

# UCTE



April 2007

Monthly provisional values

union for the co-ordination of transmission of electricity

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#### **General remarks and abbreviations used in the tables**

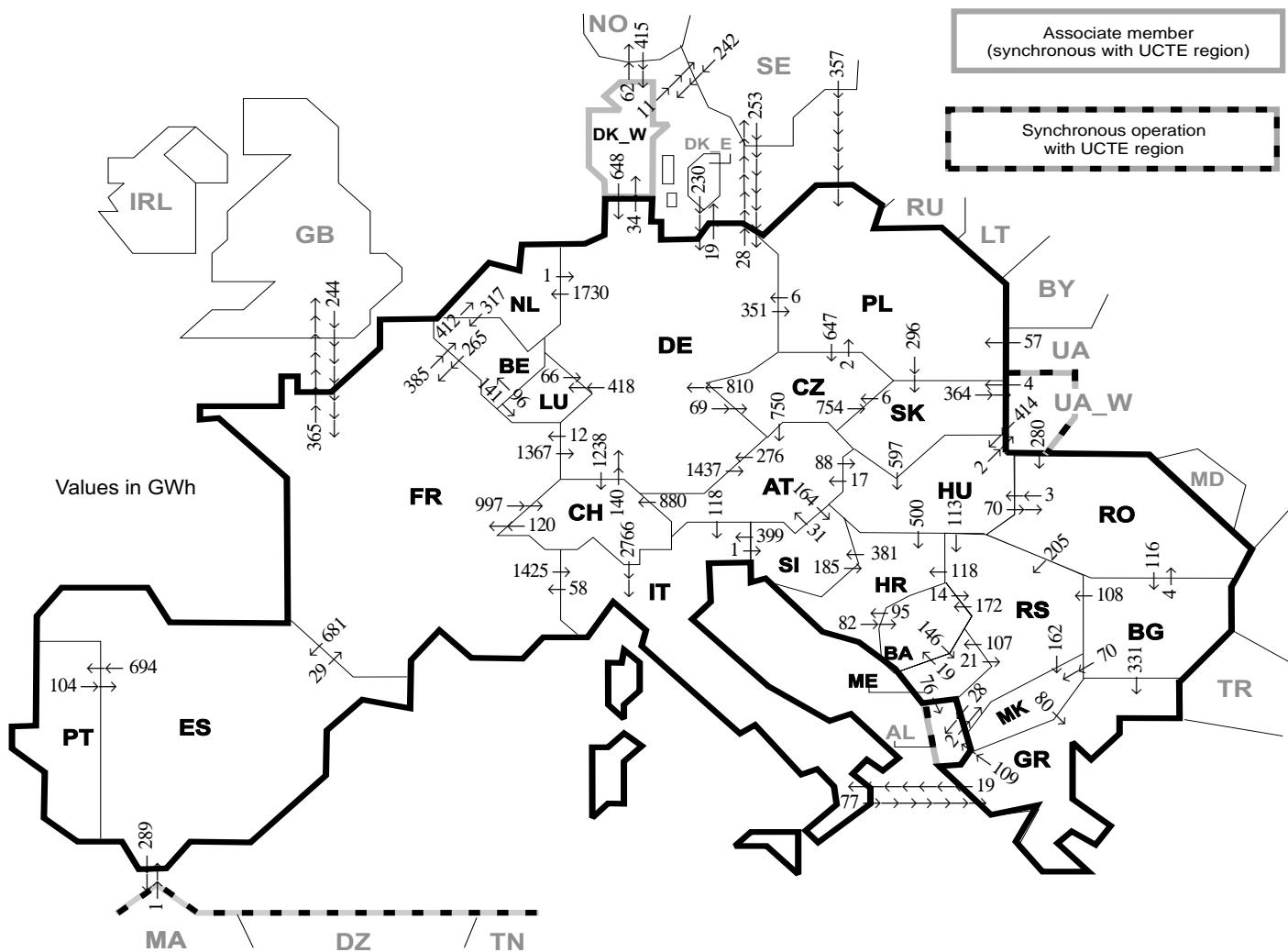
- All values of production and consumption in chapter 1, 3&4, 5&6 and 12 are calculated to represent 100% of the national values.
- DK\_W Denmark West represents the Western part of Denmark synchronously interconnected with UCTE (Jutland and Funen).
- UA\_W Ukraine West represents the so-called Burshtyn Island synchronously interconnected with UCTE.
- CET Central European Time
- The Bulgarian values of production and consumption are gross values.

Coun- tries	Net production in GWh							Exchange balance in GWh	Pump monthly	Consumption in GWh			
	Therm. nuclear	Therm. conv.	Hydro prod	Other renew.	Of which	Not iden- tify	Total			var. [%]	last 12 months	var. [%]	
AT	0	1313	2762	0	0	655	4730 <sup>1</sup>	661	197	5194	-1,4	66242	1,1
BA	0	363	469	0	0	0	832	19	0	851	0,5	10899	-2,9
BE <sup>2</sup>	3742	3029	128	250	20	0	7149 <sup>1</sup>	-11	135	7003	-3,8	88695	-0,3
BG	1369	1427	221	0	0	0	3017	-401	54	2562	-6,3	33750	-7,8
CH	2313	184	2320	90	1	0	4907 <sup>1</sup>	100	190	4817	-3,4	62123	-2,2
CZ	1905	4561	253	19	8	0	6738 <sup>1</sup>	-1594	59	5085	-0,7	63006	-1,3
DE	11189	29614	1644	4203	2491	0	46650 <sup>1</sup>	-1539	632	44479	-0,6	556223	-0,7
ES	4350	11740	2991	2057	1300	0	21138 <sup>1</sup>	-266	312	20560	8,2	262296	3,3
FR	31720	3609	5440	459	185	0	41228 <sup>1</sup>	-4617	683	35928	-4,0	465801	-4,3
GR	0	3453	208	92	80	0	3753 <sup>1</sup>	362	99	4016	4,8	53997	1,5
HR	0	428	427	2	2	0	857 <sup>1</sup>	437	14	1280	-0,7	16514	-1,3
HU <sup>3</sup>	952	1854	0	0	0	0	2806 <sup>1</sup>	400	0	3206	1,8	40475	1,7
IT	0	18426	2837	730	298	0	21993 <sup>1</sup>	4591	628	25956	2,2	336876	1,2
LU	0	161	74	12	3	0	247	397	93	551	2,4	6669	3,5
ME	0	79	131	0	0	0	210	138	0	348	n.a.	1591	n.a.
MK	0	410	102	0	0	0	512 <sup>1</sup>	160	0	672	5,0	8181	-1,3
NL	348	6711	0	563	179	0	7622 <sup>1</sup>	1822	0	9444	1,6	116507	0,9
PL	0	10985	198	44	36	0	11227 <sup>1</sup>	-182	29	11016	3,5	136715	2,7
PT	0	2189	811	403	233	0	3403 <sup>1</sup>	602	26	3979	6,5	50980	1,5
RO	474	2293	1298	0	0	0	4065 <sup>1</sup>	28	15	4078	-1,4	52586	1,8
RS	0	2145	893	0	0	0	3038	130	12	3156	n.a.	13777	n.a.
SI	487	349	280	0	0	0	1116	-73	0	1043	3,9	13300	2,9
SK	1104	592	369	25	0	0	2090 <sup>1</sup>	88	19	2159	-0,4	26982	1,4
UCTE	59953	105915	23856	8949	4836	655	199328 <sup>1</sup>	1252	3197	197383	0,5	2510424 <sup>4</sup>	-0,4
DK_W	0	1142	2	573	453	0	1717 <sup>1</sup>	-31	0	1686	-1,2	21614	0,1
UA_W	0	644	14	0	0	0	658 <sup>1</sup>	-332	0	326	-7,9	4155	-4,3

<sup>1</sup> Including deliveries from industry<sup>2</sup> The reported figures are best estimates based on actual measurements and extrapolations<sup>3</sup> Data on hydro, other renewable, not clearly identifiable production are not yet available<sup>4</sup> Including consumption values CS until December 2006

All representativities of the national production and consumption values used to calculate values at a representativity of 100% as stated in the table above

Countries	AT	BA	BE	BG	CH	CZ	DE	ES	FR	GR	HR	HU	IT	LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	DK_W	UA_W
Production																									
Therm.nuclear	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Thermal conv.	100	100	100	100	100	100	100	97	100	100	100	100	100	100	100	100	100	100	95	100	100	100	100	100	
Hydro prod	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Other renew.	100	100	100	100	100	100	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Not identify	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Consumption	100	100	100	100	100	100	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	95	100	100	

