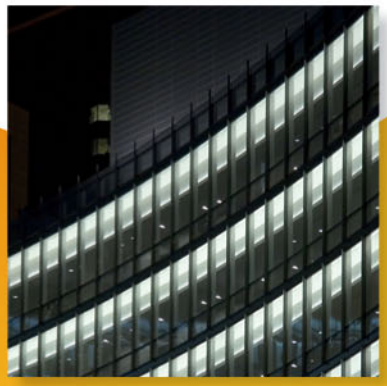
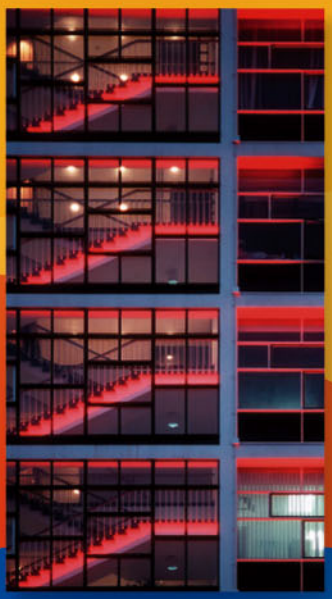
UCTE





December 2006

Monthly provisional values

union for the co-ordination of transmission of electricity

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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.

1 Electricity supply situation of the countries

December 2006

Coun-tries	Net production in GWh: Therm. nuclear	Therm conv.	Hydro prod	Other renew.	Of which wind	Not iden-tify	Total	Exchange balance in GWh	Pump in GWh	Consumption in GWh: monthly	var. [%]	last 12 months	var. [%]
AT	0	2363	1841	0	0	509	**4713** [1]	1645	304	6054	-2,5	66500	5,3
BA	0	773	300	0	0	0	**1073**	-4	0	1069	-1,5	11109	-0,7
BE[2]	3976	2993	150	268	54	0	**7387** [1]	790	140	8037	-3,3	89901	3,1
BG	1997	1797	239	0	0	0	**4033**	-619	63	3351	-8,6	35672	-1,1
CH	2419	191	2323	89	1	0	**5022** [1]	941	161	5802	-4,4	63223	0,3
CS	0	3118	816	0	0	0	**3934** [1]	444	46	4332	-1,9	42262	1,5
CZ	2278	4653	222	19	7	0	**7172** [1]	-1280	98	5794	-4,8	64319	2,6
DE	13187	32017	1849	6234	4730	0	**53287** [1]	-4396	863	48028	-4,5	559078	0,5
ES	5063	9206	5143	2266	2066	0	**21678** [1]	-332	362	21387	-7,3	257698	2,0
FR	40408	6946	5134	640	315	0	**53128**	-3888	682	48558	-5,5	478360	-0,8
GR	0	3902	387	110	101	0	**4399** [1]	424	79	4744	1,2	53988	2,1
HR	0	700	337	4	3	0	**1041** [1]	573	21	1593	-3,3	16810	1,5
HU[3]	1013	1851	10	102	5	87	**3063** [1]	520	0	3583	-0,1	40629	3,3
IT	0	21271	2756	709	255	0	**24736** [1]	4297	743	28290	0,4	335663	1,6
LU	0	305	79	14	8	0	**398**	270	93	575	0,7	6623	6,5
MK	0	590	96	0	0	0	**686** [1]	202	0	888	0,7	8377	3,8
NL	0	7775	0	757	360	0	**8532** [1]	1703	0	10235	-1,7	115862	1,1
PL	0	13220	197	54	43	0	**13471** [1]	-816	75	12580	-0,1	136498	4,5
PT	0	1875	2297	533	356	0	**4705** [1]	-122	40	4684	0,9	51168	2,6
RO	489	3752	1084	0	0	0	**5325** [1]	-456	1	4868	1,6	53016	2,2
SI	518	391	205	0	0	0	**1114**	45	0	1159	17,7	13331	4,4
SK	1671	551	223	1	1	246	**2692** [1]	-173	17	2502	-2,0	27208	3,5
UCTE	**73019**	**120240**	**25688**	**11800**	**8305**	**842**	**231589** [1]	**-232**	**3788**	**228113**	-3,4	**2527295**	**1,3**
DK_W	0	1613	4	822	705	0	2439 [1]	-510	0	1929	-2,6	21737	2,1
UA_W	0	751	6	0	0	0	757 [1]	-338	0	419	-7,1	4328	-0,8

[1] Including deliveries from industry

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

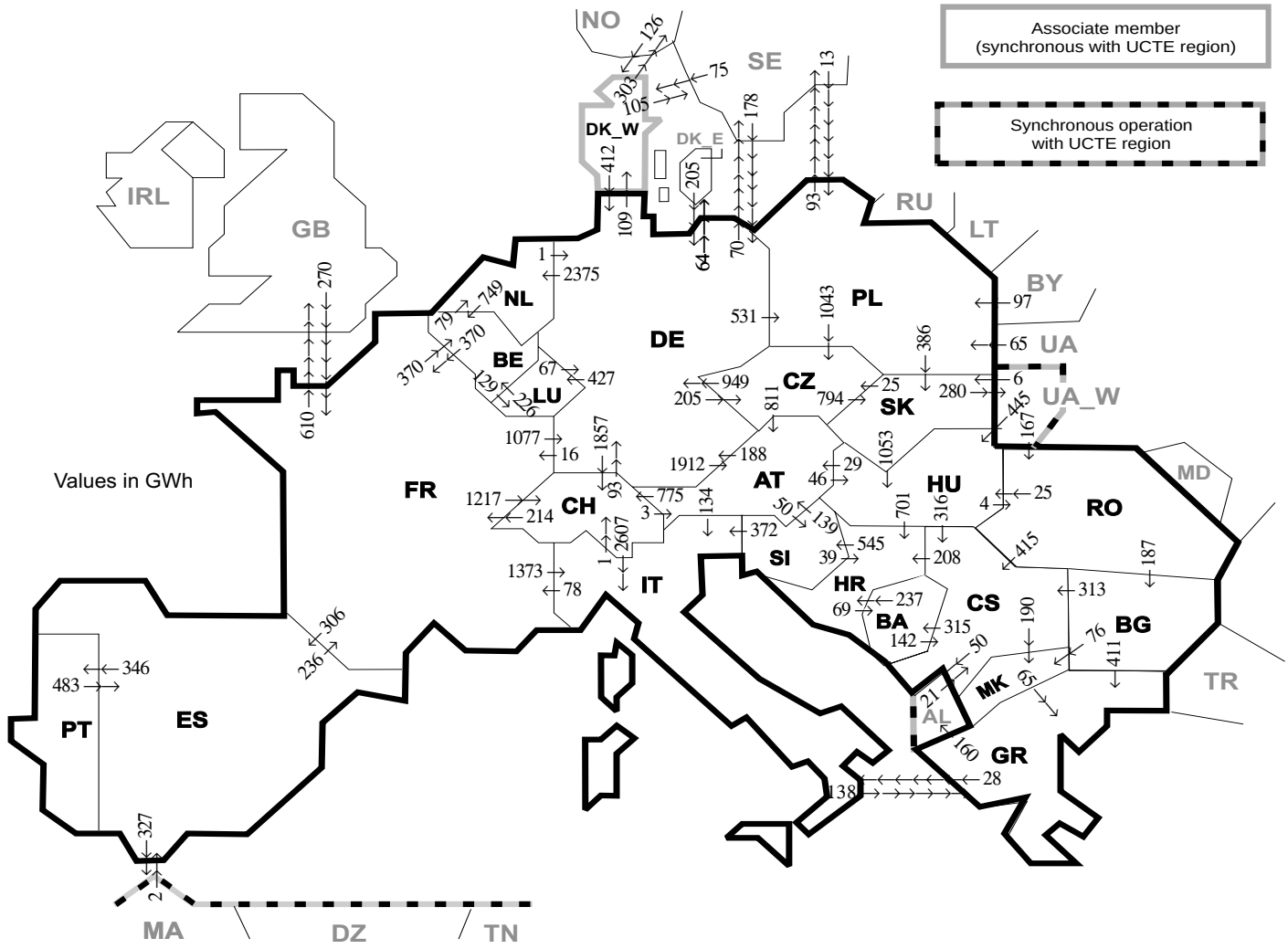
[3] Data on hydro, other renewable, not clearly identifiable production are not yet available.

