

UCTE



January 2004

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

Table of contents ¹		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	7
6	Variation of the last 12 months' consumption	8
7	Load flows (night)	9
8	Load flows (day)	10
9	Unavailability of international tie lines (major events)	11
10	Network reliability (major events)	13
11	Scheduled exchanges	14
12	Load on the 3 rd Wednesday	15

¹ Monthly provisional values from the UCTE database as of 21 April 2004

1

Electricity supply situation of the countries

January 2004

Countries	Net production in GWh ¹				Exchange balance in GWh	Pump in GWh	Consumption in GWh ¹			
	Hy	Tn	Tc	Total			monthly	Δ ³ [%]	last 12 months	Δ ³ [%]
B	158	4335	2913	7406 ²	757	150	8013	-0,4	84309	0,2
D	2137	15043	33790	50970 ²	-1845	771	48354	0,1	506754	1,4
E	4051	5461	11174	20686 ²	-315	405	19966	-0,8	223968	5,3
F	6922	41769	7461	56152	-6086	735	49331	2,3	453389	3,8
GR ⁴	427	0	3858	4285 ²	240	67	4458	2,0	50188	4,1
I	3217	0	21050	24267	4156	936	27487	0,6	319784	3,0
SLO	202	501	462	1165	-66	0	1099	-0,4	12390	5,0
HR	568	0	592	1160 ²	407	5	1562	5,5	15519	5,5
BiH	502	0	738	1240	186	0	1426	15,0	12695	n.a.
FYROM	123	0	469	592 ²	18	0	610	-4,2	6278	n.a.
SCG	1087	0	2870	3957	482	89	4350	3,6	39305	n.a.
L	90	0	295	385	243	96	532	-2,9	6110	1,3
NL	0	315	8313	8628 ²	1573	0	10201	1,1	109577	0,5
A	2134	0	2468	4602	989	227	5364	8,3	51687	2,6
P	1481	0	2214	3695 ²	434	37	4092	1,5	43139	4,3
CH	2426	2413	270	5109 ²	933	122	5912	3,4	60543	3,5
CZ	159	2666	4715	7540 ²	-1319	68	6153	1,4	59980	2,3
H	18	989	1970	2977 ²	526	0	3503	-0,1	38415	3,1
PL ⁵	251	0	13577	13828 ²	-1090	218	12520	-6,8	137401	2,3
SK	277	1588	849	2714 ²	-104	19	2591	-0,5	26372	0,8
RO	951	488	3463	4902 ²	-217	0	4685	2,9	49574	n.a.
BG	290	1933	2017	4240 ²	-576	31	3633	-6,8	36428	n.a.
UCTE	27471	77501	126085	231057²	-674	3976	22542	0,7	2347960	2,9
West UA ⁶	4	0	646	650 ²	-170	0	480	0,4	4136	n.a.

¹ Percentage as referred to total values in %

Countries	B	D	E	F	GR ⁴	I	SLO	HR	BiH	FY ROM	SCG	L	NL	A	P	CH	CZ	H	PL	SK	RO	BG	West UA ⁶
Production	99	94	94	100	99	100	95	100	99	100	96	98	100	84	92	100	100	100	100	100	100	100	100
Consumption	99	94	94	100	99	100	95	100	99	100	96	99	100	90	92	100	100	100	100	100	100	100	100

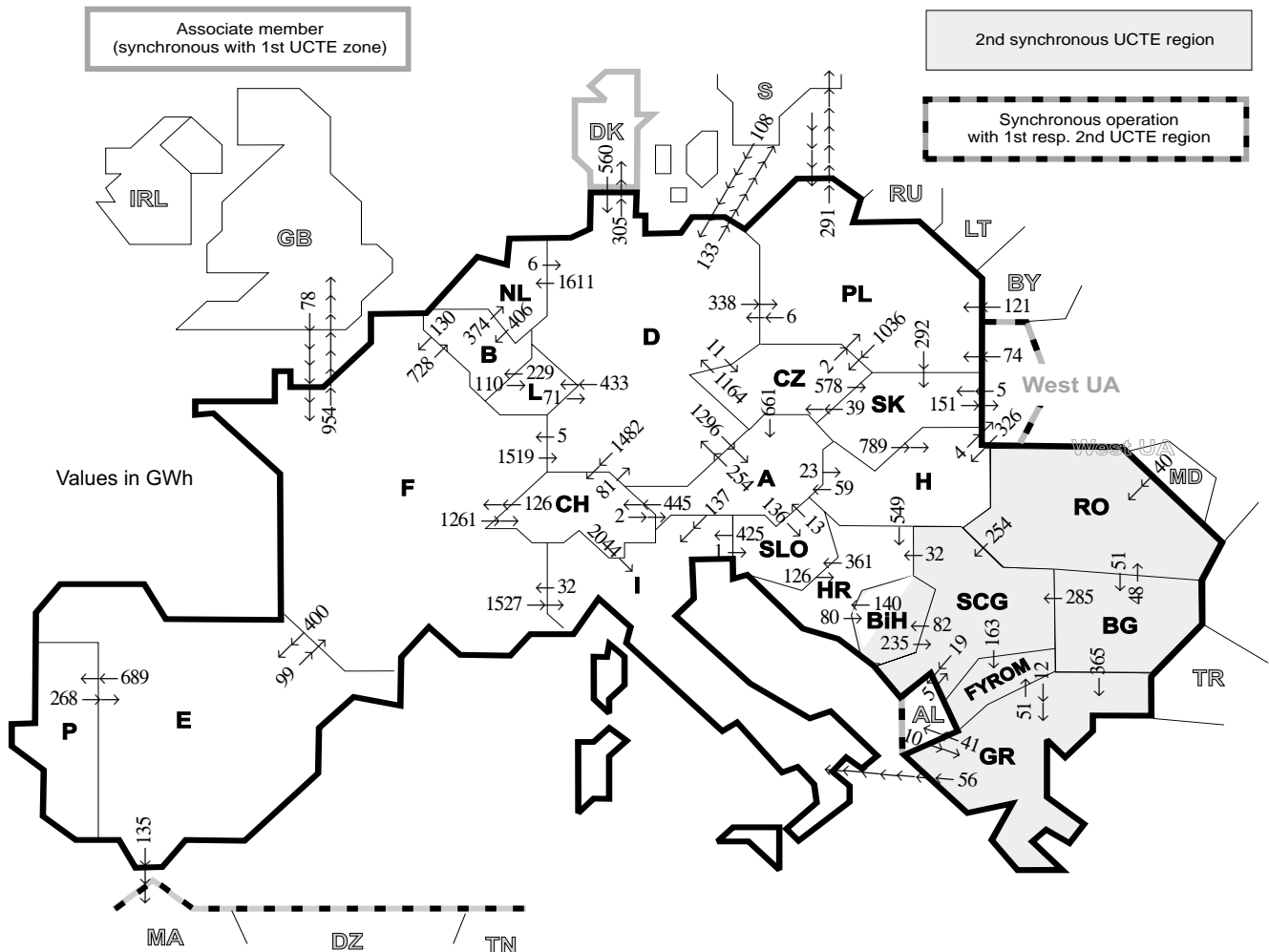
² Including deliveries from industry

³ Variation as compared to corresponding period of the previous year and representativity 100%

⁴ The representativity of data referring to the interconnected system is 99%
The representativity of data referring to the whole country including the isolated systems of Greek island is 91%

⁵ Values for 2003 are gross values, values for 2004 are net values.

