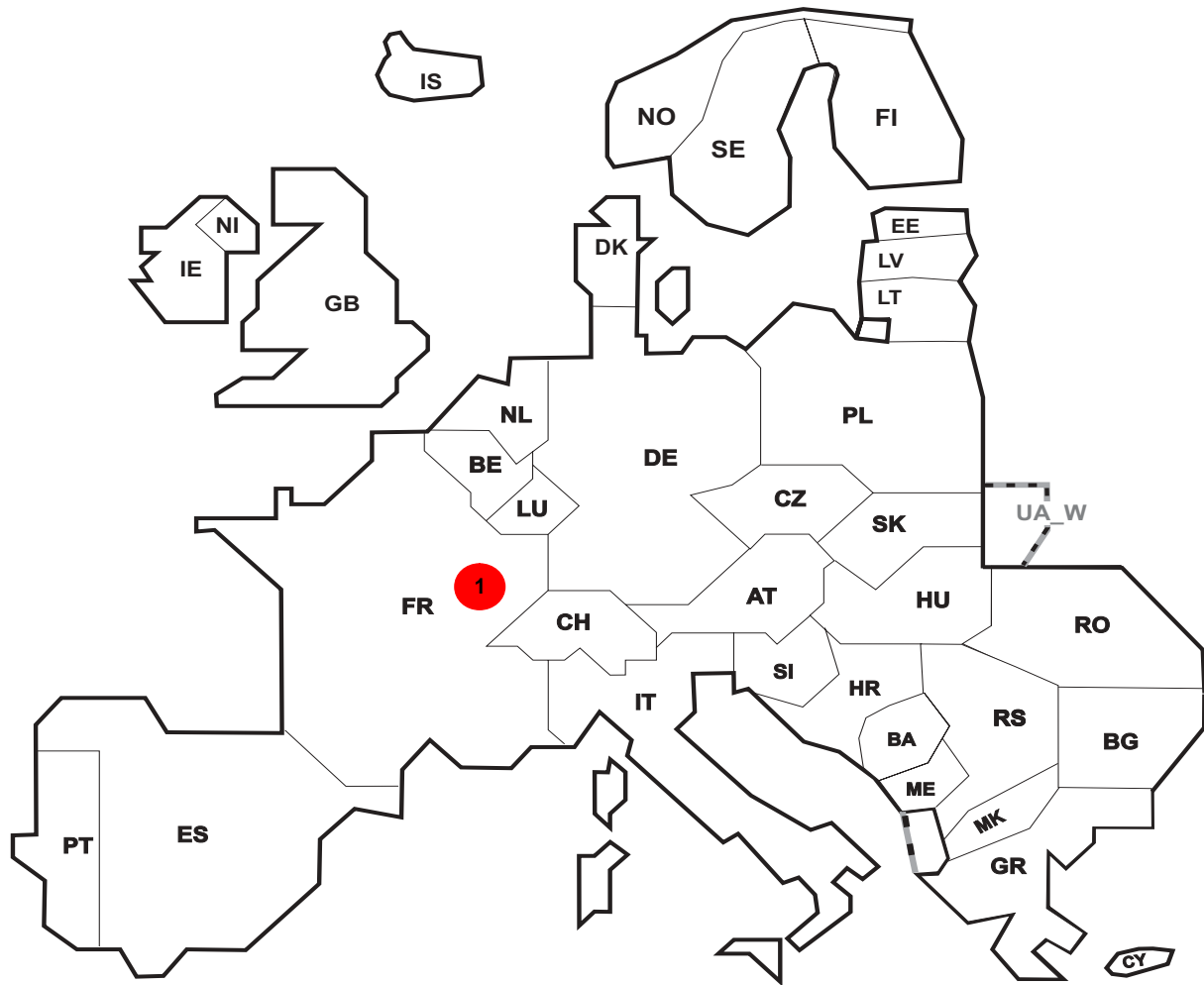
Sum of load flows in MW ENTSO-E = 42840 MW Total = 47519 MW
 (Calculated sum without data between ME - AL and NO - RU)