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	93	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	97	100	95	100	100	100

2 Physical energy flows

December 2006

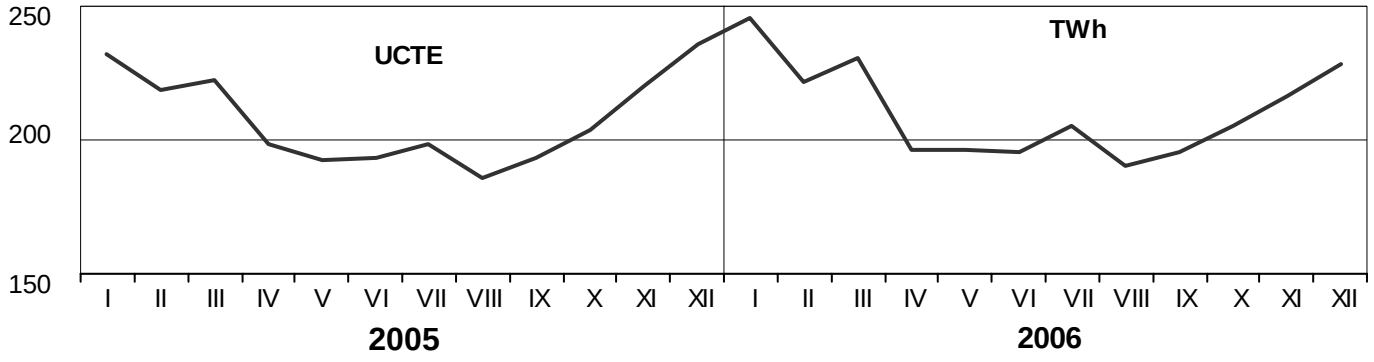


Exporting countries	Importing countries																									Sum export
	AT	BA	BE	BG	CH	CS	CZ	DE	ES	FR	GR	HR	HU	IT	LU	MK	NL	PL	PT	RO	SI	SK	DK_W	UA_W	Other III[1]	
AT	-	-	-	-	775	-	0	188	-	-	-	-	46	134	-	-	-	-	-	-	50	-	-	-	-	1193
BA	-	-	-	-	-	142	-	-	-	-	-	237	-	-	-	-	-	-	-	-	-	-	-	-	-	379
BE	-	-	-	-	-	-	-	-	-	370	-	-	-	-	129	-	79	-	-	-	-	-	-	-	-	578
BG	-	-	-	-	-	313	-	-	-	-	411	-	-	-	-	76	-	-	-	0	-	-	-	-	0	800
CH	3	-	-	-	-	-	-	93	-	214	-	-	-	2607	-	-	-	-	-	-	-	-	-	-	-	2917
CS	-	315	-	0	-	-	-	-	-	-	-	208	0	-	-	190	-	-	-	0	-	-	-	-	50	763
CZ	811	-	-	-	-	-	-	949	-	-	-	-	-	-	-	-	-	0	-	-	-	794	-	-	-	2554
DE	1912	-	-	-	1857	-	205	-	-	16	-	-	-	-	427	-	2375	531	-	-	-	-	109	-	134	7566
ES	-	-	-	-	-	-	-	-	-	236	-	-	-	-	-	-	-	-	346	-	-	-	-	-	327	909
FR	-	-	370	-	1217	-	-	1077	306	-	-	-	-	1373	-	-	-	-	-	-	-	-	-	-	610	4953
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	28	-	0	-	-	-	-	-	-	-	-	160	188
HR	-	69	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	545	-	-	-	-	614
HU	29	-	-	-	-	316	-	-	-	-	-	701	-	-	-	-	-	-	-	4	-	0	-	0	-	1050
IT	0	-	-	-	1	-	-	-	-	78	138	-	-	-	-	-	-	-	-	-	0	-	-	-	-	217
LU	-	-	226	-	-	-	-	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	293
MK	-	-	-	0	-	0	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65
NL	-	-	749	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	750
PL	-	-	-	-	-	-	1043	0	-	-	-	-	-	-	-	-	-	-	-	-	-	386	-	-	93	1522
PT	-	-	-	-	-	-	-	-	483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	483
RO	-	-	-	187	-	415	-	-	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	0	0	627
SI	139	-	-	-	-	-	-	-	-	-	-	39	-	372	-	-	-	-	-	-	-	-	-	-	-	550
SK	-	-	-	-	-	-	25	-	-	-	-	-	1053	-	-	-	-	0	-	-	-	-	-	280	-	1358
DK_W	-	-	-	-	-	-	-	412	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	408	820
UA_W	-	-	-	-	-	-	-	-	-	-	-	-	445	-	-	-	-	-	-	167	-	6	-	-	-	618
Other III[1]	-	-	-	0	-	21	-	383	2	270	0	-	-	-	-	-	-	175	-	0	-	-	201	-	-	1052
Sum imp	2894	384	1345	187	3850	1207	1273	3170	791	1184	614	1185	1569	4514	556	266	2454	706	346	171	595	1186	310	280	1782	32819

Sum of physical energy flows between UCTE countries = 28566GWh Total physical energy flows = 32819GWh

