

# UCTE



June 2005

Monthly provisional values

union for the co-ordination of transmission of electricity

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<sup>1</sup> Monthly provisional values from the UCTE database as of 10 October 2005

All values are calculated to represent 100% of the national values

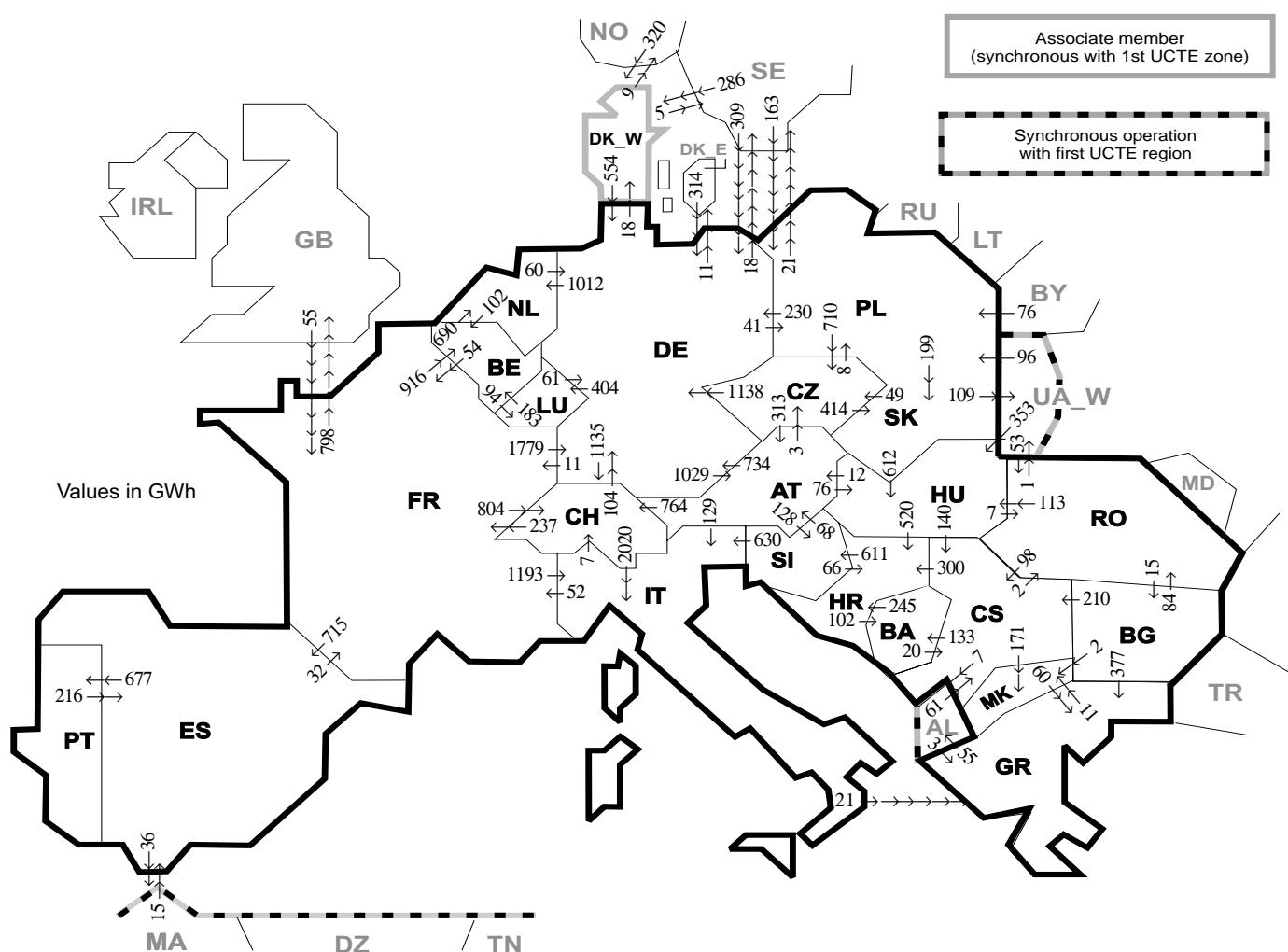
Coun- tries	Net production in GWh							Exchange balance in GWh	Pump monthly	Consumption in GWh			
	Therm. nuclear	Fossiel fuel	Hydro prod	Other renew.	Of which	Not iden- tify	Total			var. [%]	last 12 months	var. [%]	
AT	0	1700	3566	0	0	460	5726 <sup>1</sup>	-441	291	4994	-4,7	64027	0,0
BA	0	508	374	0	0	0	882	27	0	909	17,9	11003	-3,2
BE	3725	2668	115	132	7	0	6640 <sup>1</sup>	371	141	6870	0,4	88758	1,6
BG	1049	1559	568	0	0	0	3176	-663	21	2492	2,1	35238	-1,2
CH	754	173	3751	73	0	0	4751 <sup>1</sup>	360	329	4782	5,5	61667	3,0
CS	0	1687	1175	0	0	0	2862 <sup>1</sup>	-88	12	2762	-0,6	41329	0,7
CZ	1665	3829	165	4	1	0	5663 <sup>1</sup>	-1111	35	4517	2,6	61911	1,8
DE	10822	27703	2105	2093	1398	0	42723 <sup>1</sup>	1603	728	43598	3,0	556241	1,8
ES	3790	13299	2410	1865	1244	0	21364 <sup>1</sup>	132	632	20864	1,0	254089	3,1
FR	32851	2730	4999	266	42	0	40846	-5915	520	34411	1,0	479496	1,0
GR	0	3586	404	67	59	0	4057 <sup>1</sup>	394	72	4379	3,8	52144	0,2
HR	0	433	378	1	1	0	812 <sup>1</sup>	408	10	1210	6,5	16199	2,8
HU	1181	1375	15	0	0	0	2571 <sup>1</sup>	475	0	3046	3,8	38388	0,3
IT	0	20123	4052	496	104	0	24671 <sup>1</sup>	3892	709	27854	3,6	326614	1,5
LU	0	244	65	7	2	0	316	254	86	484	-6,7	6189	-1,6
MK	0	292	137	0	0	0	429 <sup>1</sup>	124	0	553	14,0	7726	5,6
NL	323	6783	0	422	99	0	7528 <sup>1</sup>	1540	0	9068	5,4	112278	1,4
PL	0	10204	301	0	0	0	10505 <sup>1</sup>	-777	145	9583	-1,1	129545	-3,8
PT	0	3017	348	193	84	0	3558 <sup>1</sup>	475	36	3997	4,8	48699	3,1
RO	468	1574	1906	0	0	0	3948 <sup>1</sup>	-81	0	3867	1,5	52176	4,9
SI	457	398	223	0	0	0	1078	-26	0	1052	-0,4	13128	-0,4
SK	1186	328	392	0	0	191	2097 <sup>1</sup>	-157	6	1934	1,3	26249	-0,8
UCTE	58271	104213	27449	5619	3041	651	196203 <sup>1</sup>	796	3773	193226	3,2	2483094	1,3
DK_W	0	1146	1	455	347	0	1602 <sup>1</sup>	56	0	1658	0,2	21158	n.a.
UA_W <sup>2</sup>	0	585	11	0	0	0	596 <sup>1</sup>	-296	0	300	4,9	4457	4,0

