

UCTE



November 2003

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	5
5	Consumption of last 12 months	6
6	Variation of the last 12 months' consumption	7
7	Load flows (night)	8
8	Load flows (day)	9
9	Unavailability of international tie lines (major events)	10
10	Network reliability (major events)	12
11	Scheduled exchanges	13
12	Load on the 3 rd Wednesday	14

¹ Monthly provisional values as of UCTE database as of 27 February 2004

1

Electricity supply situation of the countries

November 2003

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	102	3460	2965	6527 ²	873	127	7273	0,0	84465	0,9
D	1345	13819	30354	45518 ²	-984	636	43898	0,1	507092	1,9
E	3430	5301	10227	18958 ²	-24	322	18612	4,8	222333	4,9
F	4048	37679	4238	45965	-6275	810	38880	3,0	447833	2,8
GR	343	0	3499	3842 ²	129	82	3889	0,6	49701	3,5
I	3341	0	19868	23209	3949	860	26298	0,0	319412	3,0
SLO	326	437	267	1030	46	0	1076	5,2	12300	5,0
HR	539	0	413	952 ²	356	2	1306	7,3	15385	3,4
BiH	488	0	608	1096	219	0	1315	n.a.	n.a.	n.a.
FYROM	51	0	488	539 ²	4	0	543	n.a.	n.a.	n.a.
SCG	841	0	2328	3169	409	69	3509	n.a.	n.a.	n.a.
L	89	0	287	376	279	113	542	2,3	6103	1,6
NL	0	326	7753	8079 ²	1705	0	9784	3,7	109872	1,3
A	1906	0	2084	3990	704	244	4450	-7,7	51250	0,1
P	1530	0	2003	3533 ²	202	45	3690	4,6	42790	3,7
CH	2080	2327	238	4645 ²	873	184	5334	3,7	60097	2,6
CZ	115	2200	4622	6937 ²	-1459	56	5422	1,2	60004	2,6
H	15	944	1609	2568 ²	744	0	3312	2,6	38394	3,0
PL ⁵	233	0	13395	13628 ²	-1136	194	12298	1,6	138808	3,8
SK	179	1616	843	2638 ²	-231	30	2377	1,7	26419	1,1
UCTE	22153	69787	113658	205598²	-366	3820	201412	1,4	2237835	2,7
RO	937	475	3127	4539 ²	-174	0	4365	n.a.	n.a.	n.a.
BG	215	1203	2442	3860 ²	-575	46	3239	n.a.	n.a.	n.a.
West-UA	16	0	656	672 ²	-289	0	383	n.a.	n.a.	n.a.

