



# June 2009

Monthly provisional values as of 23 November 2009

European Network of Transmission System Operators for Electricity

**Regional Group Continental Europe**



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

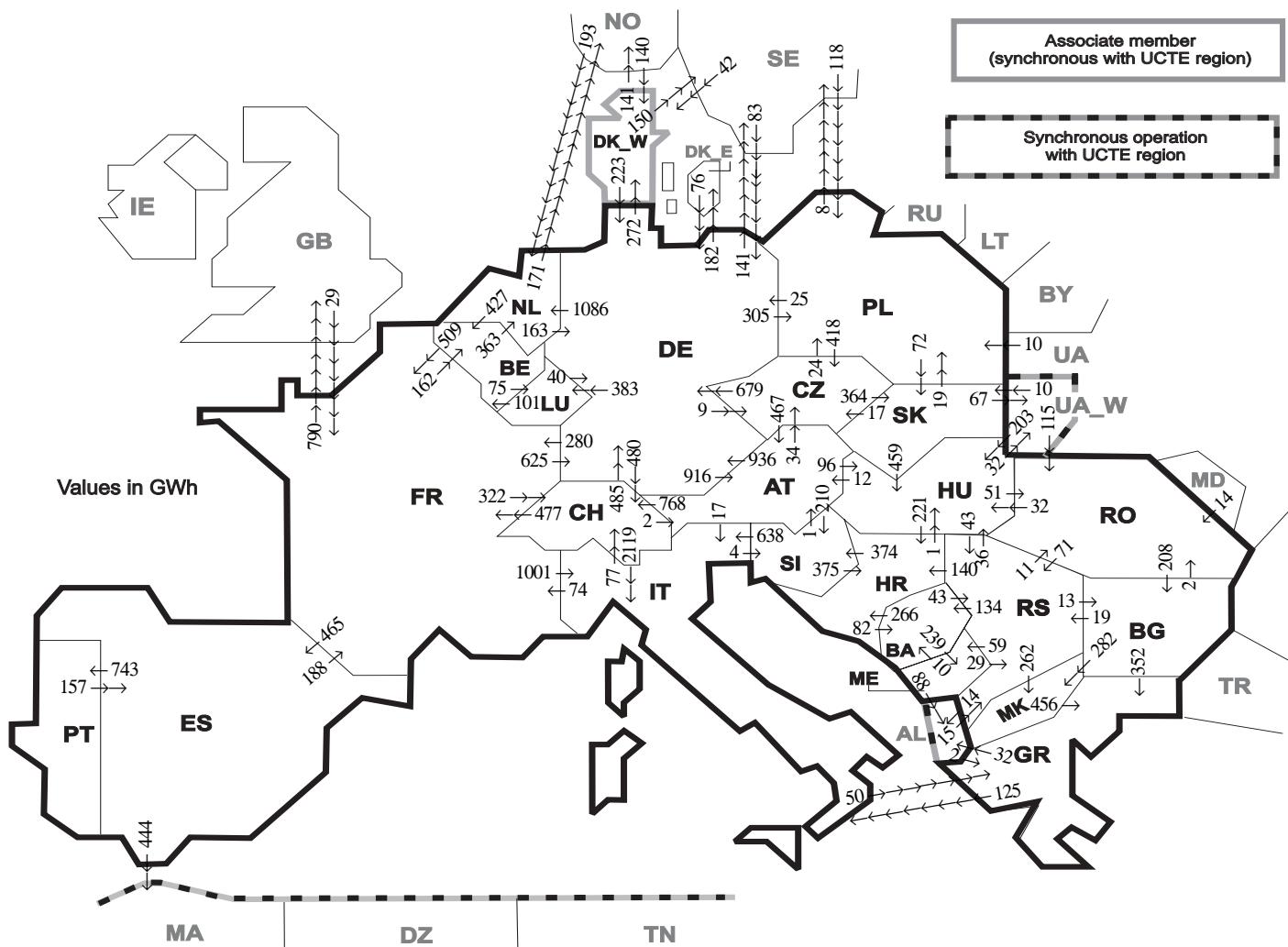
- Country code UCTE represents the ENTSO-E Regional Continental Europe (former all countries of the Union for the Co-ordination of Transmission of Electricity)
- All values of production and consumption in chapter 1, 3&4, 5&6 and 12 are calculated to represent 100% of the national values.
- DK\_W Denmark West represents the Western part of Denmark synchronously interconnected with ENTSO-E Regional Continental Europe (Jutland and Funen).
- UA\_W Ukraine West represents the so-called Burshtyn Island synchronously interconnected with ENTSO-E Regional Continental Europe
- CET Central European Time
- The Bulgarian load values on the 3rd Wednesday are gross values

Countries	Net production in GWh							Exchange balance in GWh	Pump monthly	Consumption in GWh			
	Therm. nuclear	Fossil fuels	Hydro prod	Other renew.	Of which	Non identifi- able	Total			var. [%]	last 12 months	var. [%]	
AT	0	948	4101	0	0	877	5926	-686	274	4966	-7,1	66528	-3,1
BA	0	769	366	0	0	0	1135	-322	0	813	-8,4	11223	-2,9
BE <sup>2</sup>	3630	2721	143	290	57	0	6784 <sup>1</sup>	-248	165	6371	-9,3	84791	-7,1
BG	1165	1199	413	0	0	0	2777	-441	62	2274	-7,5	33646	-1,7
CH	1725	161	4354	96	2	0	6336 <sup>1</sup>	-1416	245	4675	-4,7	63626	-1,1
CZ	1945	3354	247	32	24	0	5578 <sup>1</sup>	-1043	36	4499	-6,0	62808	-4,8
DE	9496	25663	2074	5567	2800	0	42800 <sup>1</sup>	-719	594	41487	-6,0	539115	-3,5
DK_W	0	1214	1	445	361	0	1660 <sup>1</sup>	-60	0	1600	-5,4	21089	-3,7
ES	3527	13224	2296	2828	2175	33	21908	-769	222	20917	-2,6	262625	-3,2
FR	27129	2082	6372	743	408	0	36326	-1931	447	33948	-2,5	492307	-0,4
GR	0	3520	351	143	112	0	4014 <sup>1</sup>	702	67	4649	-7,3	55126	-2,2
HR	0	325	443	4	3	0	772 <sup>1</sup>	545	10	1307	-5,4	17604	-1,9
HU	1364	1398	0	0	0	0	2762 <sup>1</sup>	468	0	3230	-2,8	40942	-2,1
IT	0	16089	5912	949	566	0	22950	3695	378	26267	-8,3	324457	-5,0
LU	0	155	45	13	4	0	213	317	58	472	-15,0	6165	-10,6
ME <sup>3</sup>	0	130	64	0	0	0	194	137	0	331	n.a.	4024	n.a.
MK	0	272	130	0	0	0	402	99	0	501	-19,3	8175	-7,3
NL	343	7015	0	561	249	0	7919 <sup>1</sup>	880	0	8799	-6,7	117521	-0,9
PL <sup>4</sup>	0	10015	245	97	79	0	10357 <sup>1</sup>	-46	68	10243	-6,5	138267	-4,0
PT	0	2536	420	558	388	0	3514 <sup>1</sup>	598	78	4034	-1,7	51615	-0,4
RO	890	1753	1388	0	0	0	4031	-117	8	3906	-9,0	52455	-5,6
RS	0	2332	833	0	0	0	3165	449	115	3499	32,8	40438	6,2
SI	497	353	464	0	0	0	1314	-429	0	885	-14,0	11819	-10,4
SK	1125	453	402	33	0	0	2013 <sup>1</sup>	-116	25	1872	-11,0	26228	-6,3
UCTE	52836	97681	31064	12359	7228	910	194850 <sup>1</sup>	-453	2852	191545	-5,2	2532594	-2,9
UA_W	0	481	12	0	0	0	493	-229	0	264	0,0	3989	-7,9

<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> Monthly national values as of June 2008<sup>4</sup> Operational data

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	DK_W	ES	FR	GR	HR	HU	IT	LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	UA_W
Production																									
Thermalnuclear	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Fossil fuels	100	100	100	100	100	100	100	100	97	100	100	100	100	100	100	100	100	100	100	95	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	100	95	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Non identifiable	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	100	98	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100	



