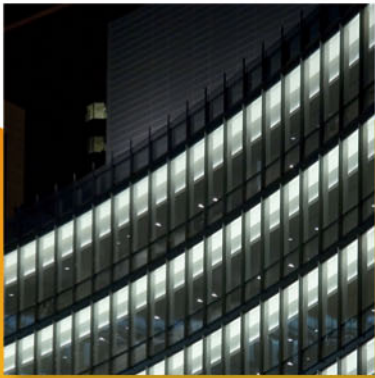


UCTE



November 2006

Monthly provisional values
union for the co-ordination of transmission of electricity

Table of contents		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 rd 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	2330	2301	0	0	669	5300 ¹	708	242	5766	-0,7	66657	5,5
BA	0	736	348	0	0	0	1084	-121	0	963	-7,1	11125	-0,3
BE ²	3378	3028	117	261	44	0	6784 ¹	1021	122	7683	0,0	90172	3,7
BG	1411	1781	300	0	0	0	3492	-404	53	3035	-10,4	35988	0,0
CH	2327	199	2380	92	1	0	4998 ¹	618	148	5468	-1,2	63491	1,2
CS	0	2934	637	0	0	0	3571 ¹	320	54	3837	-2,4	42346	1,8
CZ	1887	4791	239	17	9	0	6934 ¹	-1067	108	5759	-1,0	64610	3,3
DE	12129	31581	1801	5983	4477	0	51494 ¹	-2176	857	48461	-1,2	557488	0,2
ES	5081	10289	3565	2232	2175	0	21167 ¹	-285	556	20761	-2,1	259390	3,7
FR	37249	6138	4143	594	281	0	48124	-6509	569	41046	-6,2	479246	-0,2
GR	0	3564	368	108	100	0	4040 ¹	416	73	4383	0,8	53934	2,2
HR	0	561	360	3	3	0	924 ¹	526	19	1431	-1,0	16865	2,4
HU ³	967	1981	0	0	0	0	2948 ¹	593	0	3541	1,2	40632	3,8
IT	0	21249	2766	657	220	0	24672 ¹	4425	714	28383	1,4	335546	1,7
LU	0	285	73	13	7	0	371	305	93	583	2,6	6619	6,9
MK	0	482	107	0	0	0	589 ¹	162	0	751	-4,2	8371	4,5
NL	0	7242	0	781	384	0	8023 ¹	1904	0	9927	1,2	116039	1,5
PL	0	12741	205	46	38	0	12992 ¹	-900	68	12024	2,5	136514	4,8
PT	0	1568	1819	504	341	0	3891 ¹	155	56	4164	-2,2	51127	2,8
RO	475	3742	913	0	0	0	5130 ¹	-434	5	4691	1,9	52937	2,0
SI	496	463	160	0	0	0	1119	35	0	1154	1,9	13157	1,4
SK	1392	503	324	1	1	211	2431 ¹	-12	20	2399	-0,2	27259	3,9
UCTE	66792	118188	22926	11292	8081	880	220078¹	-720	3757	216210	-1,6	2529513	1,6
DK_W	0	1732	3	782	665	0	2517 ¹	-588	0	1929	1,0	21788	2,6
UA_W	0	712	11	0	0	0	723 ¹	-339	0	384	-7,2	4360	-0,5

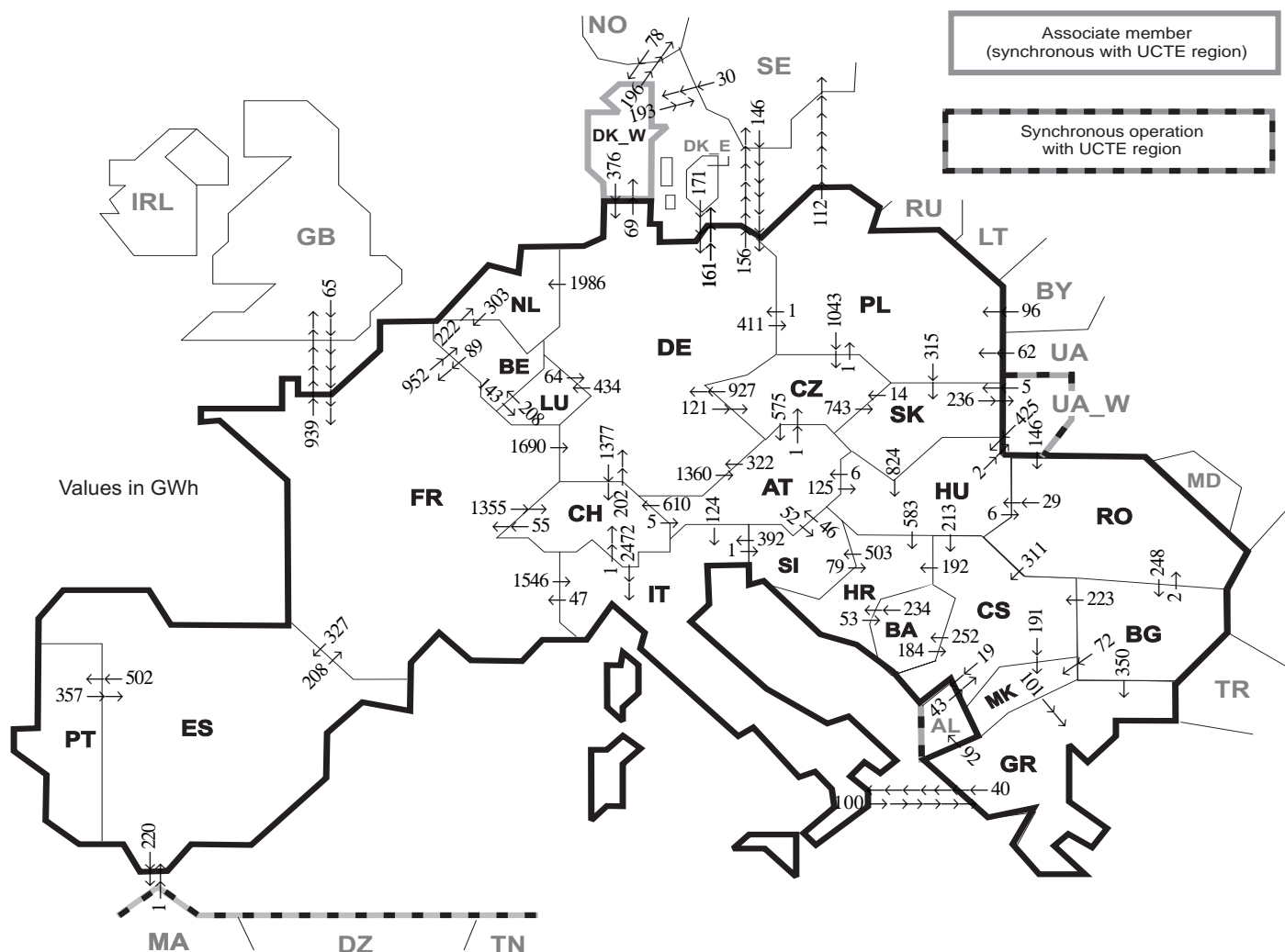
¹ Including deliveries from industry

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

³ Data on hydro, other renewable, not clearly identifiable production are not yet available.

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	CS	CZ	DE	ES	FR	GR	HR	HU	IT	LU	MK	NL	PL	PT	RO	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	100	97	100	100	100	100	100	100	100	100	100	90	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	100	95	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	100	98	100	100	100	100	100	100	100	100	100	96	100	95	100	100	100



Exporting countries	Importing countries																				Sum export					
	AT	BA	BE	BG	CH	CS	CZ	DE	ES	FR	GR	HR	HU	IT	LU	MK	NL	PL	PT	RO		SI	SK	DK_W	UA_W	Other III ¹
AT	-	-	-	-	610	-	1	322	-	-	-	125	124	-	-	-	-	-	-	-	52	-	-	-	-	1234
BA	-	-	-	-	-	184	-	-	-	-	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-	418
BE	-	-	-	-	-	-	-	-	89	-	-	-	-	-	143	-	222	-	-	-	-	-	-	-	-	454
BG	-	-	-	-	-	223	-	-	-	350	-	-	-	-	-	-	-	-	-	2	-	-	-	-	0	647
CH	5	-	-	-	-	-	202	-	55	-	-	-	2472	-	-	-	-	-	-	-	-	-	-	-	-	2734
CS	-	252	-	0	-	-	-	-	-	-	-	192	0	-	-	-	-	-	-	0	-	-	-	-	19	654
CZ	575	-	-	-	-	-	-	927	-	-	-	-	-	-	-	-	1	-	-	-	743	-	-	-	-	2246
DE	1360	-	-	-	1377	-	121	-	0	-	-	-	-	434	-	1986	411	-	-	-	-	69	-	317	-	6075
ES	-	-	-	-	-	-	-	-	208	-	-	-	-	-	-	-	-	-	502	-	-	-	-	-	220	930
FR	-	-	952	-	1355	-	-	1690	327	-	-	-	1546	-	-	-	-	-	-	-	-	-	-	-	939	6809
GR	-	-	0	-	-	-	-	-	-	-	-	-	40	-	0	-	-	-	-	-	-	-	-	-	92	132
HR	-	53	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	503	-	-	-	-	556
HU	6	-	-	-	213	-	-	-	-	-	583	-	-	-	-	-	-	-	-	6	0	2	-	-	-	810
IT	0	-	-	-	1	-	-	-	47	100	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	149
LU	-	-	208	-	-	-	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	272
MK	-	-	0	-	0	-	-	-	-	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	101
NL	-	-	303	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	303
PL	-	-	-	-	-	-	1043	1	-	-	-	-	-	-	-	-	-	-	-	-	315	-	-	112	-	1471
PT	-	-	-	-	-	-	-	357	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	357
RO	-	-	-	248	-	311	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	-	0	0	588
SI	46	-	-	-	-	-	-	-	-	-	79	392	-	-	-	-	-	-	-	-	-	-	-	-	-	517
SK	-	-	-	-	-	14	-	-	-	-	-	824	-	-	-	-	0	-	-	-	-	-	236	-	-	1074
DK_W	-	-	-	-	-	-	376	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	389	765
UA_W	-	-	-	-	-	-	-	-	-	-	-	425	-	-	-	-	-	-	-	146	5	-	-	-	-	576
Other III ¹	-	-	-	0	-	43	-	317	1	65	0	-	-	-	-	-	-	158	-	0	-	108	-	-	-	692
Sum imp	1992	305	1463	248	3343	974	1179	3899	685	464	551	1088	1403	4574	577	263	2208	570	502	154	556	1063	177	238	2088	30564