¹ Percentage as referred to total values in %

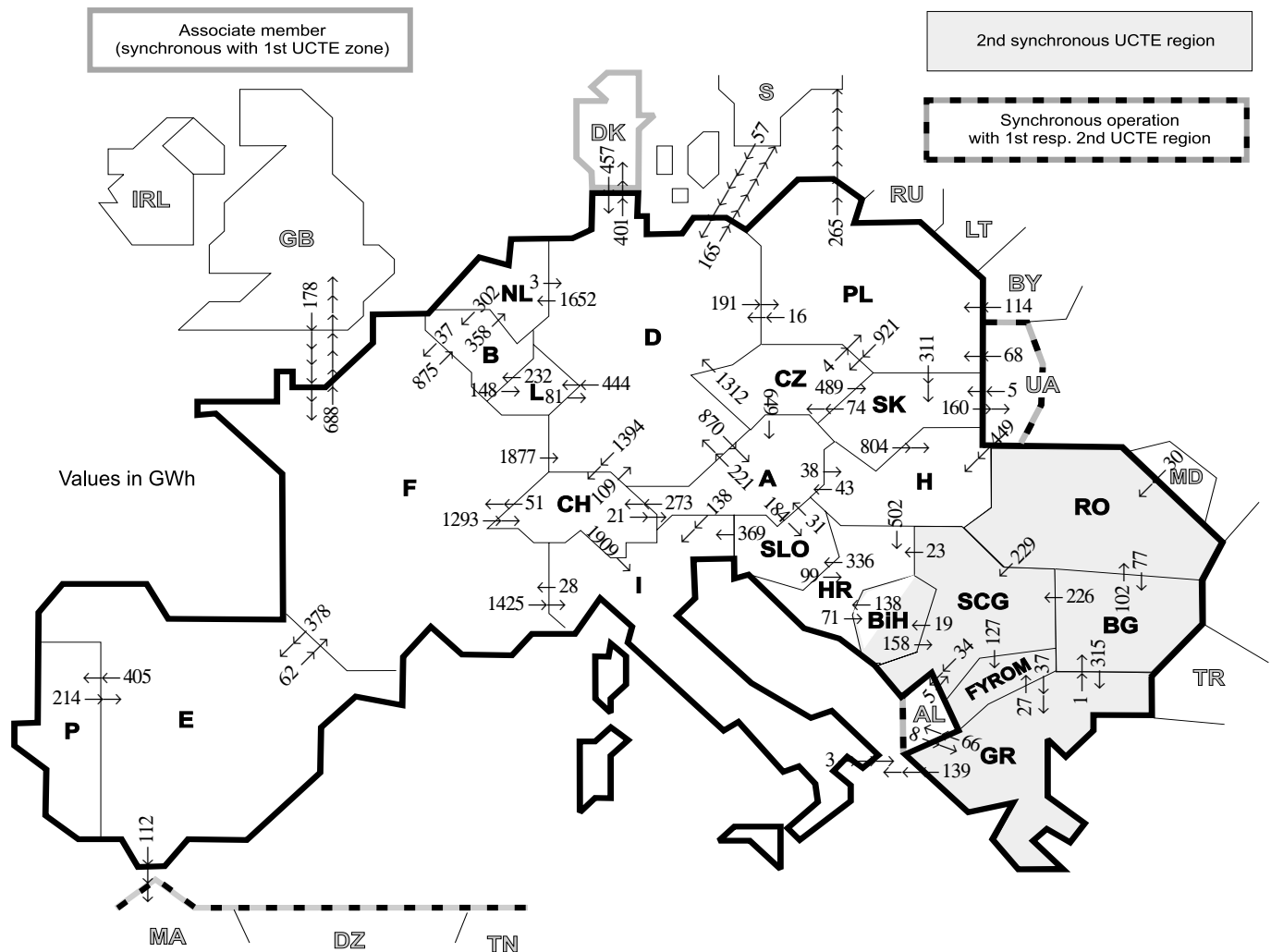
Countries	B	D	E	F	GR ⁴	I	SLO	HR	BiH	FY- ROM	SCG	L	NL	A	P	CH	CZ	H	PL	SK	RO	BG	West- UA
Production	99	94	94	97	93	100	95	100	99	100	96	98	100	84	92	100	100	100	100	100	100	100	100
Consumption	99	94	94	97	93	100	95	100	99	100	96	99	100	90	92	100	100	100	100	100	100	100	100

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 whole country including the isolated systems of the Greek island is 93%.
The representativity of data referring interconnected system on the mainland is 99%.

⁵ 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 ²	III ¹	
B	-	-	-	37	-	-	-	-	-	-	-	148	358	-	-	-	-	-	-	-	-	-	-	-	-	-	543
D	-	-	-	0	-	-	-	-	-	-	-	444	1652	870	-	1394	0	191	-	-	-	-	-	401	566	5518	
E	-	-	-	62	-	-	-	-	-	-	-	-	-	-	405	-	-	-	-	-	-	-	-	-	112	579	
F	875	1877	378	-	-	1425	-	-	-	-	-	-	-	-	-	1293	-	-	-	-	-	-	-	-	-	688	6536
GR	-	-	-	-	-	139	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	66	233
I	-	-	-	28	3	0	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	31
SLO	-	-	-	-	-	369	99	-	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	499
HR	-	-	-	-	-	-	336	71	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	407
BIH	-	-	-	-	-	-	138	-	-	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	296
FYROM	-	-	-	-	37	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	37
SCG	-	-	-	-	-	-	-	-	-	127	-	-	-	-	-	-	-	0	-	-	0	0	-	-	-	34	203
L	232	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	313
NL	302	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	305
A	-	221	-	-	-	138	184	-	-	-	-	-	-	-	-	273	0	38	-	-	-	-	-	-	-	-	854
P	-	-	214	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	214
CH	-	109	-	51	-	1909	-	-	-	-	-	-	-	21	-	-	-	-	-	-	-	-	-	-	-	-	2090
CZ	-	1312	-	-	-	-	-	-	-	-	-	-	-	649	-	-	-	-	4	489	-	-	-	-	-	-	2454
H	-	-	-	-	-	-	502	-	-	0	-	-	-	43	-	-	-	-	-	0	0	-	0	-	-	0	545
PL	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	921	-	311	-	-	0	-	265	1513	
SK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74	804	0	-	-	-	160	160	1198	
RO	-	-	-	-	-	-	-	-	-	-	229	-	-	-	-	-	-	-	0	-	-	77	-	-	-	306	
BG	-	-	-	-	315	-	-	-	-	0	226	-	-	-	-	-	-	-	-	-	-	102	-	-	0	643	
West-UA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	449	68	5	0	-	-	-	-	522	
DK ²	-	457	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	457	
III ¹	-	57	0	178	8	-	-	-	-	-	-	-	-	-	-	-	-	449	182	5	30	0	-	-	-	914	
Σ Import	1409	4133	592	356	363	3980	520	762	90	154	618	592	2010	1614	405	2960	995	1291	377	805	132	78	160	401	1891	27210	

