

# UCTE



## January 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 04 May 2005

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

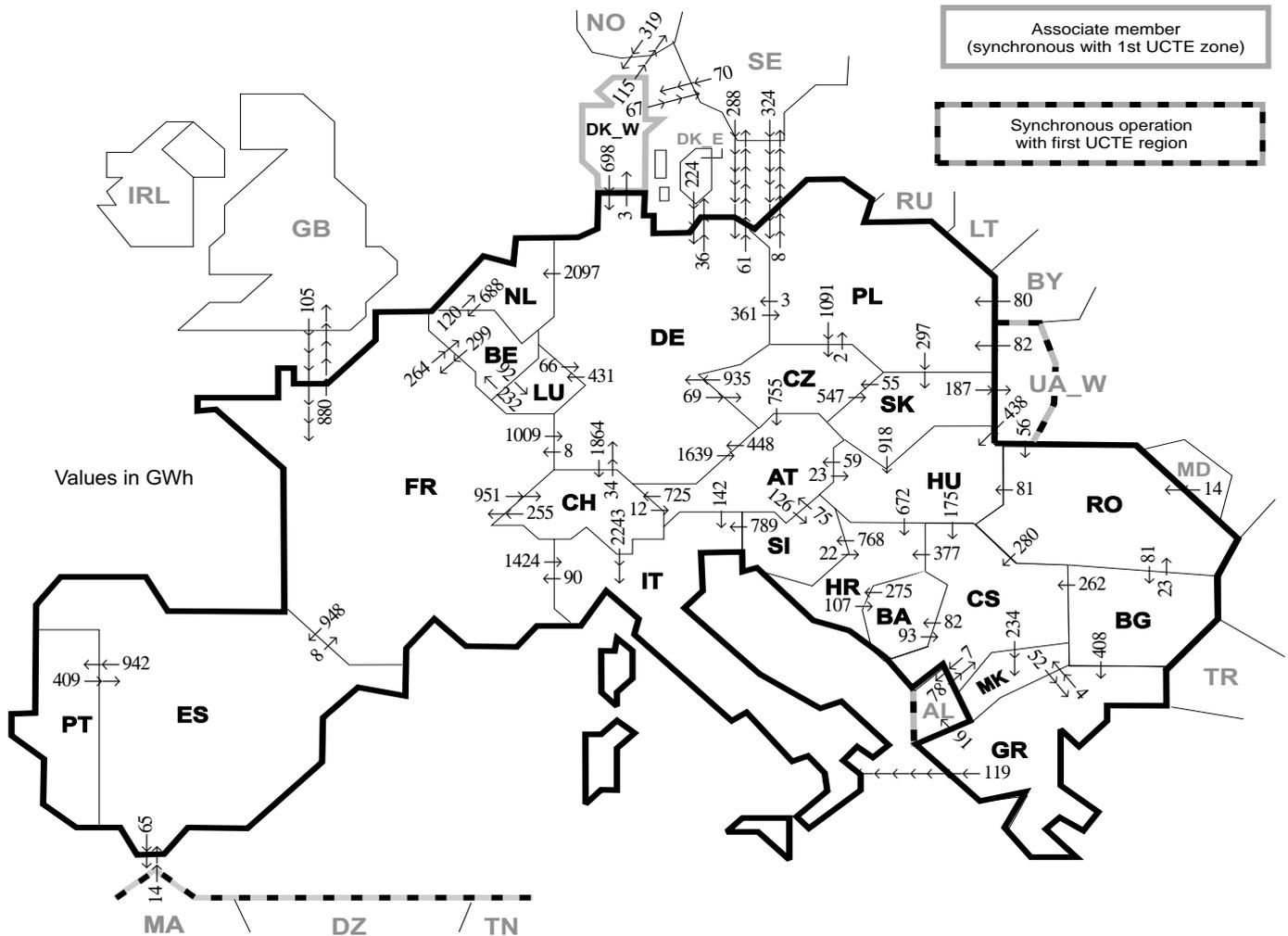
Countries	Net production in GWh							Exchange balance in GWh	Pump in GWh	Consumption in GWh			
	Therm. nuclear	Fossil fuel	Hydro prod	Other renew.	Of which wind	Not identify	Total			monthly	var. [%]	last 12 months	var. [%]
AT	0	2399	2171	n.a.	n.a.	n.a.	4570	1019	250	5339	-14,4	66410	9,2
BA	0	643	599	0	0	0	1242	-205	0	1037	2,3	10667	-13,9
BE	4313	3044	167	108	17	0	7632 <sup>1</sup>	682	158	8156	-0,2	88275	2,1
BG	2116	1735	393	0	0	0	4244	-617	43	3584	-1,3	34968	-4,0
CH	2414	195	2367	83	1	0	5089 <sup>1</sup>	1006	69	5996	1,3	61949	4,2
CS	0	2891	1266	0	0	0	4157 <sup>1</sup>	186	60	4283	-5,1	41259	1,0
CZ	2552	4354	245	4	3	0	7155 <sup>1</sup>	-1024	95	6036	-1,9	61332	2,3
DE	15097	31971	1833	6574	5907	0	55475 <sup>1</sup>	-2884	766	51825	0,6	546746	0,6
ES	5568	11878	1990	2328	1883	0	21765 <sup>1</sup>	295	553	21507	-1,0	249695	4,5
FR	42479	6388	5018	371	91	0	54256	-4874	573	48809	0,8	477637	2,3
GR	0	3921	371	84	74	0	4376 <sup>1</sup>	247	77	4546	1,4	51283	-4,3
HR	0	457	684	2	1	0	1143 <sup>1</sup>	459	26	1576	0,9	15974	2,9
HU	981	1926	17	n.a.	n.a.	n.a.	2924 <sup>1</sup>	527	0	3451	-1,5	38169	-0,6
IT	0	20122	3473	652	219	0	24247	4628	963	27912	1,5	321972	0,4
LU	0	301	81	13	8	0	395	225	93	527	-2,4	6365	2,9
MK	0	499	148	0	0	0	647 <sup>1</sup>	186	0	833	3,6	7413	1,7
NL	337	7513	0	715	392	0	8565 <sup>1</sup>	1529	0	10094	0,3	110855	1,2
PL	0	12513	312	n.a.	n.a.	n.a.	12825 <sup>1</sup>	-550	182	12093	-3,4	129848	-5,5
PT	0	3398	514	224	98	0	4136 <sup>1</sup>	549	55	4630	4,9	48578	4,1
RO	402	3371	1350	0	0	0	5123 <sup>1</sup>	-321	0	4802	2,5	50862	2,6
SI	492	479	132	0	0	0	1103	6	0	1109	-4,4	13320	2,2
SK	1672	537	354	1	1	259	2823 <sup>1</sup>	-316	13	2494	-3,7	26206	-0,6
<b>UCTE</b>	<b>78423</b>	<b>120535</b>	<b>23485</b>	<b>11160</b>	<b>8695</b>	<b>259</b>	<b>233862<sup>1</sup></b>	<b>753</b>	<b>3976</b>	<b>230639</b>	<b>-0,2</b>	<b>2459784</b>	<b>1,2</b>
DK_W	0	1531	4	910	815	0	2445 <sup>1</sup>	-488	0	1957	-2,0	21058	n.a.
UA_W <sup>2</sup>	0	770	6	0	0	0	776 <sup>1</sup>	-307	0	469	-2,3	4415	6,7