Sum of physical energy flows between UCTE countries = 26525GWh

Total physical energy flows = 30564GWh

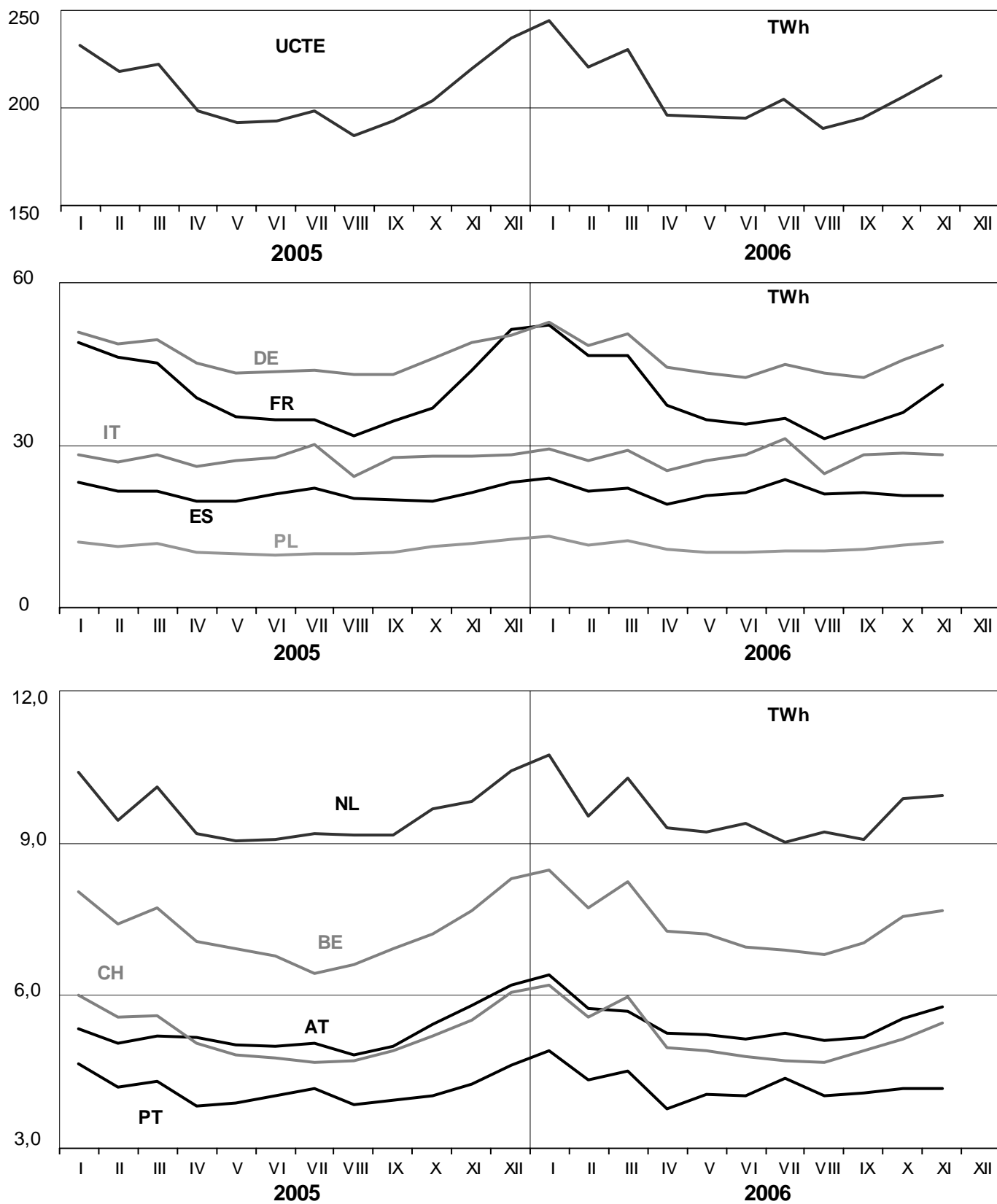
¹ Other III: Albania, Belarus, Denmark East, Great Britain, Morocco, Republic of Moldavia, Norway, Sweden, Republic of Turkey and Ukraina

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

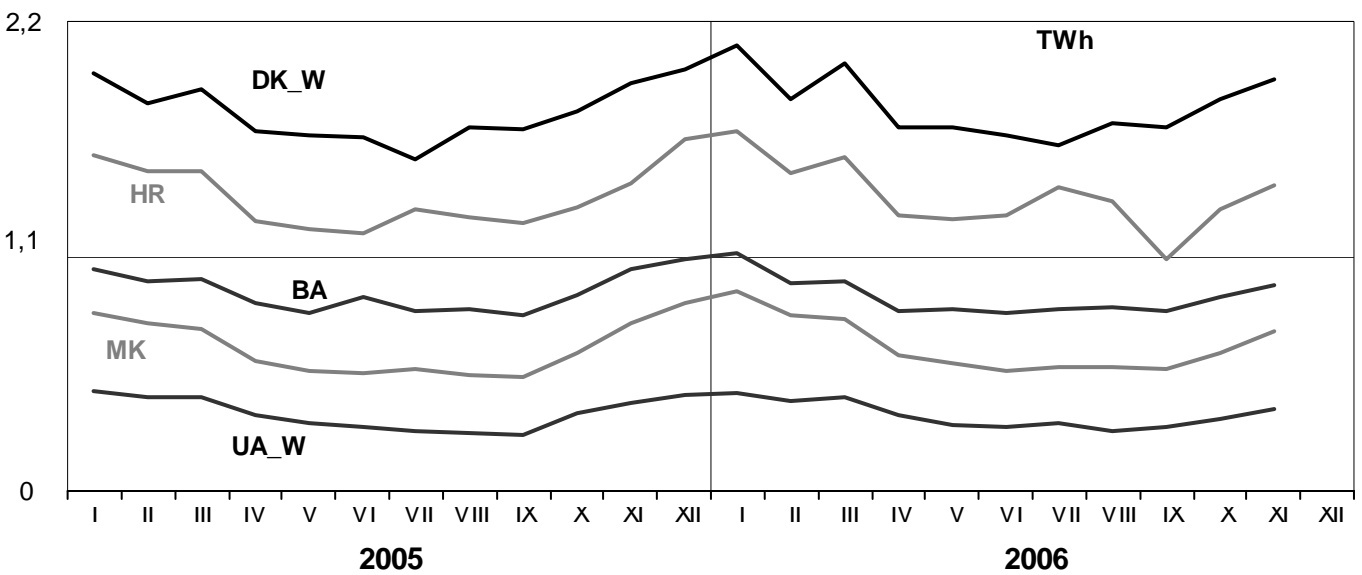
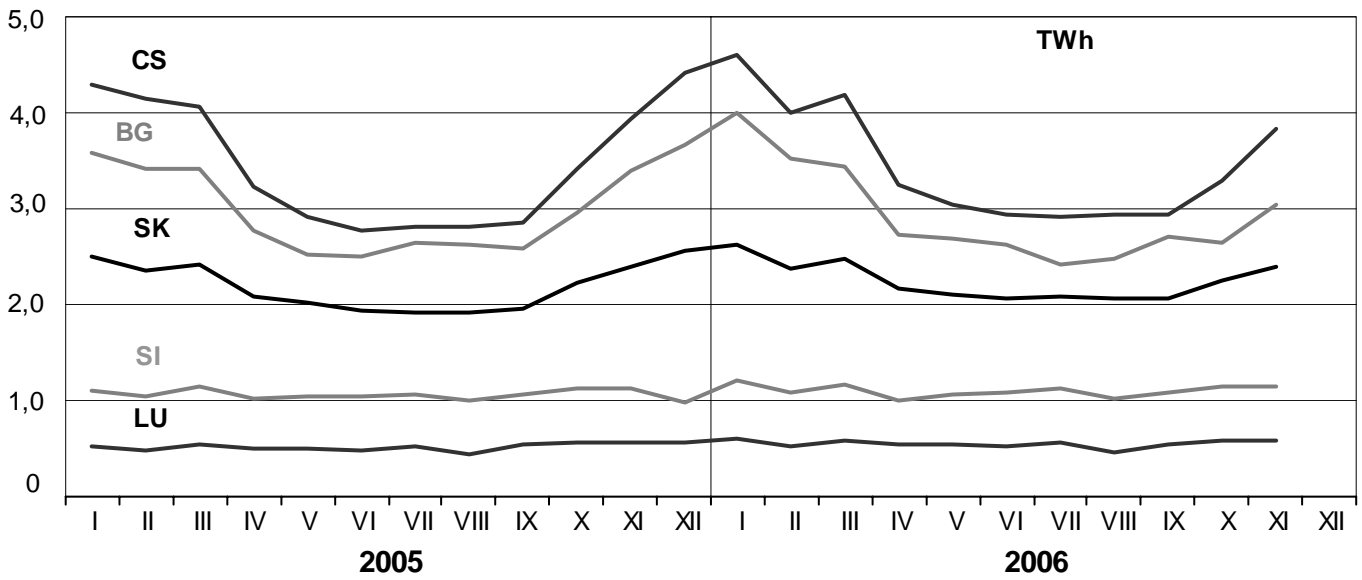
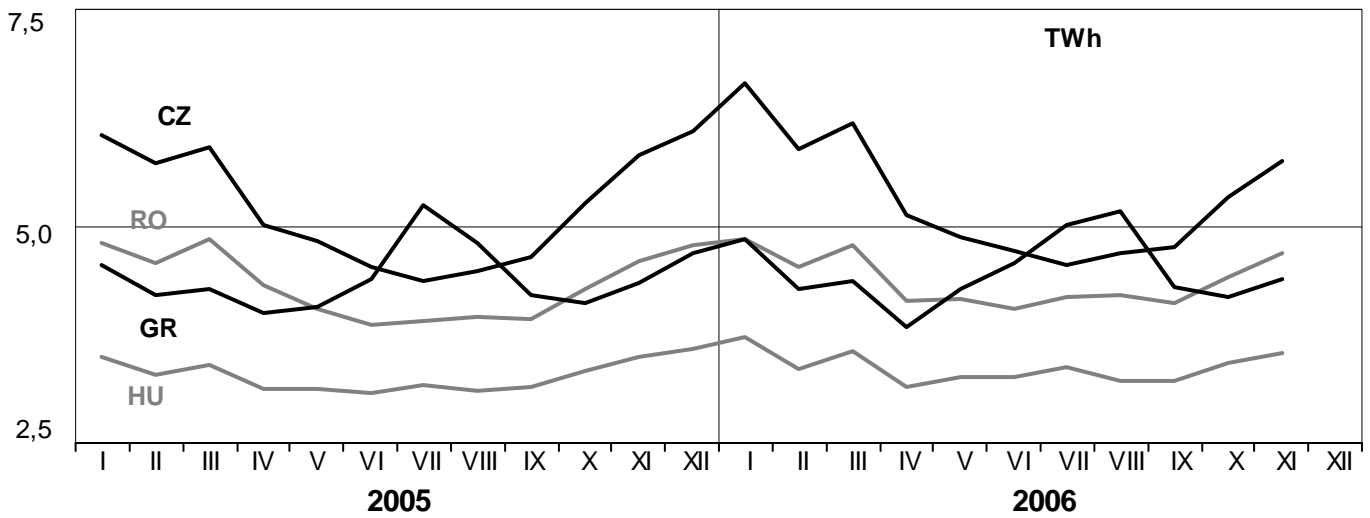
November 2006



