



October 2009

Monthly provisional values as of 22 February 2010

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 ENTSOE 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 in GWh	Consumption in GWh			
	Therm. nuclear	Fossil fuels	Hydro prod	Other renew.	Of which wind	Non identifiable	Total			monthly	var. [%]	last 12 months	var. [%]
AT	0	2556	2843	0	0	765	6164	-160	358	5646	-2,0	65624	-4,8
BA	0	759	367	0	0	0	1126	-187	0	939	-4,5	11065	-4,8
BE ²	3589	3489	134	374	93	0	7586 ¹	-150	164	7272	-4,0	83042	-8,6
BG	715	2156	259	0	0	0	3130	-471	81	2578	-5,3	32916	-5,7
CH	2403	170	2356	102	2	0	5031 ¹	460	200	5291	-1,9	63103	-2,4
CZ	1959	4509	212	40	34	0	6720 ¹	-1282	88	5350	-3,3	61597	-6,8
DE	10089	29816	1469	6253	3588	0	47627 ¹	-1571	645	45411	-2,4	527575	-5,8
DK_W	0	1284	1	675	539	0	1960 ¹	-198	0	1762	-5,0	20712	-5,0
ES	3950	13043	1472	3596	2942	37	22098	-941	283	20874	-2,8	261028	-4,0
FR	30930	4710	3011	901	572	0	39552	-2665	571	36316	-10,7	484353	-2,3
GR	0	3508	396	198	158	0	4102 ¹	105	21	4186	-2,3	53752	-5,1
HR	0	624	333	5	4	0	962 ¹	474	14	1422	-0,6	17499	-3,0
HU	1145	1867	0	0	0	0	3012 ¹	543	0	3555	1,7	41131	-1,3
IT	0	19853	3345	1027	627	0	24225	3040	403	26862	-5,4	318752	-6,9
LU	0	272	67	14	5	0	353	306	92	567	3,1	6069	-12,1
ME ³	0	65	66	0	0	0	131	230	0	361	n.a.	4449	n.a.
MK	0	484	74	0	0	0	558	76	0	634	-7,3	7812	-12,6
NL	358	8620	0	725	413	0	9703 ¹	-245	0	9458	-8,7	114290	-4,4
PL ⁴	0	12237	216	128	109	0	12581 ¹	-231	102	12248	-1,1	136519	-5,4
PT	0	2639	468	824	642	0	3931 ¹	429	100	4260	0,5	51553	-0,9
RO	967	2627	849	0	0	0	4443	-119	15	4309	-7,0	50693	-9,3
RS	0	2799	637	0	0	0	3436	28	94	3370	5,1	41779	6,9
SI	512	475	248	0	0	0	1235	-248	0	987	-10,7	11381	-12,1
SK	1058	559	302	39	0	0	1958 ¹	301	29	2230	-5,9	25571	-8,7
UCTE	57675	119121	19125	14901	9728	802	211624¹	-2476	3260	205888	-4,7	2492265	-4,8
UA_W	0	543	11	0	0	0	554	-209	0	345	0,9	3961	-6,3

¹ Including deliveries from industry

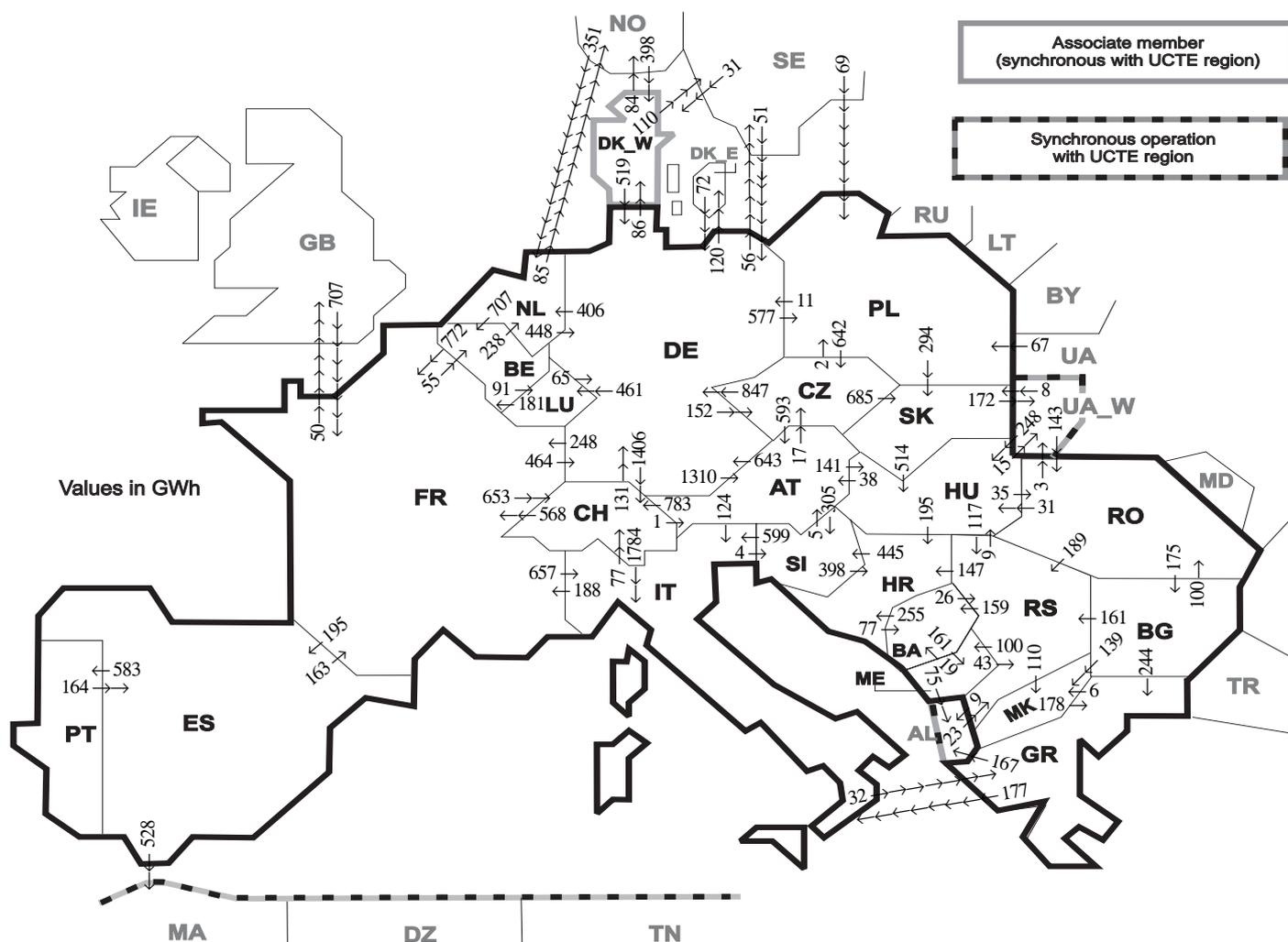
² The reported figures are best estimates based on actual measurements and extrapolations