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

<sup>2</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

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 <sup>2</sup>
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	
Fossil fuel	100	100	100	100	100	100	100	100	97	100	100	100	100	100	98	100	100	100	96	100	100	100	100	
Hydro prod	100	100	100	100	100	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	
Other renew.	n.a.	100	100	100	100	100	100	100	95	100	100	100	100	n.a.	100	99	100	100	n.a.	100	100	100	100	
Not identify	n.a.	100	100	100	100	100	100	100	100	100	100	100	100	n.a.	100	100	n.a.	100	100	100	100	100	100	
Consumption	100	100	100	100	100	100	100	100	98	100	100	100	100	100	99	100	100	100	97	100	95	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 <sup>2</sup>	Other III <sup>1</sup>	
AT	-	-	-	-	764	-	3	734	-	-	-	-	76	129	-	-	-	-	-	128	-	-	-	1834		
BA	-	-	-	-	-	20	-	-	-	-	-	-	245	-	-	-	-	-	-	-	-	-	-	265		
BE	-	-	-	-	-	-	-	-	-	-	54	-	-	-	94	-	690	-	-	-	-	-	-	838		
BG	-	-	-	-	210	-	-	-	-	-	377	-	-	-	-	2	-	-	84	-	-	-	0	673		
CH	0	-	-	-	-	-	104	-	237	-	-	-	2020	-	-	-	-	-	-	-	-	-	-	2361		
CS	-	133	-	0	-	-	-	-	-	-	300	0	-	-	171	-	-	-	2	-	-	-	7	613		
CZ	313	-	-	-	-	-	1138	-	-	-	-	-	-	-	-	-	-	8	-	-	414	-	-	1873		
DE	1029	-	-	-	1135	-	0	-	-	11	-	-	404	-	1012	41	-	-	-	18	-	29	-	3679		
ES	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	677	-	-	-	-	36	745		
FR	-	-	916	-	804	-	-	1779	715	-	-	-	1193	-	-	-	-	-	-	-	-	-	798	6205		
GR	-	-	-	0	-	-	-	-	-	-	-	-	0	-	11	-	-	-	-	-	-	-	55	66		
HR	-	102	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	611	-	-	-	-	713		
HU	12	-	-	-	-	140	-	-	-	-	-	-	520	-	-	-	-	-	7	-	0	-	0	679		
IT	0	-	-	-	7	-	-	-	-	52	21	-	-	-	-	-	-	-	0	-	-	-	80			
LU	-	-	183	-	-	-	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	244			
MK	-	-	-	0	-	0	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-	60			
NL	-	-	102	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	162			
PL	-	-	-	-	-	710	230	-	-	-	-	-	-	-	-	-	-	-	199	0	21	-	1160			
PT	-	-	-	-	-	-	216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	216			
RO	-	-	-	15	-	98	-	-	-	-	-	113	-	-	-	-	-	-	-	1	0	-	227			
SI	68	-	-	-	-	-	-	-	-	66	-	630	-	-	-	-	-	-	-	-	-	-	764			
SK	-	-	-	-	-	-	49	-	-	-	612	-	-	-	-	0	-	-	-	109	-	-	770			
DK_W	-	-	-	-	-	-	-	554	-	-	-	-	-	-	-	-	-	-	-	-	-	14	568			
UA_W <sup>2</sup>	-	-	-	-	-	-	-	-	353	-	-	-	-	-	96	53	0	-	-	-	-	-	502			
Other III <sup>1</sup>	-	-	-	0	-	61	-	623	15	55	3	-	-	-	-	239	0	-	606	-	-	-	1602			
<b>Sum imp</b>	1422	235	1201	15	2710	529	762	5283	946	441	461	1131	1154	3972	498	184	1702	384	677	146	739	613	624	110	960	26899

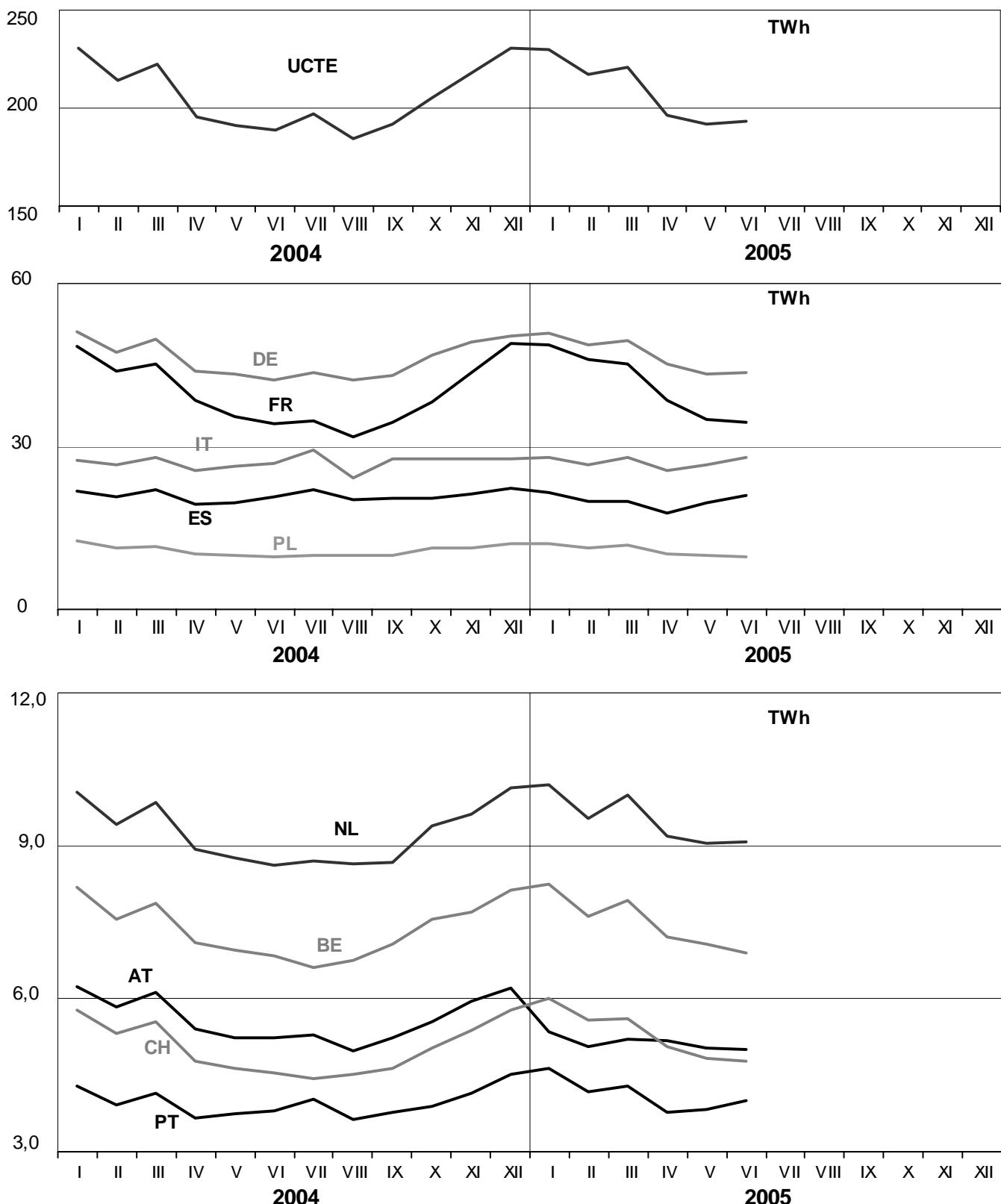
Sum of physical energy flows between UCTE countries = 23153GWh Total physical energy flows = 26899GWh