Synchronous operation with ENTSO-E region

I = Import balance
 E = 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	FR	Lutterbach	R6	12	25	28	0,013

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 20.06.2012 CET of each country

	Highest		Low est		Load representativity %
	load MW	variation % ¹	load MW	variation % ¹	
AT	8477	5,3	5017	5,7	100
BA	1652	6,4	999	5,3	100
BE ²	10589	-6,1	7552	-3,0	100
BG	4487	2,4	3056	0,6	99
CH	8787	0,7	5244	-1,1	100
CY ³	813	5,6	469	16,4	100
CZ	8010	2,2	5528	-2,2	100
DE ⁴	75890	-0,4	45378	-5,0	91
DK	4502	-2,0	2616	0,1	100
EE	941	-1,4	564	0,2	100
ES	34642	-5,2	23342	-1,2	98
FI	8468	-10,5	6220	-12,6	100
FR	56129	-1,4	38220	-3,5	100
GB	41179	-1,6	24455	1,5	92
GR	7739	20,0	5072	21,7	100
HR	2546	12,9	1548	4,5	100
HU	5647	11,1	3666	8,8	100
IE	3347	-2,8	1872	4,4	100
IS	1975	3,7	1815	0,8	100
IT	51874	18,5	32105	8,2	100
LT	1367	2,2	798	-1,5	100
LU	826	-10,8	572	-8,9	100
LV	951	15,6	525	26,5	100
ME ⁵	492	n.a.	331	n.a.	100
MK	977	0,5	566	-9,3	100
NI	1197	-5,0	624	-5,6	100
NL	14782	-5,3	9133	-4,6	100
NO	12853	2,9	10068	3,9	100
PL ⁶	19081	2,5	12858	1,1	100
PT	6613	-4,4	4390	-2,1	100
RO	7158	8,2	4998	1,1	100
RS	4788	1,2	2804	7,4	100
SE	16217	2,1	11697	4,3	100
SI	1772	3,0	1345	7,6	100
SK	3561	8,3	2639	0,6	100
ENTSO-E	427475	n.a.	281312	n.a.	

¹ Variation as compared to corresponding month of the previous year

² The reported figures are best estimates based on actual measurements and extrapolations.

³ Only highest and lowest load value available.