³ Monthly national values as of October 2008

⁴ 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																									
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	100
Fossil fuels	100	100	100	100	100	100	100	100	97	100	100	100	100	100	100	100	100	100	95	100	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	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	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	100
Consumption	100	100	100	100	100	100	100	100	98	100	100	100	100	100	100	100	100	100	97	100	100	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 ¹	Sum export	
AT	-	-	-	-	783	17	643	-	-	-	-	-	141	124	-	-	-	-	-	-	-	-	305	-	-	-	2013	
BA	-	-	-	-	-	-	-	-	-	-	-	255	-	-	-	161	-	-	-	-	-	26	-	-	-	-	442	
BE	-	-	-	-	-	-	-	-	-	772	-	-	-	-	91	-	-	238	-	-	-	-	-	-	-	-	1101	
BG	-	-	-	-	-	-	-	-	-	-	244	-	-	-	-	-	139	-	-	-	100	161	-	-	-	0	644	
CH	1	-	-	-	-	-	131	-	-	568	-	-	-	1784	-	-	-	-	-	-	-	-	-	-	-	-	2484	
CZ	593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	685	-	-	2127	
DE	1310	-	-	-	1406	152	-	86	-	248	-	-	-	461	-	-	-	406	577	-	-	-	-	-	-	176	4822	
DK_W	-	-	-	-	-	-	519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	194	713	
ES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	583	-	-	-	-	-	-	528	1274
FR	-	-	55	-	653	-	464	-	195	-	-	-	657	-	-	-	-	-	-	-	-	-	-	-	-	50	2074	
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	177	-	-	-	-	-	-	-	-	-	-	-	167	350	
HR	-	77	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	0	445	-	-	-	522	
HU	38	-	-	-	-	-	-	-	-	-	-	195	-	-	-	-	-	-	-	-	35	117	0	15	-	-	400	
IT	0	-	-	-	77	-	-	-	-	188	32	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	301	
LU	-	-	181	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	246	
ME	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43	-	-	-	75	137	
MK	-	-	-	0	-	-	-	-	-	-	-	178	-	-	-	-	-	-	-	-	-	0	-	-	-	-	178	
NL	-	-	707	-	-	-	448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	1240	
PL	-	-	-	-	-	642	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	294	-	0	947	
PT	-	-	-	-	-	-	-	-	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	164	
RO	-	-	-	175	-	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	189	-	3	0	398		
RS	-	159	-	0	-	-	-	-	-	-	-	147	9	-	-	100	110	-	-	-	0	-	-	-	-	9	534	
SI	5	-	-	-	-	-	-	-	-	-	-	398	599	-	-	-	-	-	-	-	-	-	-	-	-	-	1002	
SK	-	-	-	-	-	0	-	-	-	-	-	-	514	-	-	-	-	-	0	-	-	-	-	-	-	172	686	
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	248	-	-	-	-	-	-	-	143	-	8	-	-	-	399	
Other III ¹	-	-	-	0	-	-	123	429	0	707	0	-	-	-	-	0	-	351	136	-	0	23	-	-	-	-	1769	
Sum imp	1947	255	943	175	2919	811	3251	515	359	2646	454	995	943	3341	552	261	255	995	715	583	278	559	754	987	190	1284	26967	

Sum of physical energy flows between UCTE countries = 23325GWh Total physical energy flows = 26967GWh

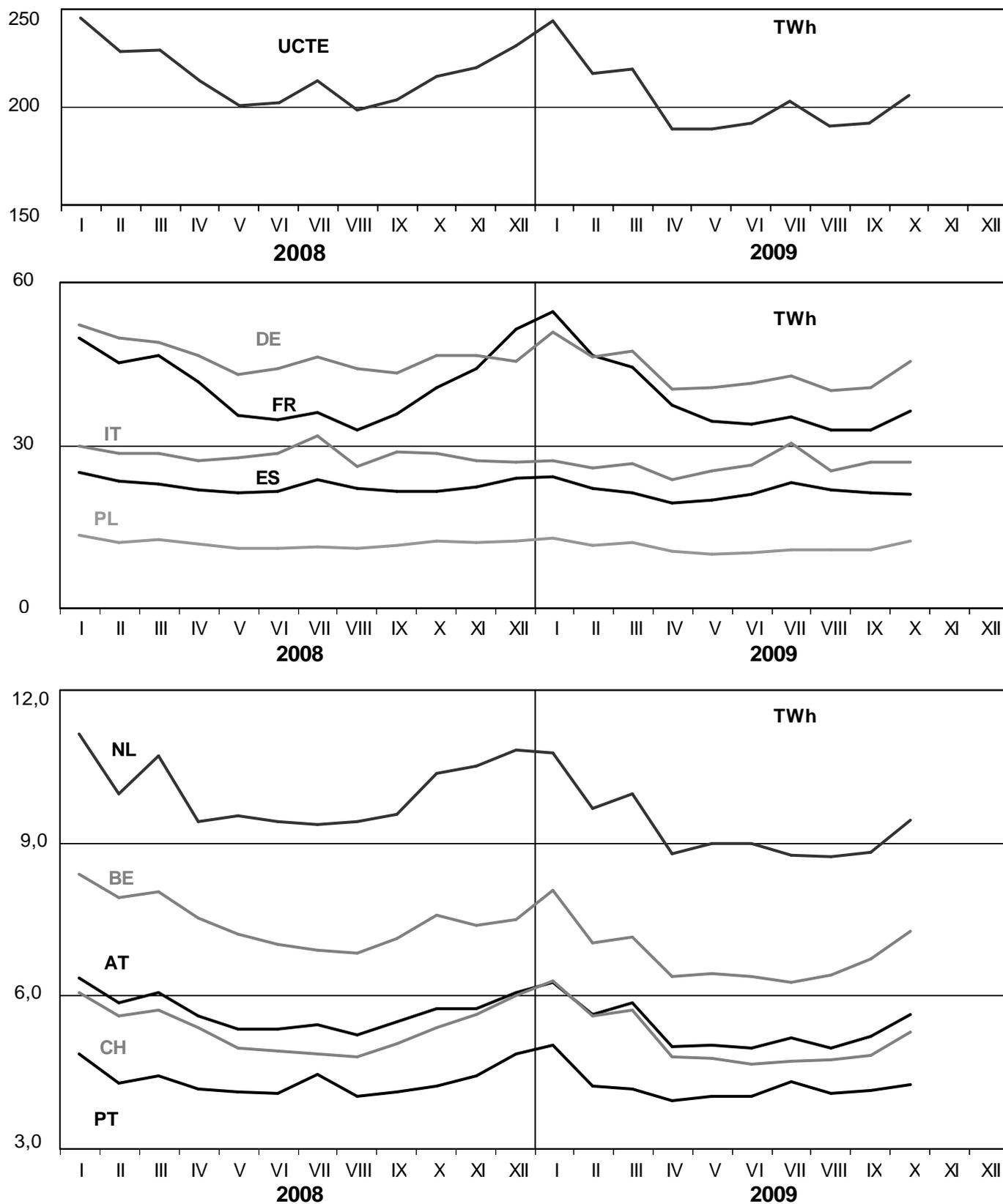
¹ Other III: Albania, Belarus, Denmark East, Great Britain, Morocco, Republic of Moldavia, Norway, Sweden, Republic of Turkey and Ukraine

These physical energy flows were measured on the cross-frontier transmission lines (≤ 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

