



# July 2008

Monthly provisional values

union for the co-ordination of transmission of electricity



<b>Table of contents</b>		Page
1	Electricity supply situation of the countries	2
2	Physical energy flows	3
3	Monthly consumption	4
4	Monthly consumption variation	6
5	Consumption of the last 12 months	8
6	Variation of the last 12 months' consumption	10
7	Load flows (night)	12
8	Load flows (day)	13
9	Unavailability of international tie lines ( major events )	14
10	Network reliability ( major events )	16
11	Scheduled exchanges	17
12	Load on the 3 <sup>rd</sup> Wednesday	18

#### **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 load values on the 3rd Wednesday are gross values

## 1

## Electricity supply situation of the countries

July 2008

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	1282	4240	0	0	711	6233	-582	203	5448	2,0	68783	3,6
BA	0	853	225	0	0	0	1078	-150	0	928	4,4	11592	5,8
BE <sup>2</sup>	3625	2590	126	301	0	0	6642 <sup>1</sup>	277	150	6769	-1,3	91240	2,3
BG	979	1943	269	0	0	0	3191	-561	52	2578	9,2	34437	3,5
CH	2295	179	4356	97	2	0	6927 <sup>1</sup>	-1742	330	4855	2,6	64442	3,7
CZ	2472	3202	134	34	17	0	5842 <sup>1</sup>	-987	32	4823	3,3	66112	4,4
DE	10341	28749	2251	4493	2256	0	45834 <sup>1</sup>	1182	666	46350	2,5	559668	0,6
DK_W	0	888	1	399	0	0	1288 <sup>1</sup>	314	0	1602	-0,1	21895	1,3
ES	4522	15654	2386	2361	2090	0	24923	-908	241	23774	1,8	271850	3,3
FR	31838	2555	6085	654	338	0	41132 <sup>1</sup>	-4793	269	36070	3,2	495284	6,4
GR	0	4754	450	146	131	0	5350 <sup>1</sup>	574	94	5830	-0,4	56355	2,1
HR	0	583	346	3	0	0	932 <sup>1</sup>	606	25	1513	1,9	17967	7,9
HU	1013	1879	0	0	0	0	2892 <sup>1</sup>	494	0	3386	-3,3	41669	2,2
IT	0	22029	5272	1128	0	0	28429	3688	603	31514	0,3	339499	0,3
LU	0	57	76	13	4	0	146	533	101	578	4,1	6919	3,0
ME	0	107	38	0	0	0	145	230	0	375	n.a.	4657	n.a.
MK	0	341	51	0	0	0	392	281	0	673	6,0	8860	7,3
NL	354	6572	0	527	258	0	7453 <sup>1</sup>	1790	0	9243	0,1	117122	0,6
PL <sup>3</sup>	0	11051	202	46	34	0	11299 <sup>1</sup>	-10	58	11231	2,7	144375	4,2
PT	0	2657	577	554	368	0	3788 <sup>1</sup>	729	44	4473	3,9	52373	2,6
RO	885	2547	1471	0	0	0	4903 <sup>1</sup>	-367	9	4527	-0,3	55560	4,3
RS	0	2331	707	0	0	0	3038	189	117	3110	10,9	38371	n.a.
SI	508	406	380	0	0	0	1294 <sup>1</sup>	-240	0	1054	-6,0	13127	-1,8
SK	1163	487	412	26	0	0	2088 <sup>1</sup>	71	18	2141	1,9	28027	3,5
<b>UCTE</b>	<b>59995</b>	<b>113696</b>	<b>30055</b>	<b>10782</b>	<b>5498</b>	<b>711</b>	<b>215239<sup>1</sup></b>	<b>618</b>	<b>3012</b>	<b>212845</b>	<b>1,9</b>	<b>2610184</b>	<b>3,5</b>
UA_W	0	665	18	0	0	0	683	-404	0	279	-11,7	4293	3,6

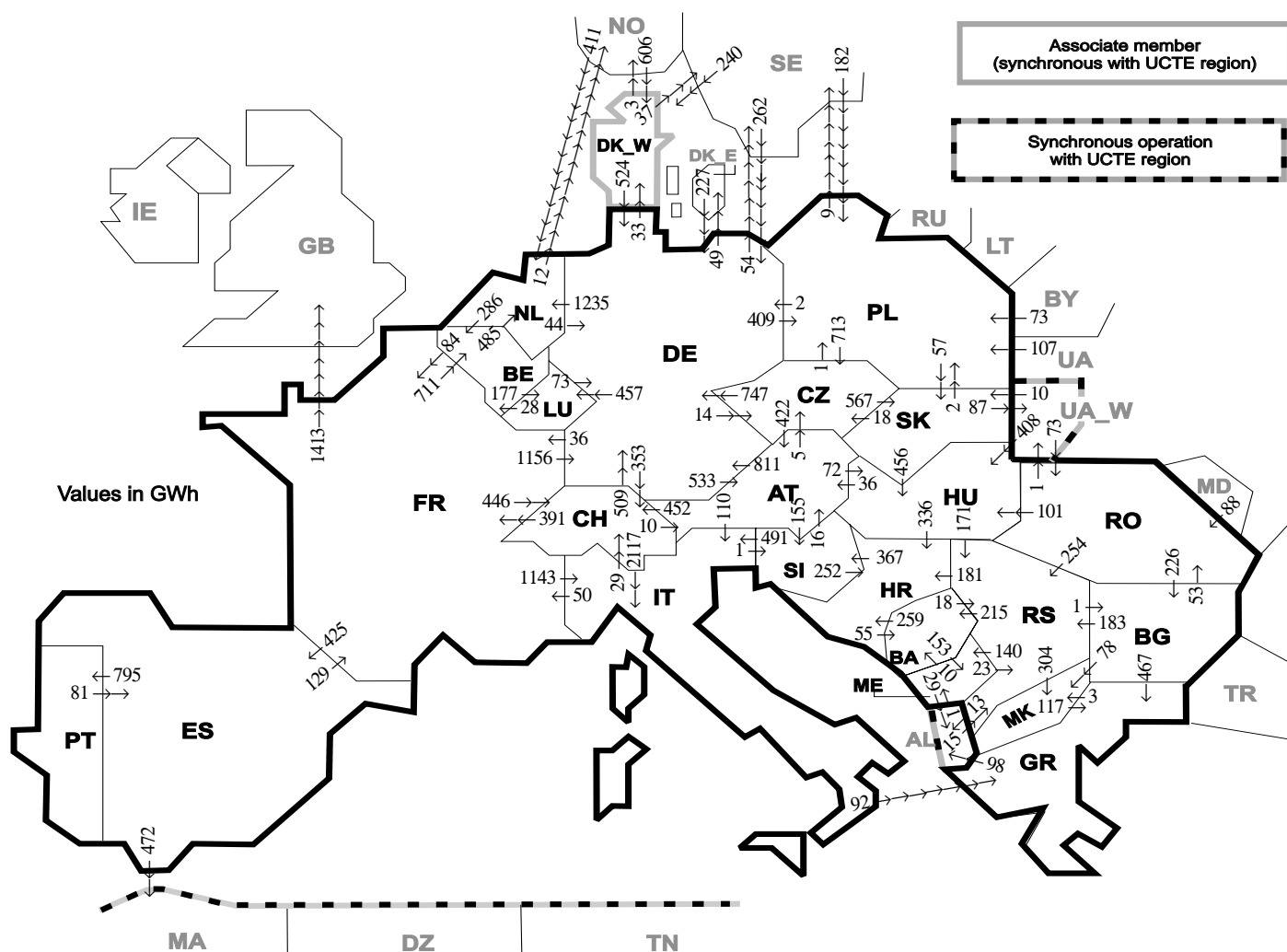
<sup>1</sup> Including deliveries from industry

