

# UCTE



## February 2003

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

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<sup>1</sup> Monthly provisional values as of UCTE database from 14 May 2003

Countries	Net production in GWh <sup>1</sup>				Exchange balance in GWh	Pump in GWh	Consumption in GWh <sup>1</sup>			
	Hy	Tn	Tc	Total			monthly	Δ <sup>3</sup> [%]	last 12 months	Δ <sup>3</sup> [%]
B	132	3880	2780	6792 <sup>2</sup>	621	118	7295	6,3	83938	0,9
D	1733	12732	31536	46001 <sup>2</sup>	-223	545	45233	10,5	504071	1,9
E	4728	4936	9420	19084 <sup>2</sup>	51	380	18755	10,6	212675	2,7
F	6652	36442	4922	48016	-5759	445	41812	13,1	439048	0,3
GR	715	0	3219	3934 <sup>2</sup>	153	25	4062	13,6	47477	2,2
I	3547	0	18856	22403	4346	818	25931	4,5	311030	1,3
SLO	158	449	470	1077	-52	0	1025	11,2	11885	8,3
HR	664	0	573	1237 <sup>2</sup>	179	0	1416	10,8	14804	1,0
BiH	506	0	481	987	51	0	1038	n.a.	n.a.	n.a.
FYROM	207	0	407	614 <sup>2</sup>	3	0	617	n.a.	n.a.	n.a.
SCG	1327	0	2299	3626	434	30	4030	n.a.	n.a.	n.a.
L	71	0	256	327	253	78	502	1,4	6073	-5,9
NL	0	306	7425	7731 <sup>2</sup>	1045	0	8776	0,6	108638	2,6
A	2471	0	2361	4832	178	27	4983	18,2	51167	1,1
P	1904	0	1614	3518 <sup>2</sup>	102	38	3582	10,9	41248	0,8
CH	3027	2167	248	5442 <sup>2</sup>	25	139	5328	7,1	58783	1,5
CZ	196	1524	4757	6477 <sup>2</sup>	-818	42	5617	10,9	59154	0,7
H	14	928	1904	2846 <sup>2</sup>	395	0	3241	6,3	37411	1,6
PL <sup>5</sup>	259	0	12972	13231 <sup>2</sup>	-915	181	12135	9,9	135360	1,3
SK	329	1604	879	2812 <sup>2</sup>	-437	8	2367	5,7	26293	-0,4
<b>UCTE</b>	<b>30165</b>	<b>67145</b>	<b>112262</b>	<b>209572<sup>2</sup></b>	<b>-874</b>	<b>2908</b>	<b>205790</b>	<b>0,0</b>	<b>2194087</b>	<b>1,3</b>
RO	1152	445	2926	4523 <sup>2</sup>	-248	0	4275	n.a.	n.a.	n.a.
BG	373	1732	1957	4062 <sup>2</sup>	-258	34	3770	n.a.	n.a.	n.a.
West-UA	3	0	674	677 <sup>2</sup>	-247	0	430	n.a.	n.a.	n.a.

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

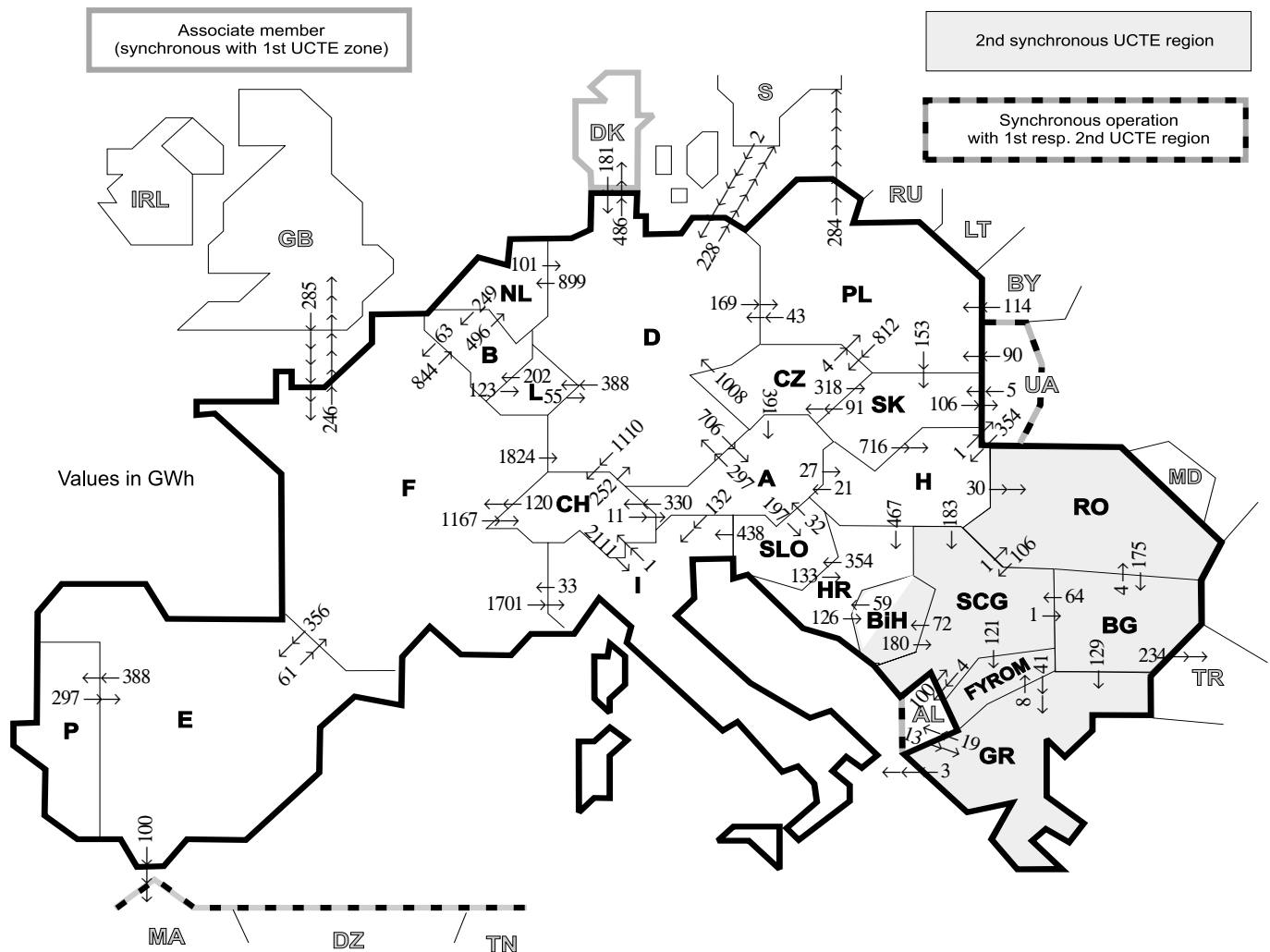
Countries	B	D	E	F	GR <sup>4</sup>	I	SLO	HR	BiH	FY- ROM	SCG	L	NL	A	P	CH	CZ	H	PL	SK	RO	BG	West- UA
Production	99	94	94	97	93	100	95	100	99	100	96	98	100	84	91	100	100	100	100	100	100	100	100
Consumption	100	94	94	97	93	100	95	100	99	100	96	99	100	90	91	100	100	100	100	100	100	100	100

<sup>2</sup> Including deliveries from industry

<sup>3</sup> Variation as compared to corresponding period of the previous year and representativity 100%

<sup>4</sup> The representativity of data referring to the whole country including the isolated systems of the Greek island is 93%.  
The representativity of data referring interconnected system on the mainland is 99%.

<sup>5</sup> Production values are gross values.