Sum of physical energy flows between UCTE countries = 23025 GWh

Total physical energy flows = 26127 GWh

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

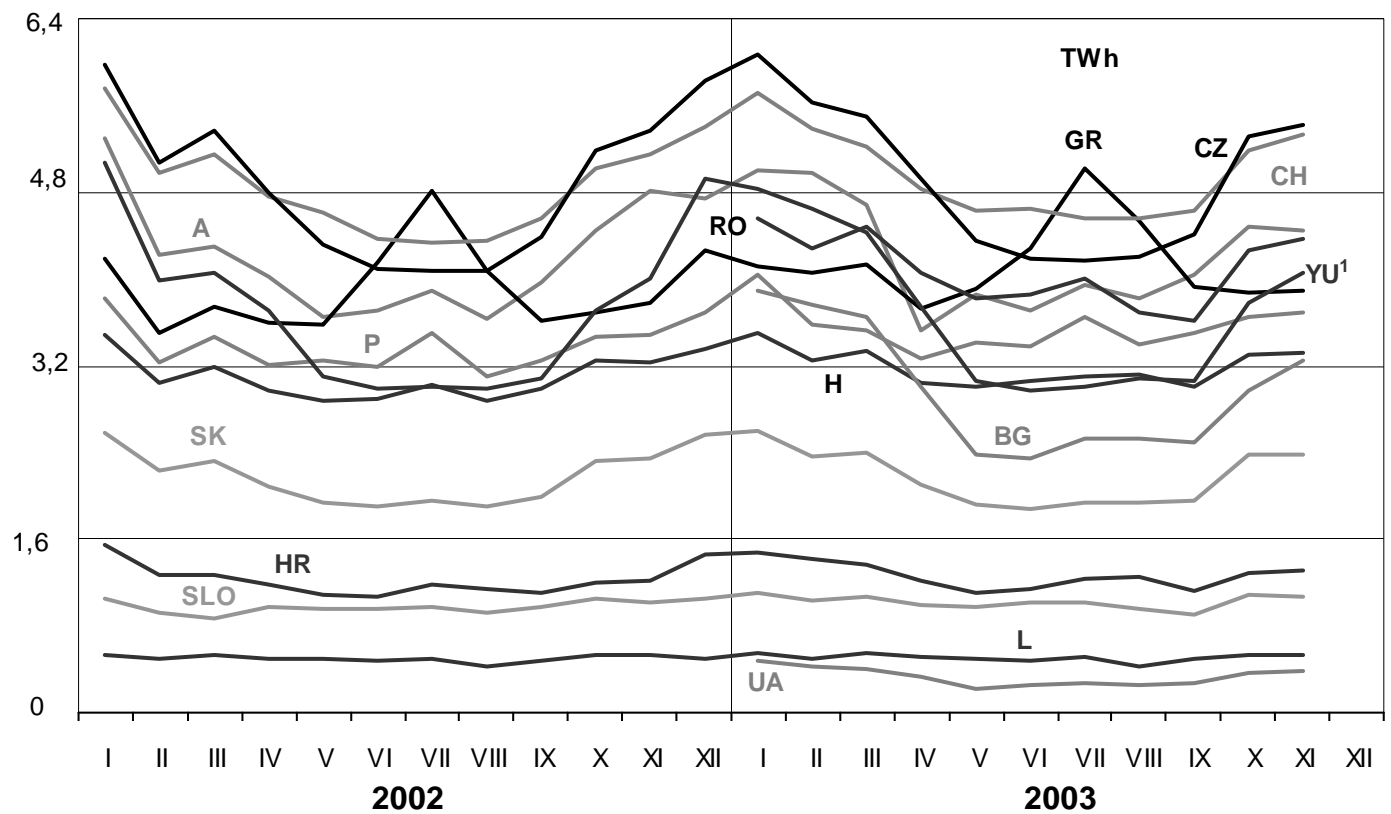
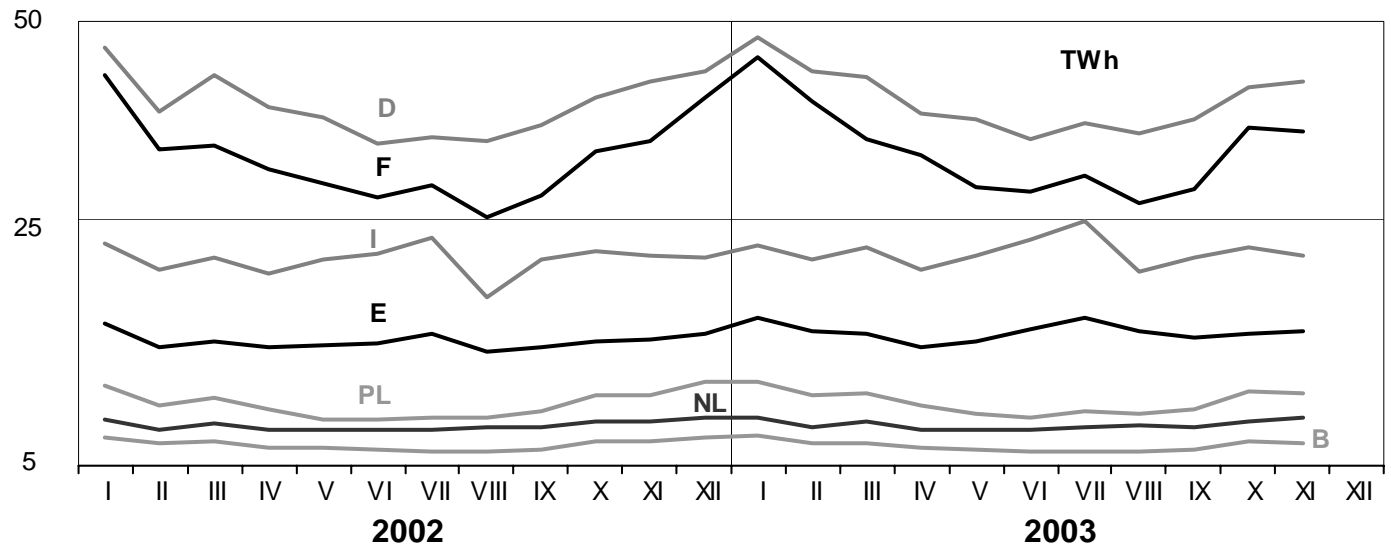
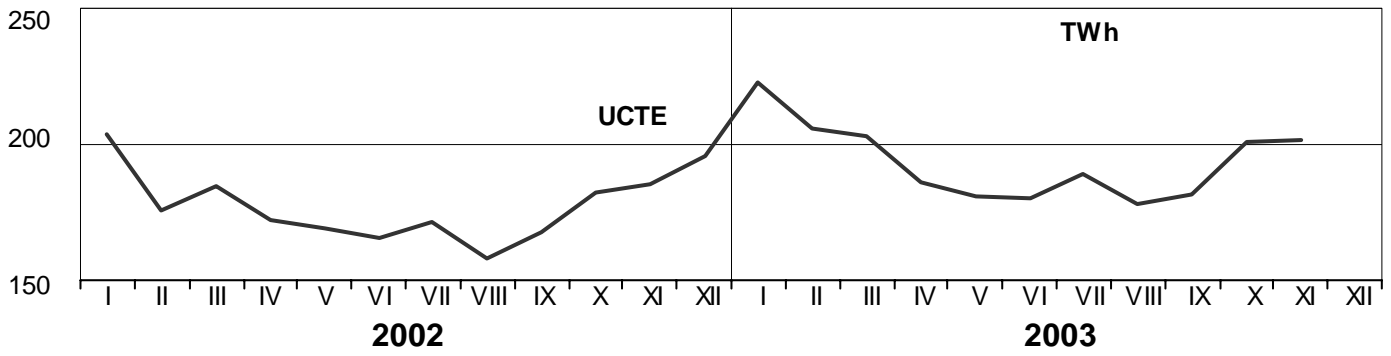
² Denmark (Jutland)