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

<sup>3</sup> 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	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	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
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	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	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_	Other III <sup>1</sup>	Sum export	
AT	-	-	-	-	452	5	811	-	-	-	-	-	72	110	-	-	-	-	-	-	-	-	155	-	-	-	1605	
BA	-	-	-	-	-	-	-	-	-	-	-	259	-	-	-	153	-	-	-	-	-	18	-	-	-	-	430	
BE	-	-	-	-	-	-	-	-	-	84	-	-	-	177	-	-	-	485	-	-	-	-	-	-	-	-	746	
BG	-	-	-	-	-	-	-	-	-	-	467	-	-	-	-	78	-	-	-	-	53	183	-	-	-	0	781	
CH	10	-	-	-	-	-	509	-	-	391	-	-	-	2117	-	-	-	-	-	-	-	-	-	-	-	-	3027	
CZ	422	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	567	-	-	1737	
DE	533	-	-	-	353	14	-	33	36	-	-	-	-	457	-	-	-	1235	409	-	-	-	-	-	-	103	3173	
DK_W	-	-	-	-	-	-	-	524	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	564	
ES	-	-	-	-	-	-	-	-	-	129	-	-	-	-	-	-	-	-	-	795	-	-	-	-	-	-	472	1396
FR	-	-	711	-	446	-	1156	-	425	-	-	-	-	1143	-	-	-	-	-	-	-	-	-	-	-	-	1413	5294
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	0	-	-	3	-	-	-	-	-	-	-	-	-	98	101
HR	-	55	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	0	367	-	-	-	-	422	
HU	36	-	-	-	-	-	-	-	-	-	-	336	-	-	-	-	-	-	-	-	0	171	0	0	-	-	543	
IT	0	-	-	-	29	-	-	-	-	50	92	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	172	
LU	-	-	28	-	-	-	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	101	
ME	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	29	62	
MK	-	-	-	0	-	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-	-	0	-	-	-	117	
NL	-	-	286	-	-	-	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	342
PL	-	-	-	-	-	713	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	-	-	781	
PT	-	-	-	-	-	-	-	-	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	
RO	-	-	-	226	-	-	-	-	-	-	-	-	101	-	-	-	-	-	-	-	-	-	-	-	1	0	582	
RS	-	215	-	1	-	-	-	-	-	-	-	181	0	-	140	304	-	-	-	-	0	-	-	-	-	-	13	854
SI	16	-	-	-	-	-	-	-	-	-	252	491	-	-	-	-	-	-	-	-	-	-	-	-	-	-	759	
SK	-	-	-	-	-	18	-	-	-	-	-	-	456	-	-	-	-	-	2	-	-	-	-	-	87	-	563	
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	408	-	-	-	-	-	-	-	73	-	-	10	-	-	491	
Other III <sup>1</sup>	-	-	-	0	-	-	489	846	0	0	0	-	-	-	-	1	-	411	362	-	88	15	-	-	-	-	2212	
<b>Sum imp</b>	<b>1017</b>	<b>280</b>	<b>1025</b>	<b>227</b>	<b>1280</b>	<b>750</b>	<b>4355</b>	<b>879</b>	<b>506</b>	<b>690</b>	<b>676</b>	<b>1028</b>	<b>1037</b>	<b>3861</b>	<b>634</b>	<b>294</b>	<b>385</b>	<b>2131</b>	<b>774</b>	<b>795</b>	<b>214</b>	<b>664</b>	<b>523</b>	<b>634</b>	<b>88</b>	<b>2189</b>	<b>26936</b>	

Sum of physical energy flows between UCTE countries = 21956GWh Total physical energy flows = 26936GWh

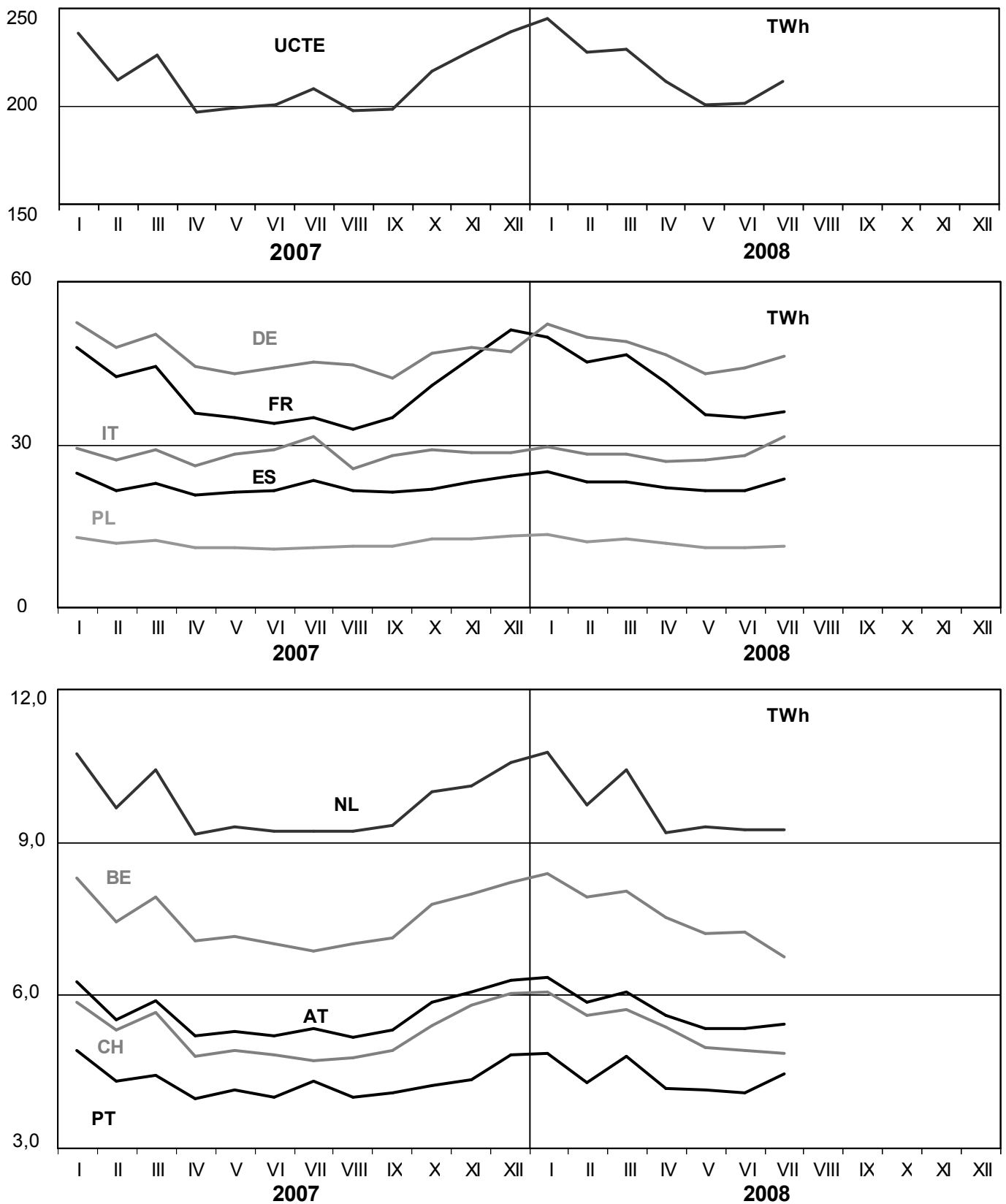
<sup>1</sup> Other III: Albania, Belarus, Denmark East, Great Britain, Morocco, Republic of Moldavia, Norway, Sweden, Republic of Turkey and Ukraine

