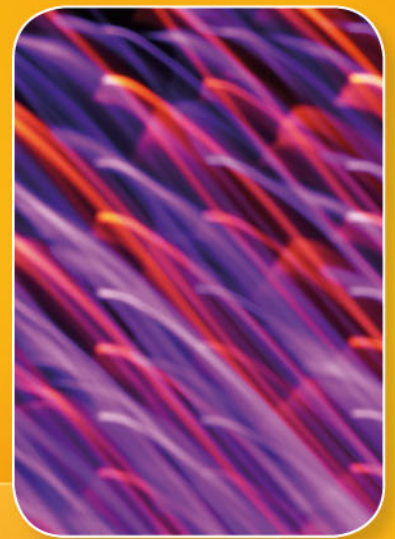


# UCTE



May 2007

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 values of production and consumption are gross values.

Countries	Net production in GWh							Exchange balance in GWh	Pump in GWh	Consumption in GWh			
	Therm. nuclear	Therm conv.	Hydro prod	Other renew.	Of which wind	Not identify	Total			monthly	var. [%]	last 12 months	var. [%]
AT	0	819	3153	0	0	752	4724 <sup>1</sup>	776	202	5298	1,1	66300	0,9
BA	0	506	280	0	0	0	786	83	0	869	2,0	10916	-3,0
BE <sup>2</sup>	3855	2594	124	258	38	0	6831 <sup>1</sup>	408	138	7101	-1,5	88589	-0,6
BG	1319	1072	437	0	0	0	2828	-327	37	2464	-8,3	33528	-8,8
CH	2365	166	3160	82	1	0	5773 <sup>1</sup>	-639	214	4920	-0,2	62113	-2,4
CZ	1995	4298	201	20	8	0	6514 <sup>1</sup>	-1413	76	5025	3,1	63159	-1,1
DE	11120	26731	1980	4172	2455	0	44003 <sup>1</sup>	-273	707	43023	-1,2	555681	-0,8
ES	3477	12781	3118	2812	2508	0	22188 <sup>1</sup>	-495	391	21302	2,6	262838	3,1
FR	31802	2814	6061	643	352	0	41320 <sup>1</sup>	-5615	714	34991	0,6	465995	-4,1
GR	0	3762	283	88	74	0	4133 <sup>1</sup>	291	104	4320	0,9	54036	1,1
HR <sup>3</sup>	0	452	348	3	3	0	803 <sup>1</sup>	537	21	1319	3,6	16560	-1,3
HU <sup>3</sup>	1011	1904	0	0	0	0	2915 <sup>1</sup>	397	0	3312	1,9	40537	1,5
IT	0	20673	3496	850	404	0	25019 <sup>1</sup>	3794	639	28174	2,5	337575	1,3
LU	0	249	80	14	6	0	343	327	102	568	3,3	6687	3,0
ME	0	49	75	0	0	0	124	220	0	344	n.a.	1935	n.a.
MK	0	326	64	0	0	0	390 <sup>1</sup>	204	0	594	-1,0	8175	-1,8
NL	357	6191	0	637	253	0	7185 <sup>1</sup>	2028	0	9213	-0,2	116490	0,8
PL	0	11117	156	29	21	0	11302 <sup>1</sup>	-159	35	11108	7,4	137484	3,0
PT	0	2117	983	479	321	0	3579 <sup>1</sup>	605	41	4143	2,7	51090	1,5
RO	478	2342	1462	0	0	0	4282 <sup>1</sup>	15	25	4272	2,7	52699	1,8
RS	0	2245	762	0	0	0	3007	425	73	3359	n.a.	17136	n.a.
SI	500	237	252	0	0	0	989	125	0	1114	4,4	13347	3,0
SK	1246	540	343	25	1	0	2154 <sup>1</sup>	42	19	2177	3,2	27049	1,3
<b>UCTE</b>	<b>59525</b>	<b>103985</b>	<b>26818</b>	<b>10112</b>	<b>6445</b>	<b>752</b>	<b>201192<sup>1</sup></b>	<b>1356</b>	<b>3538</b>	<b>199010</b>	<b>1,4</b>	<b>2513117<sup>4</sup></b>	<b>-0,4</b>
DK_W	0	1035	2	468	337	0	1505 <sup>1</sup>	211	0	1716	0,9	21627	0,1
UA_W	0	574	17	0	0	0	591 <sup>1</sup>	-281	0	310	1,0	4158	-4,0

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

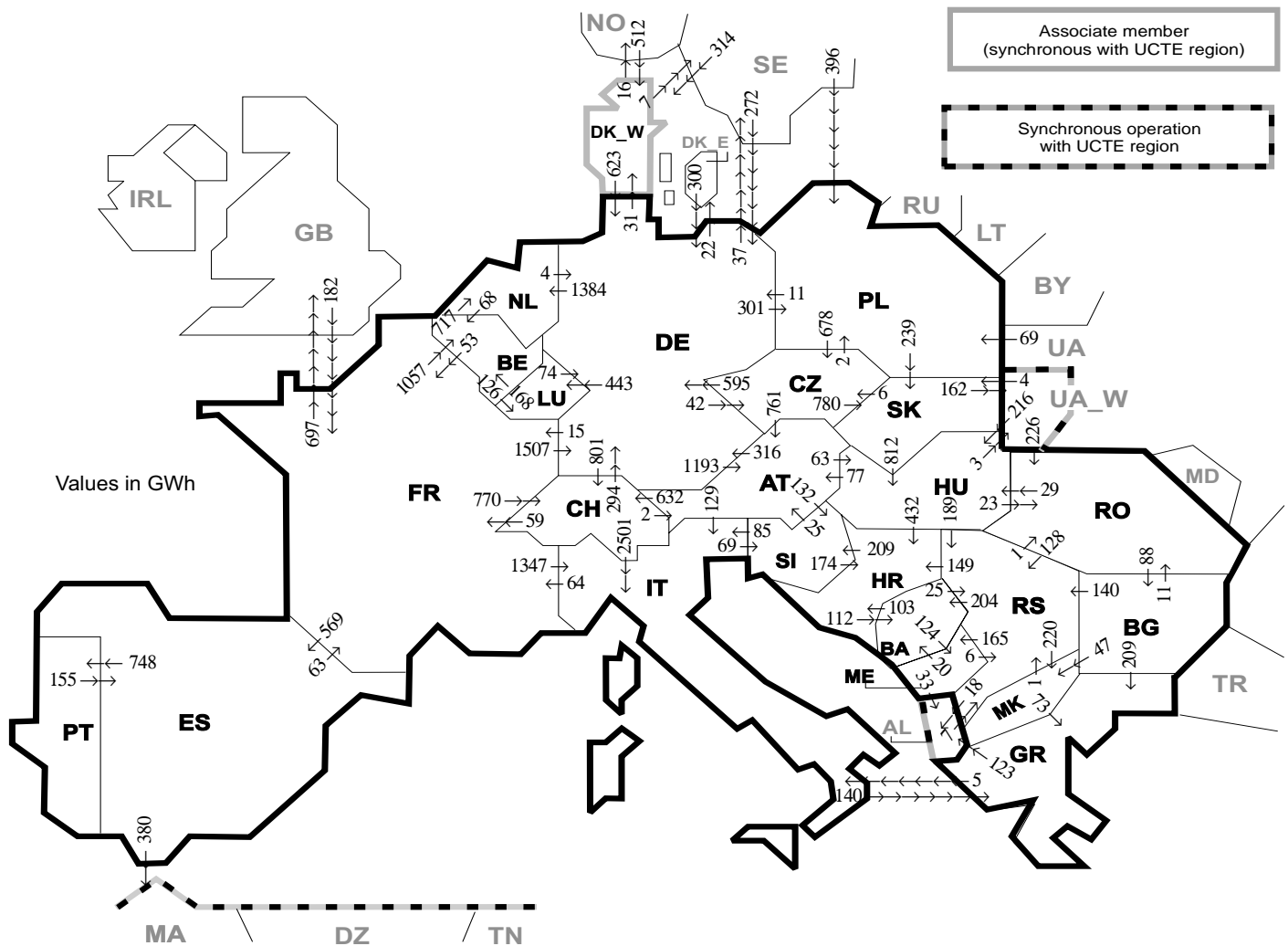
<sup>2</sup> The reported figures are best estimates based on actual measurements and extrapolations