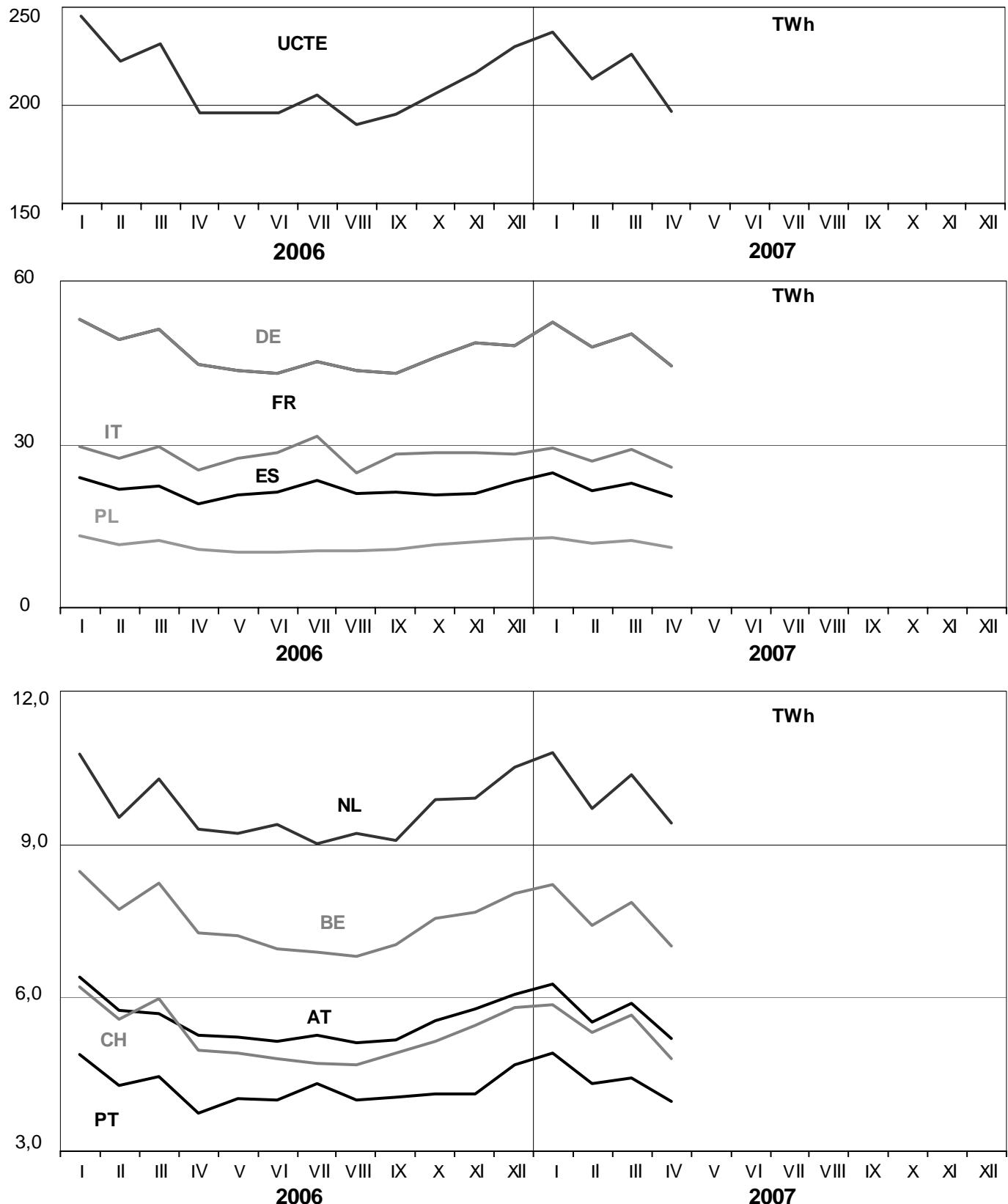


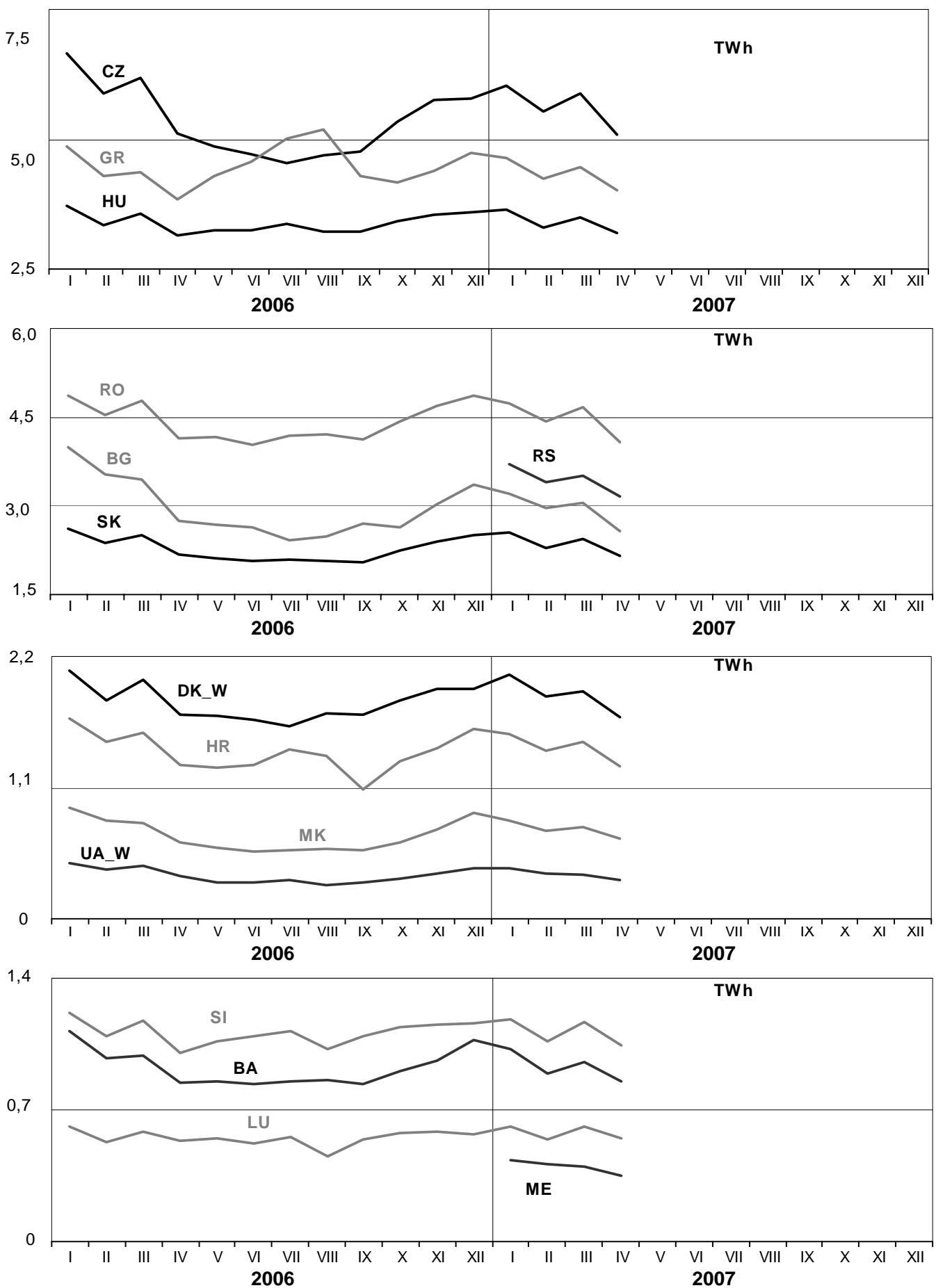
Exporting countries	AT	BA	BE	BG	CH	CZ	DE	ES	FR	GR	HR	HU	IT	LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	DK_W	UA_W	Other III <sup>1</sup>	Sum export
AT	-	-	-	-	880	0	276	-	-	-	88	118	-	-	-	-	-	-	-	-	164	-	-	-	-	1526	
BA	-	-	-	-	-	-	-	-	-	-	95	-	-	-	146	-	-	-	-	-	14	-	-	-	-	255	
BE	-	-	-	-	-	-	-	-	265	-	-	-	-	141	-	-	412	-	-	-	-	-	-	-	-	818	
BG	-	-	-	-	-	-	-	-	-	331	-	-	-	-	70	-	-	-	4	108	-	-	-	-	0	513	
CH	0	-	-	-	-	140	-	120	-	-	-	2766	-	-	-	-	-	-	-	-	-	-	-	-	-	3026	
CZ	750	-	-	-	-	-	810	-	-	-	-	-	-	-	-	-	-	-	-	-	754	-	-	-	-	2316	
DE	1437	-	-	-	1238	69	-	-	12	-	-	-	418	-	-	1730	351	-	-	-	-	34	-	-	47	5336	
ES	-	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	694	-	-	-	-	-	-	-	1012	
FR	-	-	385	-	997	-	1367	681	-	-	-	1425	-	-	-	-	-	-	-	-	-	-	-	-	365	5220	
GR	-	-	-	0	-	-	-	-	-	-	-	19	-	0	-	-	-	-	-	-	-	-	-	-	109	128	
HR	-	82	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	381	-	-	-	463		
HU	17	-	-	-	-	-	-	-	-	-	500	-	-	-	-	-	-	-	70	113	-	0	-	2	-	702	
IT	0	-	-	-	0	-	-	-	58	77	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	136	
LU	-	-	96	-	-	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162	
ME	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	76	116		
MK	-	-	-	0	-	-	-	-	80	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	80		
NL	-	-	317	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	318		
PL	-	-	-	-	647	6	-	-	-	-	-	-	-	-	-	-	-	-	-	296	-	-	-	0	949		
PT	-	-	-	-	-	-	104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104		
RO	-	-	-	116	-	-	-	-	-	-	3	-	-	-	-	-	-	-	205	-	-	-	0	0	324		
RS	-	172	-	0	-	-	-	-	-	-	118	0	-	-	107	162	-	-	0	-	-	-	-	28	587		
SI	31	-	-	-	-	-	-	-	-	-	185	399	-	-	-	-	-	-	-	-	-	-	-	-	615		
SK	-	-	-	-	-	6	-	-	-	-	597	-	-	-	0	-	-	-	-	-	364	-	-	-	967		
DK_W	-	-	-	-	-	648	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73	-	-	-	721		
UA_W	-	-	-	-	-	-	-	-	-	-	414	-	-	-	-	-	-	-	280	-	4	-	-	698			
Other III <sup>1</sup>	-	-	-	0	-	483	1	244	0	-	-	-	-	0	-	414	-	0	2	-	657	-	-	-	1801		
<b>Sum imp</b>	2235	273	798	116	3115	722	3797	786	728	488	898	1102	4727	559	253	232	2142	767	694	354	463	546	1054	691	366	987	28893