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

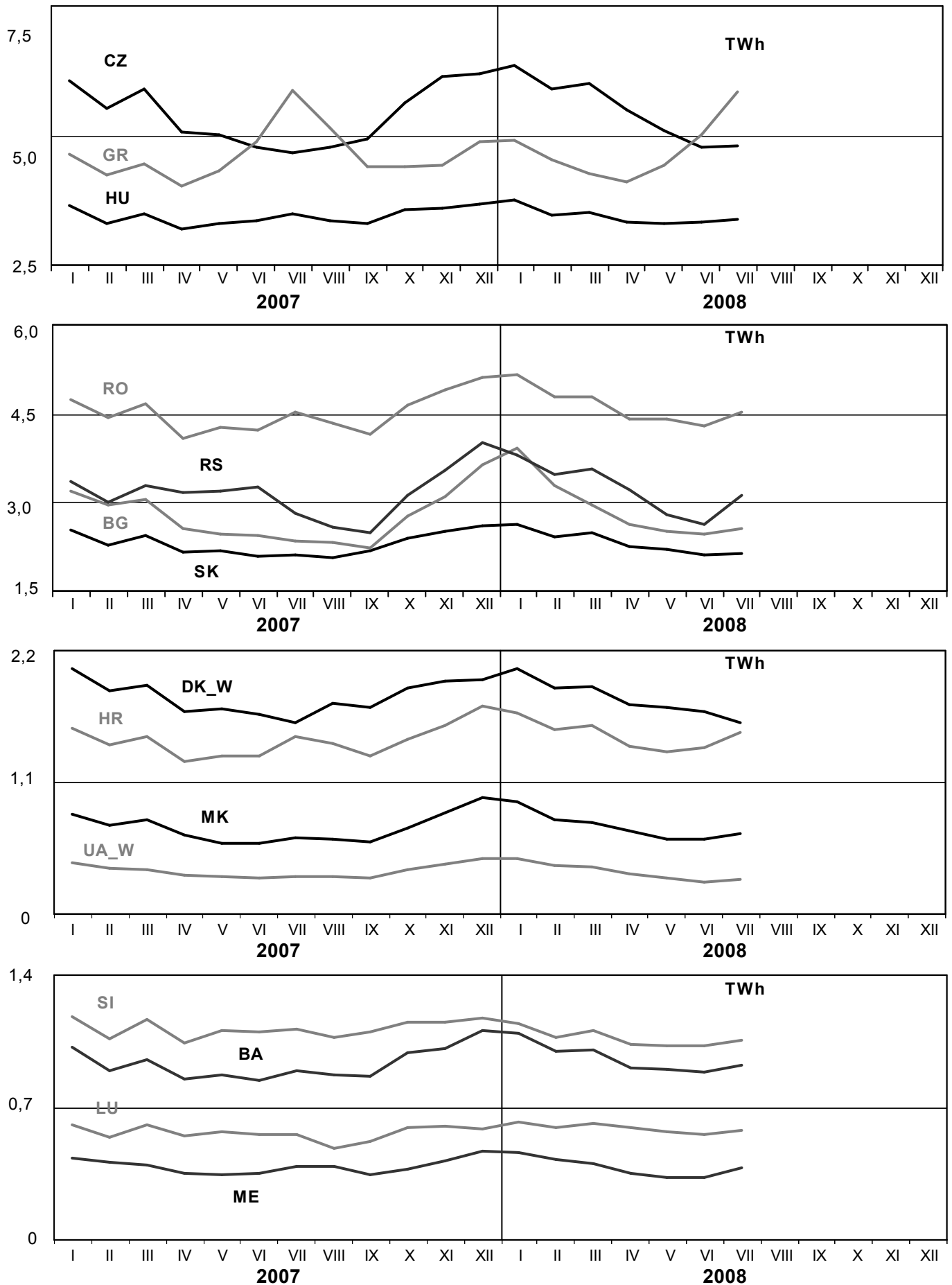
July 2008



# 3

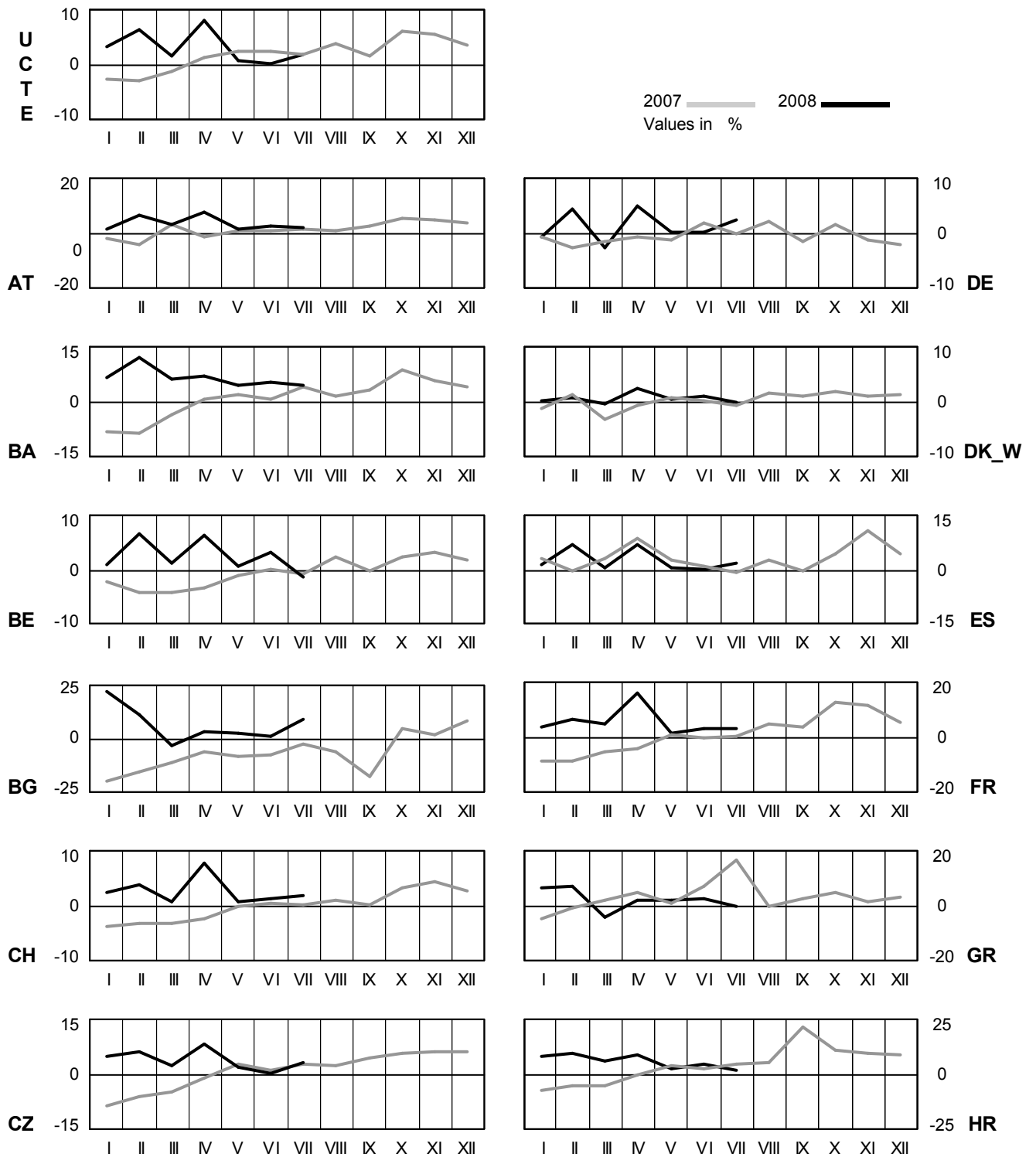
## Monthly consumption

July 2008



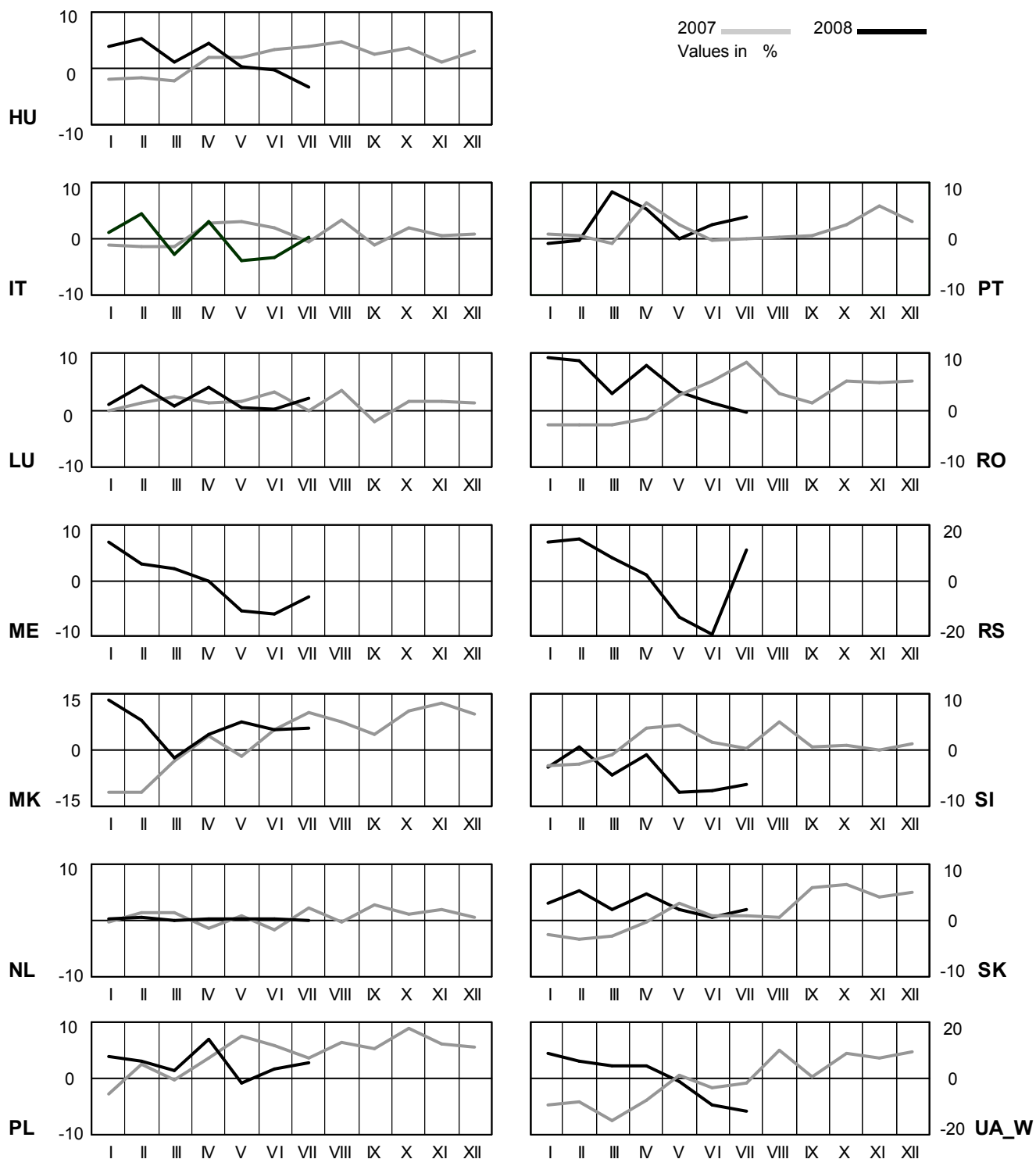