3

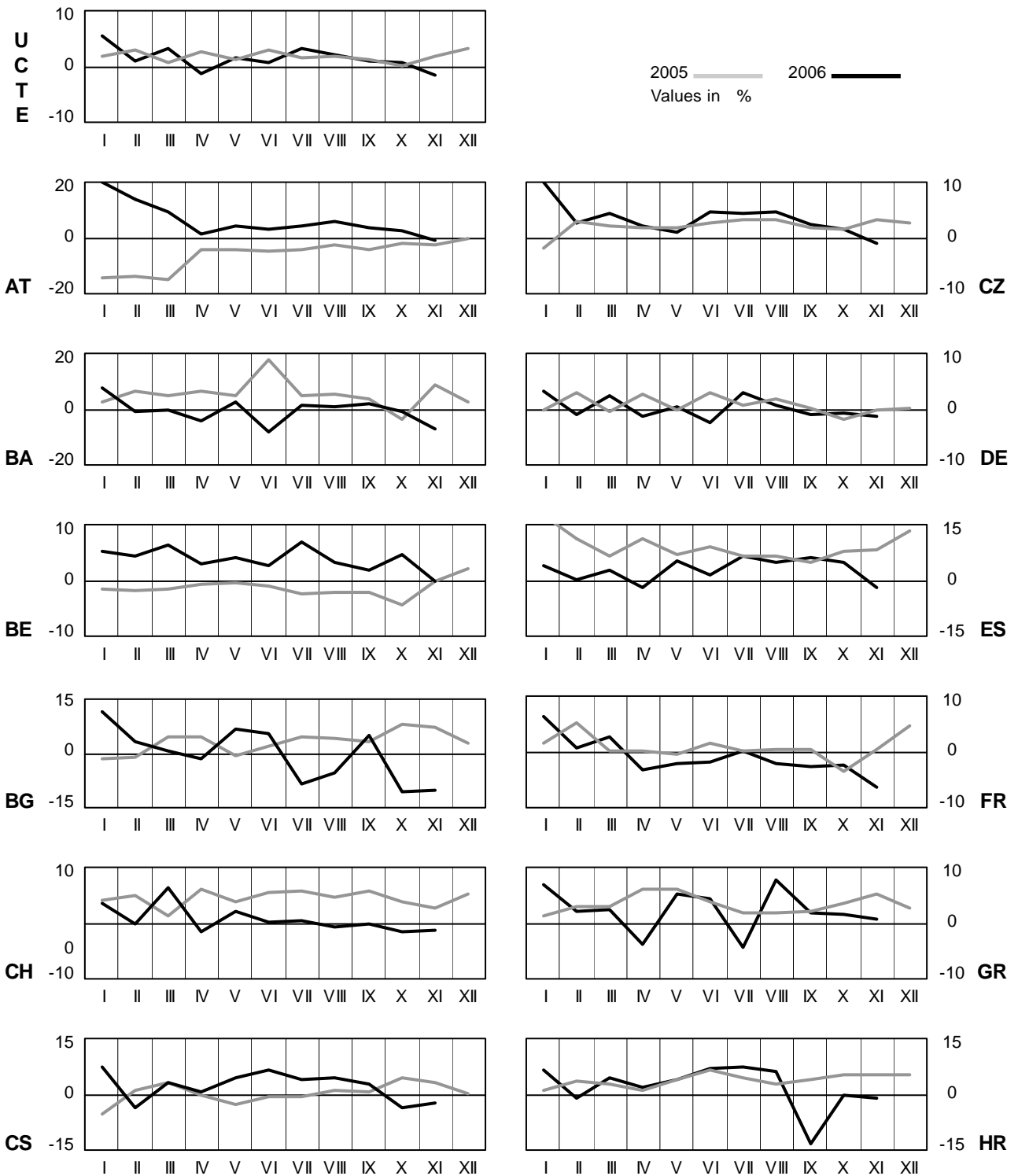
Monthly consumption

November 2006



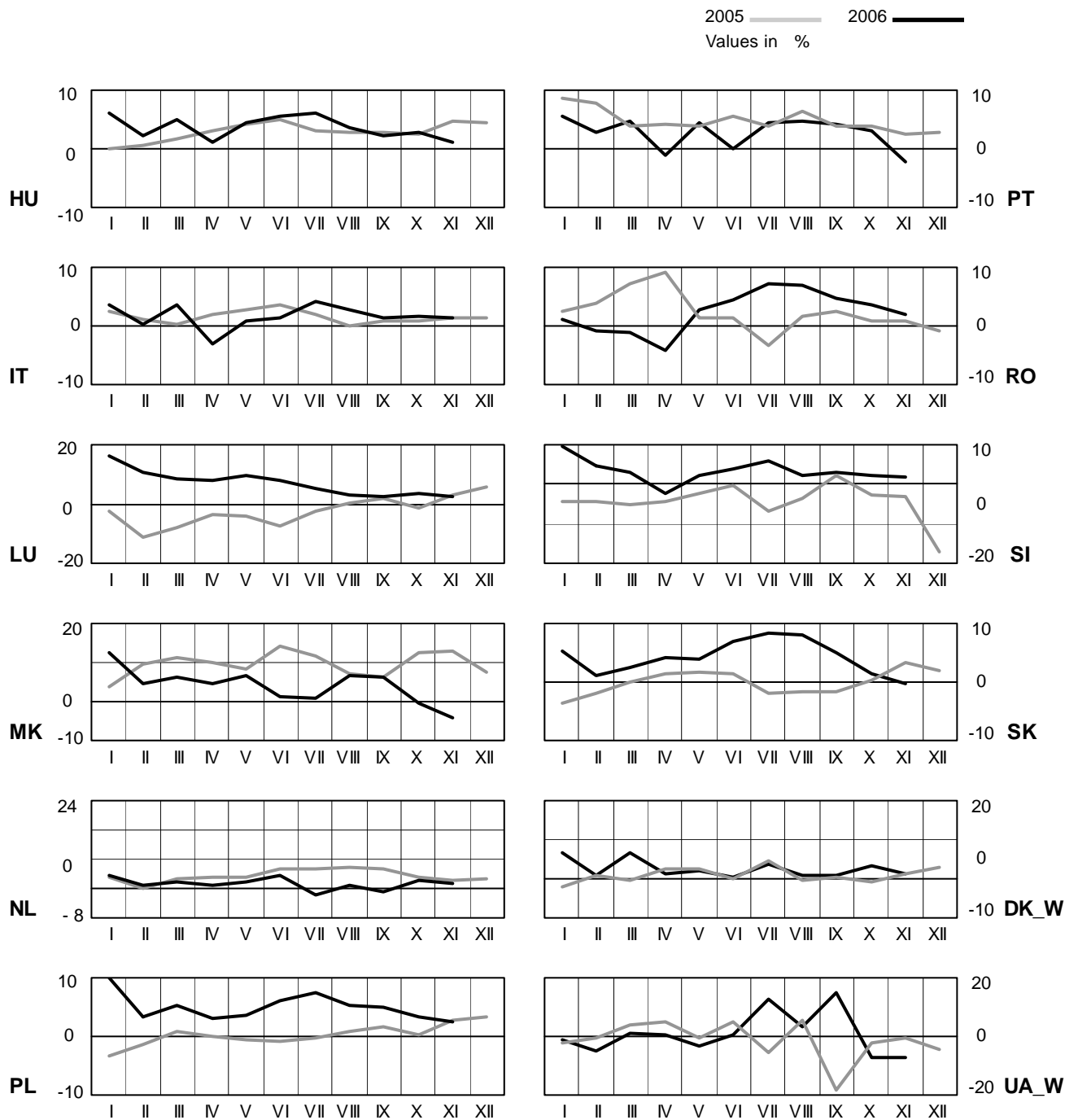
4 Monthly consumption variation

November 2006



4 Monthly consumption variation

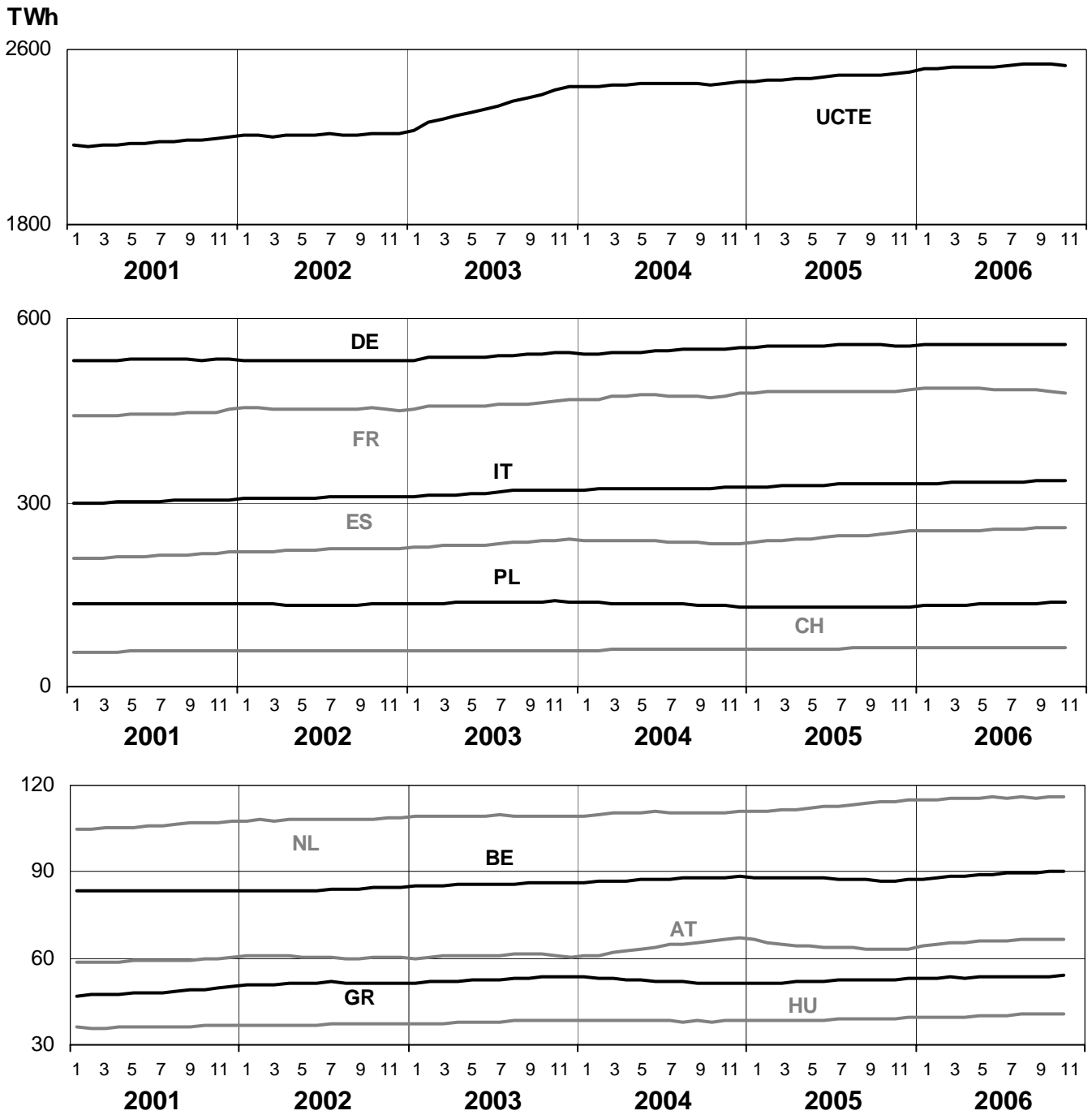
November 2006



5