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

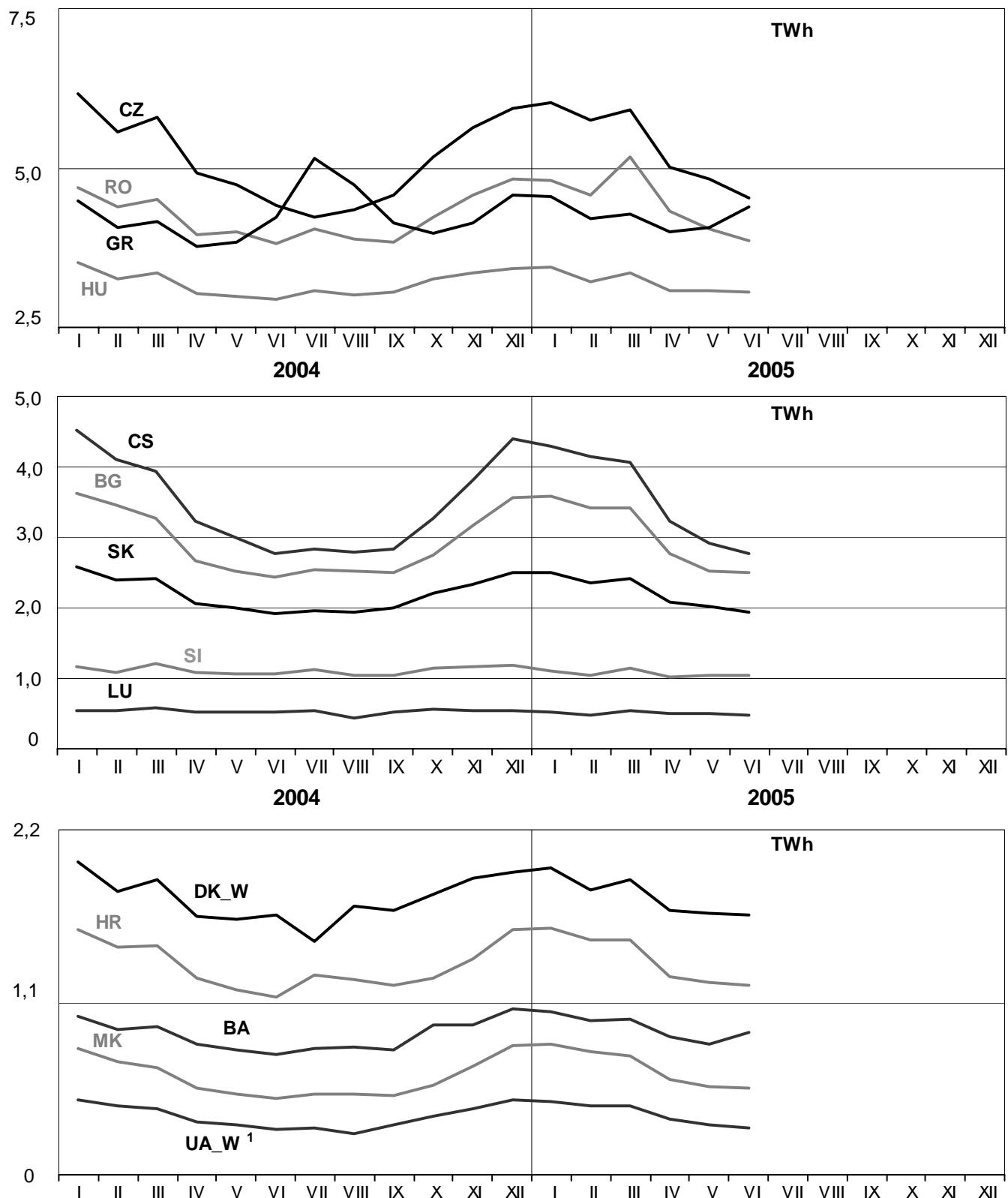
<sup>2</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

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.

All values are calculated to represent 100% of the national values

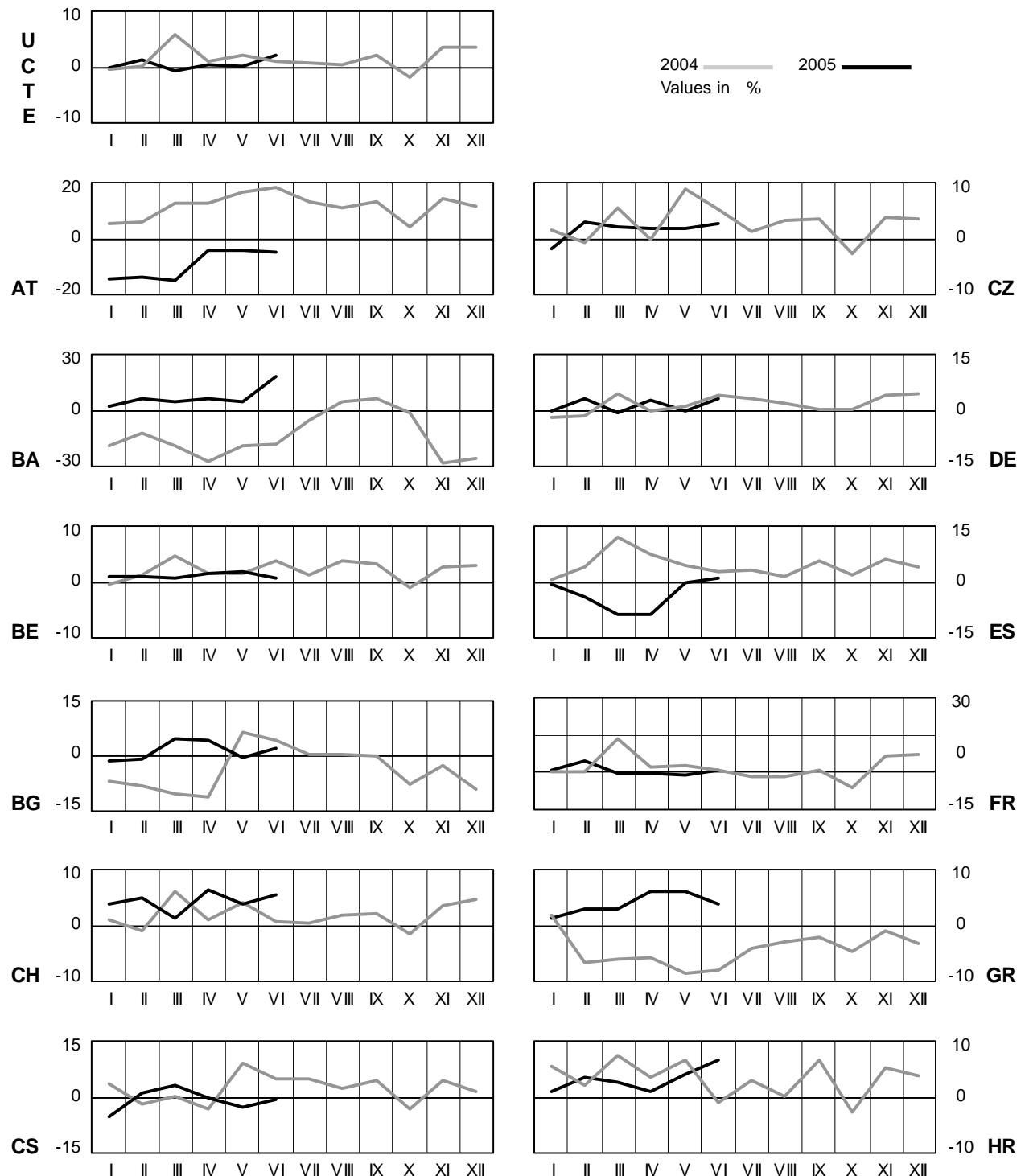


All values are calculated to represent 100% of the national values



<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

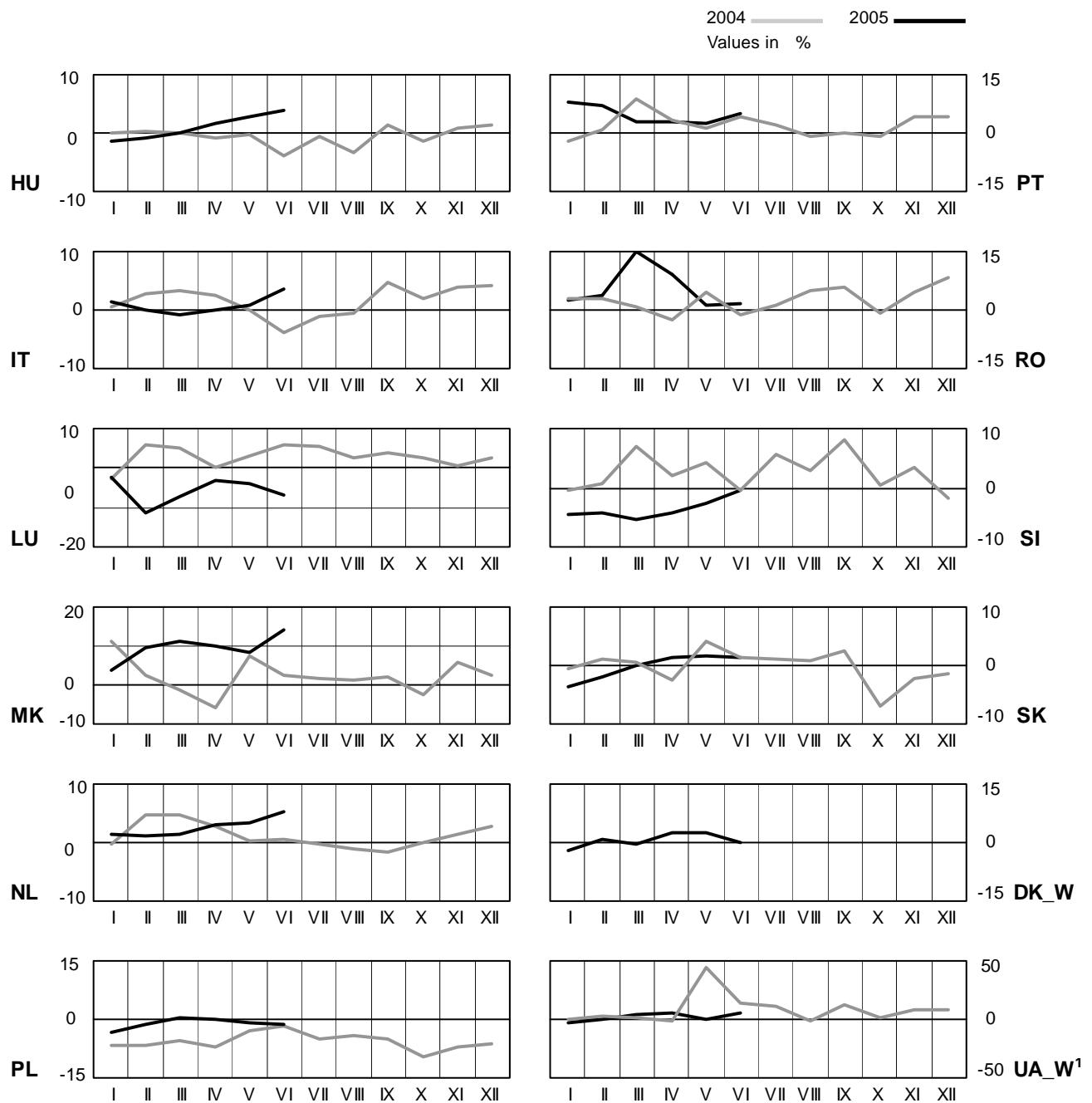
All values are calculated to represent 100% of the national values