⁶ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE



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	III¹	DK²	West UA³	
B	-	-	-	130	-	-	-	-	-	-	-	110	374	-	-	-	-	-	-	-	-	-	-	-	-	-	614
D	-	-	-	5	-	-	-	-	-	-	-	433	1611	1296	-	-	-	-	-	-	-	-	438	305	-	5614	
E	-	-	-	99	-	-	-	-	-	-	-	-	-	-	689	-	-	-	-	-	-	-	-	135	-	923	
F	728	1519	400	-	1527	-	-	-	-	-	-	-	-	-	-	1261	-	-	-	-	-	-	-	954	-	6389	
GR	-	-	-	-	56	-	-	-	-	51	-	-	-	-	-	-	-	-	-	-	-	0	41	-	-	148	
I	-	-	-	32	0	1	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	33	
SLO	-	-	-	-	425	-	126	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	564	
HR	-	-	-	-	-	361	-	80	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	-	441	
BIH	-	-	-	-	-	-	140	-	-	-	235	-	-	-	-	-	-	-	-	-	-	-	-	-	-	375	
FYROM	-	-	-	-	12	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	0	-	-	-	12	
SCG	-	-	-	-	-	-	32	82	163	-	-	-	-	-	-	-	-	0	-	-	0	0	19	-	-	296	
L	229	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	
NL	406	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	412	
A	-	254	-	-	137	136	-	-	-	-	-	-	-	-	-	445	0	23	-	-	-	-	-	-	-	995	
P	-	-	268	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	268	
CH	-	81	-	126	2044	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2253	
CZ	-	1164	-	-	-	-	-	-	-	-	-	-	-	661	-	-	-	-	2	578	-	-	-	-	-	2405	
H	-	-	-	-	-	-	-	-	-	-	0	-	-	59	-	-	-	-	-	0	0	-	4	-	4	612	
PL	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	1036	-	-	-	292	-	-	291	-	0	1625	
SK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	789	0	-	-	-	151	-	151	979		
RO	-	-	-	-	-	-	-	-	-	-	254	-	-	-	-	0	-	-	-	-	-	51	0	-	0	305	
BG	-	-	-	-	365	-	-	-	-	0	285	-	-	-	-	-	-	-	-	-	-	48	0	-	-	698	
III¹	-	668	0	78	10	-	-	-	-	-	5	-	-	-	-	-	-	326	195	5	40	0	-	-	-	1327	
DK²	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	560	
West UA³	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	326	74	5	0	-	-	-	-	405	
Σ Import	1363	3769	668	470	387	4189	498	847	162	214	779	543	1985	2031	689	3188	1086	1138	535	875	88	51	2033	305	155	27588	

Sum of physical energy flows between UCTE countries = 24228 GWh Total physical energy flows = 27588 GWh

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

² Denmark (Jutland)

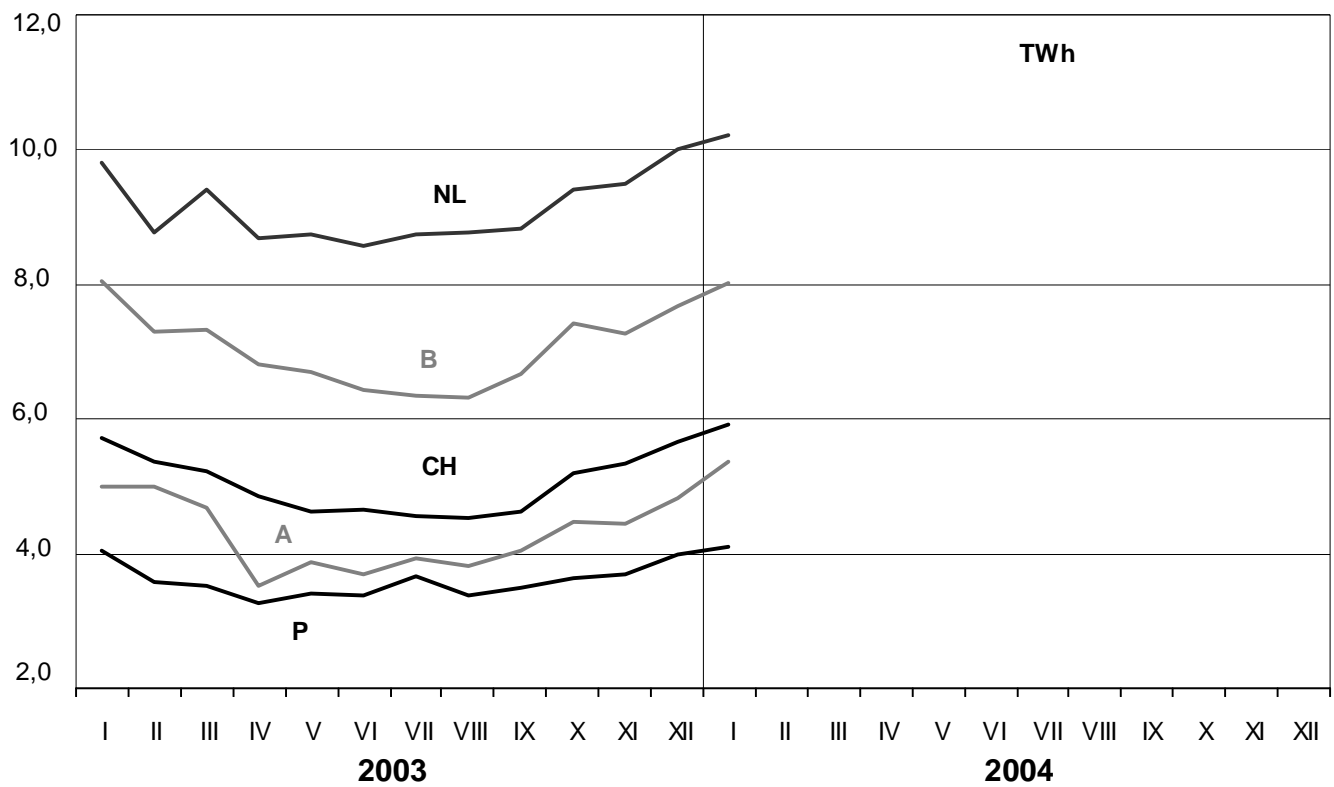
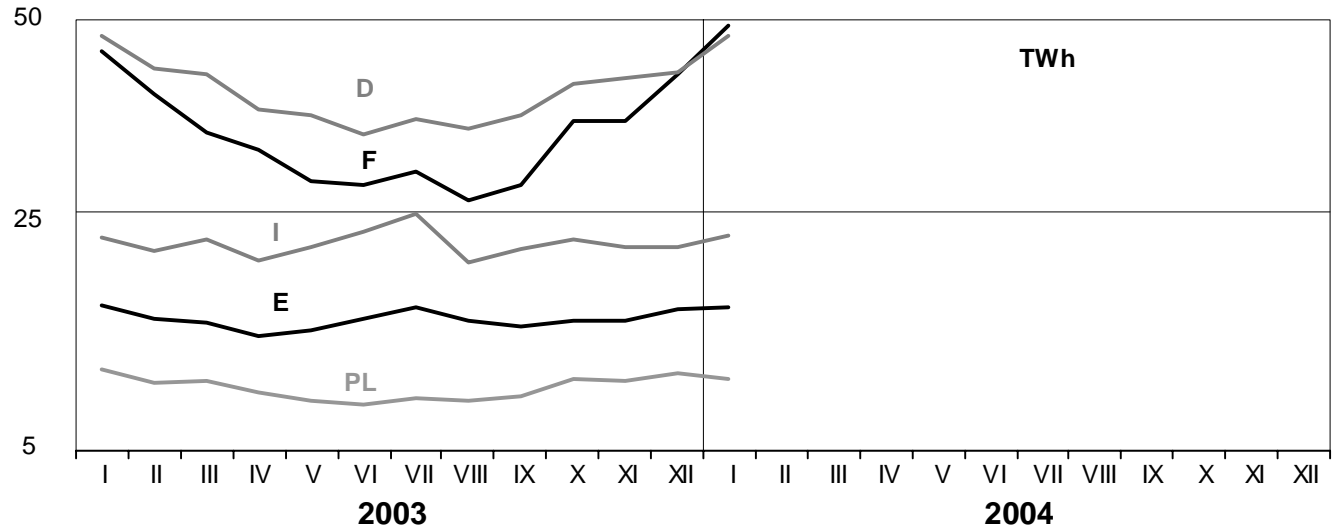
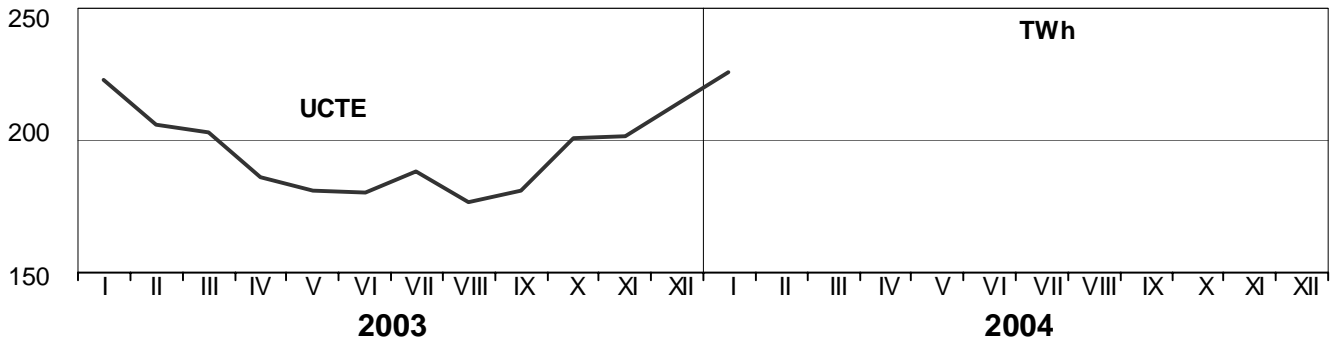
³ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