Exporting countries	AT	BA	BE	BG	CH	CZ	DE	DK_W	ES	FR	GR	HR	HU	IT	LU	ME	MK	NL	PL	PT	RO	RS	SI	SK	UA_W	Other III <sup>1</sup>	Sum export
AT	-	-	-	-	768	34	936	-	-	-	-	96	17	-	-	-	-	-	-	-	-	-	210	-	-	2061	
BA	-	-	-	-	-	-	-	-	-	-	266	-	-	-	239	-	-	-	-	-	-	43	-	-	-	548	
BE	-	-	-	-	-	-	-	-	509	-	-	-	-	75	-	-	363	-	-	-	-	-	-	-	-	947	
BG	-	-	-	-	-	-	-	-	-	352	-	-	-	-	-	-	282	-	-	-	2	19	-	-	0	655	
CH	2	-	-	-	-	485	-	-	477	-	-	2119	-	-	-	-	-	-	-	-	-	-	-	-	-	3083	
CZ	467	-	-	-	-	-	679	-	-	-	-	-	-	-	-	-	24	-	-	-	-	364	-	-	-	1534	
DE	916	-	-	-	480	9	-	223	-	272	280	-	-	-	383	-	1086	305	-	-	-	-	-	-	-	4054	
DK_W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	514	
ES	-	-	-	-	-	-	-	-	188	-	-	-	-	-	-	-	-	-	743	-	-	-	-	444	-	-	1375
FR	-	162	-	322	-	625	-	465	-	-	-	1001	-	-	-	-	-	-	-	-	-	-	-	-	790	-	3365
GR	-	-	-	0	-	-	-	-	-	-	-	125	-	-	0	-	-	-	-	-	-	-	-	32	-	157	
HR	-	82	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	0	374	-	-	-	457		
HU	12	-	-	-	-	-	-	-	-	-	221	-	-	-	-	-	-	-	-	51	43	-	0	32	-	359	
IT	0	-	-	-	77	-	-	-	74	50	-	-	-	-	-	-	-	-	-	-	4	-	-	-	205		
LU	-	-	101	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141		
ME	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-	-	88	-	127	
MK	-	-	-	0	-	-	-	-	456	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	456		
NL	-	-	427	-	-	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171	-	761	
PL	-	-	-	-	-	418	25	-	-	-	-	-	-	-	-	-	-	-	-	-	72	-	8	-	523		
PT	-	-	-	-	-	-	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157		
RO	-	-	-	208	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	71	-	-	0	0	-	311	
RS	-	134	-	13	-	-	-	-	-	-	140	36	-	-	59	262	-	-	-	11	-	-	-	14	-	669	
SI	1	-	-	-	-	-	-	-	375	-	638	-	-	-	-	-	-	-	-	-	-	-	-	-	1014		
SK	-	-	-	-	-	17	-	-	-	-	459	-	-	-	-	-	19	-	-	-	-	-	67	-	562		
UA_W	-	-	-	-	-	-	-	-	-	-	-	203	-	-	-	-	-	-	-	115	-	-	10	-	-	328	
Other III <sup>1</sup>	-	-	-	0	-	159	182	0	29	2	-	-	-	-	0	193	128	-	14	15	-	-	-	-	-	722	
<b>Sum imp</b>	1398	226	690	221	1647	478	3335	454	622	1557	860	1002	827	3900	458	298	544	1642	476	743	193	220	588	446	99	2161	25085