<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 <sup>3</sup>	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	100
Thermal conv.	100	100	100	100	100	100	100	97	100	100	100	100	100	100	100	100	100	100	94	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	95	100	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	98	100	100	100	100	100	100	100	100	100	100	97	100	100	95	100	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	-	-	-	-	632	0	316	-	-	-	-	63	129	-	-	-	-	-	-	-	132	-	-	-	-	-	1272
BA	-	-	-	-	-	-	-	-	-	-	103	-	-	-	124	-	-	-	-	-	25	-	-	-	-	-	252
BE	-	-	-	-	-	-	-	-	53	-	-	-	-	126	-	-	717	-	-	-	-	-	-	-	-	-	896
BG	-	-	-	-	-	-	-	-	-	209	-	-	-	-	-	47	-	-	-	11	140	-	-	-	-	0	407
CH	2	-	-	-	-	-	294	-	59	-	-	2501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2856
CZ	761	-	-	-	-	-	595	-	-	-	-	-	-	-	-	-	-	2	-	-	-	780	-	-	-	-	2138
DE	1193	-	-	-	801	42	-	-	15	-	-	-	443	-	-	1384	301	-	-	-	-	-	31	-	59	4269	
ES	-	-	-	-	-	-	-	-	63	-	-	-	-	-	-	-	-	-	748	-	-	-	-	-	380	1191	
FR	-	-	1057	-	770	-	1507	569	-	-	-	1347	-	-	-	-	-	-	-	-	-	-	-	-	-	697	5947
GR	-	-	-	0	-	-	-	-	-	-	-	5	-	-	-	0	-	-	-	-	-	-	-	-	-	123	128
HR	-	112	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	0	209	-	-	-	-	321
HU	77	-	-	-	-	-	-	-	-	-	432	-	-	-	-	-	-	-	-	23	189	0	-	3	-	724	
IT	0	-	-	-	0	-	-	-	64	140	-	-	-	-	-	-	-	-	-	-	69	-	-	-	-	273	
LU	-	-	168	-	-	-	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	242	
ME	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	33	59	
MK	-	-	-	0	-	-	-	-	-	73	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	74	
NL	-	-	68	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	
PL	-	-	-	-	678	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239	-	-	0	928	
PT	-	-	-	-	-	-	-	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	
RO	-	-	-	88	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	128	-	-	-	0	0	245
RS	-	204	-	0	-	-	-	-	-	-	149	0	-	-	165	220	-	-	-	1	-	-	-	-	-	18	757
SI	25	-	-	-	-	-	-	-	-	-	174	85	-	-	-	-	-	-	-	-	-	-	-	-	-	284	
SK	-	-	-	-	6	-	-	-	-	-	812	-	-	-	-	-	-	-	0	-	-	-	-	-	162	980	
DK_W	-	-	-	-	-	-	623	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	646	
UA_W	-	-	-	-	-	-	-	-	-	-	-	216	-	-	-	-	-	-	-	-	226	4	-	-	-	446	
Other III <sup>1</sup>	-	-	-	0	-	-	572	0	182	0	-	-	-	-	0	-	465	-	0	7	-	-	826	-	-	2052	
<b>Sum imp</b>	<b>2058</b>	<b>336</b>	<b>1293</b>	<b>88</b>	<b>2203</b>	<b>726</b>	<b>3996</b>	<b>724</b>	<b>436</b>	<b>422</b>	<b>858</b>	<b>1120</b>	<b>4067</b>	<b>569</b>	<b>289</b>	<b>267</b>	<b>2101</b>	<b>768</b>	<b>748</b>	<b>261</b>	<b>496</b>	<b>410</b>	<b>1023</b>	<b>857</b>	<b>165</b>	<b>1333</b>	<b>27614</b>

Sum of physical energy flows between UCTE countries = 22964GWh Total physical energy flows = 27614GWh

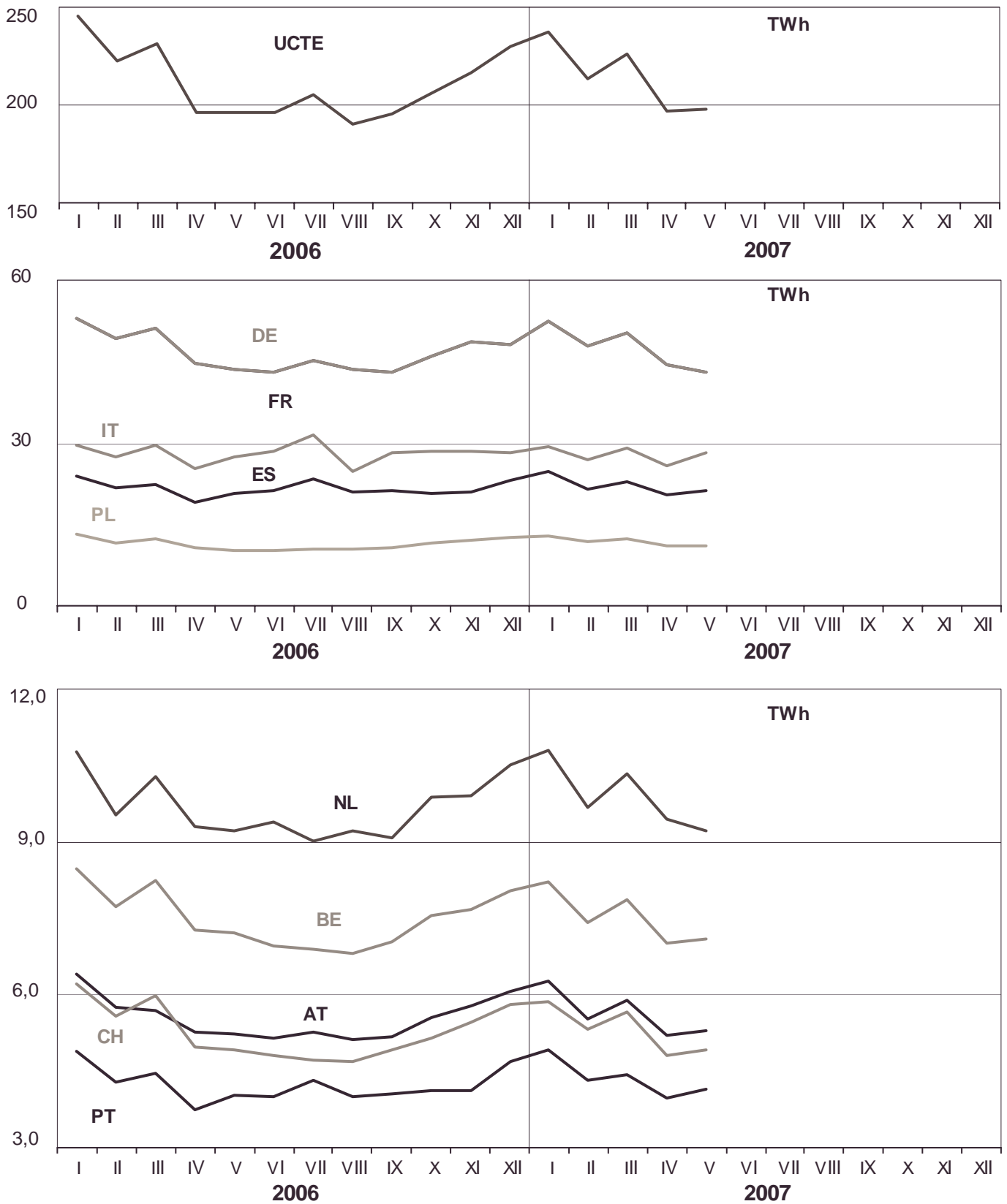
<sup>1</sup> Other III: Albania, Belarus, Denmark East, Great Britain, Morocco, Republic of Moldavia, Norway, Sweden, Republic of Turkey and Ukraina