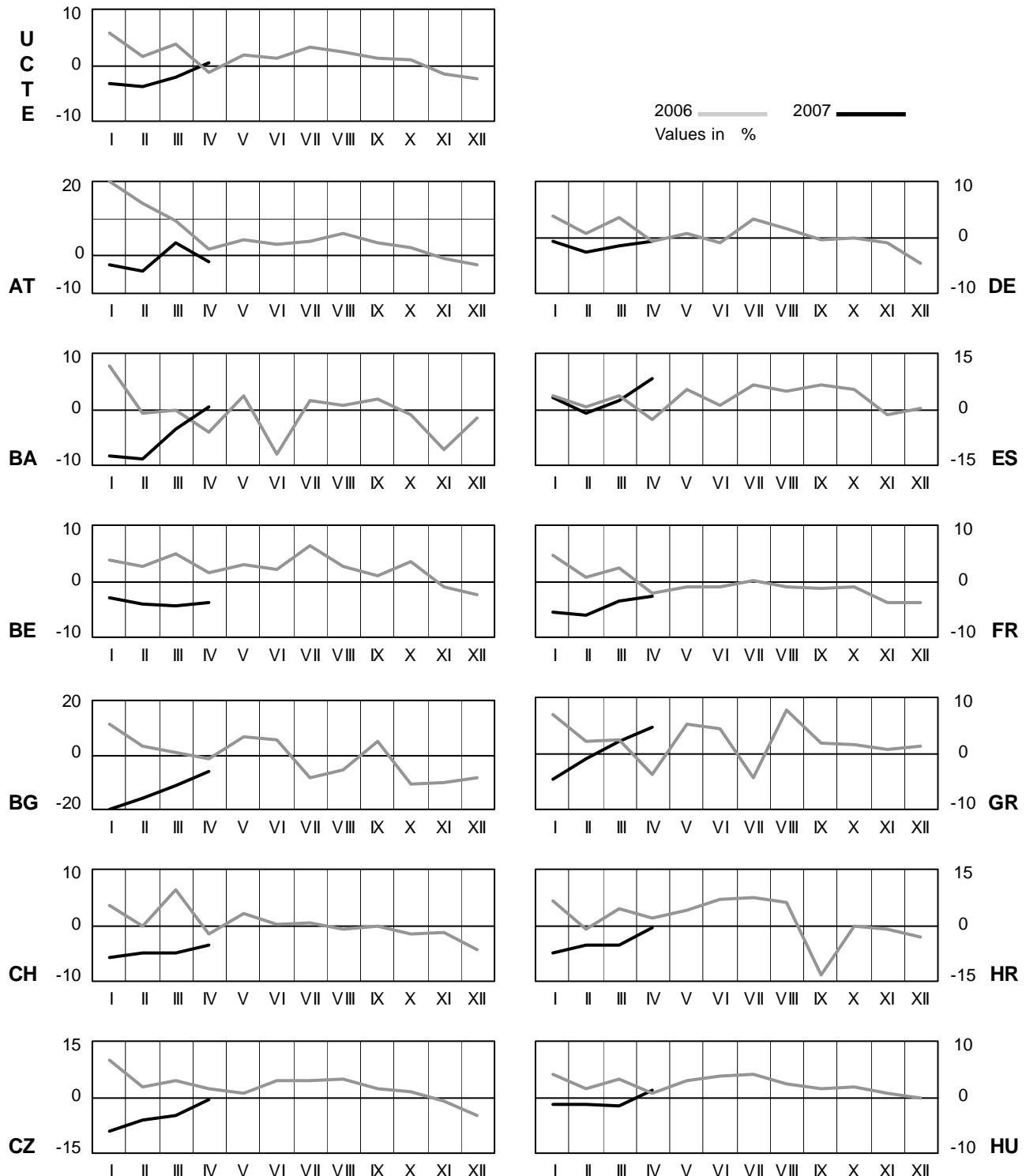
Sum of physical energy flows between UCTE countries = 24359 GWh Total physical energy flows = 28893 GWh

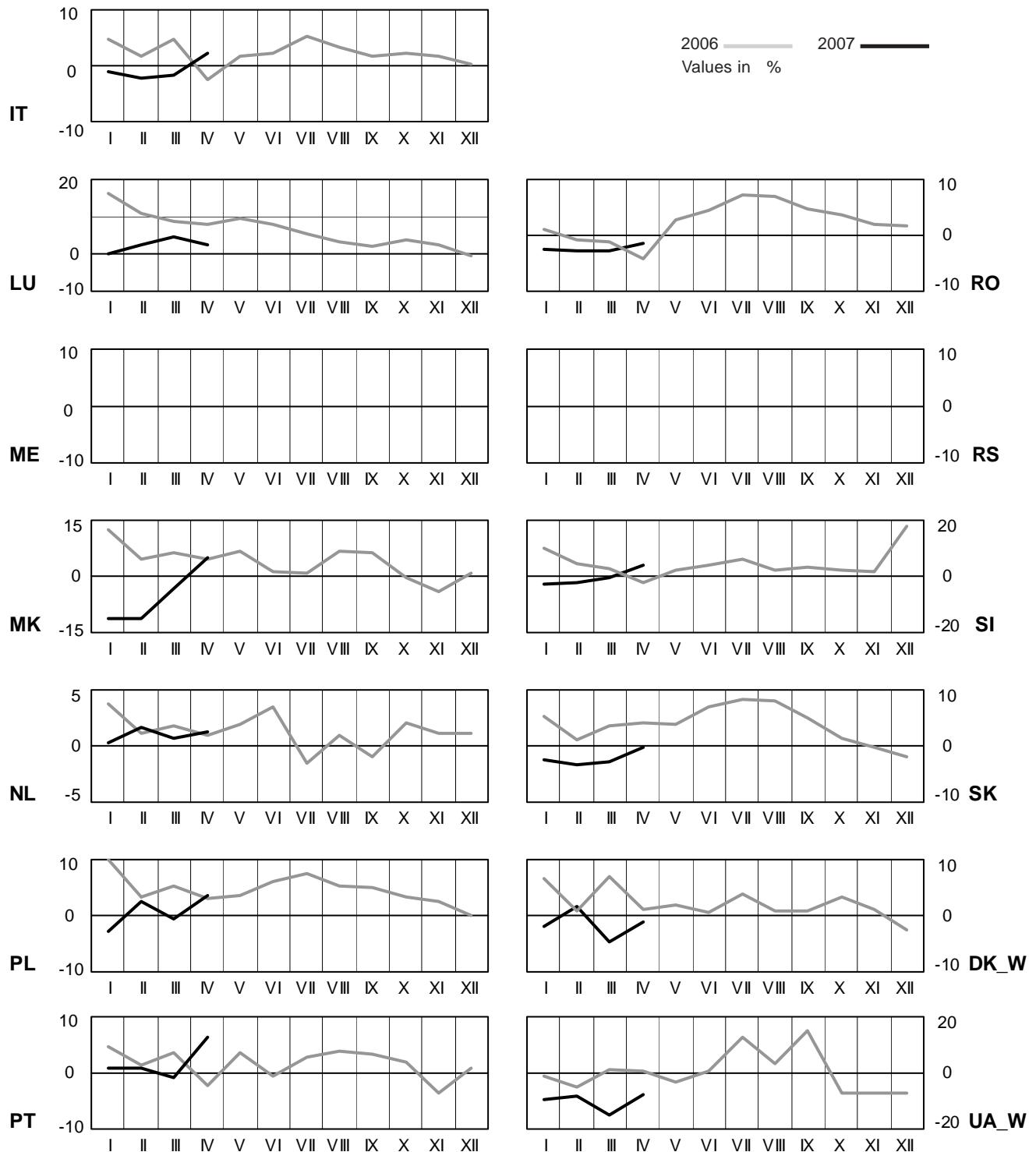
<sup>1</sup> Other III: Albania, Belarus, Denmark East, Great Britain, Morocco, Republic of Moldavia, Norway, Sweden, Republic of Turkey and Ukraina

These physical energy flows were measured on the cross-frontier transmission lines ( $\leq 110$  kV) listed in table 9 of the Statistical Yearbook. These values may differ from the official statistics and the exchange balances in chapter 1.