# 4 Monthly consumption variation

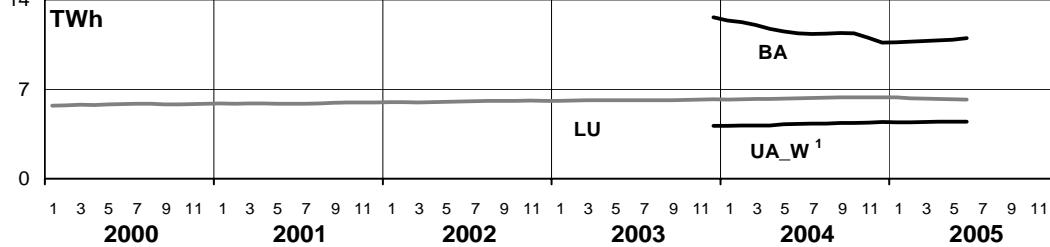
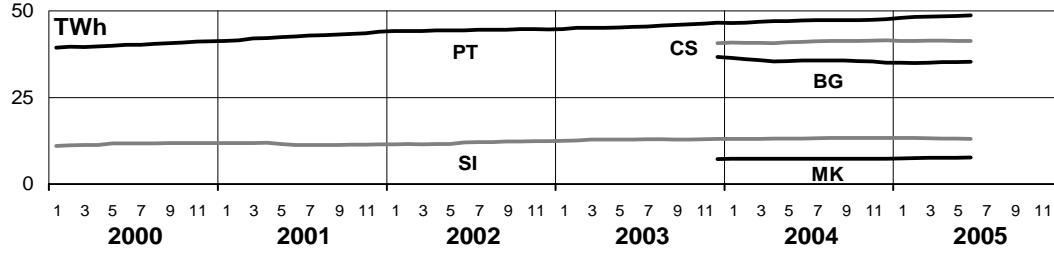
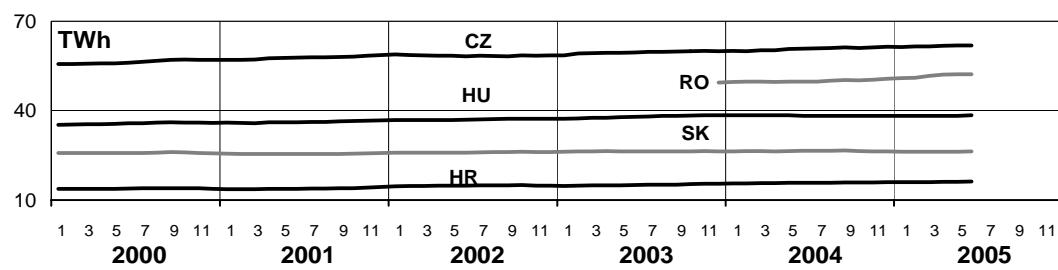
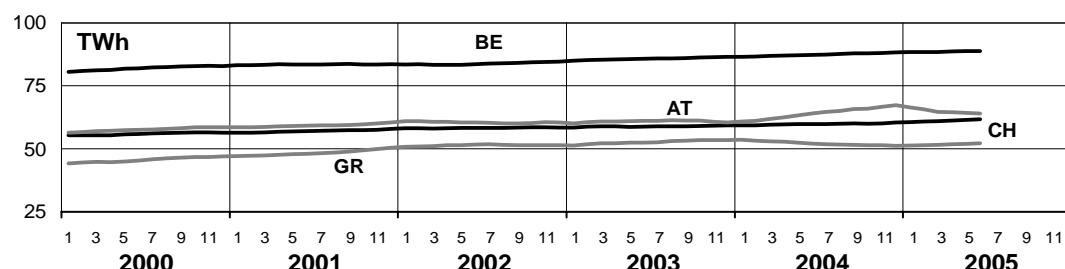
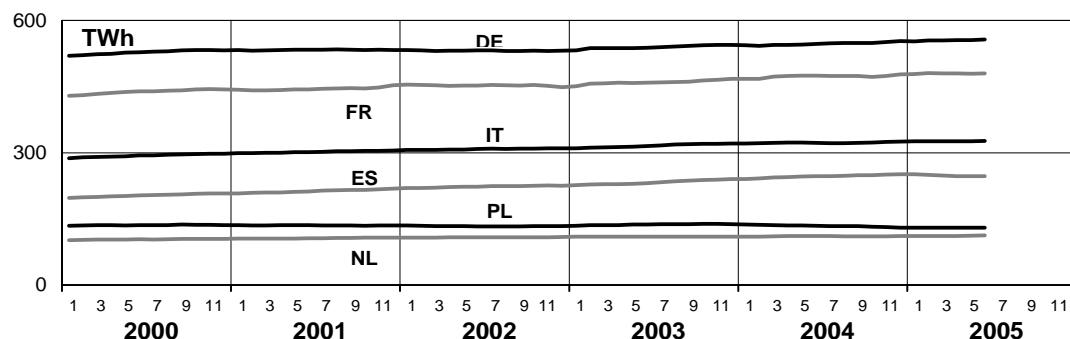
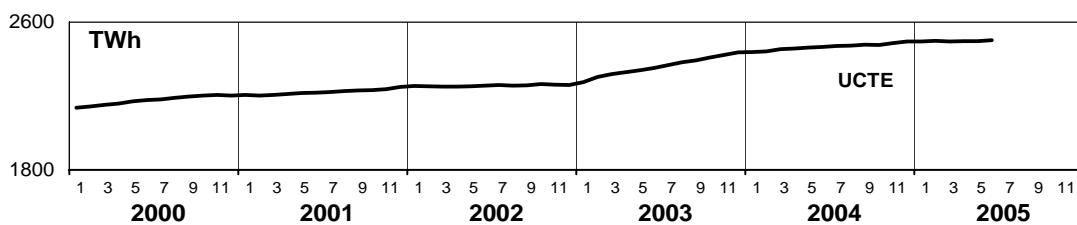
June 2005

