Monthly report

February 2012

Monthly provisional values as of 07 June 2012

European Network of
Transmission System Operators
for Electricity

entsoe

Table of contents Page

General remarks and abbreviations used in the tables

- All values of production and consumption on page 2, 11 and 12 are calculated to represent 100% of the national values.
- CET Central European Time

1 Electricity supply situation of the countries

February 2012

Coun-tries	Net generation in GWh: Therm. nuclear	Fossil fuels	Hydro power	Other renew.	of which wind	of which solar	Non identi-fiable	Total	Exchange balance in GWh	Pump in GWh	Consumption monthly [GWh]	Consumption var. [%]
AT	0	2781	2616	0	0	0	735	**6132**	549	328	6353	8,6
BA	0	732	286	0	0	0	0	**1018**	149	32	1135	9,3
BE [2]	3795	3403	139	716	334	102	0	**8053** [1]	40	137	7956	9,0
BG	1350	2291	423	91	91	0	0	**4155**	-489	92	3574	15,2
CH	2276	191	2835	118	6	0	0	**5420** [1]	1001	92	6329	11,4
CY	0	360	0	26	26	0	0	**386**	0	0	386	-5,2
CZ	2268	4554	298	148	39	110	0	**7268** [1]	-986	106	6176	8,9
DE [3]	8425	38877	1722	5038	1952	991	0	**54062** [1]	-3491	546	50025	1,0
DK	0	2303	2	1161	945	0	0	**3466** [1]	-314	0	3152	9,1
EE	0	832	2	118	33	0	0	**952**	-108	0	844	7,2
ES	5110	13101	1469	6168	4925	877	27	**25875**	-1376	459	24040	13,0
FI	1923	2627	1236	1022	43	0	55	**6863** [1]	1470	0	8333	-1,0
FR	38685	8674	5279	1751	1119	191	0	**54389**	520	421	54488	18,7
GB	5806	23010	748	2126	1148	0	0	**31690**	-679	358	30654	7,8
GR	0	3694	381	310	240	38	0	**4385** [1]	106	69	4422	6,4
HR	0	623	272	37	29	0	0	**932**	733	12	1653	11,5
HU	1424	2100	0	0	0	0	0	**3524**	226	0	3750	12,4
IE	0	1777	80	373	373	0	15	**2245** [1]	-29	0	2216	0,1
IS	0	0	1002	413	0	0	0	**1415**	0	0	1415	6,0
IT	0	20413	2098	2562	1152	999	0	**25073**	2902	201	27774	2,2
LT	0	376	71	61	47	0	0	**508** [1]	521	64	965	6,3
LU	0	272	84	10	5	0	0	**366**	290	113	543	-4,4
LV	0	363	120	25	7	0	0	**508**	226	0	734	11,6
ME [4]	0	126	231	0	0	0	0	**357**	5	0	362	n.a.
MK	0	553	50	0	0	0	0	**603**	307	0	910	6,4
NI	0	547	1	112	106	0	0	**660**	174	0	834	8,2
NL	327	8201	0	1466	466	n.a.	0	**9994**	-152	0	9842	0,3
NO	0	322	13938	171	171	0	0	**14431** [1]	-1707	57	12667	2,5
PL [5]	0	12852	177	805	356	0	0	**13834** [1]	-570	56	13208	7,7
PT	0	2268	354	1138	902	27	0	**3760** [1]	700	84	4376	1,1
RO	912	3059	861	217	181	0	0	**5049**	-61	3	4985	4,4
RS	0	2822	777	0	0	0	0	**3599**	-588	14	2997	-16,6
SE	4814	827	7040	1855	660	0	0	**14536** [1]	-294	0	14242	1,8
SI	476	479	122	0	0	0	0	**1077**	54	0	1131	7,9
SK	1237	600	304	77	0	29	90	**2308** [1]	188	25	2471	5,6
ENTSO-E	**78828**	**166010**	**45018**	**28115**	**15356**	**3364**	**922**	**318893** [1]	**-683**	**3269**	**314942**	**n.a.**