[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.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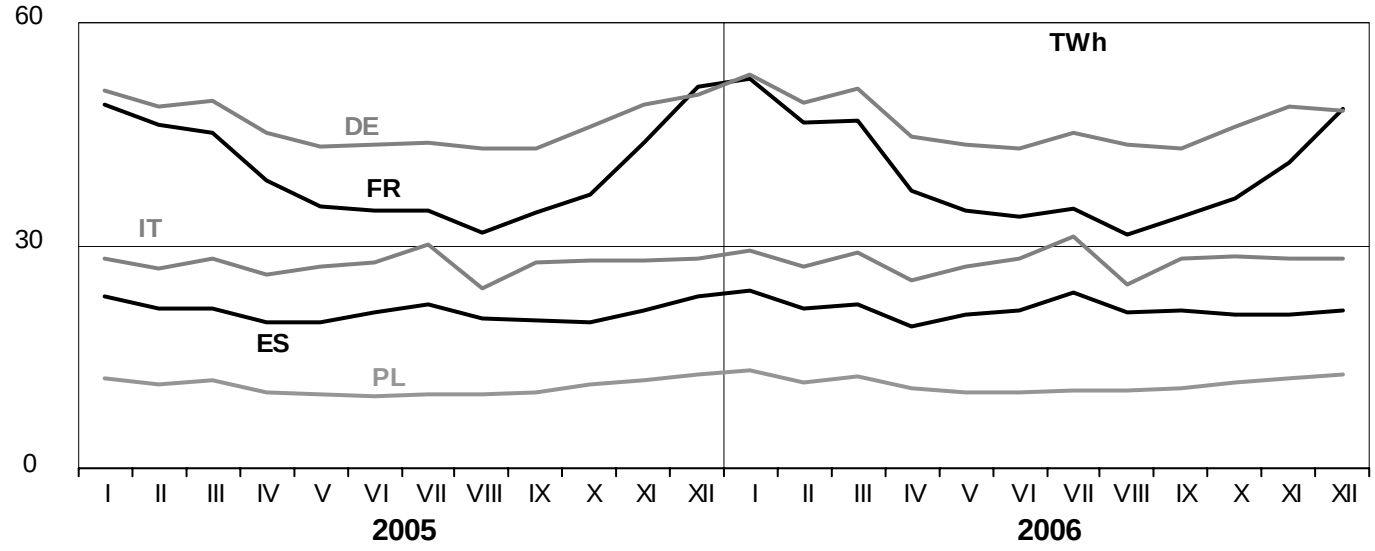
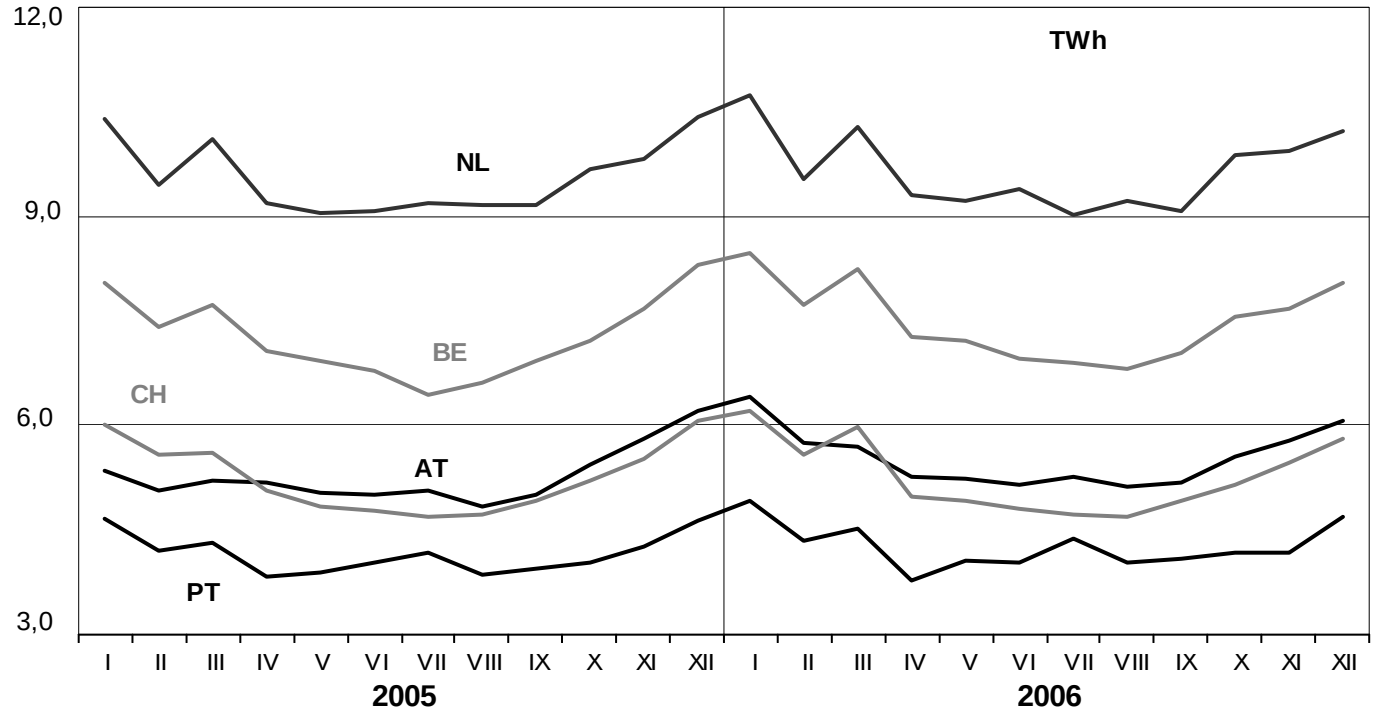
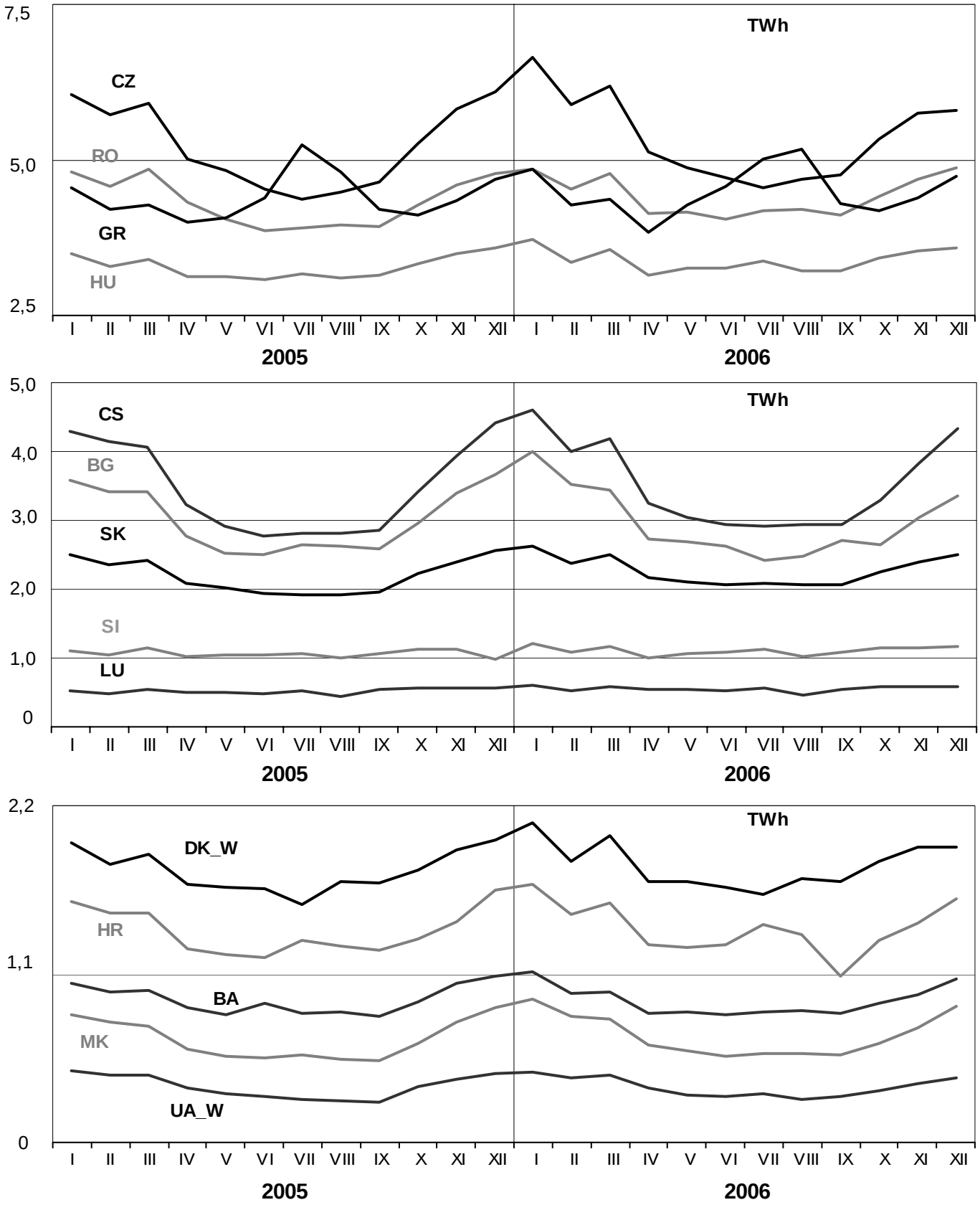
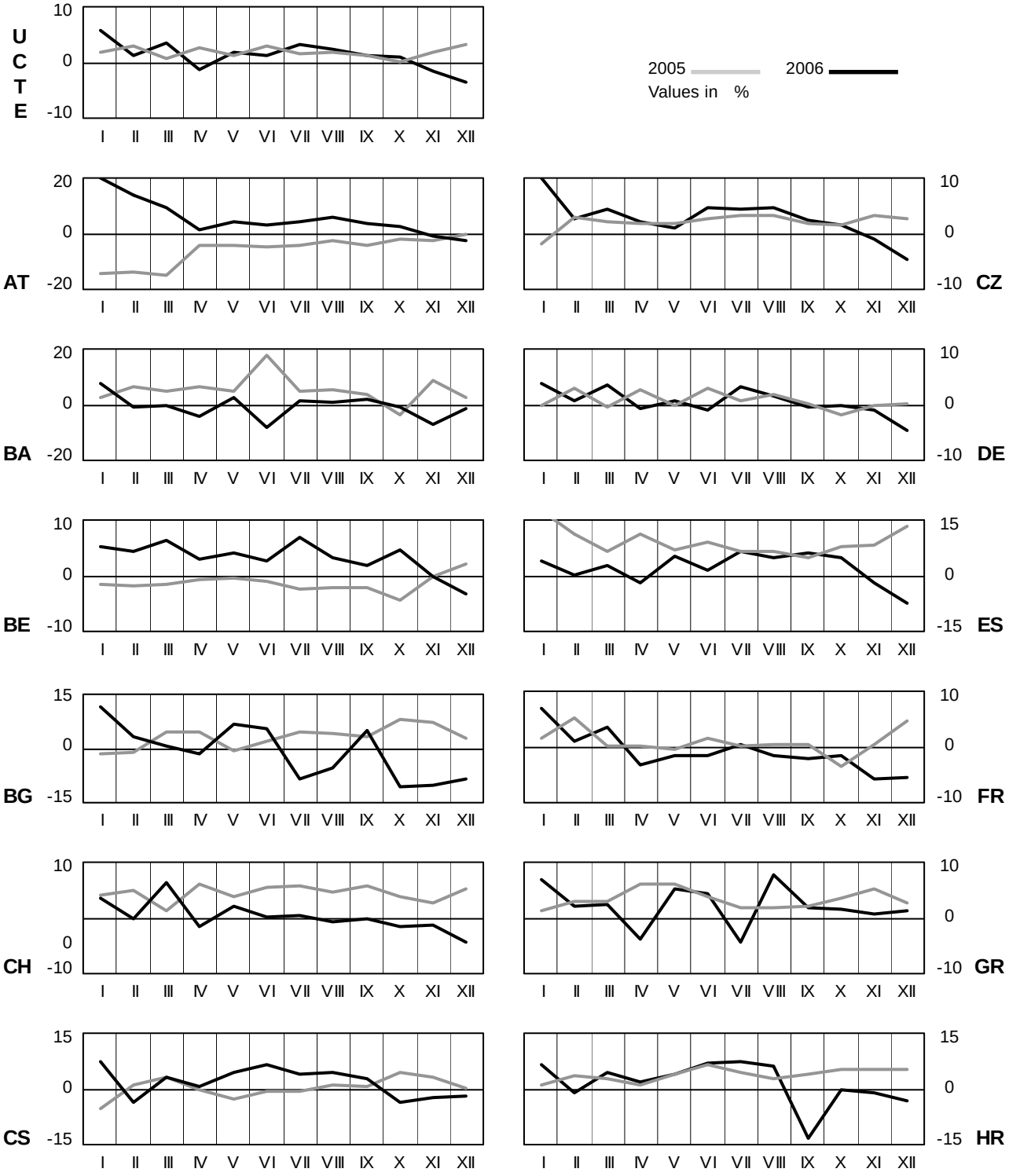
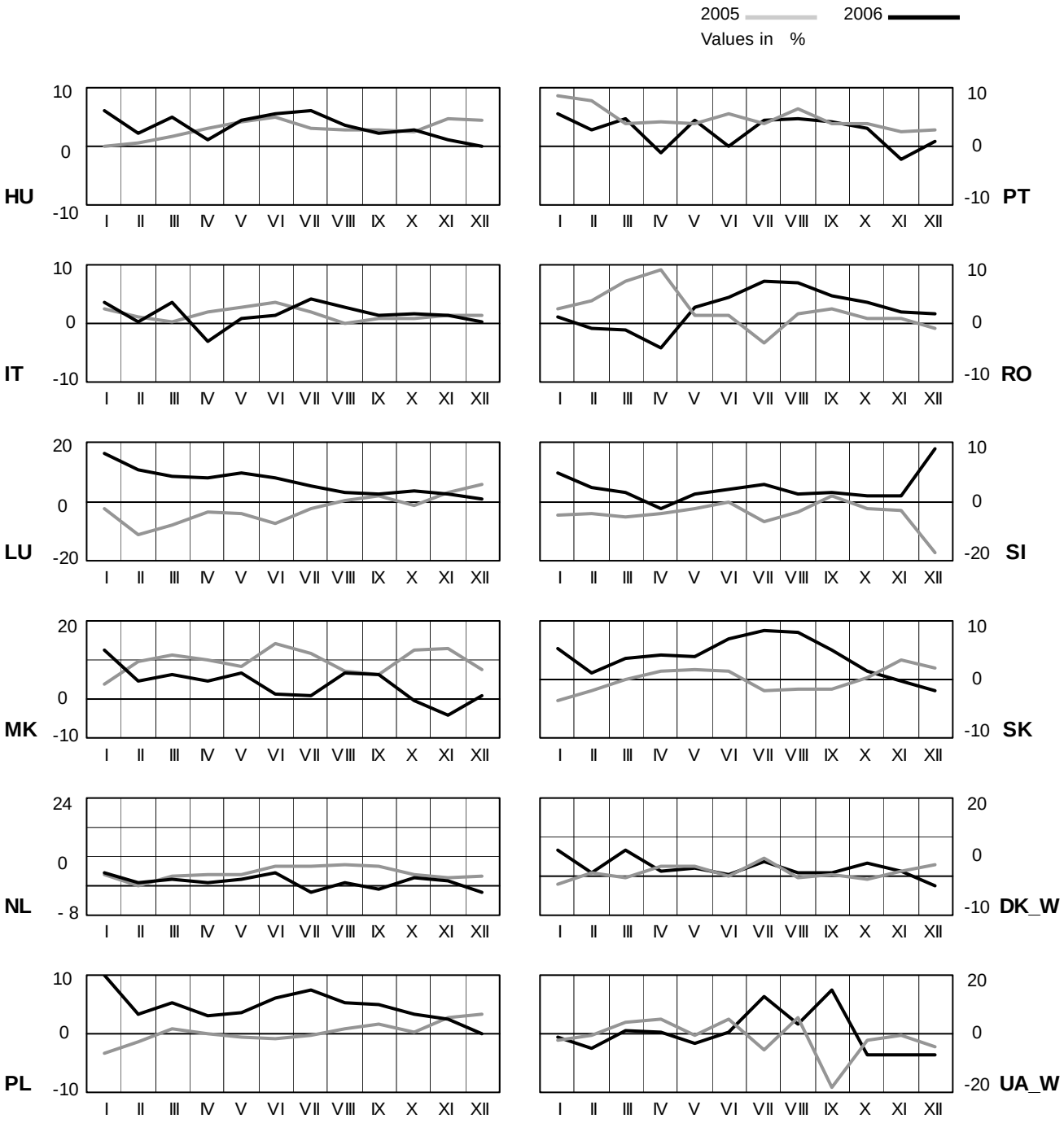
200
150
UCTE
TWh
I II III IV V VI VII VIII IX X XI XII I II III IV V VI VII VIII IX X XI XII
2005
2006