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

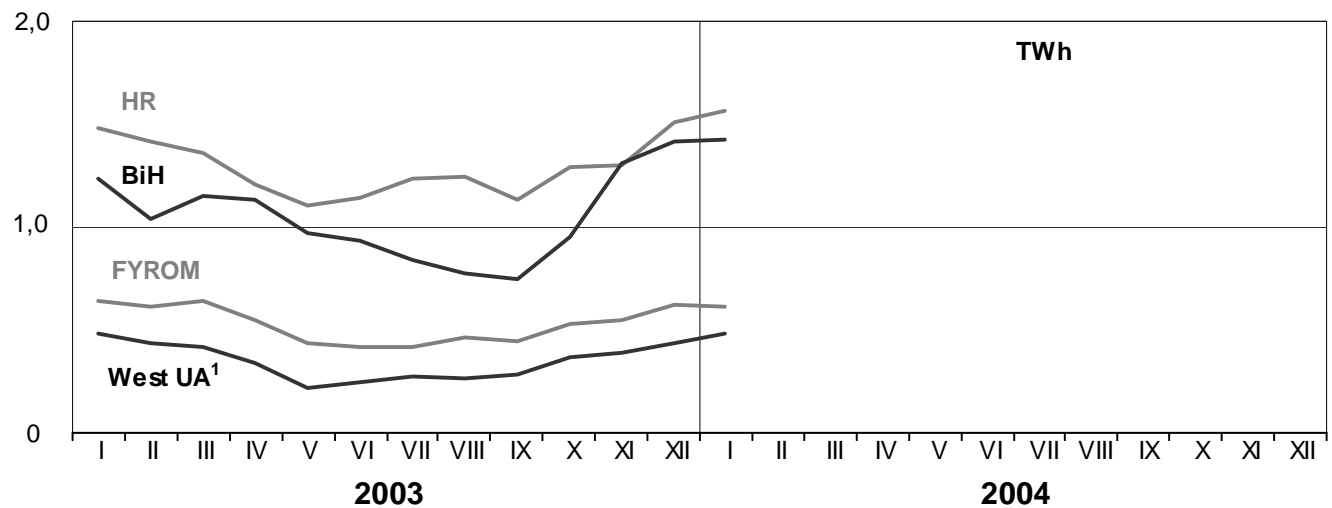
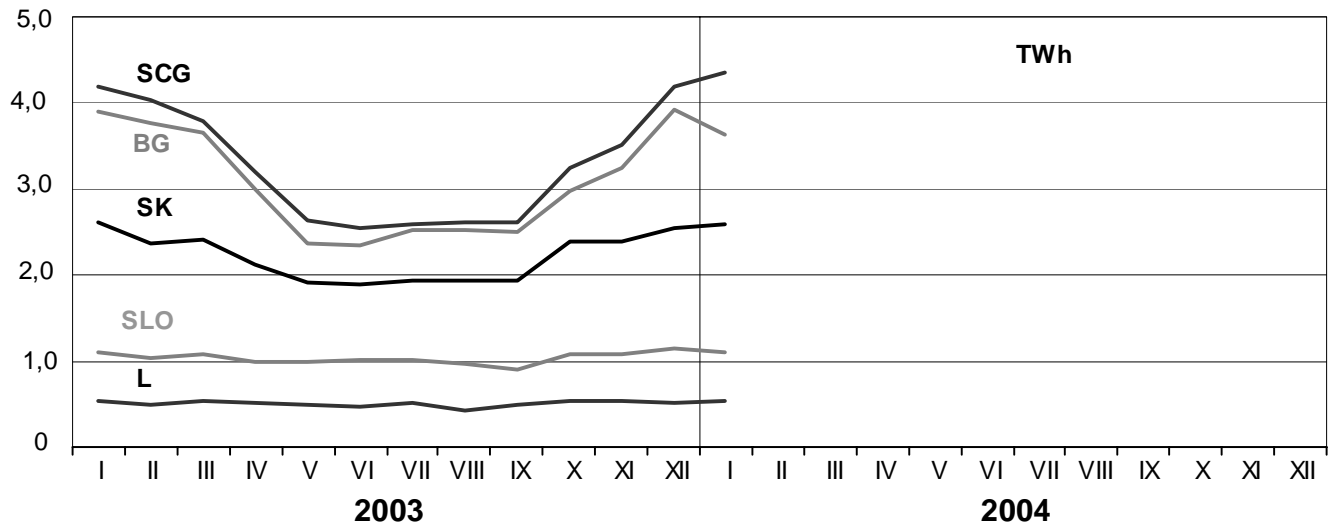
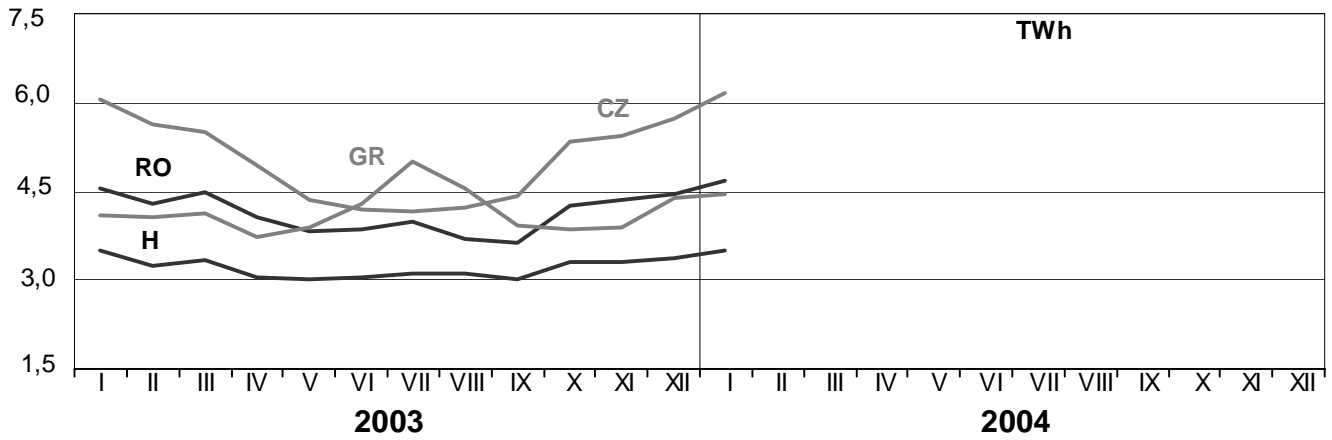
January 2004