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

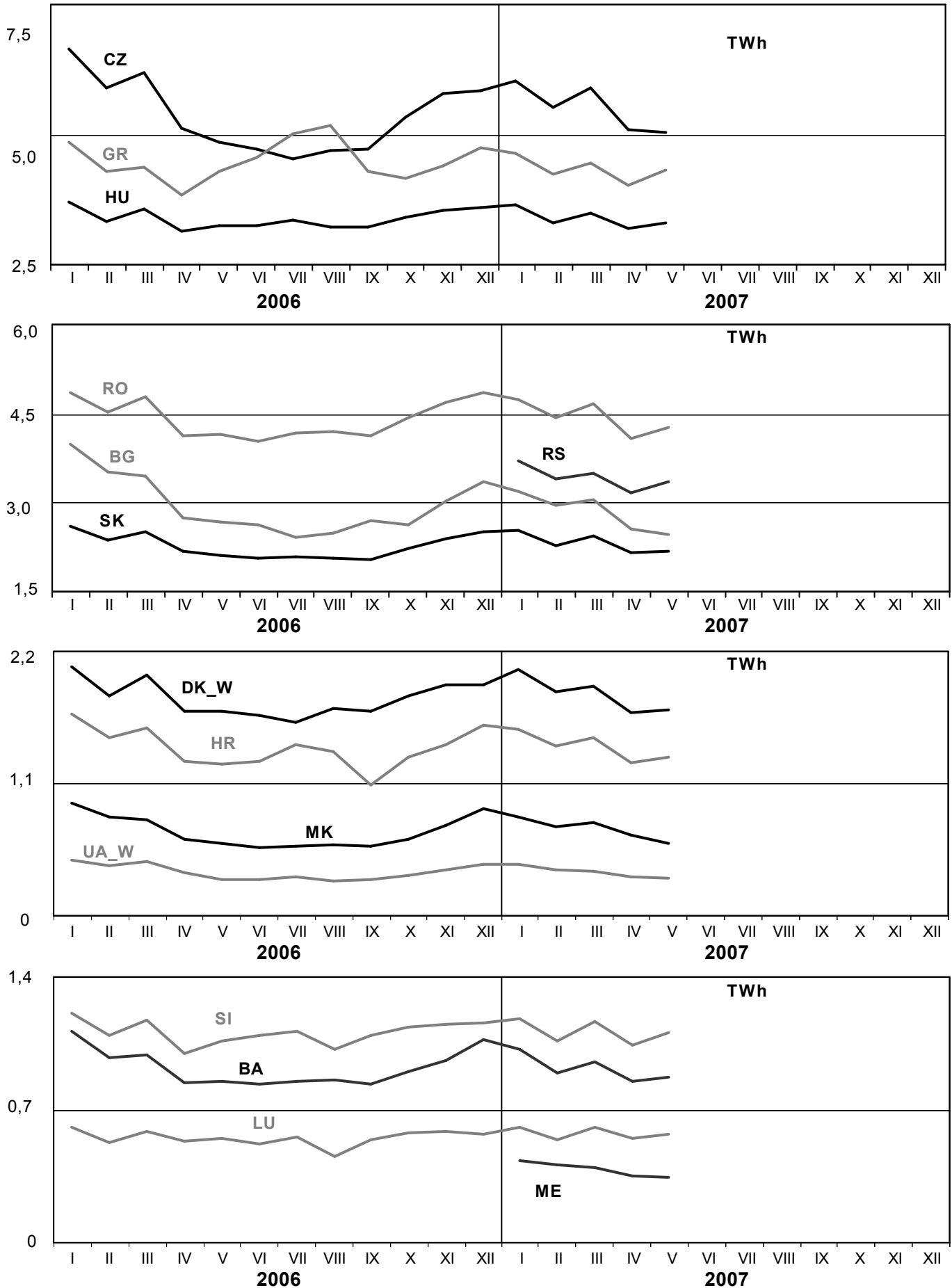
May 2007



# 3

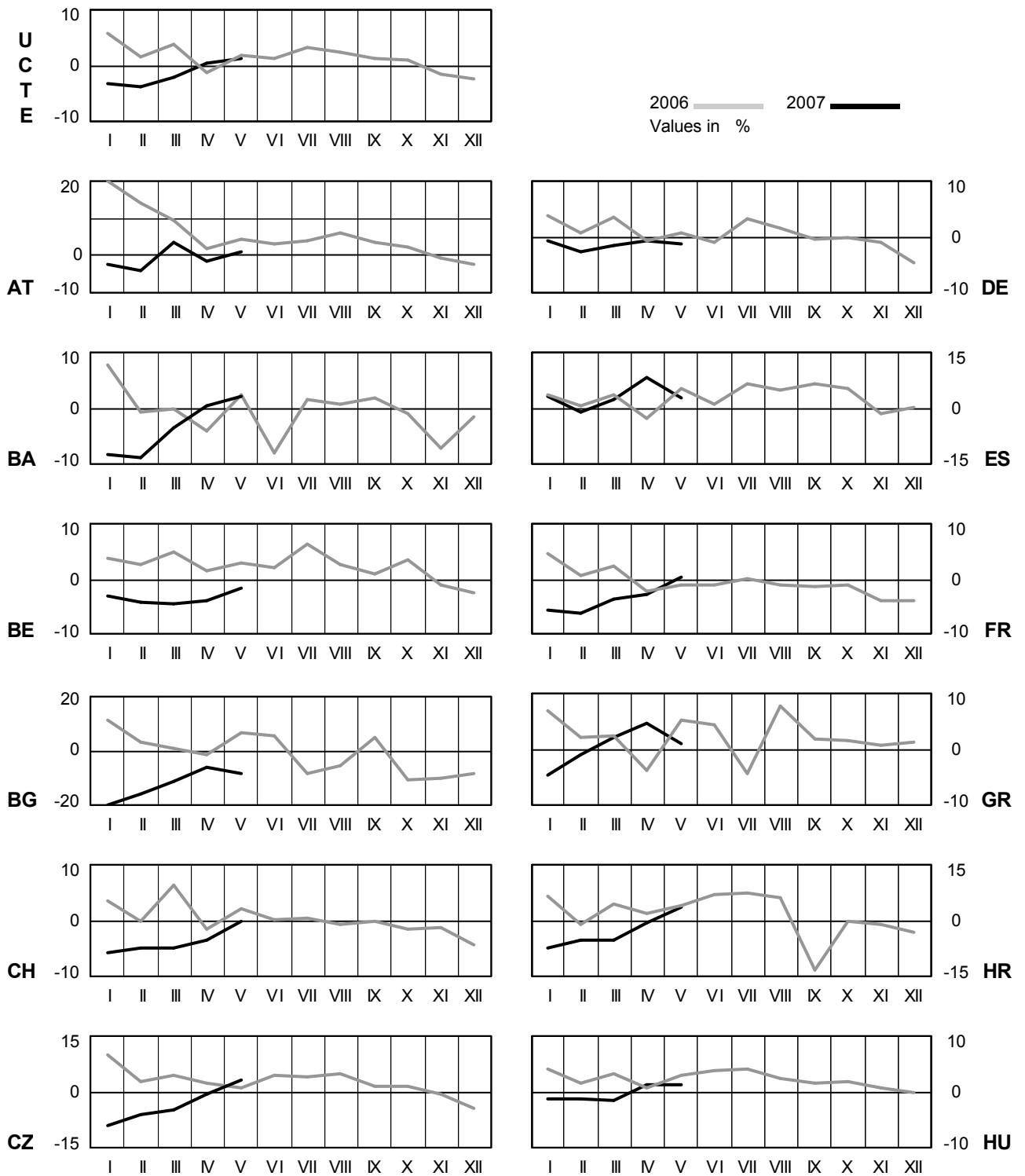
## Monthly consumption

May 2007



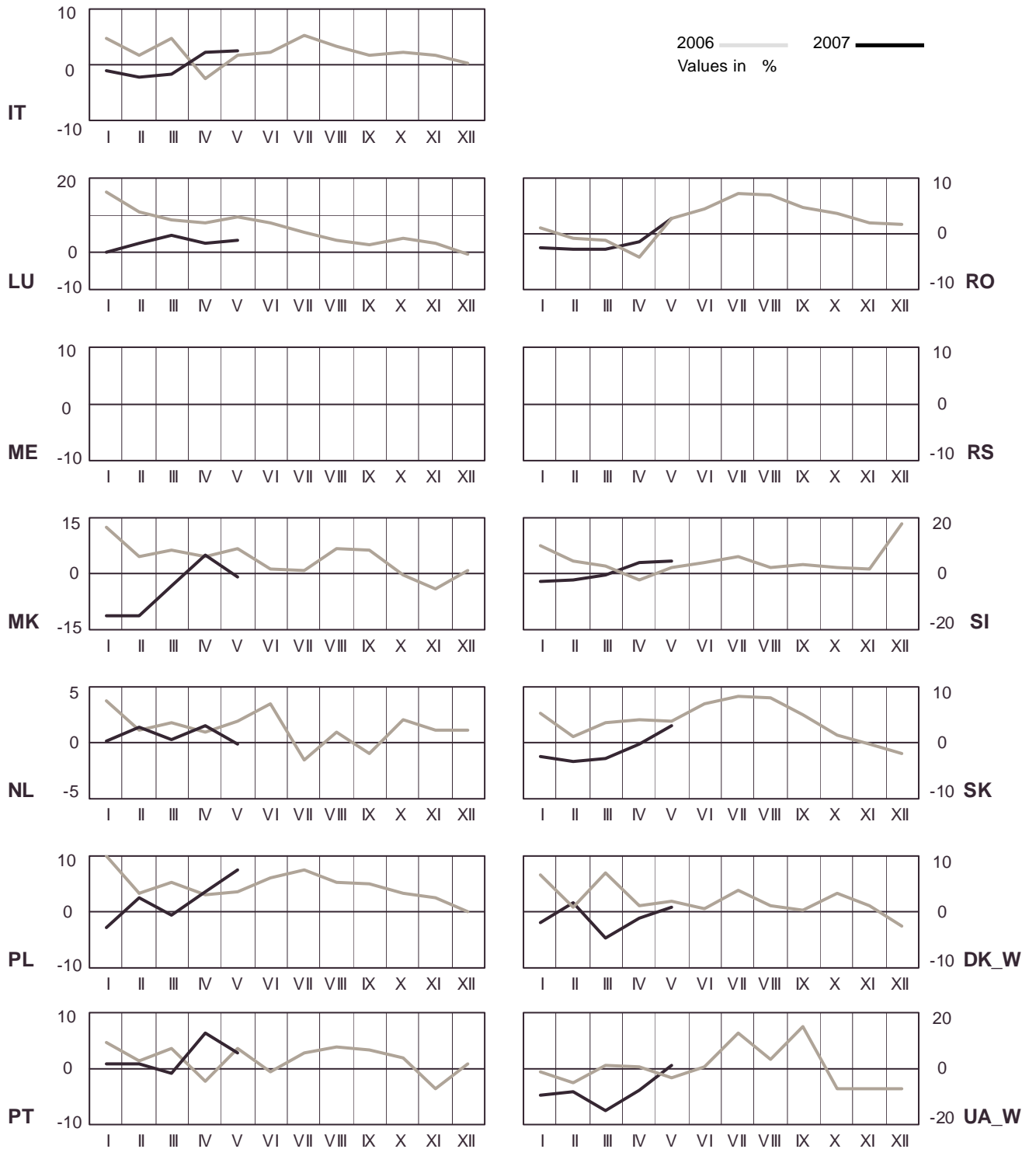