<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	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	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	100
Other renew.	n.a.	100	100	100	100	100	100	100	95	100	100	100	n.a.	100	98	100	100	n.a.	100	100	100	100	100	100
Not identify	n.a.	100	100	100	100	100	100	100	100	100	100	100	n.a.	100	n.a.	100	100	n.a.	100	100	n.a.	100	100	100
Consumption	90	100	99	100	100	100	100	100	98	100	100	100	100	100	99	100	100	100	94	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 <sup>2</sup>	Other III <sup>1</sup>		
AT	-	-	-	-	725	-	0	448	-	-	-	-	23	142	-	-	-	-	-	-	126	-	-	-	-	-	1464	
BA	-	-	-	-	-	93	-	-	-	-	-	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-	368	
BE	-	-	-	-	-	-	-	-	299	-	-	-	-	-	92	-	120	-	-	-	-	-	-	-	-	-	511	
BG	-	-	-	-	-	262	-	-	-	408	-	-	-	-	0	-	-	-	-	23	-	-	-	-	-	0	693	
CH	12	-	-	-	-	-	34	-	255	-	-	-	-	2243	-	-	-	-	-	-	-	-	-	-	-	-	2544	
CS	-	82	-	0	-	-	-	-	-	-	-	377	0	-	-	234	-	-	-	0	-	-	-	-	-	7	700	
CZ	755	-	-	-	-	-	-	935	-	-	-	-	-	-	-	-	-	2	-	-	-	547	-	-	-	-	2239	
DE	1639	-	-	-	1864	-	69	-	-	8	-	-	-	431	-	2097	361	-	-	-	-	-	3	-	-	97	6569	
ES	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	942	-	-	-	-	-	-	65	1015	
FR	-	-	264	-	951	-	-	1009	948	-	-	-	-	1424	-	-	-	-	-	-	-	-	-	-	-	880	5476	
GR	-	-	-	0	-	-	-	-	-	-	-	-	-	119	-	4	-	-	-	-	-	-	-	-	-	-	91	214
HR	-	107	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	768	-	-	-	-	-	875	
HU	59	-	-	-	175	-	-	-	-	-	-	672	-	-	-	-	-	-	-	28	0	-	0	-	-	-	934	
IT	0	-	-	-	0	-	-	-	-	90	0	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	90	
LU	-	-	232	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	298	
MK	-	-	-	0	0	-	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	
NL	-	-	688	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	688	
PL	-	-	-	-	-	-	-	-	1091	3	-	-	-	-	-	-	-	-	-	-	-	297	-	0	8	1399		
PT	-	-	-	-	-	-	-	-	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	409	
RO	-	-	-	81	-	280	-	-	-	-	-	-	81	-	-	-	-	-	-	-	-	-	-	-	0	0	442	
SI	75	-	-	-	-	-	-	-	-	-	-	22	789	-	-	-	-	-	-	-	-	-	-	-	-	-	886	
SK	-	-	-	-	-	55	-	-	-	-	-	-	918	-	-	-	-	0	-	-	-	-	-	-	187	-	1160	
DK_W	-	-	-	-	-	-	698	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	880		
UA_W <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	438	-	-	-	-	82	-	56	0	-	-	-	-	-	576	
Other III <sup>1</sup>	-	-	0	78	-	-	512	14	105	0	-	-	-	-	-	-	-	404	-	14	-	-	389	-	-	-	1516	
<b>Sum imp</b>	<b>2540</b>	<b>189</b>	<b>1184</b>	<b>81</b>	<b>3540</b>	<b>888</b>	<b>1215</b>	<b>3705</b>	<b>1371</b>	<b>765</b>	<b>460</b>	<b>1346</b>	<b>1460</b>	<b>4717</b>	<b>523</b>	<b>238</b>	<b>2217</b>	<b>849</b>	<b>942</b>	<b>121</b>	<b>894</b>	<b>844</b>	<b>392</b>	<b>187</b>	<b>1330</b>	<b>31998</b>		

Sum of physical energy flows between UCTE countries = 27688GWh Total physical energy flows = 31998GWh

<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

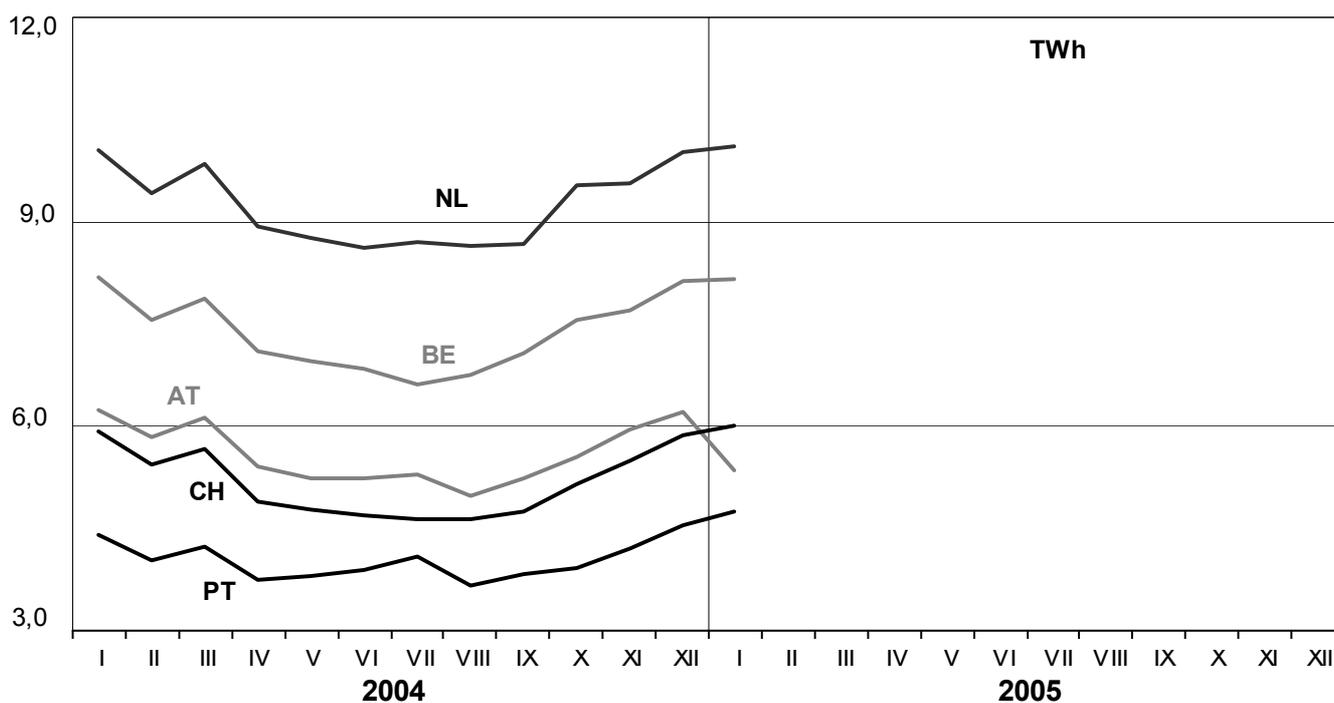
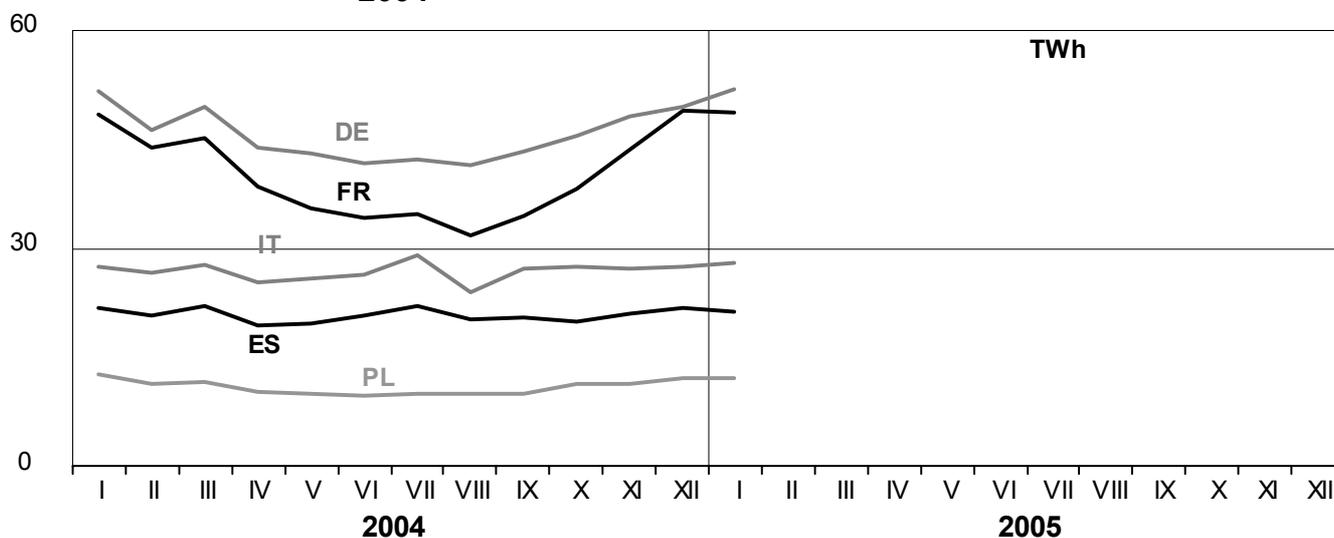
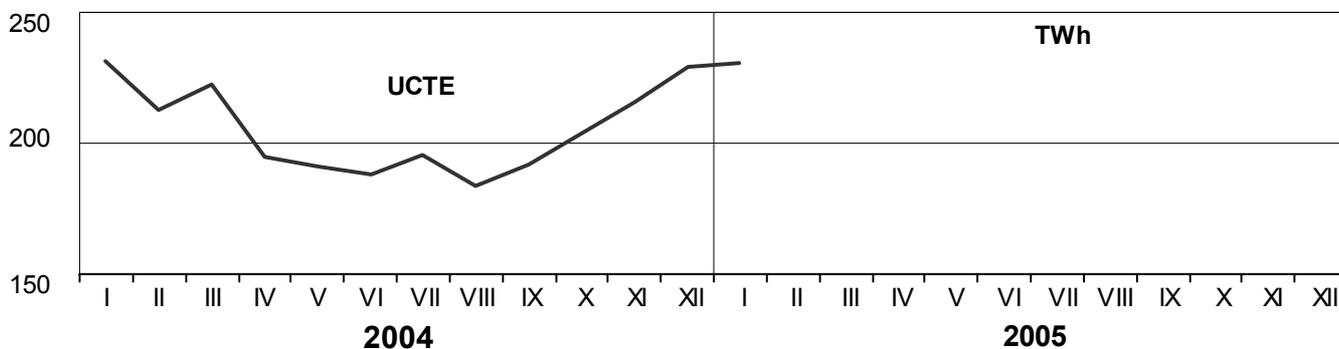
These physical energy flows were measured on the cross-frontier transmission lines (≤ 110 kV) listed in table 9 of the Statistical Yearbook. These values may differ from the official statistics and the exchange balances in chapter 1.