All values are calculated to represent 100% of the national values



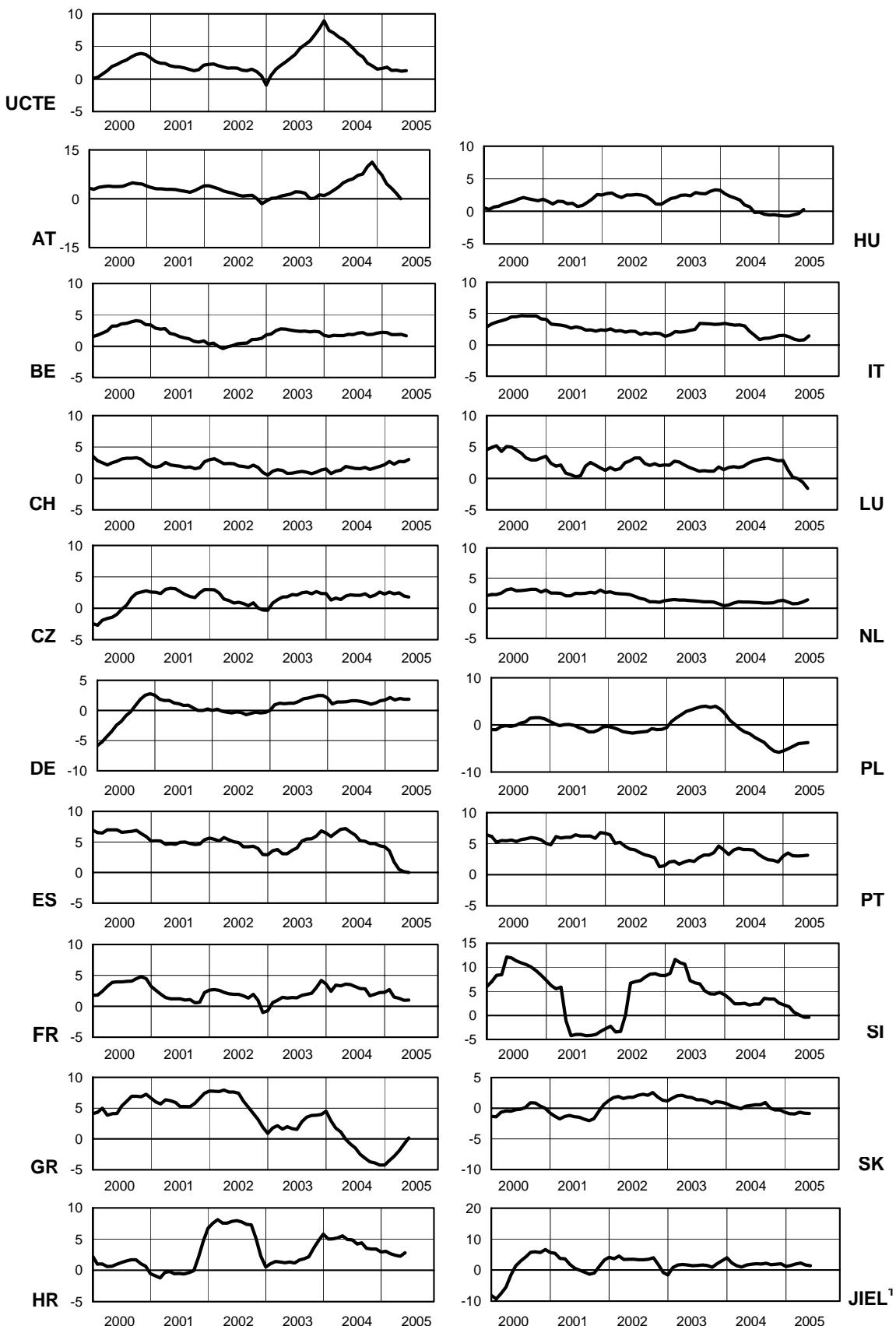
<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

All values are calculated to represent 100% of the national values

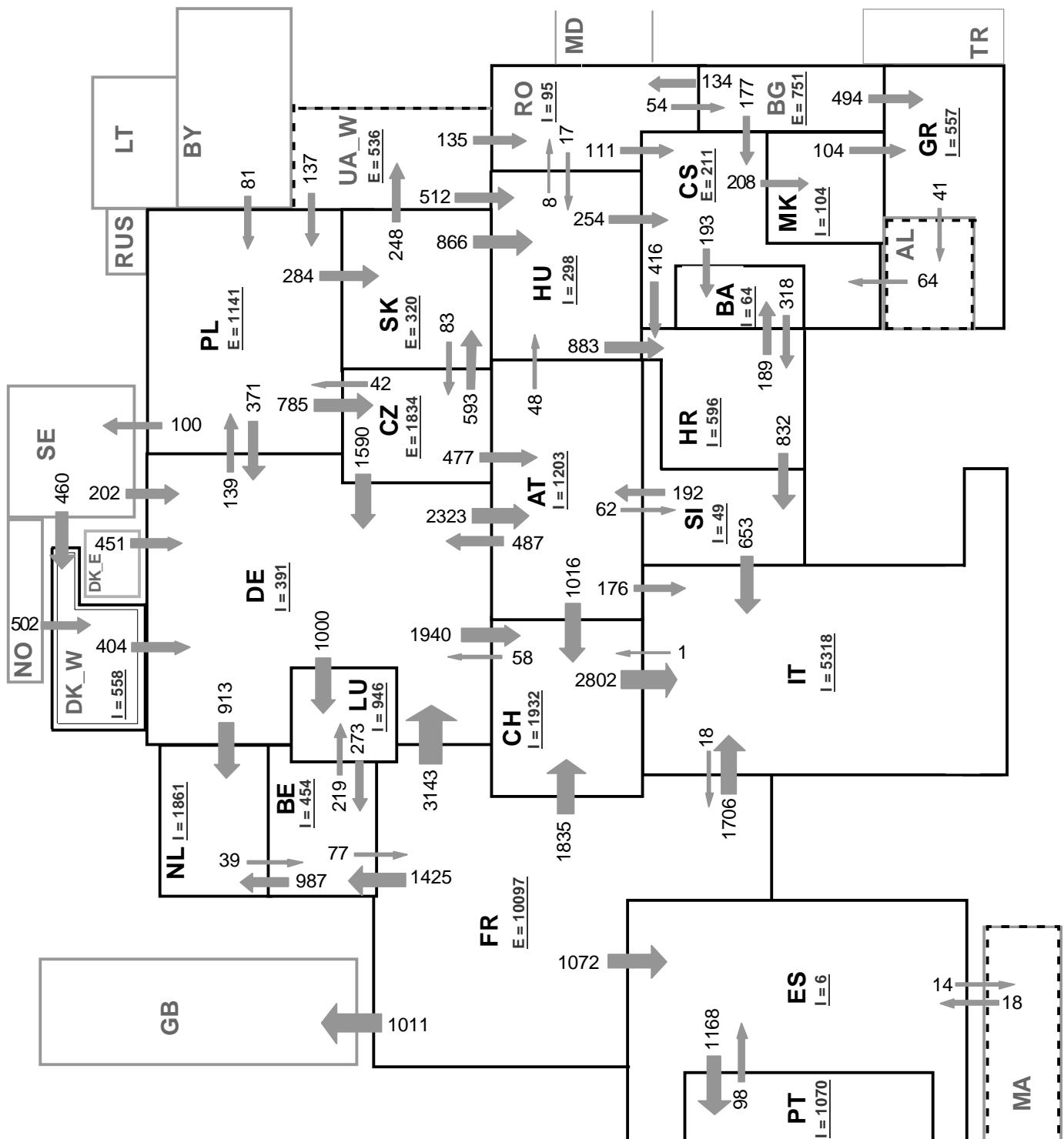


<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

All values are calculated to represent 100% of the national values



<sup>1</sup> JIEL = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)



Associate member

Sum of load flows in MW:

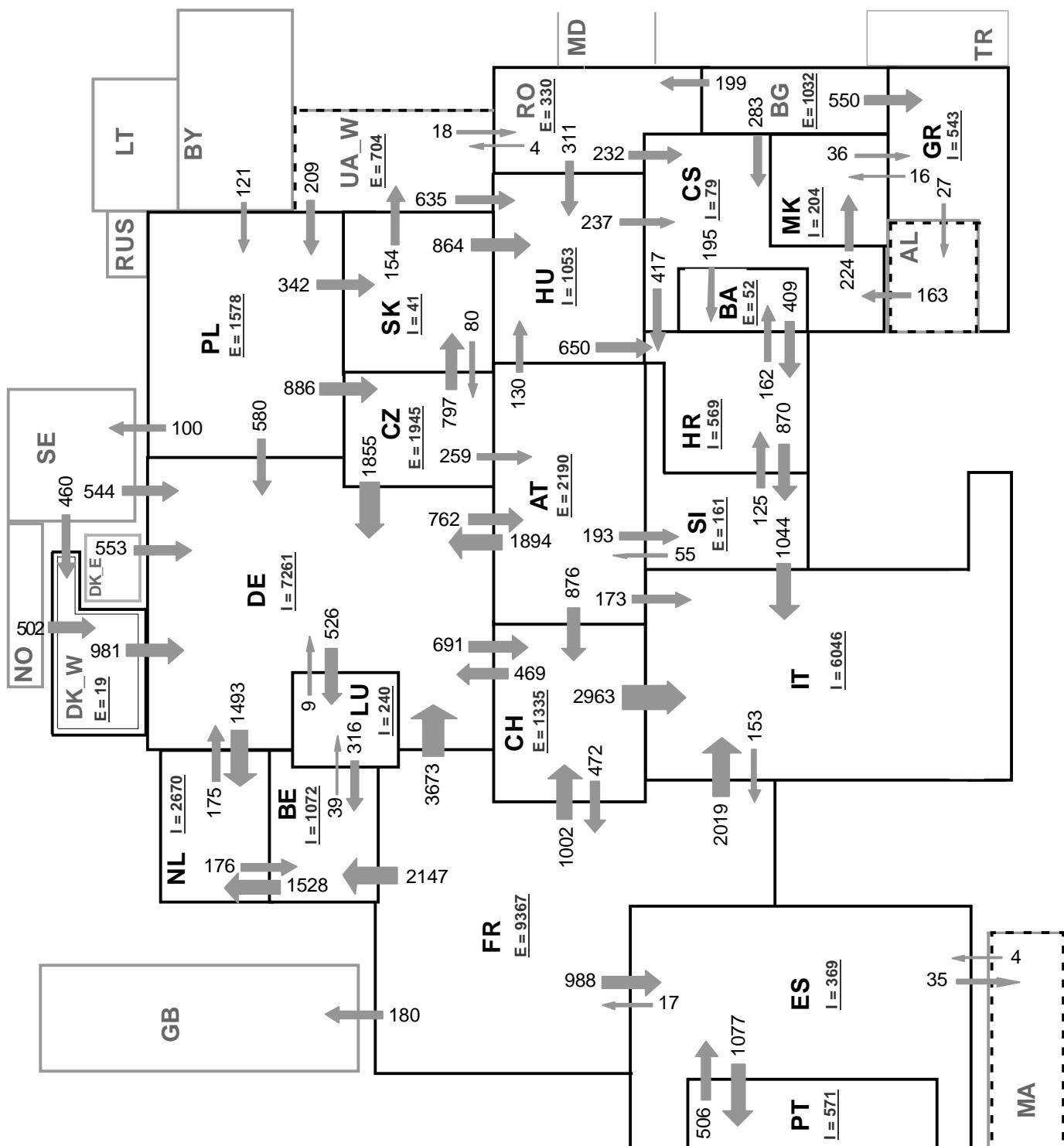
UCTE = 33353MW Total = 37733MW

Synchronous operation with first region

\* Central European Time ( CET )

I = Import balance

E = Export balance



Associate member

Sum of load flows in MW:

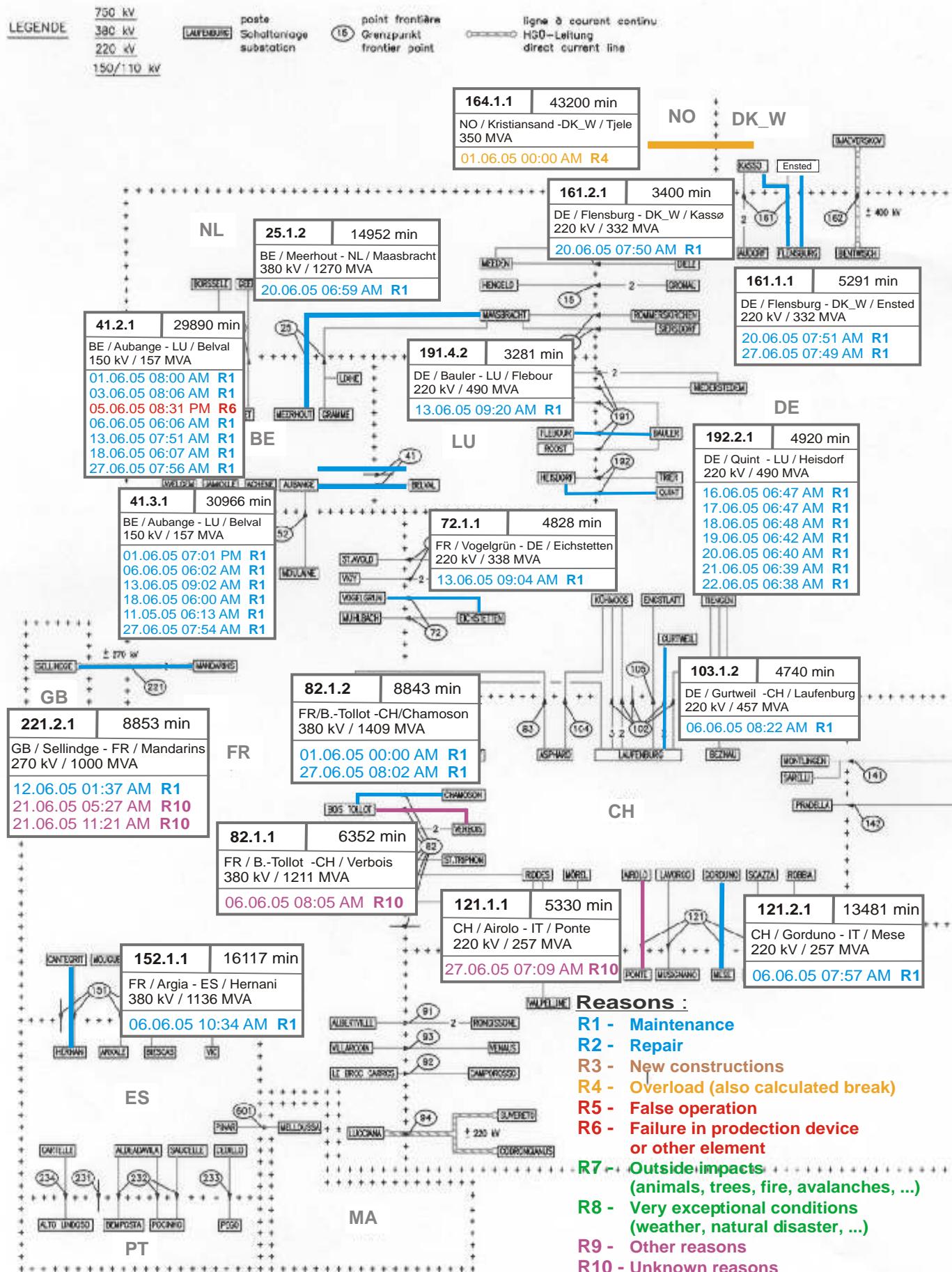
UCTE = 36145MW Total = 40835MW

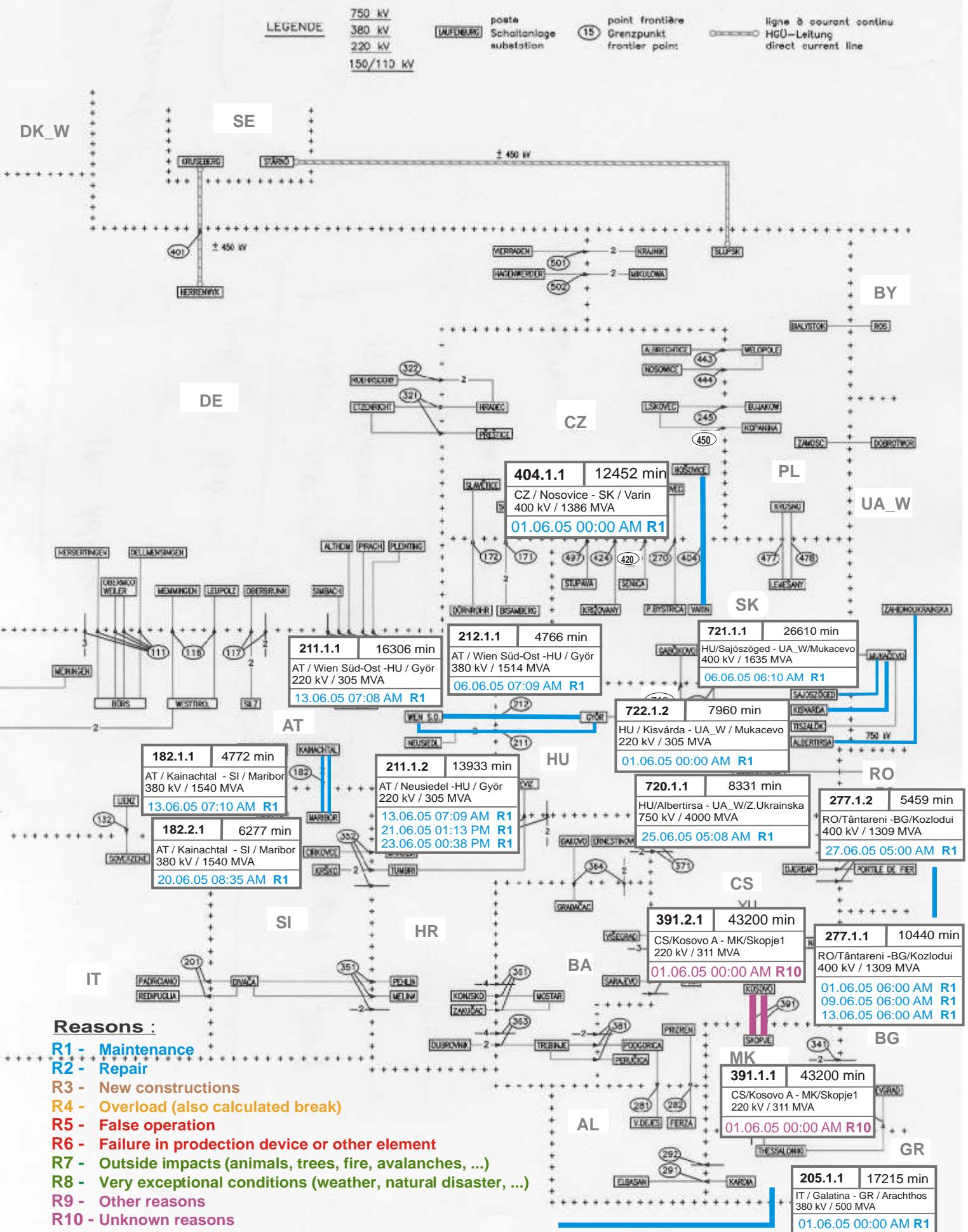
Synchronous operation with first region

\* Central European Time ( CET )

I = Import balance

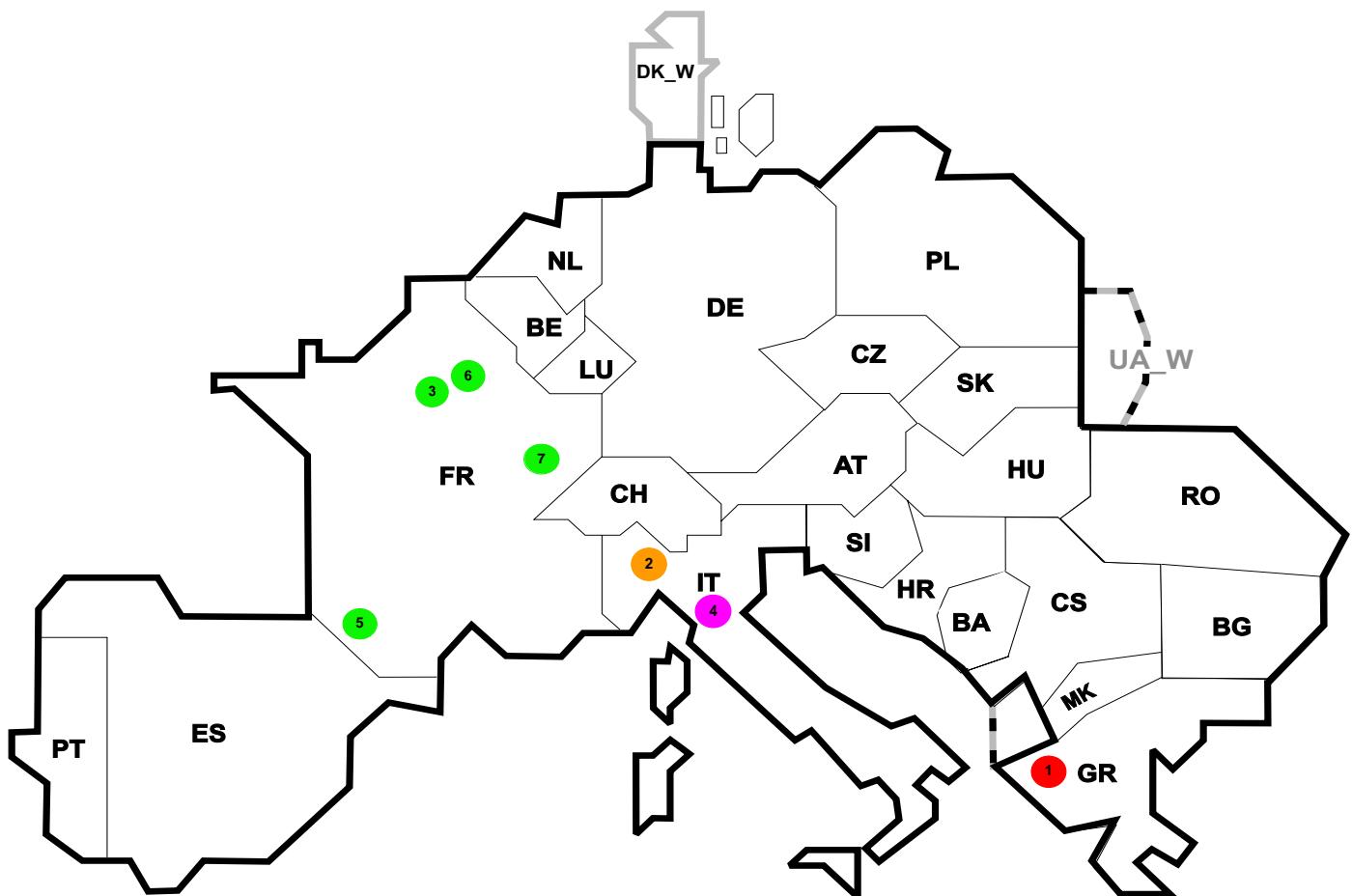
E = Export balance





## **Reasons :**

- R1 - Maintenance
  - R2 - Repair
  - R3 - New constructions
  - R4 - Overload (also calculated break)
  - R5 - False operation
  - R6 - Failure in production 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, ...)  
(animals, trees, fire, avalanches, ...)

- R8 Very exceptional conditions  
(weather, natural disaster, ...)
- R9 Other reasons
- R10 Unknown reasons

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	GR	Agios Dmthrios	R6	8250	550	900	83,16
2	IT	Brindisi	R4	20	69	29	0,03
3	FR	Chesnoy	R8	19	12	247	0,02
4	IT	Salerno	R9	12	57	13	0,02
5	FR	Hospitalet	R8	5	5	56	0,01
6	FR	Creney	R8	1	2	16	0,00
7	FR	Cornier	R8	1	7	8	0,00

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

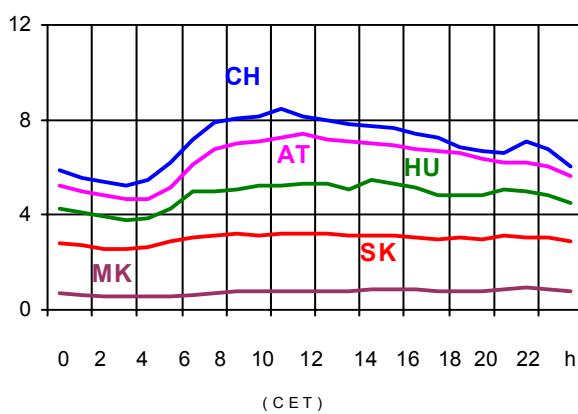
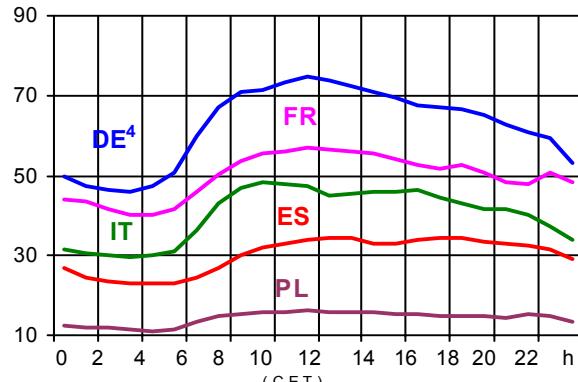
Control area	Export Programs	Import Programs	Export Programs at 03:00	Import Programs at 03:00	Export Programs at 11:00	Import Programs at 11:00
AT	546637	489152	550	817	900	699
BA	129957	94281	109	179	225	174
BE	607656	881362	797	1216	948	1750
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2182832	2542771	2553	4525	4414	3090
CS	386064	386353	711	484	836	886
CZ	1762294	596487	2572	663	2730	745
DE	2542639	3065620	3226	3895	2078	6588
ES	652783	819767	1104	1107	1157	1518
FR	7437502	1698045	10390	329	9910	615
GR	7437	407389	0	555	0	529
HR	112083	524677	170	766	170	721
HU	394628	869604	723	1038	457	1505
IT	80421	3972423	19	5337	153	6199
MK	0	122200	137	238	30	238
NL	359330	1898111	356	2210	112	2793
PL	1050927	301001	1341	272	1792	215
PT	104016	579647	0	1063	499	1100
RO	246828	323700	388	290	354	675
SI	526776	504040	748	779	765	588
SK	530848	326177	660	292	741	723
DK_W	540586	625884	385	960	878	960
UA_W <sup>1</sup>	295407	0	397	0	492	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.