# 4 Monthly consumption variation

May 2007



# 4 Monthly consumption variation

May 2007

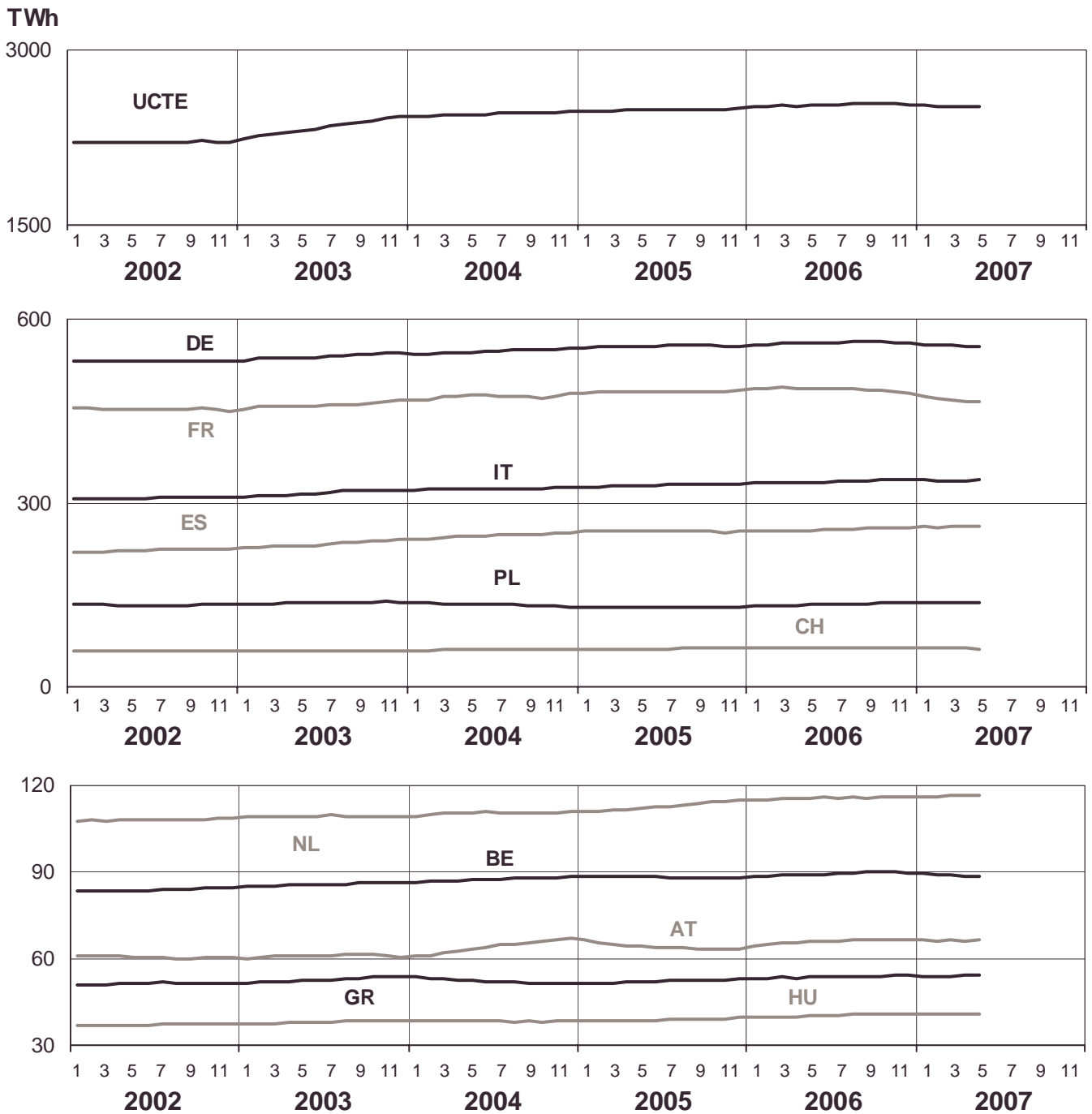




# 5

## Consumption of the last 12 months

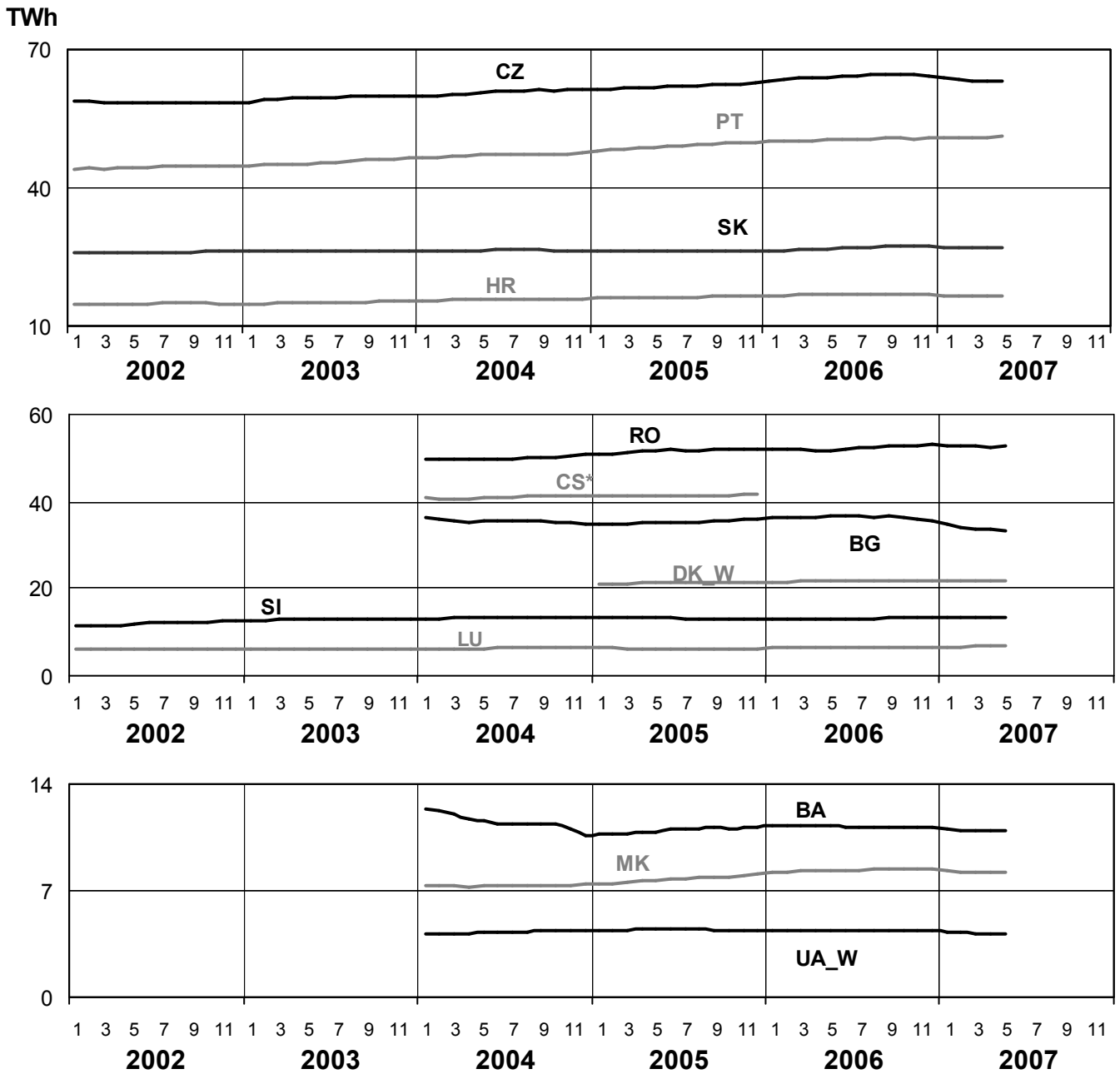