# 3

## Monthly consumption

January 2005

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

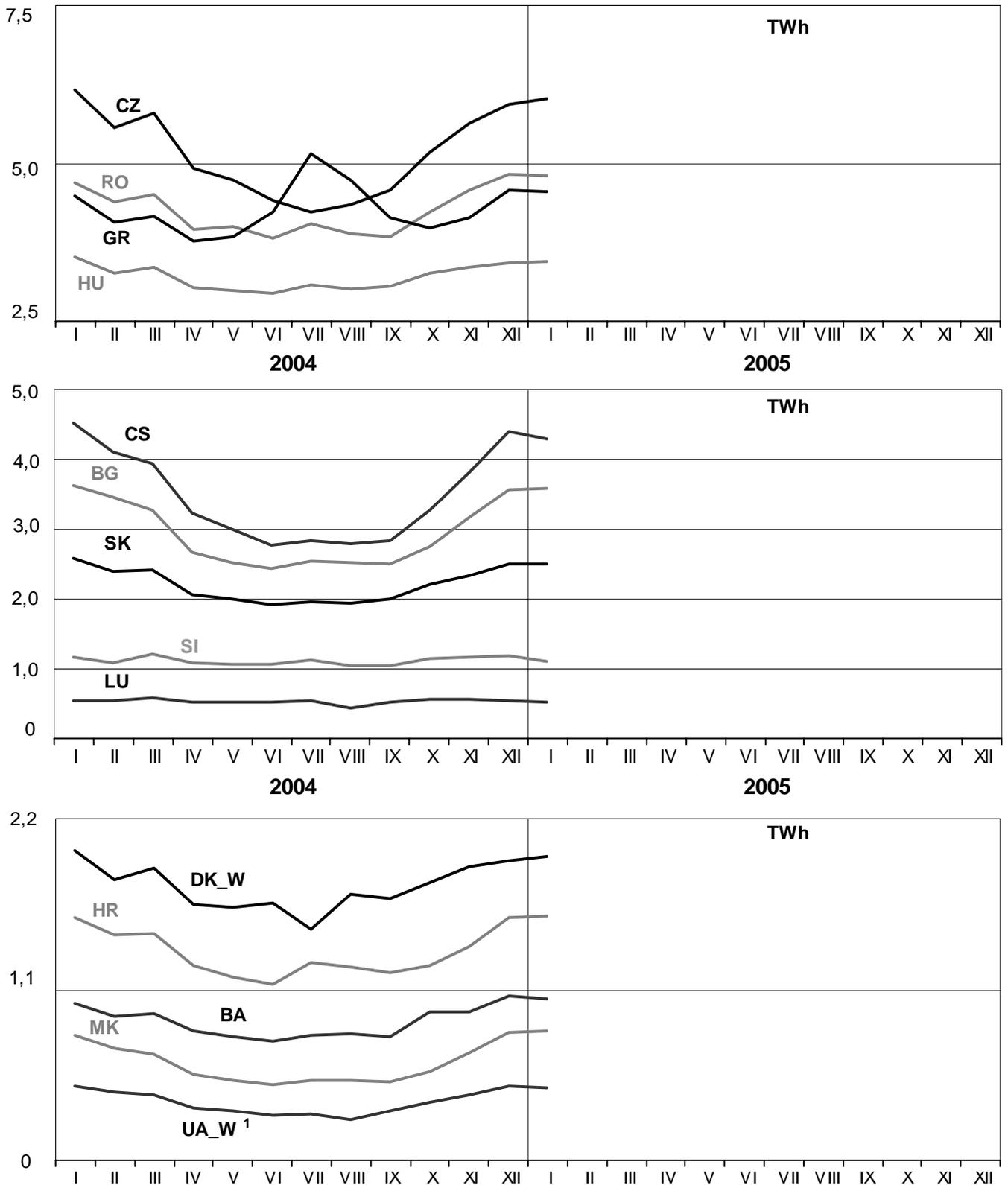


# 3

## Monthly consumption

January 2005

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



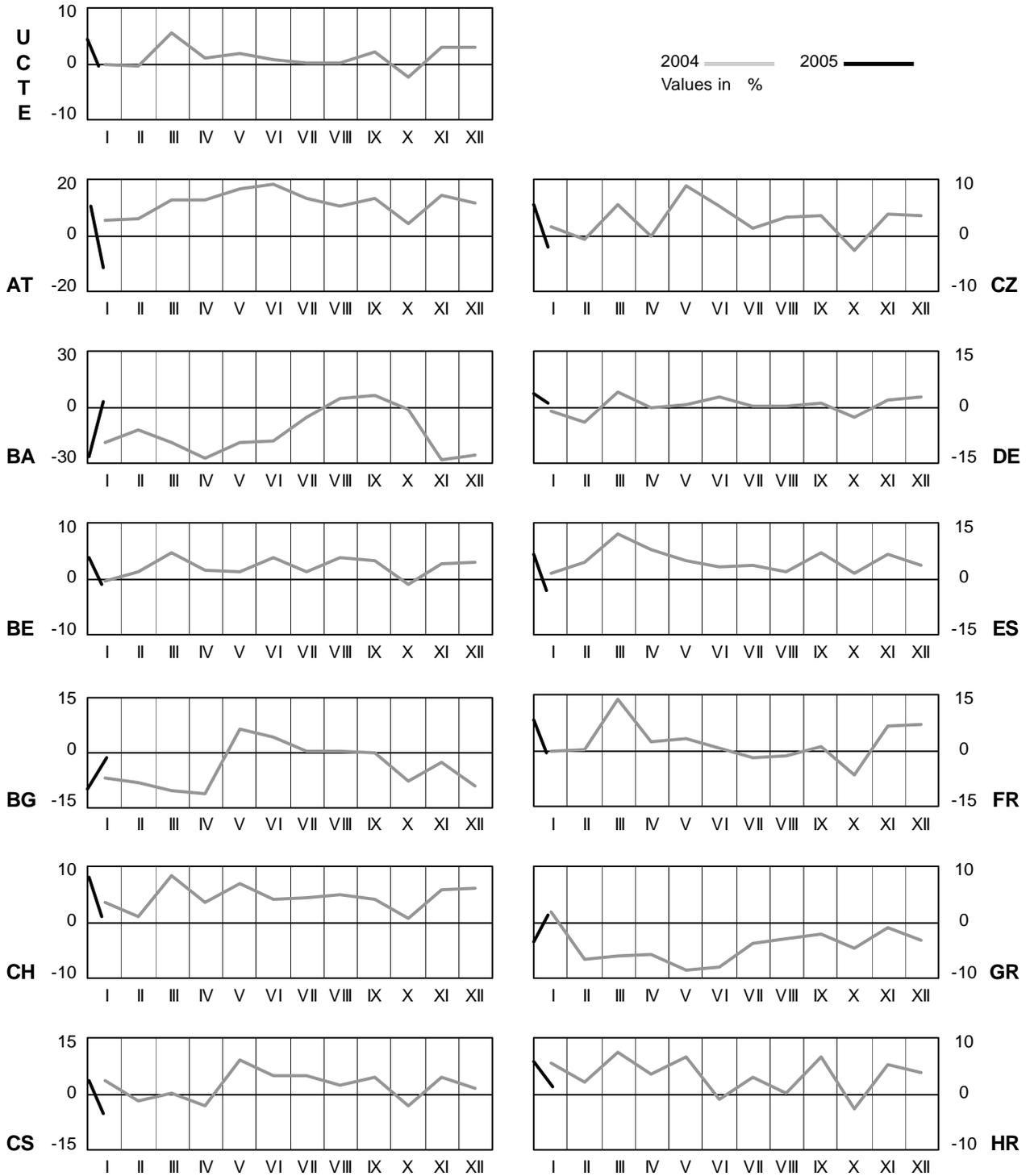
<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