Exporting countries	Importing countries																	Σ Export									
	B	D	E	F	GR	I	SLO	HR	BIH	FY-ROM	SCG	L	NL	A	P	CH	CZ		H	PL	SK	RO	BG	West-UA	DK <sup>2</sup>	III <sup>1</sup>	
B	-	-	-	63	-	-	-	-	-	-	-	123	496	-	-	-	-	-	-	-	-	-	-	-	-	-	682
D	-	-	-	0	-	-	-	-	-	-	-	388	899	706	-	1110	0	-	169	-	-	-	-	486	714	-	3986
E	-	-	-	61	-	-	-	-	-	-	-	-	-	-	388	-	-	-	-	-	-	-	-	-	100	-	549
F	844	1824	356	-	-	1701	-	-	-	-	-	-	-	-	-	1167	-	-	-	-	-	-	-	-	-	246	6138
GR	-	-	-	-	-	3	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	0	-	-	19	30	
I	-	-	-	33	0	0	-	-	-	-	-	-	-	0	-	1	-	-	-	-	-	-	-	-	-	34	
SLO	-	-	-	-	-	438	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-	-	603	
HR	-	-	-	-	-	-	133	-	126	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	480	
BIH	-	-	-	-	-	-	-	59	-	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239	
FYROM	-	-	-	-	41	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	41	
SCG	-	-	-	-	-	-	-	0	72	121	-	-	-	-	-	-	-	0	-	-	1	1	-	-	4	199	
L	202	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	257	
NL	249	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	
A	-	297	-	-	-	132	197	-	-	-	-	-	-	-	-	330	0	27	-	-	-	-	-	-	-	983	
P	-	-	297	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	297	
CH	-	252	-	120	-	2111	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	2494	
CZ	-	1008	-	-	-	-	-	-	-	-	-	-	-	391	-	-	-	-	4	318	-	-	-	-	-	1721	
H	-	-	-	-	-	-	-	467	-	-	183	-	-	21	-	-	-	-	-	0	30	-	1	-	-	702	
PL	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	812	-	-	153	-	0	-	-	0	1292	
SK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91	716	0	-	-	-	106	106	913	
RO	-	-	-	-	-	-	-	-	-	-	106	-	-	-	-	-	-	-	0	-	-	-	175	-	-	281	
BG	-	-	-	-	129	-	-	-	-	0	64	-	-	-	-	-	-	-	-	-	4	-	-	-	-	431	
West-UA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	449	
DK <sup>2</sup>	-	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	354	90	5	0	-	-	-	181	
III <sup>1</sup>	-	183	0	285	13	-	-	-	-	-	100	-	-	-	-	-	-	-	-	-	5	0	0	-	-	1144	
Σ Import	1295	3763	653	562	183	4385	551	659	198	129	633	511	1395	1161	388	2608	903	1097	377	476	35	176	107	486	1708	23846	

Sum of physical energy flows between UCTE countries = 20994 GWh

Total physical energy flows = 23846 GWh

<sup>1</sup> III = Third countries: Albania, Belarus, Denmark, Great Britain, Morocco, Republic of Moldavia, Sweden, Republic of Turkey and West-Ukraine

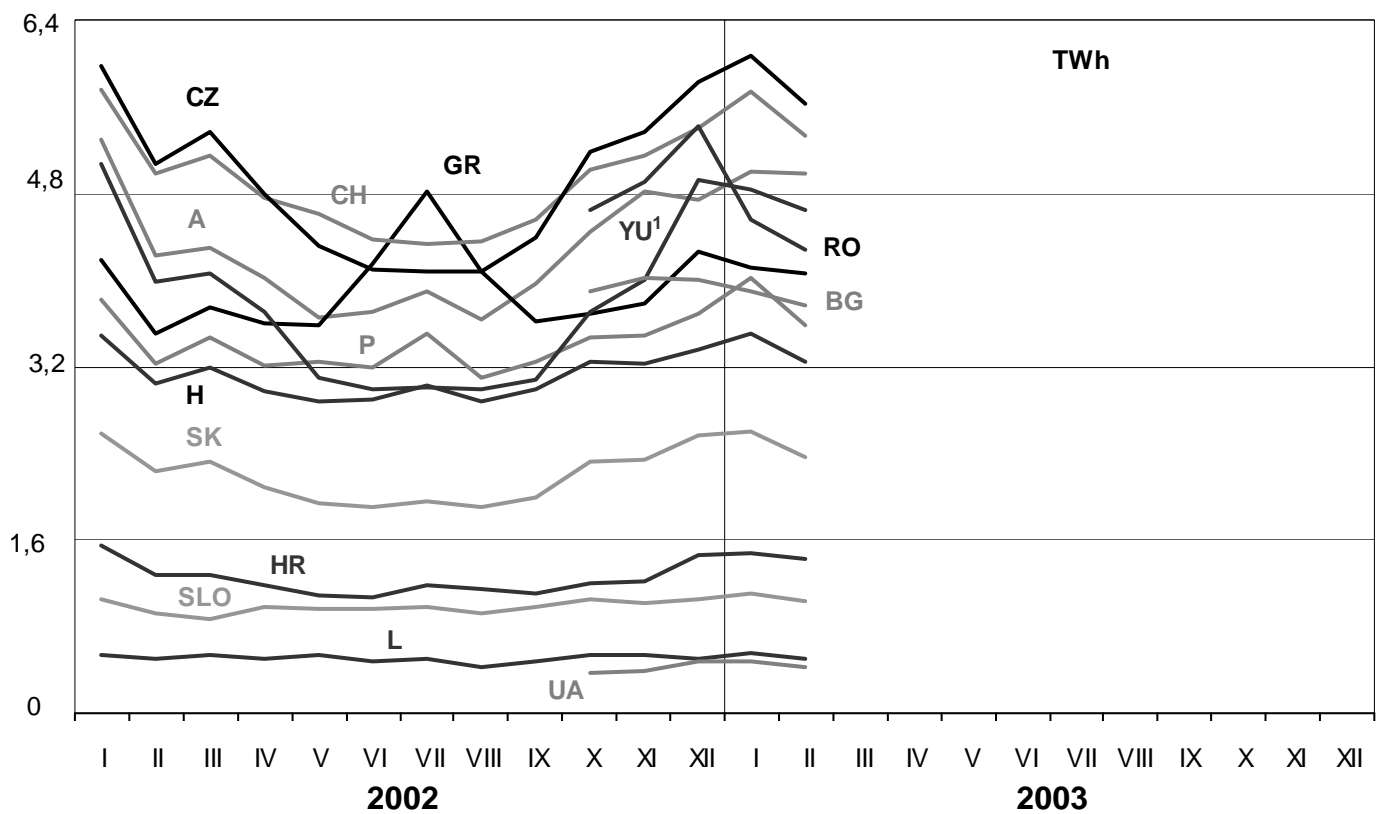
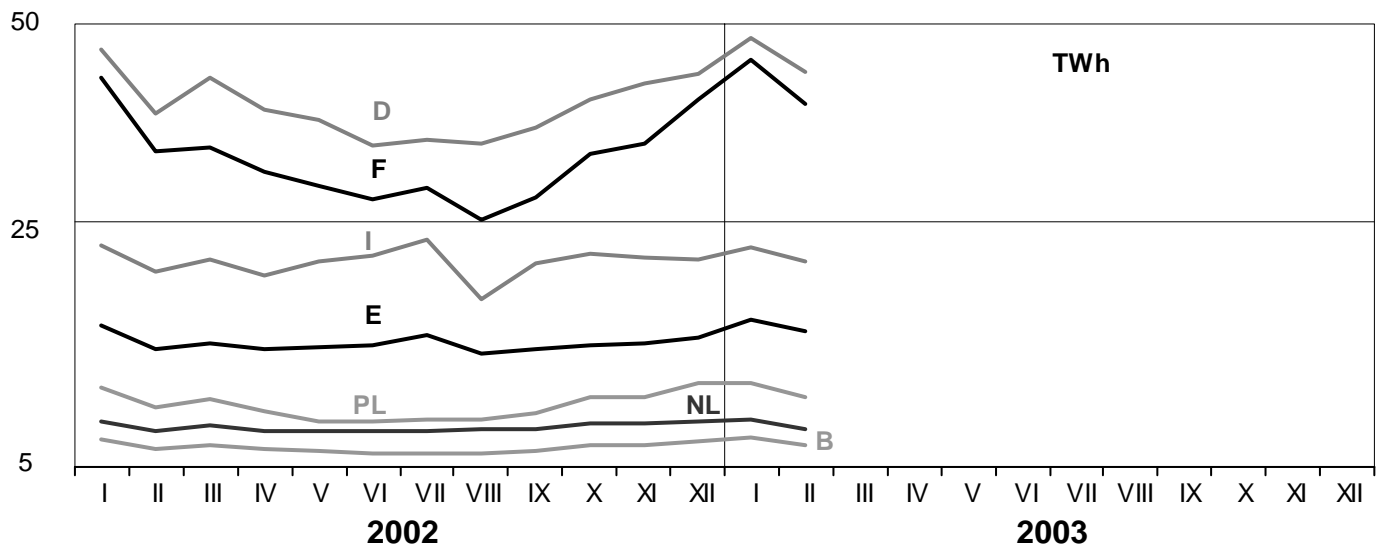
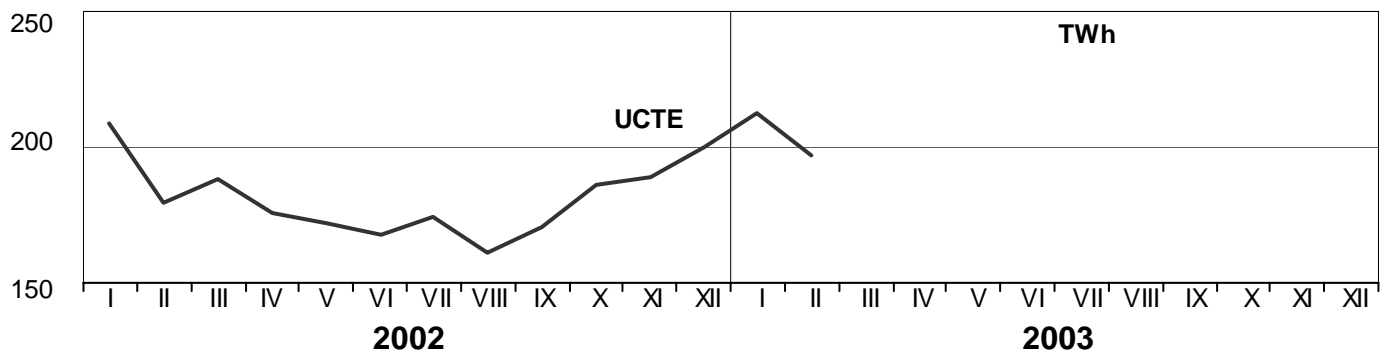
<sup>2</sup> Denmark (Jutland)