May 2007



# 5

## Consumption of the last 12 months

May 2007

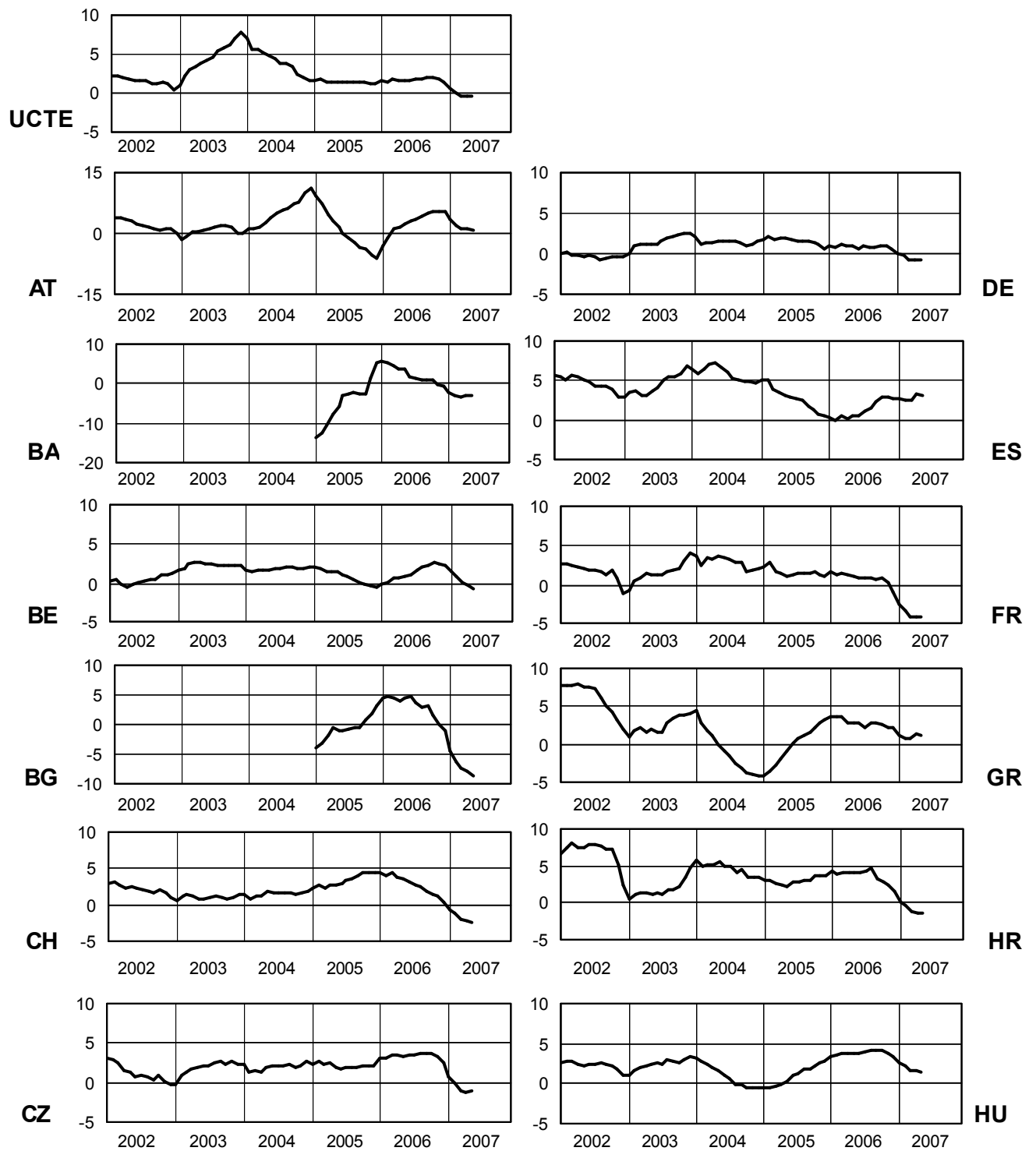


\* CS consumption values until December 2006; from 2007 on ME and RS as separate countries