# 4

## Monthly consumption variation

January 2005

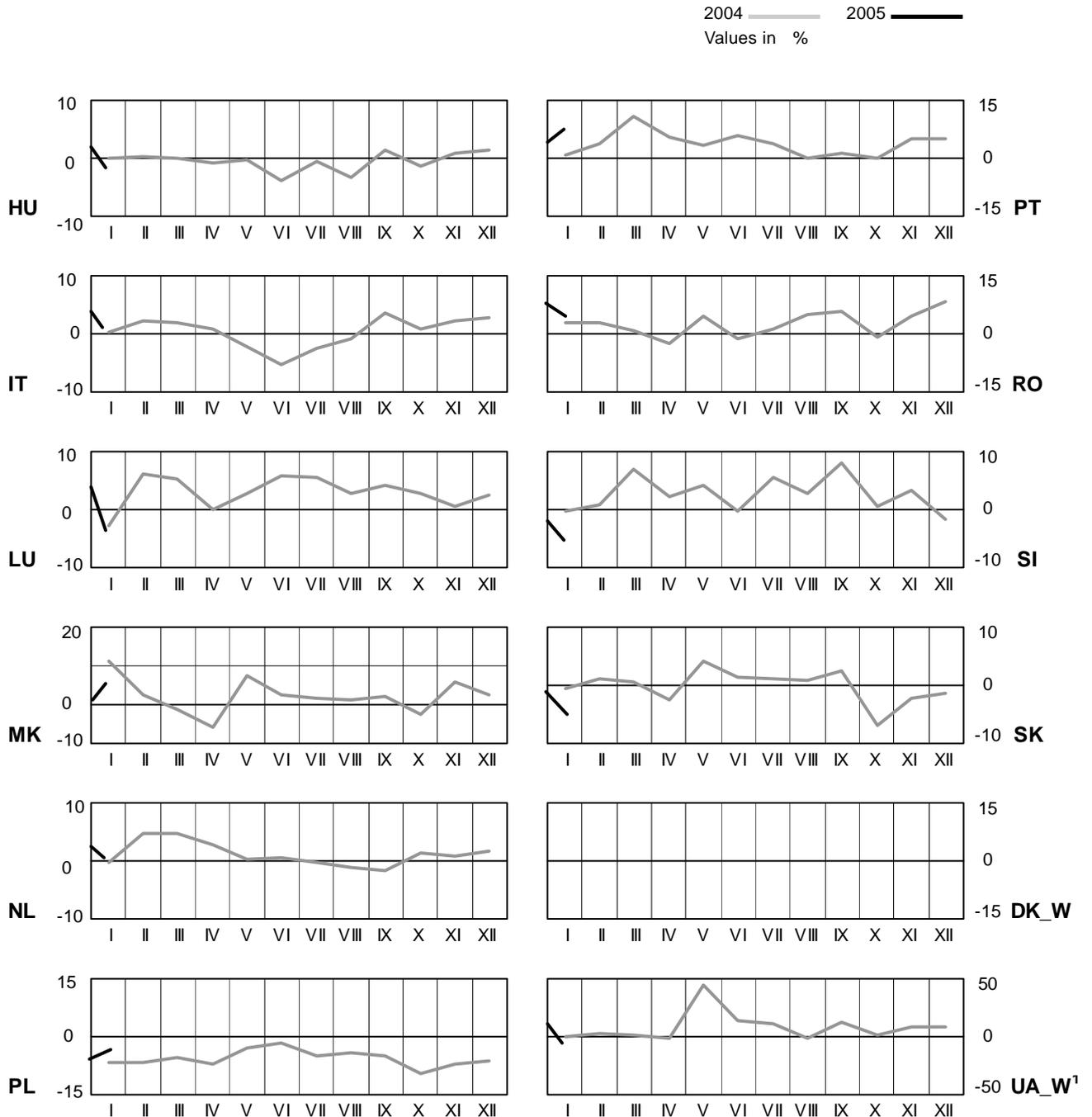
All values are calculated to represent 100% of the national values



# 4 Monthly consumption variation

January 2005

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



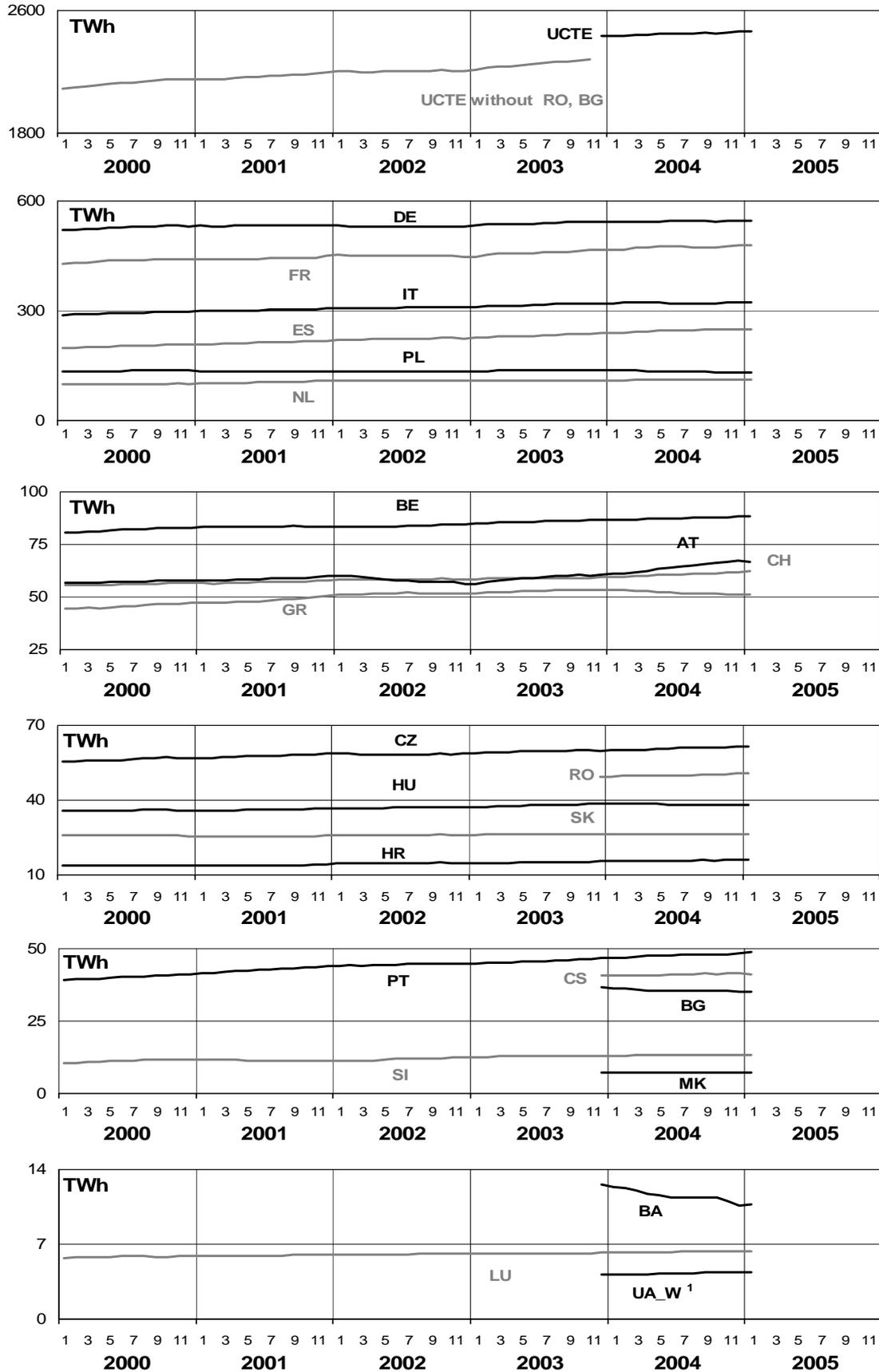
<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