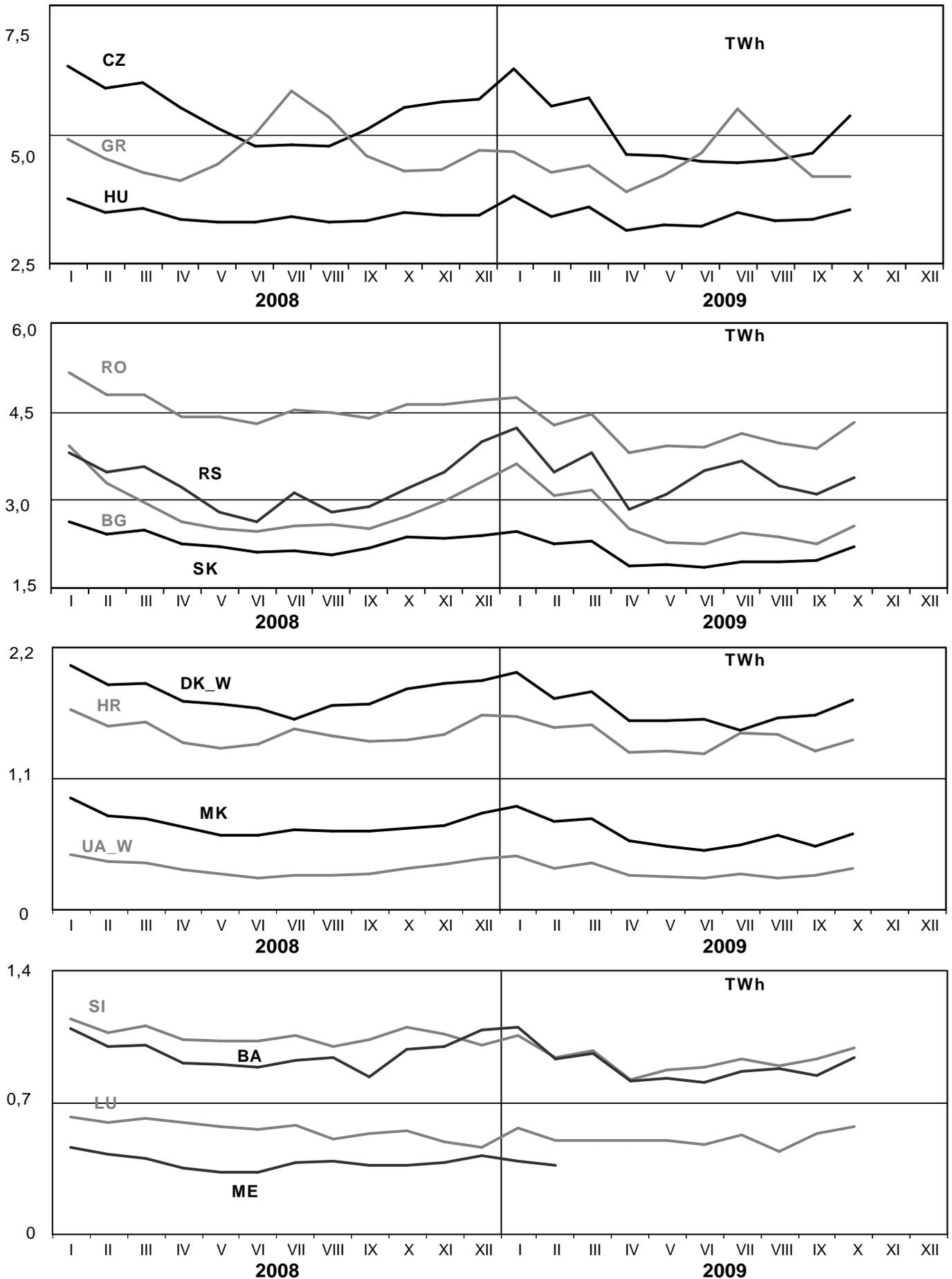
October 2009



3

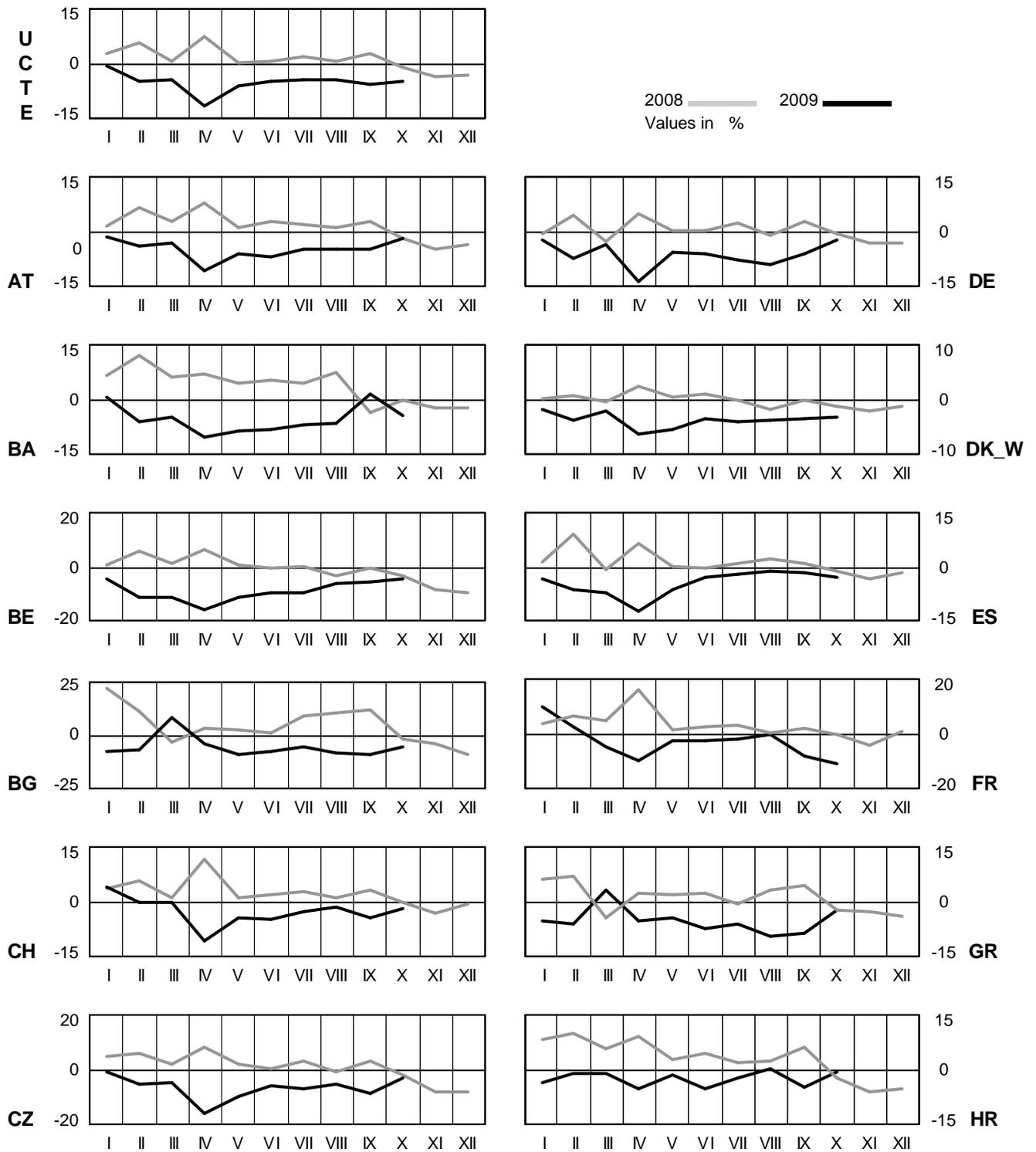
Monthly consumption

October 2009



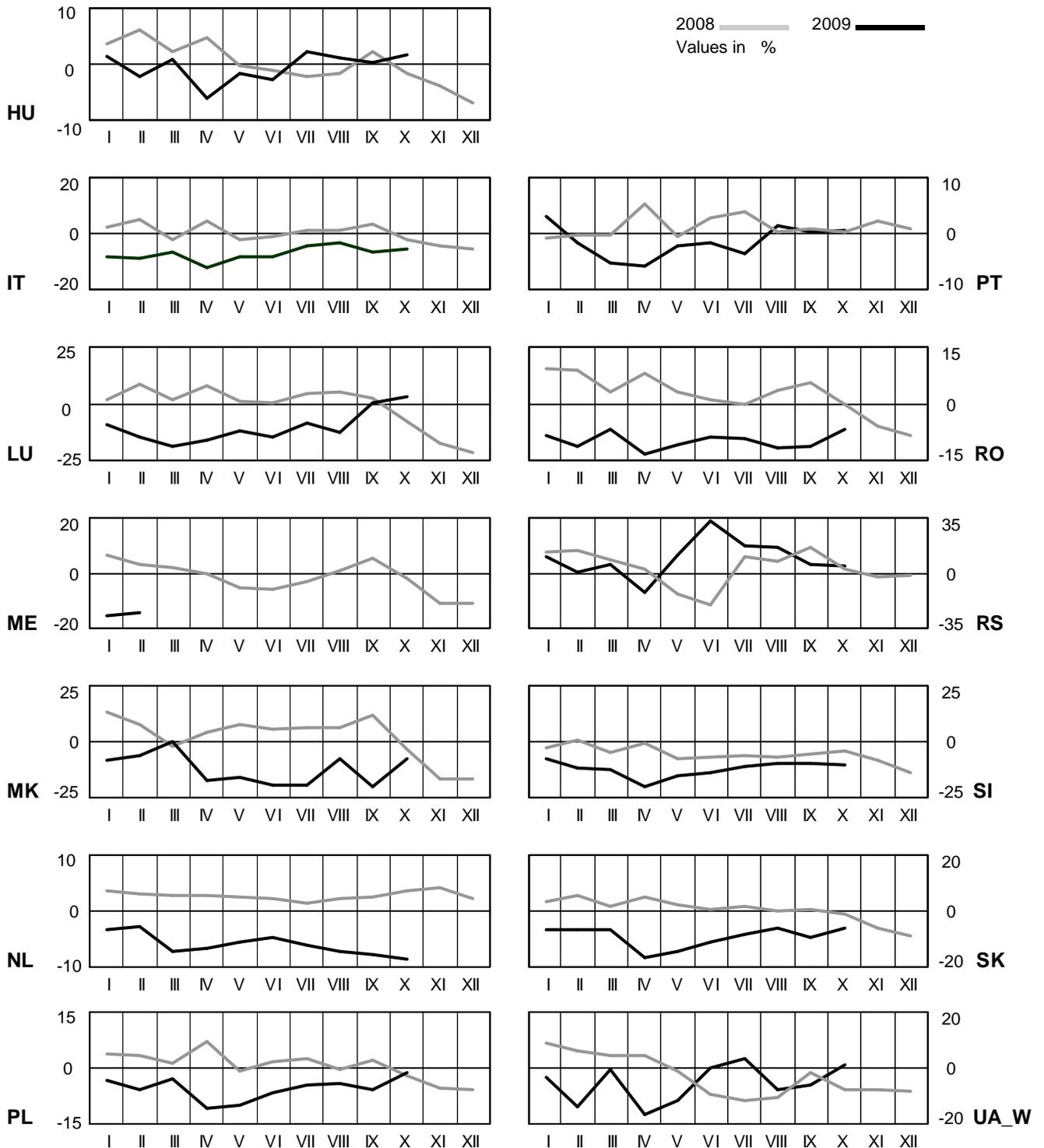
4 Monthly consumption variation