Sum of physical energy flows between UCTE countries = 21775GWh

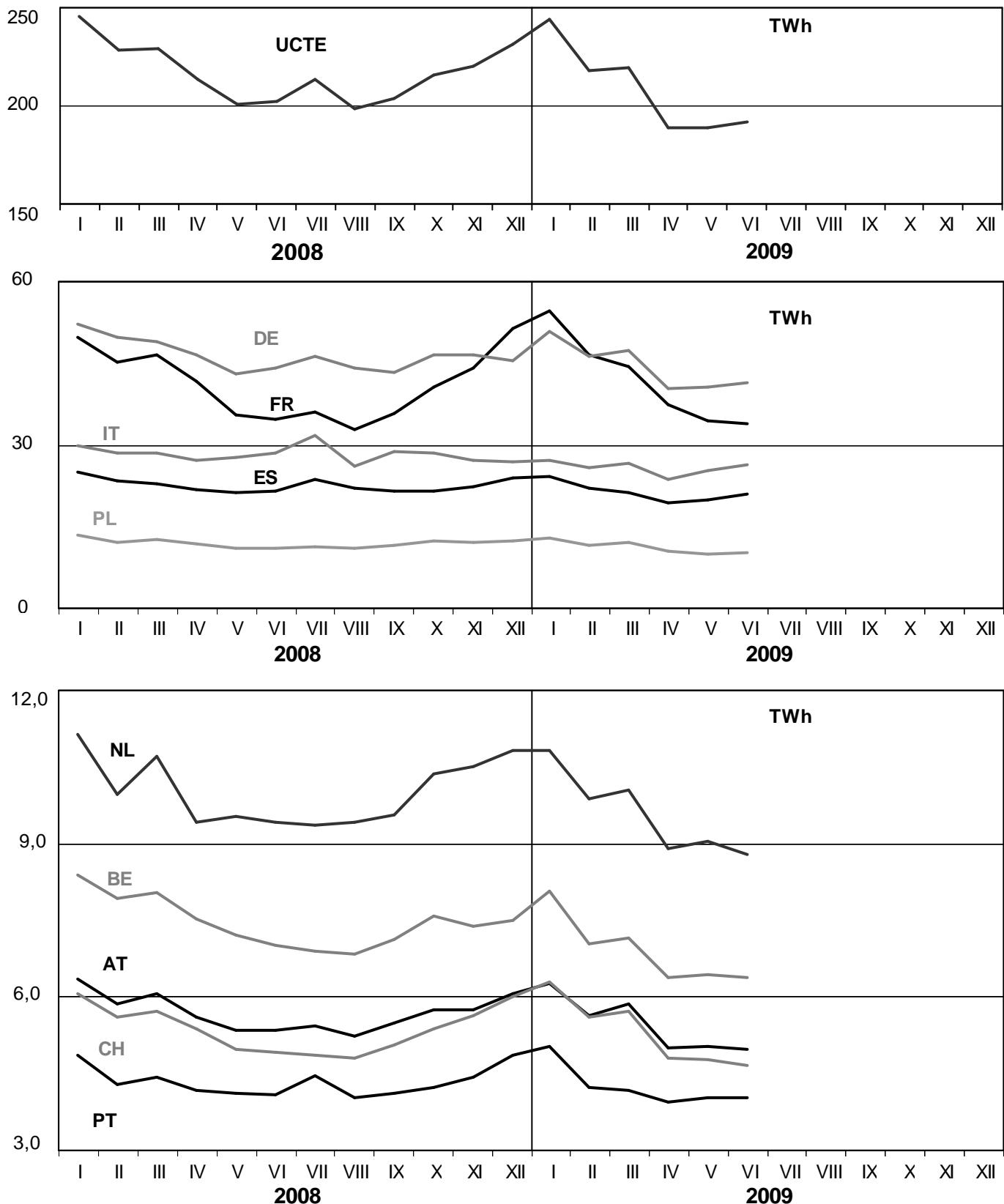
Total physical energy flows = 25085GWh

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

# 3

## Monthly consumption

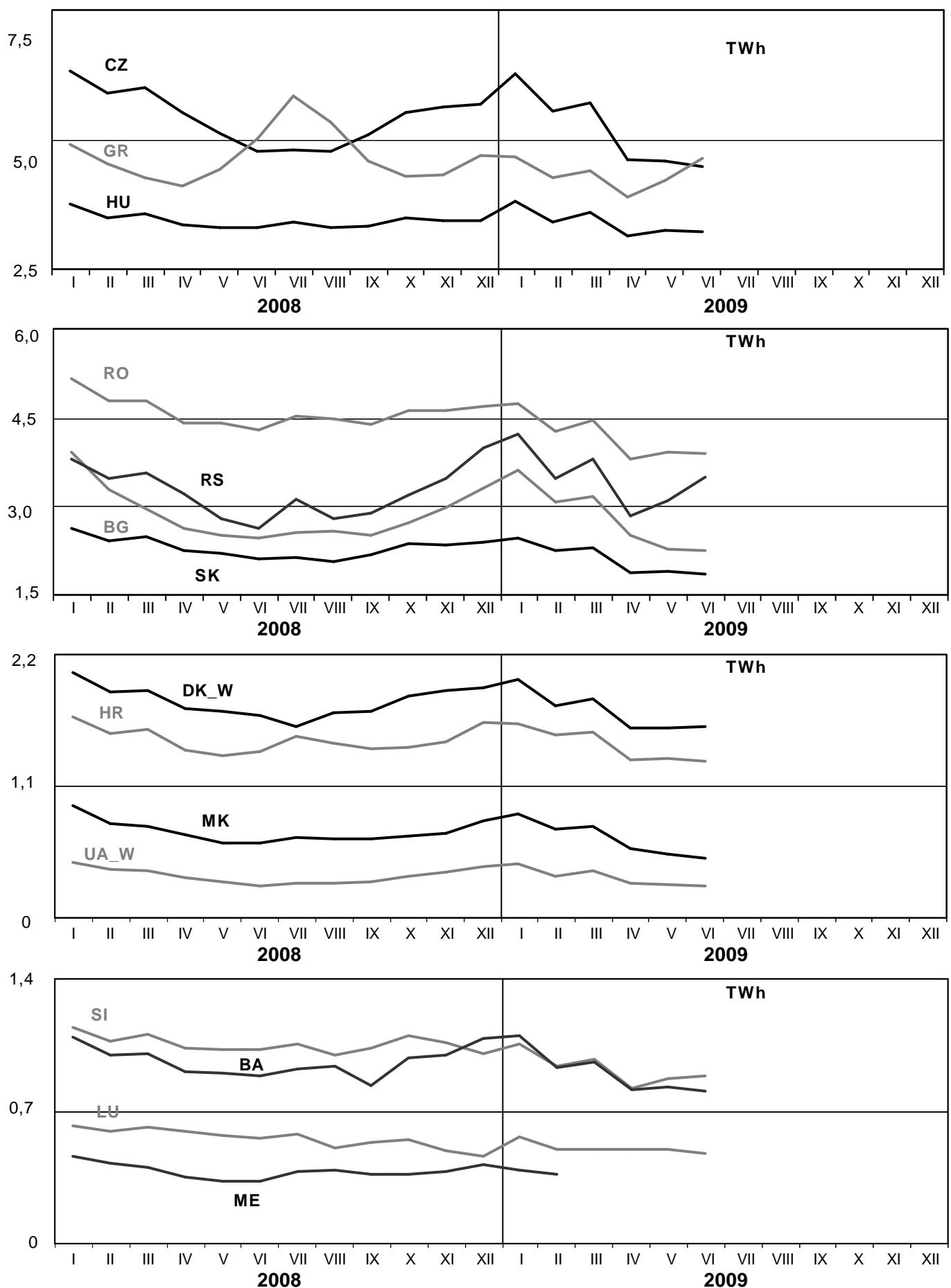
June 2009

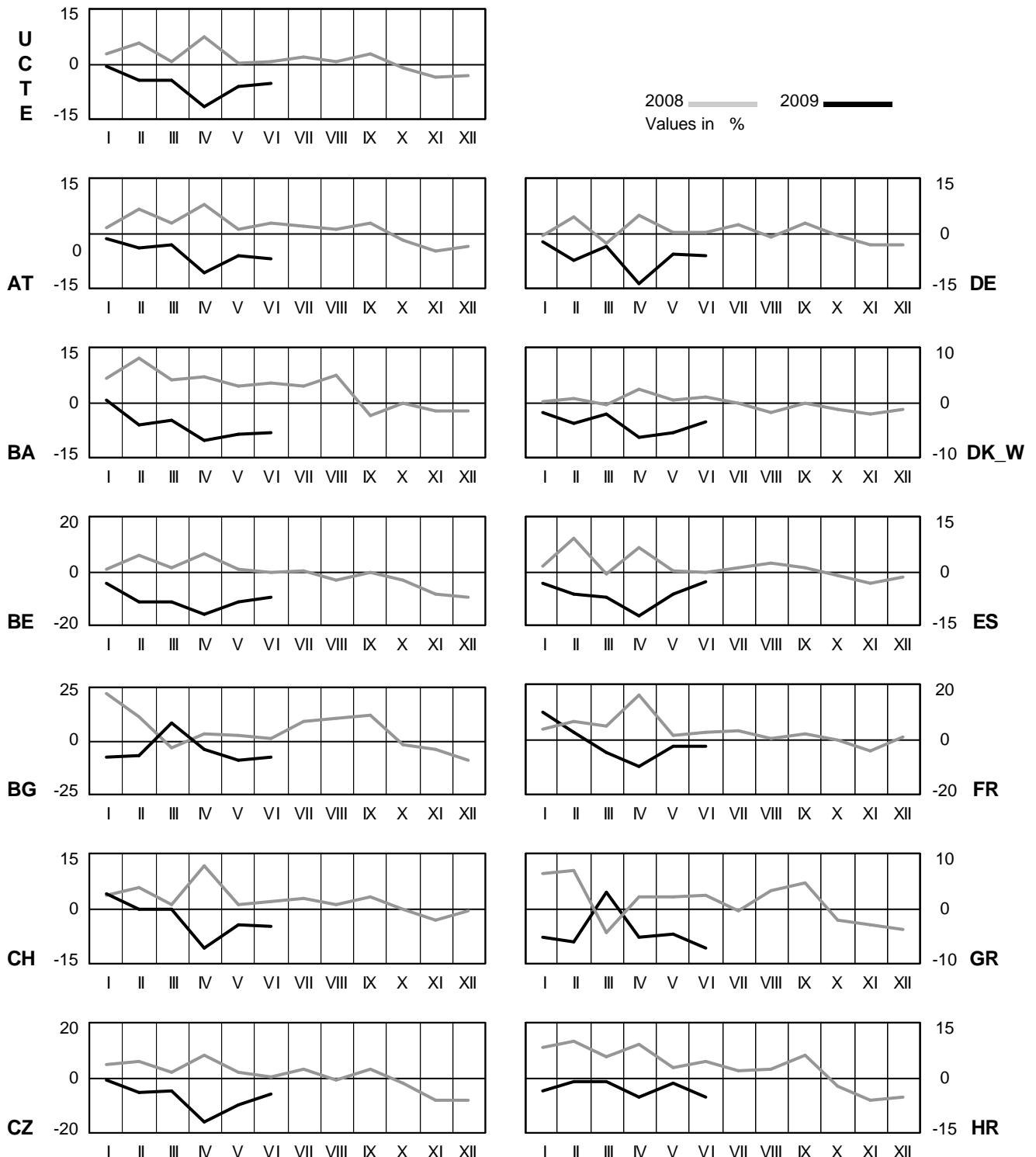


# 3

## Monthly consumption

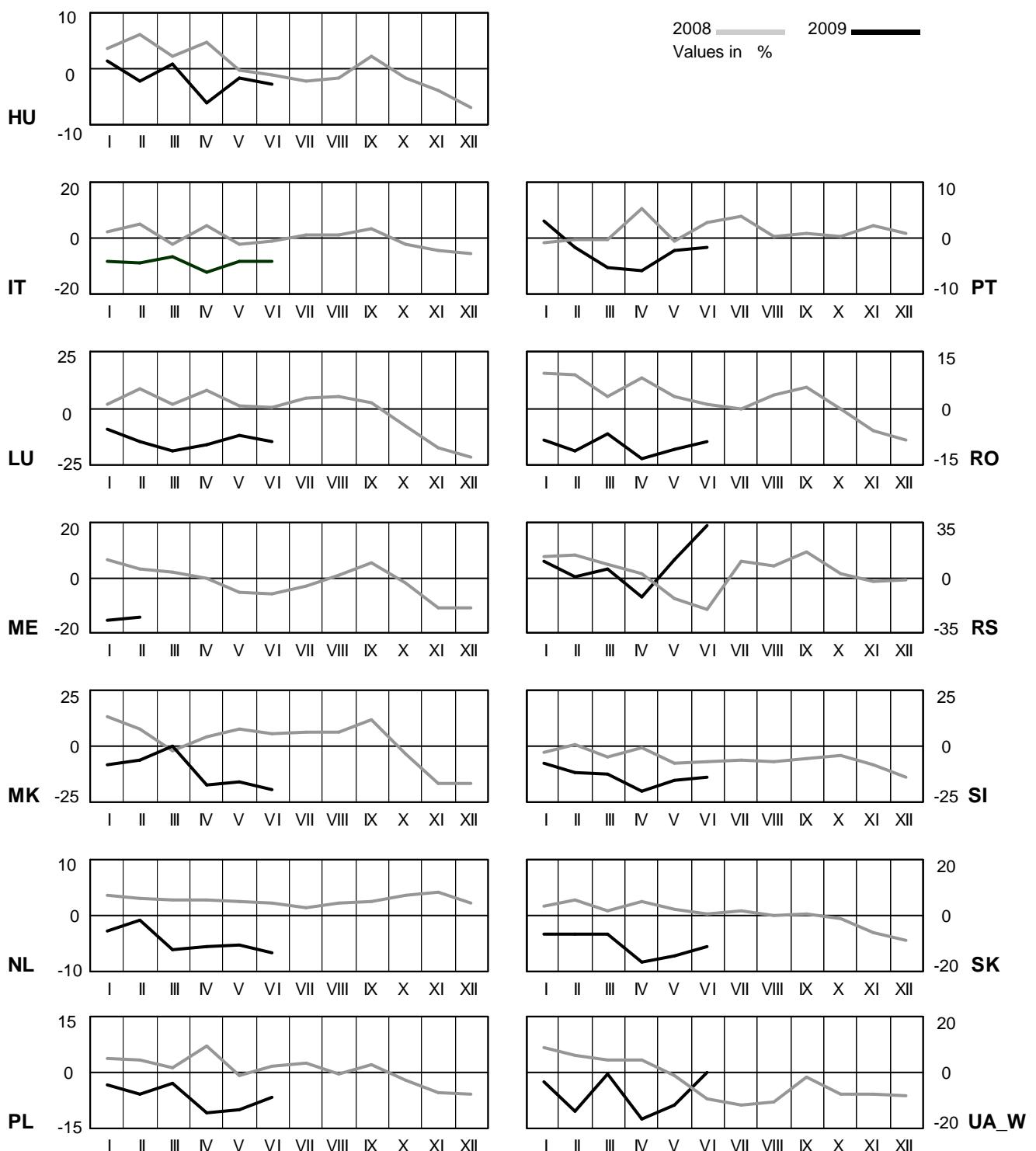