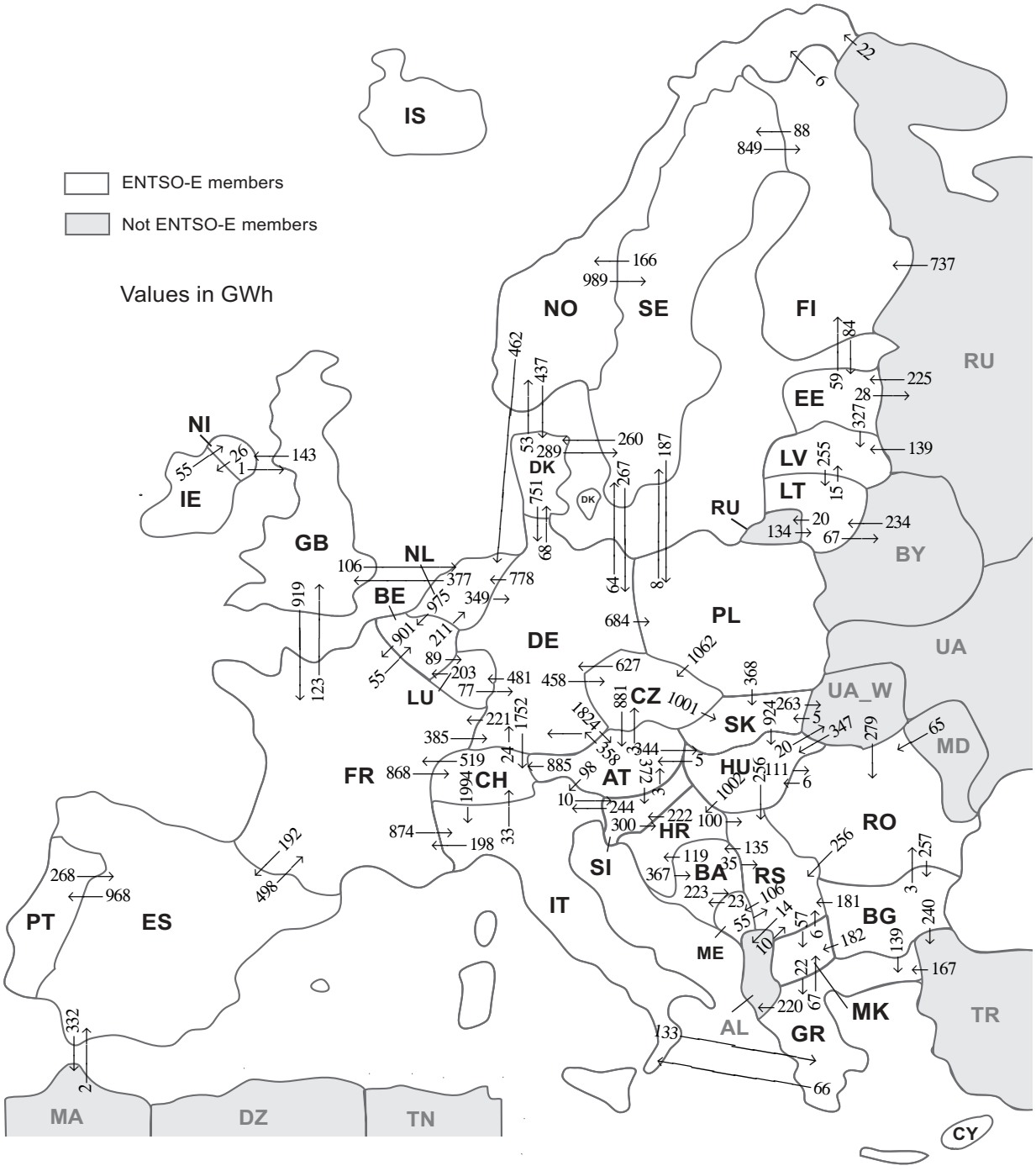
[1] Including deliveries from industry
[2] The reported figures are best estimates based on actual measurements and extrapolations.
[3] The reported figures are best estimates based on actual inquiries, measurements and extrapolations.
[4] National monthly values as of February 2011
[5] Operational data. 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 %					
	Thermal nuclear	Fossil fuels	Hydro prod	Other renewable	Non identifiable	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	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

3 Physical energy flows

February 2012



Sum of physical energy flows between ENTSO-E countries: **34937GWh** [1]

Total physical energy flows: **38511GWh** [1]

[1] Sum of physical energy flows without exchanges between ME-AL.

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.