3

Monthly consumption

January 2004

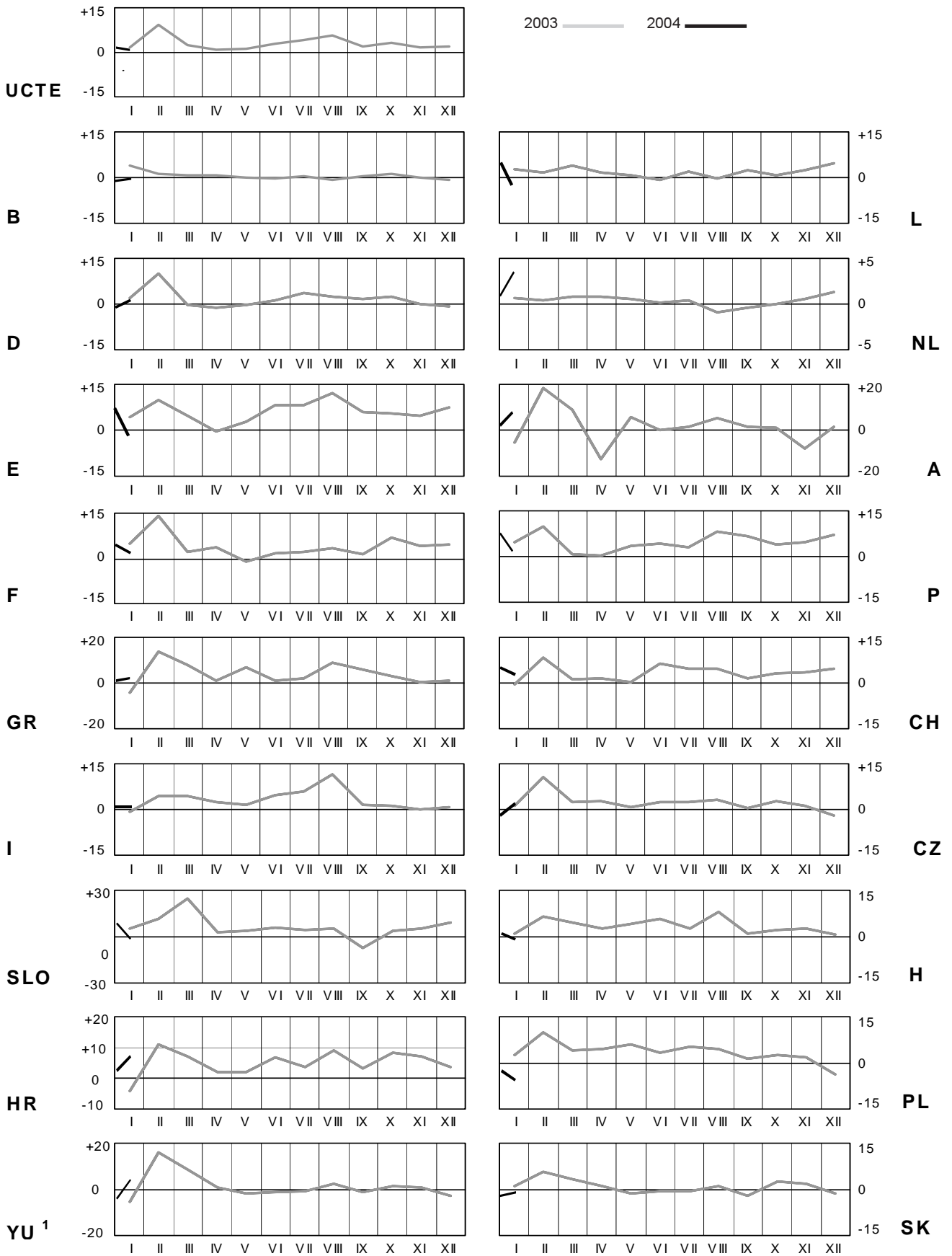


¹ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

4

Monthly consumption variation

January 2004

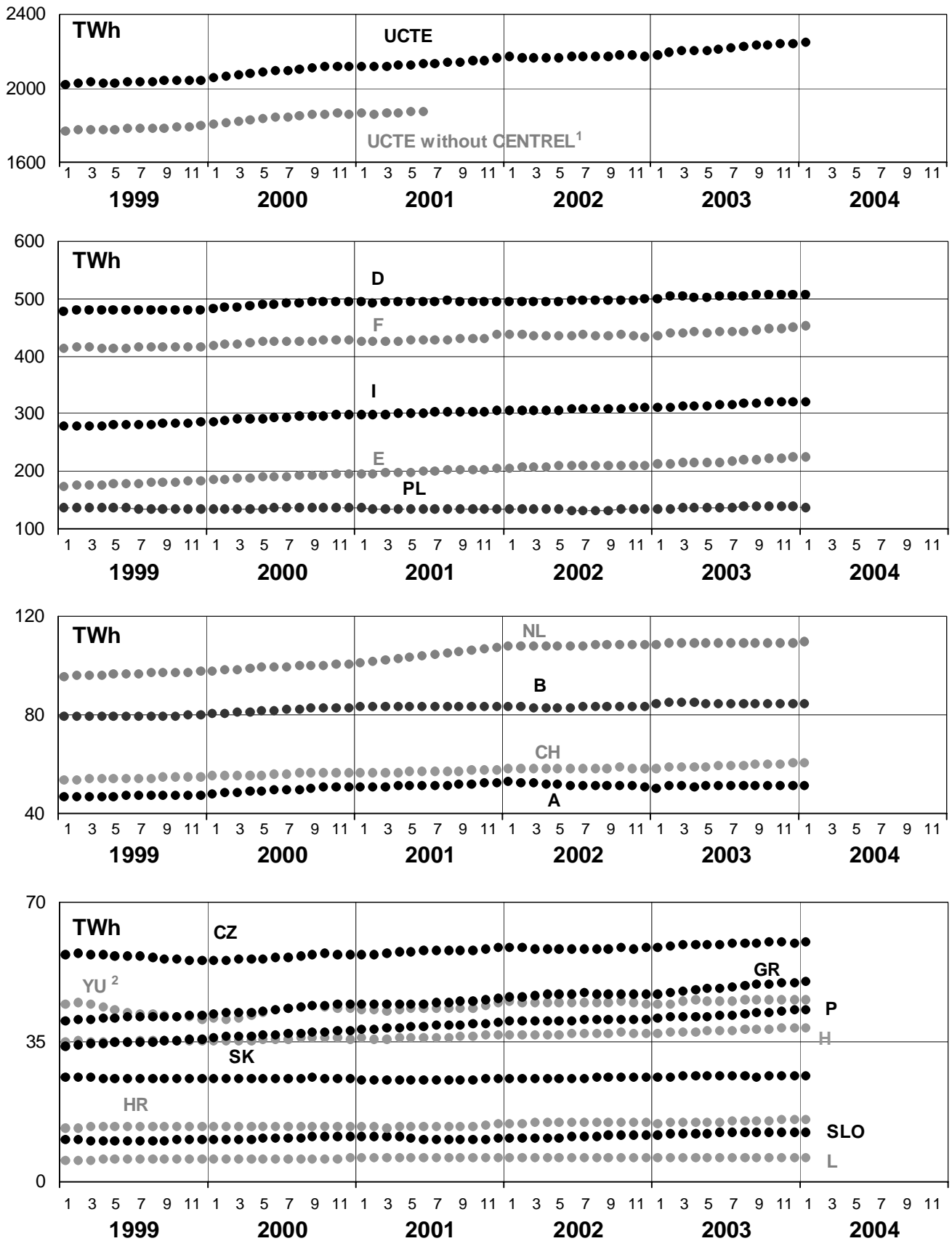


¹YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)