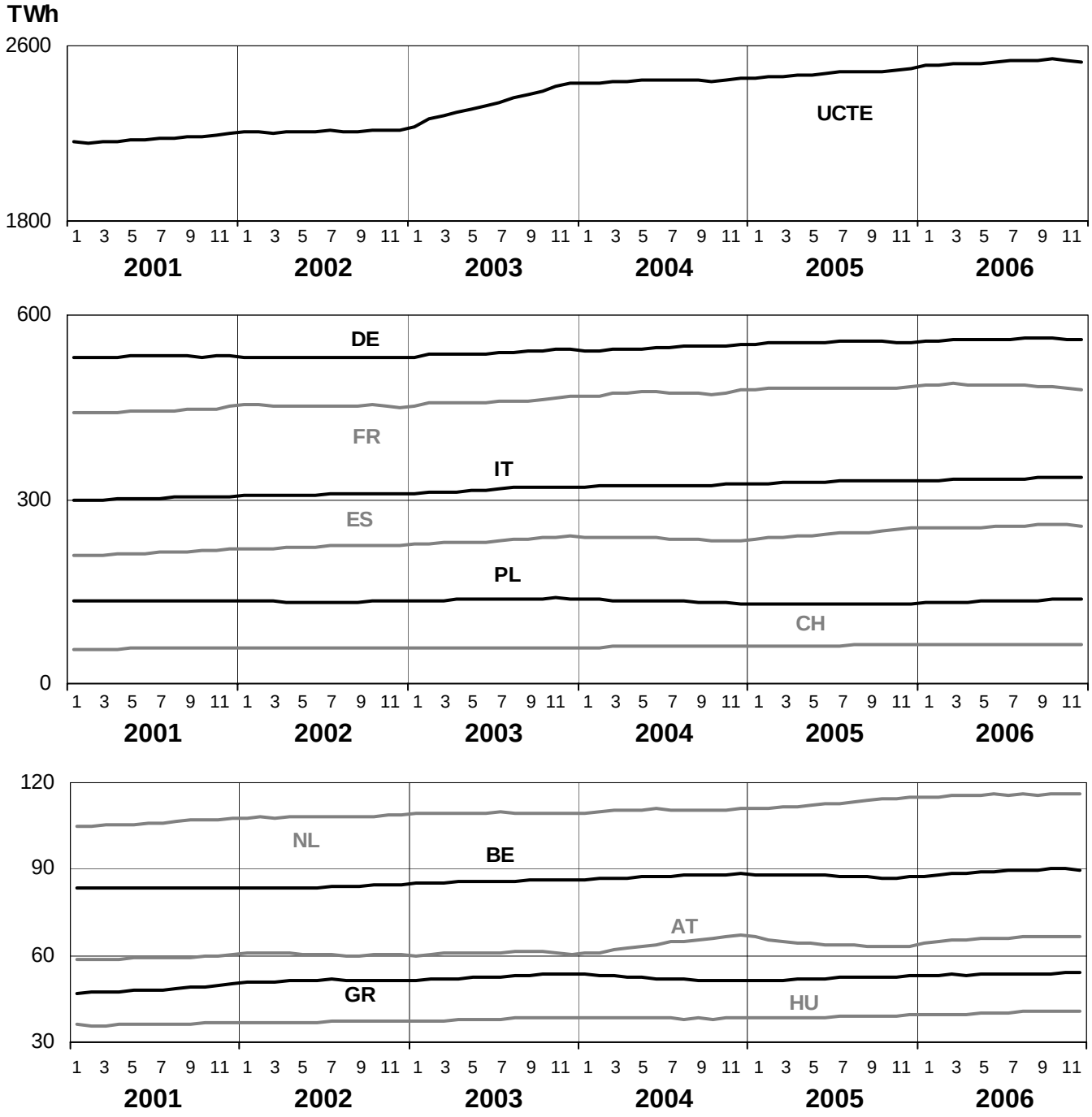

60
30
0
TWh
DE
FR
IT
ES
PL
I II III IV V VI VII VIII IX X XI XII I II III IV V VI VII VIII IX X XI XII
2005
2006

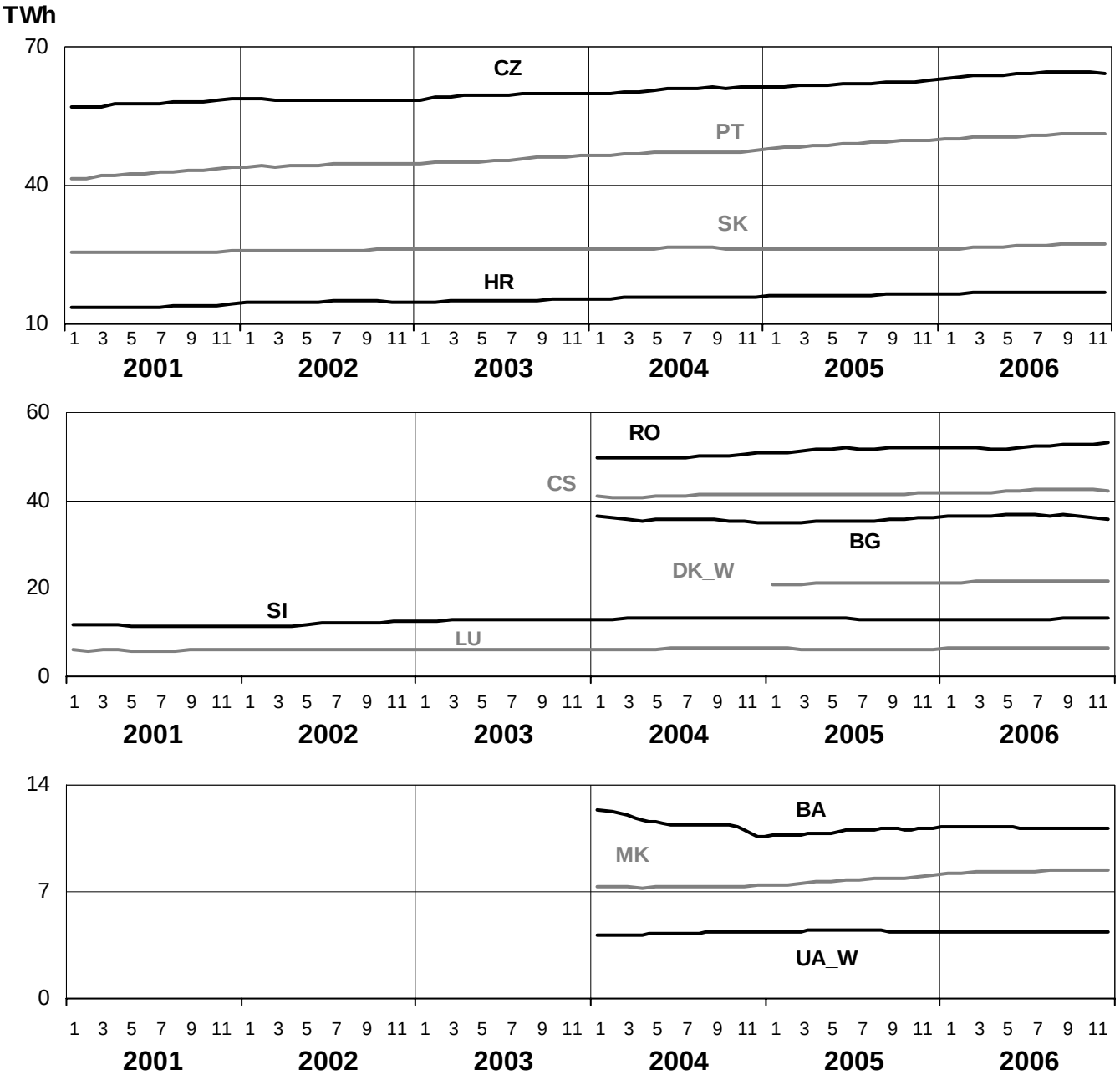

12,0
9,0
6,0
3,0
TWh
NL
BE
CH
AT
PT
I II III IV V VI VII VIII IX X XI XII I II III IV V VI VII VIII IX X XI XII
2005
2006