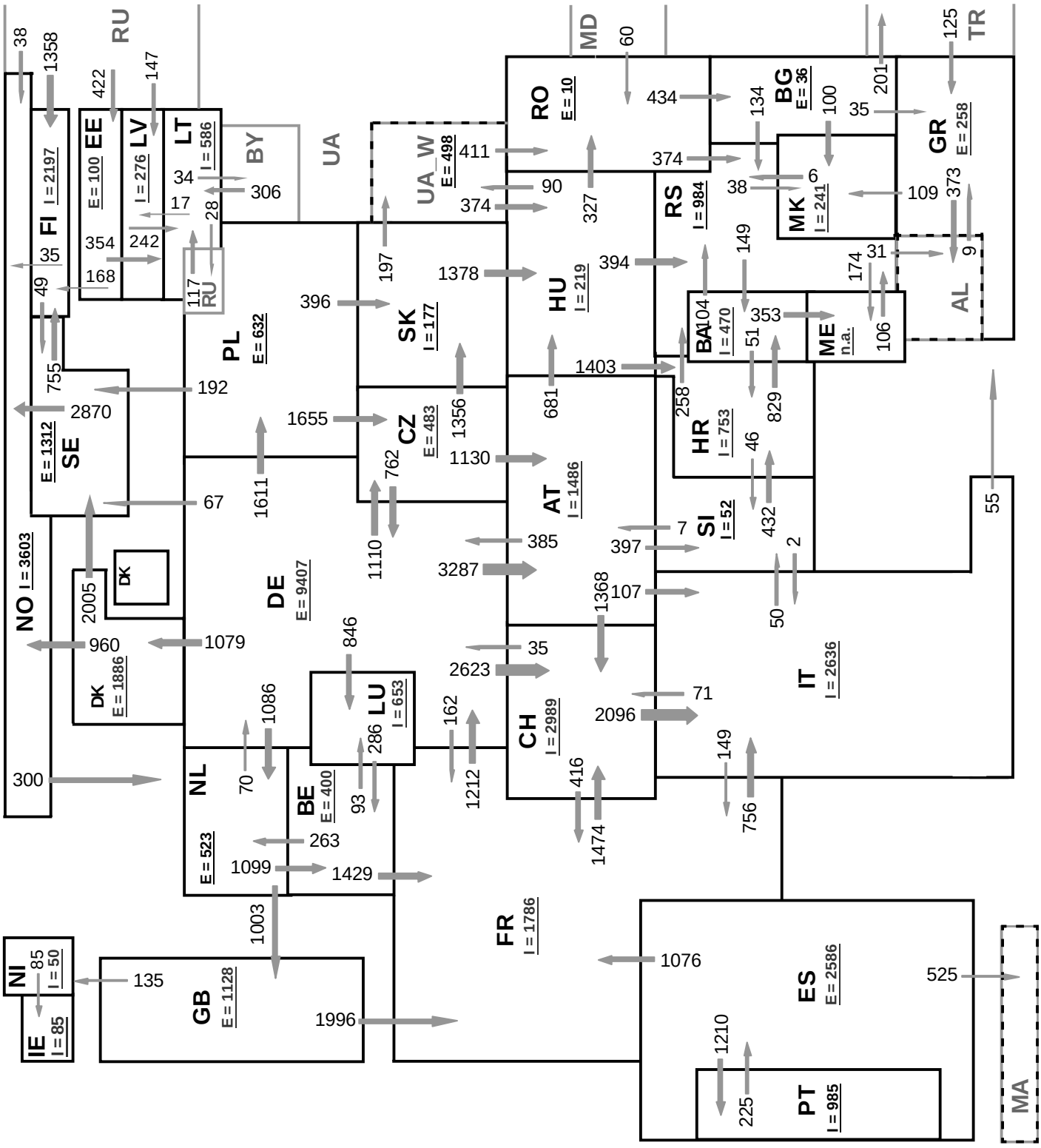
Outside flows	Inside flows of the countries																															
	AT	BA	BE	BG	CH	CZ	DE	DK	EE	ES	FI	FR	GB	GR	HR	HU	IE	IT	LT	LU	LV	ME	MK	NI	NL	NO	PL	PT	RO	RS	SE	SI	SK	UA_W	Other III[1]
AT	-	-	-	-	885	3	358	-	-	-	-	-	-	-	-	344	-	98	-	-	-	-	-	-	-	-	-	-	-	-	372	-	-	-
BA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	119	-	-	-	-	-	-	223	-	-	-	-	-	-	-	35	-	-	-	-
BE	-	-	-	-	-	-	-	-	-	-	-	901	-	-	-	-	-	-	-	89	-	-	-	-	211	-	-	-	-	-	-	-	-	-
BG	-	-	-	-	-	-	-	-	-	-	-	-	-	139	-	-	-	-	-	-	-	182	-	-	-	-	-	-	3	181	-	-	-	240
CH	0	-	-	-	-	-	24	-	-	-	-	519	-	-	-	-	-	1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CZ	881	-	-	-	-	-	627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	1001	-	-
DE	1824	-	-	-	1752	458	-	68	-	-	-	221	-	-	-	-	-	-	-	481	-	-	-	-	778	-	684	-	-	-	64	-	-	-
DK	-	-	-	-	-	-	751	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	-	-	-	-	289	-	-	-	-
EE	-	-	-	-	-	-	-	-	-	-	59	-	-	-	-	-	-	-	-	-	327	-	-	-	-	-	-	-	-	-	-	-	-	-	28
ES	-	-	-	-	-	-	-	-	-	-	-	498	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	968	-	-	-	-	-	-	332
FI	-	-	-	-	-	-	-	-	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	88	-	-	-	0
FR	-	-	55	-	868	-	385	-	-	192	-	-	123	-	-	-	-	874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GB	-	-	-	-	-	-	-	-	-	-	-	919	-	-	-	-	-	-	-	-	-	-	-	143	106	-	-	-	-	-	-	-	-	-	-
GR	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	66	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-	220
HR	-	367	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	222	-	-	-
HU	5	-	-	-	-	-	-	-	-	-	-	-	-	-	1002	-	-	-	-	-	-	-	-	-	-	-	-	-	111	256	-	-	0	20	-
IE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	-	-	-	-	-	-	-	-	-	-
IT	0	-	-	-	33	-	-	-	-	-	-	198	-	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-
LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	87
LU	-	-	203	-	-	-	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LV	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
ME	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	-	-	-	n.a.
MK	-	-	-	0	-	-	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-
NI	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NL	-	-	975	-	-	-	349	-	-	-	-	-	377	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
NO	-	-	-	-	-	-	-	437	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	462	-	-	-	-	-	989	-	-	-	0
PL	-	-	-	-	-	1062	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	368	-	0
PT	-	-	-	-	-	-	-	-	-	268	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RO	-	-	-	257	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	256	-	-	-	0	0
RS	-	135	-	0	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-	-	-	106	57	-	-	-	-	-	0	-	-	-	-	-	14
SE	-	-	-	-	-	-	267	260	-	-	849	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166	187	-	-	-	-	-	-	-	-
SI	3	-	-	-	-	-	-	-	-	-	-	-	-	-	300	-	-	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SK	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	924	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	263	-
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	347	-	-	-	-	-	-	-	-	-	-	-	-	279	-	-	-	5	-	-
Other III[1]	-	-	-	0	-	-	-	-	225	2	737	-	-	171	-	-	-	-	368	-	139	n.a.	-	-	-	22	0	-	65	10	-	-	-	-	-

Other III[1]: Albania, Belarus, Morocco, Republic of Moldavia, Republic of Turkey, Russia and Ukraine

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

	flows inside	flows outside
AT	2713	2060
BA	525	377
BE	1233	1201
BG	259	745
CH	3538	2537
CZ	1523	2509
DE	2839	6330
DK	765	1093
EE	309	414
ES	462	1798
FI	1649	178
FR	3256	2497
GB	501	1168
GR	465	355
HR	1421	689
HU	1621	1394
IE	26	55

	flows inside	flows outside
IT	3276	374
LT	623	102
LU	570	280
LV	481	255
ME	n.a.	n.a.
MK	306	31
NI	198	27
NL	1557	1701
NO	247	1892
PL	871	1439
PT	968	268
RO	458	519
RS	902	312
SE	1438	1729
SI	604	547
SK	1374	1187
UA_W	283	631