June 2009



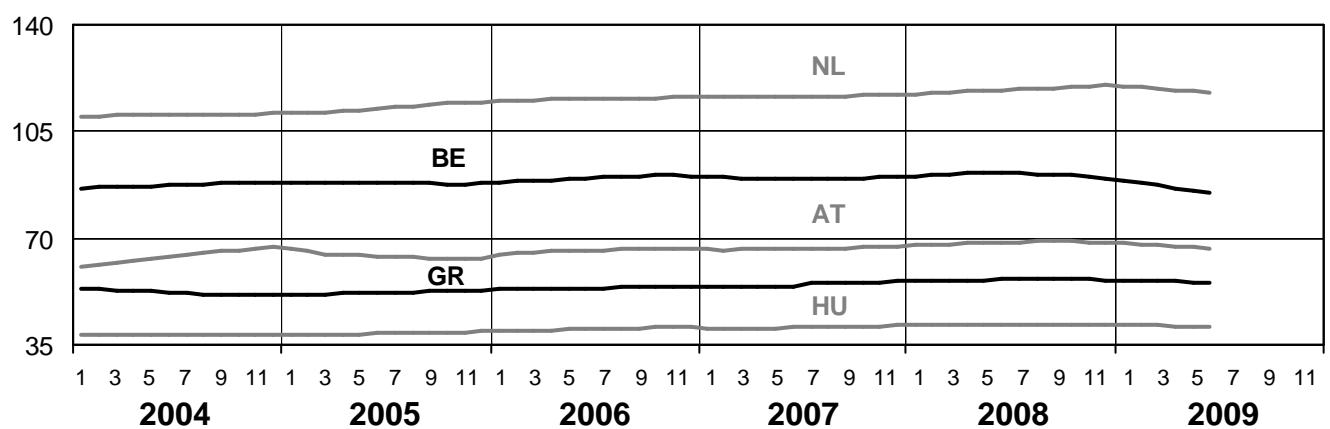
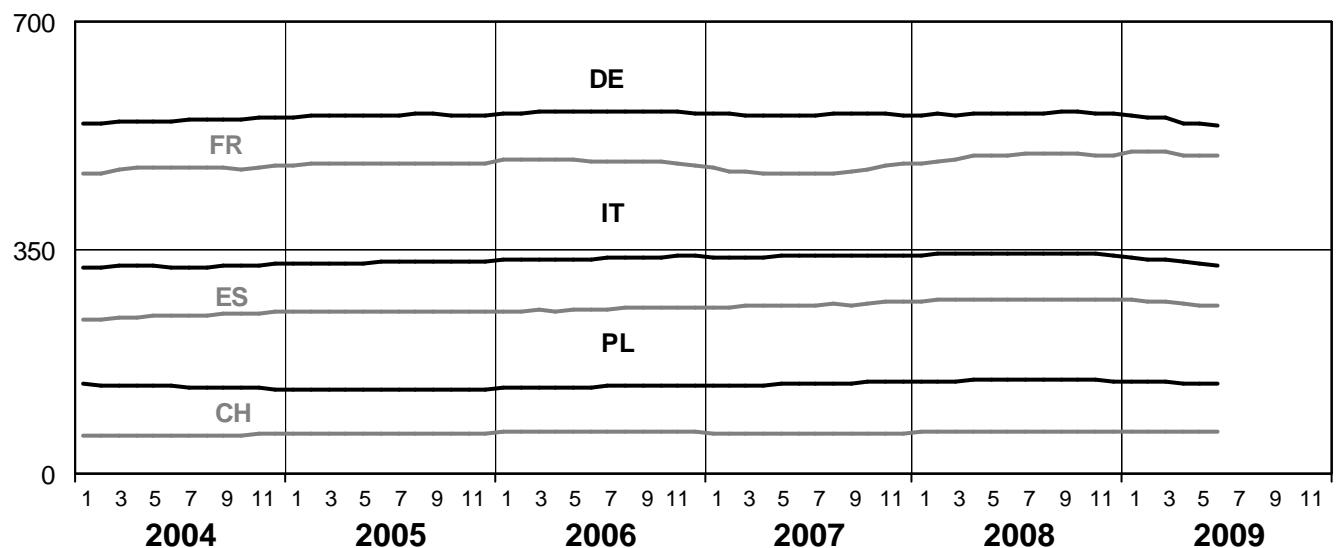
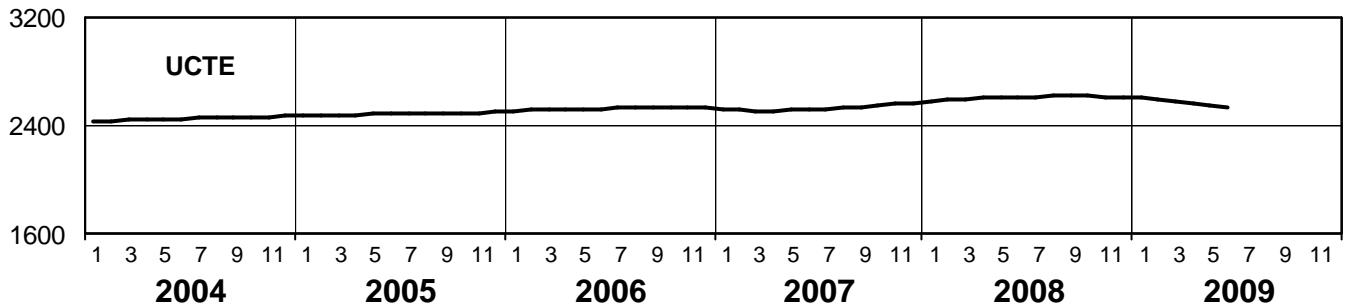


# 4 Monthly consumption variation

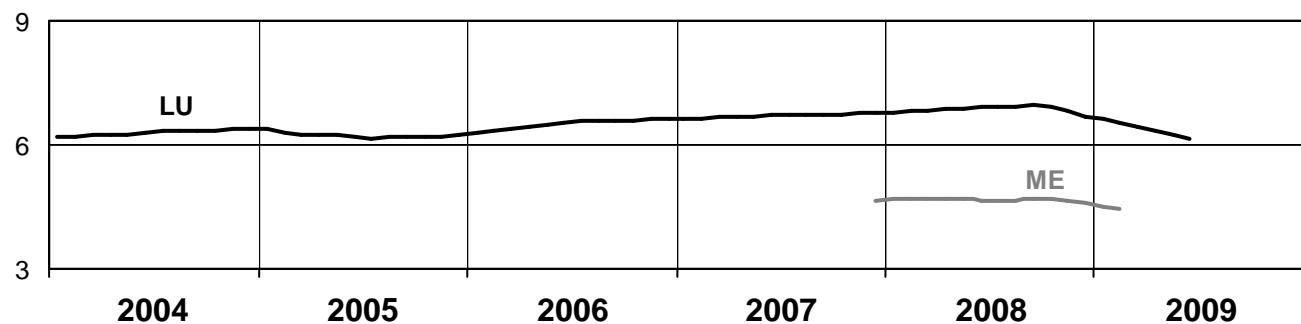
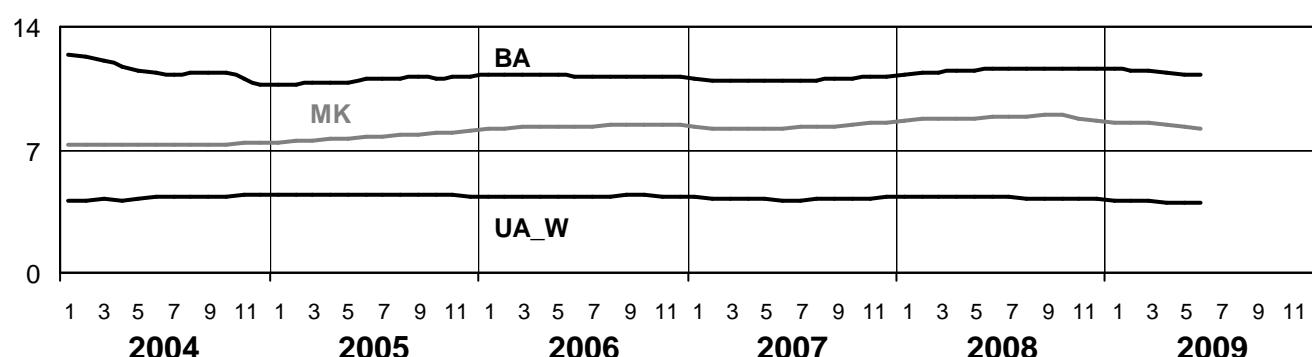
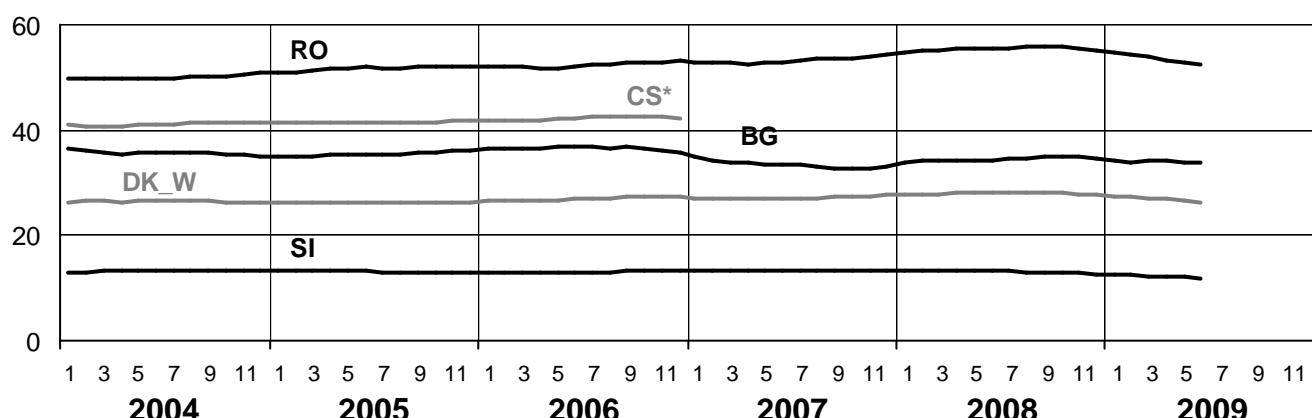
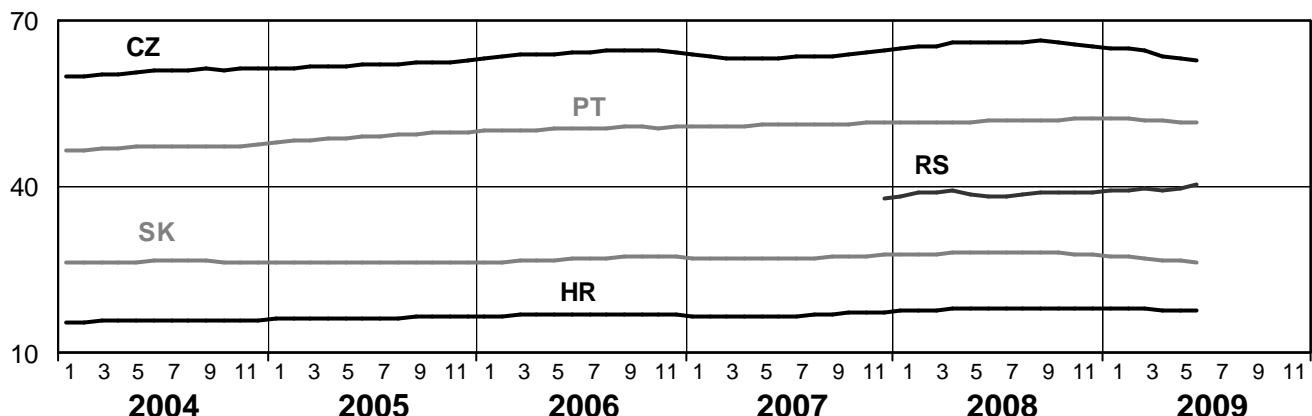
June 2009