7,5
5,0
2,5
TWh
CZ
RO
GR
HU
I II III IV V VI VII VIII IX X XI XII I II III IV V VI VII VIII IX X XI XII
2005
2006
5,0
4,0
3,0
2,0
1,0
0
TWh
CS
BG
SK
SI
LU
I II III IV V VI VII VIII IX X XI XII I II III IV V VI VII VIII IX X XI XII
2005
2006
2,2
1,1
0
TWh
DK_W
HR
BA
MK
UA_W
I II III IV V VI VII VIII IX X XI XII I II III IV V VI VII VIII IX X XI XII
2005
2006


UCTE
2005
2006
Values in %
AT
BA
BE
BG
CH
CS
CZ
DE
ES
FR
GR
HR
I II III IV V VI VII VIII IX X XI XII

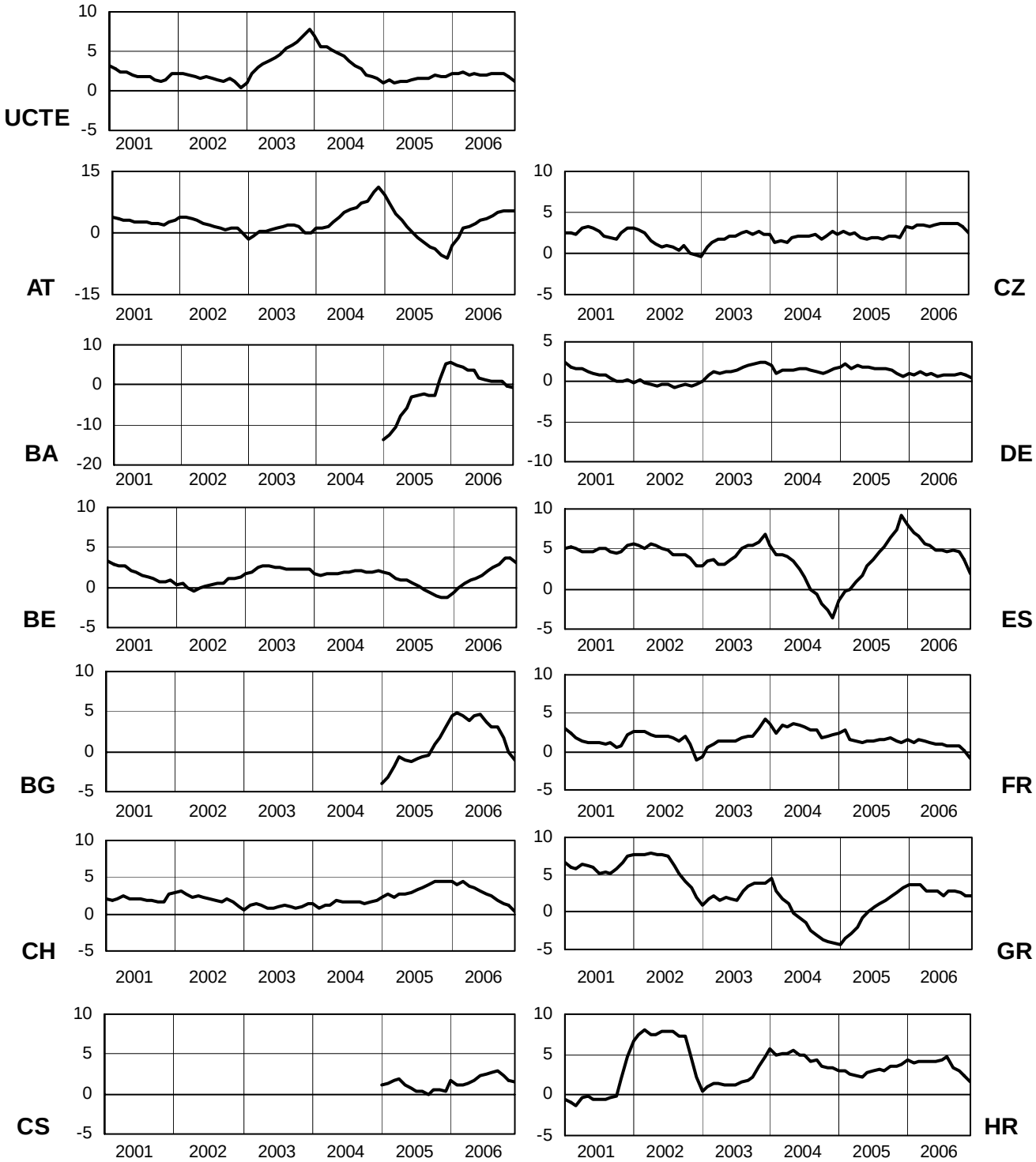

2005
2006
Values in %
HU
PT
IT
RO
LU
SI
MK
SK
NL
DK_W
PL
UA_W
I II III IV V VI VII VIII IX X XI XII


TWh
2600
1800
UCTE
600
300
0
DE
FR
IT
ES
PL
CH
120
90
60
30
NL
BE
AT
GR
HU
1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11
2001 2002 2003 2004 2005 2006


TWh
70
40
10
CZ
PT
SK
HR
60
40
20
0
RO
CS
BG
DK_W
SI
LU
14
7
0
BA
MK
UA_W
1 3 5 7 9 11
2001
2002
2003
2004
2005
2006

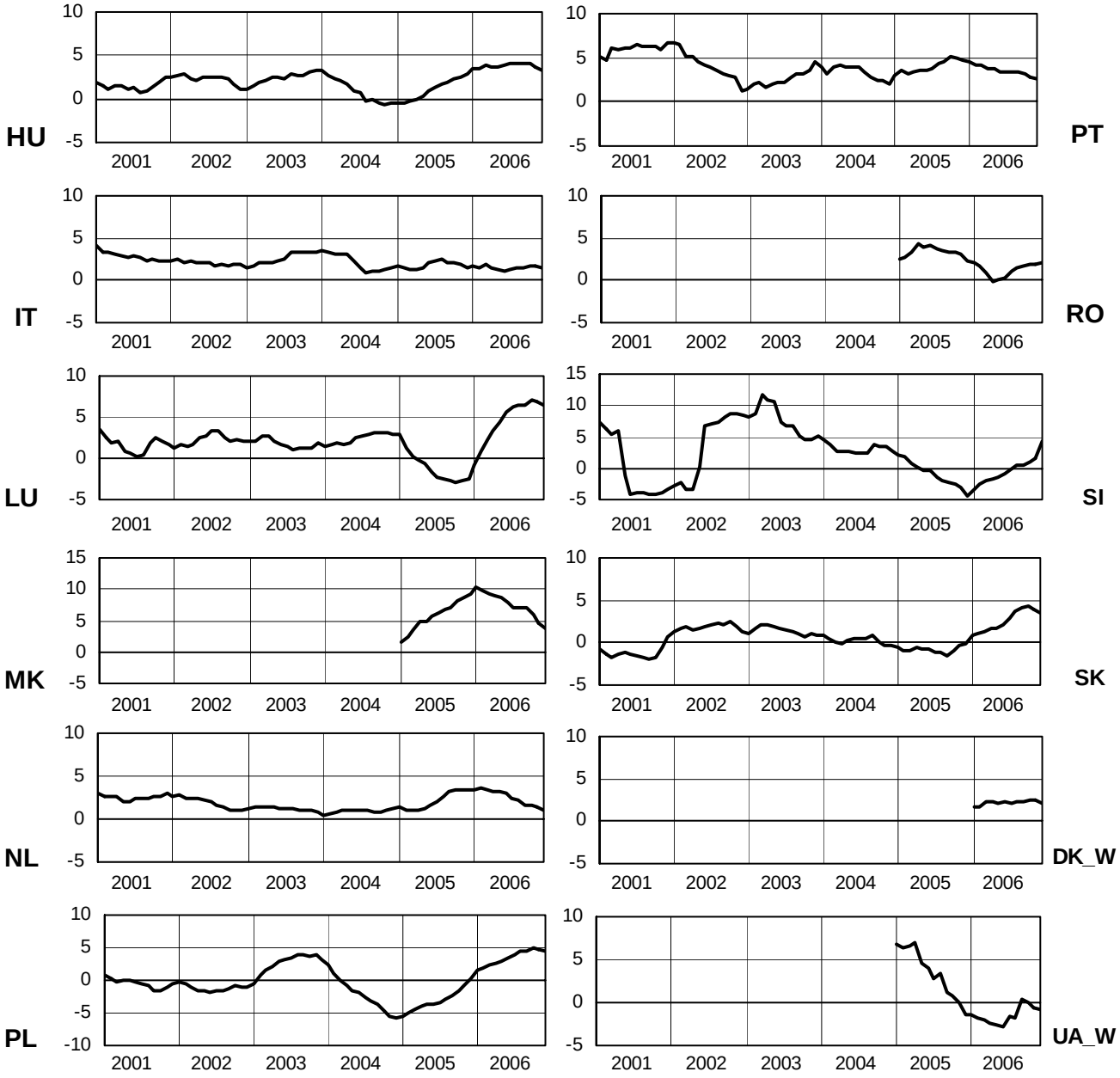
6 Variation of the last 12 months´consumption in %