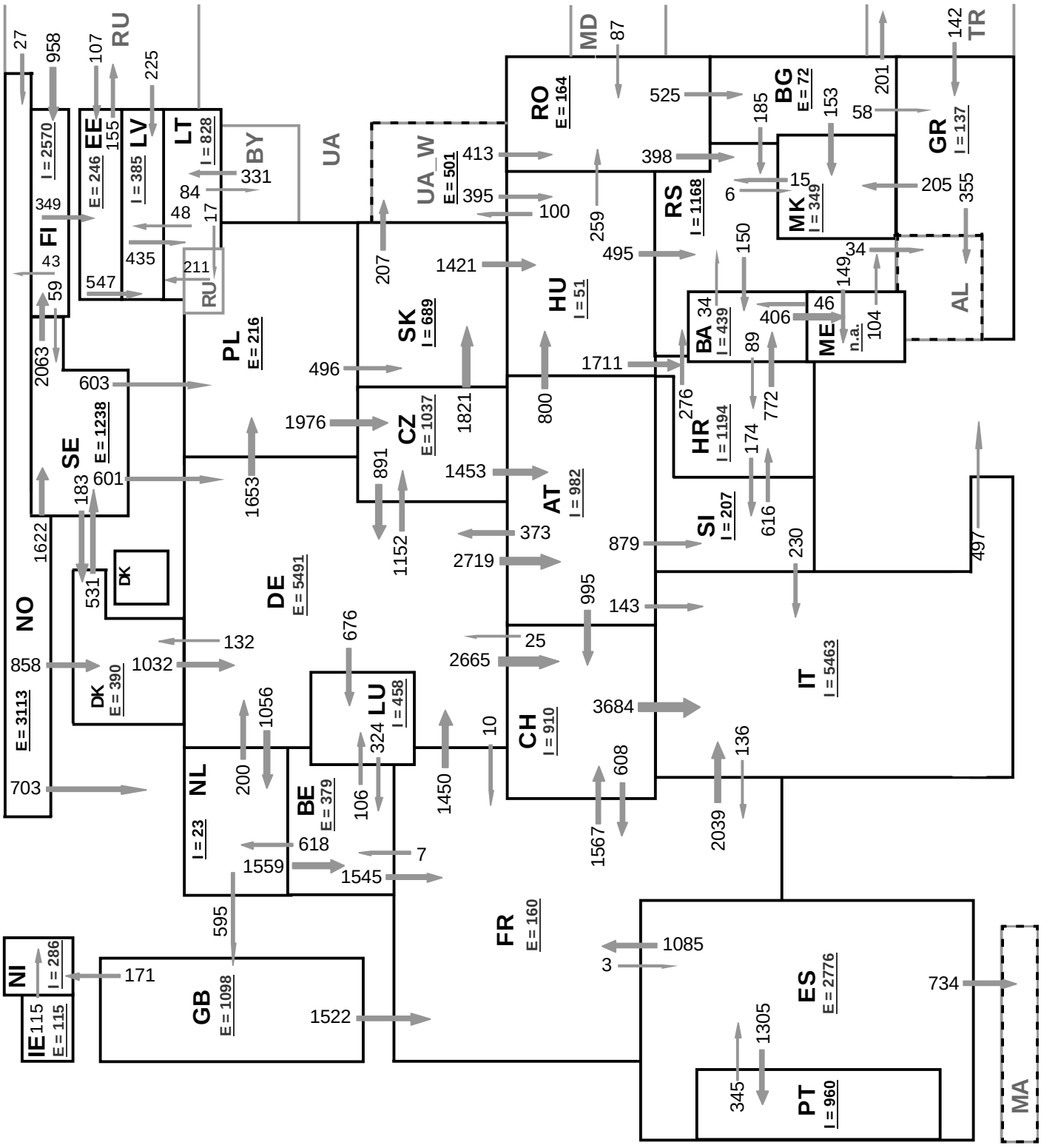
Sum of load flows in MW **ENTSO-E = 50582 MW** **Total = 55428 MW**
(Calculated sum without data between ME - AL)