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.

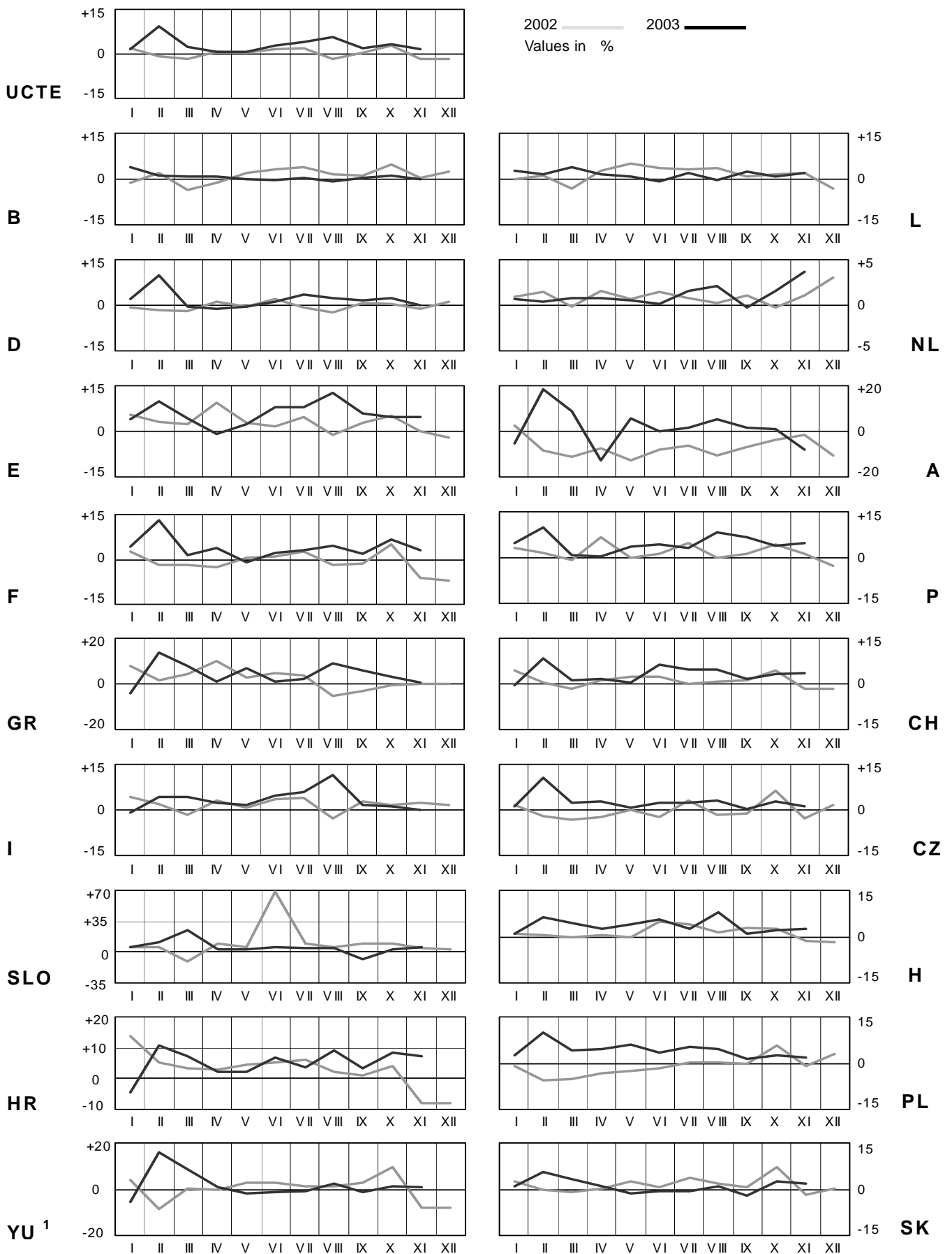
3

Monthly consumption

November 2003



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