# 4 Monthly consumption variation

July 2008



# 4 Monthly consumption variation

July 2008

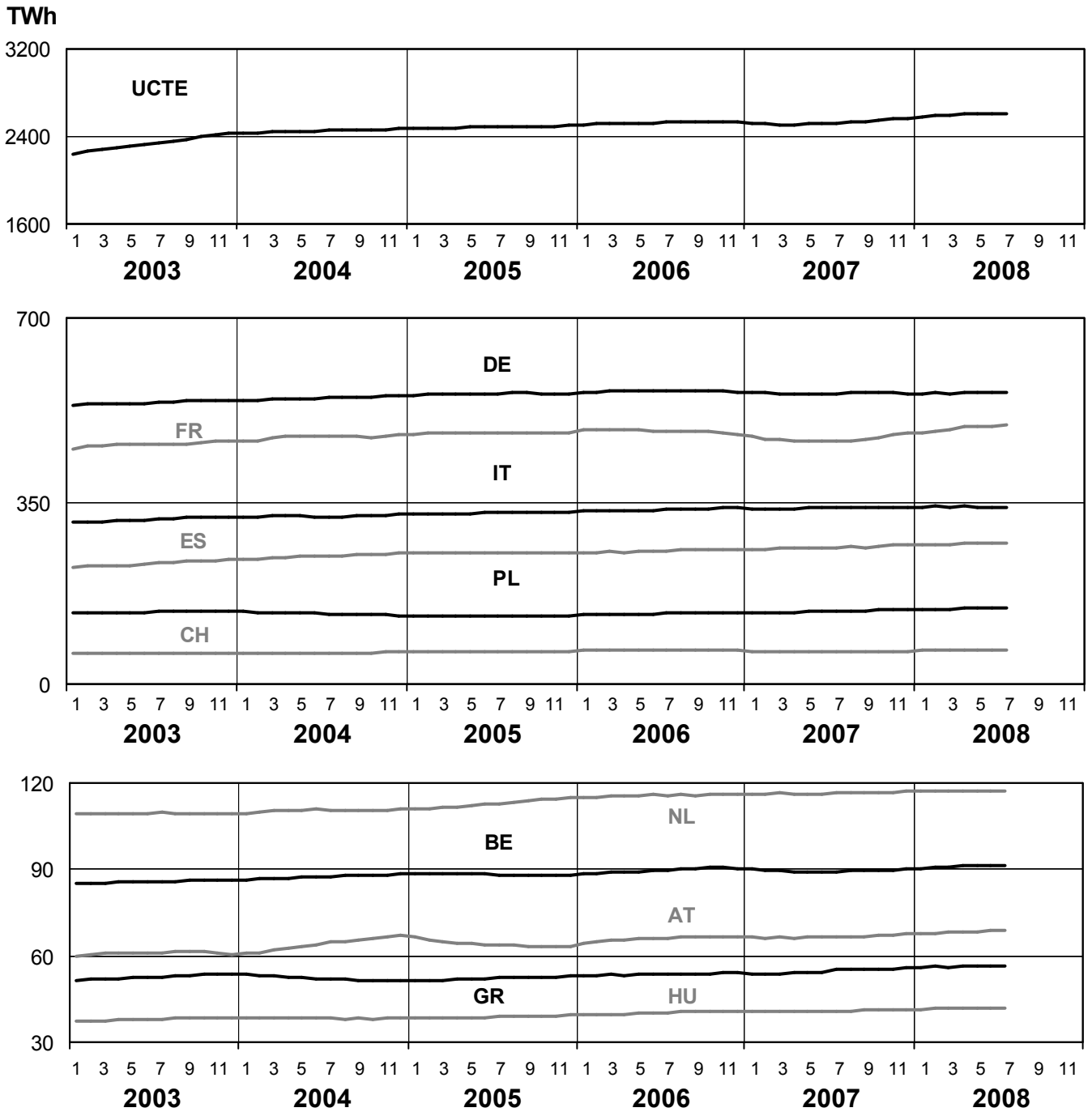




# 5

## Consumption of the last 12 months

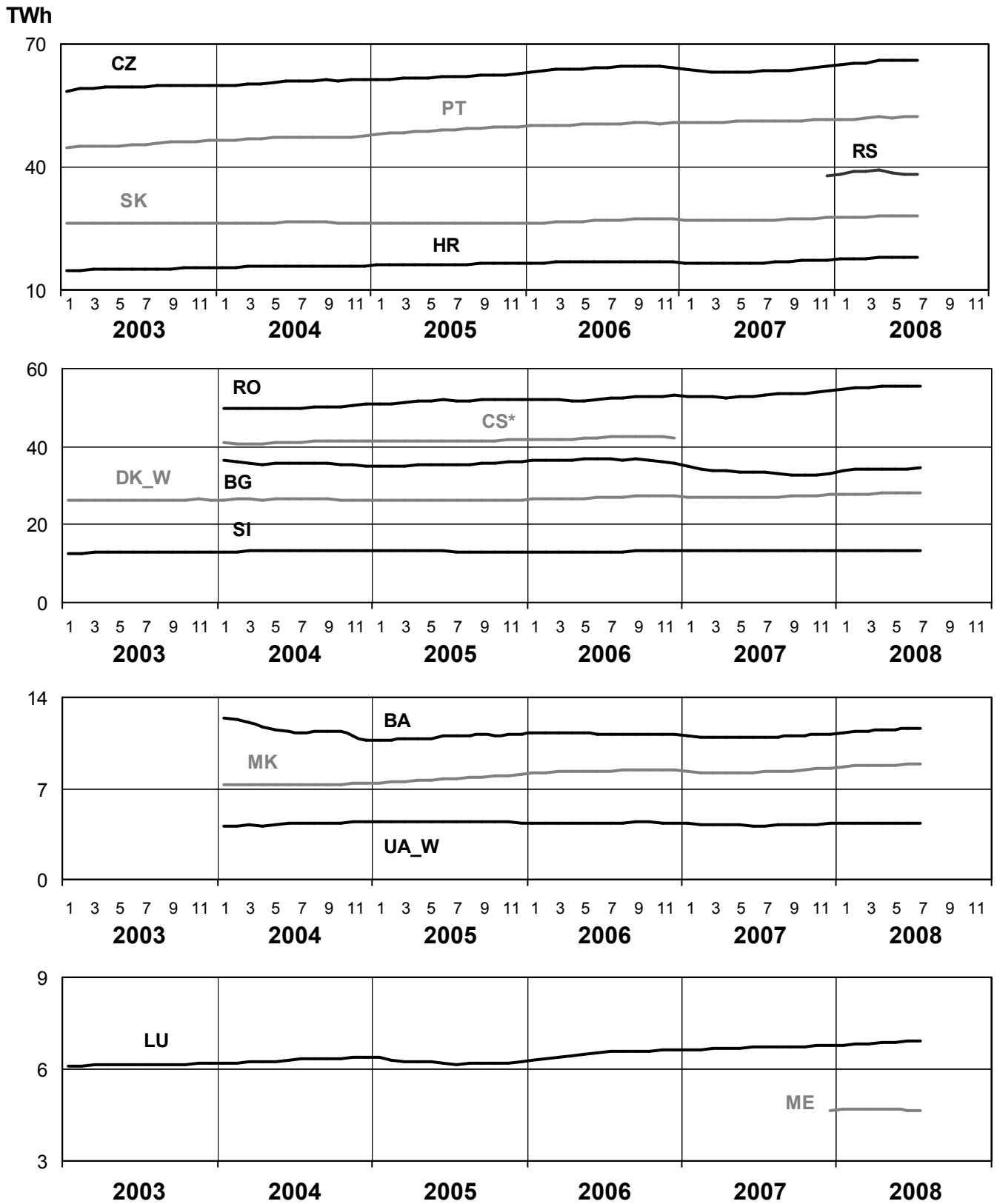