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.

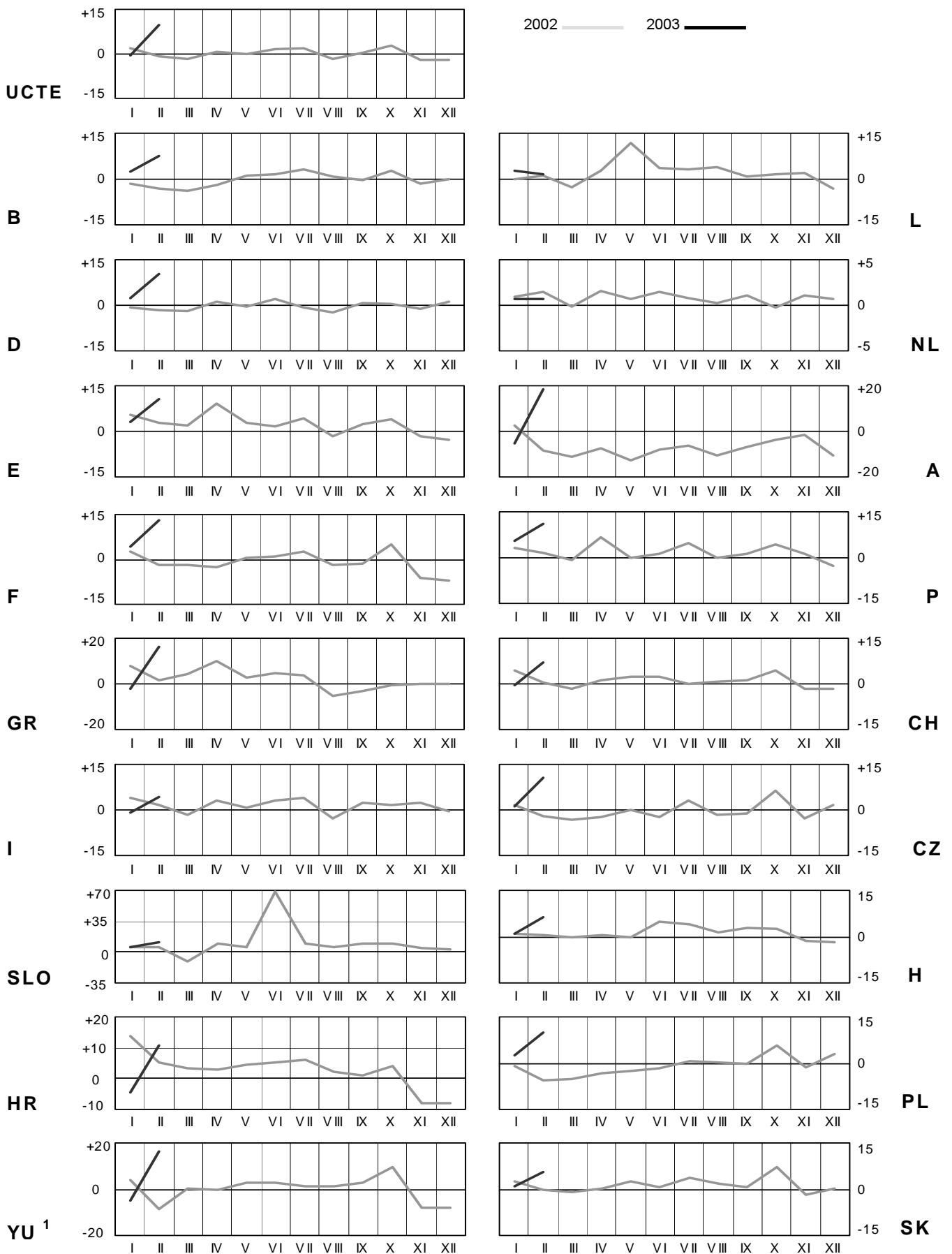
# 3

## Monthly consumption

February 2003



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

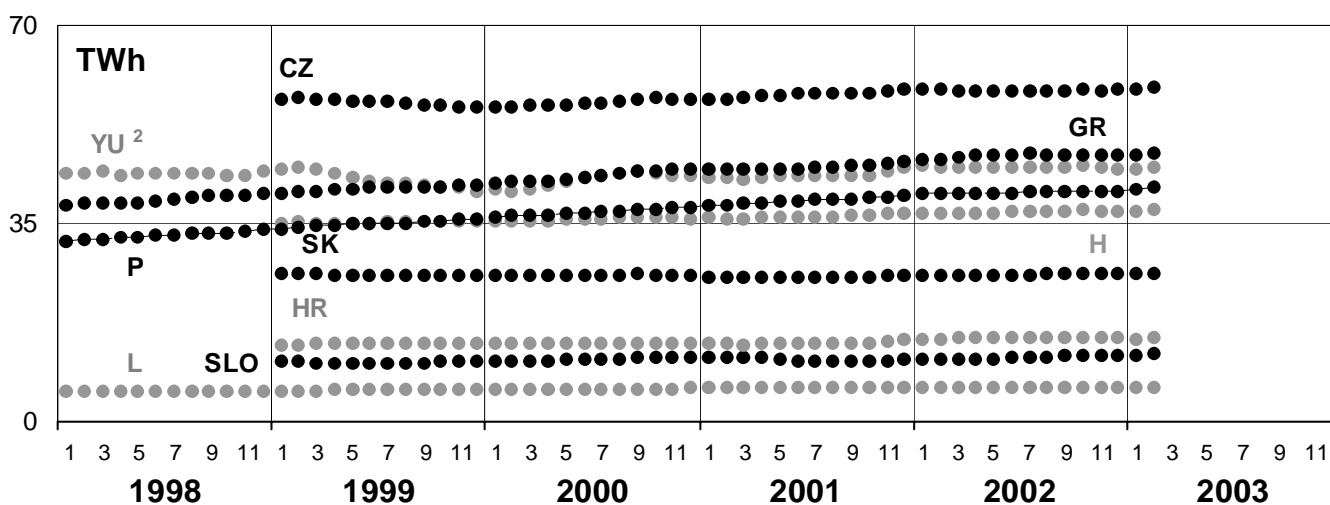
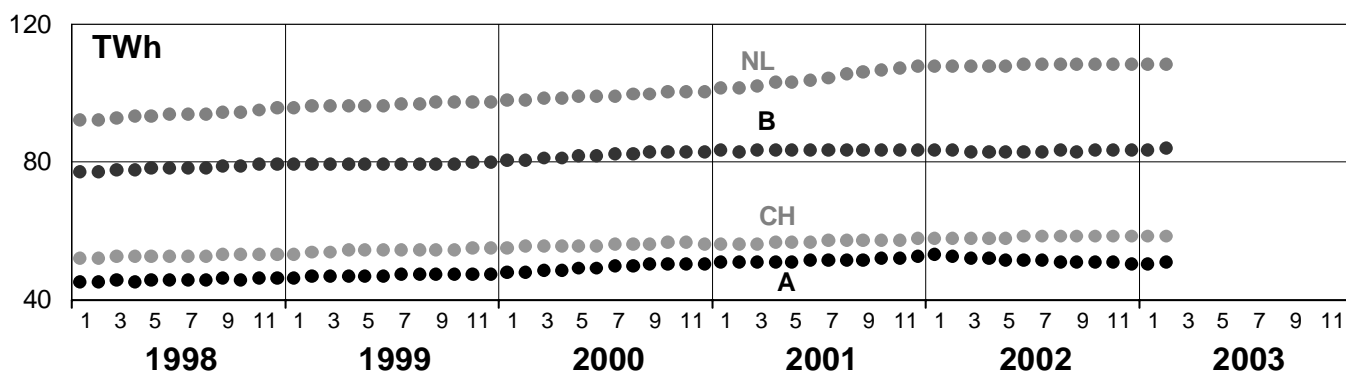
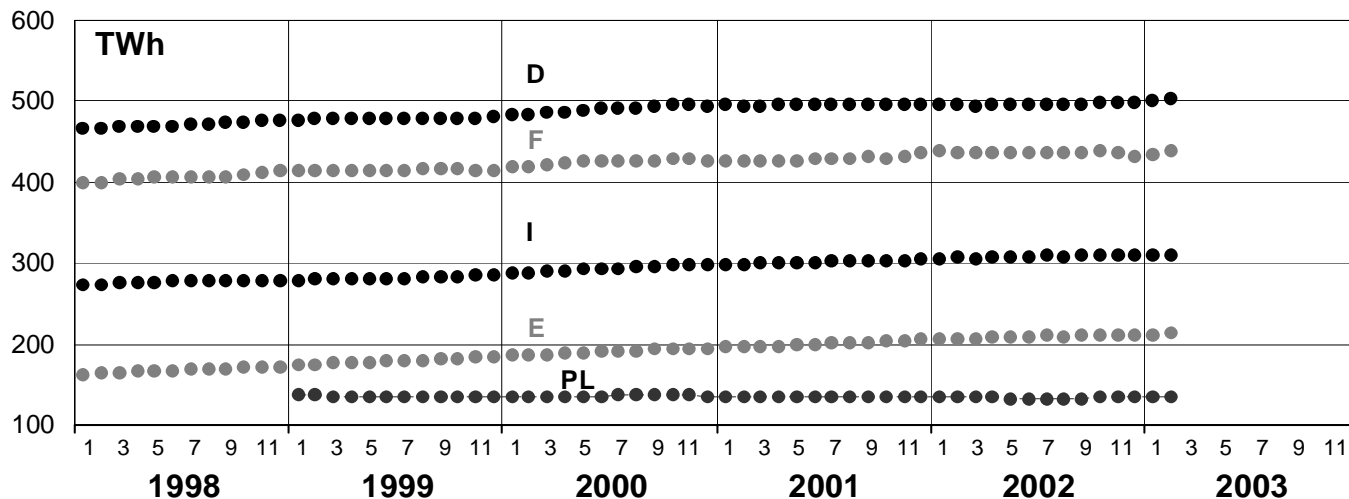
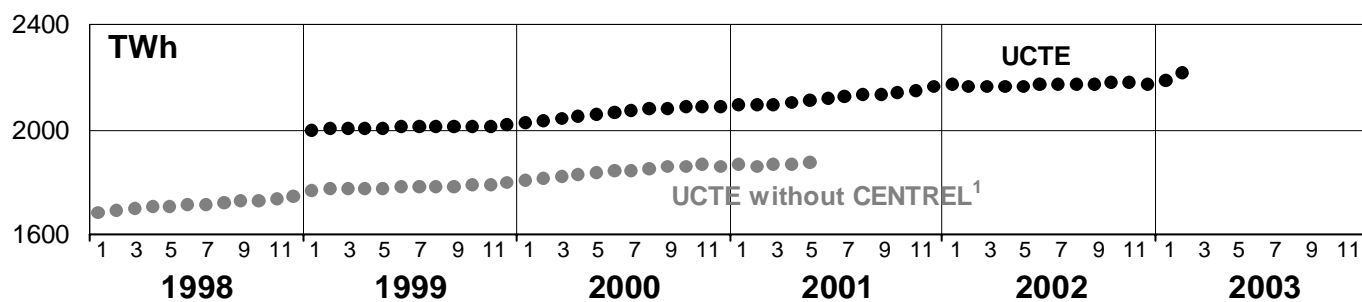


<sup>1</sup>YU = FRY + FYROM (Federal Republic of Yugoslavia and Former Yugoslav Republic of Macedonia)