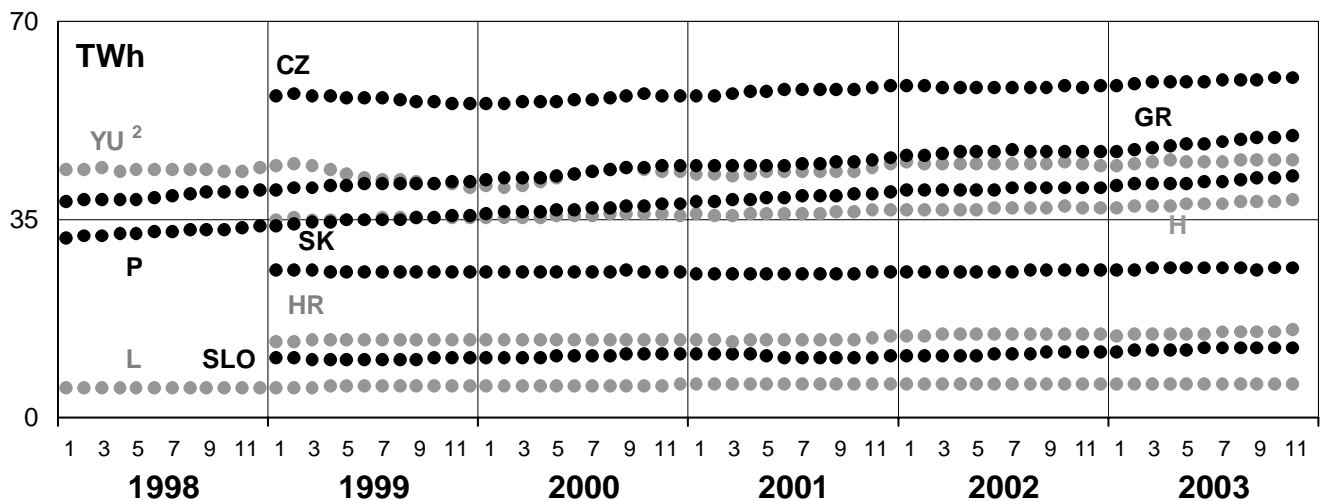
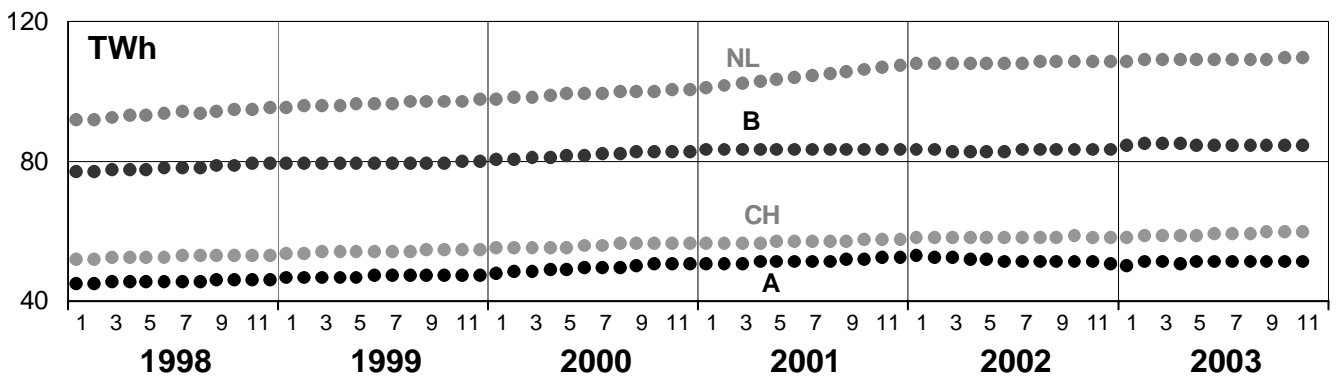
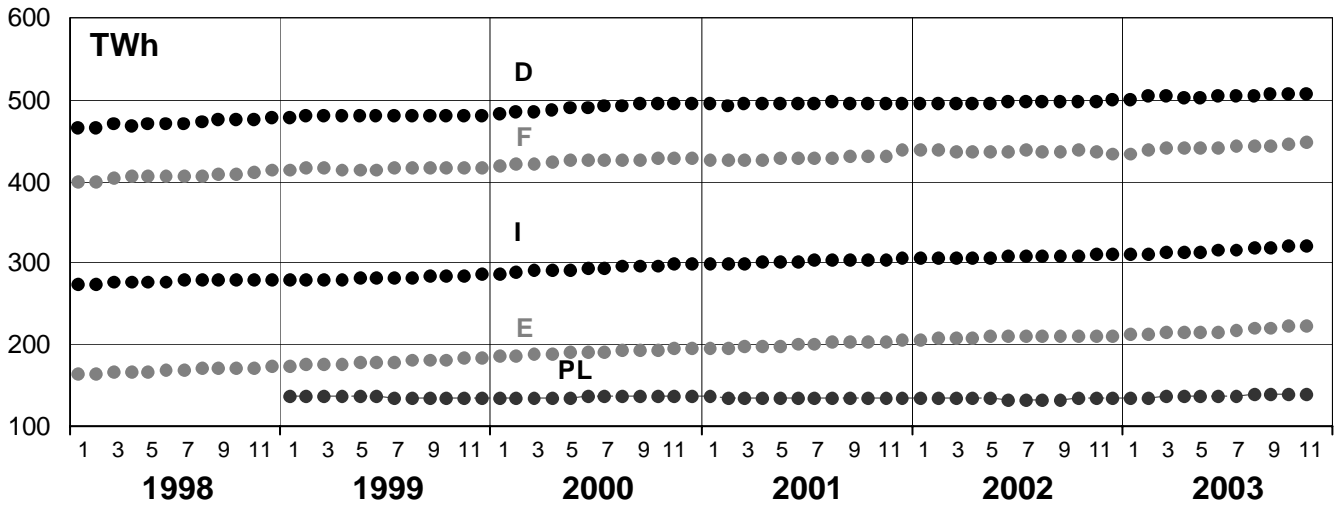
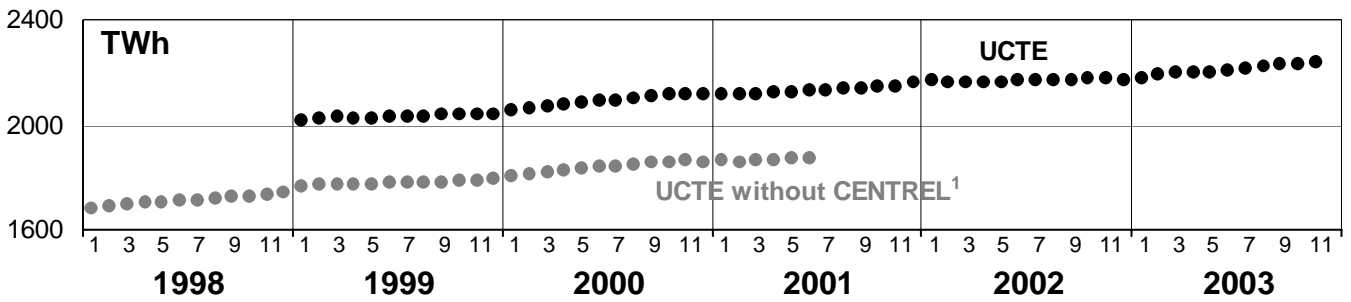