Synchronous operation with ENTSO-E region

I = Import balance
E = Export balance

6 Load flows (day) on 15.02.2012 at 11:00 a.m. CET in MW

February 2012



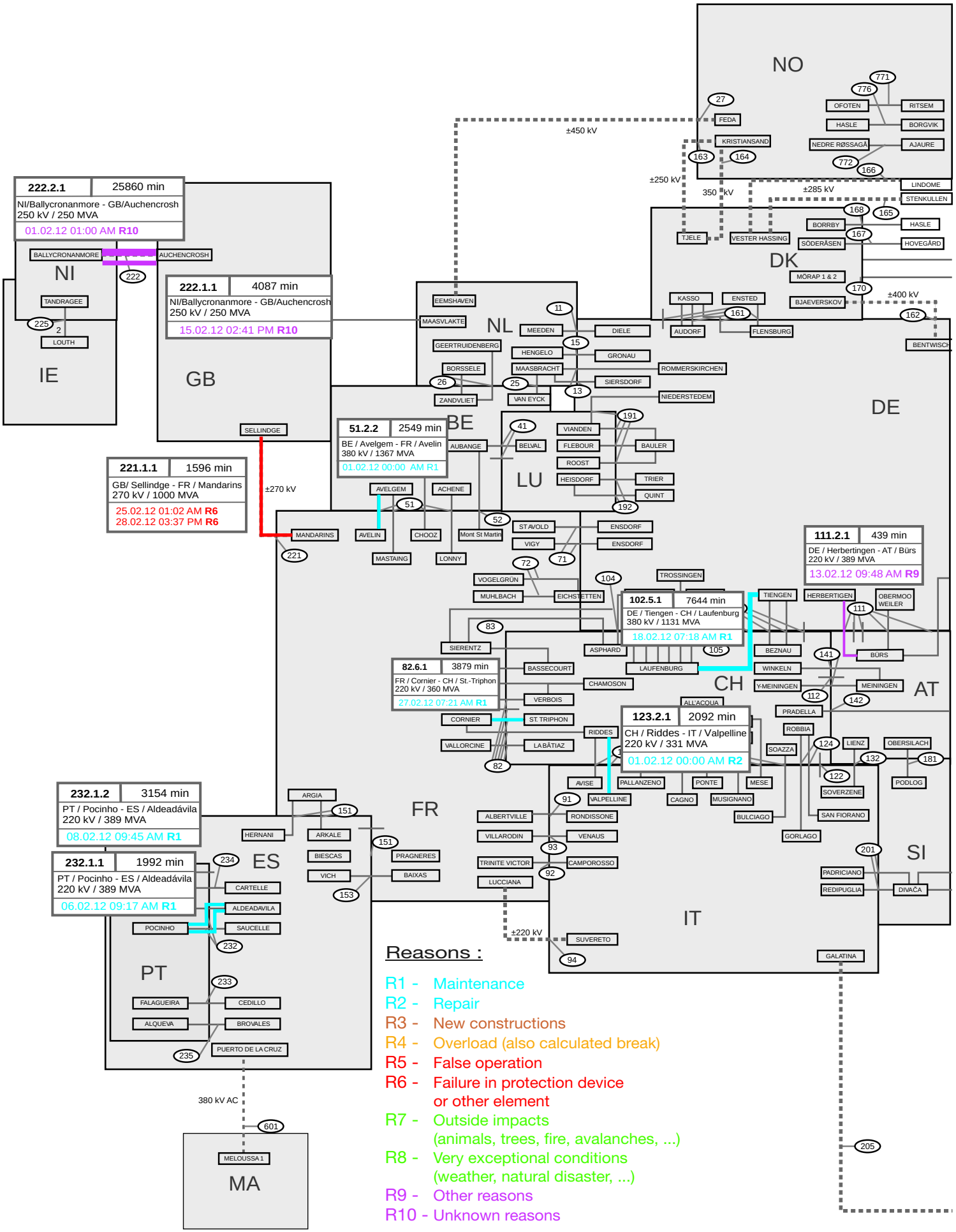
Sum of load flows in MW **ENTSO-E = 57003 MW** **Total = 62333 MW**

(Calculated sum without data between ME - AL)

Synchronous operation with ENTSO-E region

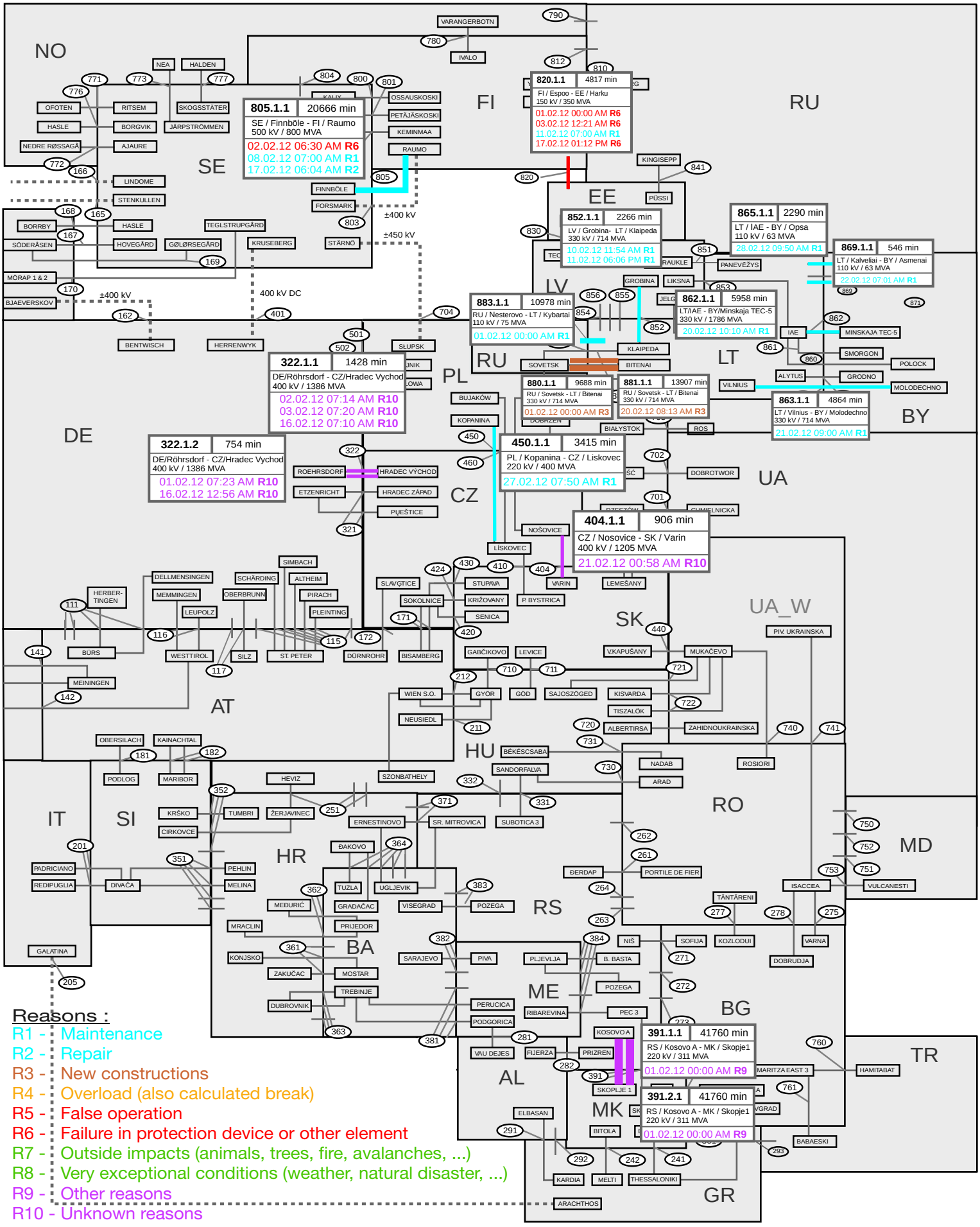
I = Import balance
E = Export balance

Unavailability of international tie lines
(major events with sum over 400 minutes)