# 5

## Consumption of the last 12 months

January 2005

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



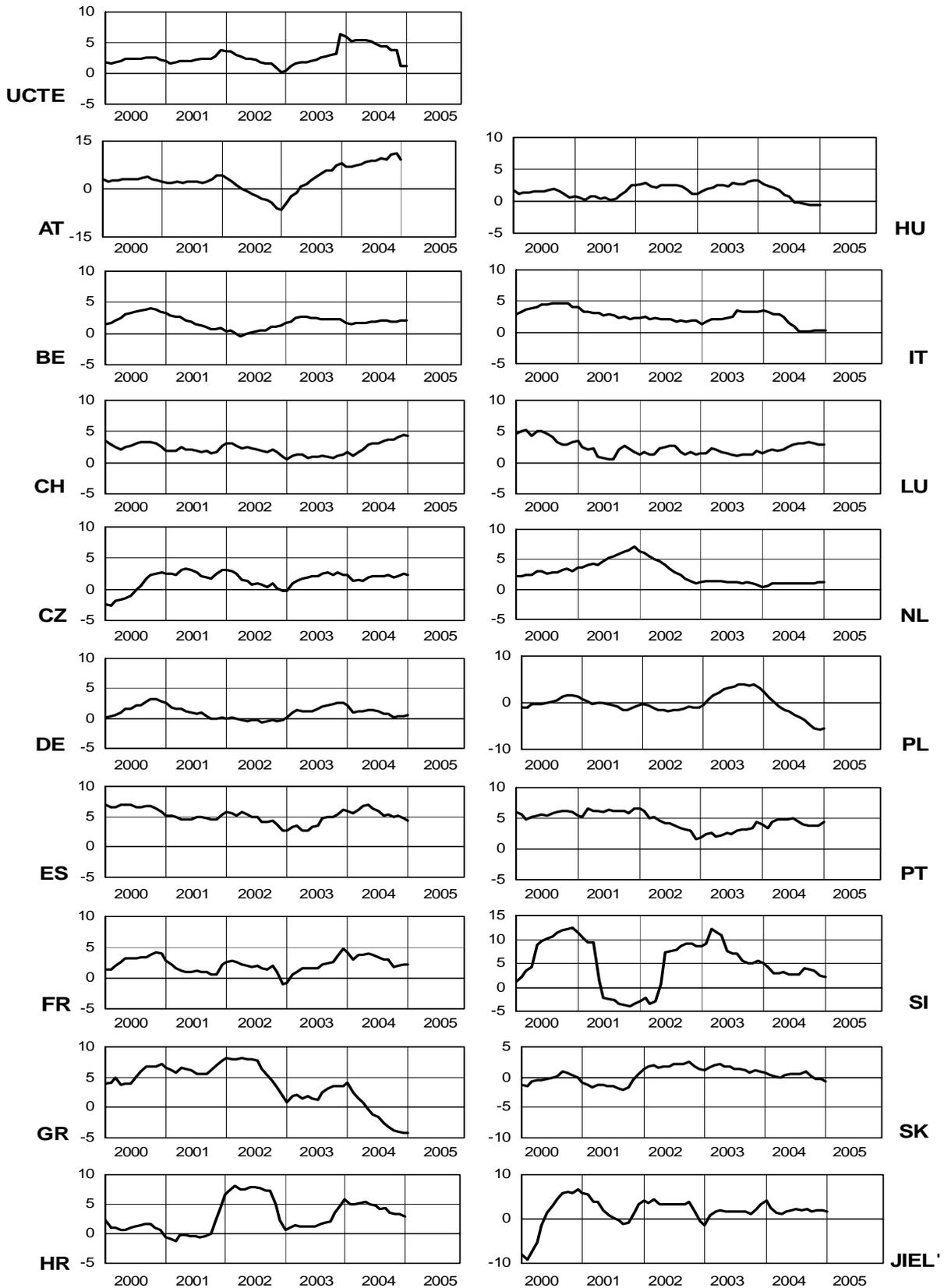
<sup>1</sup> UA\_W represents the so-called Burshtyn Island synchronously interconnected with UCTE