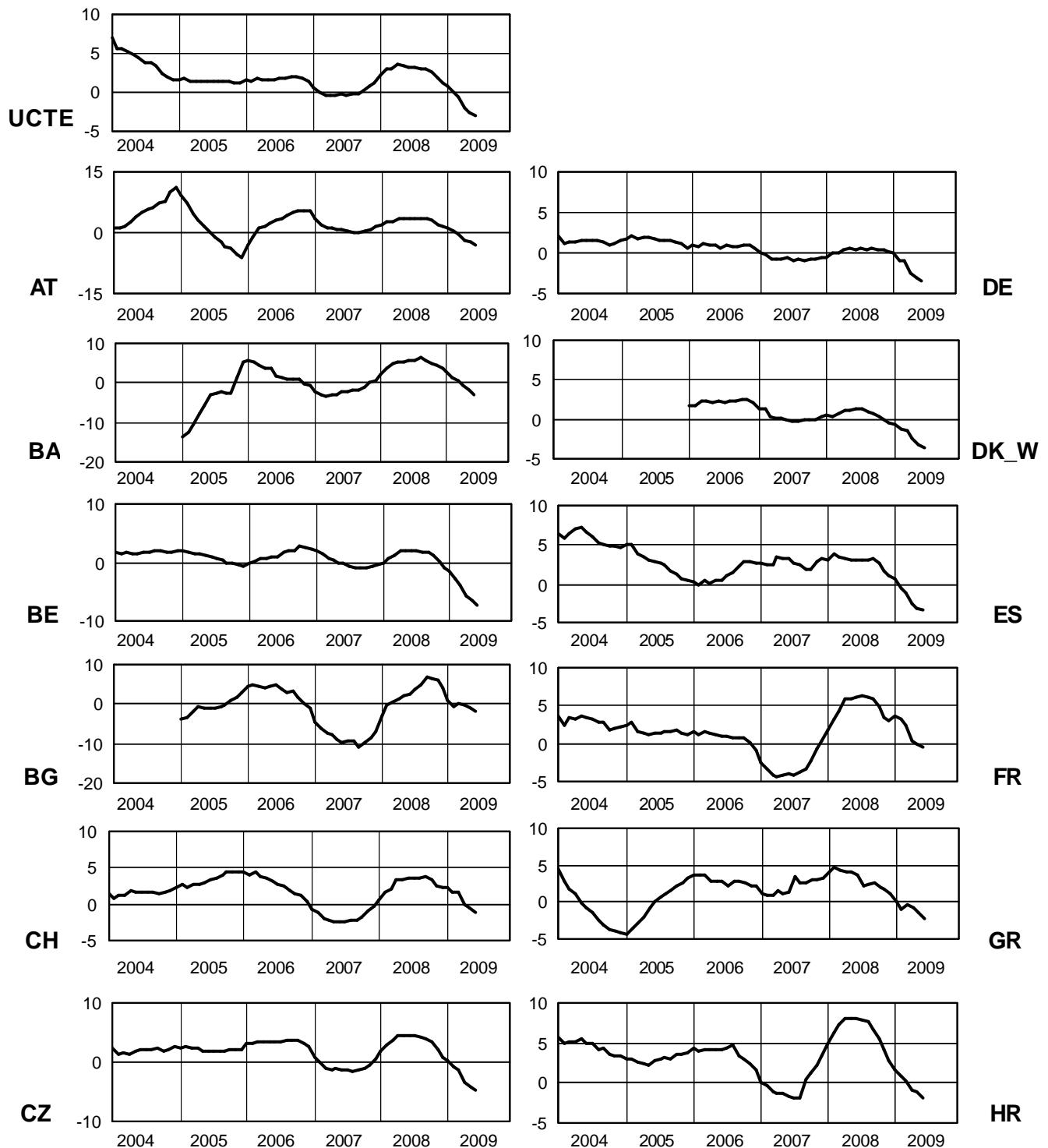
TWh



TWh



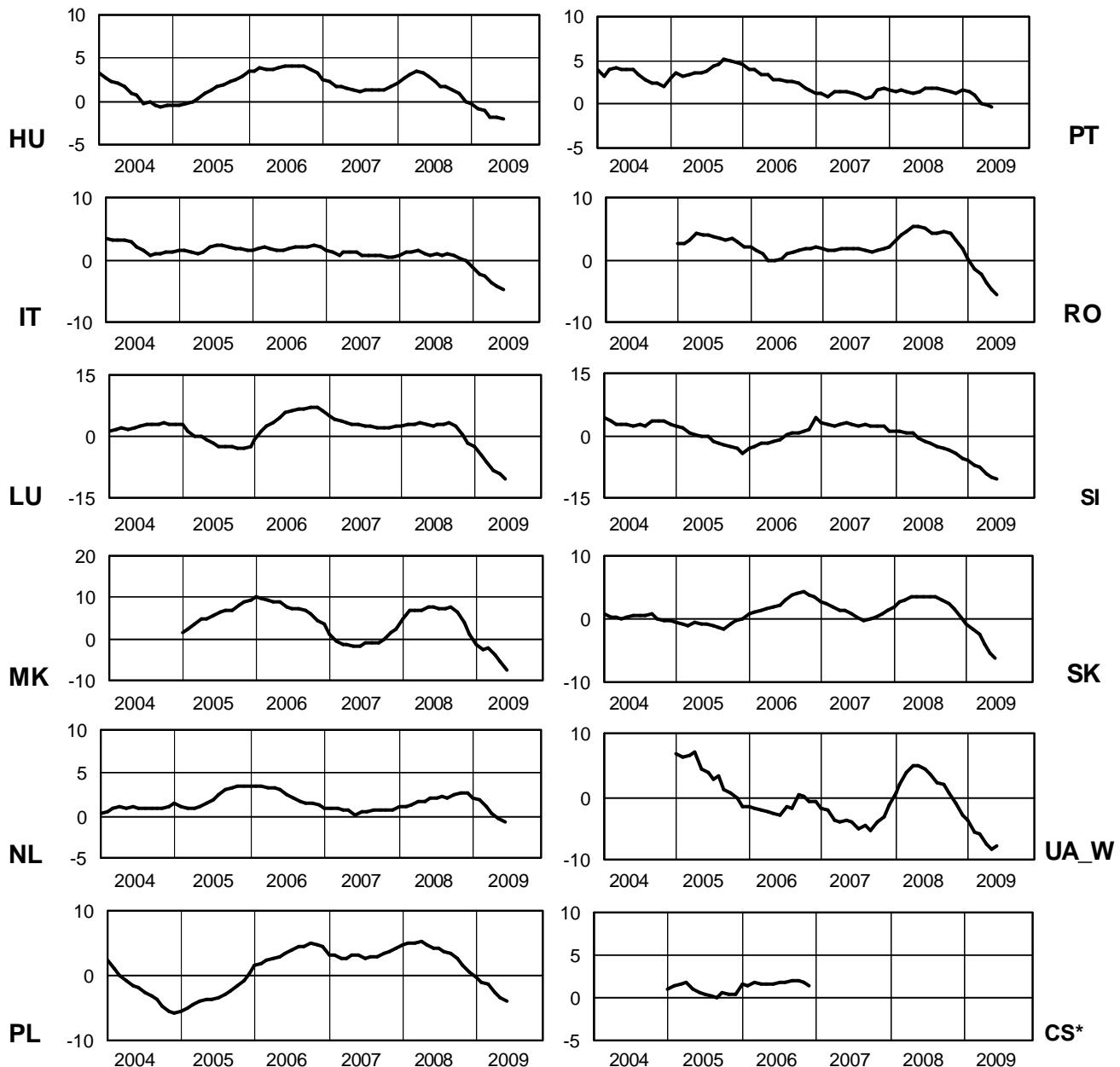
\* CS consumption values until December 2006; from 2007 on ME and RS as separate countries