Consumption of the last 12 months

November 2006

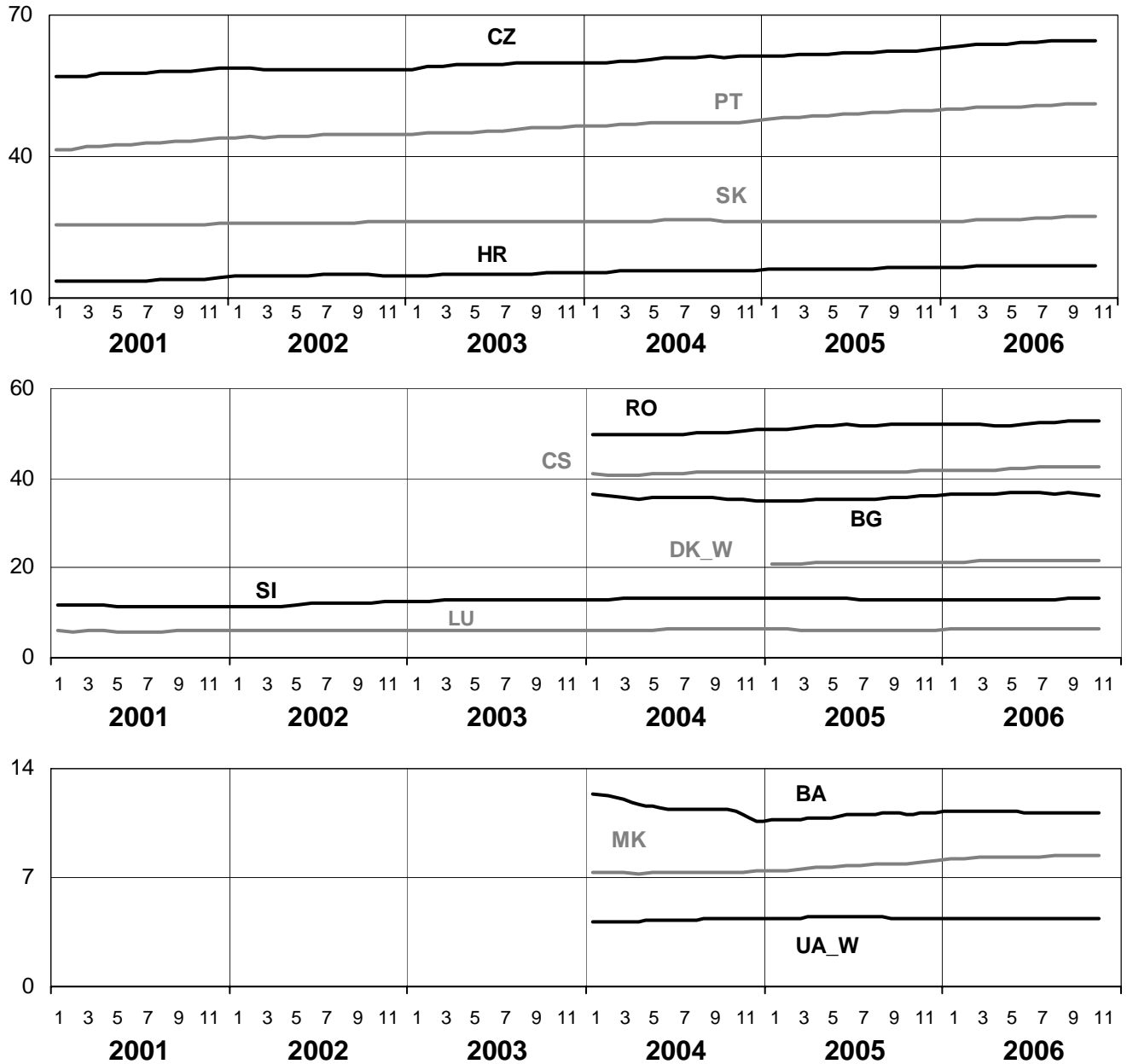


5

Consumption of the last 12 months

November 2006

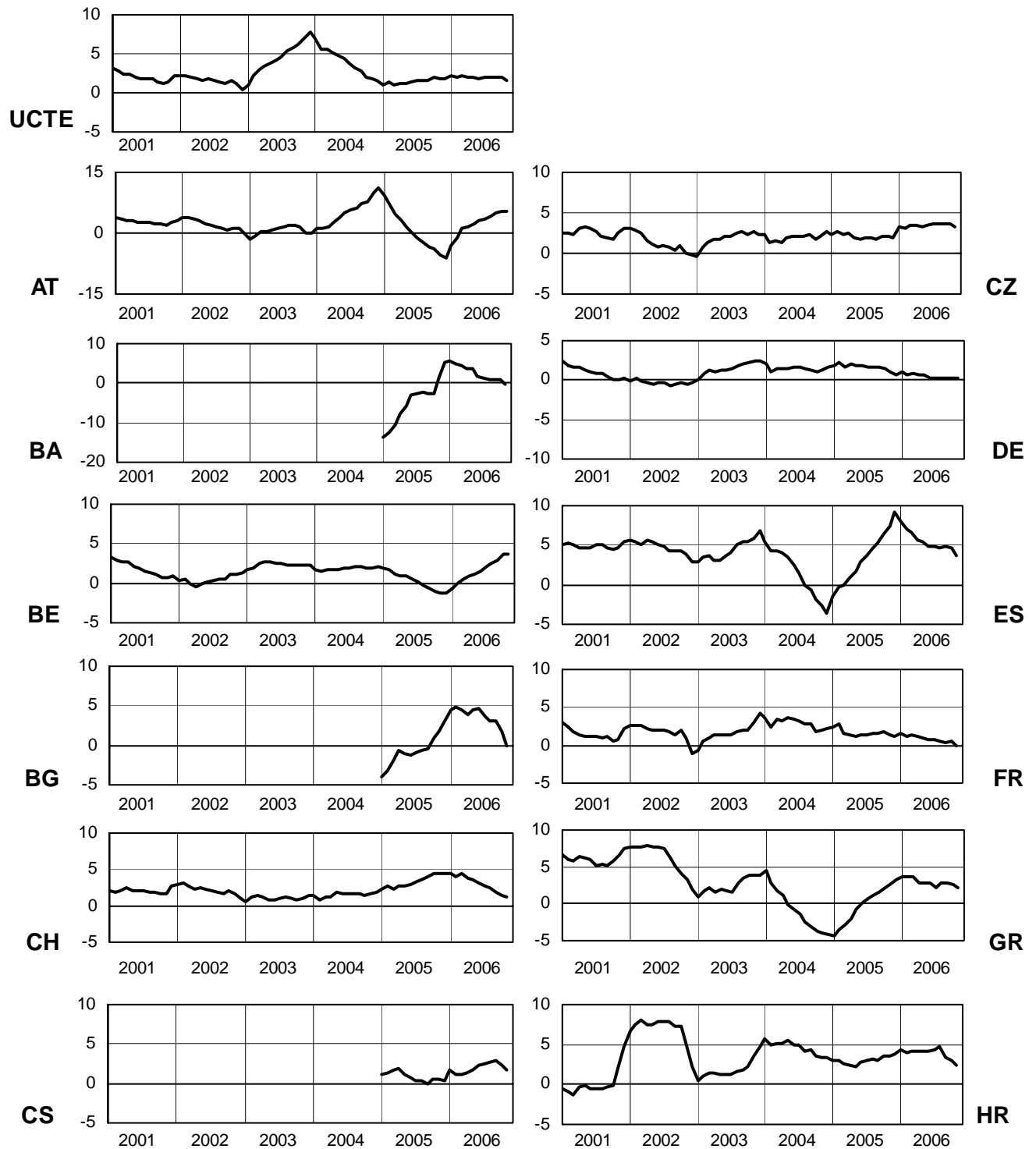
TWh



6

Variation of the last 12 months' consumption in %

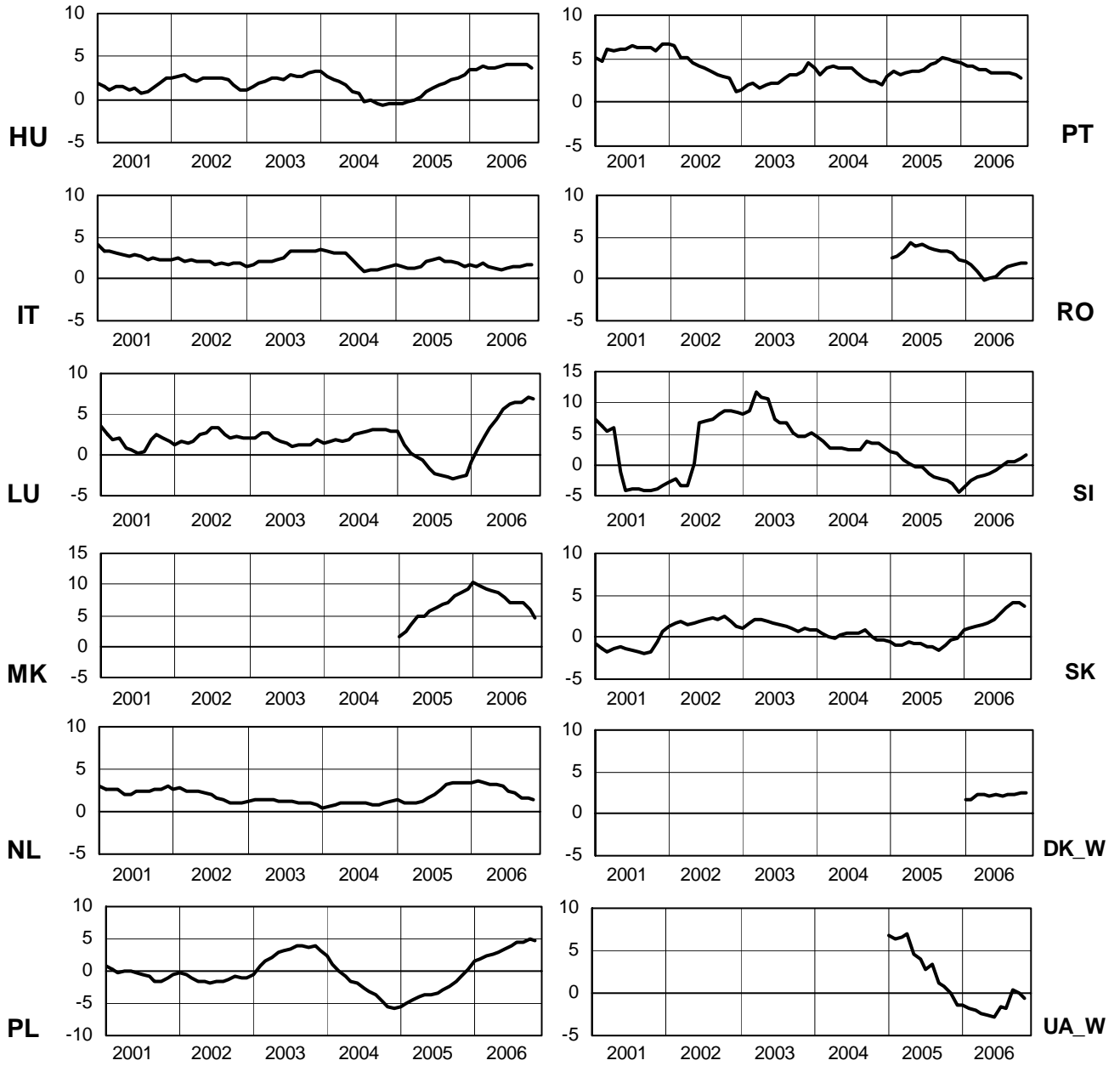