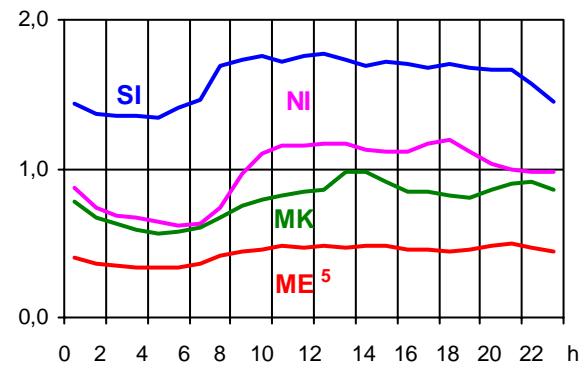
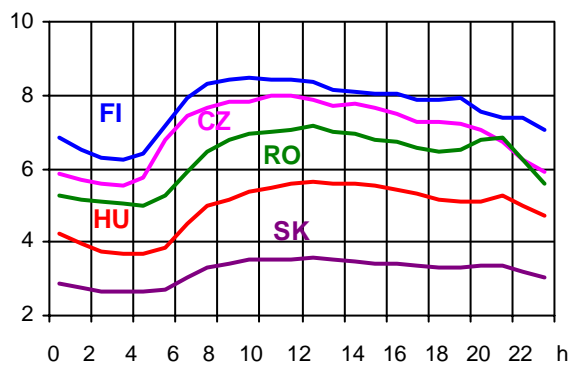
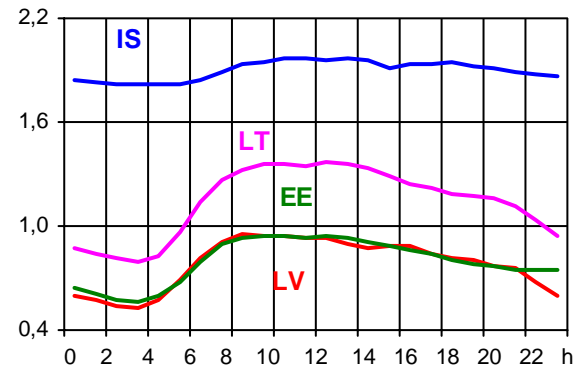
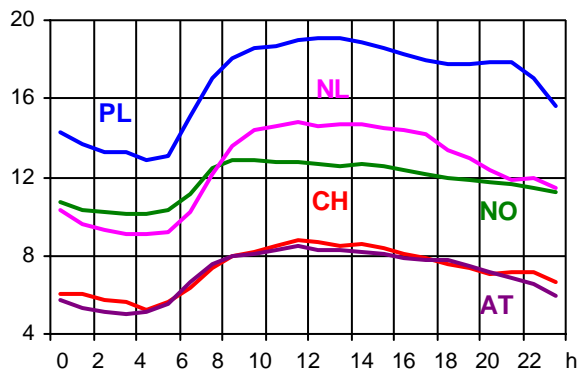
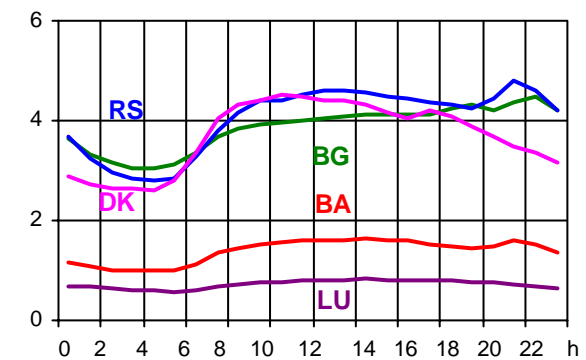
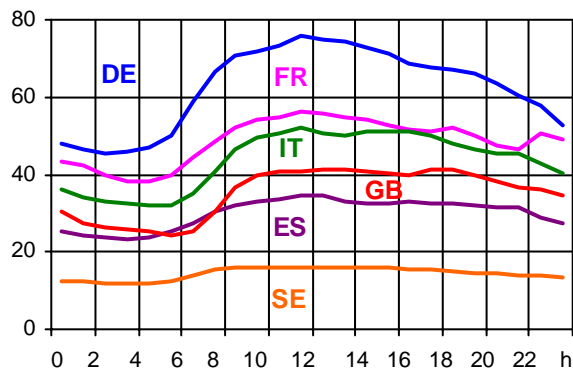
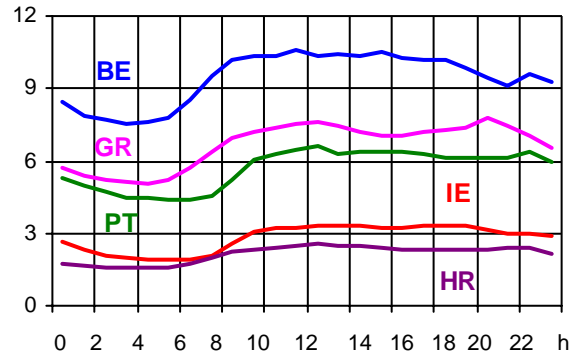
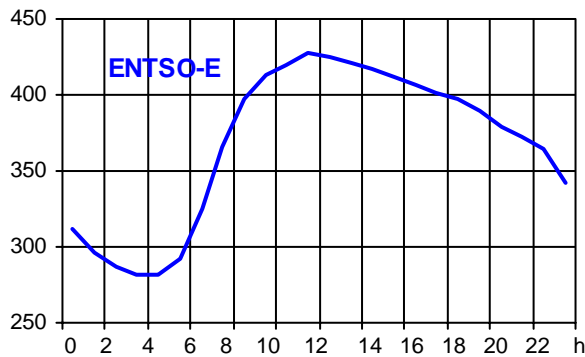
⁴ A comparison with previous figures may be limited for statistical reasons related to renewable energies feed-in like direct marketing.