October 2009



4 Monthly consumption variation

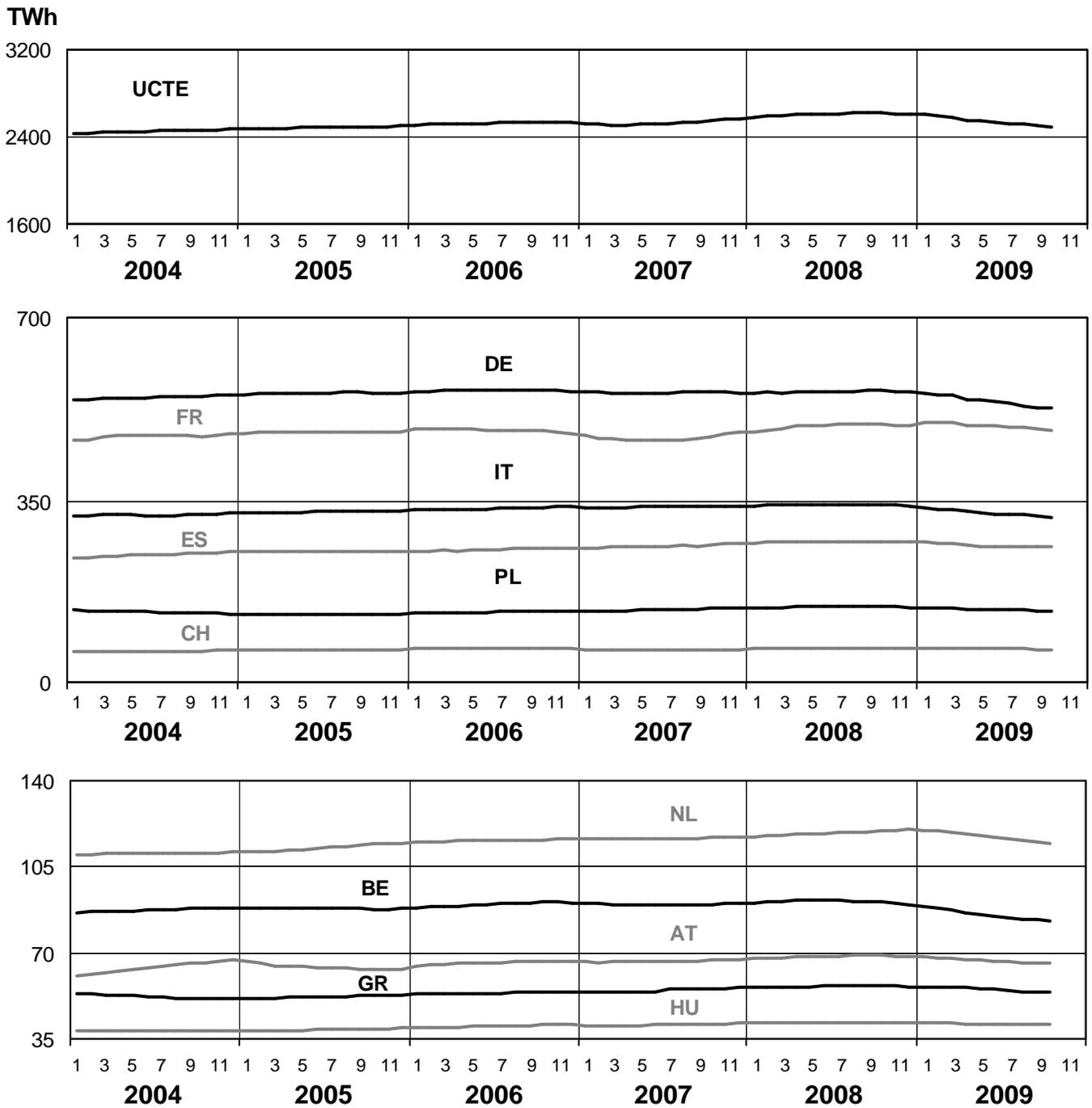
October 2009



5

Consumption of the last 12 months

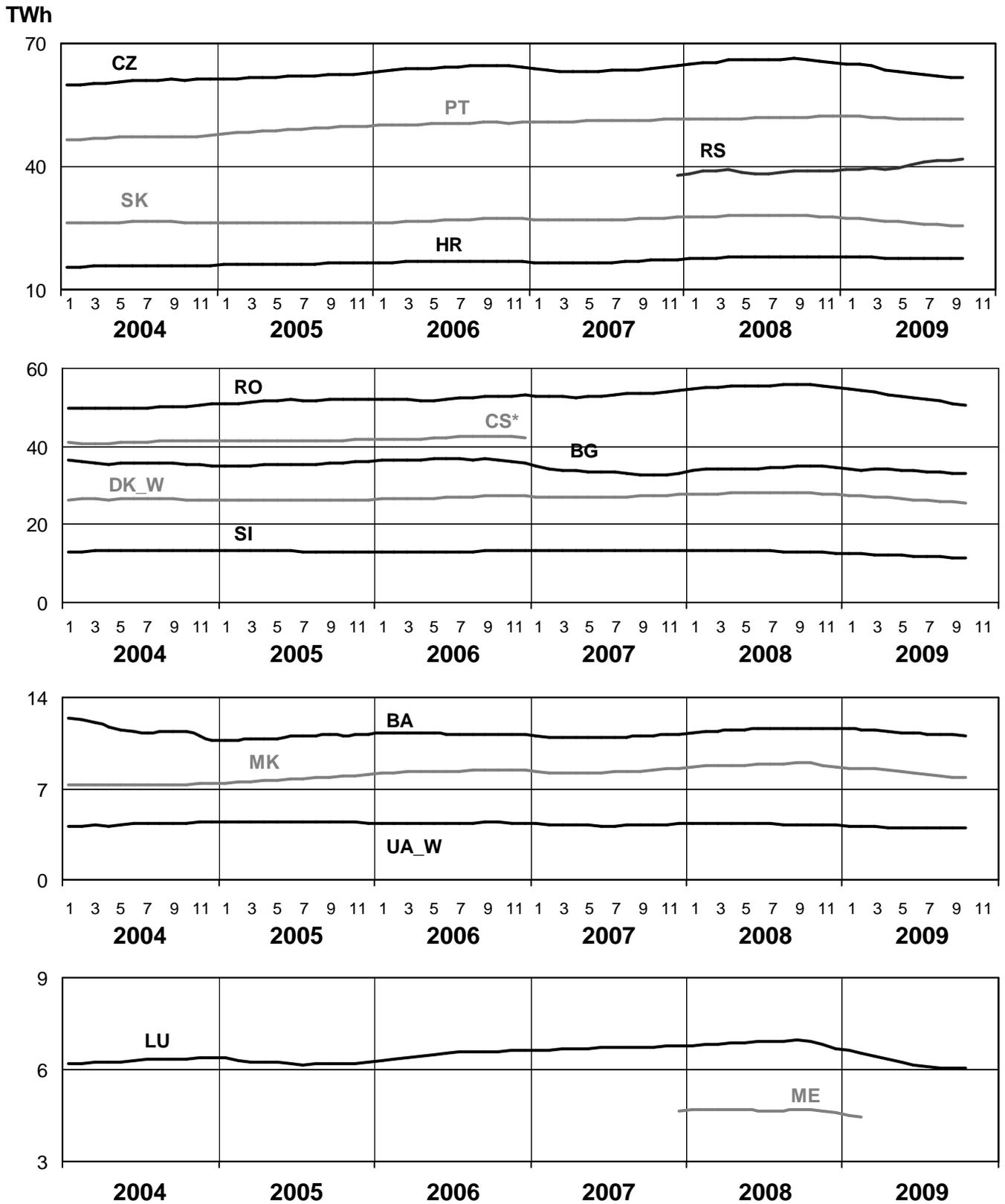