5

Consumption of the last 12 months

January 2004



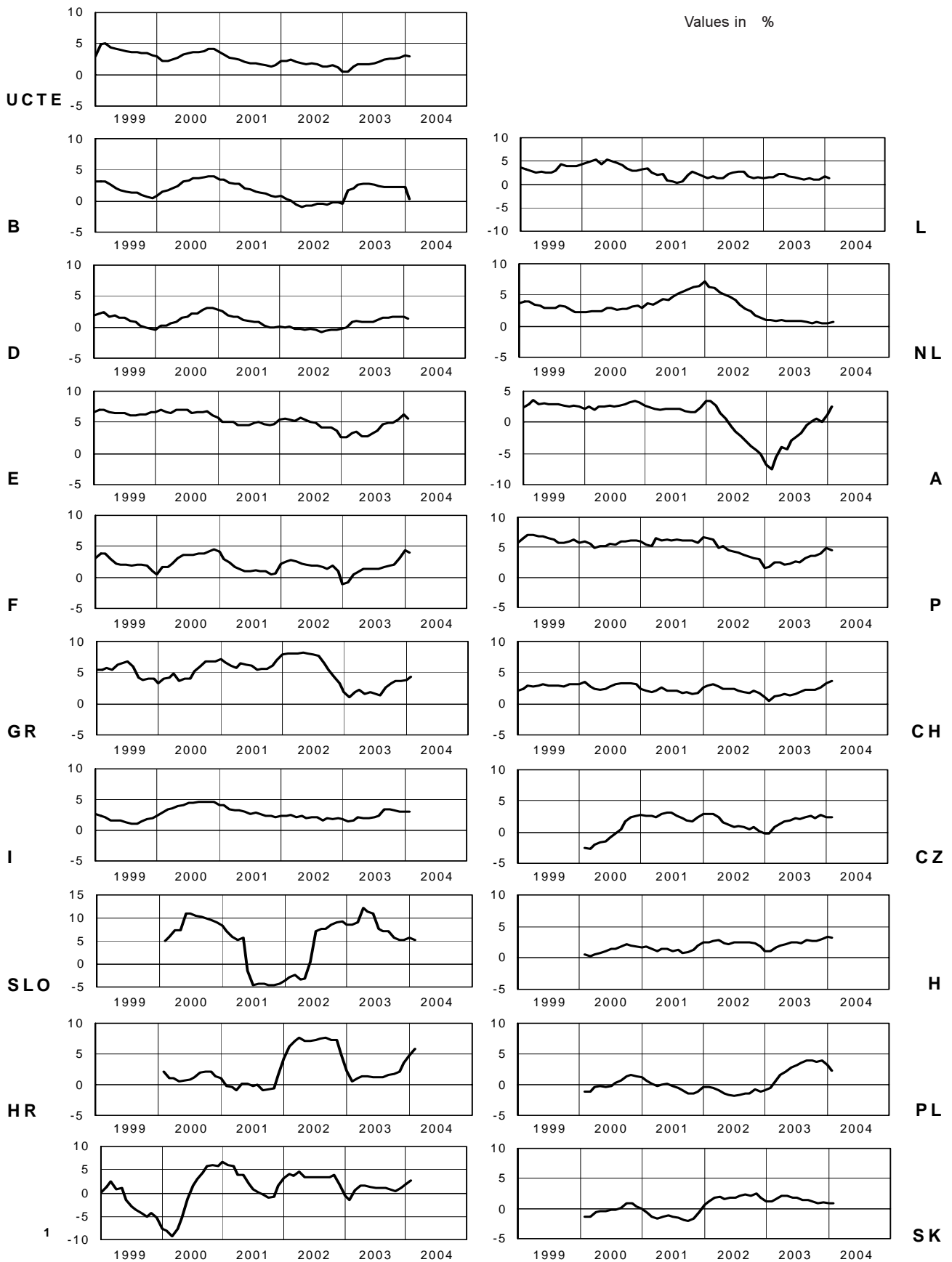
¹ CENTREL countries CZ, H, PL and SK member of UCTE from May 2001