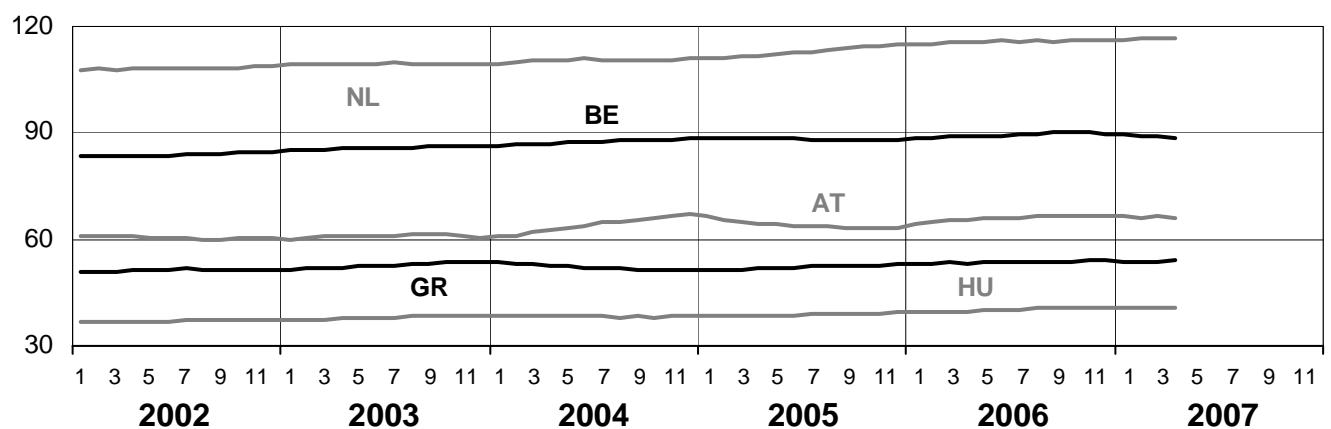
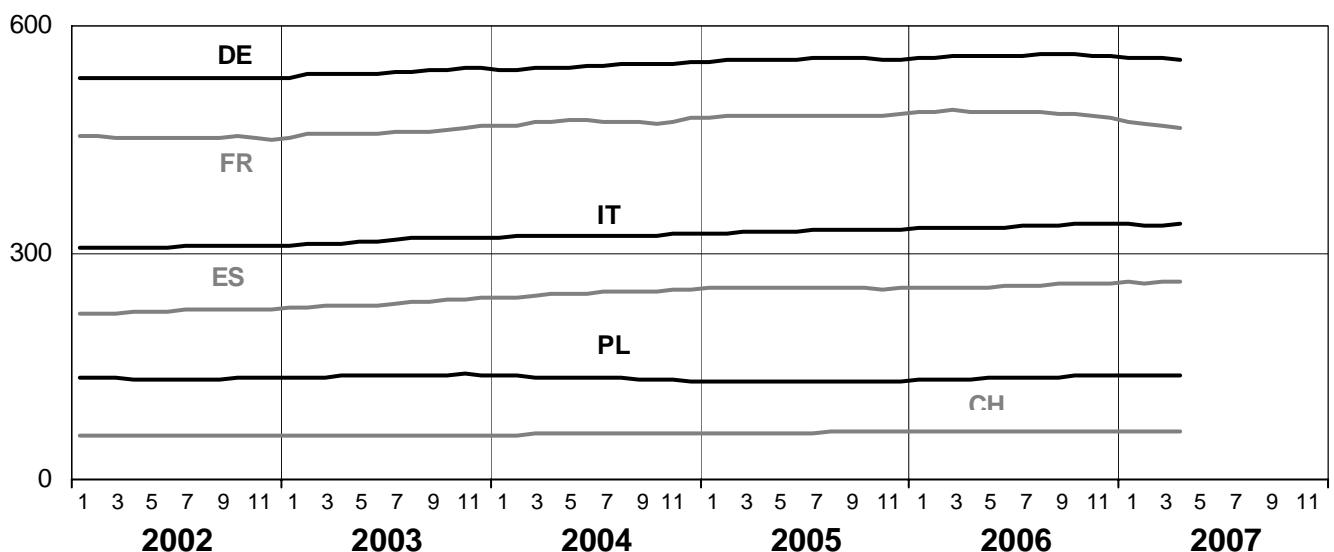
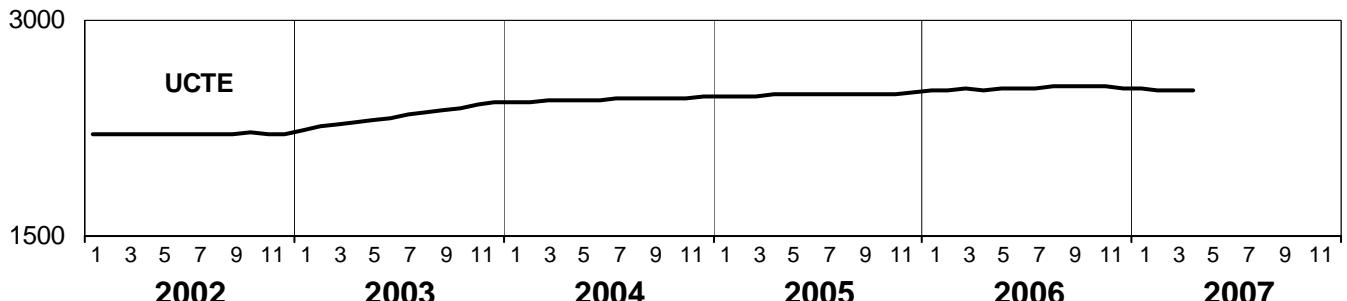




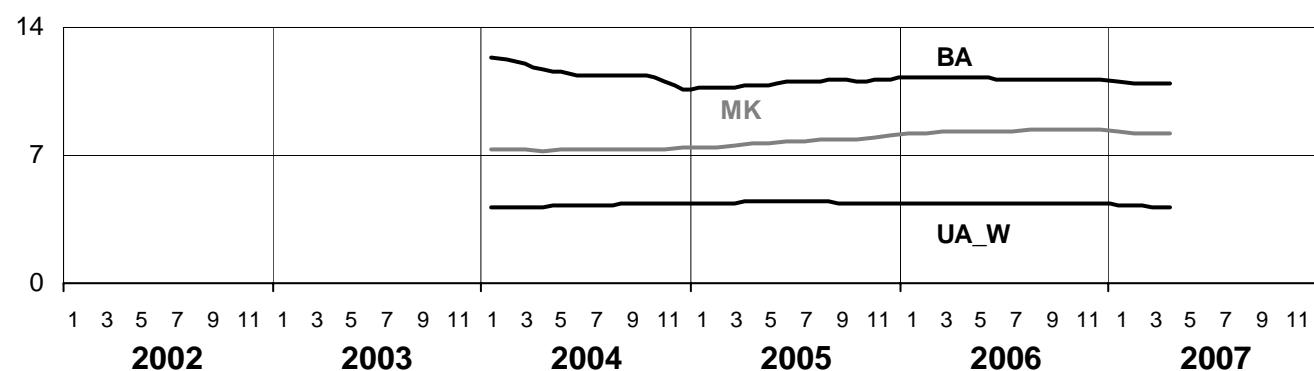
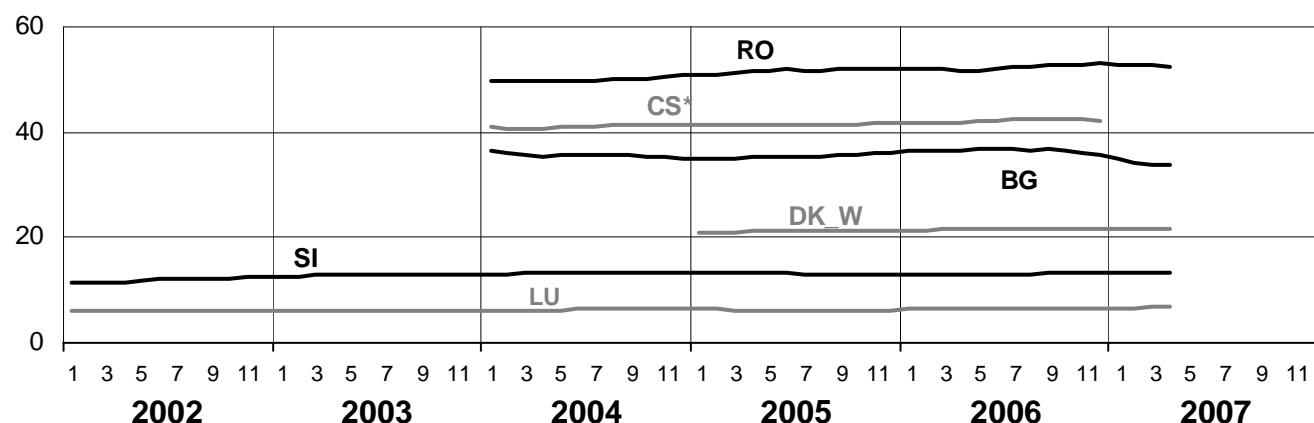
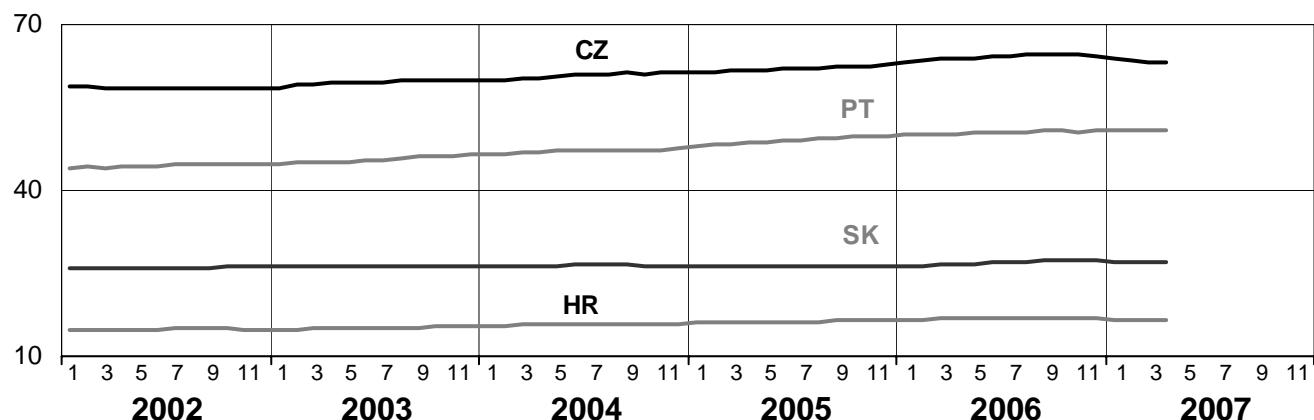