October 2009



5

Consumption of the last 12 months

October 2009

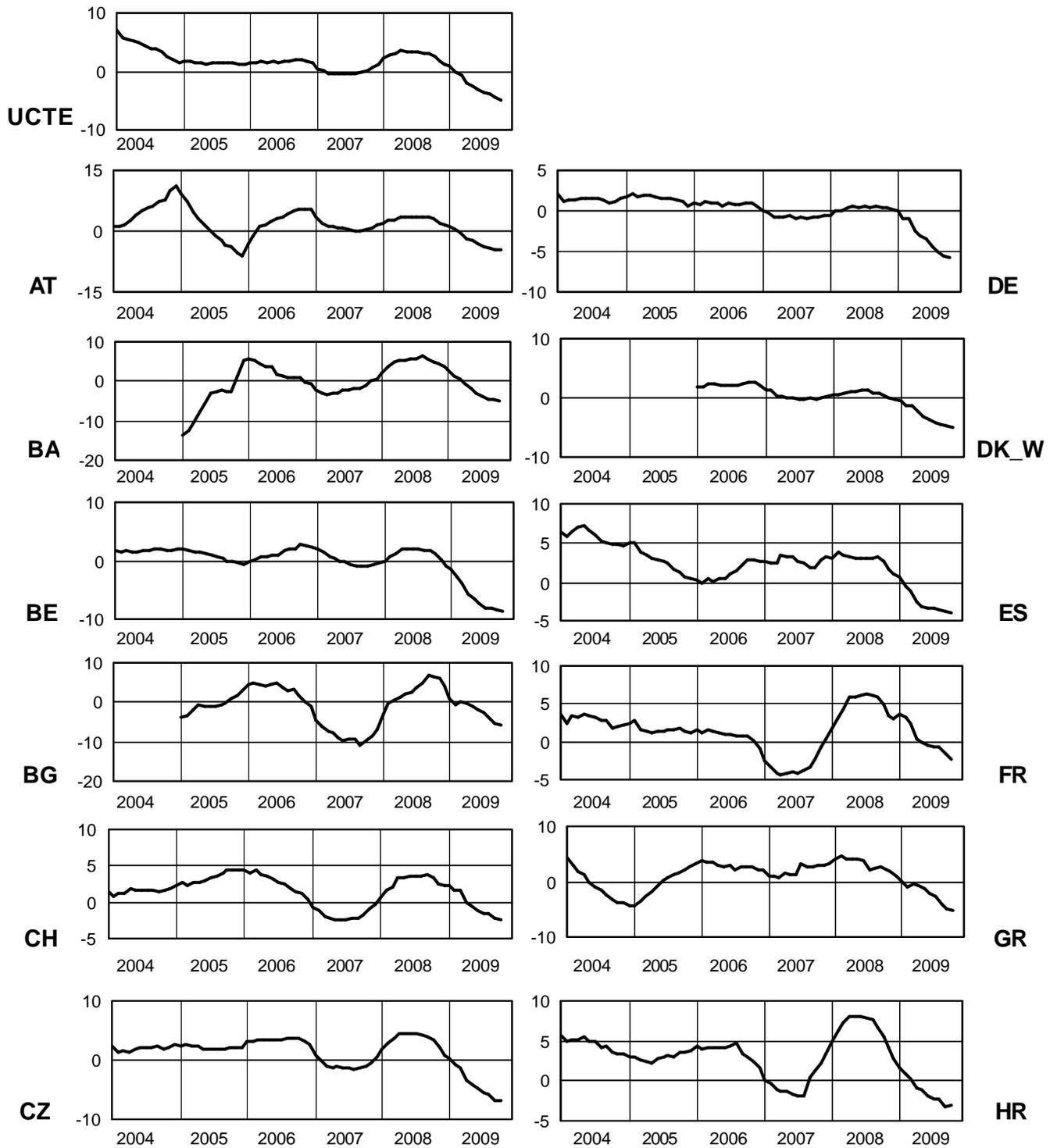


* CS consumption values until December 2006; from 2007 on ME and RS as separate countries