November 2006



6

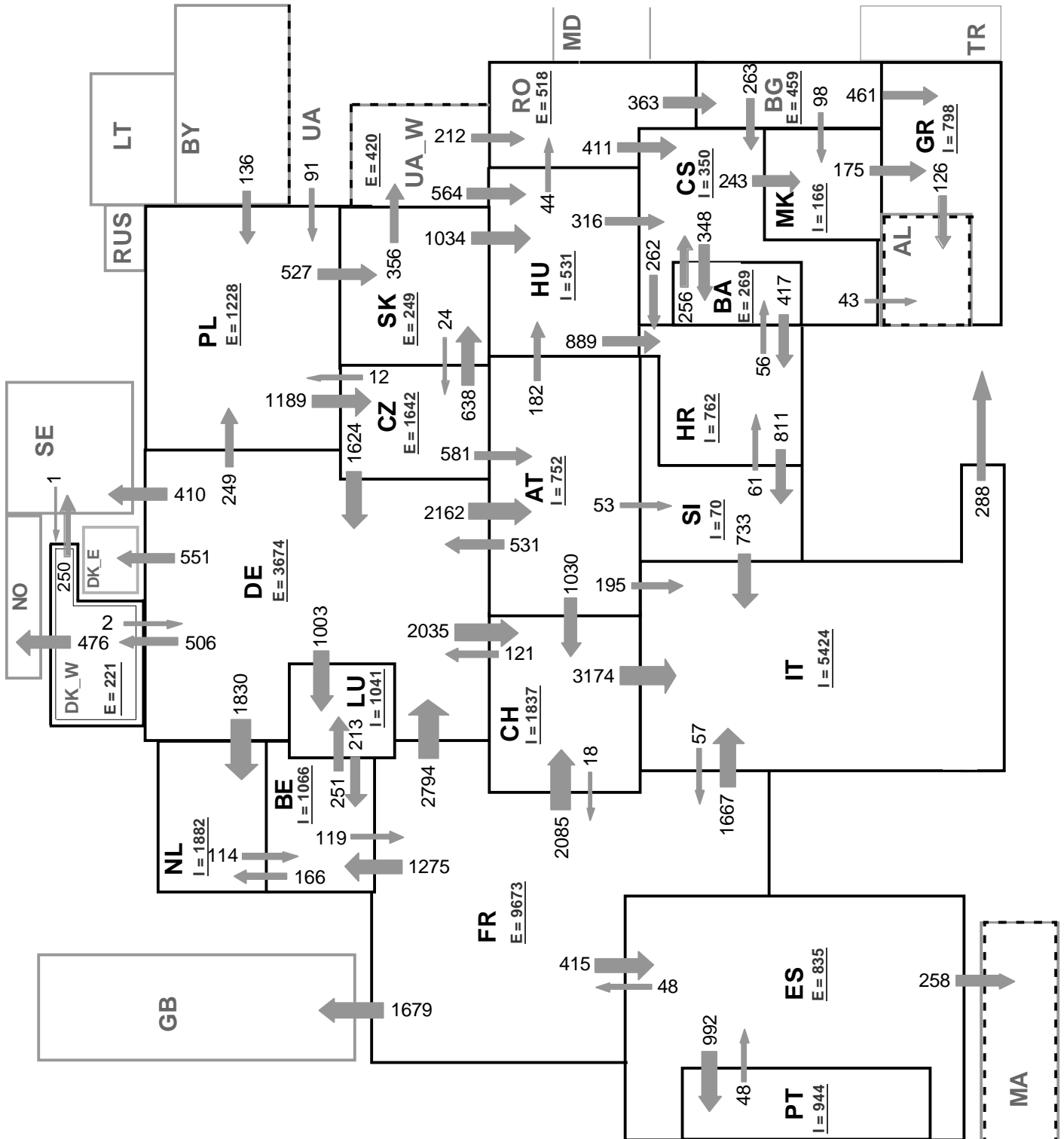
Variation of the last 12 months' consumption in %

November 2006



7

Load flows (night) on 15.11.06 at 03:00 a.m. CET in MW November 2006



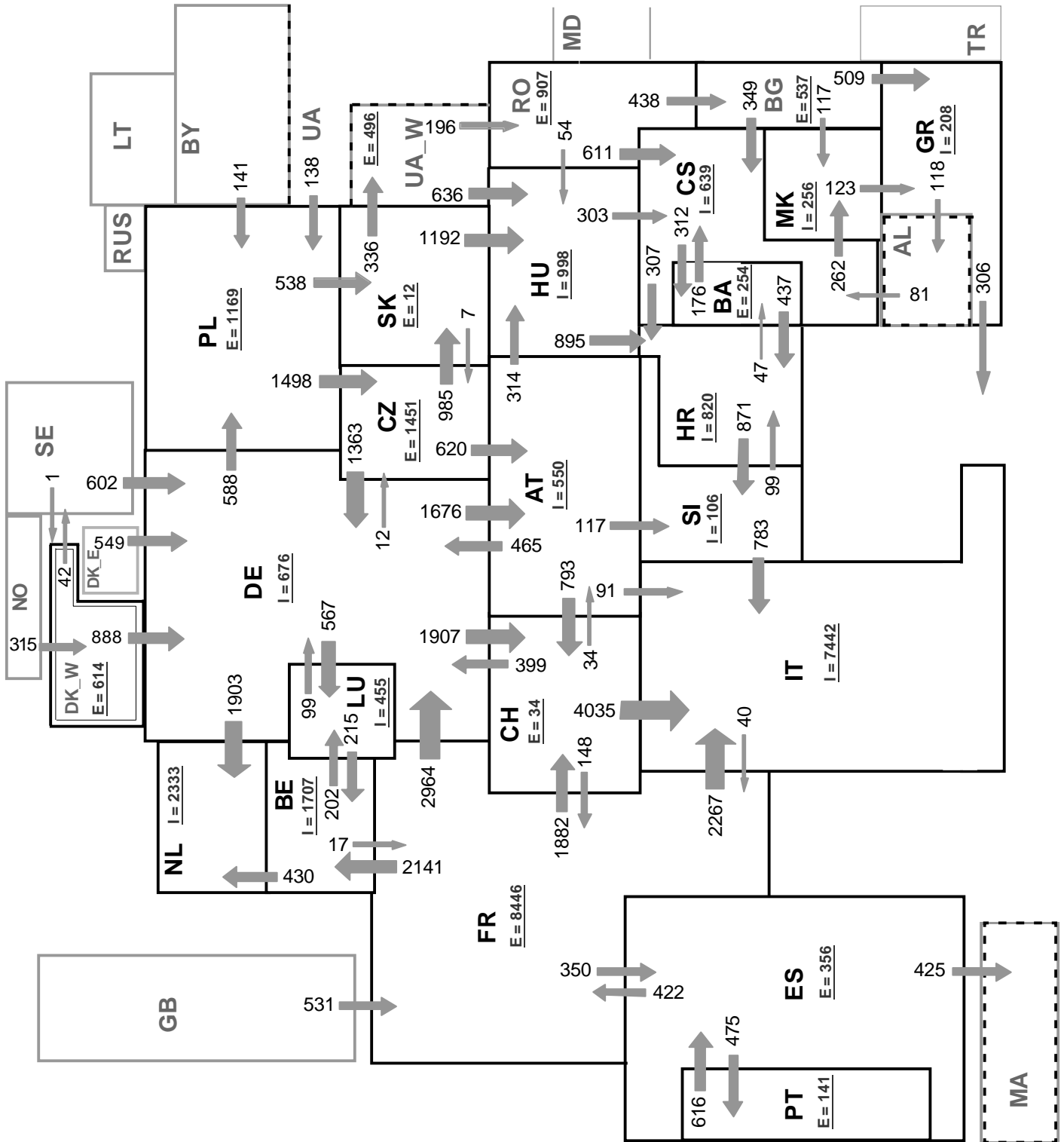
Associate member