TWh



TWh

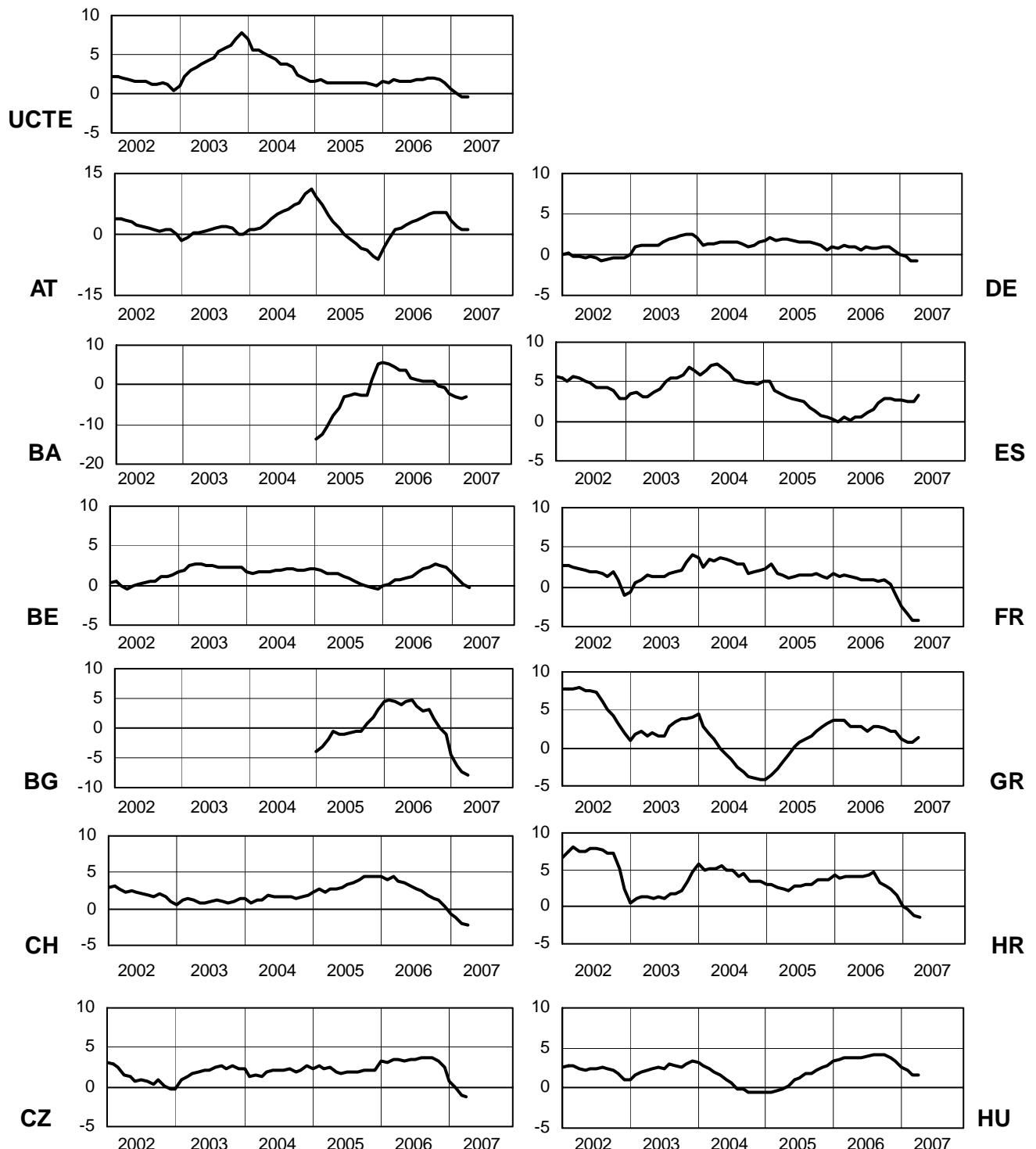


\* CS consumption values until December 2006; from 2007 on ME and RS as separate countries