# 6

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

January 2005

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

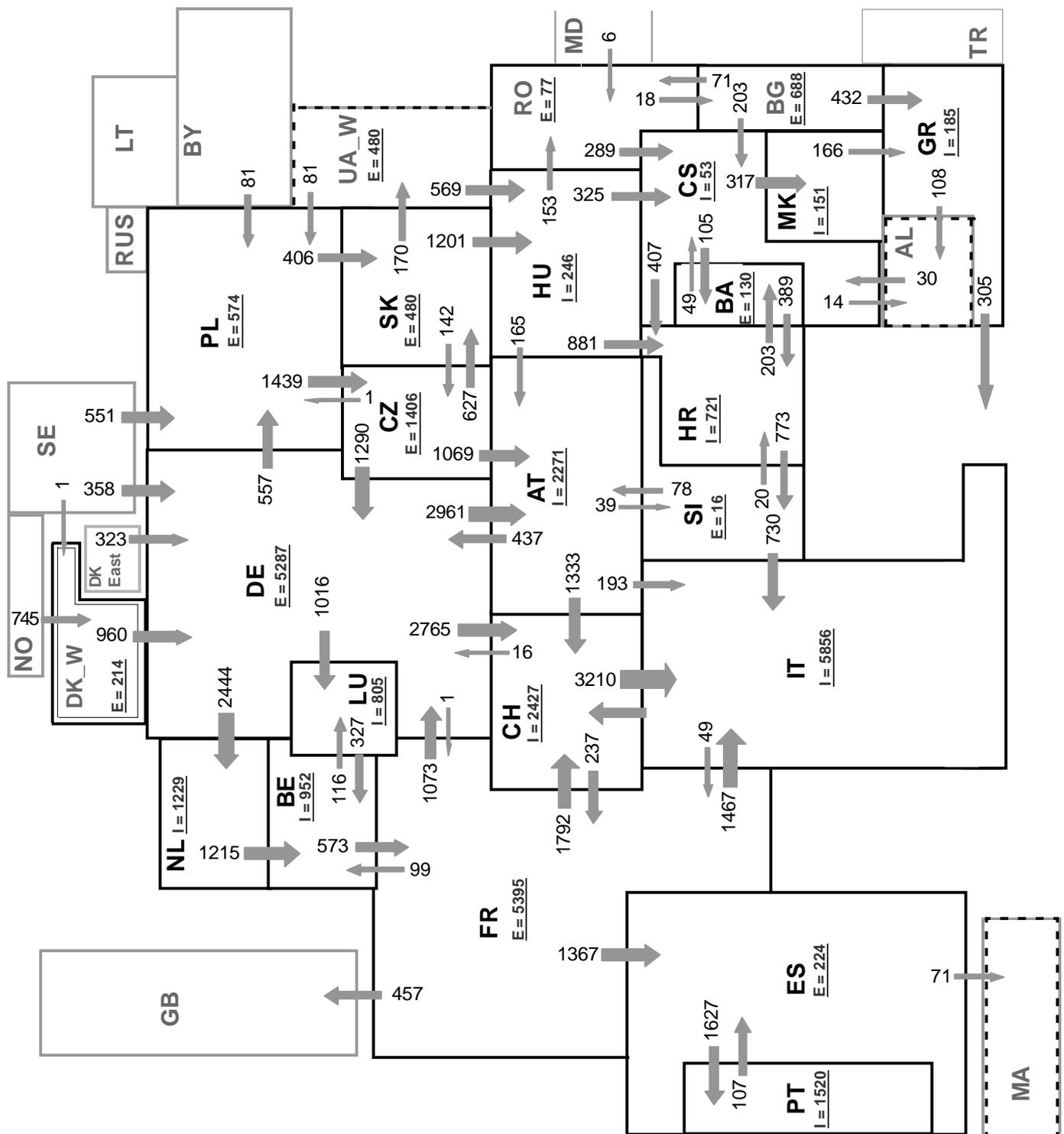


<sup>1</sup> JIEL = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)

# 7

## Load flows (night) on 19.01.05 at 03:00\* in MW

January 2005



Associate member

Synchronous operation with first region

Sum of load flows in MW:

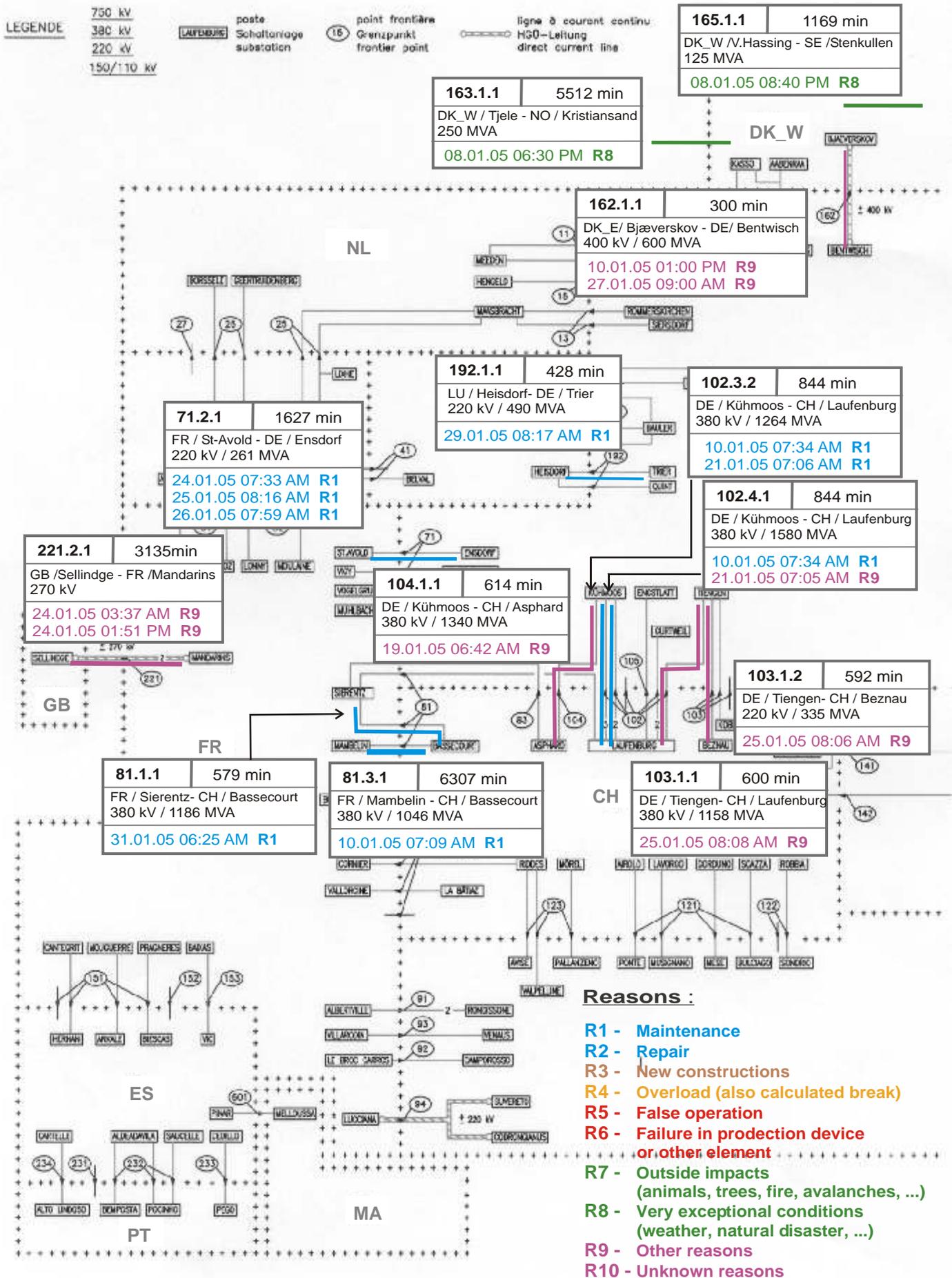
UCTE = 37275MW      Total = 41800MW

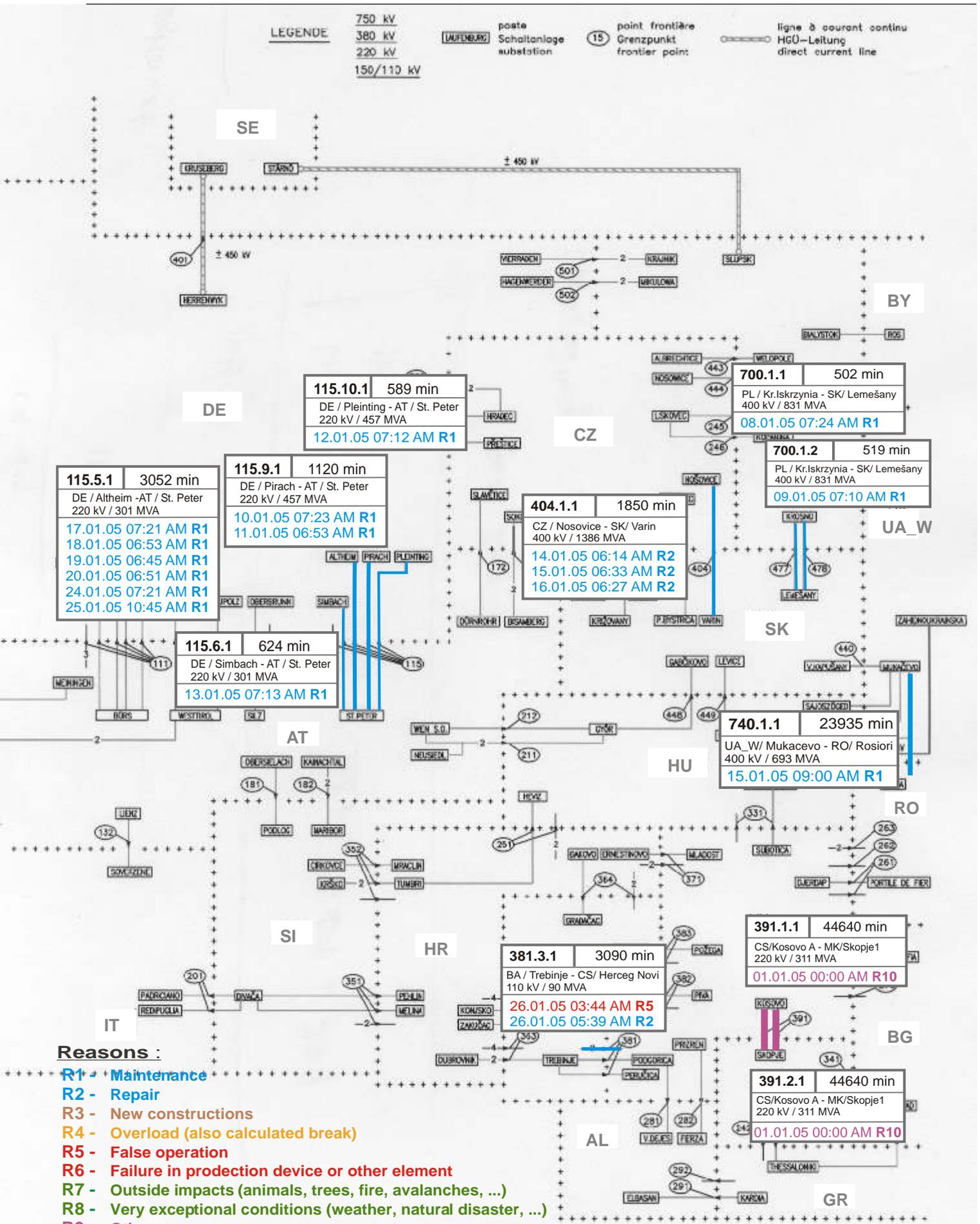
\* Central European Time ( CET )