6

Variation of the last 12 months' consumption in %

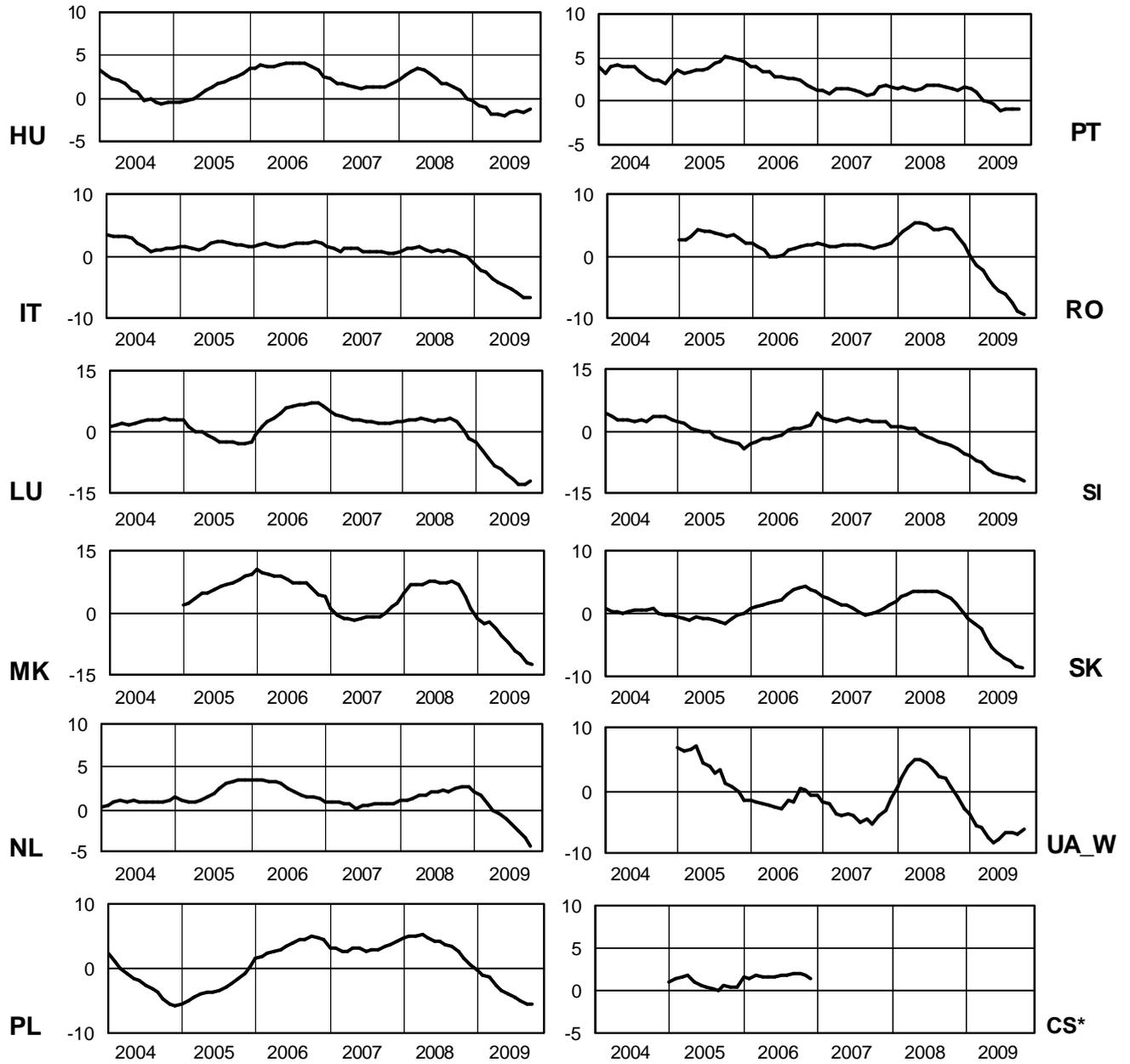
October 2009



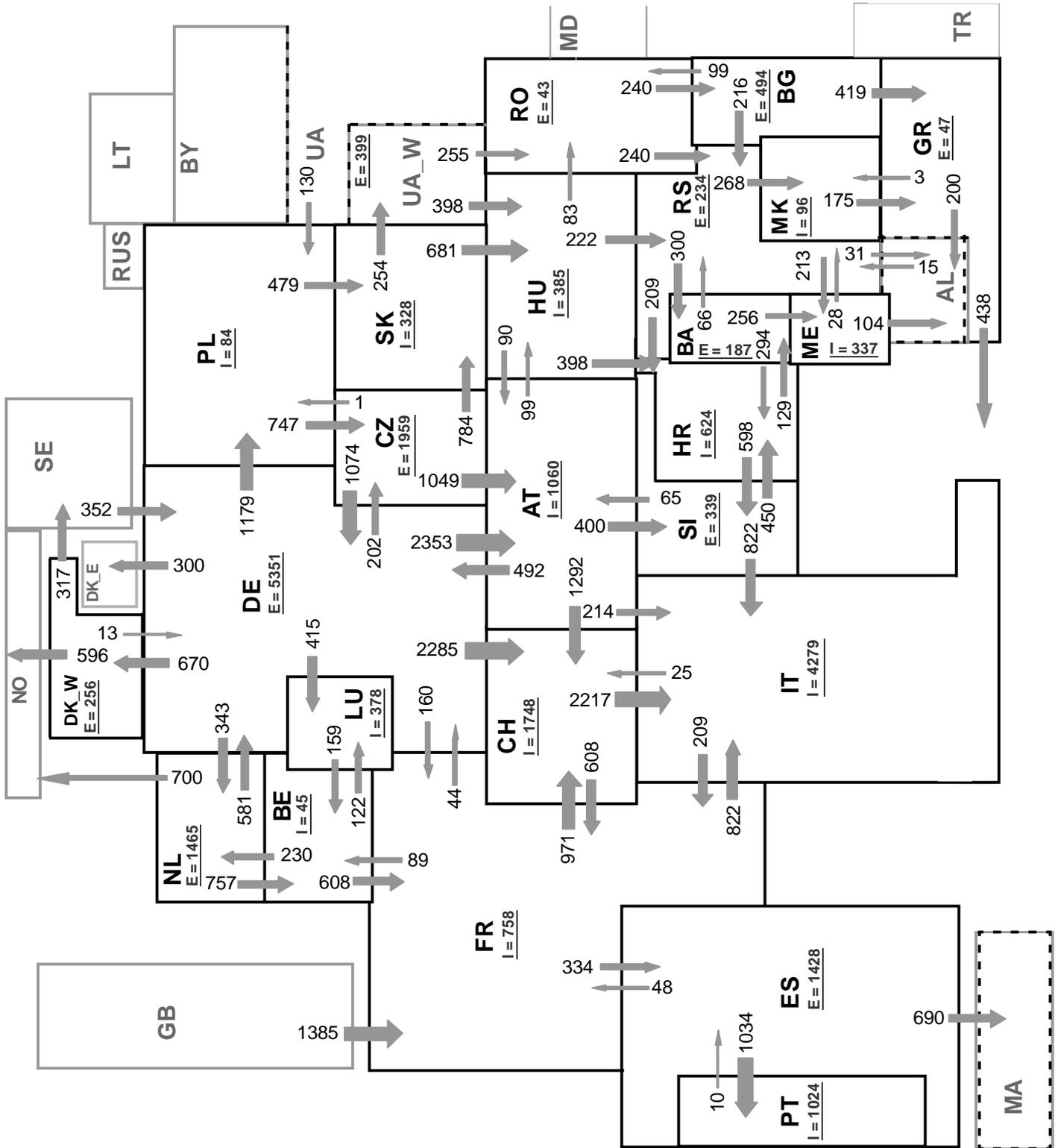
6

Variation of the last 12 months' consumption in %

October 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



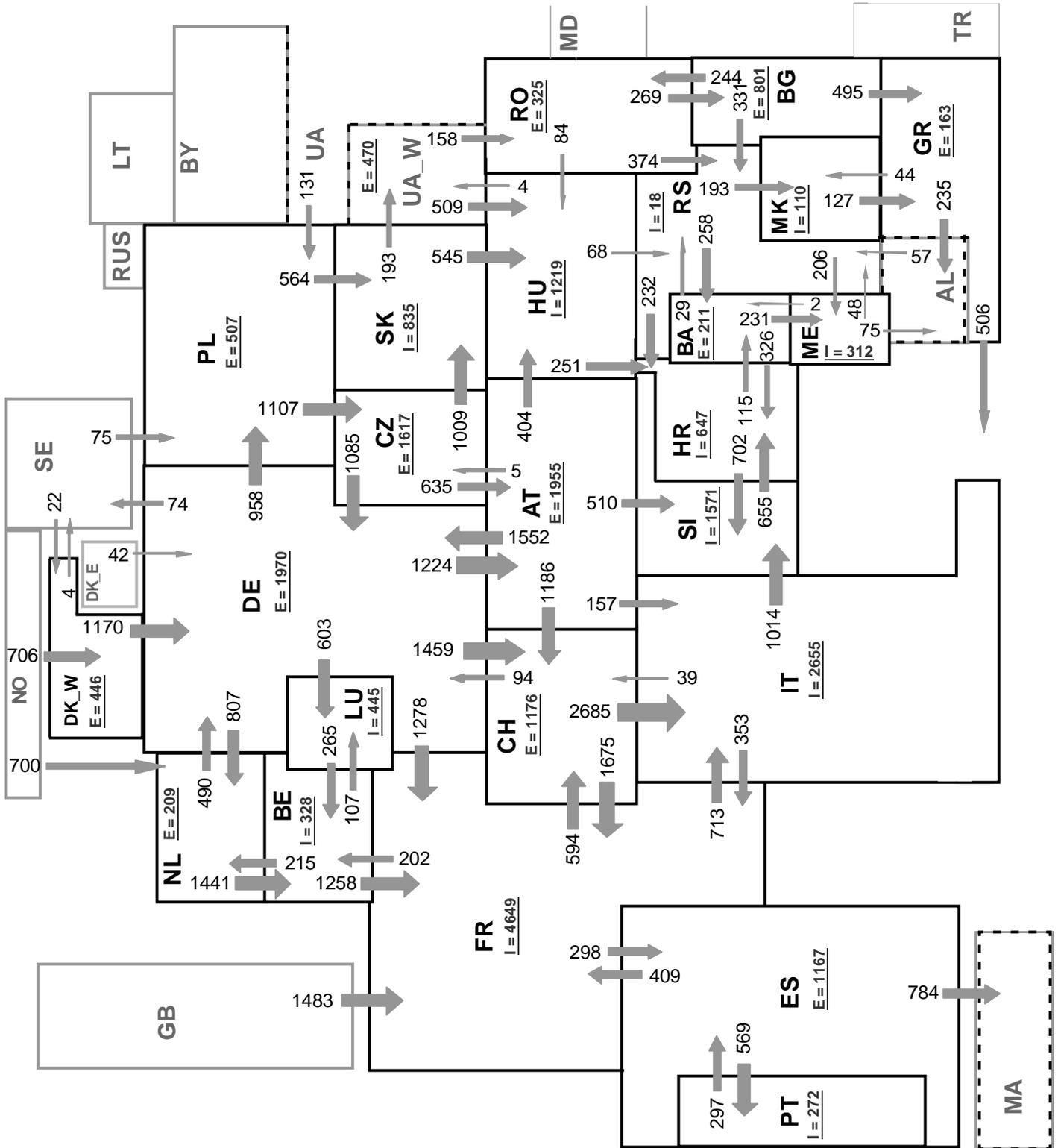
Sum of load flows in MW

UCTE = 30121 MW

Total = 35848 MW

Synchronous operation with UCTE region

I = Import balance
E = Export balance



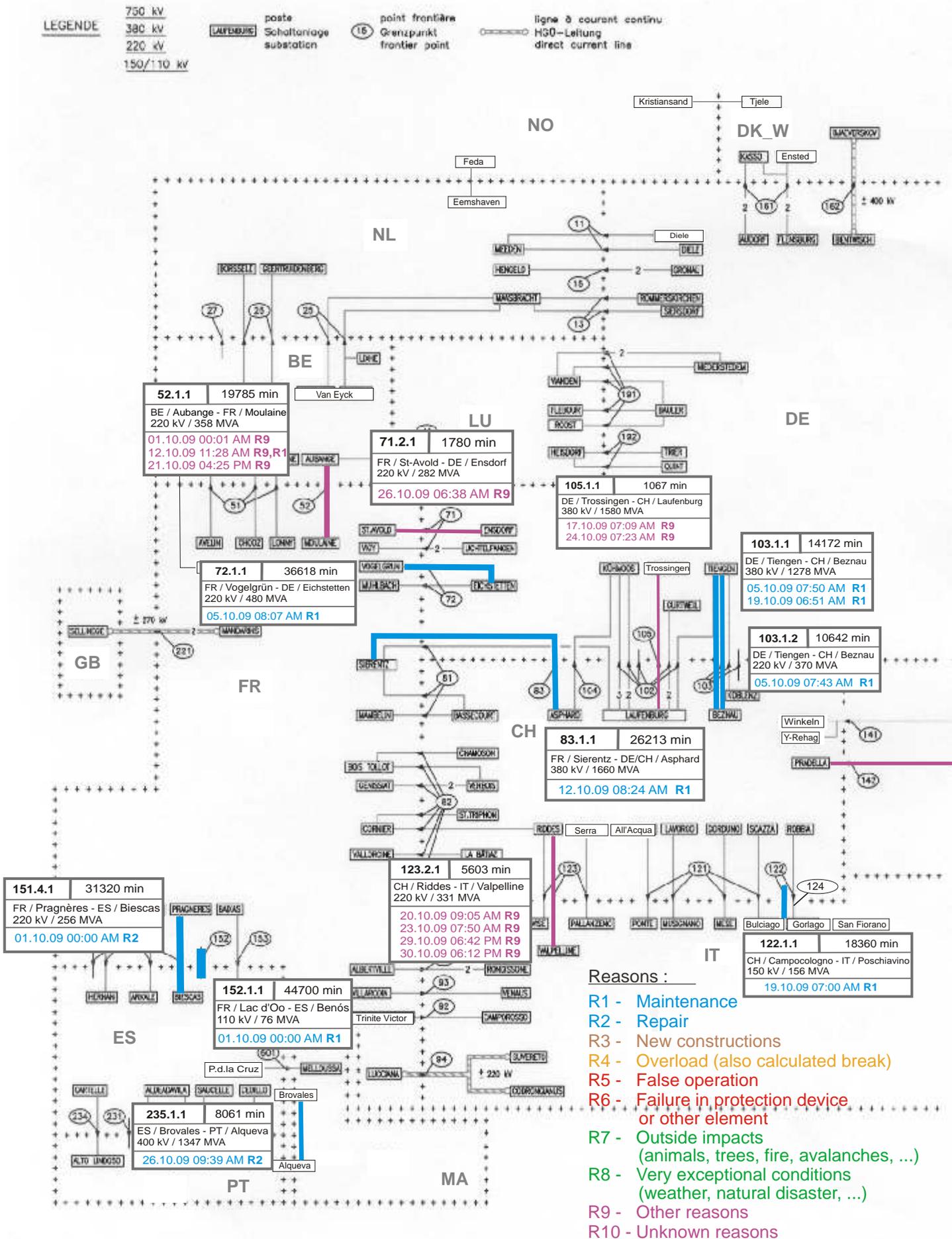
Sum of load flows in MW

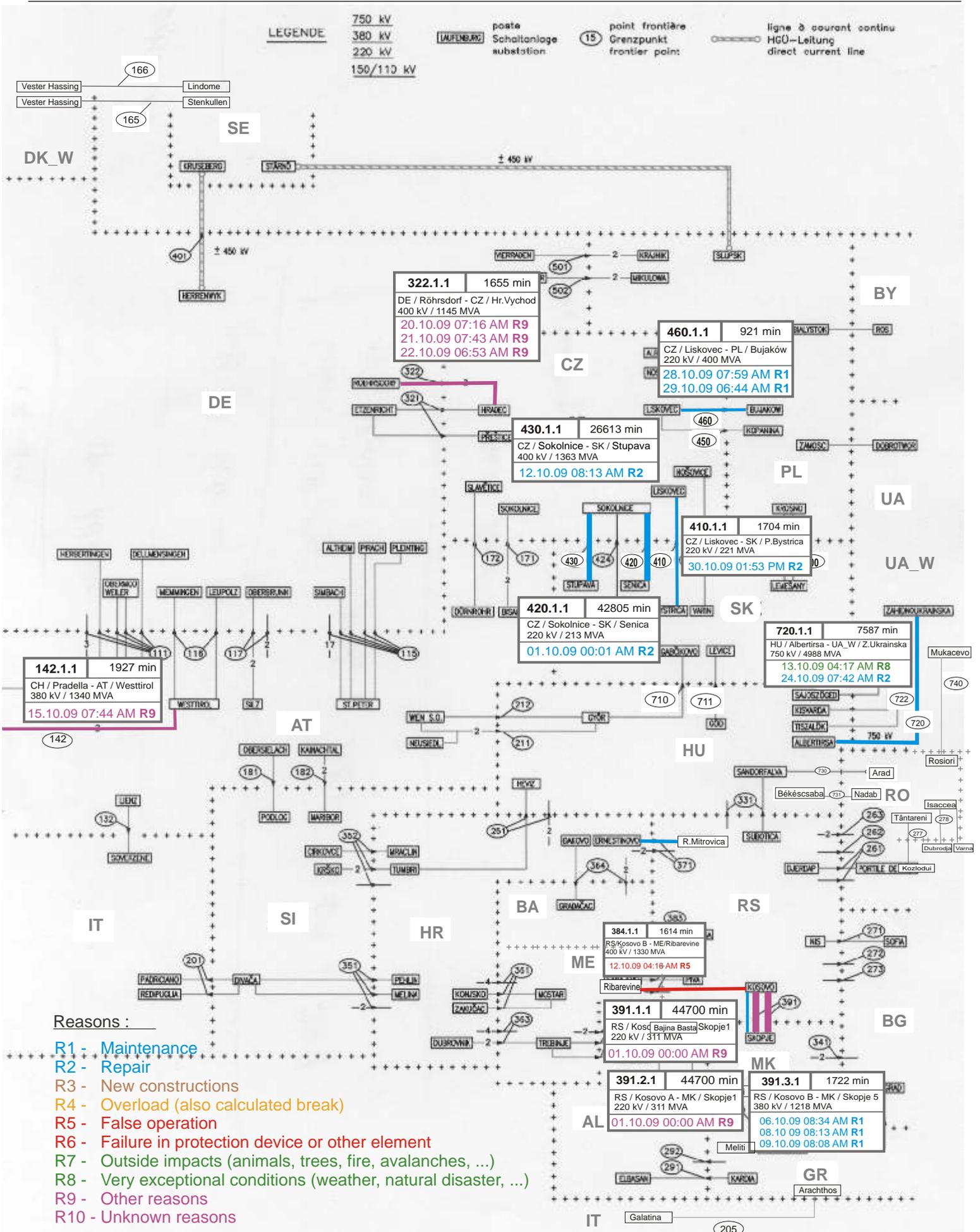
UCTE = 34766 MW

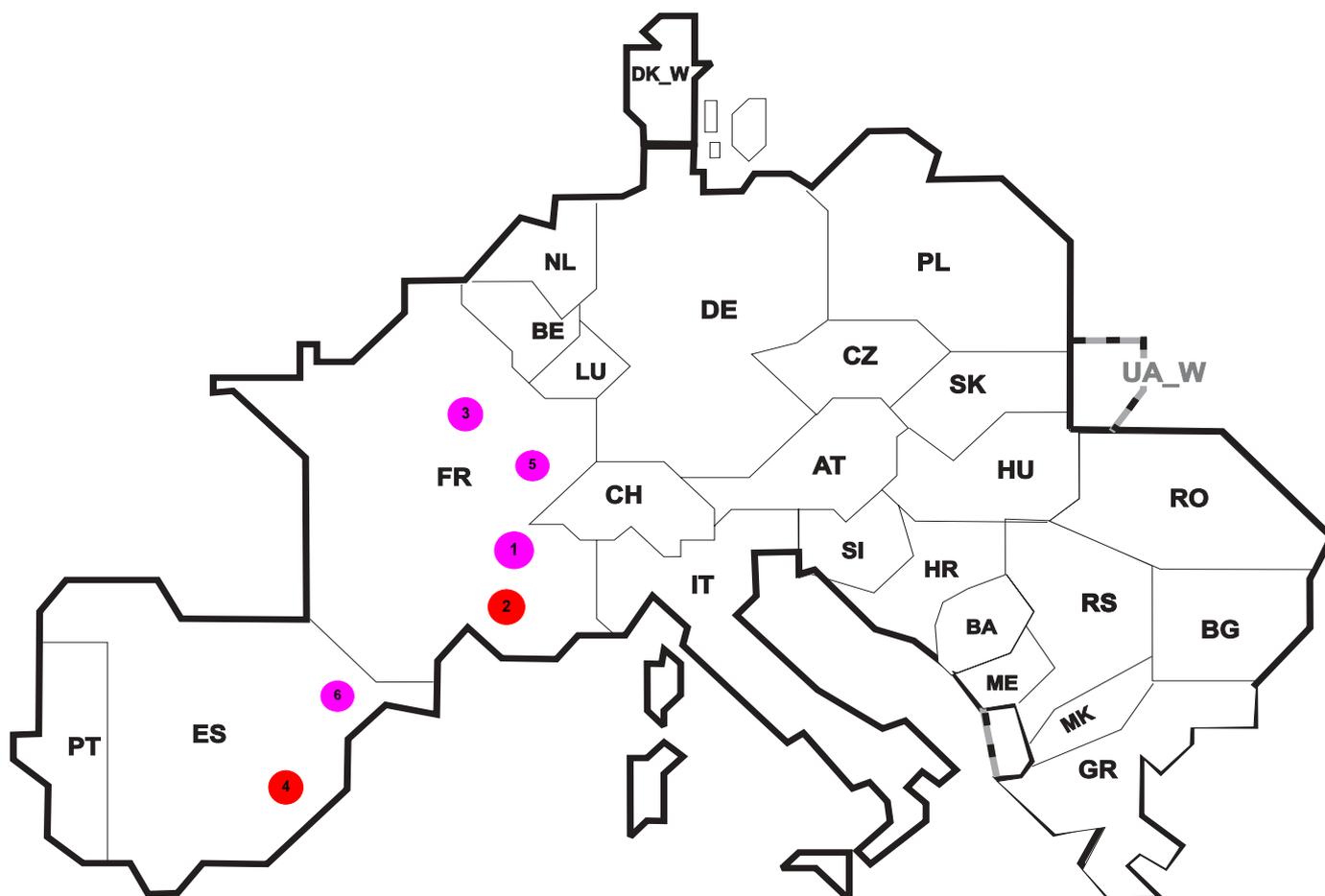
Total = 40018 MW

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 [MWh]	Total loss of power [MW]	Restoration time [min]	Equivalent time of interruption ¹
1	FR	Contamine	R9	74	1	4468	0,080
2	FR	Langlois	R6	65	115	34	0,071
3	FR	Montcroisette	R9	5	31	9	0,005
4	ES	Petrel	R5	2	284	4	0,049
5	FR	Cize	R9	23	70	19	0,025
6	ES	Sabon	R10	24	764	19	0,003

¹ (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	1509187	1556076	2358	446	1186	1778
BA	493741	358111	33	100	33	100