December 2006

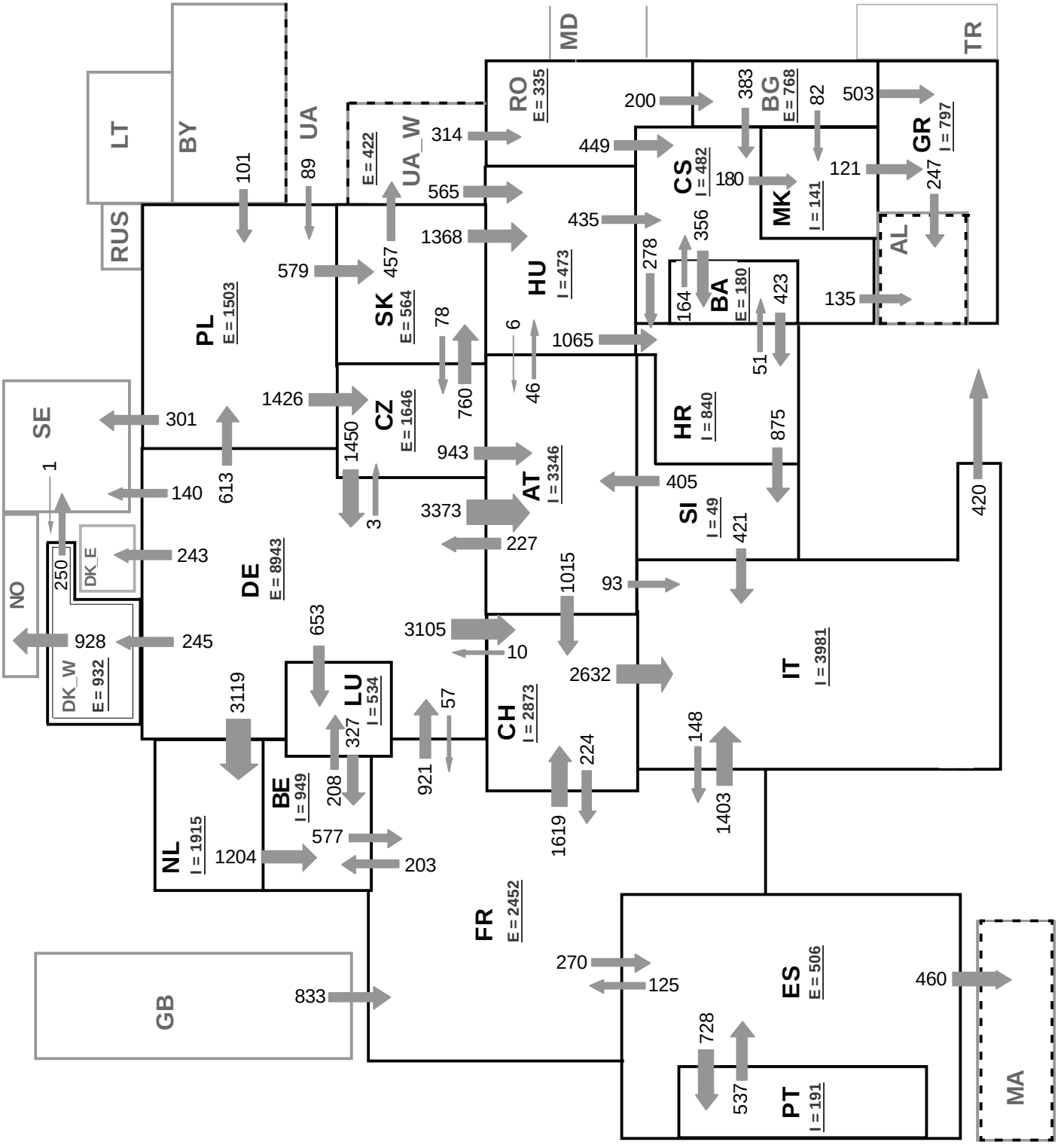


6 Variation of the last 12 months´consumption in %

December 2006



7 Load flows (night) on 20.12.06 at 03:00 a.m. CET in MW December 2006



Associate member

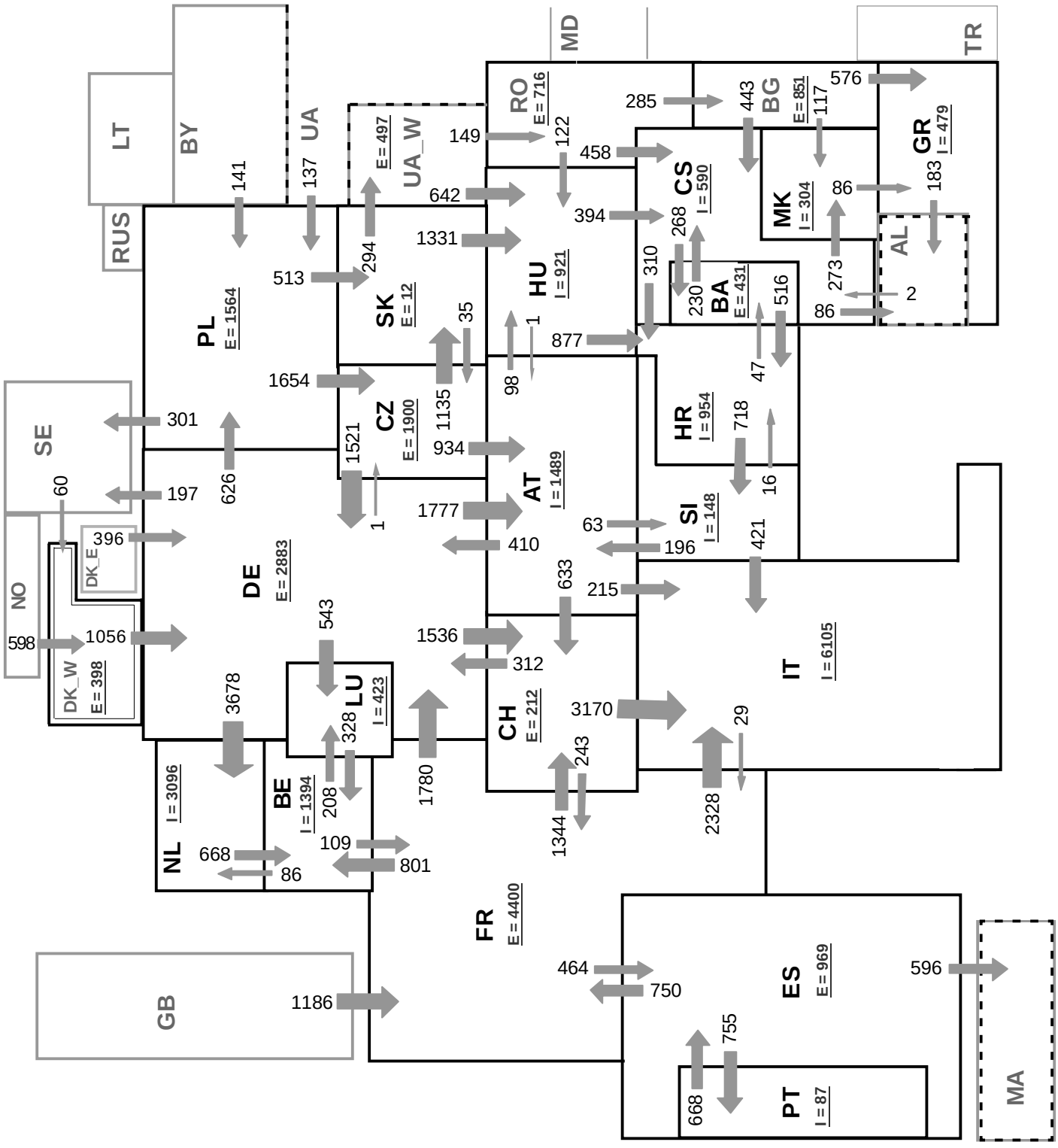
Synchronous operation with UCTE region

Sum of load flows in MW:

UCTE = 36861 MW

Total = 42170 MW

I = Import balance
E = Export balance



Associate member

Synchronous operation with UCTE region

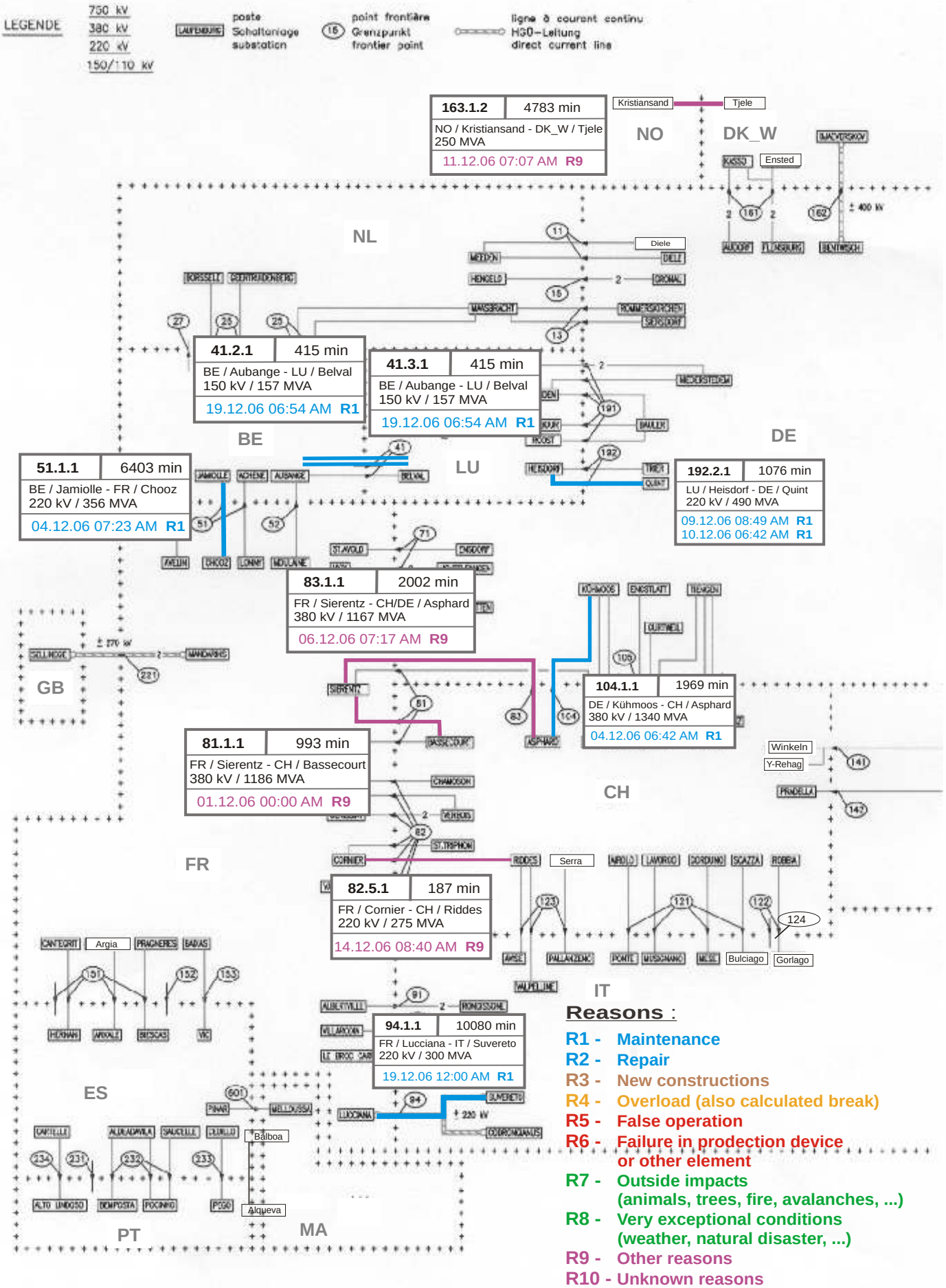
Sum of load flows in MW:

UCTE = 37100 MW

Total = 43124 MW

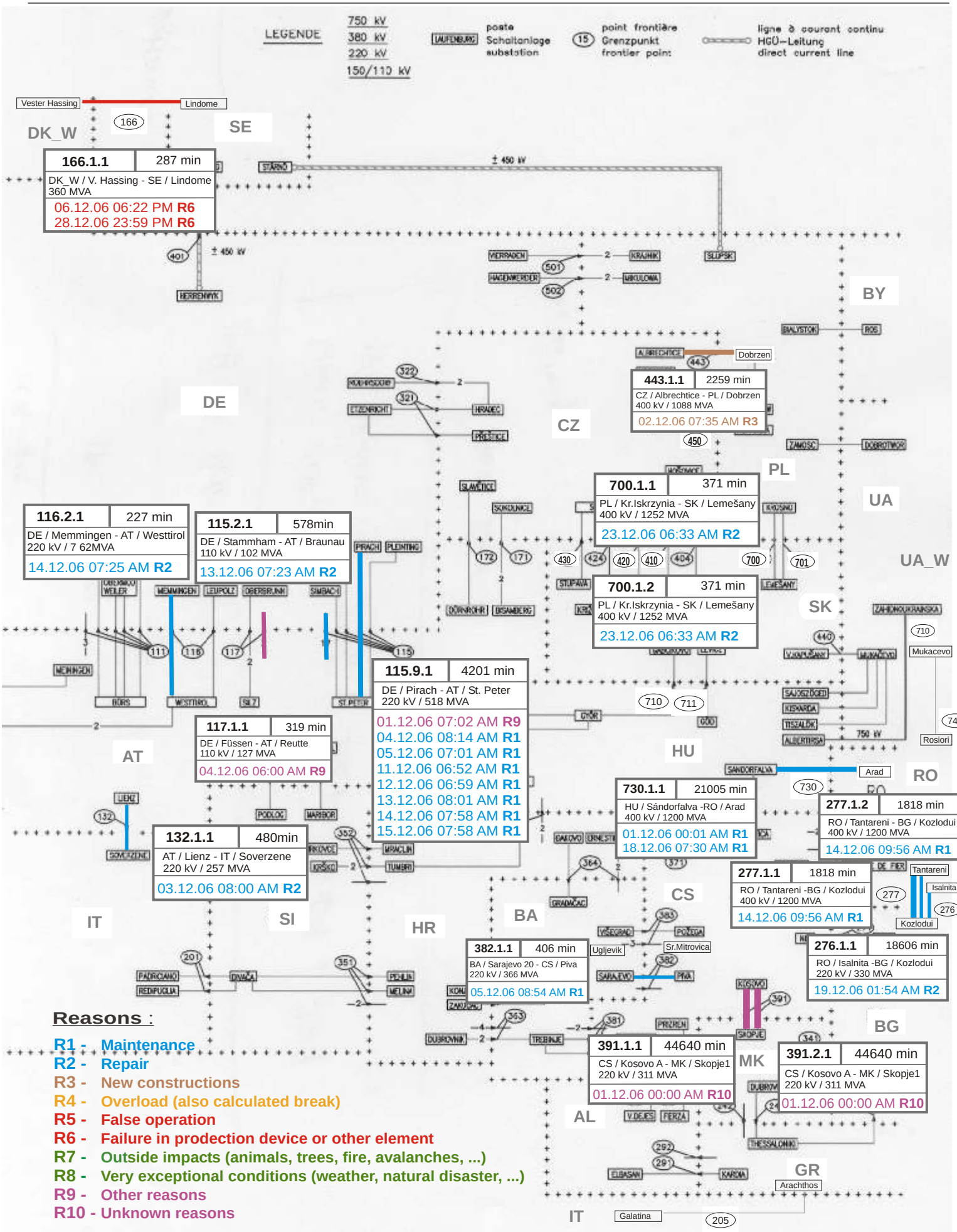
I = Import balance
E = Export balance

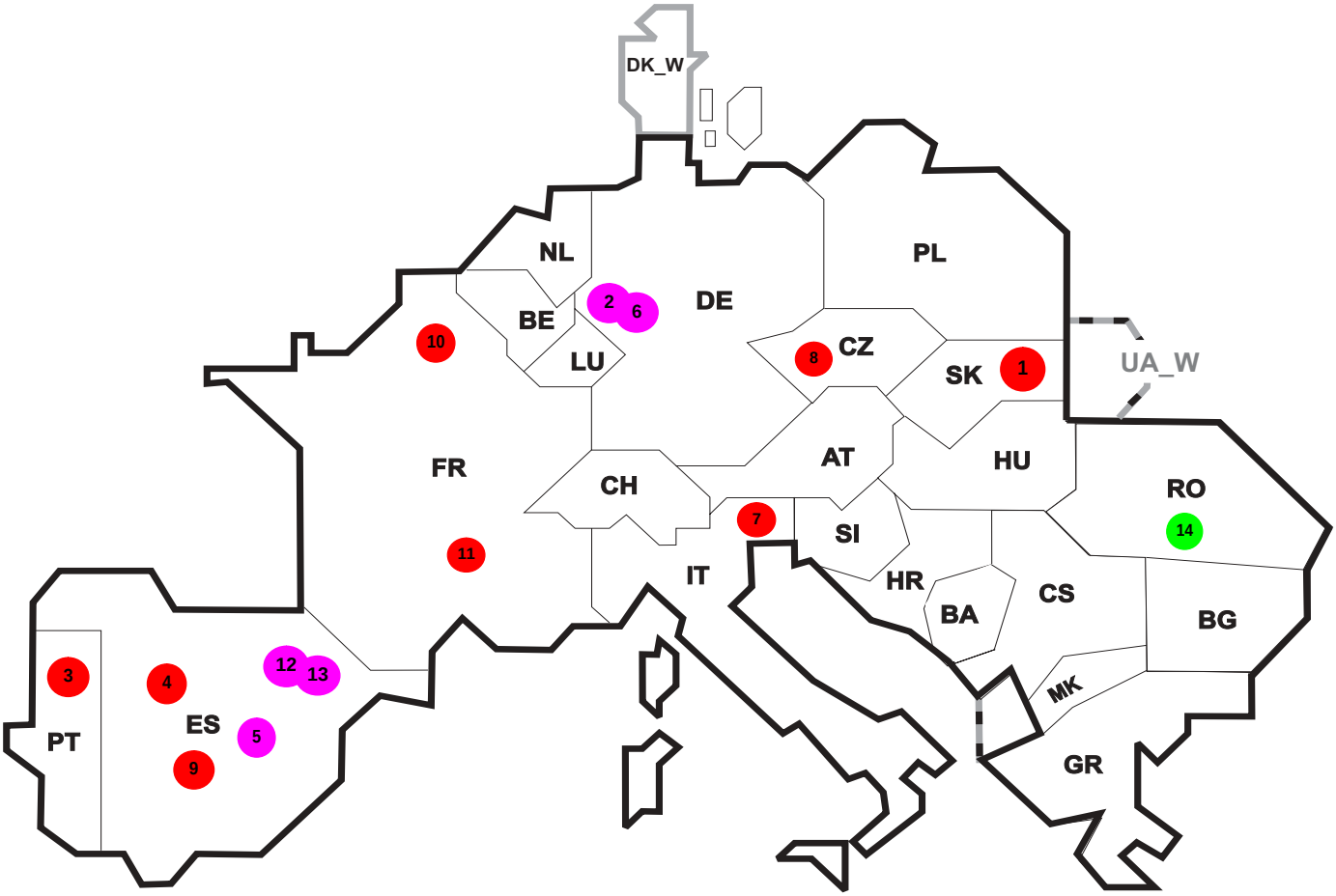
Unavailability of international tie lines
(major events with sum over 180 minutes)



9 Unavailability of international tie lines (major events with sum over 180 minutes)

December 2006





Reasons:

R4	Overload (also calculated break)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches, ...) (animals, trees, fire, avalanches, ...)		