I = Import balance

E = Export balance

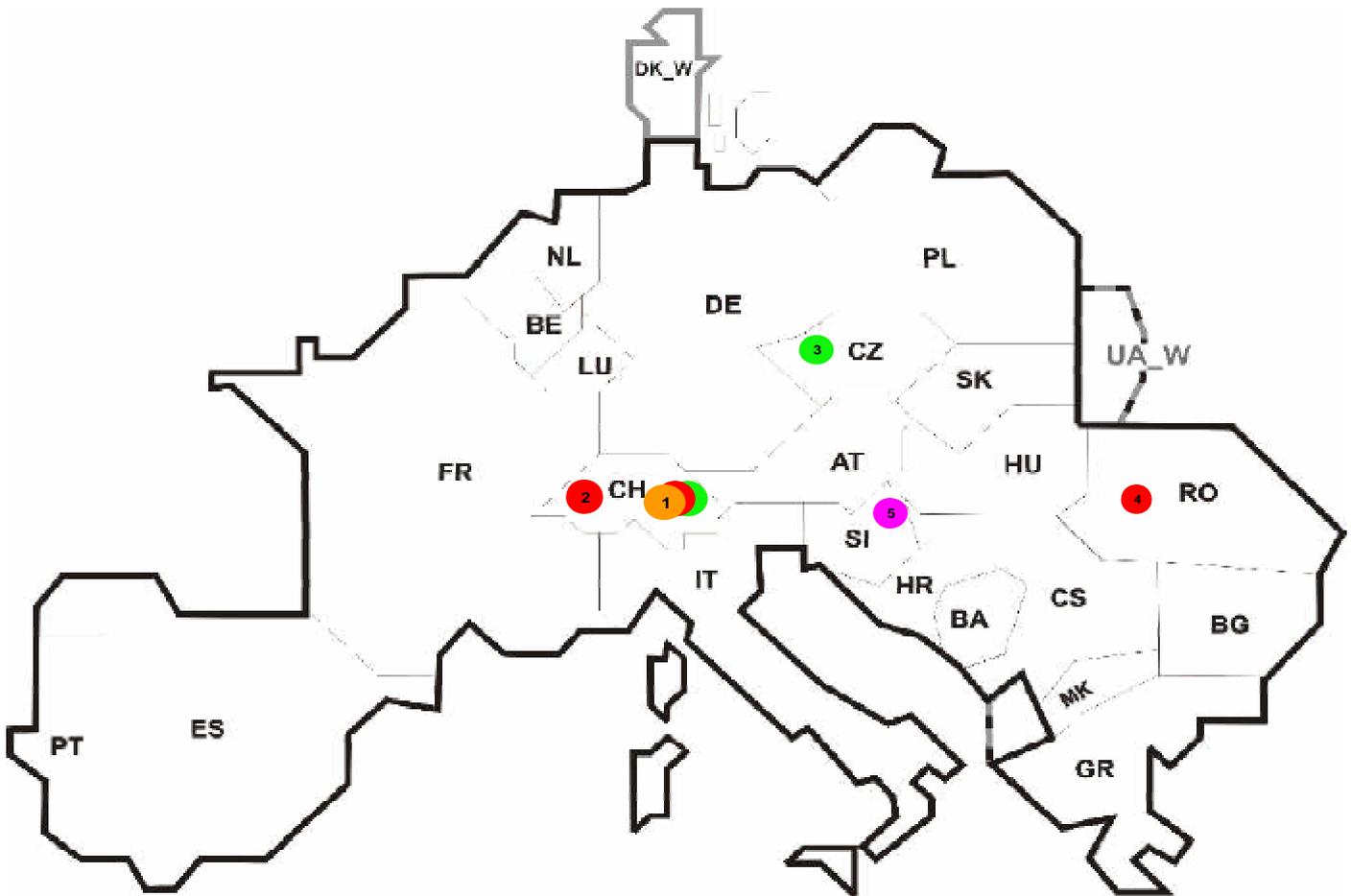






**Reasons :**

- R1 - Maintenance
- R2 - Repair
- R3 - New constructions
- R4 - Overload (also calculated break)
- R5 - False operation
- R6 - Failure in 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, ...)  
(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	CH	Banlieue Ouest	R4,R6,R8	300	600	11	2,60
2	CH	Lachmatt	R6	15	40	22	0,13
3	CZ	Nosovice	R8	10	0	3	0,09
4	RO	Hasdat	R6	6	5	7	0,06

<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	318196	742155	890	437	1190	891
BA	253757	64654	327	173	362	108
BE	655845	1190261	695	1460	1033	1904
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	2243432	3245406	2526	4972	2799	1569
CS	484330	673449	719	789	936	811
CZ	1913613	879100	2629	1219	2838	1393
DE	5368423	2121075	7302	2248	2853	5963
ES	726413	1054992	1652	1337	1120	1681
FR	8365593	3641690	10180	4825	10253	7478
GR	123993	371504	350	539	50	534
HR	164527	629967	147	860	257	960
HU	488702	1015859	901	1160	545	1722
IT	90203	4718405	49	5921	99	6137
MK	52200	238300	229	379	120	420
NL	442371	1965949	934	2153	63	3233
PL	1037769	482765	1369	786	1779	825
PT	67931	618289	0	1535	704	950
RO	686339	365838	430	363	870	371
SI	687451	701308	833	832	962	1078
SK	683970	305920	851	311	906	633
DK_W	859097	338214	950	609	950	1087
UA_W <sup>1</sup>	308983	0	398	0	498	0