# 6

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

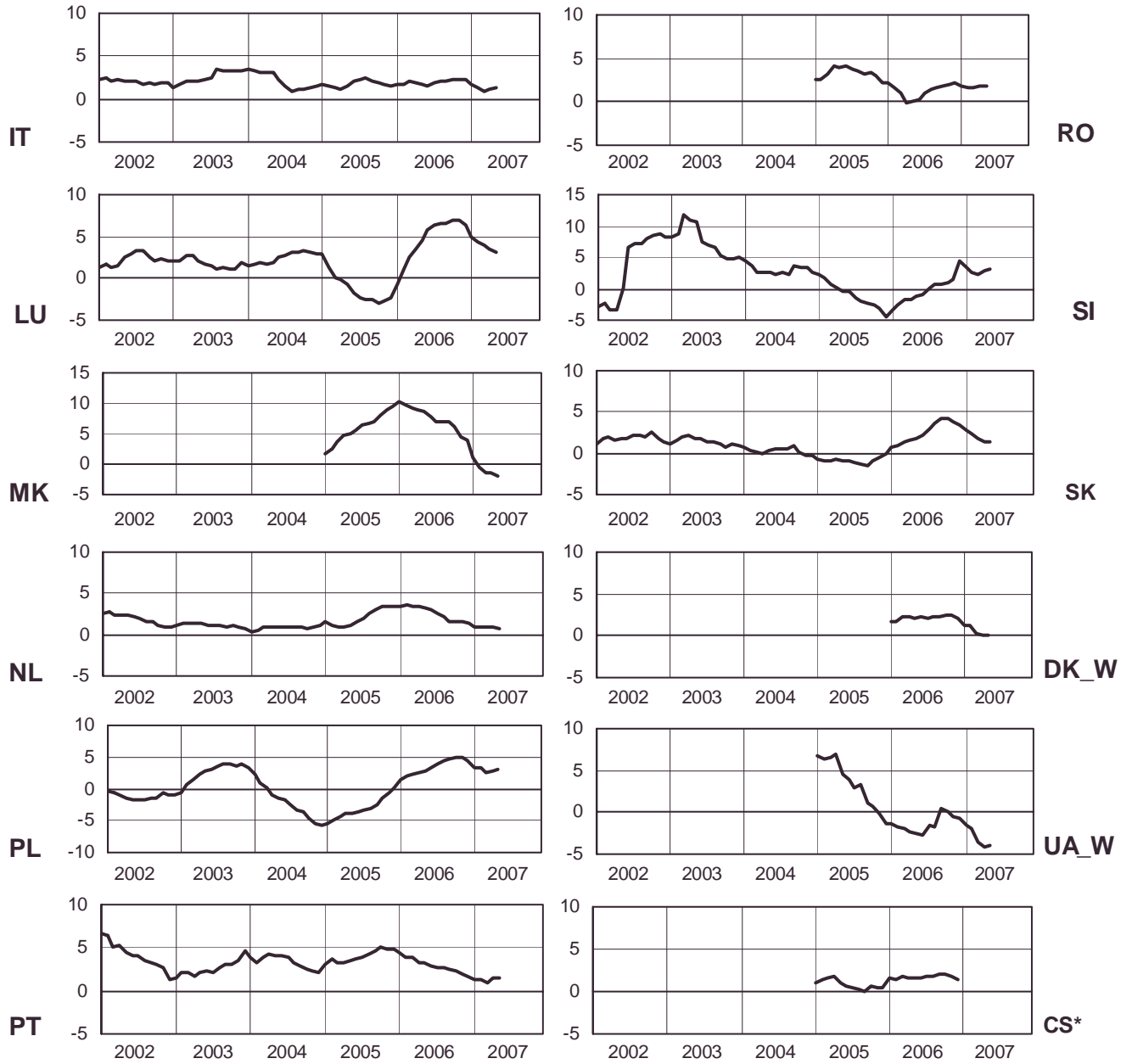
May 2007



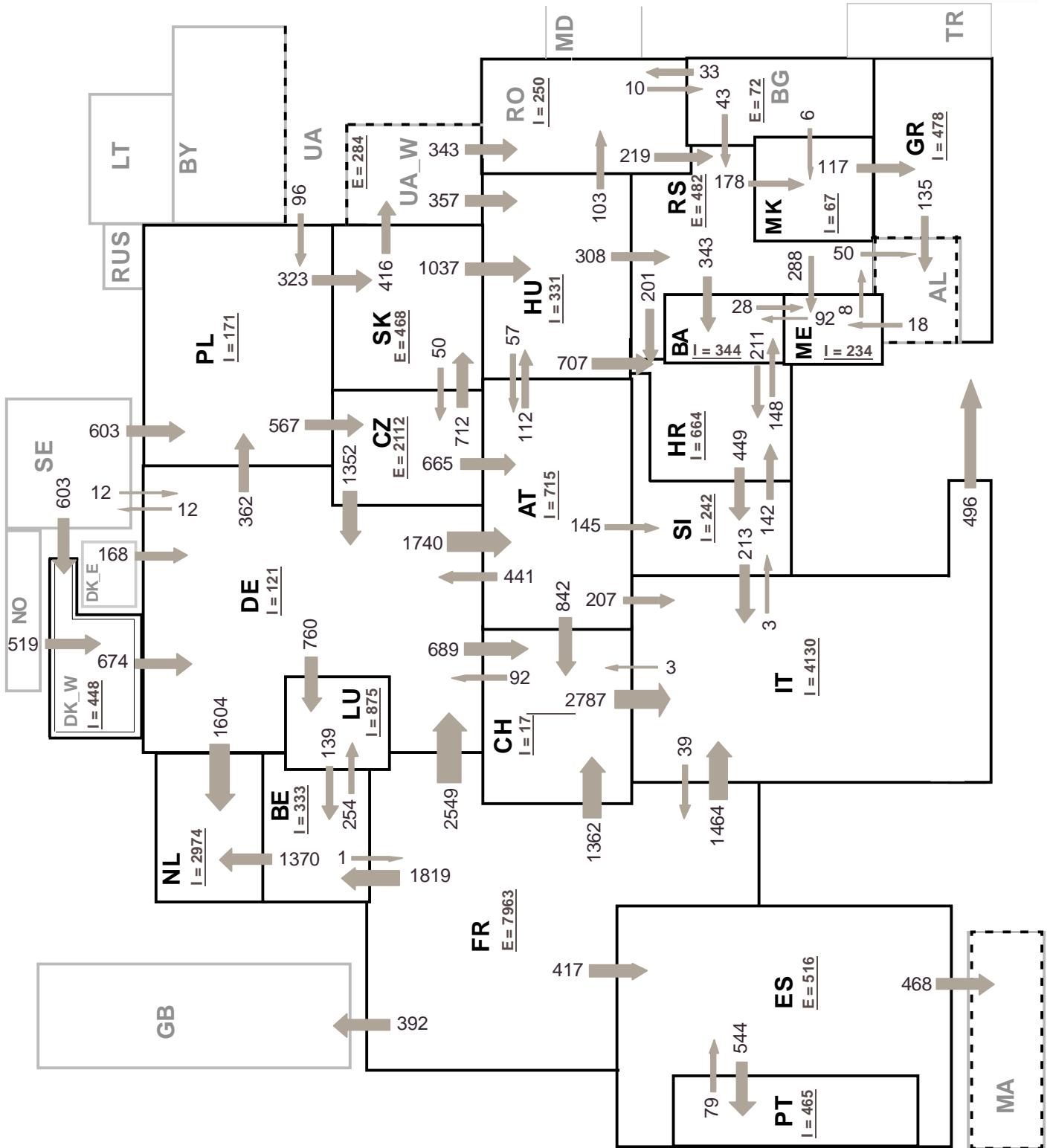
# 6

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

May 2007



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



Associate member

Synchronous operation with UCTE region

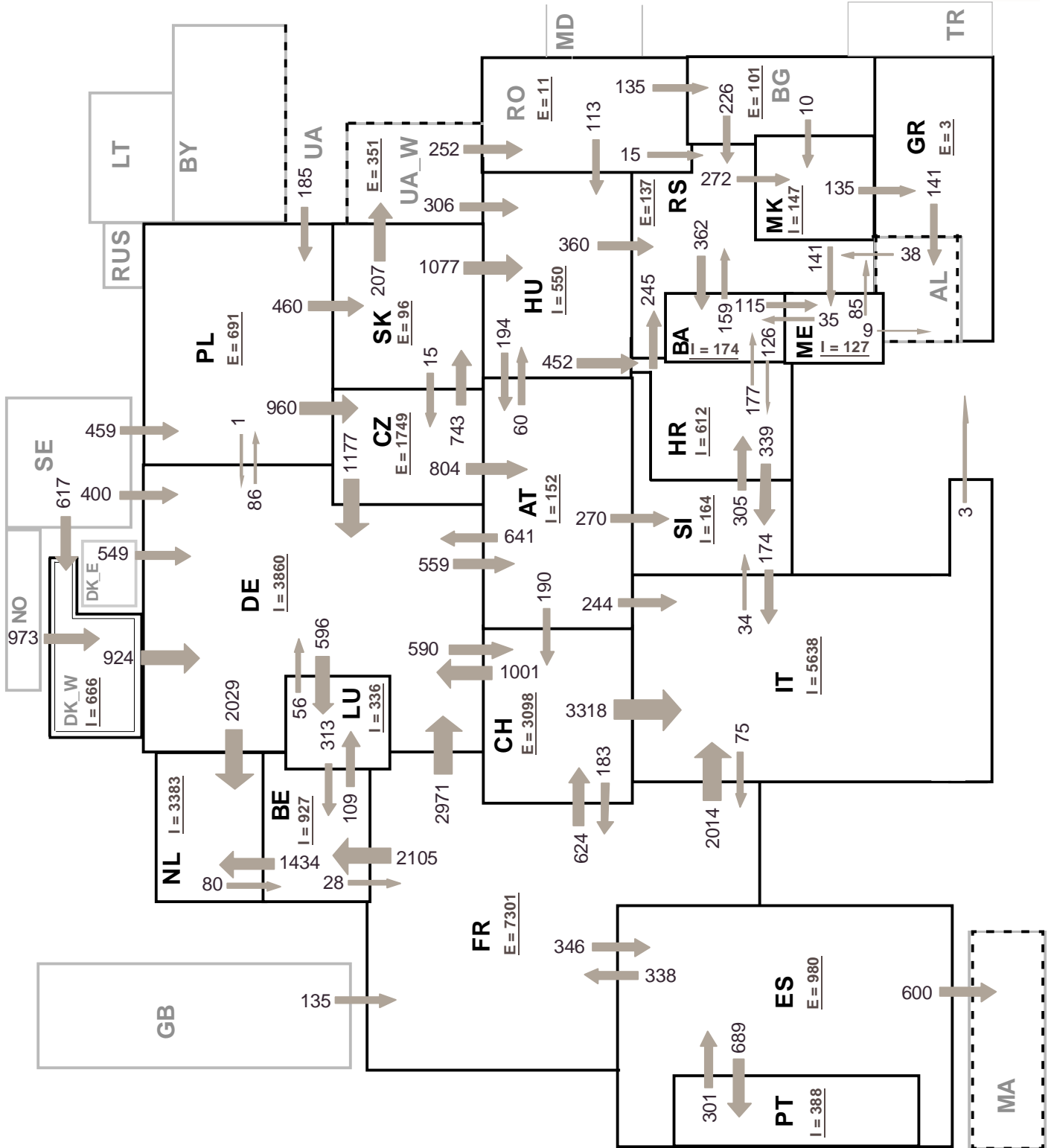
**Sum of load flows in MW:**

**UCTE = 28930 MW**

**Total = 33796 MW**

**I = Import balance**

**E = Export balance**



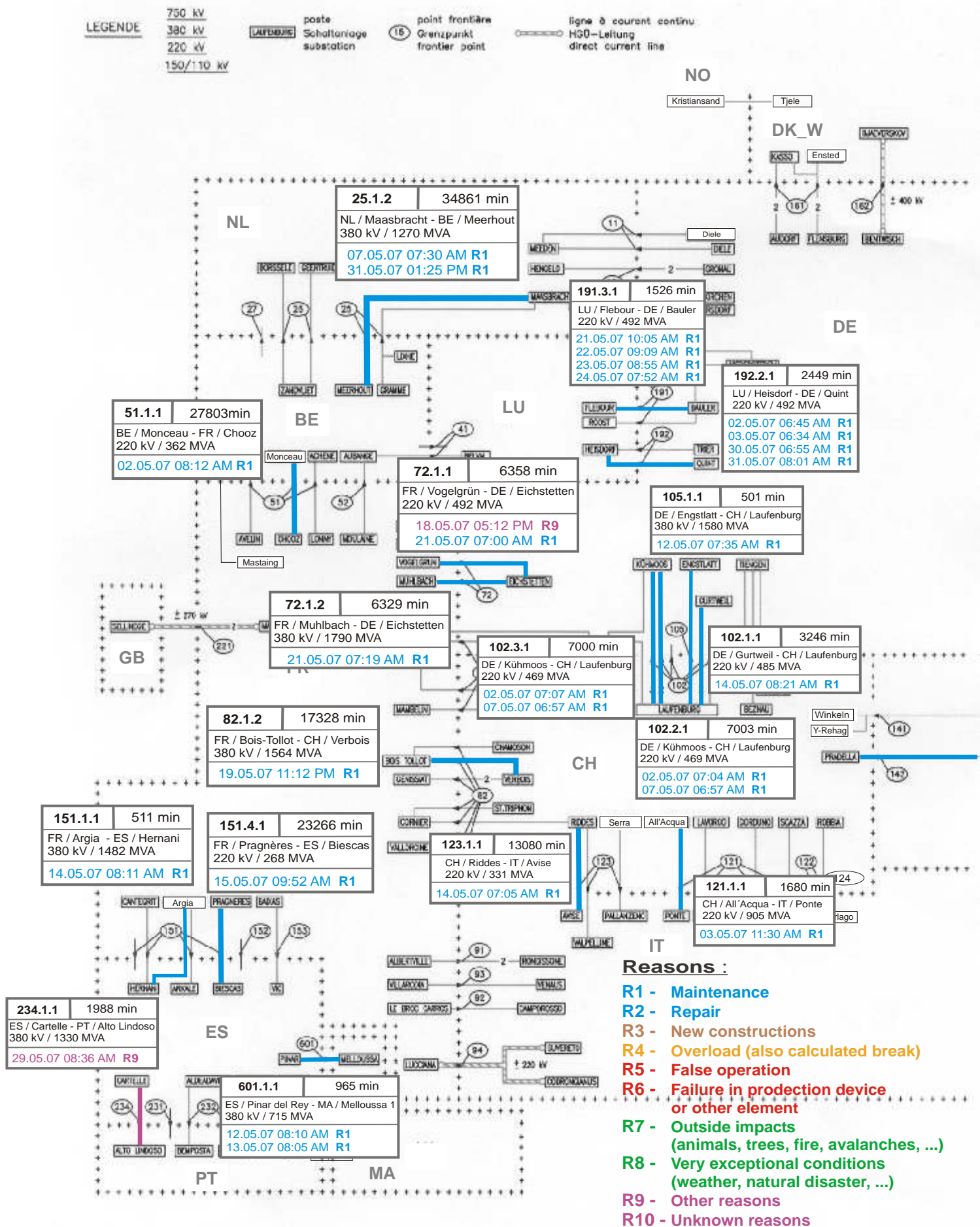
Associate member

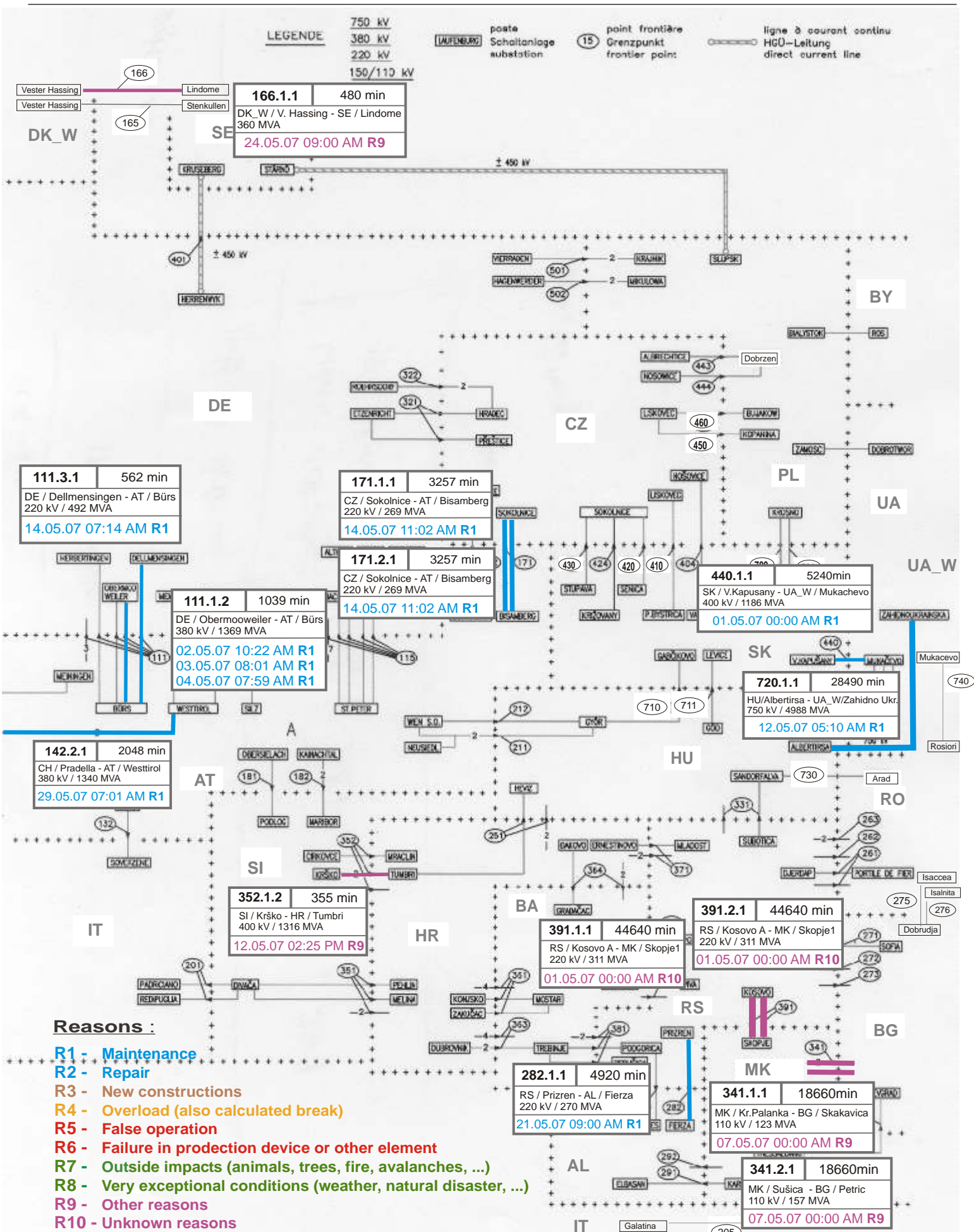
Synchronous operation with UCTE region

**Sum of load flows in MW:**

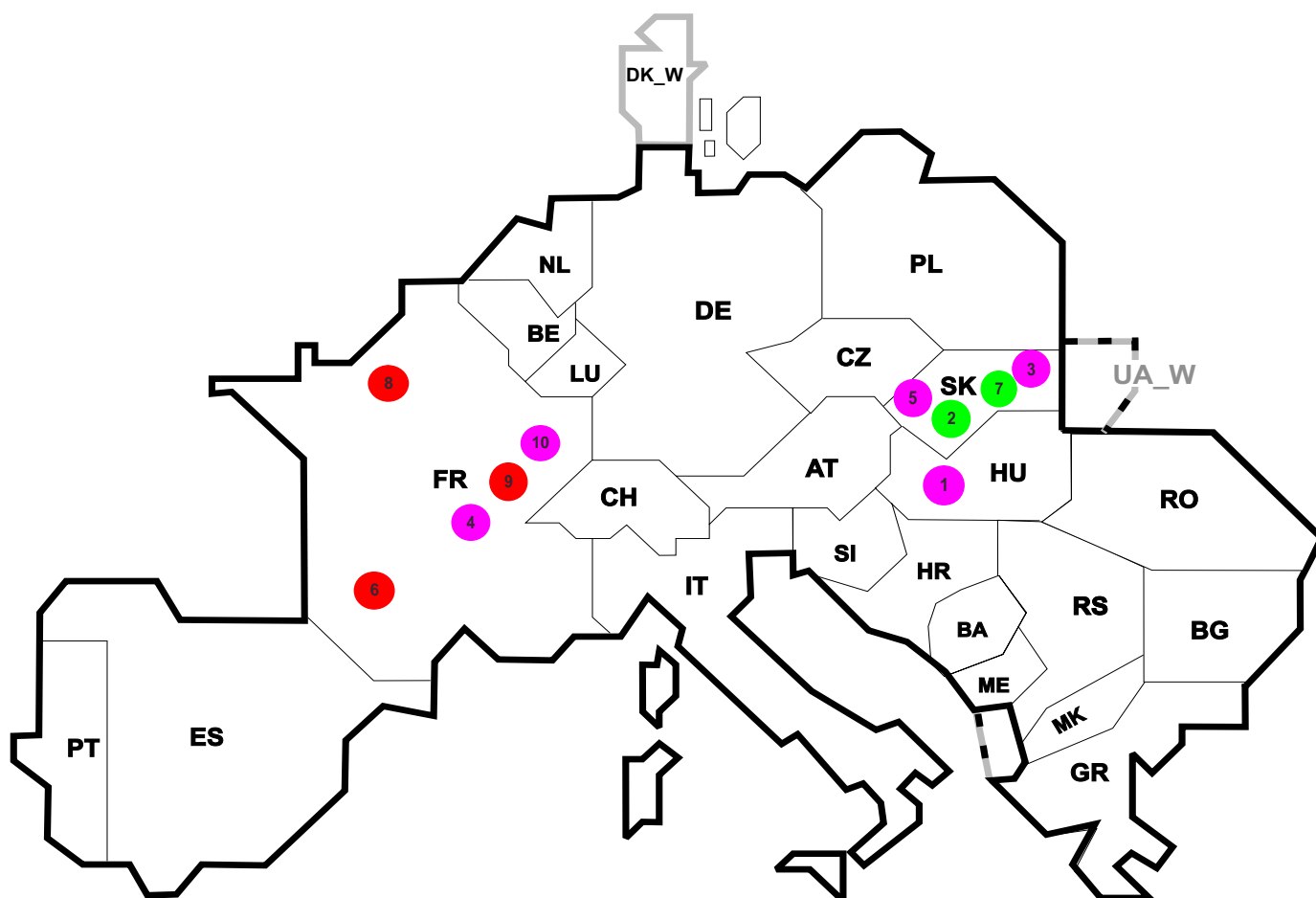
UCTE = 30699 MW  
 Total = 36494 MW

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	HU	Sajszged	R9	145	220	39	1,880
2	SK	Sucany	R7	42	86	29	0,806
3	SK	Varin	R9	22	30	43	0,427
4	FR	Grosne	R10	199	62	194	0,224
5	SK	Moldava	R9	6	87	4	0,113
6	FR	Colayrac	R5	94	141	40	0,106
7	SK	Sp. N. Ves	R7	4	20	13	0,084
8	FR	La Corbiere	R6	57	37	92	0,064