Synchronous operation with UCTE region

Sum of load flows in MW:

UCTE = 34951 MW
 Total = 40612 MW

I = Import balance
 E = Export balance



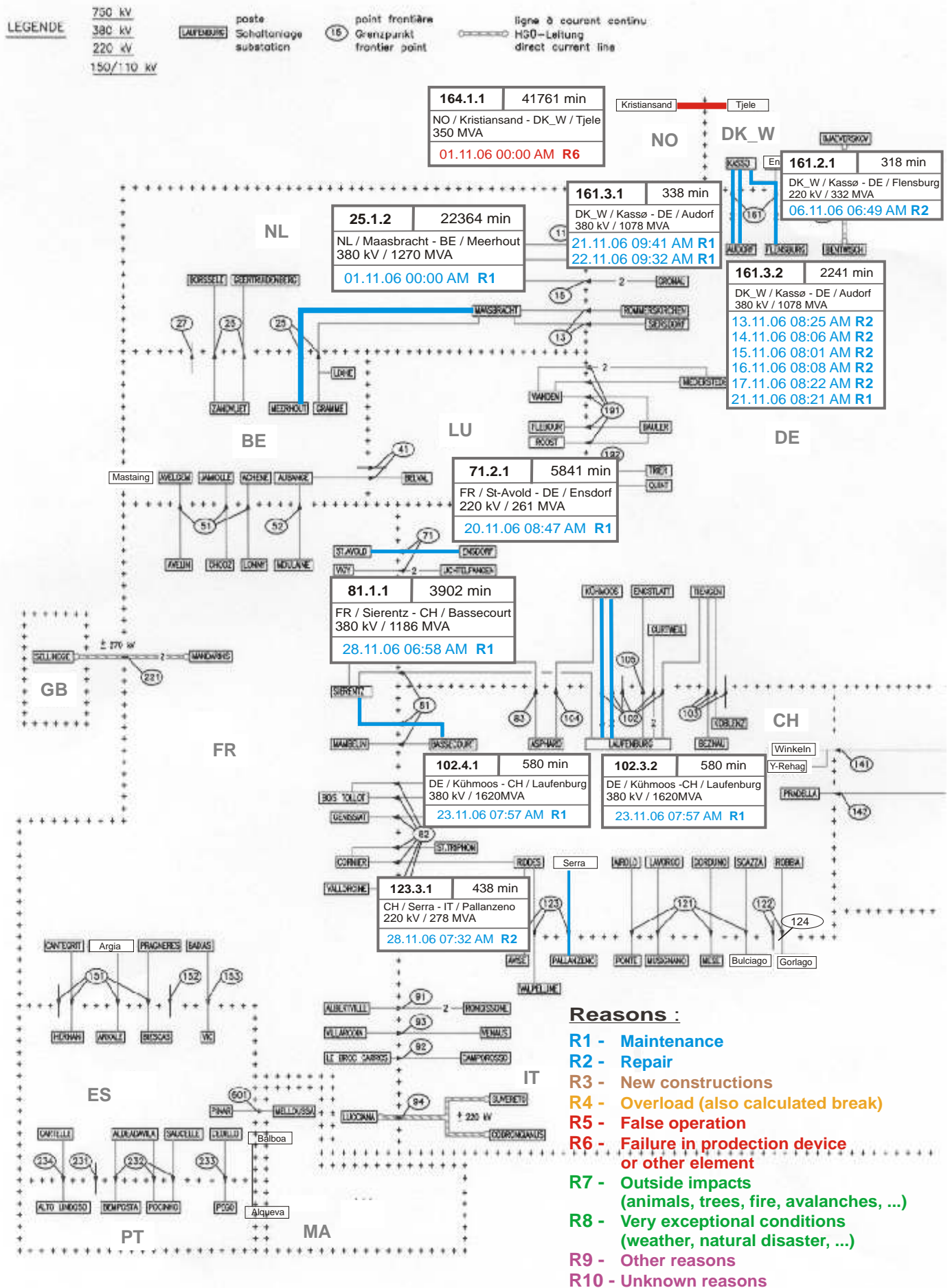
Associate member

Synchronous operation with UCTE region

Sum of load flows in MW:

UCTE = 38371 MW
 Total = 43370 MW

I = Import balance
 E = Export balance

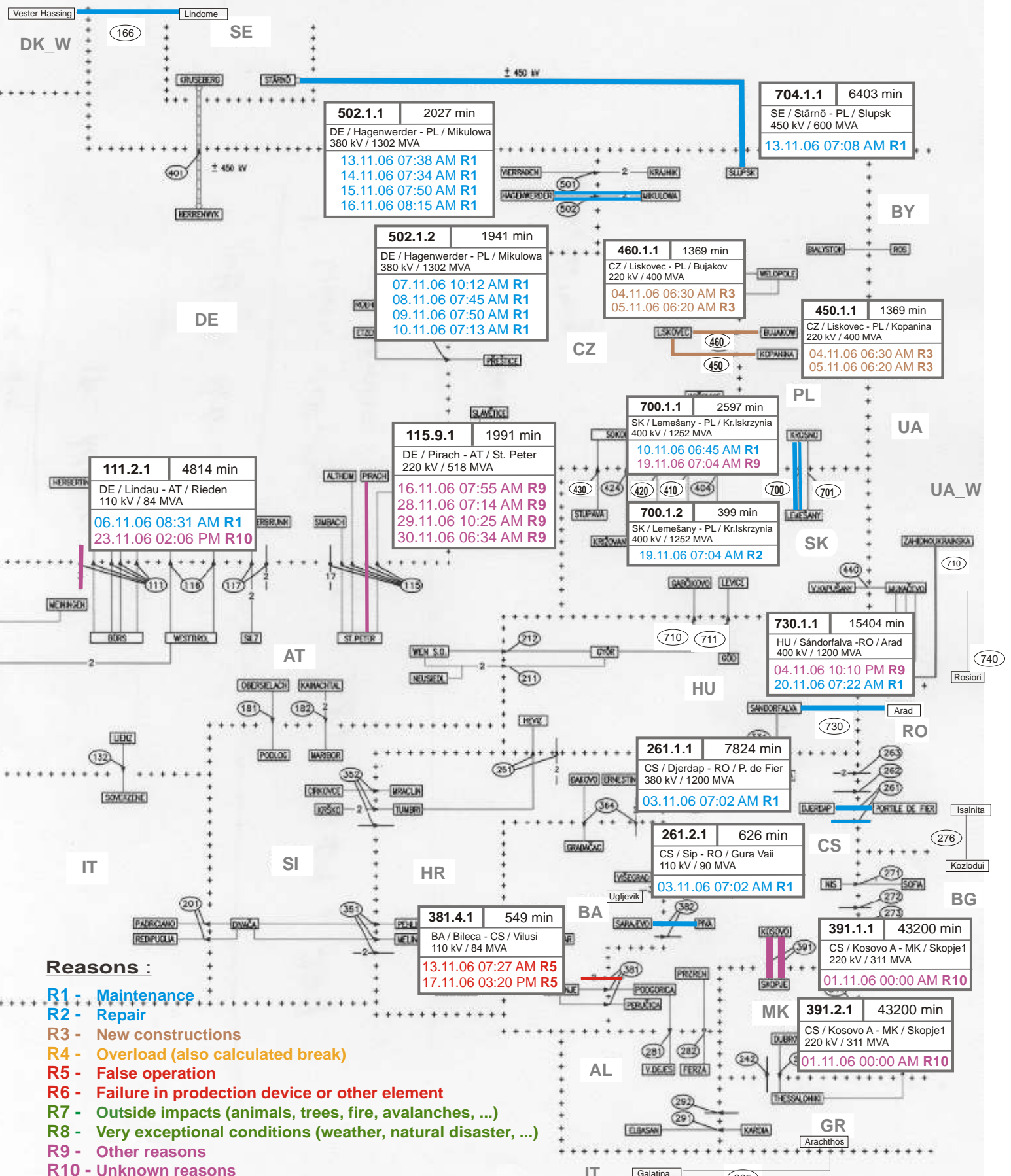


166.1.1	3455 min
DK_W / V. Hassing - SE / Lindome 360 MVA	
21.11.06 07:00 AM R1	

LEGENDE
750 kV
380 kV
220 kV
150/110 kV

LAUFENBURG poste Schalteranlage substation
point frontière Grenzpunkt frontier point

ligne à courant continu HGÜ-Leitung direct current line



502.1.1	2027 min
DE / Hagenwerder - PL / Mikulowa 380 kV / 1302 MVA	
13.11.06 07:38 AM R1 14.11.06 07:34 AM R1 15.11.06 07:50 AM R1 16.11.06 08:15 AM R1	

502.1.2	1941 min
DE / Hagenwerder - PL / Mikulowa 380 kV / 1302 MVA	
07.11.06 10:12 AM R1 08.11.06 07:45 AM R1 09.11.06 07:50 AM R1 10.11.06 07:13 AM R1	

704.1.1	6403 min
SE / Stårnö - PL / Slupsk 450 kV / 600 MVA	
13.11.06 07:08 AM R1	

460.1.1	1369 min
CZ / Liskovec - PL / Bujakov 220 kV / 400 MVA	
04.11.06 06:30 AM R3 05.11.06 06:20 AM R3	

450.1.1	1369 min
CZ / Liskovec - PL / Kopanina 220 kV / 400 MVA	
04.11.06 06:30 AM R3 05.11.06 06:20 AM R3	

115.9.1	1991 min
DE / Pirach - AT / St. Peter 220 kV / 518 MVA	
16.11.06 07:55 AM R9 28.11.06 07:14 AM R9 29.11.06 10:25 AM R9 30.11.06 06:34 AM R9	

700.1.1	2597 min
SK / Lemešany - PL / Kr.Iskrzynia 400 kV / 1252 MVA	
10.11.06 06:45 AM R1 19.11.06 07:04 AM R9	

700.1.2	399 min
SK / Lemešany - PL / Kr.Iskrzynia 400 kV / 1252 MVA	
19.11.06 07:04 AM R2	

111.2.1	4814 min
DE / Lindau - AT / Rieden 110 kV / 84 MVA	
06.11.06 08:31 AM R1 23.11.06 02:06 PM R10	

730.1.1	15404 min
HU / Sándorfalva - RO / Arad 400 kV / 1200 MVA	
04.11.06 10:10 PM R9 20.11.06 07:22 AM R1	

261.1.1	7824 min
CS / Djerdap - RO / P. de Fier 380 kV / 1200 MVA	
03.11.06 07:02 AM R1	

261.2.1	626 min
CS / Sip - RO / Gura Vail 110 kV / 90 MVA	
03.11.06 07:02 AM R1	

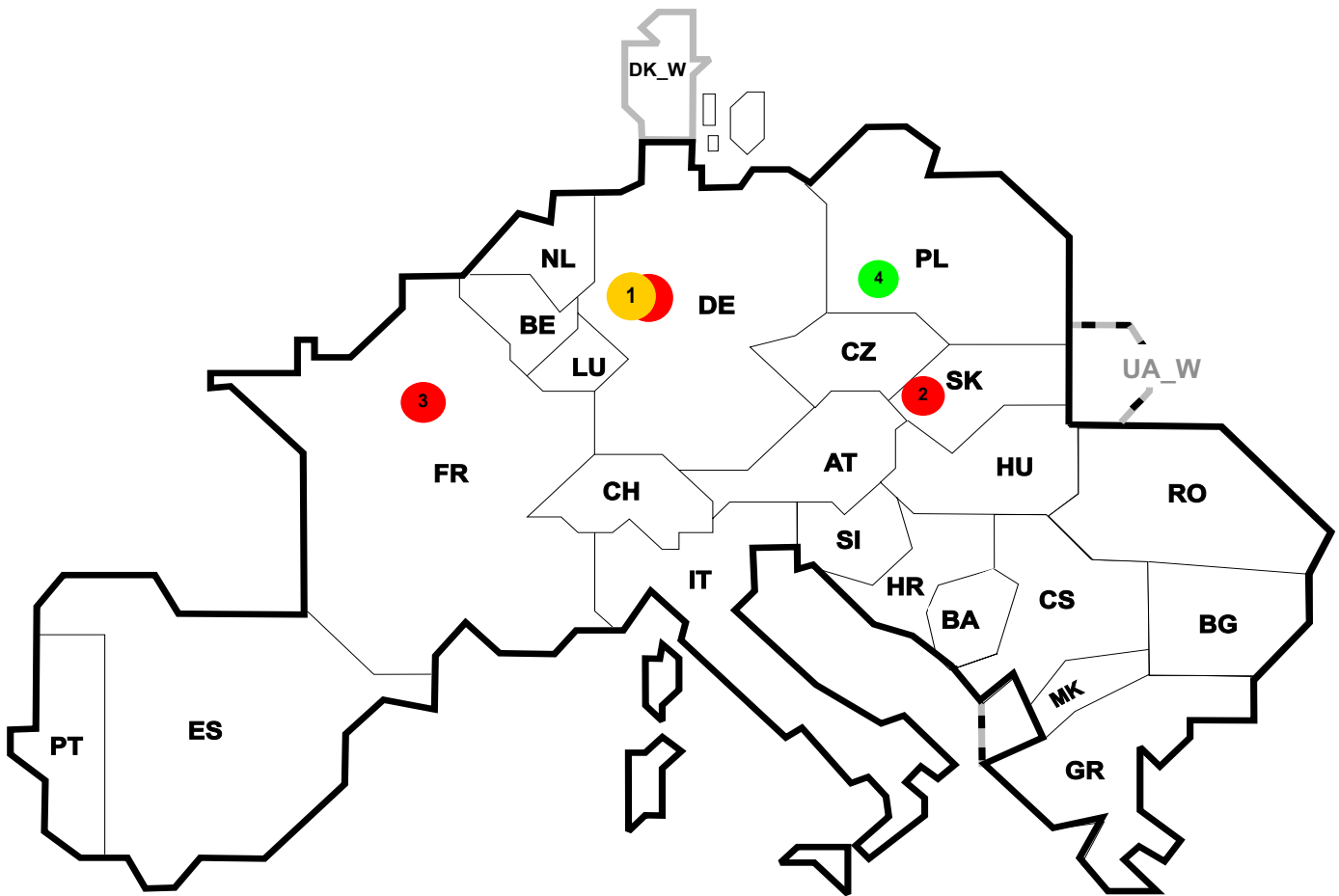
381.4.1	549 min
BA / Bileca - CS / Vilusi 110 kV / 84 MVA	
13.11.06 07:27 AM R5 17.11.06 03:20 PM R5	