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

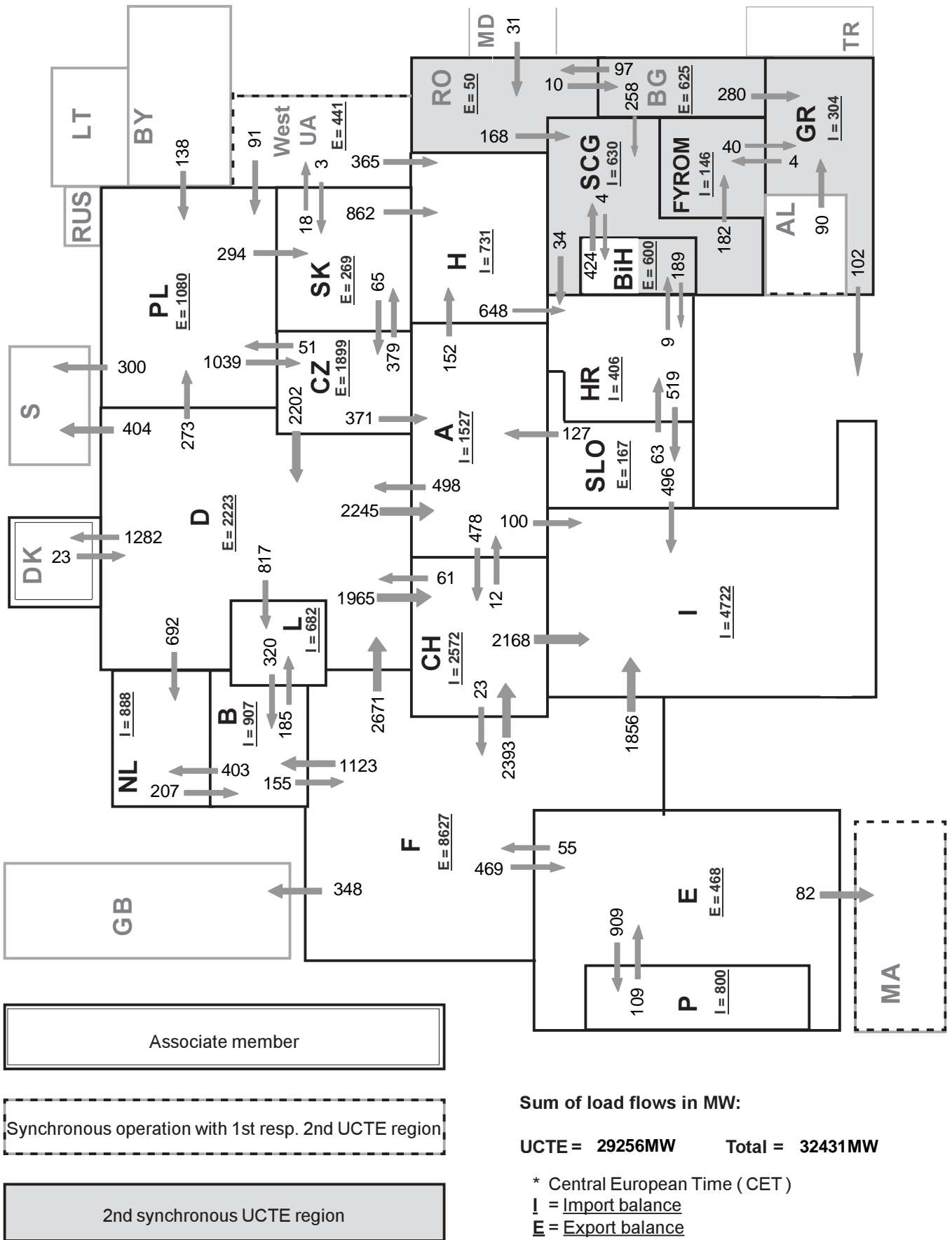
6

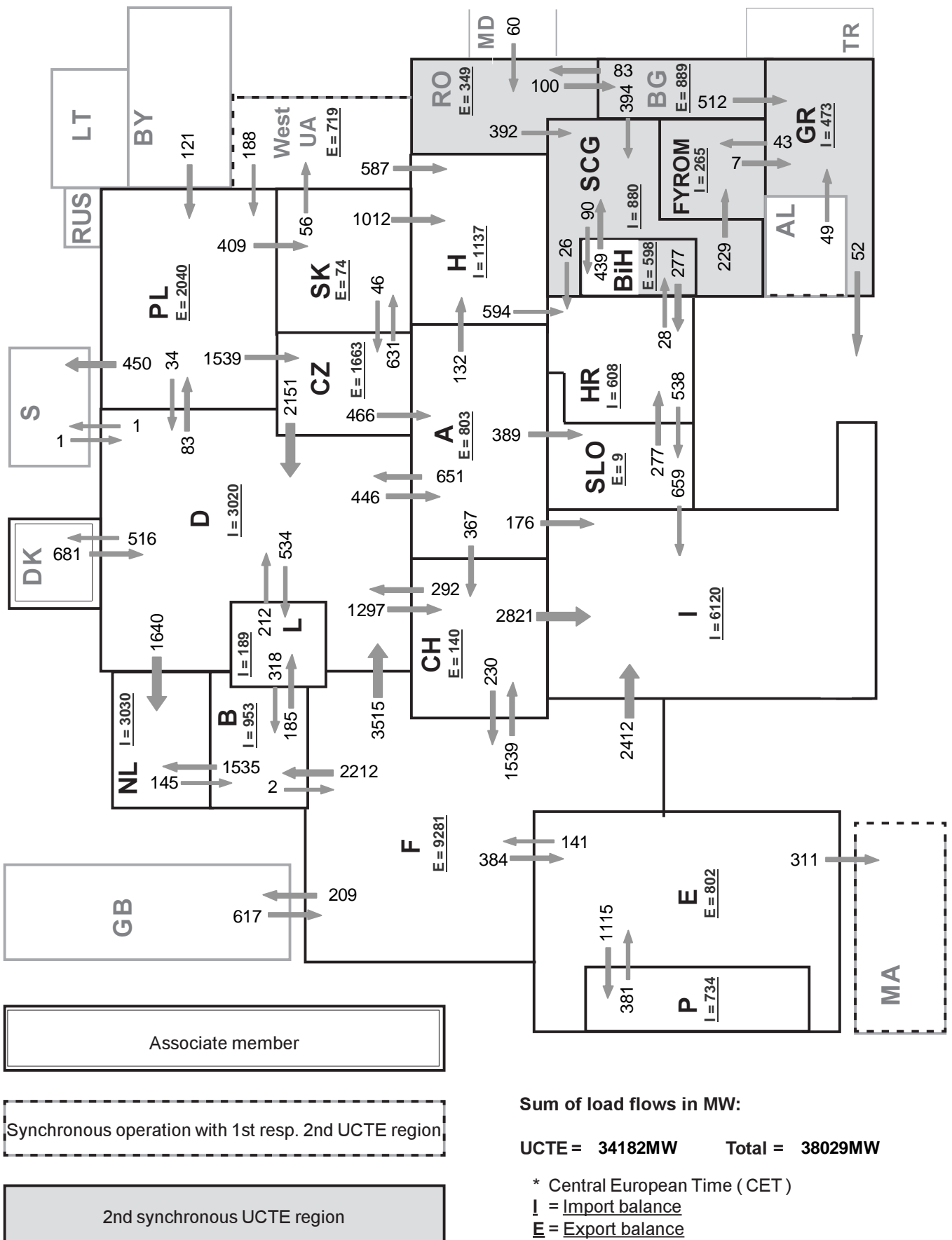
Variation of the last 12 months' consumption

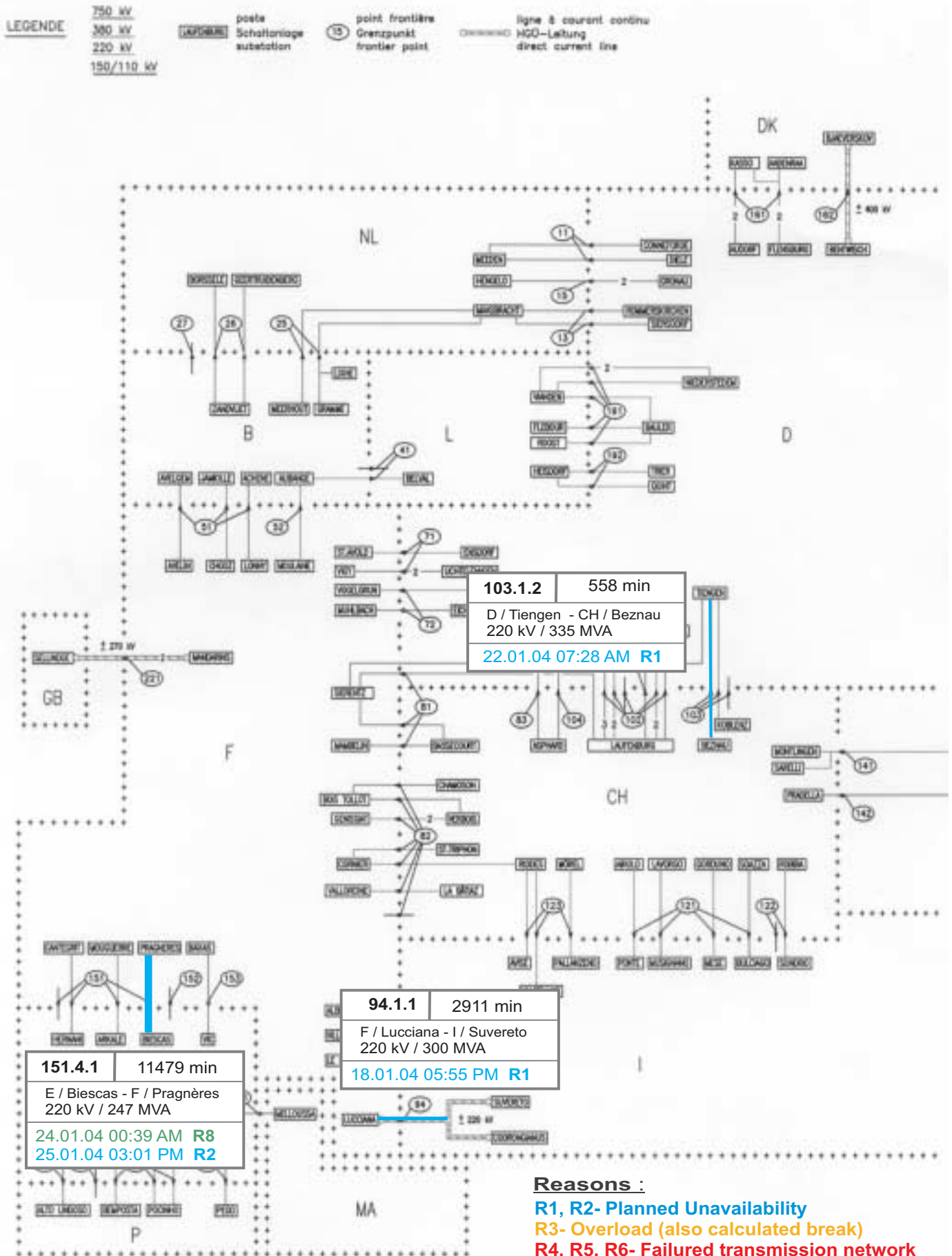
January 2004



¹ YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)