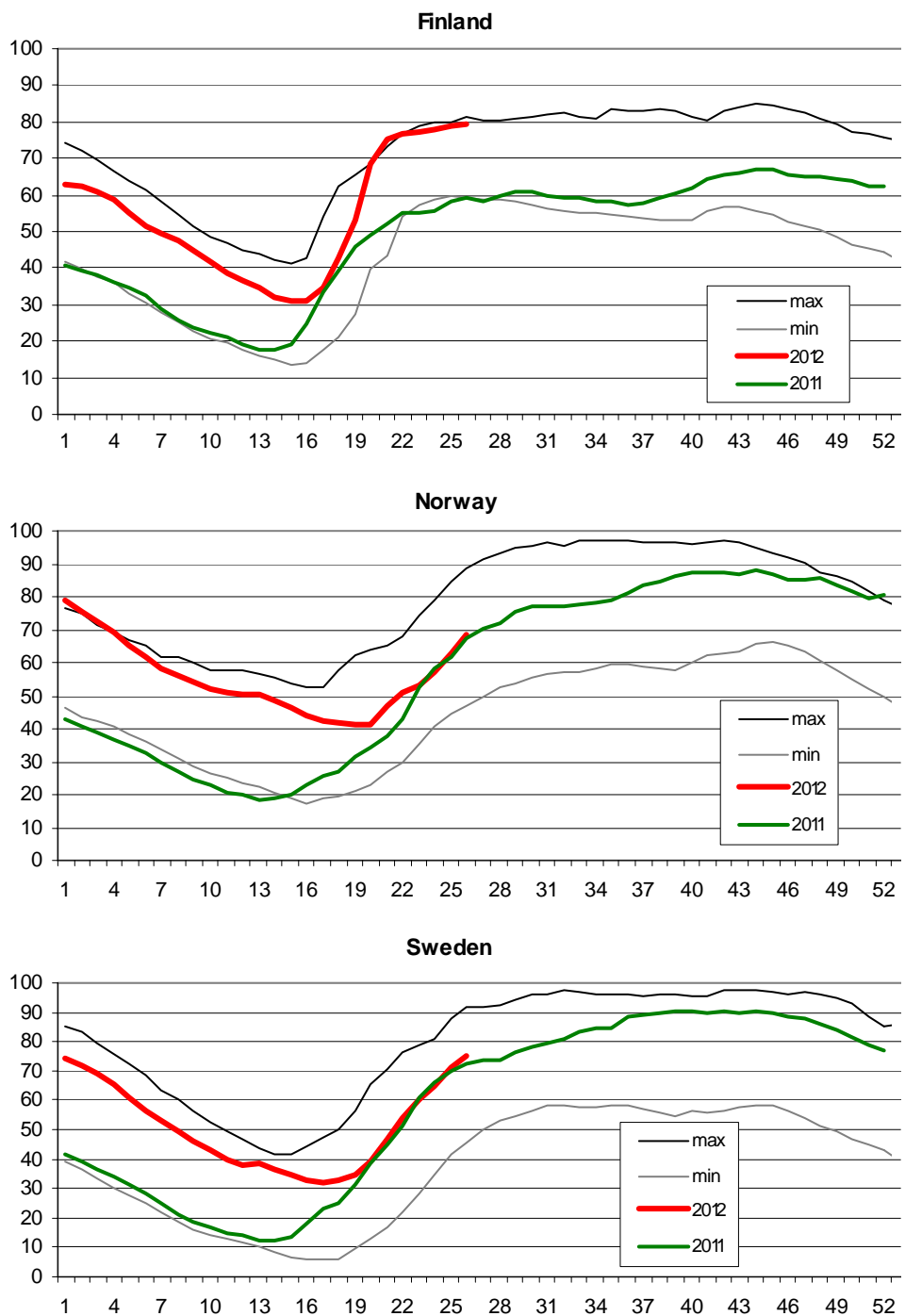
⁵ Monthly load values as of 15 June 2011

⁶ Operational data

Consumption hourly load curves on 20.06.2012 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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