9	FR	Commerville	R5	13	70	11	0,015
10	FR	Guengnon	R10	10	73	8	0,011

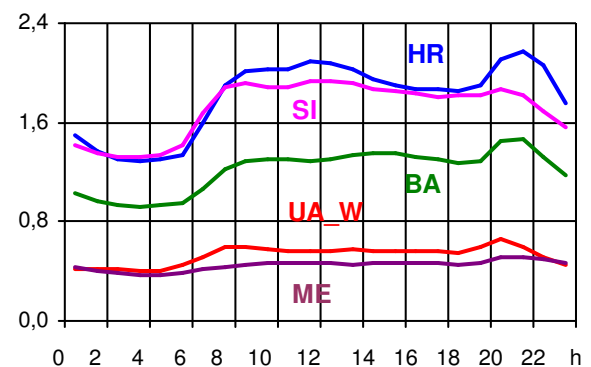
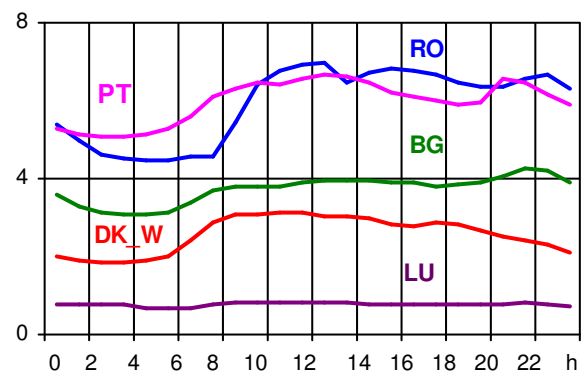
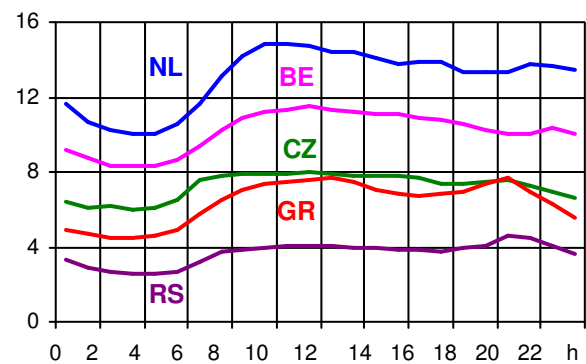
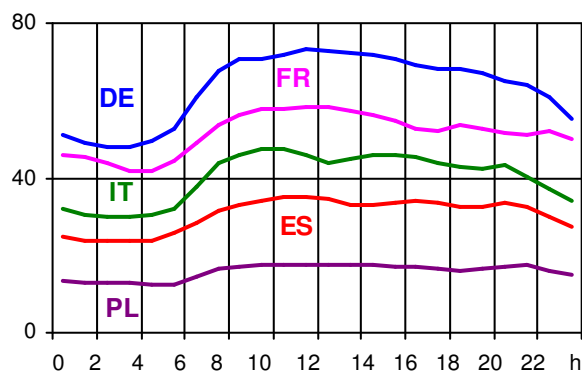
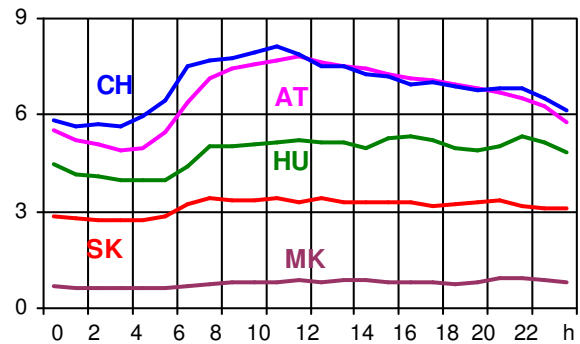
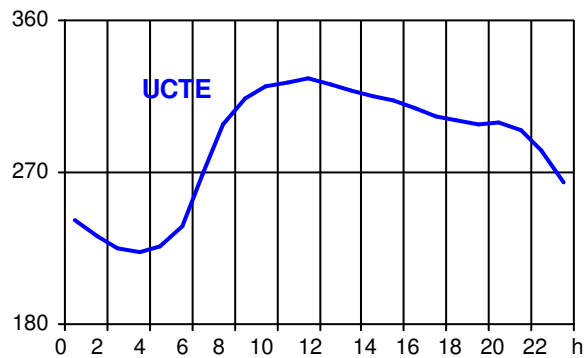
<sup>1</sup> ( year [in min] \* energy not supplied ) / consumption last 12 months

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	668567	809840	759	726	2030	798
BA	251538	338352	16	339	86	284
BE	689212	1033130	1310	1728	1310	2047
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2626335	1984700	2777	2834	5214	2141
CZ	2105416	652721	2783	597	2907	1105
DE	3084611	2094289	2676	3222	2864	5520
ES	1241456	752986	1205	598	1488	498
FR	7104154	1587926	8582	663	9622	2338
GR	7151	301949	0	500	0	0
HR	165155	699685	330	991	284	894
HU	802997	1198897	1217	1543	1099	1646
IT	273438	4066657	541	4671	109	5753
ME	135	355	100	351	129	461
MK	1600	204300	0	120	0	143
NL	106346	2136758	30	3003	0	3387
PL	552873	497418	423	745	1200	648
PT	161830	766239	198	698	198	598