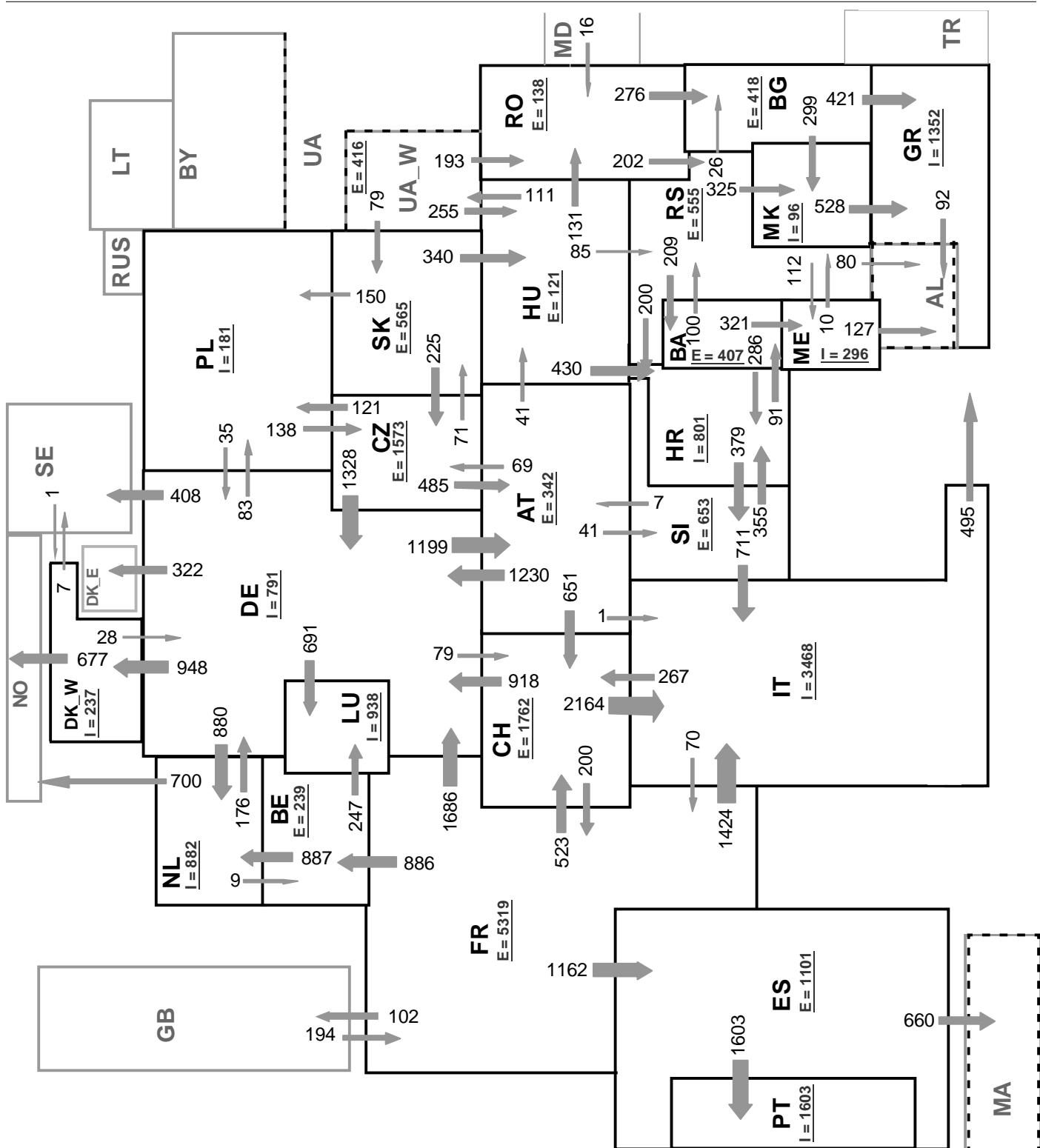
# 6

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

June 2009

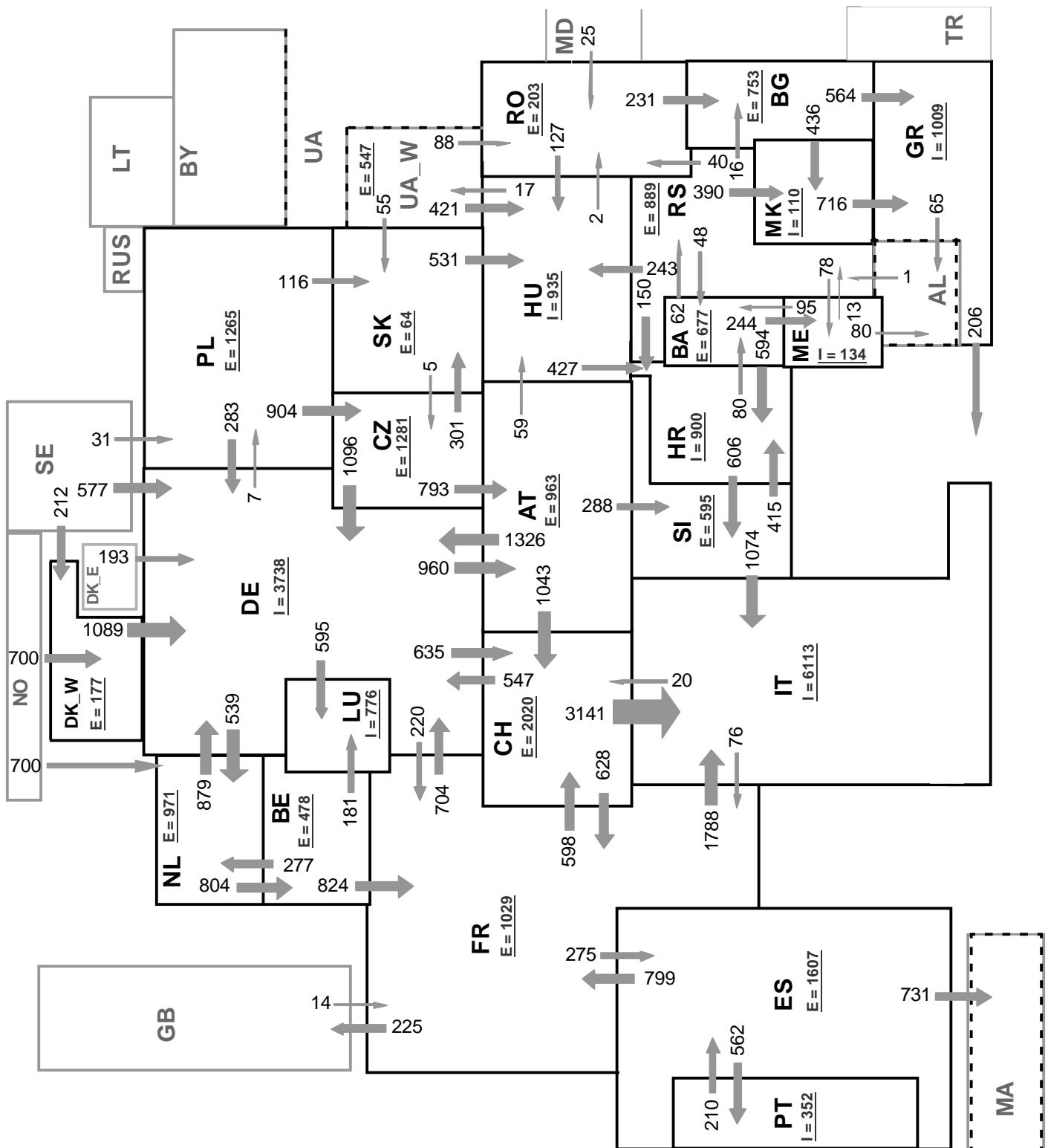


\* CS consumption values of the last 12 months until December 2006; variation ME and RS will be published from the third quarter 2009 on