July 2008



# 5

## Consumption of the last 12 months

July 2008

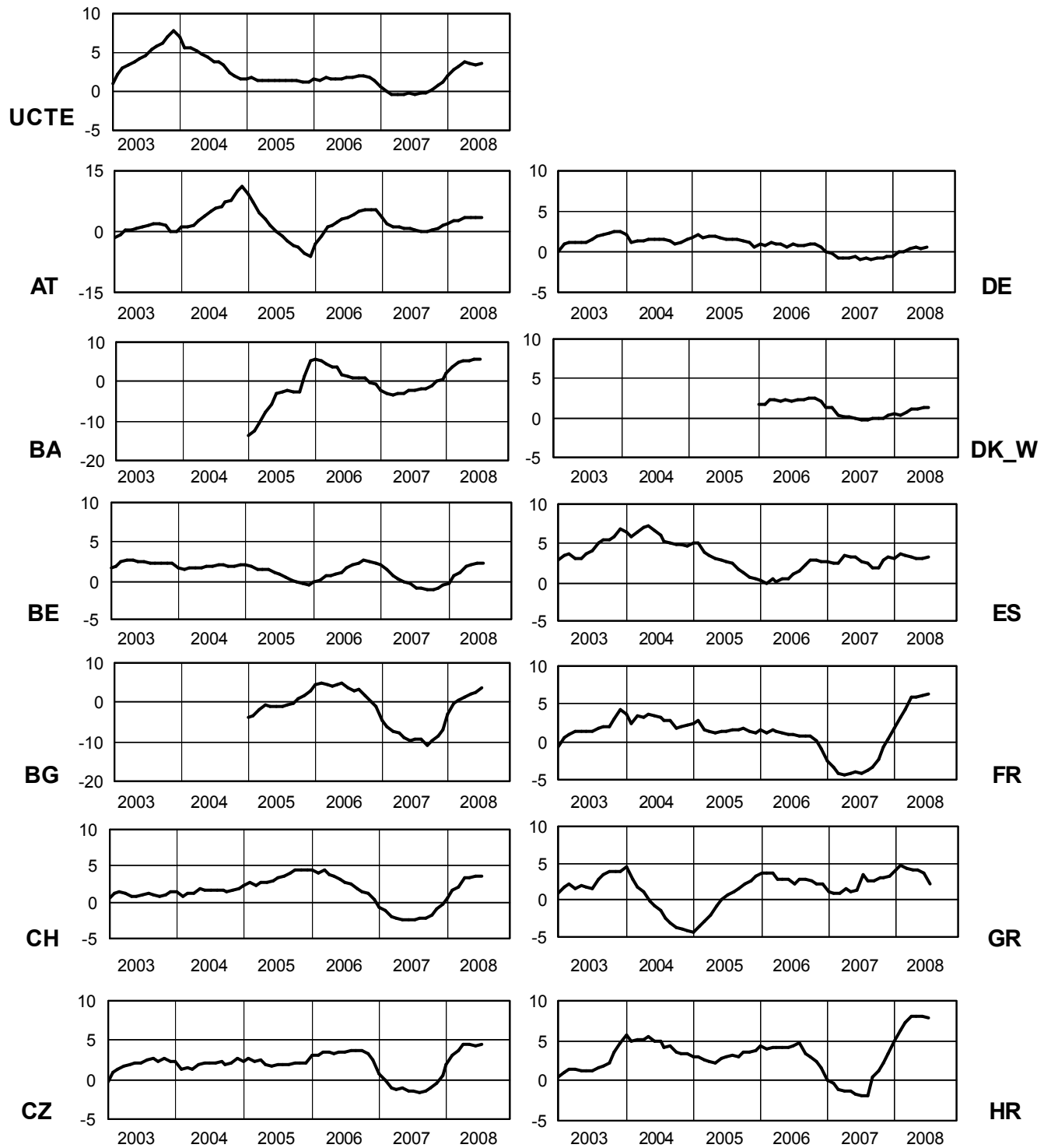


\* CS consumption values until December 2006; from 2007 on ME and RS as separate countries