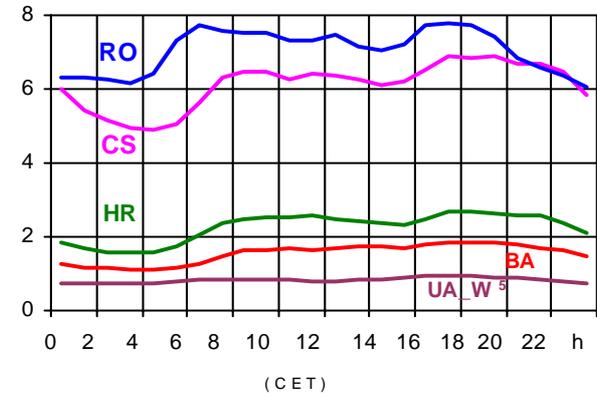
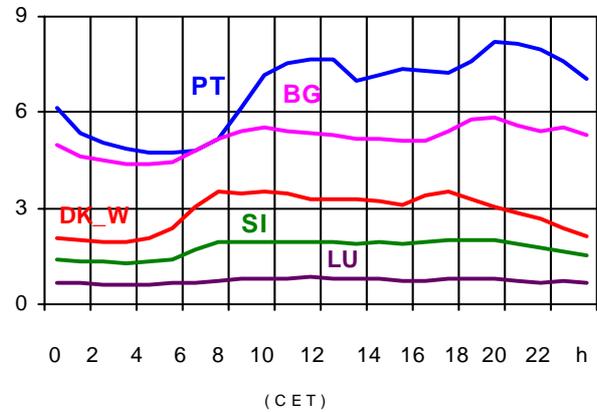
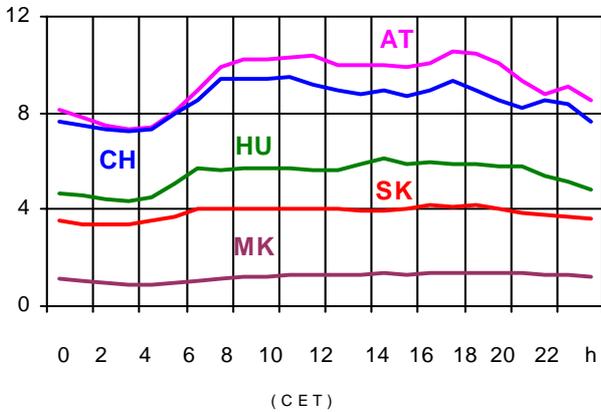
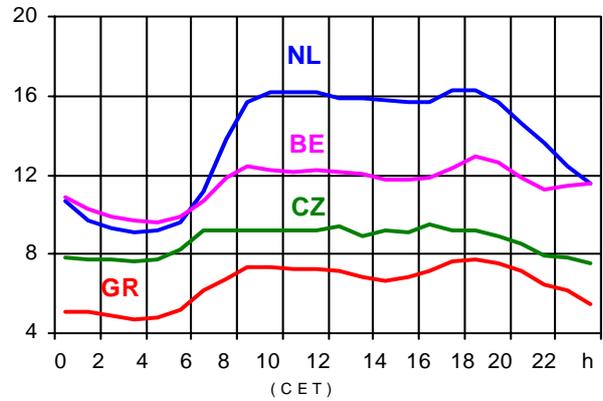
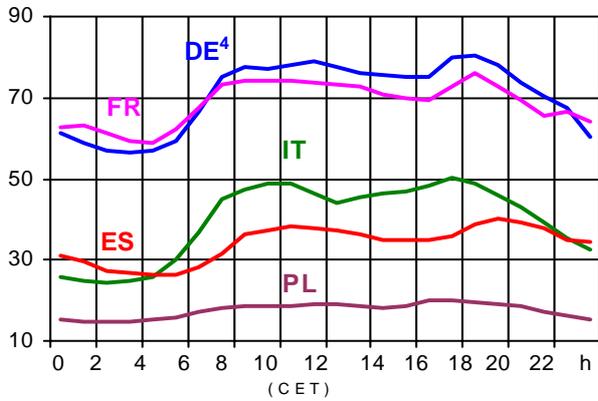
- Control areas can differ from national borders ( i.e. German block which includes parts of AT, LU and DK ).
- Values are calculated on an hourly base ( MWh ).
- This values are not the provisional values entered in the VULCANUS system, but the definitive values after an eventual correction during the 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 19.01.2005

Values in GW



	Peak load MW	var.% <sup>2</sup>	Load representativity <sup>1</sup> %	Parallel power <sup>3</sup> MW
AT	10521	1,4	82	8627
BA	1861	13,2	100	1916
BE	12888	0,0	100	11113
BG	5815	-0,3	100	6272
CH	9473	1,4	100	10991
CS	6894	2,1	100	6401
CZ	9483	-1,1	100	11079
DE <sup>4</sup>	80549	0,3	91	77700
ES	39990	4,4	98	37220
FR	76129	2,1	100	76909
GR	7687	8,6	100	6788
HR	2684	4,2	100	1824
HU	6146	5,6	100	4559
IT	50218	-0,9	100	43180
LU	823	-5,5	99	806
MK	1370	12,5	100	951
NL	16241	6,2	100	12979
PL	19978	-1,0	100	20518
PT	8185	-1,8	94	6037
RO	7810	6,8	100	7328
SI	2003	4,8	95	1762
SK	4172	0,1	100	4219
<b>UCTE</b>	<b>375746</b>	<b>1,7</b>		<b>359179</b>
DK_W	3538	-1,4	100	3061
UA_W <sup>5</sup>	954	3,8	100	1339

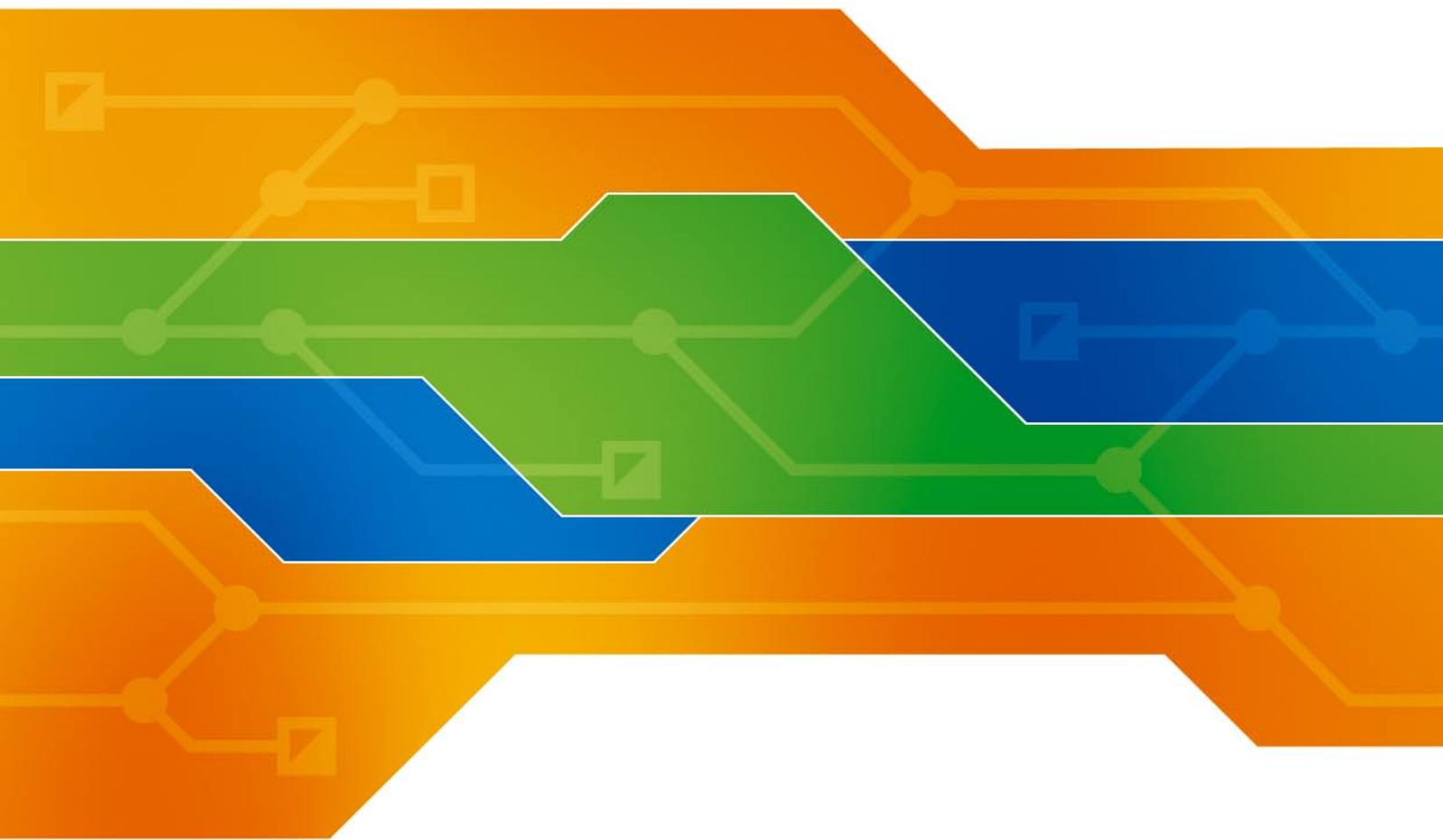
<sup>1</sup> Percentage as referred to total values in %

<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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