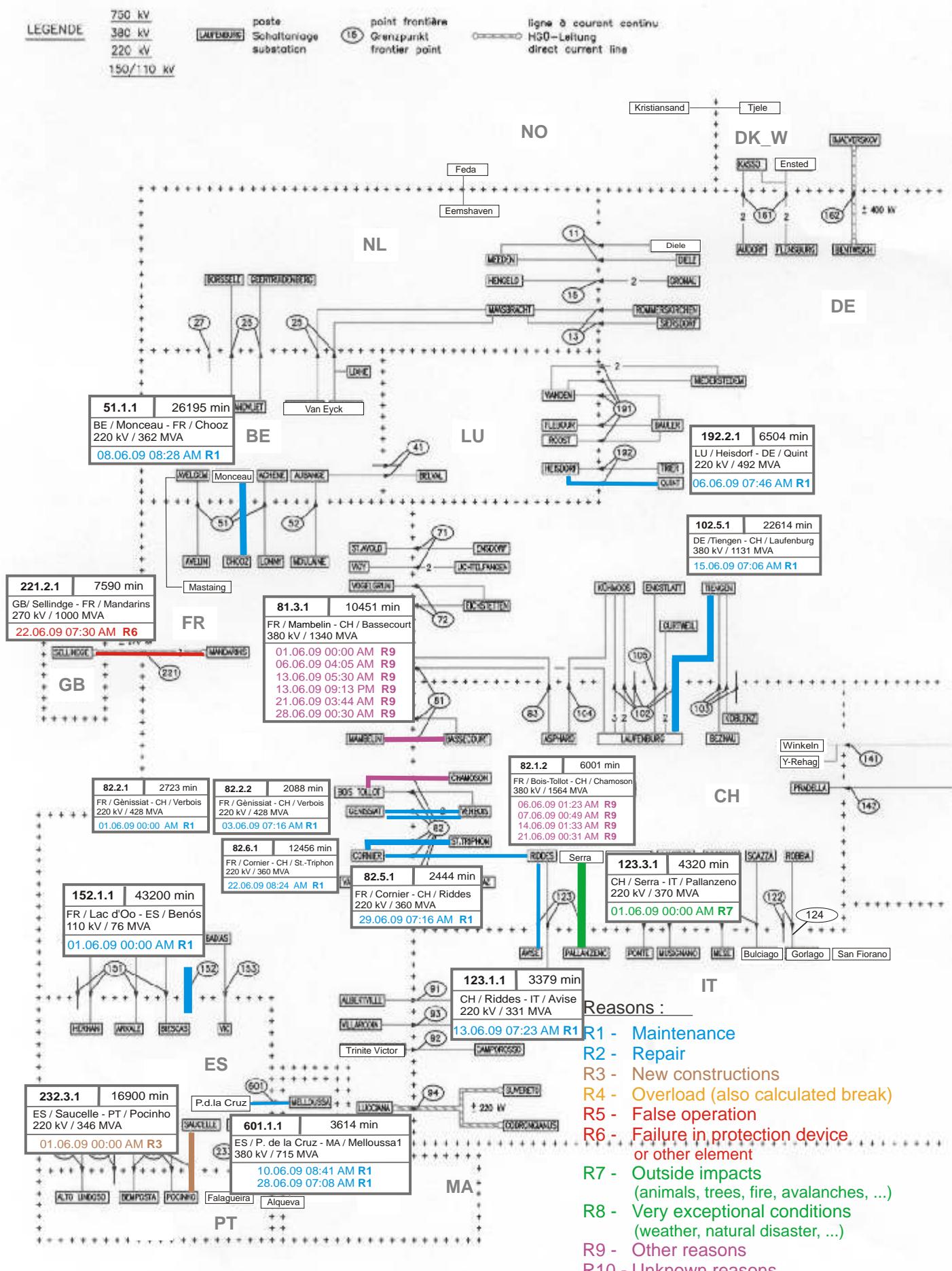
Synchronous operation with UCTE region

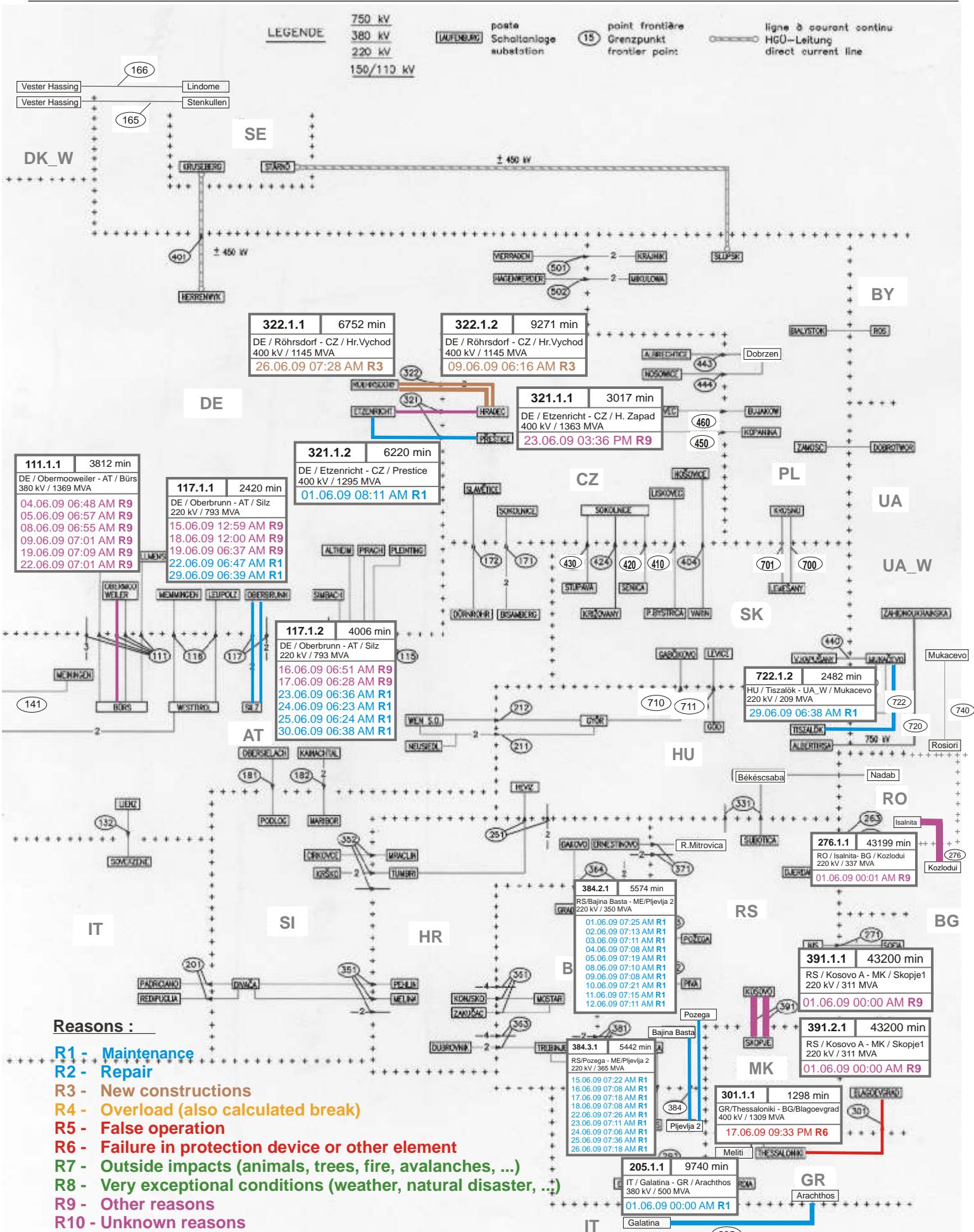
**I** = Import balance  
**E** = Export balance