# 6

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

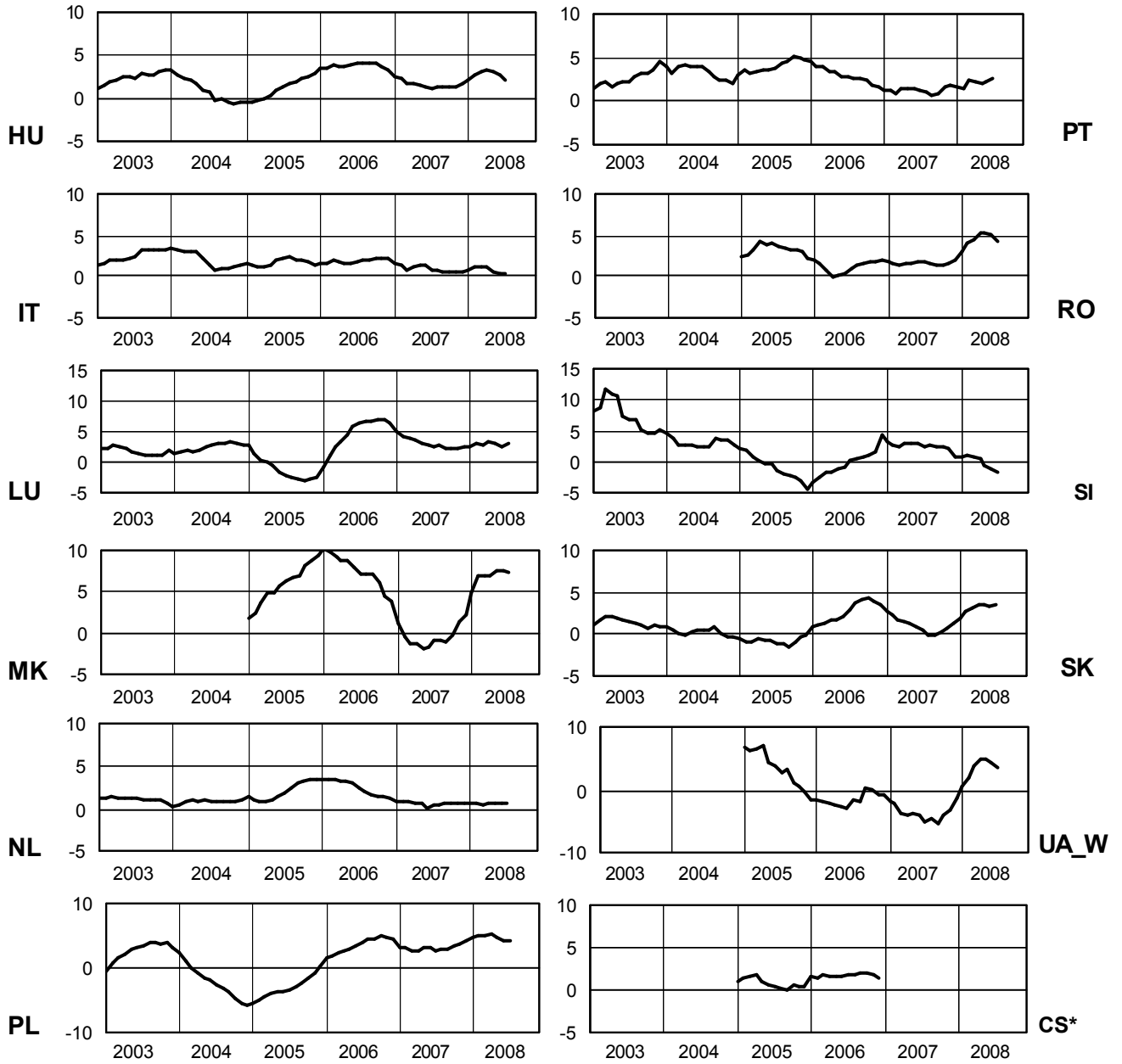
July 2008



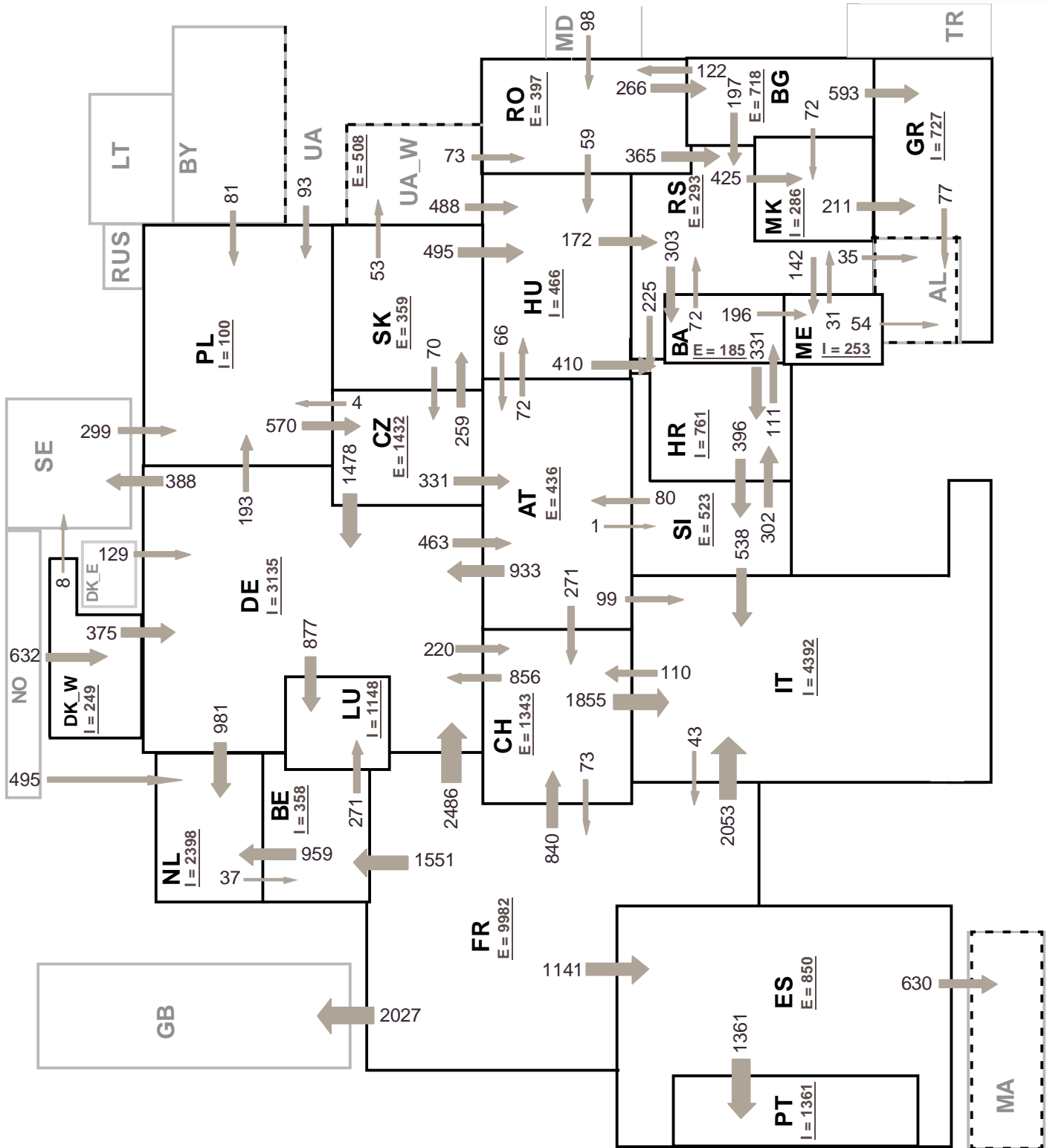
# 6

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

July 2008



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



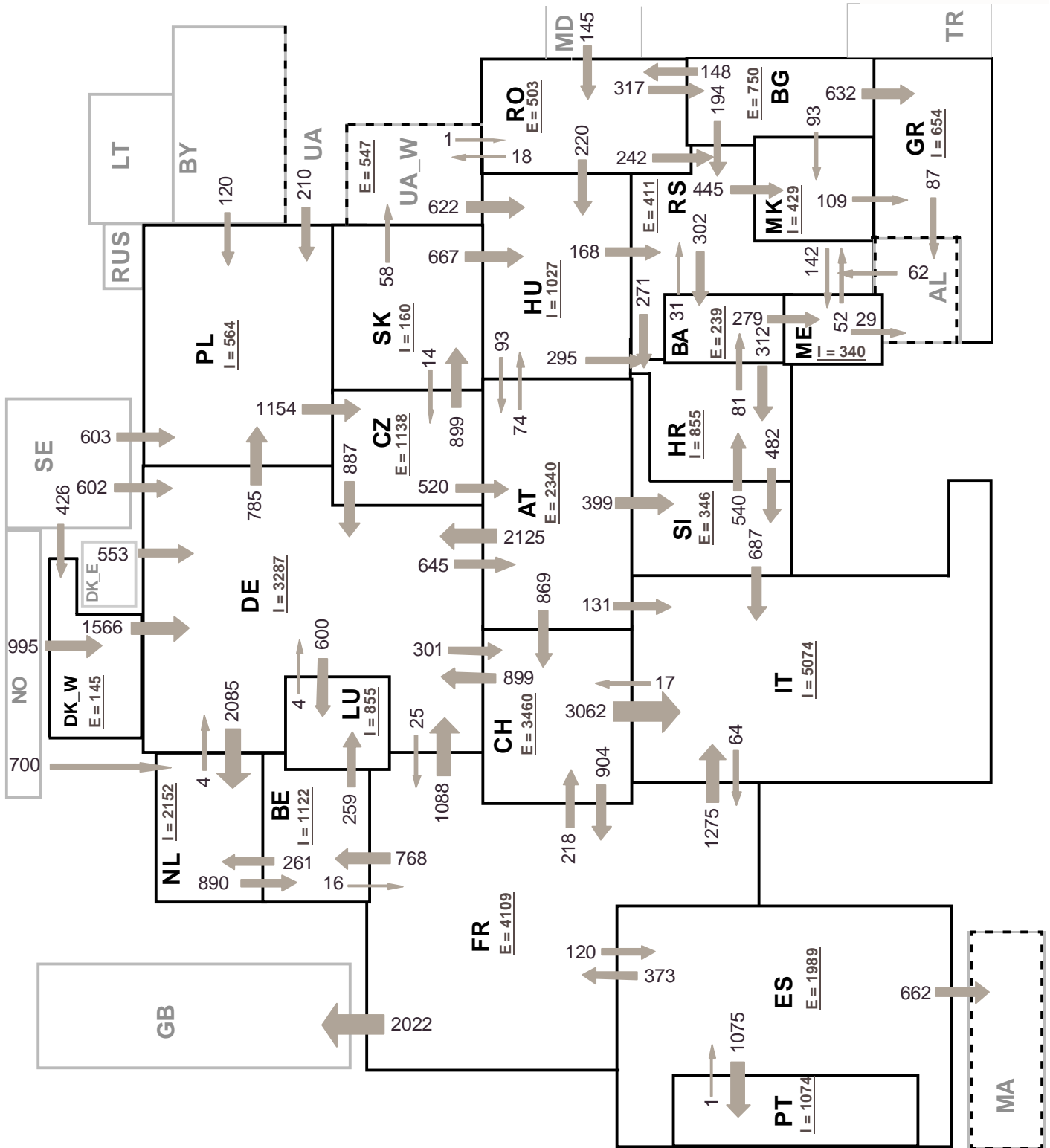
Sum of load flows in MW

UCTE = 27013 MW

Total = 32673 MW

Synchronous operation with UCTE region

I = Import balance  
E = Export balance



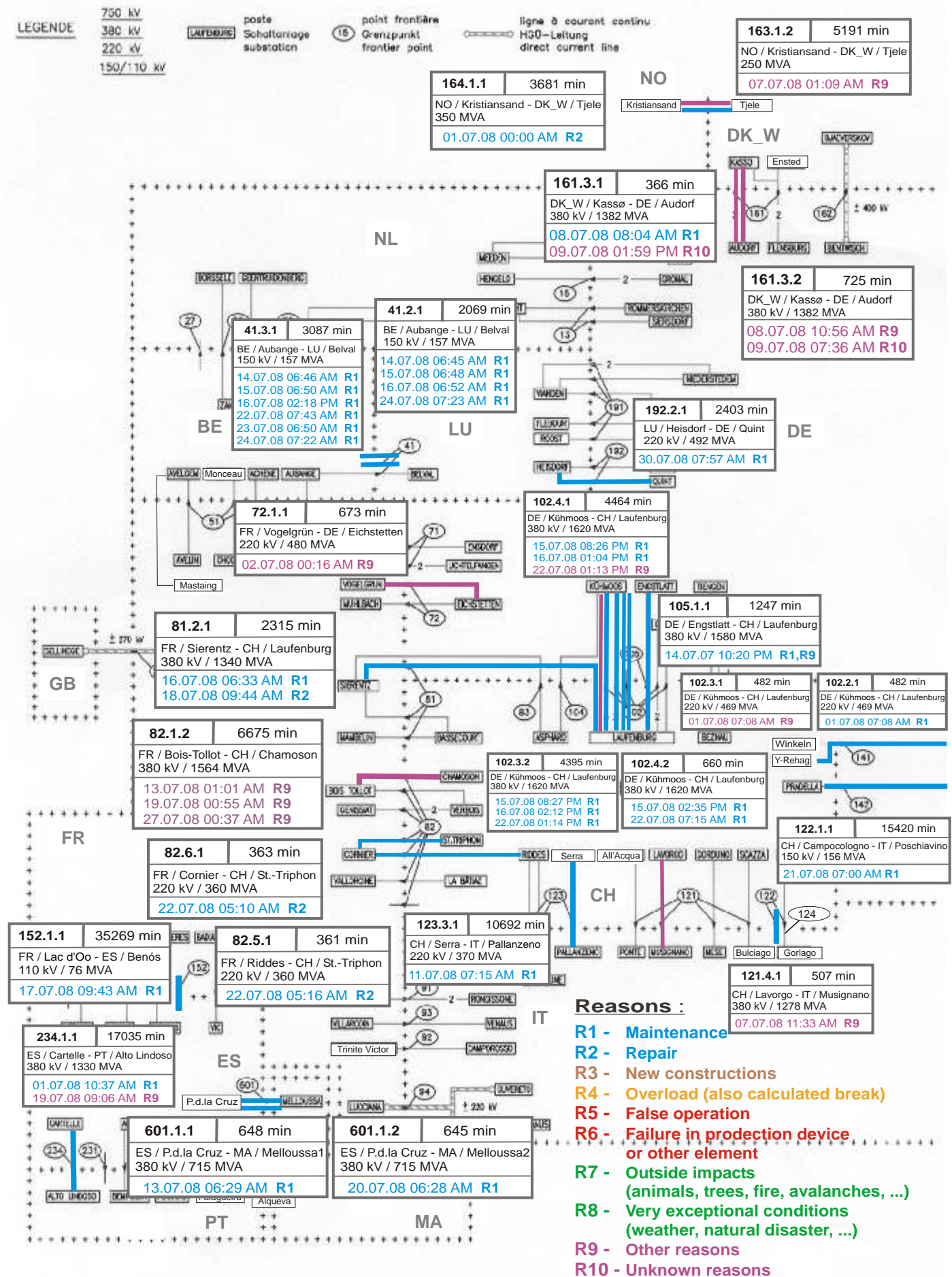
Sum of load flows in MW

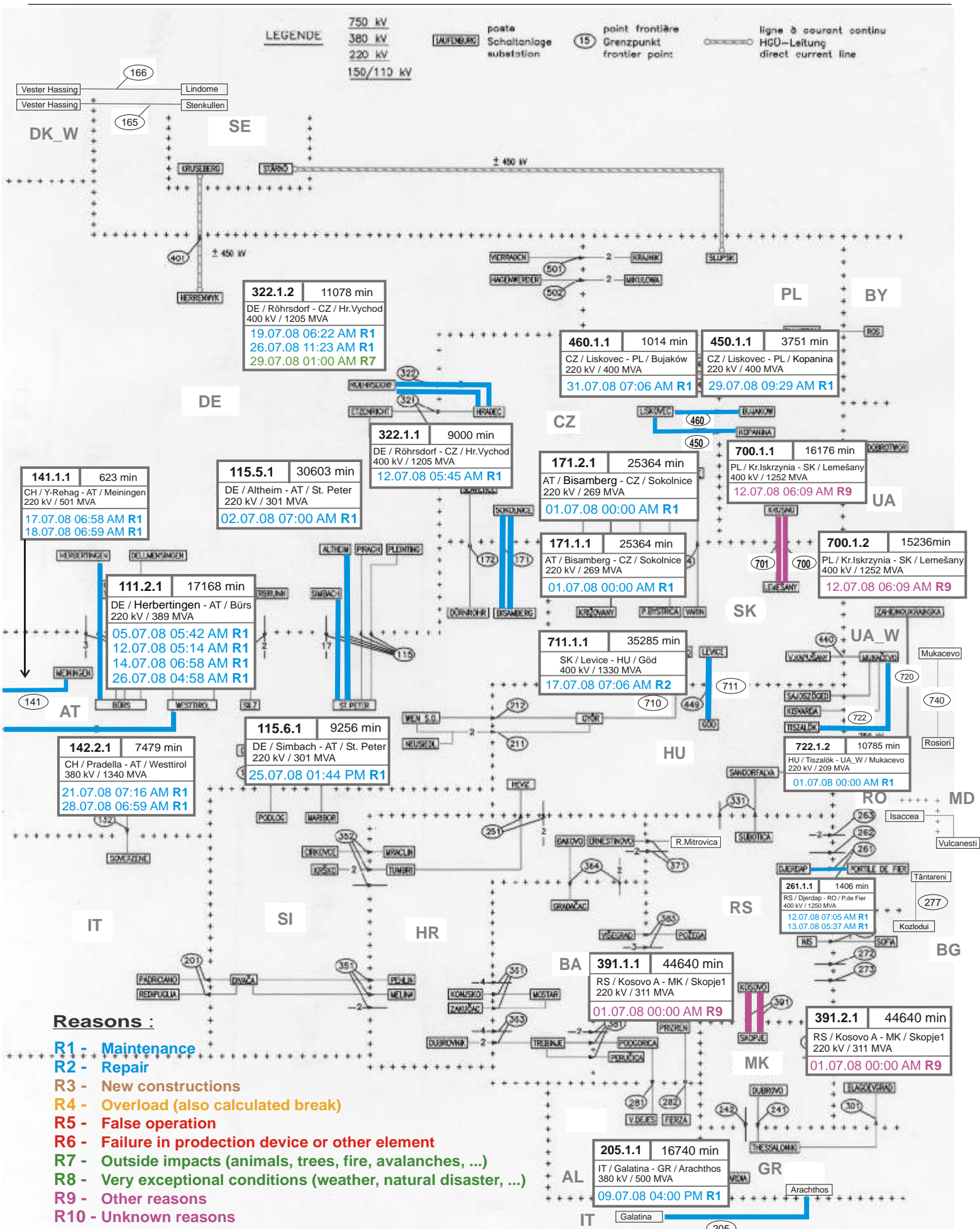
UCTE = 31179 MW

Total = 39094 MW

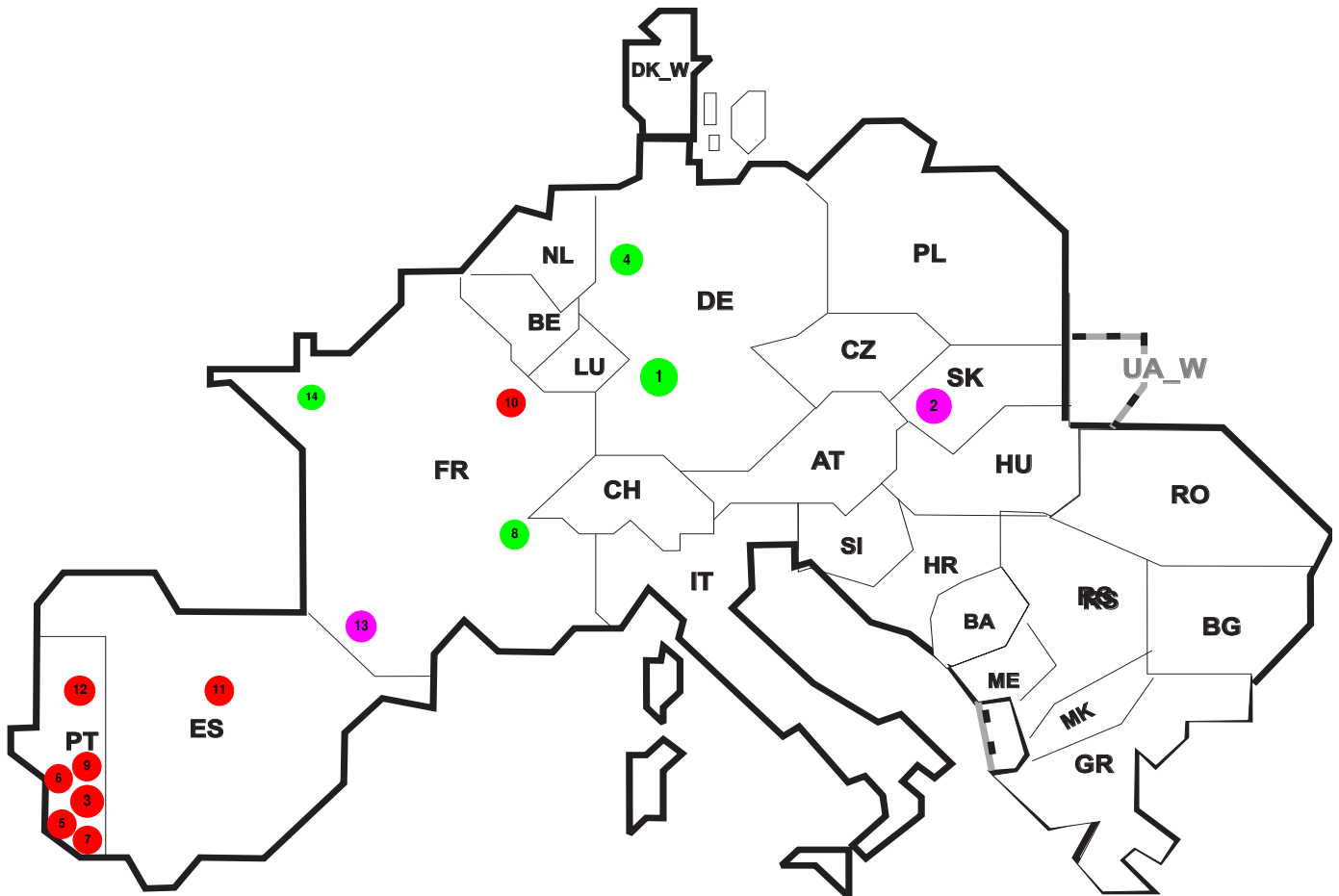
Synchronous operation with UCTE region

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, ...)  
(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	DE	Bürstadt	R7	6556	700	562	6,174
2	SK	S.N. Ves	R9	17	78	13	0,320
3	PT	Estoi	R5	27	0	10	0,273
4	DE	Kusenhorst	R8	150	360	25	0,141
5	PT	Portimo	R5	13	0	65	0,129
6	PT	Sines	R5	7	0	6	0,066
7	PT	Tunes	R5	2	0	1	0,025
8	FR	Mambelin	R7	21	53	24	0,023
9	PT	Neves Corvo	R5	2	0	1	0,016
10	FR	Moulaine	R6	14	36	23	0,014
11	ES	Lucero	R5	2	1495	35	0,005