No	Country	Substation	Reason	Energy not supplied[2] [MWh]	Total loss of power [MW]	Restoration time [min]	Equivalent time of interruption[1]
1	SK	Moldava	R6	45	143	19	0,87
2	DE	Herne	R10	215	260	49	0,20
3	PT	Siderurgia do Seixal - Longos	R6	16	0	107	0,17
4	ES	La Fortunada	R6	77	153	302	0,16
5	ES	Coln	R9	57	20	90	0,12
6	DE	Herne	R10	100	260	23	0,09
7	IT	Pordenone	R6	38	100	23	0,06
8	CZ	Noovice	R5	5	0	2	0,04
9	ES	Sidmed	R6	9	8	64	0,02
10	FR	Caulaincourt	R6	9	91	6	0,01
11	FR	Cornier	R6	2	9	10	-
12	ES	Oriol	R10	1	89	4	-
13	ES	Oriol	R10	0	82	2	-
14	RO	Isalnita	R7	0	0	18606	-

[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.

11 Scheduled exchanges in MWh

December 2006

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	841339	1921685	2827	957	1711	1162
BA	194973	191475	351	219	451	195
BE	524337	1197308	560	1382	1344	2622
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2198966	3143671	1659	4569	3541	3392
CS	376281	818607	438	887	587	1144
CZ	1927392	591509	2886	1111	3030	1069
DE	5460876	1485993	8397	2158	4542	1887
ES	123342	1049773	1617	1033	2310	1200
FR	7063453	3243482	7423	5036	8796	4401
GR	118765	543292	164	974	287	734
HR	20714	584749	21	825	5	982
HU	720863	1241211	1160	1640	800	1729
IT	216705	4514283	568	4549	29	6134
MK	0	202300	65	231	65	371
NL	355286	2052900	331	2237	233	3319
PL	888694	96499	1506	115	1678	140
PT	652362	531387	359	611	900	1032
RO	509211	52872	482	153	813	81
SI	597863	645543	780	781	861	965
SK	764543	524730	1082	451	1100	984
DK_W	300932	749863	341	1372	600	979
UA_W	308627	0	422	0	495	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.

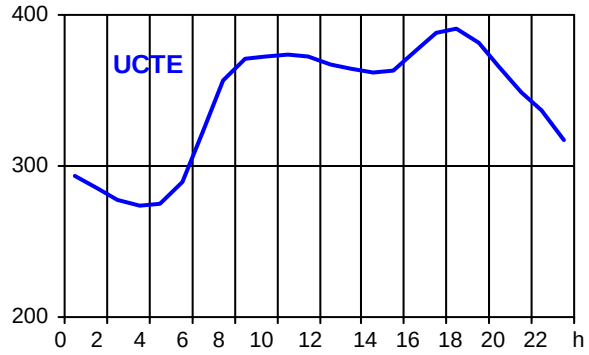
- Export Programs: Sum of all positive values of every hour of every border
- Import Programs: Sum of all negative values of every hour of every border

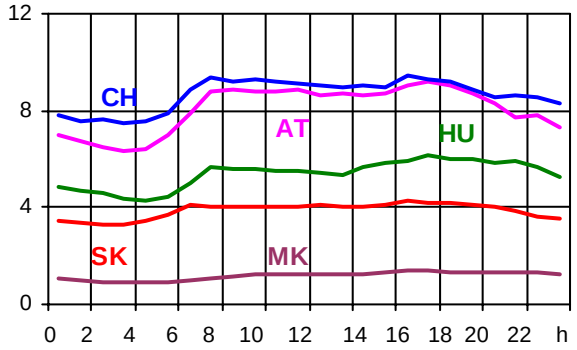
- Export Programs at 03:00: Sum of all positive values the third Wednesday from 02:00 to 03:00 a.m.
- Import Programs at 03:00: Sum of all negative values the third Wednesday from 02:00 to 03:00 a.m.

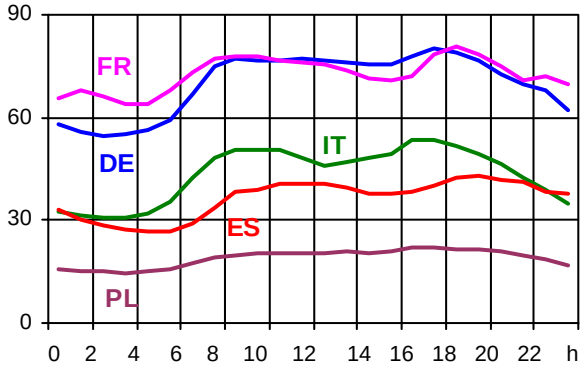
- Export Programs at 11:00: Sum of all positive values the third Wednesday from 10:00 to 11:00 a.m.
- Import Programs at 11:00: Sum of all negative values the third Wednesday from 10:00 to 11:00 a.m.

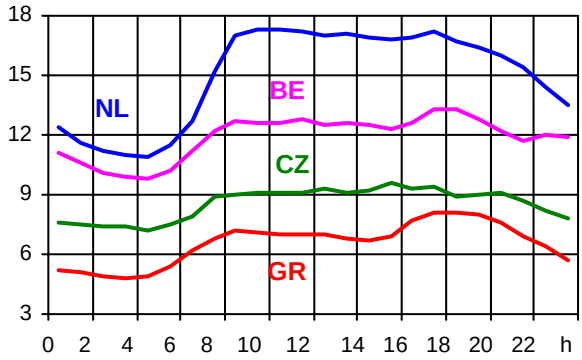
Consumption hourly load curves on 20.12.2006 CET

Values in GW

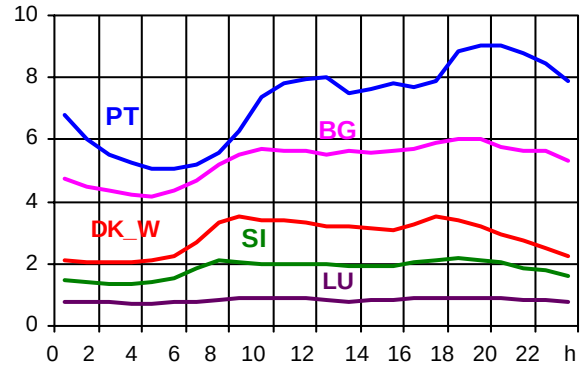


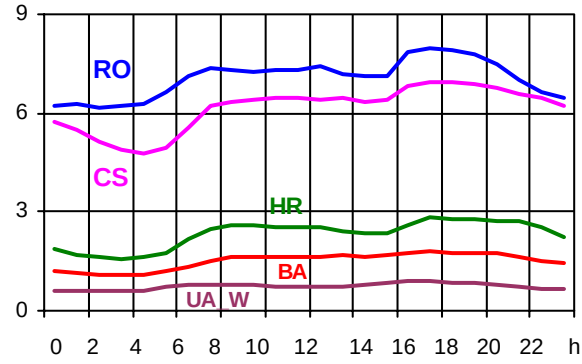






	Highest load MW	var.%[1]	Load representativity %	Parallel power[2] MW
AT	9222	3,6	100	8355
BA	1826	-3,4	100	2075
BE[3]	13317	2,0	100	11280
BG	6029	-3,1	100	6521
CH	9439	-2,9	100	9848
CS	6936	-2,7	100	5867
CZ	9563	1,5	100	11326
DE	80231	-0,8	91	76800
ES	42745	4,3	98	40562
FR	80966	-1,6	100	81108
GR	8102	-5,7	100	6558
HR	2817	0,2	100	1927
HU	6180	1,9	100	4578
IT	53631	-0,9	100	46526
LU	921	-0,9	100	912
MK	1385	-4,5	100	973
NL	17335	4,4	100	14172
PL[4]	22017	2,0	100	23899
PT	9049	4,4	97	7473
RO	7974	0,0	100	8004
SI	2166	4,4	95	1743
SK	4254	-1,6	100	4023
UCTE	**390431**	0,1		**374530**
DK_W	3511	-0,5	100	3794
UA_W	923	-5,6	100	1252





[1] Variation as compared to corresponding month of the previous year

[2] Power produced in parallel operation on the 3rd Wednesday at 11:00 a.m.CET (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