# 5

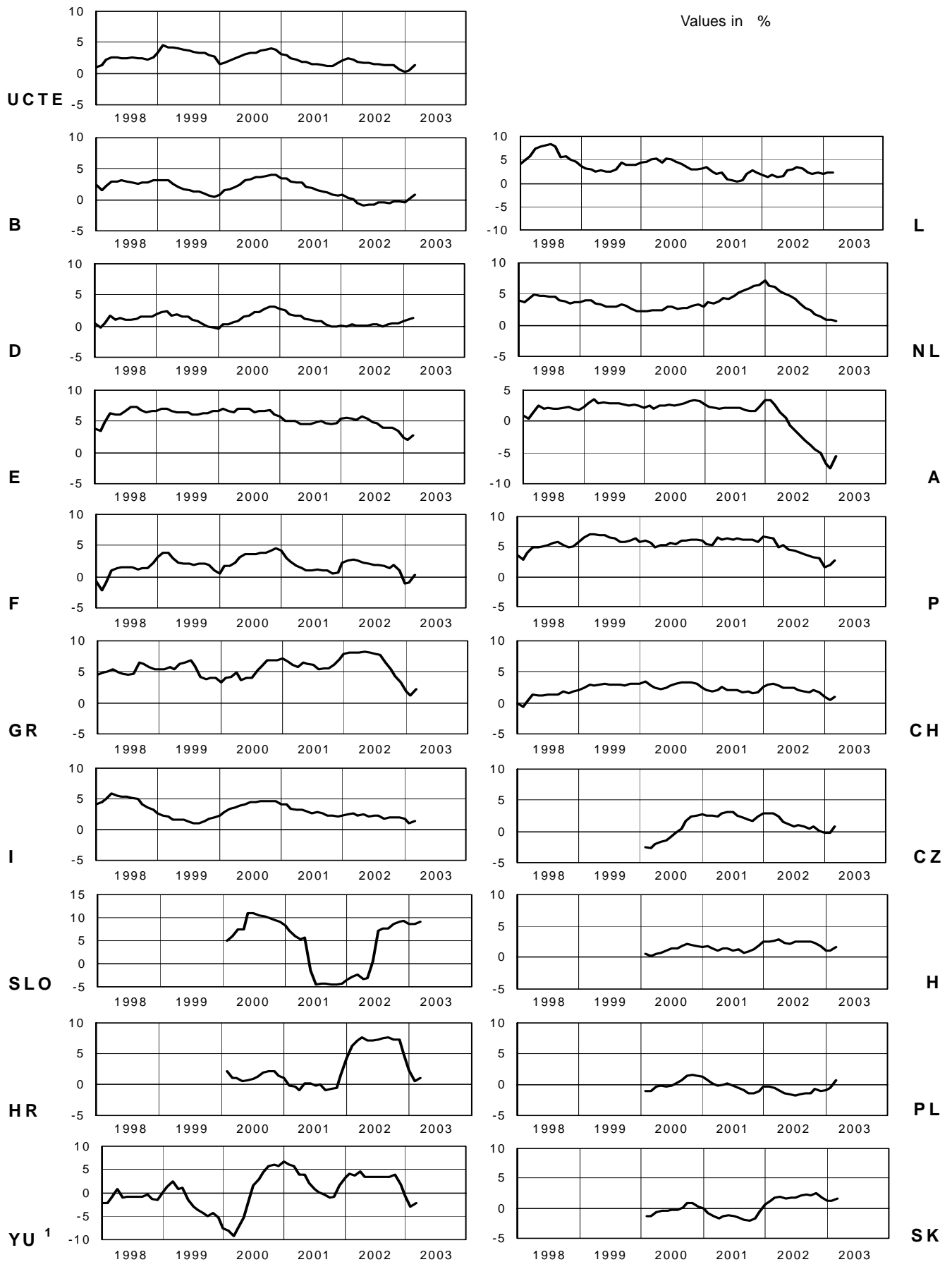
## Consumption of last 12 months

February 2003



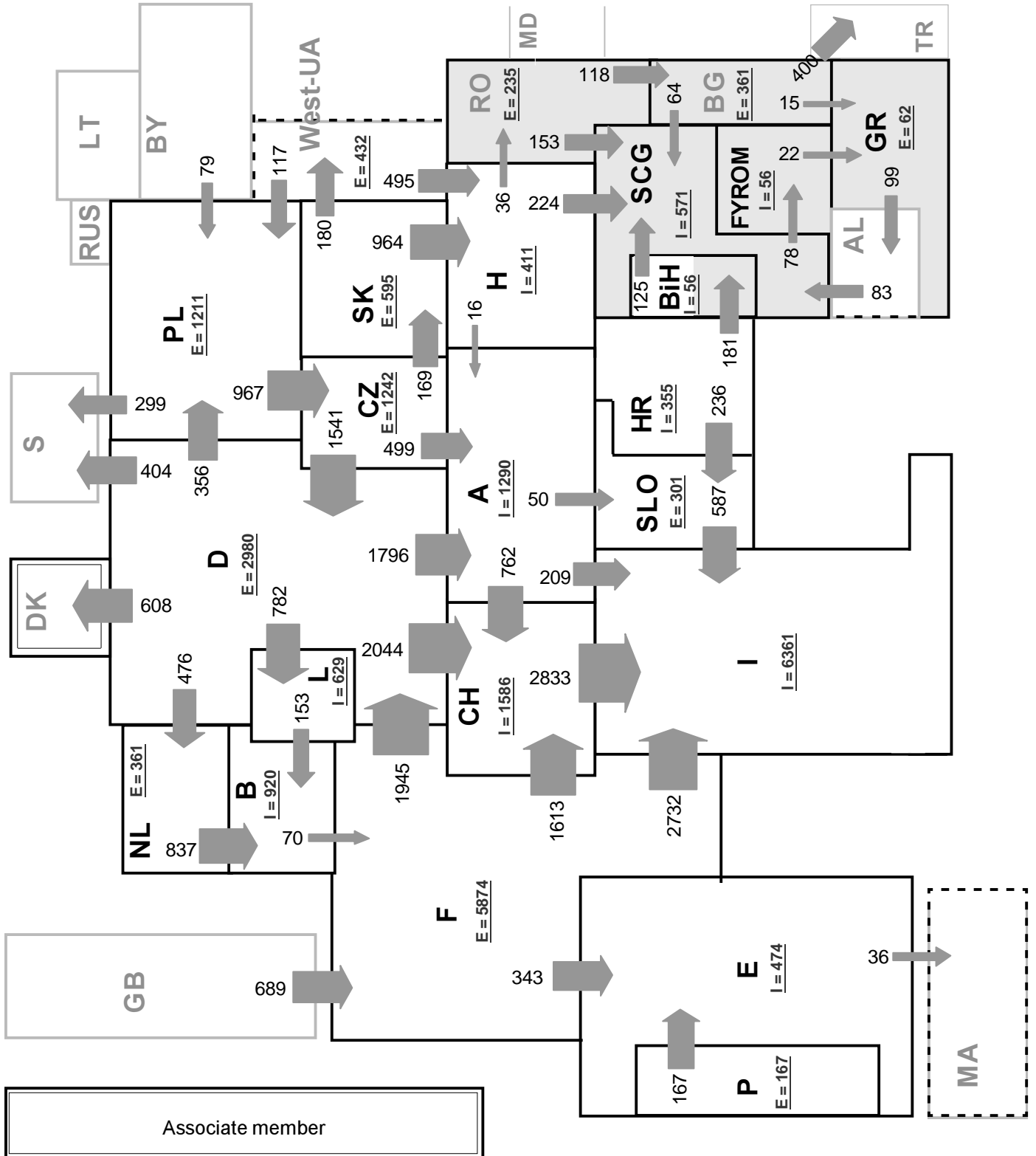
<sup>1</sup> CENTREL countries CZ, H, PL, SK member of UCTE from May 2001

<sup>2</sup> YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)