RO	245234	259332	230	473	324	316
RS	572631	276125	638	156	594	262
SI	420125	546484	508	794	668	809
SK	823516	796993	1150	609	1149	948
DK_W	851627	606023	1136	659	1595	889
UA_W	306044	29734	332	50	399	49

- 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 16.05.2007 CET

Values in GW



	Highest load MW	var.% <sup>1</sup>	Load representativity %
AT	7851	2,1	100
BA	1458	1,8	100
BE <sup>2</sup>	11523	-1,5	100
BG	4271	3,3	100
CH	8117	-2,8	100
CZ	7961	2,0	100
DE	73407	0,3	91
ES	35251	-0,9	98
FR	58357	4,4	100
GR	7718	9,0	100
HR	2179	3,5	100
HU	5367	-0,2	100
IT	47470	2,8	100
LU	830	-11,6	100
ME	523	-	100
MK	949	-2,6	100
NL	14857	-1,0	100
PL	17793	7,3	100
PT	6997	-0,3	97
RO	6672	4,7	100
RS	4558	-	100
SI	1931	6,0	95
SK	3415	0,8	100
<b>UCTE</b>	<b>325473</b>	<b>1,9</b>	
DK_W	3132	2,5	100
UA_W	658	2,8	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.



## Contact

Boulevard Saint-Michel, 15  
B-1040 Brussels – Belgium  
Tel +32 2 741 69 40 – Fax +32 2 741 69 49

[info@ucte.org](mailto:info@ucte.org)  
[www.ucte.org](http://www.ucte.org)