BE	622595	380476	815	918	751	932
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	1451309	1914001	1476	3269	2643	1526
CZ	2181483	833599	2800	768	2939	1293
DE	3151582	1784779	5007	1019	4535	2034
DK_W	36592	91510	0	321	54	0
ES	1260888	325911	1860	402	1468	300
FR	4642089	5177071	5213	5978	5250	9668
GR	238470	340735	435	408	598	414
HR	25294	498305	15	639	0	669
HU	844720	1387291	1395	1754	948	2174
IT	301237	3341305	234	4513	392	5075
ME	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
MK	62200	138500	49	58	49	161
NL	1321485	1081156	2075	624	1671	1472
PL	334841	184656	8	230	600	205
PT	40848	472138	0	1056	0	285
RO	229558	109537	151	118	476	148
RS	648804	596899	864	663	857	876
SI	814110	567739	996	684	1252	769
SK	602602	848865	813	1090	910	1679
UA_W	205453	120	402	0	470	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.

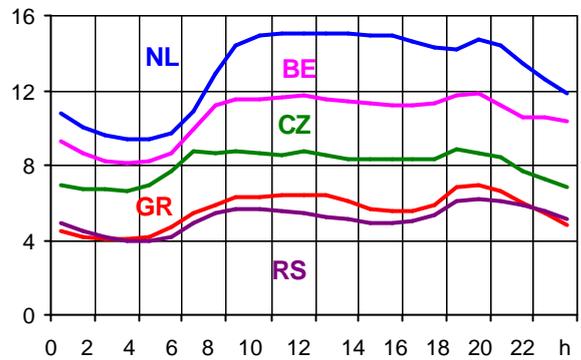
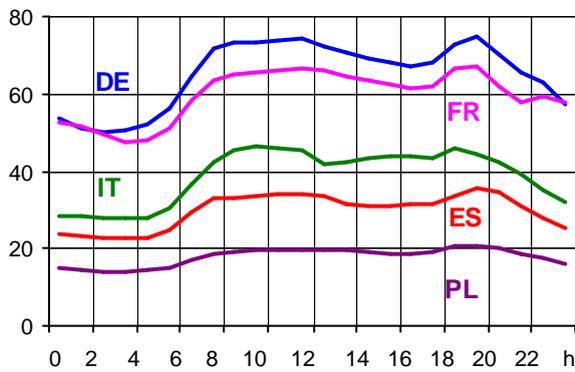
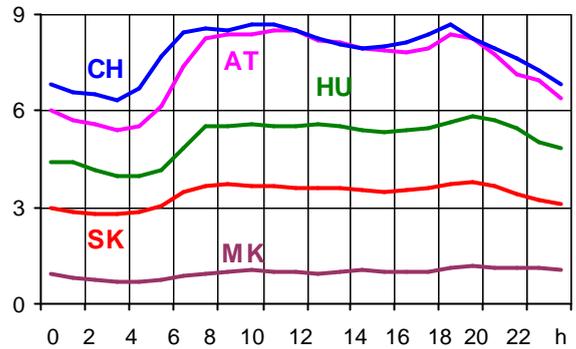
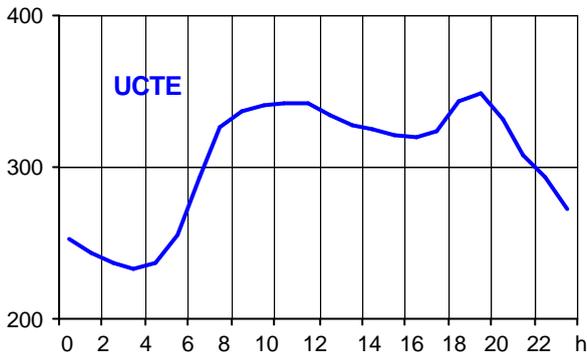
- Export Programs: Sum of all positive values of every hour of every border
 - Import Programs: Sum of all negative values of every hour of every border