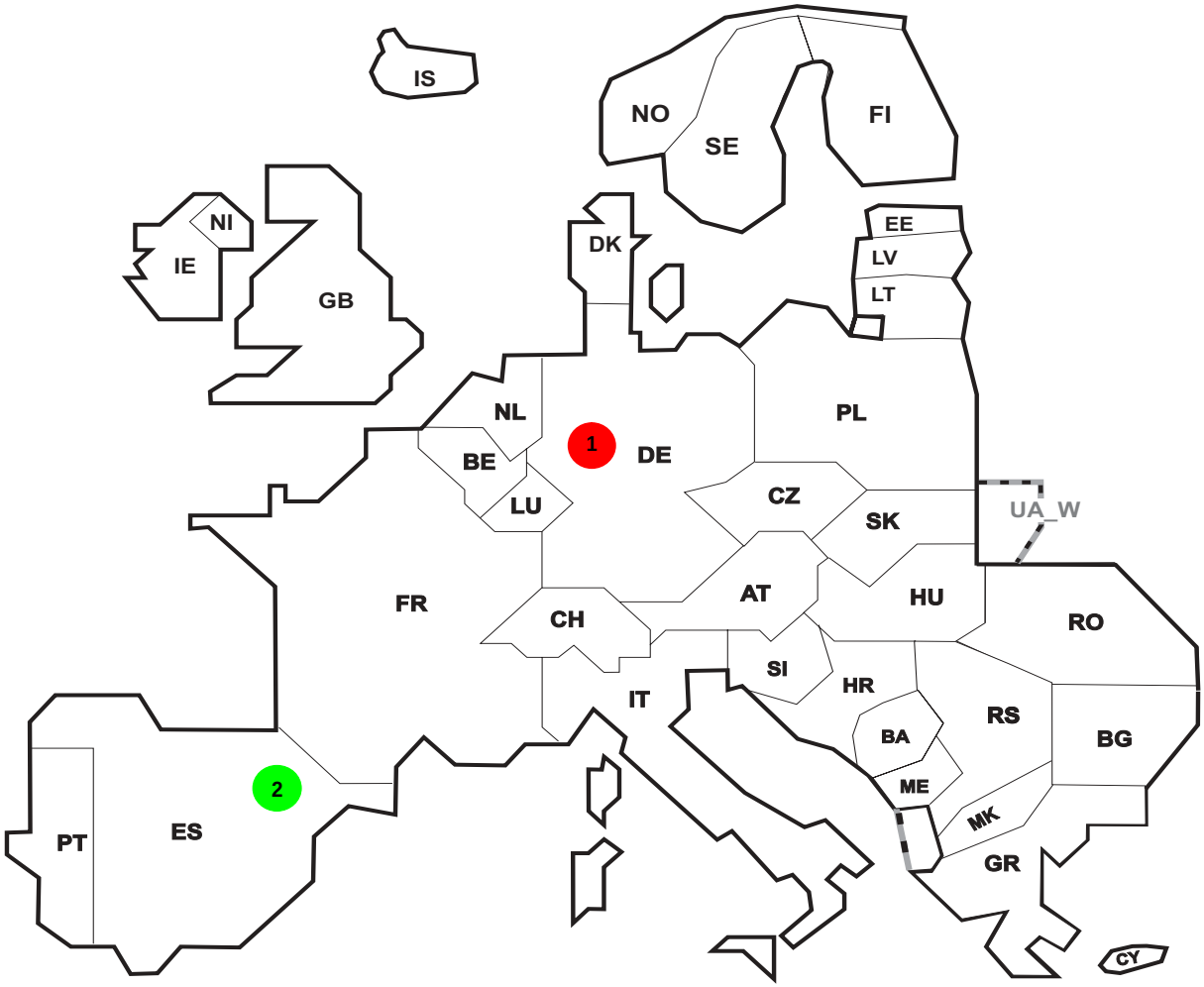
7 Unavailability of international tie lines (major events with sum over 400 minutes)

February 2012



Reasons :

- R1 - Maintenance
- R2 - Repair
- R3 - New constructions
- 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



Reasons:

R4	Overload (also calculated break)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation		
R6	Failure in protection device or other element	R9	Other reasons
R7	Outside impacts (animals, trees, fire, avalanches, ...)	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	DE	Büscherhof	R6	55	254	13	0,053
2	ES	La Fortunada	R8	15	4	442	0,032

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 15.02.2012 CET of each country

	Highest load MW	variation %[1]	Lowest load MW	variation %[1]	Load representativity %
AT	9821	5,9	6626	12,1	100
BA	2009	8,4	1317	16,2	100
BE [2]	13326	7,0	10047	7,2	100
BG	6813	6,5	4934	15,0	99
CH	10792	9,2	8047	12,9	100
CY [3]	724	-7,2	375	-8,8	100
CZ	10109	4,5	8109	9,4	100
DE [4]	76321	-10,9	53923	0,8	91
DK	5516	-3,5	3484	-0,5	100
EE	1371	-8,3	962	-12,3	100
ES	41701	4,1	25724	3,4	98
FI	12597	-11,9	10353	-18,1	100
FR	86254	14,3	71567	17,6	100
GB	53494	-7,3	32530	-0,3	92
GR	7858	4,5	4743	5,4	100
HR	3057	10,3	1812	18,1	100
HU	5805	2,4	4075	5,6	100
IE	4033	-6,5	2267	-7,8	100
IS	2113	3,9	1934	3,2	100
IT	53023	5,9	30704	5,8	100
LT	1647	8,4	1024	-1,0	100
LU	891	-14,0	584	-26,4	100
LV	1202	-2,0	686	-7,5	100
ME [5]	642	n.a.	407	n.a.	100
MK	1481	4,2	1063	20,5	100
NI	1486	-1,5	790	-3,7	100
NL	16529	3,1	9921	1,2	100
NO	20279	-5,7	15762	-8,5	100
PL [6]	22691	3,2	16135	5,0	100
PT	8268	-3,6	5050	0,9	100
RO	8394	-0,6	6251	3,4	100
RS	6331	-6,9	5037	10,0	100
SE	23200	-4,3	17202	-10,5	100
SI	2039	7,7	1364	0,9	100
SK	4287	3,9	3352	6,6	100
ENTSO-E	**520947**	**n.a.**	**372410**	**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.