12	PT	Saboia-Luzianes	R5	0	0	10	0,002
13	FR	Hourat	R9	1	1	45	0,001
14	FR	Laval	R8	1	5	7	0,001

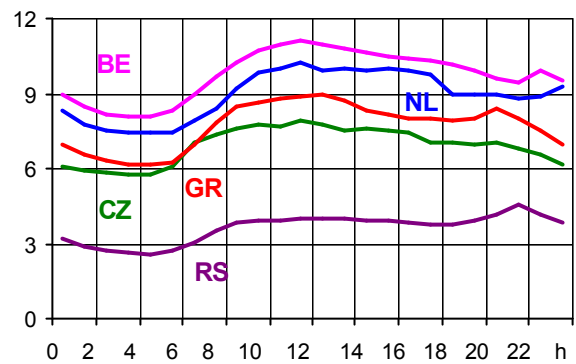
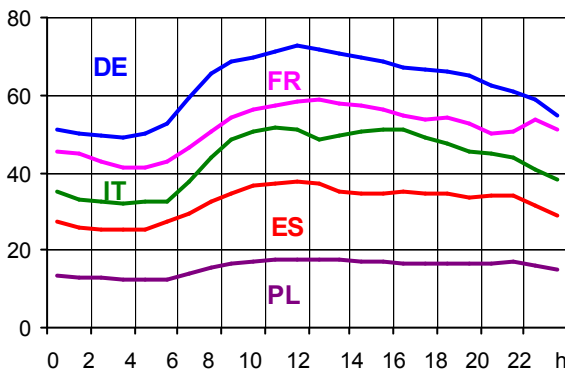
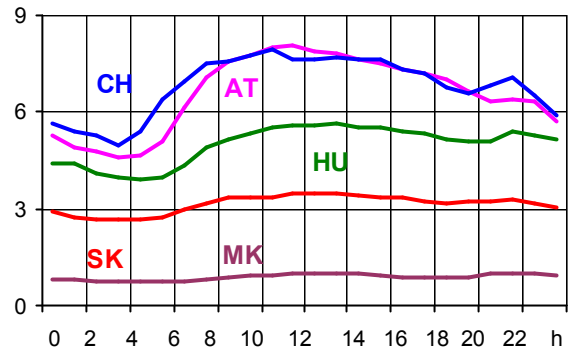
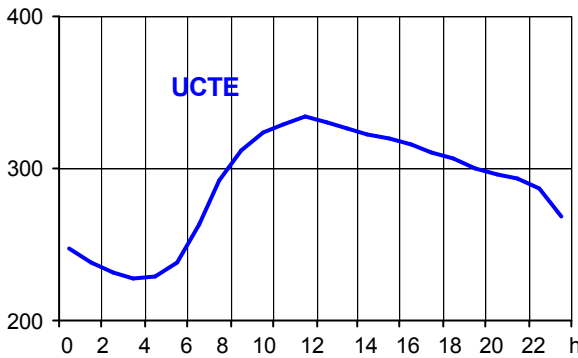
<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months

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	411620	1001242	1749	254	1150	805
BA	319922	170035	308	141	354	141
BE	350889	791846	1067	1672	0	1344
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2902664	1162039	4134	2794	4087	622
CZ	1855785	859284	2553	1105	2465	1360
DE	2320811	2579255	1147	4996	3762	3591
DK_W	1105251	145662	1446	0	2142	0
ES	1445853	534480	2057	1200	2205	300
FR	7390523	2763909	11338	1171	8935	4809
GR	51303	630885	0	650	0	750
HR	4807	536376	0	789	0	838
HU	595833	1089782	837	1299	532	1566
IT	171885	3860730	153	4545	81	5155
ME	54027	283694	45	328	5	343
MK	12000	280700	0	289	0	433
NL	352767	2151287	509	2935	544	2535
PL	290969	290823	261	395	300	815
PT	1920	734891	0	1400	0	1100
RO	467299	100912	500	117	665	173
RS	520525	315861	584	318	806	415
SI	643168	409367	955	399	889	572
SK	473249	469576	725	295	687	725
UA_W	410471	11520	505	0	550	0