# 6

## Variation of the last 12 months' consumption in %

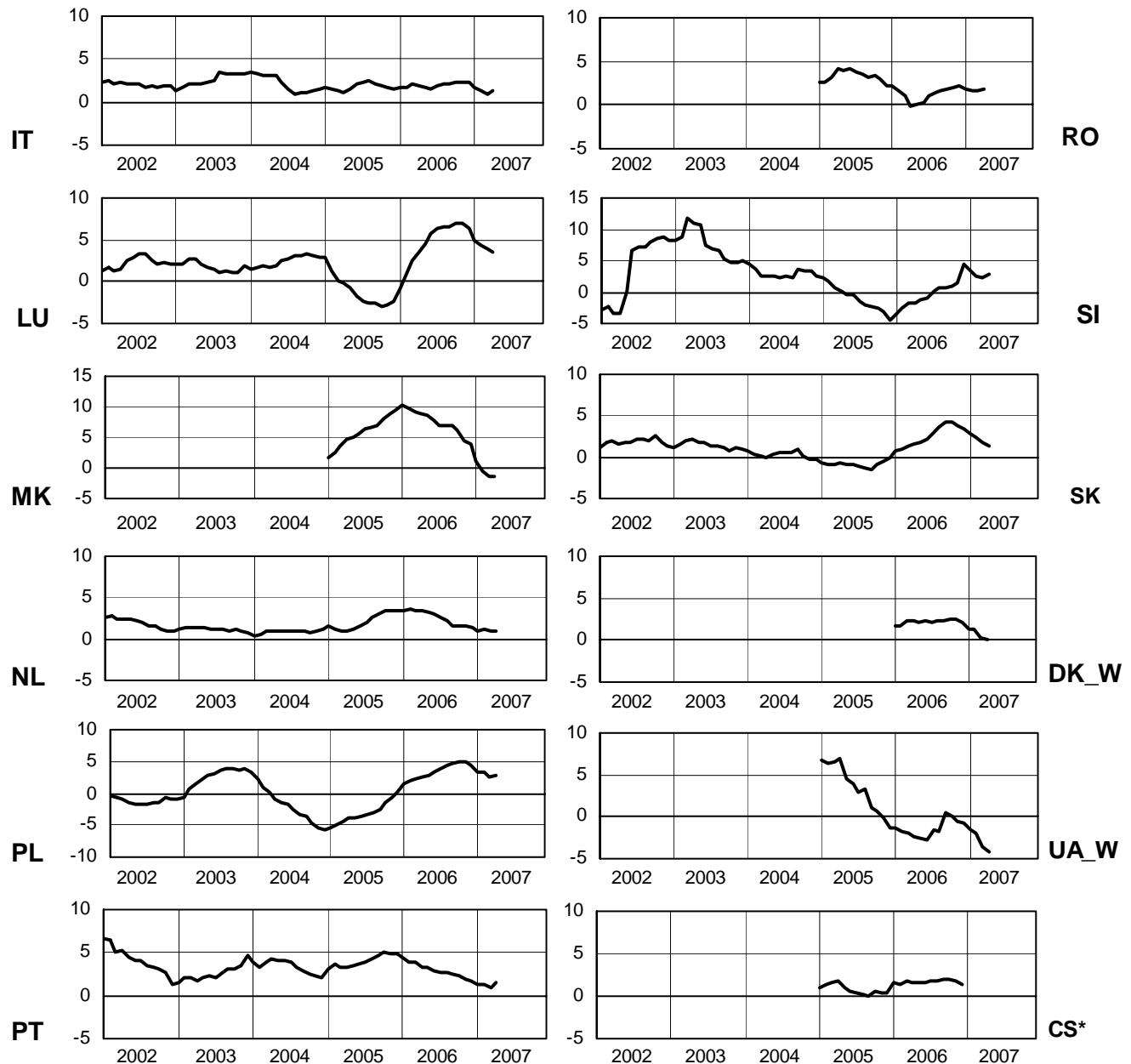
April 2007



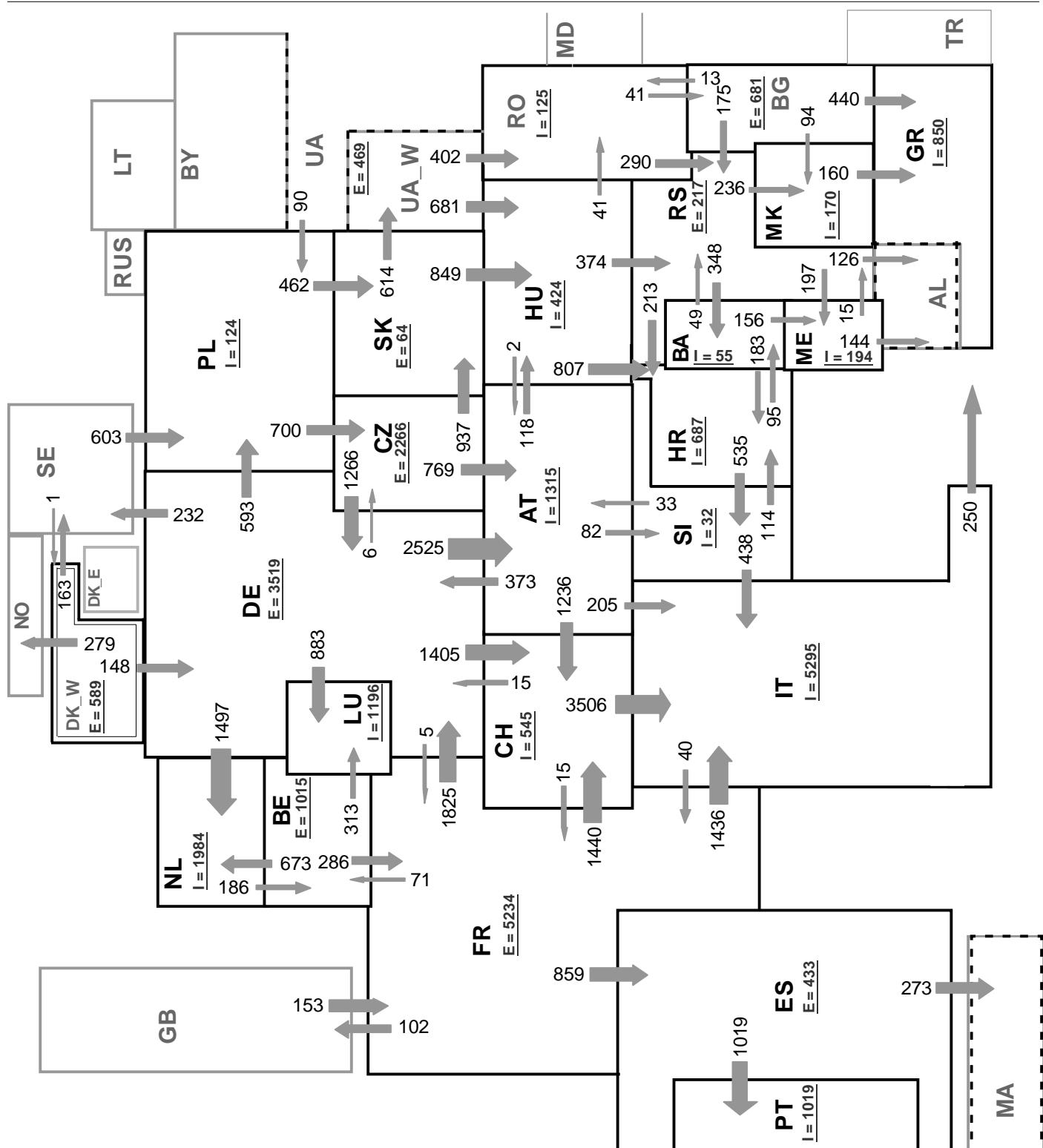
# 6

## Variation of the last 12 months' consumption in %

April 2007



\* CS consumption values until December 2006; from 2007 on ME and RS as separate countries



Associate member

Synchronous operation with UCTE region

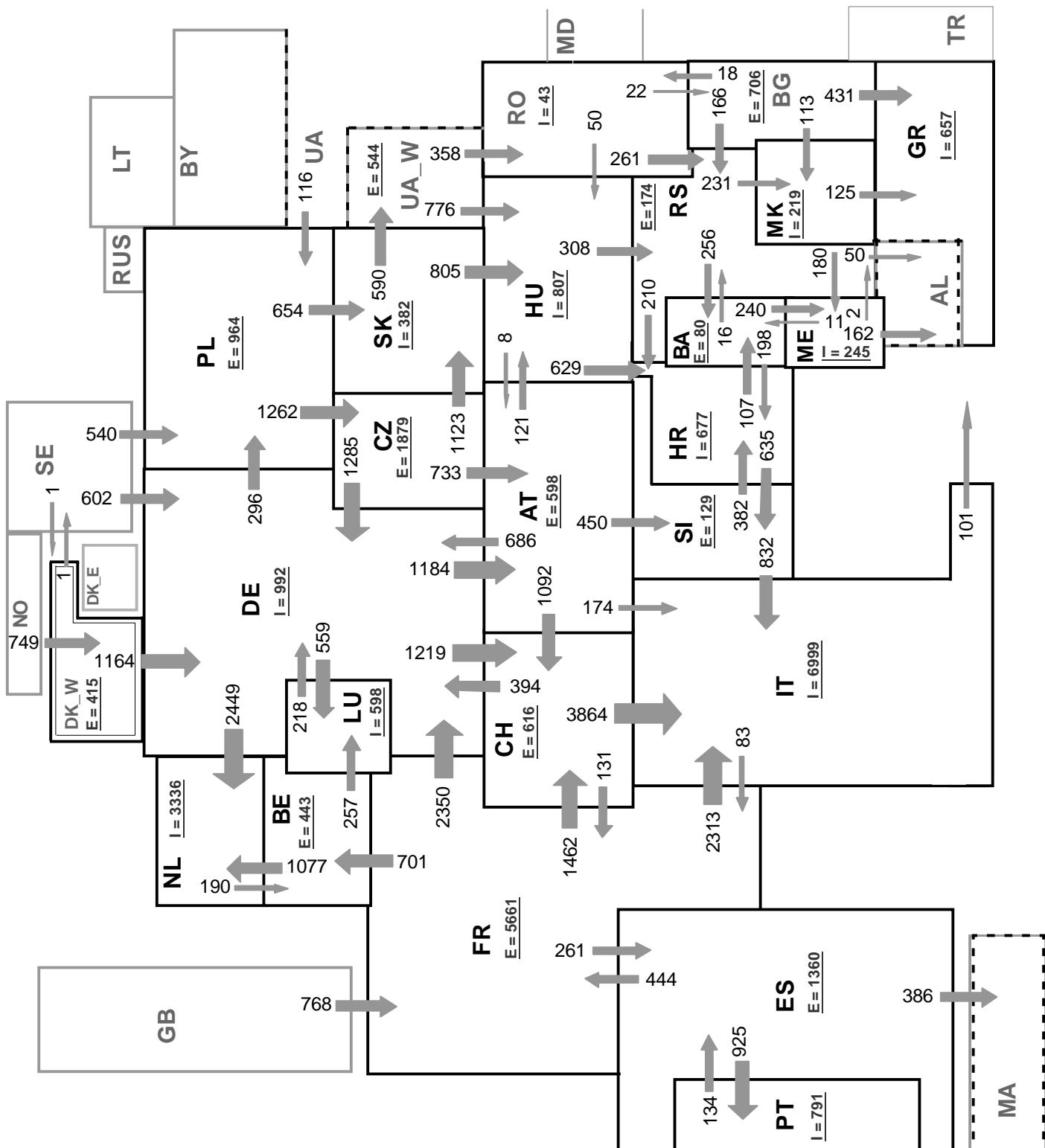
Sum of load flows in MW:

UCTE = 30894 MW

Total = 34905 MW

I = Import balance

E = Export balance



Associate member

Sum of load flows in MW:

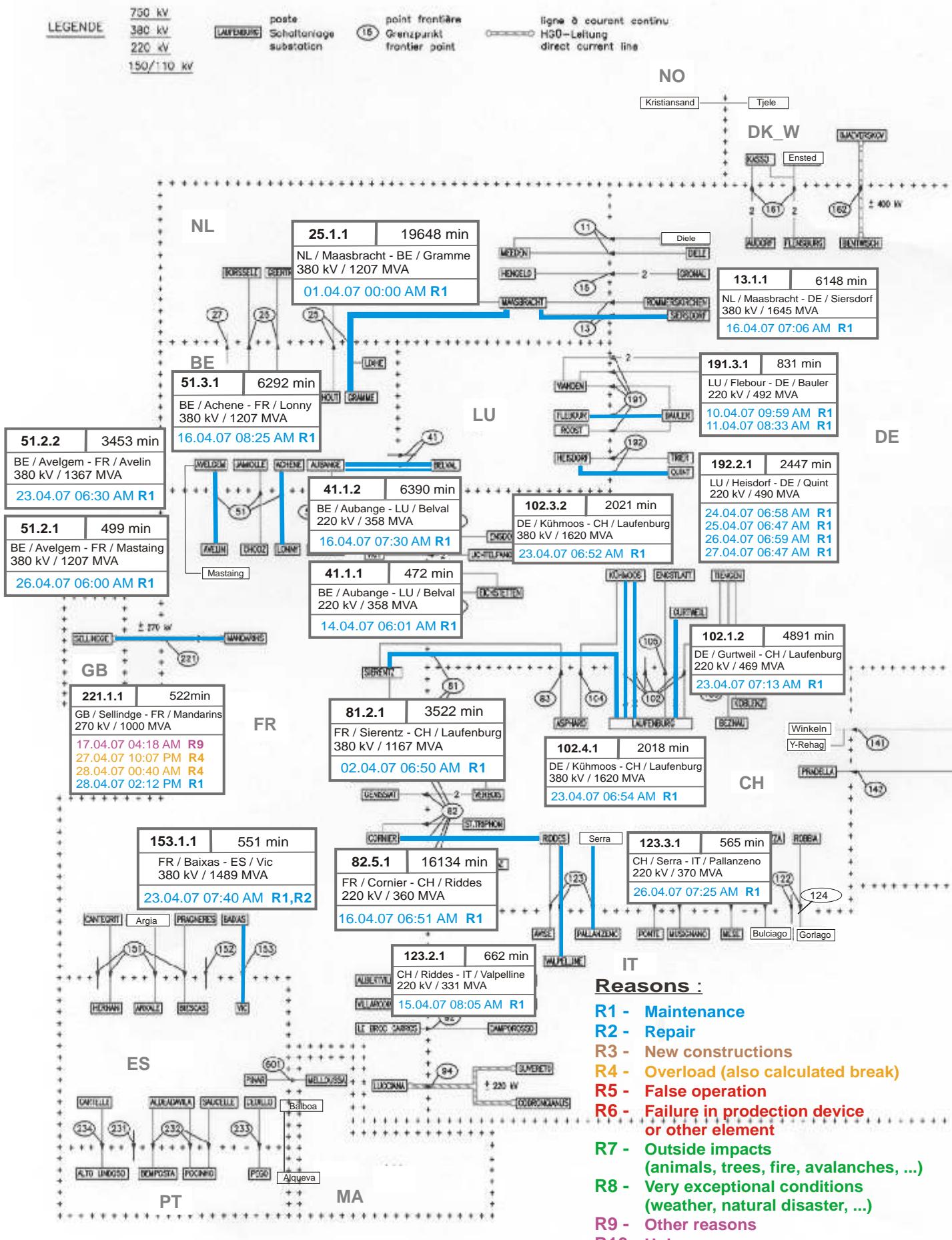
UCTE = 34428 MW

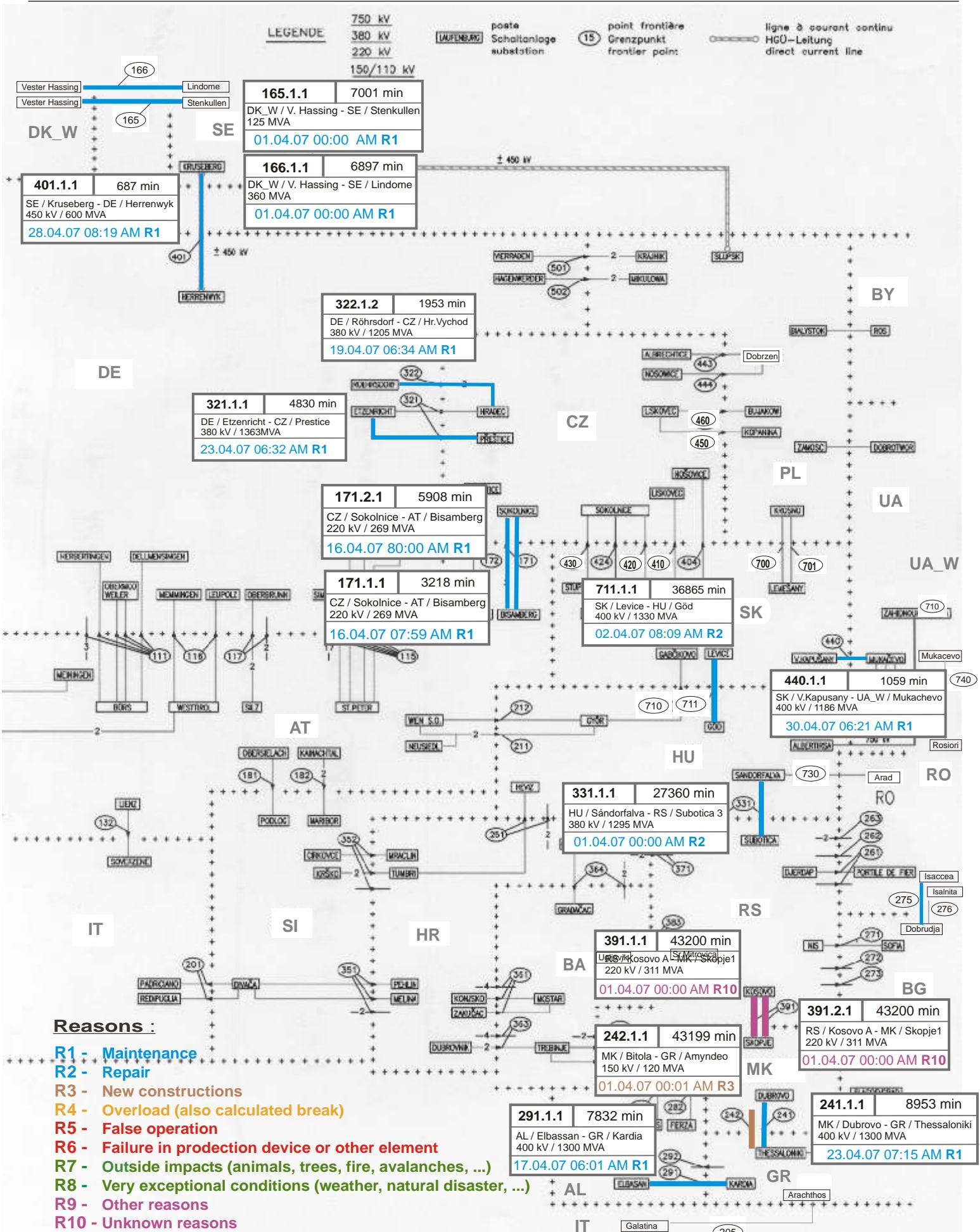
Total = 40691 MW

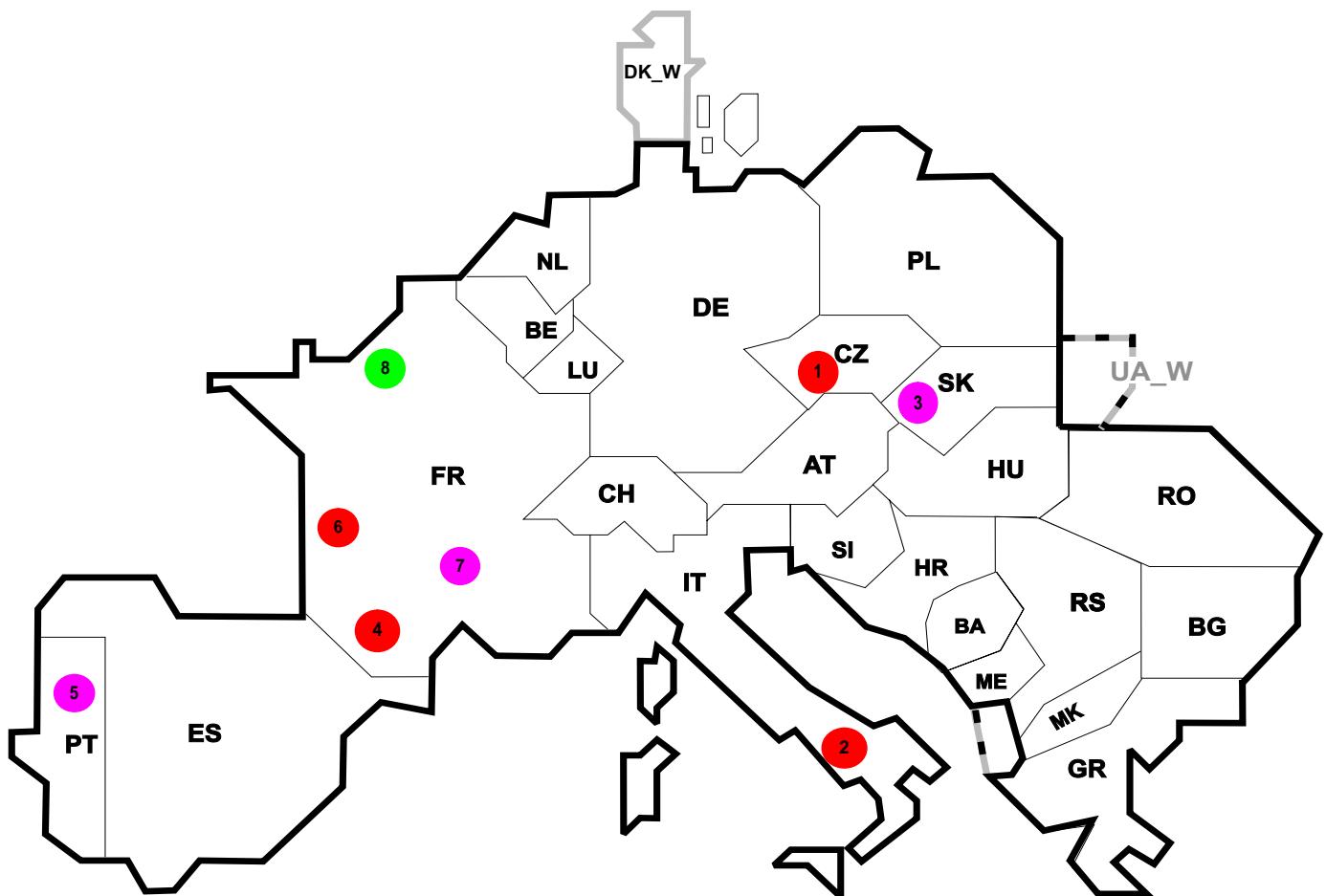
Synchronous operation with UCTE region

I = Import balance

E = Export balance







No	Country	Substation	Reason	Energy not supplied <sup>2</sup> [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Bezdecin	R6	68	150	27	0,563
2	IT	Maddaloni	R6	309	23	1026	0,482
3	SK	Sp. N. Ves	R9	5	95	3	0,093
4	FR	Isseil	R6	54	58	55	0,061
5	PT	Subestao do Ferro	R9	2	0	27	0,025
6	FR	Montguyon	R6	18	33	33	0,020
7	FR	Givors	R9	9	21	25	0,010
8	FR	Mezerolles	R8	4	44	6	0,005

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

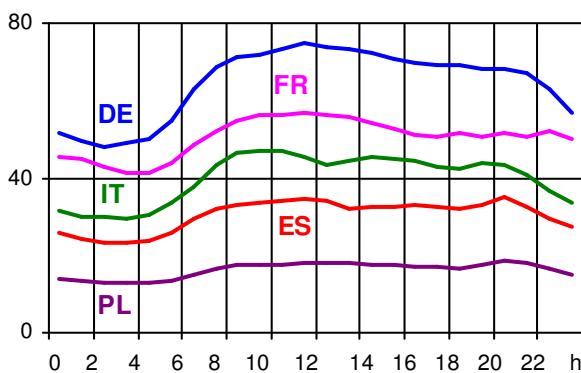
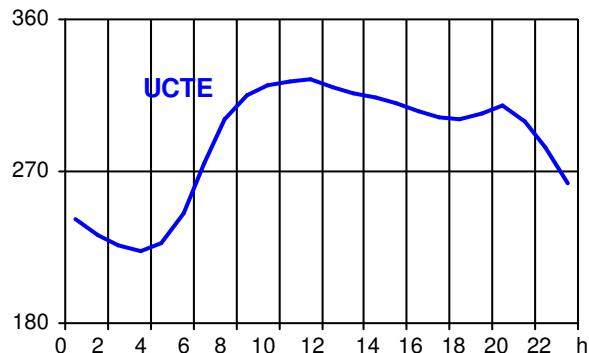
<sup>2</sup> Energy Not Supplied only related to the transmission grid, not including supply interruptions in lower voltage levels. A report with a detailed description of the events on 4 November 2006 to be found on [www.ucte.org](http://www.ucte.org).

Control area	Export Programs	Import Programs	Export Programs at 03:00	Import Programs at 03:00	Export Programs at 11:00	Import Programs at 11:00
AT	705057	786592	803	913	1489	1139
BA	213478	228575	222	270	228	165
BE	556538	586553	691	0	1222	1035
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2551703	2638464	2580	3125	3890	3264
CZ	2109548	471388	2899	562	3122	1204
DE	3768695	1697891	3649	1900	3143	2734
ES	1236895	991066	1488	1034	2668	1285
FR	6632489	2112106	7644	2302	8780	3091
GR	29459	391218	18	850	65	750
HR	198030	634144	90	790	199	874
HU	641910	1041005	961	1393	725	1525
IT	136332	4726646	290	5585	184	7183
ME	172	310	43	226	43	300
MK	79931	232696	0	147	0	230
NL	185833	2011386	151	2161	0	3350
PL	513579	434443	460	732	1456	658
PT	286778	888993	134	1234	685	1485
RO	186901	216215	173	301	233	260
RS	408252	228489	460	258	458	292