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





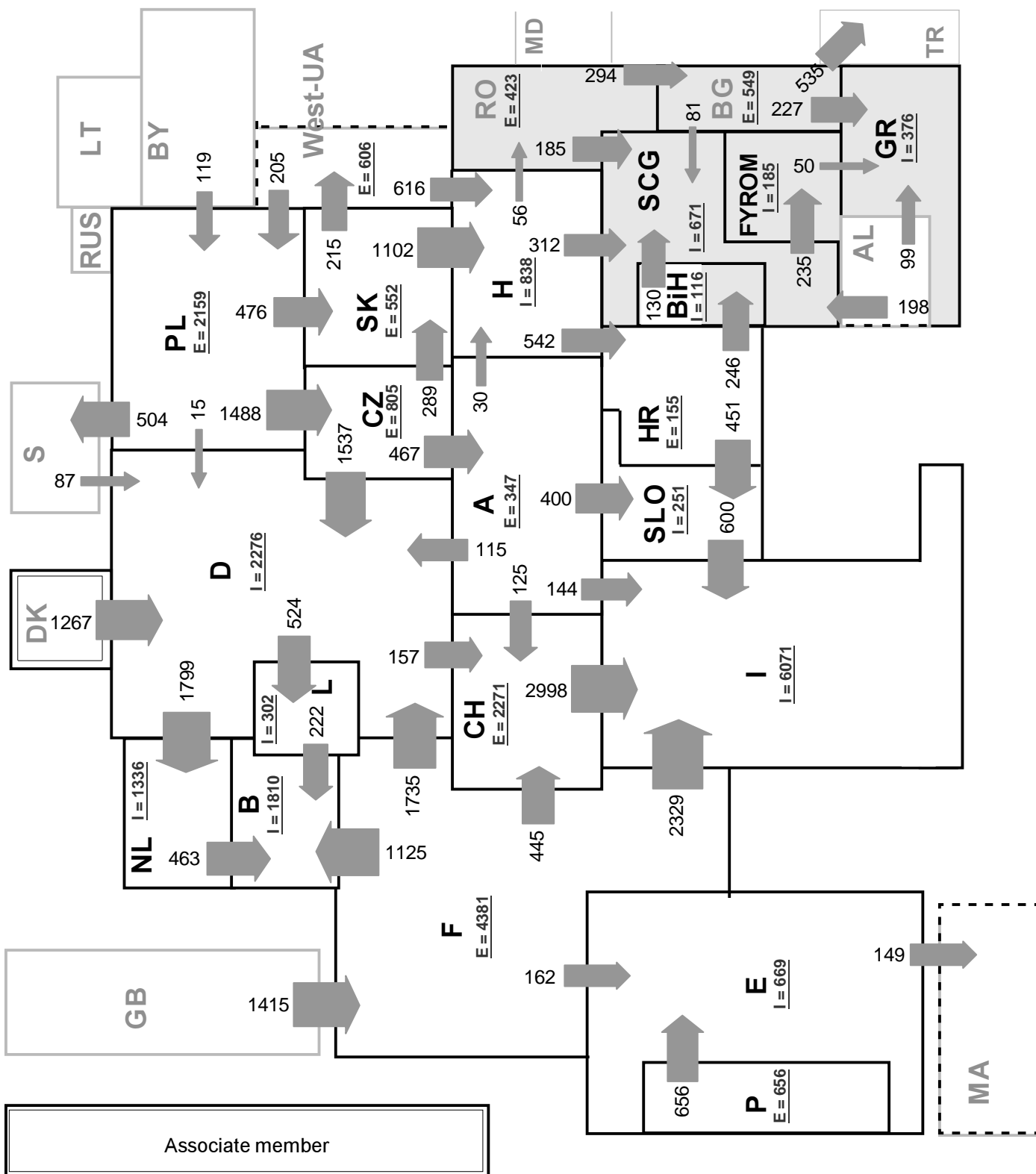
Sum of load flows in MW:

UCTE = 24315      Total = 27804

\* Central European Time (CET)

I = Import balance

E = Export balance



Associate member

Synchronous operation with 1st resp. 2nd UCTE region

2nd synchronous UCTE region

**Sum of load flows in MW:**

UCTE = 22212      Total = 27621

\* Central European Time (CET)