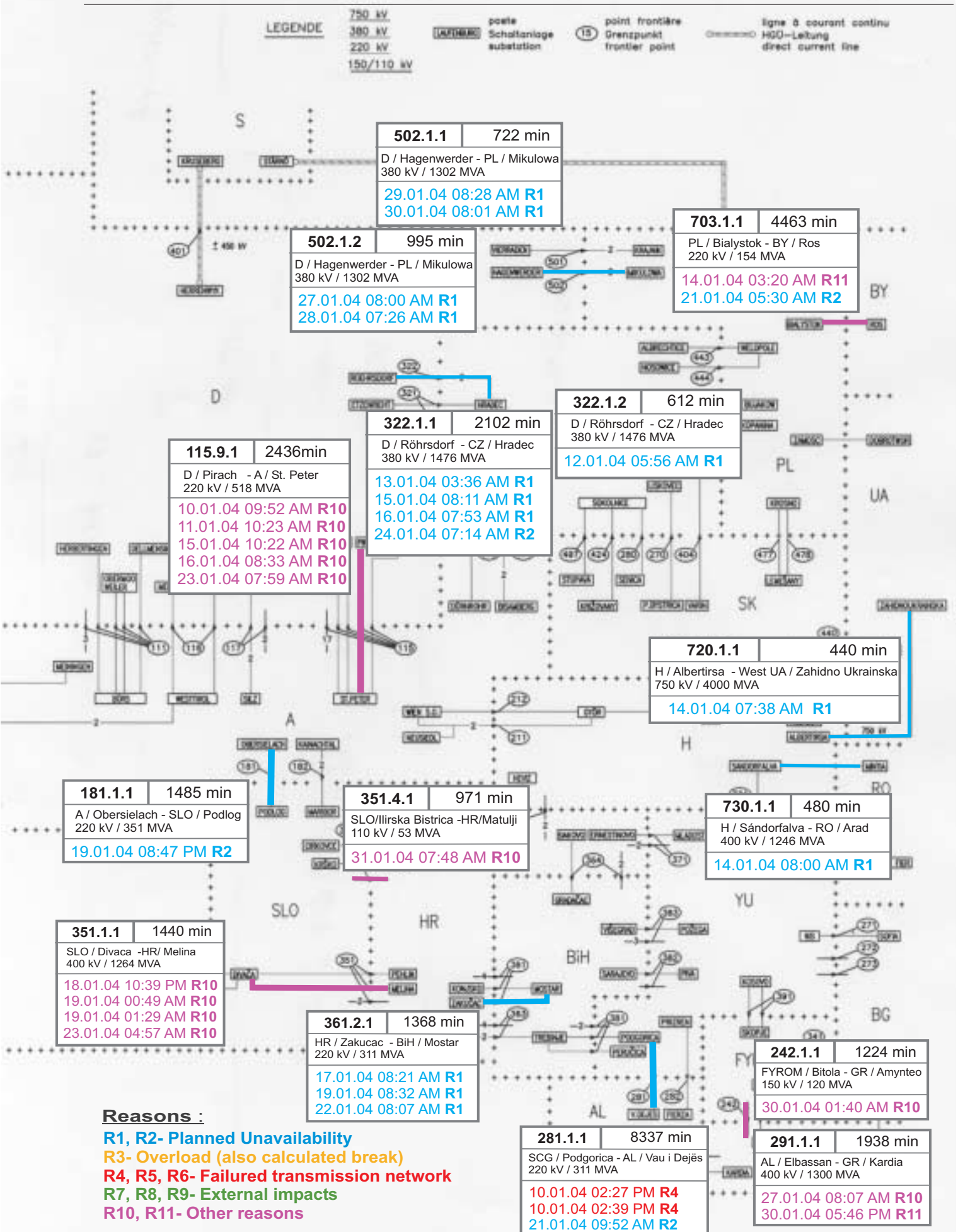






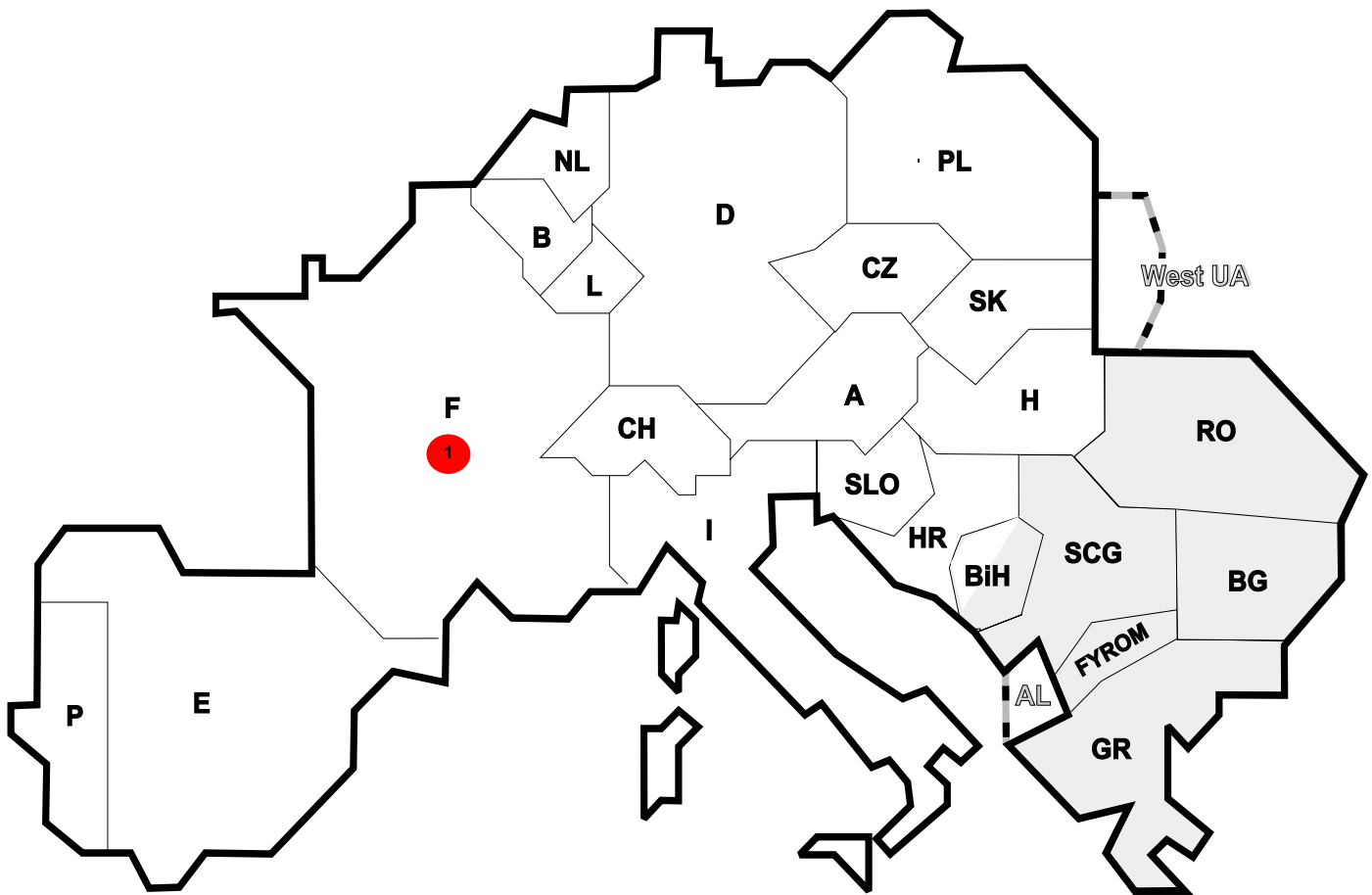
Reasons :