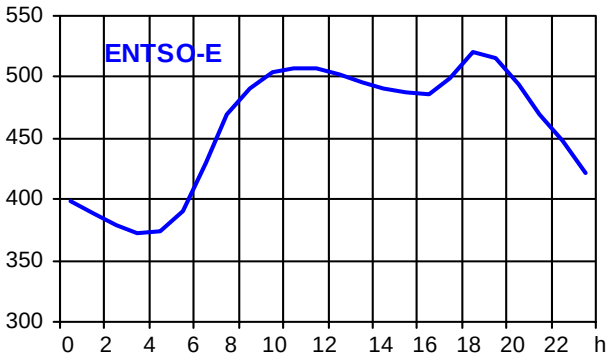
[4] The reported figures are best estimates based on actual inquiries, measurements and extrapolations.

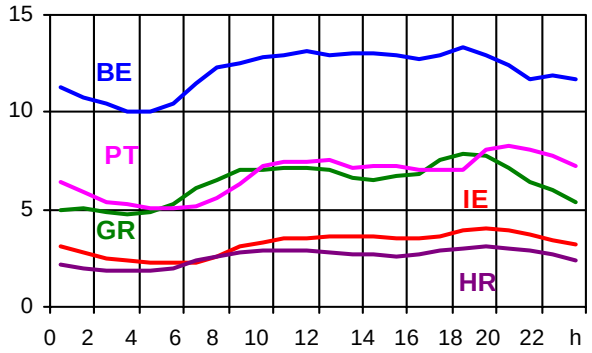
[5] Monthly load values as of 16 February 2011

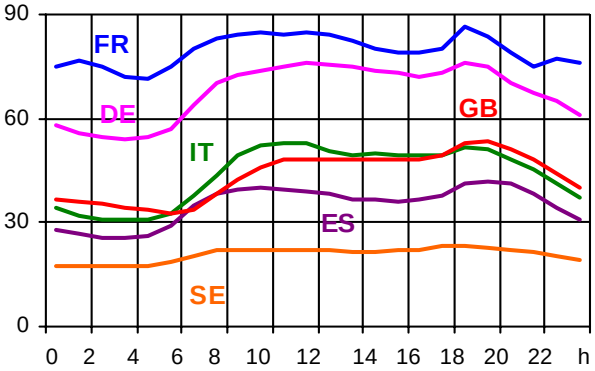
[6] Operational data

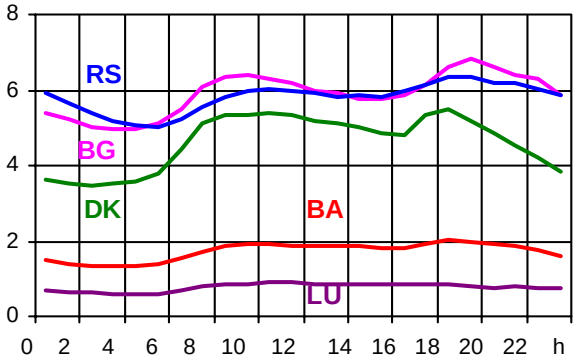
Consumption hourly load curves on 15.02.2012 CET