- 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.

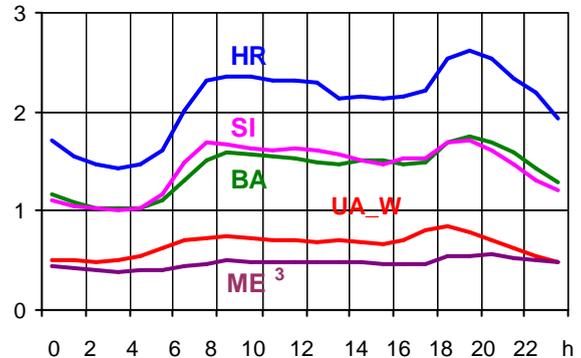
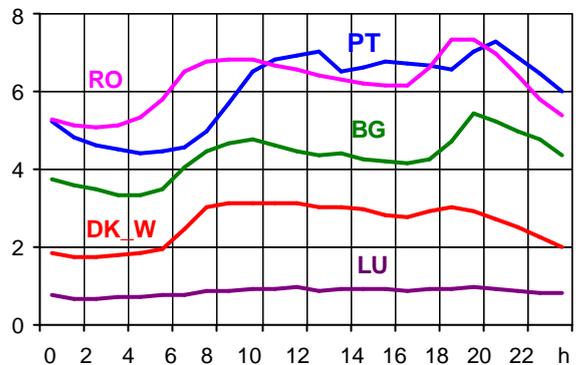
- Export Programs at 11:00: Sum of all positive values the third Wednesday from 10:00 to 11:00 a.m.
 - Import Programs at 11:00: Sum of all negative values the third Wednesday from 10:00 to 11:00 a.m.

Consumption hourly load curves on 21.10.2009 CET

Values in GW



	Highest load		Load representativity %
	MW	var.% ¹	
AT	8530	3,9	100
BA	1745	-0,5	100
BE ²	11854	-0,1	100
BG	5436	6,5	99
CH	8715	3,0	100
CZ	8823	3,3	100
DE	74632	-2,6	91
DK_W	3149	-3,2	100
ES	35724	-2,1	98
FR	66931	10,5	100
GR	6956	-5,9	100
HR	2627	4,6	100
HU	5861	-3,0	100
IT	46200	-1,7	100
LU	975	7,6	100
ME ³	556	n.a.	100
MK	1177	3,0	100
NL	15085	-1,6	100
PL ⁴	20709	2,0	100
PT	7275	0,1	97
RO	7326	-0,9	100
RS	6199	14,3	100
SI	1714	-8,0	100
SK	3764	-0,5	100
UCTE	348564	1,0	
UA_W	846	12,4	100



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 Highest load value as of October 2008

⁴ Operational data

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