SI	497389	428936	552	587	776	646
SK	655665	682002	910	782	911	1173
DK_W	697383	683283	0	758	906	1100
UA_W	340961	11889	485	10	560	11

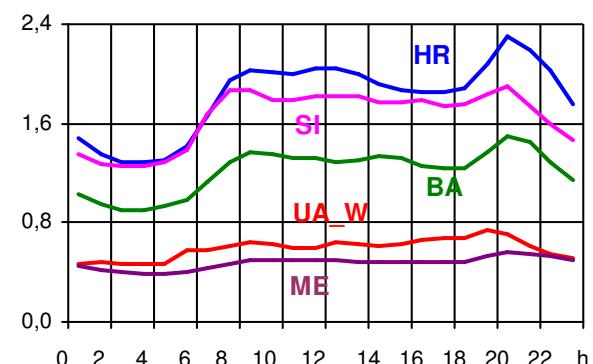
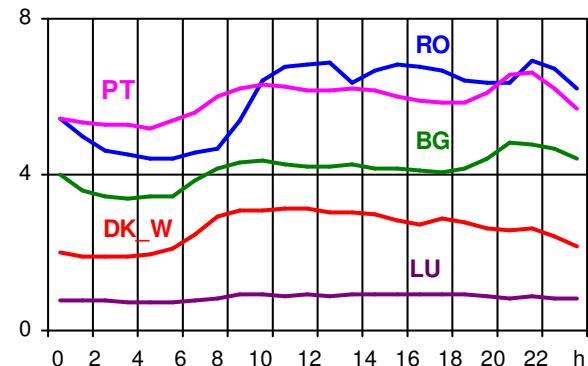
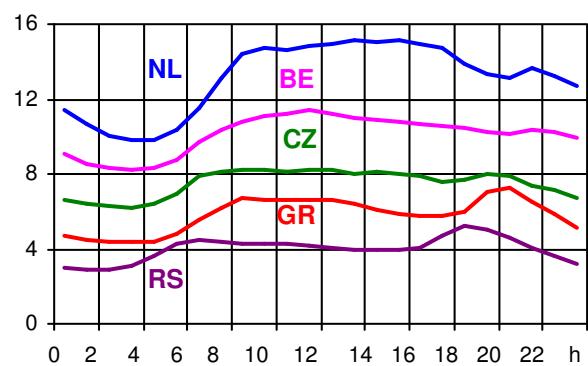
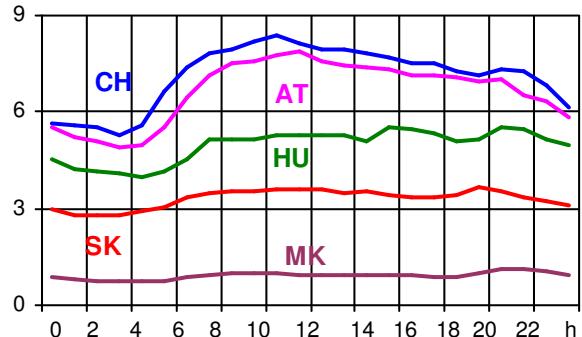
- Control areas can differ from national borders ( i.e. German block which includes parts of AT, LU and DK ).
- Values are calculated on an hourly base ( MWh ).
- This values are not the provisional values entered in the VULCANUS system, but the definitive values after an eventual correction during the actual date.
- Export Programs: Sum of all positive values of every hour of every border
- Import Programs: Sum of all negative values of every hour of every border
- Export Programs at 03:00: Sum of all positive values the third Wednesday from 02:00 to 03:00 a.m.
- Import Programs at 03:00: Sum of all negative values the third Wednesday from 02:00 to 03:00 a.m.
- Export Programs at 11:00: Sum of all positive values the third Wednesday from 10:00 to 11:00 a.m.
- Import Programs at 11:00: Sum of all negative values the third Wednesday from 10:00 to 11:00 a.m.

Consumption hourly load curves on 18.04.2007 CET

Values in GW



	Highest load MW	Load representativity var.% <sup>1</sup>
AT	7864	4,2
BA	1493	-3,2
BE <sup>2</sup>	11418	-2,1
BG	4796	7,1
CH	8367	-1,0
CZ	8242	4,0
DE	74895	3,7
ES	35244	5,1
FR	56753	-6,9
GR	7258	6,3
HR	2302	0,7
HU	5532	3,6
IT	47089	0,9
LU	941	9,8
ME	557	-
MK	1133	3,1
NL	15191	-2,0
PL	18803	5,0
PT	6920	3,6
RO	6593	-5,5
RS	5190	-
SI	1899	3,7
SK	3642	4,2
<b>UCTE</b>	<b>324142</b>	0,3
DK_W	3136	2,7
UA_W	741	-4,3



<sup>1</sup> Variation as compared to corresponding month of the previous year

<sup>2</sup> The reported figures are best estimates based on actual measurements and extrapolations.



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