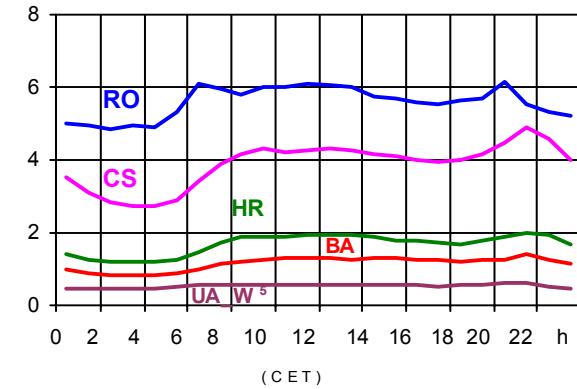
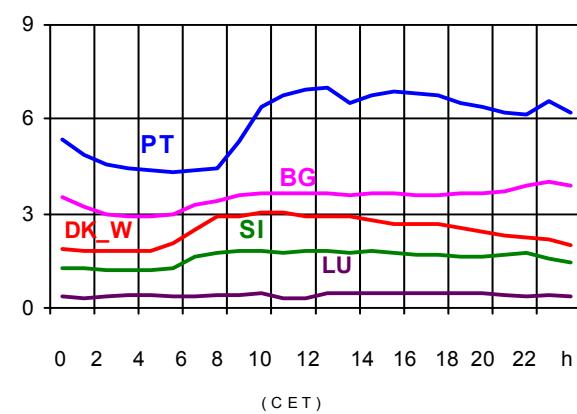
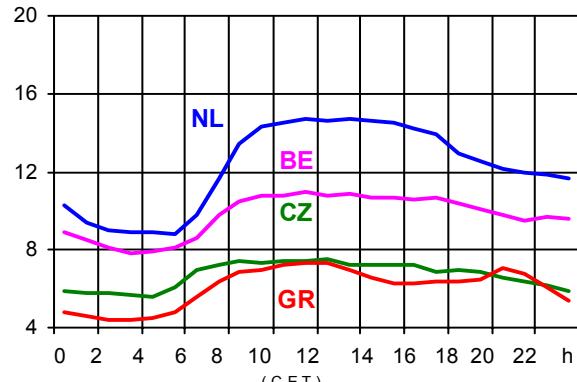
<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

All values are calculated to represent 100% of the national values

**Consumption hourly load curves<sup>1</sup> on 15.06.2005**



Values in GW



	Peak load MW	var.% <sup>2</sup>	Load representativity <sup>1</sup> %	Parallel power er <sup>3</sup> MW
AT	7446	-19,0	100	8903
BA	1405	8,1	100	1354
BE	10945	-0,1	100	9632
BG	3999	-0,3	100	4684
CH	8475	-0,2	100	9741
CS	4885	1,3	100	4121
CZ	7546	3,4	100	9624
DE <sup>4</sup>	74505	-0,9	91	73100
ES	34628	3,2	98	32032
FR	56859	1,8	100	65727
GR	7340	-4,8	100	6679
HR	1987	2,4	100	1425
HU	5489	9,2	100	4271
IT	48203	1,2	100	41128
LU	496	-39,1	99	311
MK	950	14,9	100	636
NL	14733	4,6	100	11819
PL	16116	3,0	100	17955
PT	7013	-0,3	97	5985
RO	6134	1,9	100	5983
SI	1847	4,2	95	1830
SK	3244	1,6	100	3159
UCTE	<b>320551</b>	0,6		<b>320099</b>
DK_W	3029	3,5	100	3012
UA_W <sup>5</sup>	657	9,5	100	1081

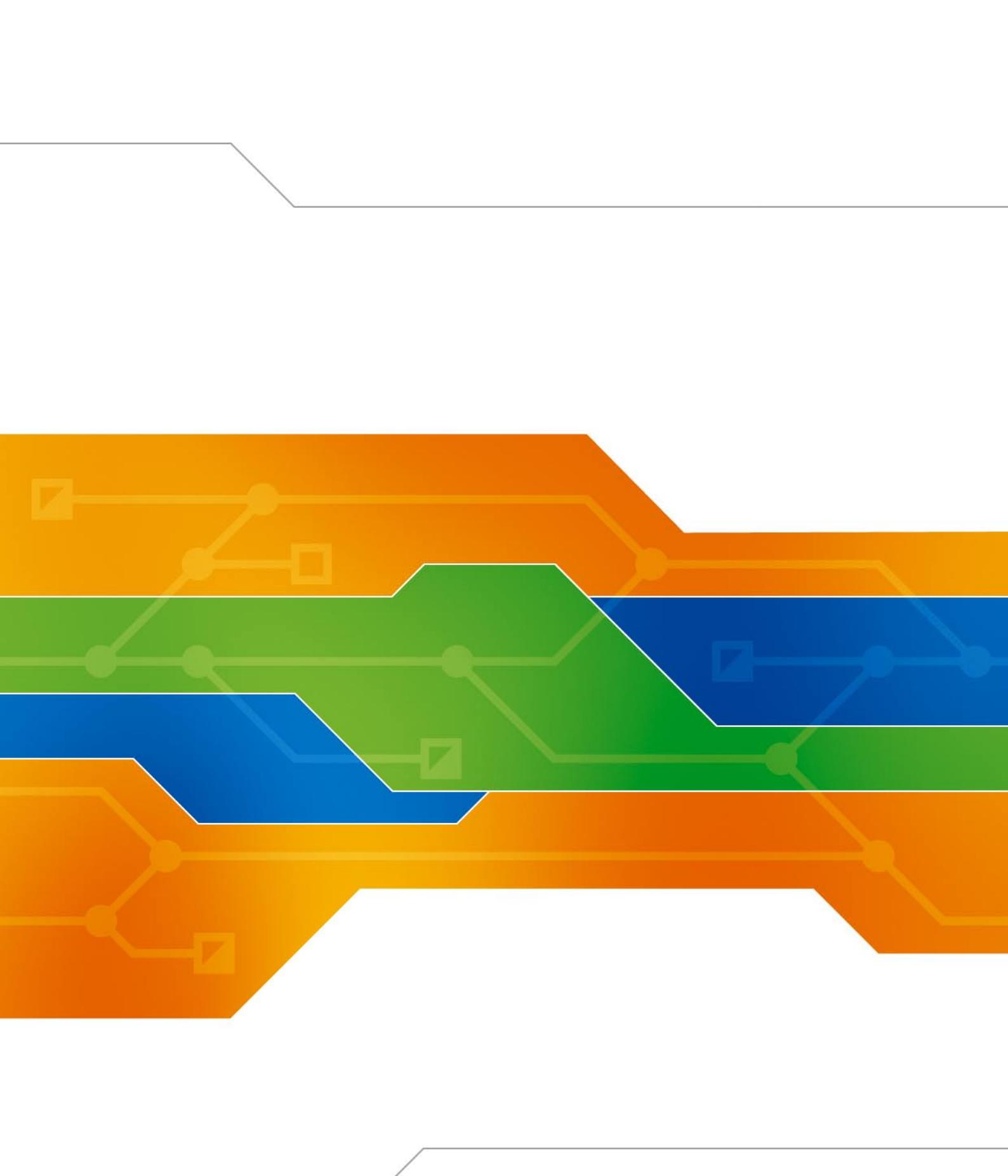
<sup>1</sup> Percentage as referred to total values in %

<sup>2</sup> Variation as compared to corresponding month of the previous year

<sup>3</sup> Power produced in parallel operation (including autoproduction)

<sup>4</sup> Values estimated on the basis of the vertical load. The vertical load is the total amount of the power flows out of the transmission network into distribution and large consumer networks.

<sup>5</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE



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