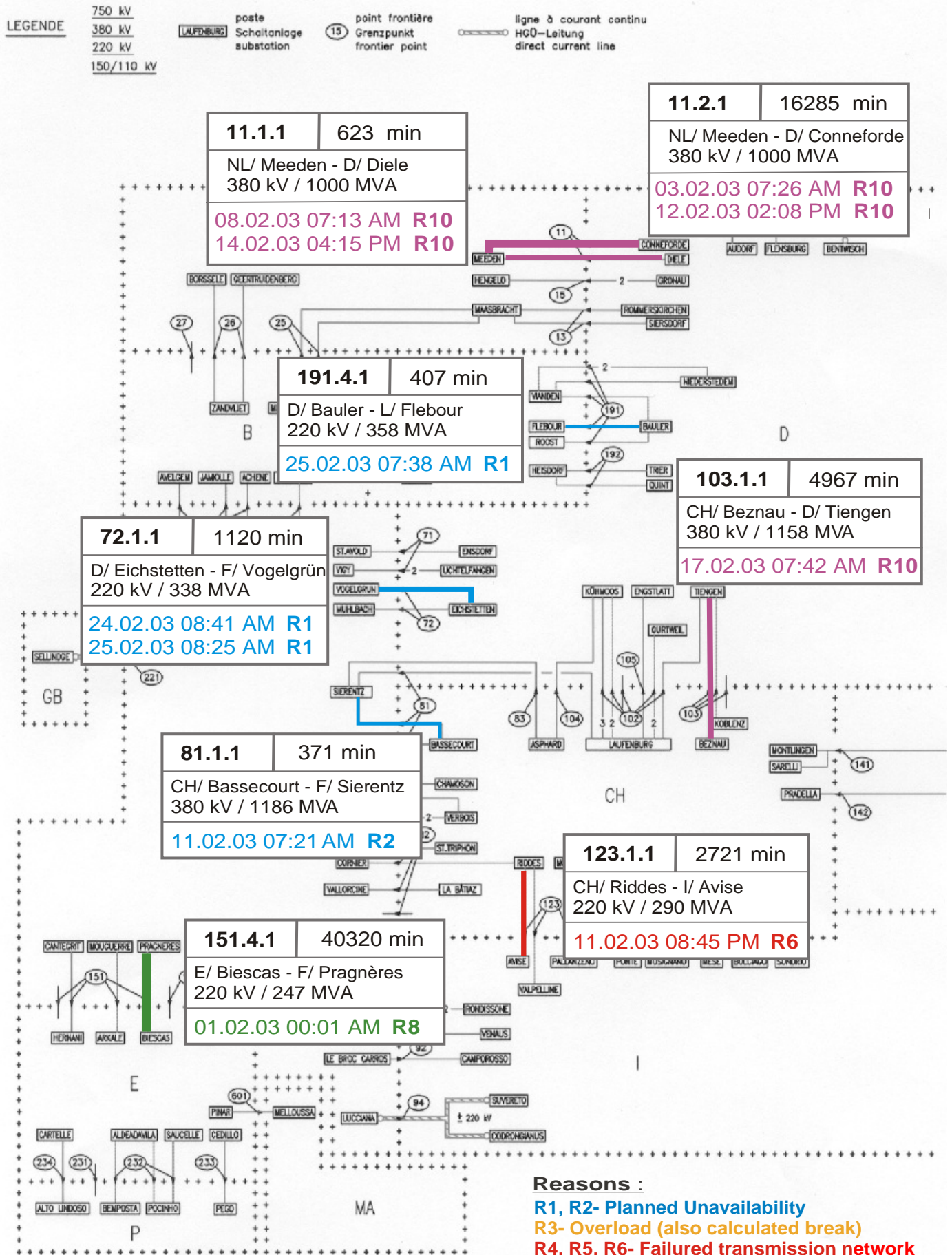
I = Import balance

E = Export balance

# 9

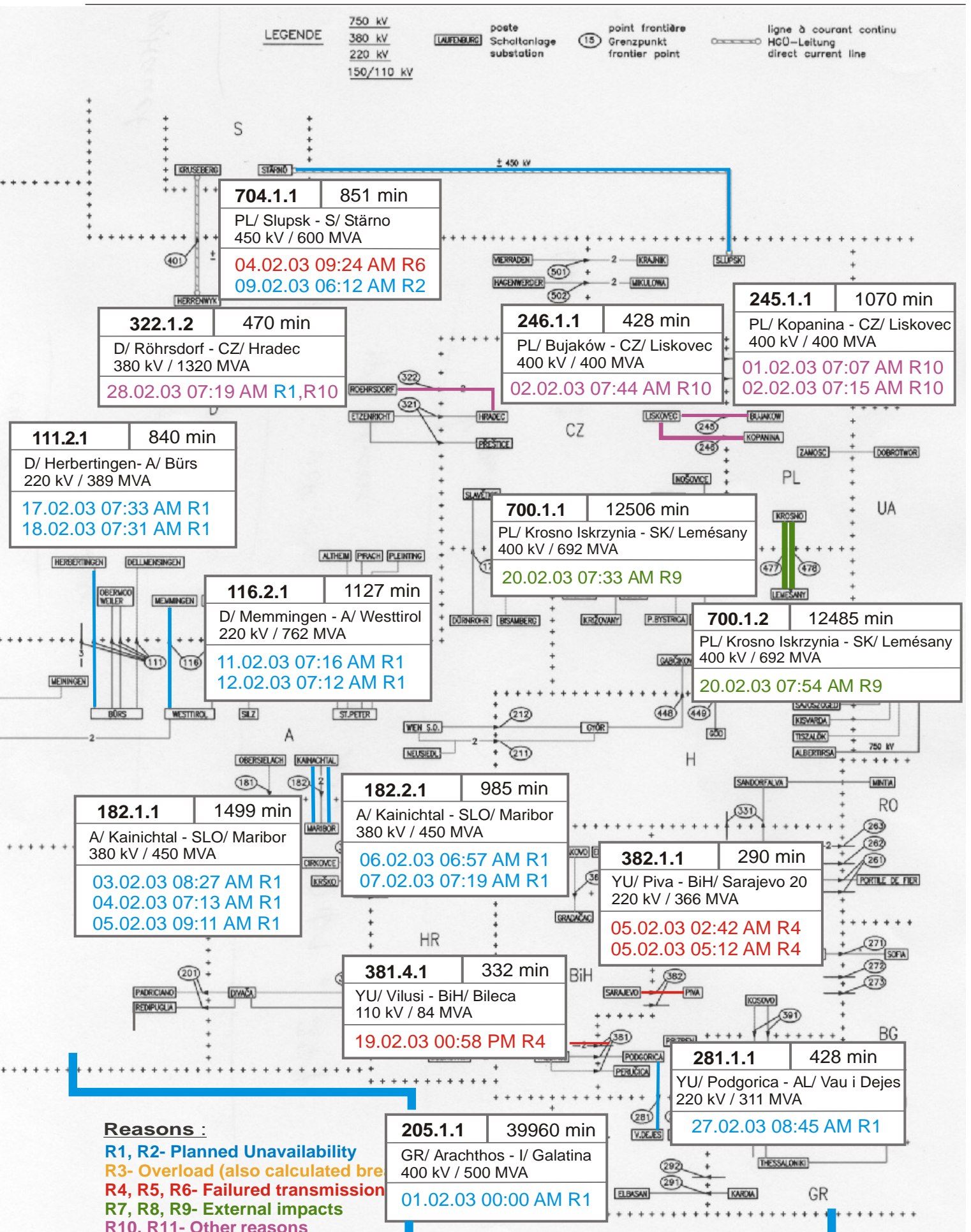
## Unavailability of international tie lines (major events with sum over 290 minutes)

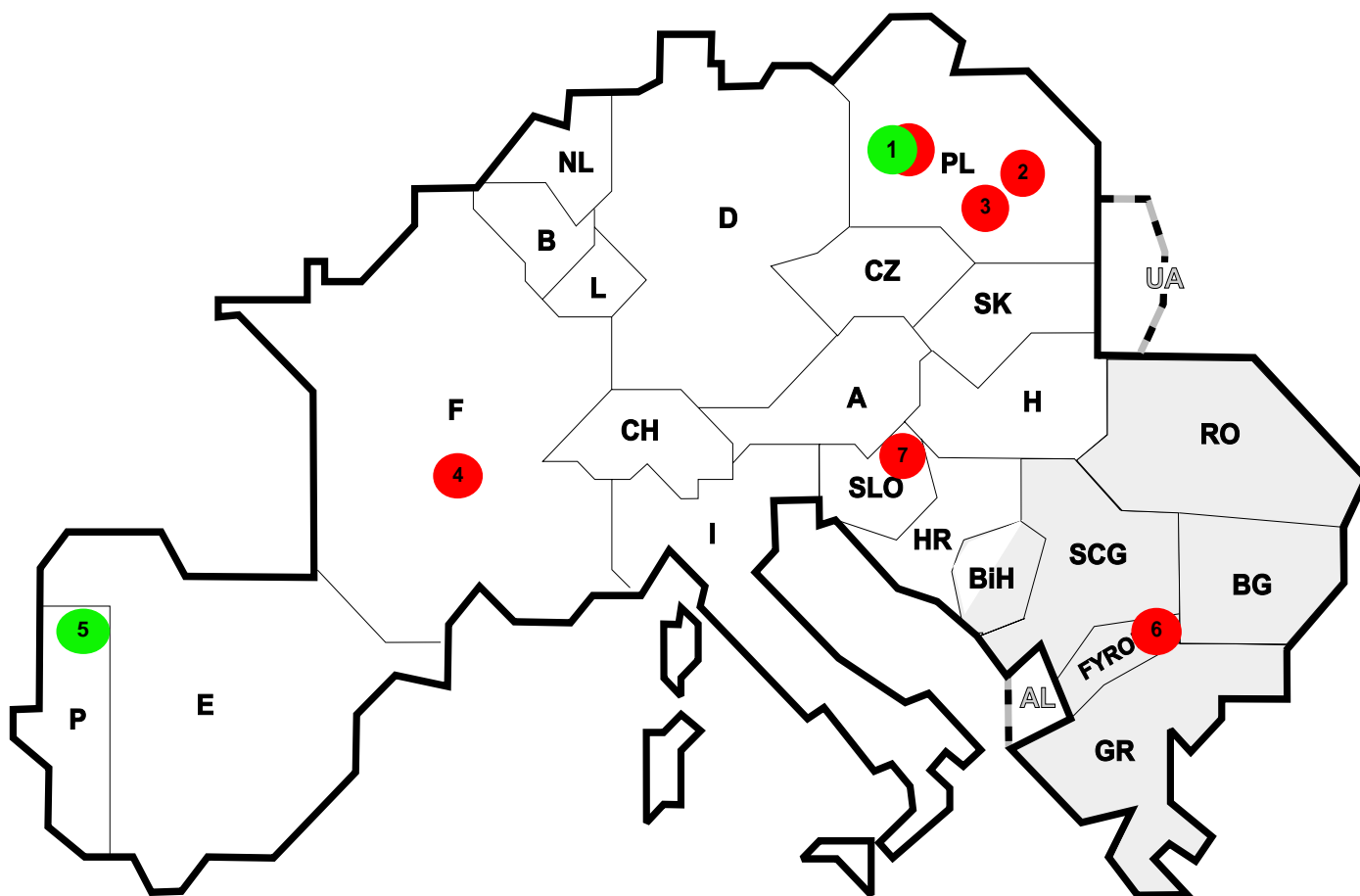
February 2003



### Reasons :

- R1, R2- Planned Unavailability
- R3- Overload (also calculated break)
- R4, R5, R6- Failed transmission network
- R7, R8, R9- External impacts
- R10, R11- Other reasons





Reasons:

**R3** Overload

**R7, R8, R9** External impacts (animals...)

**R4, R5, R6** Failure in the transmission network

**R10, R11** Other reasons

Nbr	Country	Substation	Reason	Energie not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	PL	Krosno	R6, R8, R9	185	370	12119	1,44
2	PL	Supsk	R6	76	600	10	2,33
3	PL	Zmosc	R4	38	150	23	0,58
4	F	Mandarins	R6	7	40	10	0,05
5	P	Mogofores	R7	7	0	5	0,00
6	FYROM	SkopjeIV	R5	0	0	215	0,00
7	SLO	Okroglo	R6	0	600	82	26,53

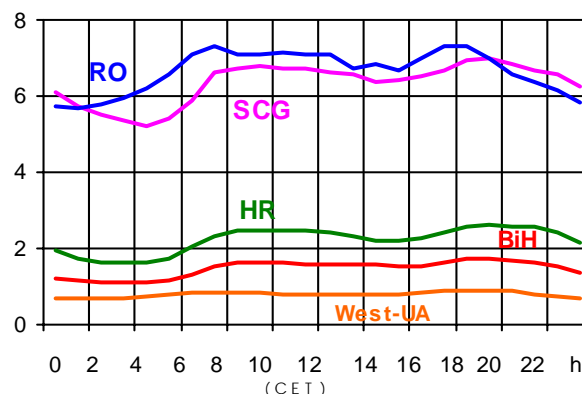
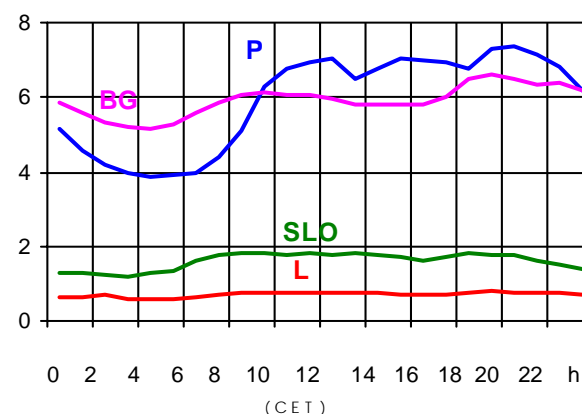
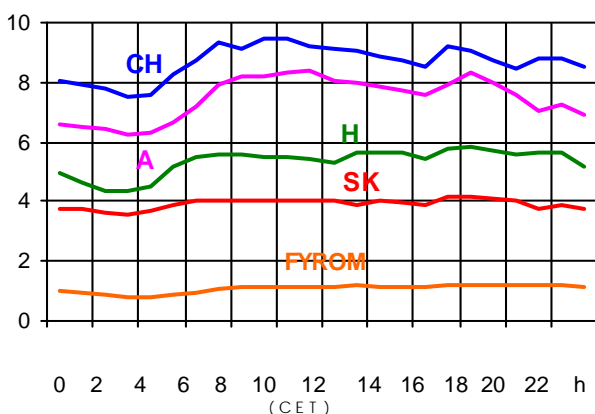
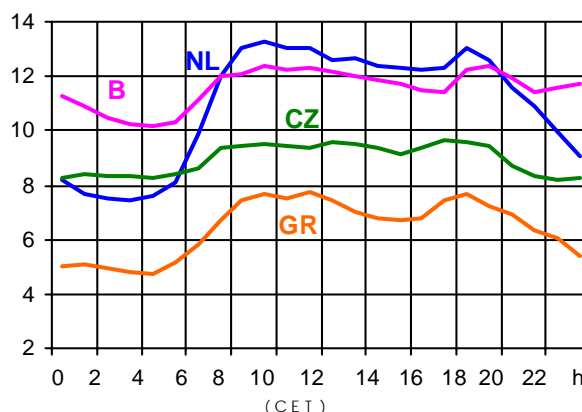
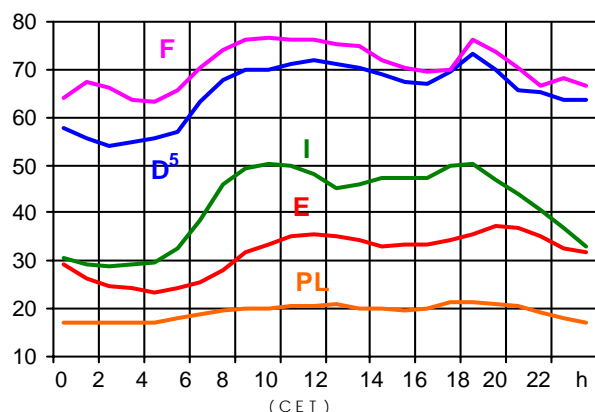
<sup>1</sup> ( year [in min] \* power loss ) / consumption last 12 months

Control area	Prog_exp	Prog_imp	Prog_exp3	Prog_imp3	Prog_exp11	Prog_imp11
B	543964	1159120	419	1326	494	1806
D	1974878	2710514	3737	3169	2952	4591
E	293895	335272	94	488	225	764
F	7141784	1542027	9243	3364	9589	5143
GR	4550	161026	0	163	0	353
I	34051	4377675	0	6361	0	6071
SLO	427140	369077	773	565	545	555
HR	129758	310441	252	446	235	423
BiH	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FYROM	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
YU	300642	731556	113	625	347	980
NL	531809	731556	1856	1482	898	2241
A	730438	346109	1043	482	846	642
P	118648	222519	437	282	922	272
CH	2450792	2588886	3131	4730	4360	2069
CZ	1580090	719604	2175	880	2096	1230
H	562742	974334	800	1273	905	1763
PL	1061326	90231	1171	120	2360	215
SK	663565	167035	945	272	995	482
RO	310000	26000	340	30	580	50
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
UA	248016	0	318	0	413	0

- Control areas can differ from national borders ( i.e. German block which includes parts of A, L 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.
- Prog\_exp: Sum of all positive values of every hour of every border
- Prog\_imp: Sum of all negative values of every hour of every border
- Prog\_exp3: Sum of all positive values the third Wednesday from 02:00 to 03:00 a.m.
- Prog\_imp3: Sum of all negative values the third Wednesday from 02:00 to 03:00 a.m.
- Prog\_exp11: Sum of all positive values the third Wednesday from 10:00 to 11:00 a.m.
- Prog\_imp11: Sum of all negative values the third Wednesday from 10:00 to 11:00 a.m.

### Consumption hourly load curves<sup>1</sup> on 19.02.03

Values in GW



	Peak load MW	$\Delta$ % <sup>2</sup>	Cons_load_repr <sup>1</sup> %	Parallel load <sup>3</sup> MW
B	12413	2,7	100	10414
D	73200	1,0	91	78400
E	37048	16,1	94	34452
F	76656	12,1	97	83343
GR <sup>4</sup>	7711	16,4	93	7141
I	50266	6,2	100	43195
SLO	1830	6,6	95	1767
HR	2618	12,7	100	2453
BiH	1745	n.a.	100	1570
FYROM	1222	n.a.	100	987
SCG	6979	n.a.	96	6075
L	806	-5,7	99	754
NL	13246	3,4	90	11683
A	8415	5,6	82	9131
P	7371	19,5	92	6953
CH	9494	5,0	100	11830
CZ	9646	11,2	100	10632
H	5846	5,6	100	5012
PL	21313	6,4	100	22285
SK	4166	4,2	100	4578
<b>UCTE</b>	<b>362299</b>	<b>8,2</b>		<b>326234</b>
DK <sup>6</sup>				2640
RO	7339	n.a.	100	7135
BG	6595	n.a.	100	6626
West-UA	918	n.a.	100	1216

<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> Including autoproduction

<sup>4</sup> The representativity of data referring to the whole country, including the systems of the Greek islands, is 93%. The representativity of data to the interconnected system is 99%.

<sup>5</sup> Values estimated on the basis of former data from the German Federal Office for Statistics

<sup>6</sup> Denmark (Jutland)



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