391.1.1	43200 min
CS / Kosovo A - MK / Skopje1 220 kV / 311 MVA	
01.11.06 00:00 AM R10	

391.2.1	43200 min
CS / Kosovo A - MK / Skopje1 220 kV / 311 MVA	
01.11.06 00:00 AM R10	

Reasons :

- R1 - Maintenance
- R2 - Repair
- R3 - New constructions
- 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



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	DE	Landesbergen	R4, R6	6000	16724	37	5,66
2	SK	Lemesany	R5	217	230	38	4,19
3	FR	Chatillon	R6	23	56	5414	0,03
4	PL	Opole Power Plant	R7	0	360	1425	-

UCTE²

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

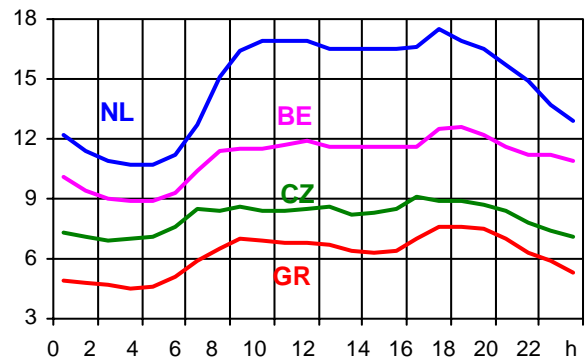
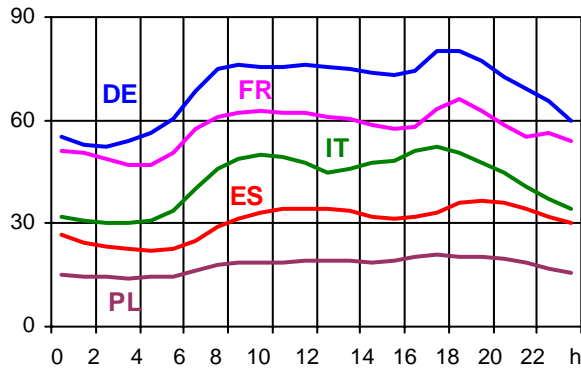
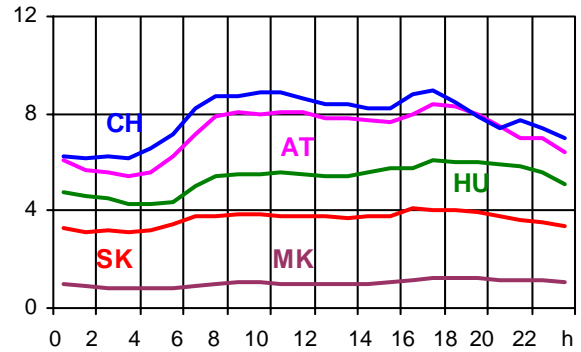
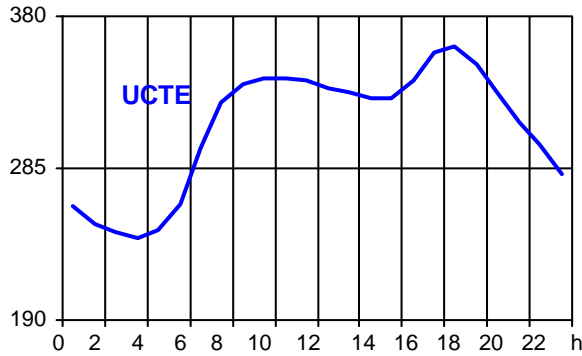
² Energy Not Supplied only related to the transmission grid, not including supply interruptions in lower voltage levels. A report with a detailed description of the events on 4 November 2006 to be found on www.ucte.org.

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	857558	1207540	1093	1107	1050	1228
BA	255236	134285	374	125	398	145
BE	618394	1559416	728	1753	538	2212
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2293306	2915639	2746	4613	3891	3868
CS	212664	532461	349	727	229	880
CZ	1863005	744358	2564	869	2723	1235
DE	3539662	1821945	3548	3077	3231	3070
ES	1212345	927243	1817	1300	895	809
FR	7928561	1564753	11350	1555	9610	1167
GR	66405	482627	0	781	303	490
HR	10705	522232	17	854	17	799
HU	689684	1282325	1168	1691	998	1990
IT	149184	4574077	345	5769	40	7482
MK	0	162600	2	166	2	265
NL	216333	2159536	709	2612	764	3074
PL	955201	72167	1300	104	1300	140
PT	465614	621970	0	992	1450	1330
RO	477636	43259	644	161	942	21
SI	566171	608766	760	764	822	930
SK	672590	596210	875	567	964	863
DK_W	160349	742954	491	905	334	800
UA_W	333827	0	425	0	499	0

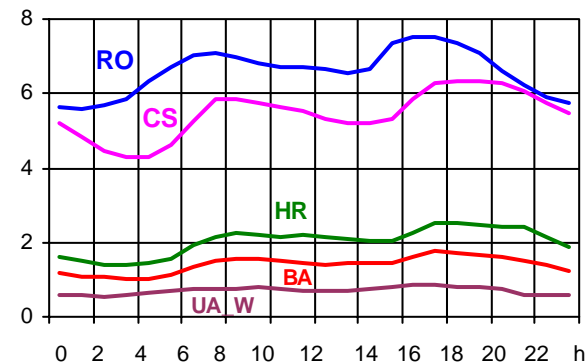
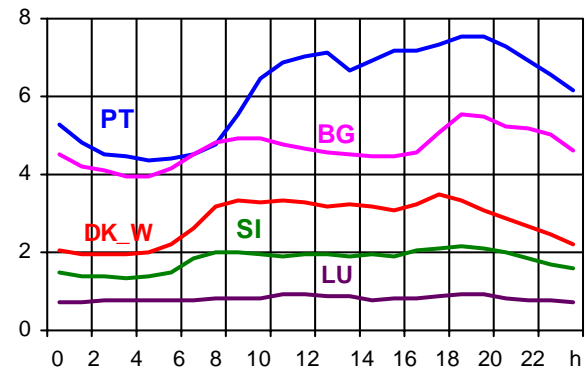
- Control areas can differ from national borders (i.e. German block which includes parts of AT, LU and DK).
- Values are calculated on an hourly base (MWh).
- This values are not the provisional values entered in the VULCANUS system, but the definitive values after an eventual correction during the actual 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 15.11.2006 CET

Values in GW



	Highest load		Load representativity %	Parallel power ² MW
	MW	var.% ¹		
AT	8393	-0,2	100	8516
BA	1759	5,0	100	1637
BE ³	12583	-3,1	100	10012
BG	5519	-1,3	100	5221
CH	8968	-1,6	100	9066
CS	6354	4,9	100	4994
CZ	9139	-2,2	100	10115
DE	80093	-2,9	91	72300
ES	36387	-1,9	98	33621
FR	66046	-8,4	100	70724
GR	7575	1,0	100	6625
HR	2550	4,4	100	1767
HU	6120	0,4	100	4496
IT	51973	2,8	100	43837
LU	916	-2,8	100	910
MK	1212	-8,9	100	765
NL	17544	4,1	100	14591
PL ⁴	20653	2,2	100	22241
PT	7547	-3,1	96	6597
RO	7512	-2,8	100	7727
SI	2137	3,3	95	1716
SK	4076	1,1	100	3847
UCTE	361053	-1,1		341325
DK_W	3497	1,5	100	3950
UA_W	876	0,2	100	1180



¹ Variation as compared to corresponding month of the previous year

² Power produced in parallel operation (including autoproduction)

³ The reported figures are best estimates based on actual measurements and extrapolations.

⁴ Average value of each hour



Contact

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

info@ucte.org
www.ucte.org