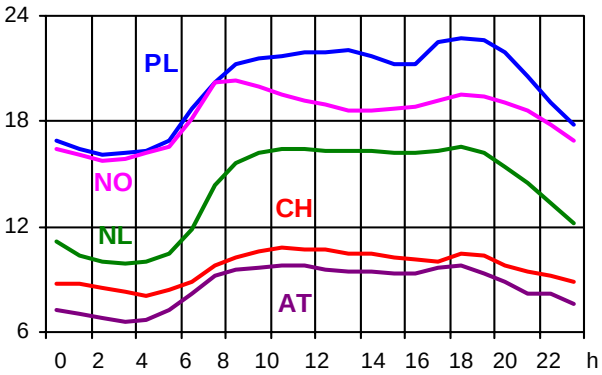
Values in GW

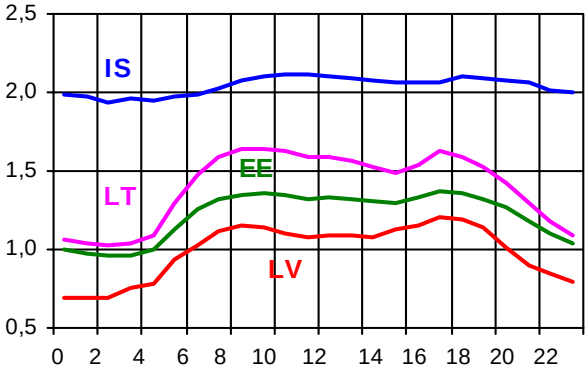


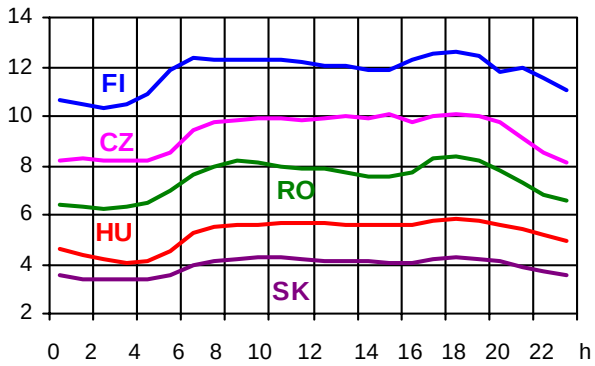


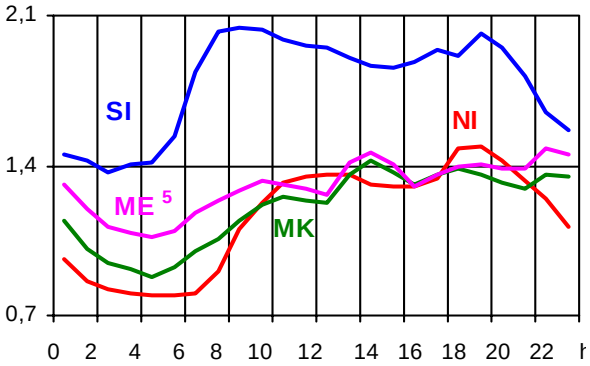




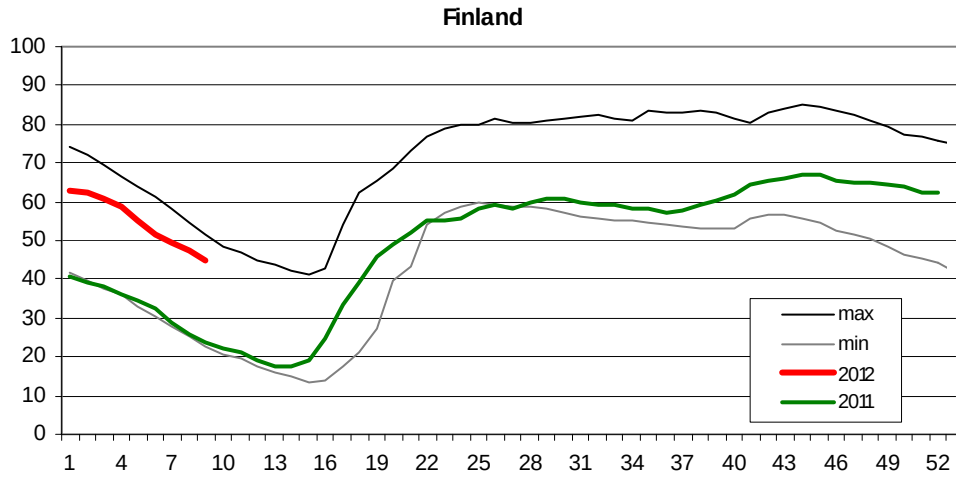


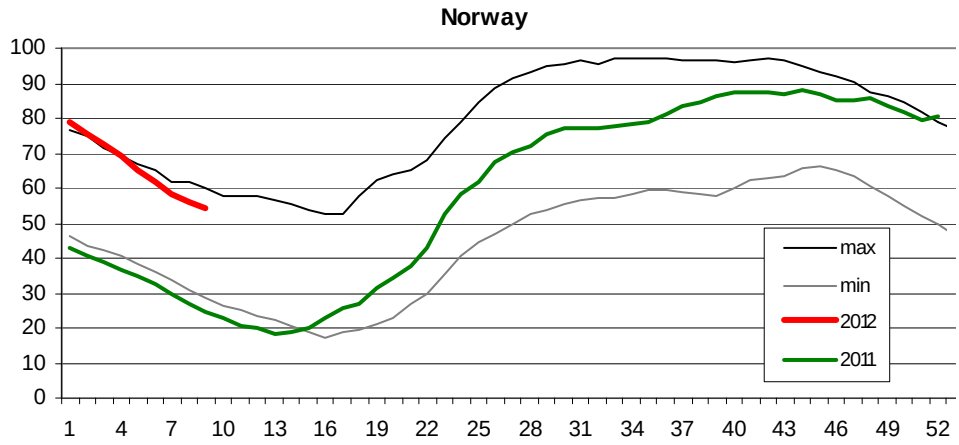


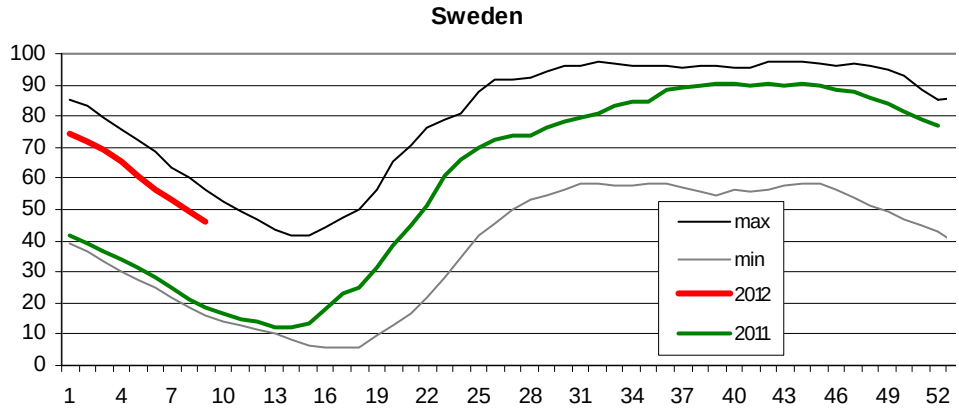




11 Water reservoirs Nordic







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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