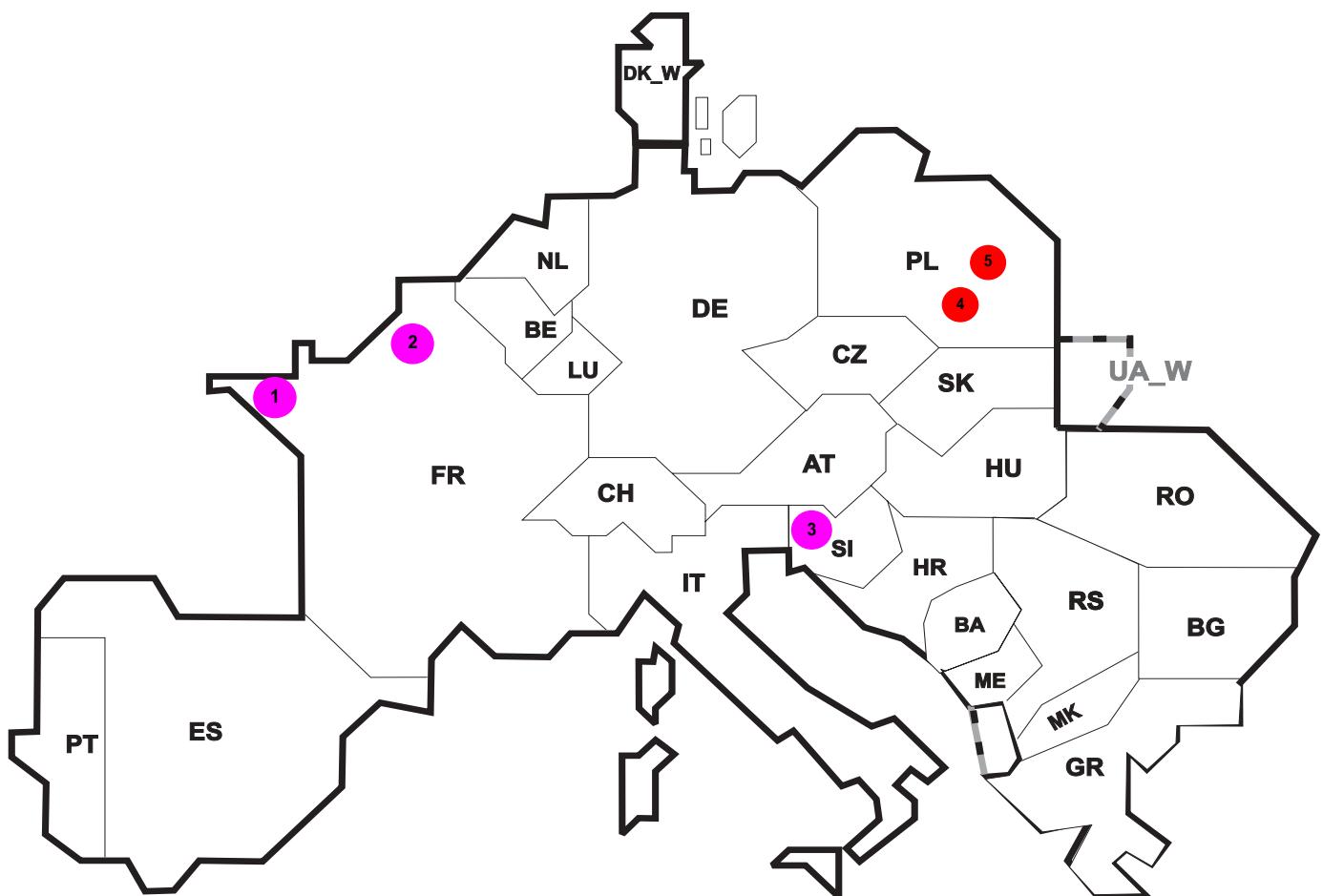


Synchronous operation with UCTE region

**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 <sup>2</sup> [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Loscoat	R9	57	67	51	0,061
2	FR	Guarbecque	R9	6	7	48	0,006
3	SI	Podlog	R9	0	0	9	0,000
4	PL	Polaniec	R5	0	548	0	0,000
5	PL	Kozienice	R6	0	256	0	0,000

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

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	342242	1067884	2309	83	1794	201
BA	526593	205338	271	100	326	100
BE	664718	389419	1305	1443	1006	747
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2301094	886114	3065	1338	3442	1464
CZ	1855361	788414	2822	1248	2883	1619
DE	2528904	1952773	788	3949	1546	3848
DK_W	312105	619150	0	1583	1237	0
ES	1285886	514305	2300	1200	2084	315
FR	5670436	3824084	8535	3143	7046	6037
GR	163276	865038	0	1489	230	1238
HR	21165	566324	93	885	0	877
HU	730325	1199328	1577	1437	1081	2020
IT	205304	3900184	832	4300	96	6209
ME	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MK	12600	98700	0	336	0	500
NL	854765	1741087	1980	2867	1947	1714
PL	303921	307825	0	200	1244	4
PT	5461	606577	0	1600	0	363
RO	190315	74703	215	80	324	134
RS	891367	389730	1183	621	1467	414
SI	844750	422606	1213	589	1384	801
SK	507908	348163	775	172	683	553
UA_W	224467	0	415	0	549	0

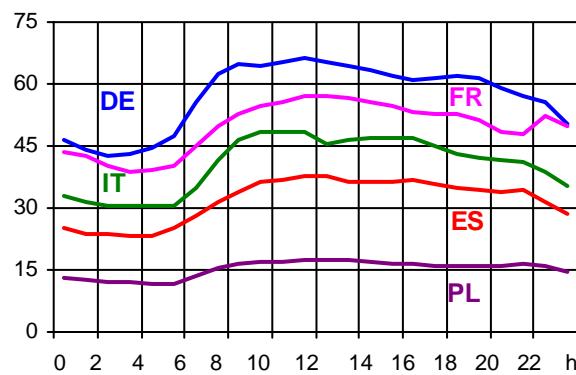
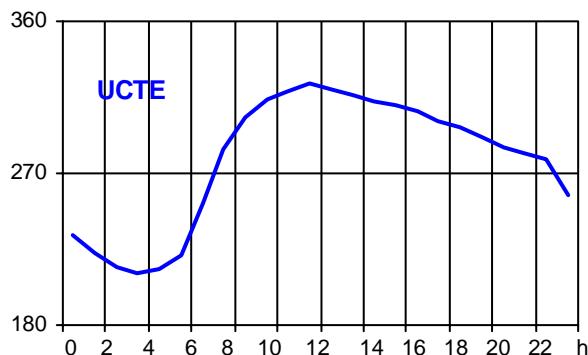
- Control areas can differ from national borders ( i.e. German block which includes parts of AT, LU and DK ).
- Values are calculated on an hourly base ( MWh ).

- This values are not the provisional values entered in the VULCANUS system, but the definitive values after an eventual correction during the actual date.

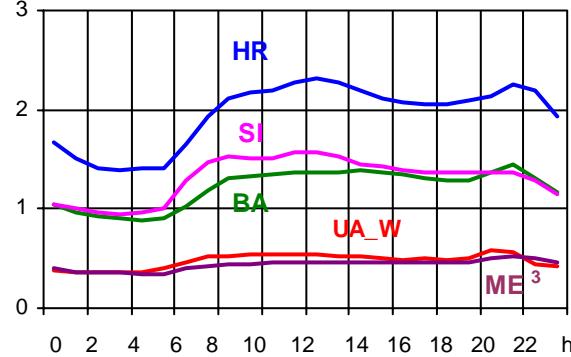
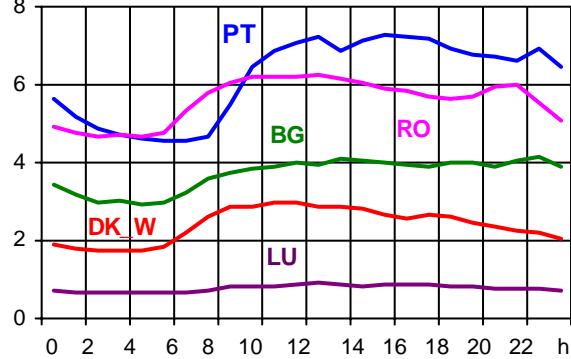
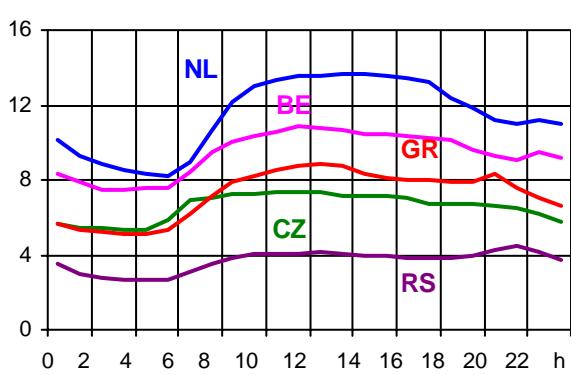
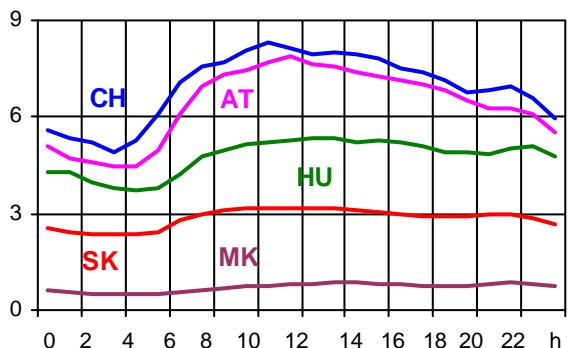
- Export Programs: Sum of all positive values of every hour of every border
- Import Programs: Sum of all negative values of every hour of every border
- Export Programs at 03:00: Sum of all positive values the third Wednesday from 02:00 to 03:00 a.m.
- Import Programs at 03:00: Sum of all negative values 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 17.06.2009 CET

Values in GW



	Highest load MW	Load representativity var.% <sup>1</sup>	%
AT	7854	-1,3	100
BA	1446	-3,7	100
BE <sup>2</sup>	10877	-5,6	100
BG	4167	-8,6	99
CH	8337	-0,9	100
CZ	7387	-7,0	100
DE	66533	-8,8	91
DK_W	2958	-3,0	100
ES	37800	5,3	98
FR	56934	-1,1	100
GR	8869	-1,5	100
HR	2319	2,3	100
HU	5356	-5,8	100
IT	48613	0,2	100
LU	904	-8,3	100
ME <sup>3</sup>	524	n.a.	100
MK	861	-15,7	100
NL	13700	-11,5	100
PL <sup>4</sup>	17279	-5,4	100
PT	7282	1,3	97
RO	6246	-8,7	100
RS	4484	-1,6	100
SI	1578	-8,8	100
SK	3183	-9,0	100
UCTE	<b>323459</b>	-3,3	
UA_W	588	-1,8	100



<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.

<sup>3</sup> Highest load value as of June 2008

<sup>4</sup> Operational data

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