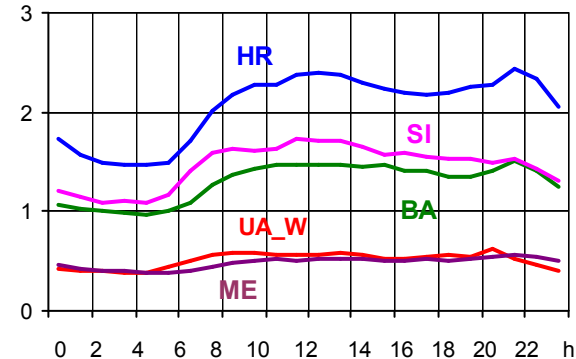
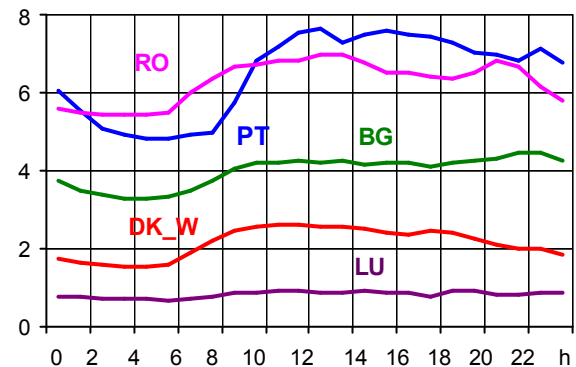
- Control areas can differ from national borders ( i.e. German block which includes parts of AT, LU and DK ).
- Values are calculated on an hourly base ( MWh ).
- This values are not the provisional values entered in the VULCANUS system, but the definitive values after an eventual correction during the 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 16.07.2008 CET

Values in GW



	Highest load MW	var.% <sup>1</sup>	Load representativity %
AT	8093	0,9	100
BA	1517	1,7	100
BE <sup>2</sup>	11097	3,0	100
BG	4459	-3,6	100
CH	7943	-3,2	100
CZ	7884	-1,0	100
DE	72800	-2,4	91
DK_W	2627	-2,1	100
ES	37618	-4,3	98
FR	58645	1,5	100
GR	8933	-8,6	100
HR	2434	-7,6	100
HU	5651	-8,5	100
IT	51498	-7,8	100
LU	911	5,3	100
ME	563	-4,7	100
MK	1012	-1,3	100
NL	10209	-24,8	100
PL <sup>3</sup>	17761	-0,8	100
PT	7657	7,3	97
RO	6982	-4,2	100
RS	4529	-0,9	100
SI	1725	-14,6	100
SK	3493	-1,4	100
<b>UCTE</b>	<b>333842</b>	<b>-3,3</b>	
UA_W	621	-7,5	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> Operational data

## Contact

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