- 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 :

- 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:

- R4 Overload (also calculated brake)
- R5 False operation
- R6 Failure in protection device or other element
- R7 Outside impacts (animals, 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 ¹
1	F	Malassis	R6	53	196	55	0,61

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

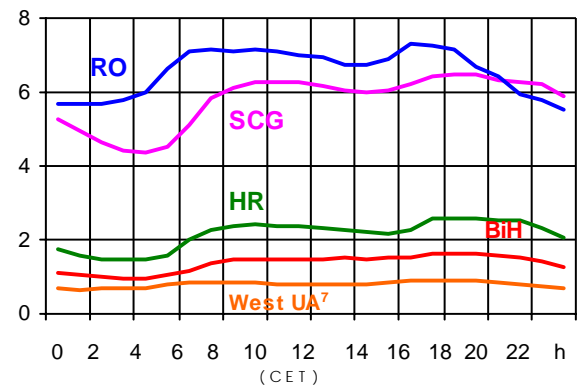
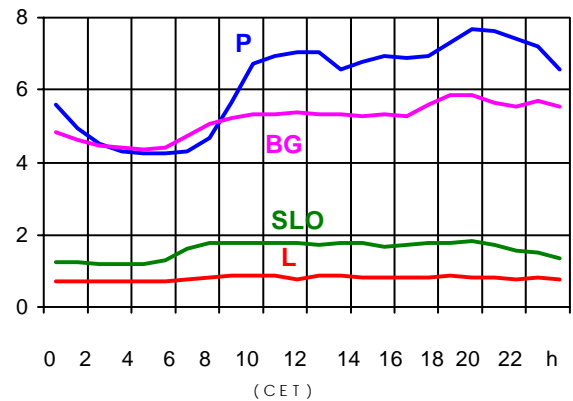
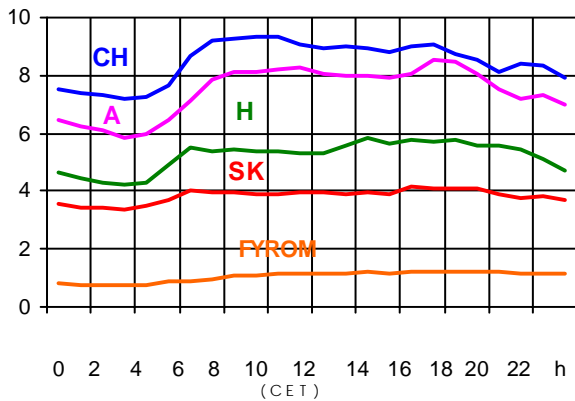
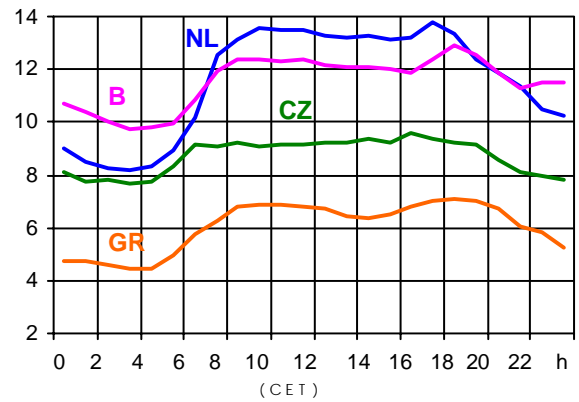
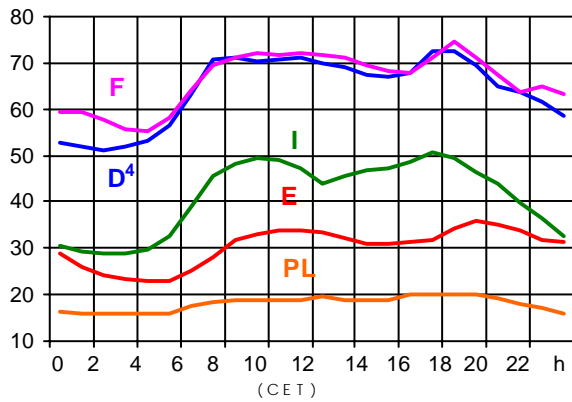
Control area	Prog_exp	Prog_imp	Prog_exp3	Prog_imp3	Prog_exp11	Prog_imp11
B	747337	1377515	815	1565	800	1843
D	3731519	2379707	2189	3478	2965	6101
E	915580	576670	960	1400	1124	772
F	8122056	2201059	9600	1004	10385	1105
GR	100696	340062	110	344	110	564
I	32867	4191505	0	4722	0	6120
SLO	558939	500258	965	854	898	919
HR	249865	651175	501	560	290	520
BiH	112	178	441	0	436	0
FYROM	300	203800	0	140	0	250
SCG	381569	857520	270	927	418	1227
NL	396431	1967840	1961	1078	3326	249
A	539831	605275	939	298	786	983
P	70752	506668	0	841	100	856
CH	1929226	2860893	1708	4275	3604	3452
CZ	1939164	617674	2630	685	2700	1039
H	268650	795754	371	1112	346	1438
PL	1286304	134004	1371	133	2304	190
SK	607710	435240	784	468	918	760
RO	414160	72344	202	55	460	118
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
West UA ¹	169961	0	353	0	485	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.

¹ West UA represents the so-called Burshtyn Island synchronously interconnected with UCTE

Consumption hourly load curves¹ on 21.01.04

Values in GW



	Peak load MW	Δ % ²	Cons_load_repr ¹ %	Parallel load ³ MW
B	12890	0,5	100	11417
D	72500	1,0	91	78000
E	36012	-3,1	94	36012
F	74535	-5,0	100	81061
GR ⁶	7100	-6,4	99	6358
I	50679	-0,7	100	43611
SLO	1815	-2,2	95	1761
HR	2576	2,8	100	2373
BIH	1628	-5,4	99	2047
FYROM	1218	1,9	100	877
SCG	6485	-3,3	96	5384
L	862	-6,1	99	857
NL	13769	11,1	90	10429
A	8511	2,1	82	9304
P	7673	-4,6	92	5984
CH	9330	-0,4	100	9484
CZ	9585	-1,7	100	11352
H	5821	-0,5	100	4314
PL	20186	-5,6	100	20708
SK	4167	4,6	100	3991
RO	7310	0,6	100	7086
BG	5835	-6,3	100	6243
UCTE	355112	-1,5		358653
DK ⁵				2830
West UA ⁷	919	-2,5	100	1293

¹ Percentage as referred to total values in %

² Variation as compared to corresponding month of the previous year

³ Including autoproduction

⁴ Values estimated on the basis of former data from the German Federal Office for Statistics

⁵ Denmark (Jutland)

⁶ The representativity of data referring to the interconnected system is 99%
The representativity of data referring to the whole country including the isolated systems of the Greek island is 91%

⁷ West UA represents the so-called Burshtyn Island synchronously with the UCTE



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