¹YU = FRY + FYROM (Federal Republic of Yugoslavia and former Yugoslav Republic of Macedonia)

5

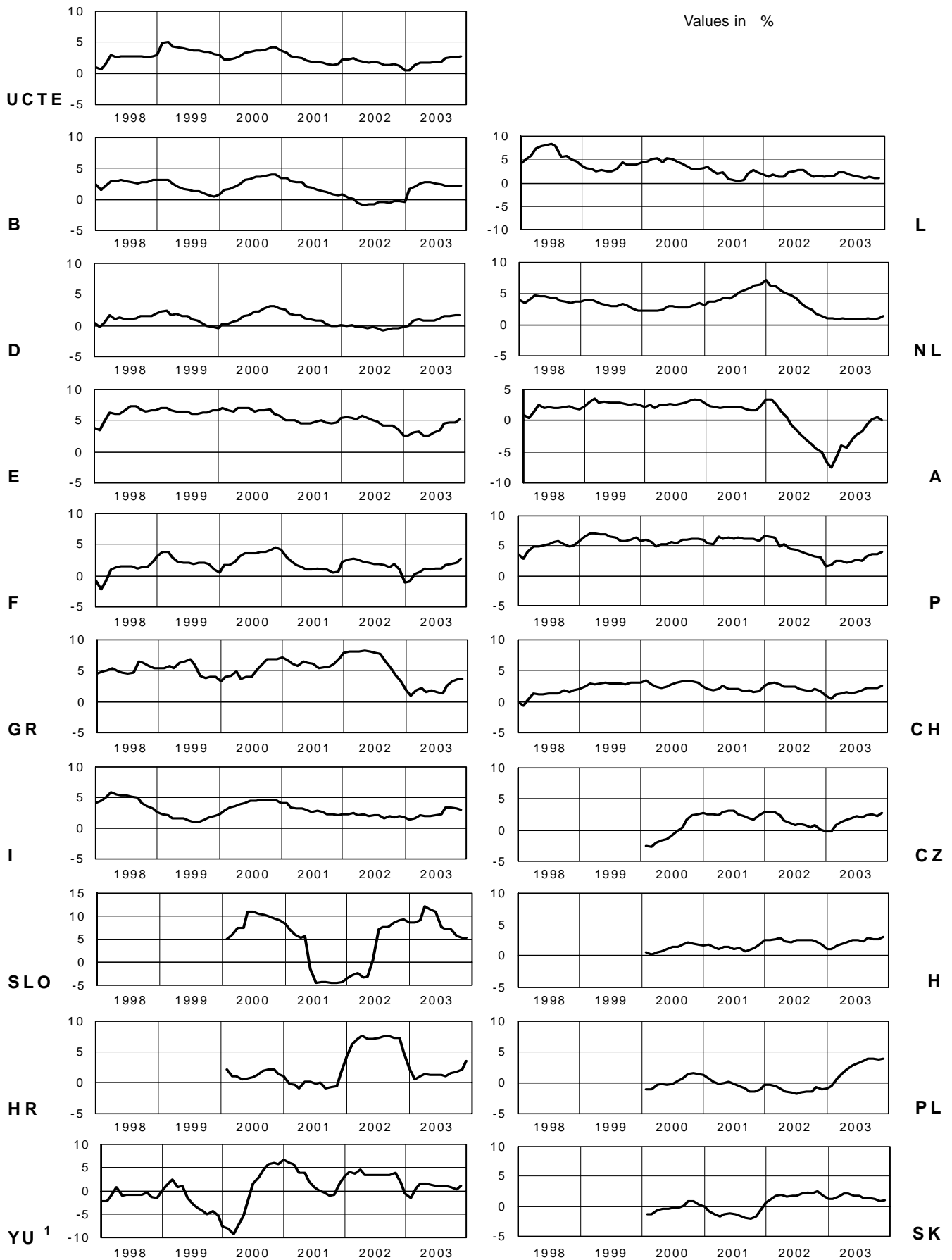
Consumption of last 12 months

November 2003

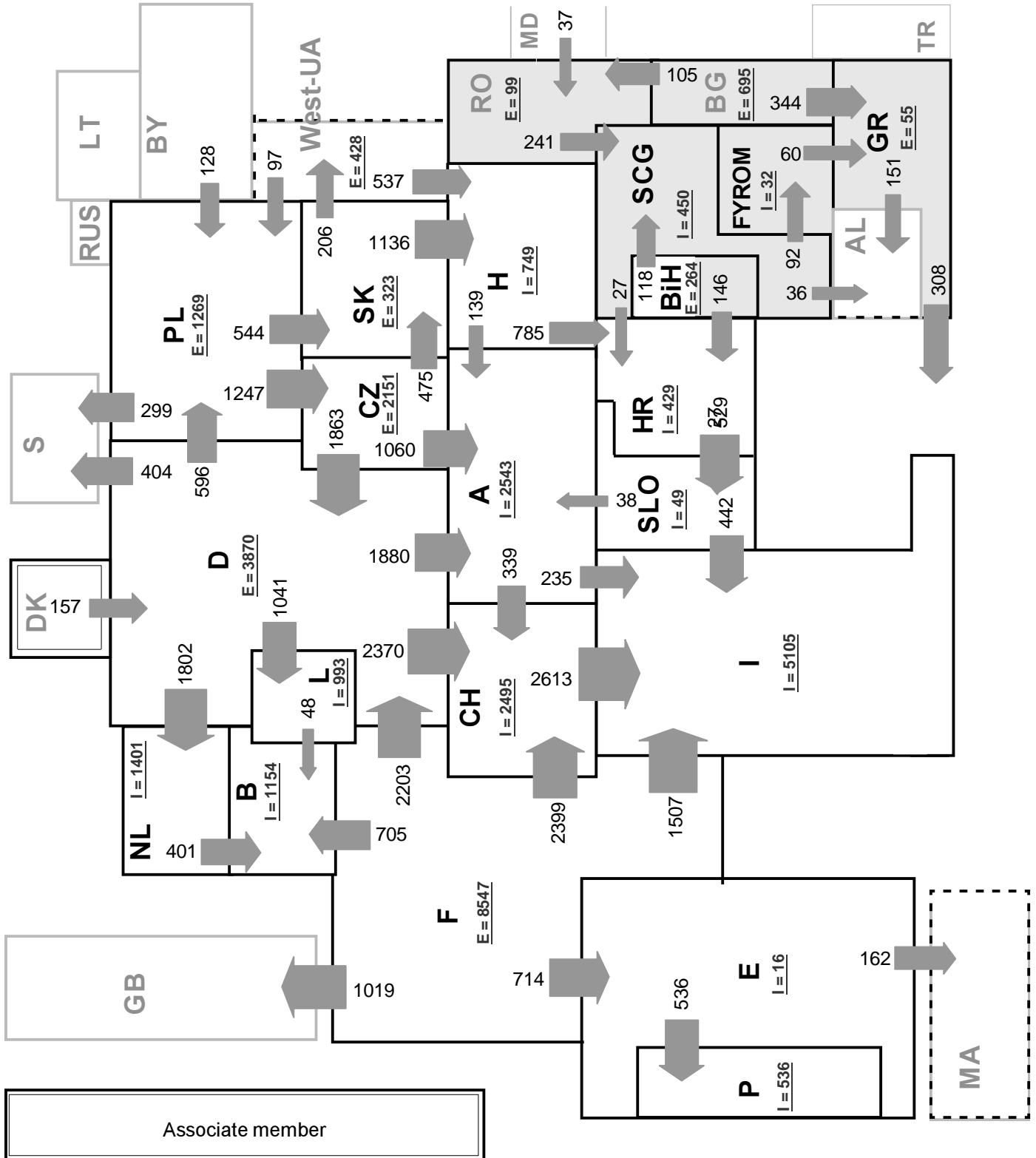


¹ CENTREL countries CZ, H, PL and SK member of UCTE from May 2001

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



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



Associate member

Synchronous operation with 1st resp. 2nd UCTE region

2nd synchronous UCTE region

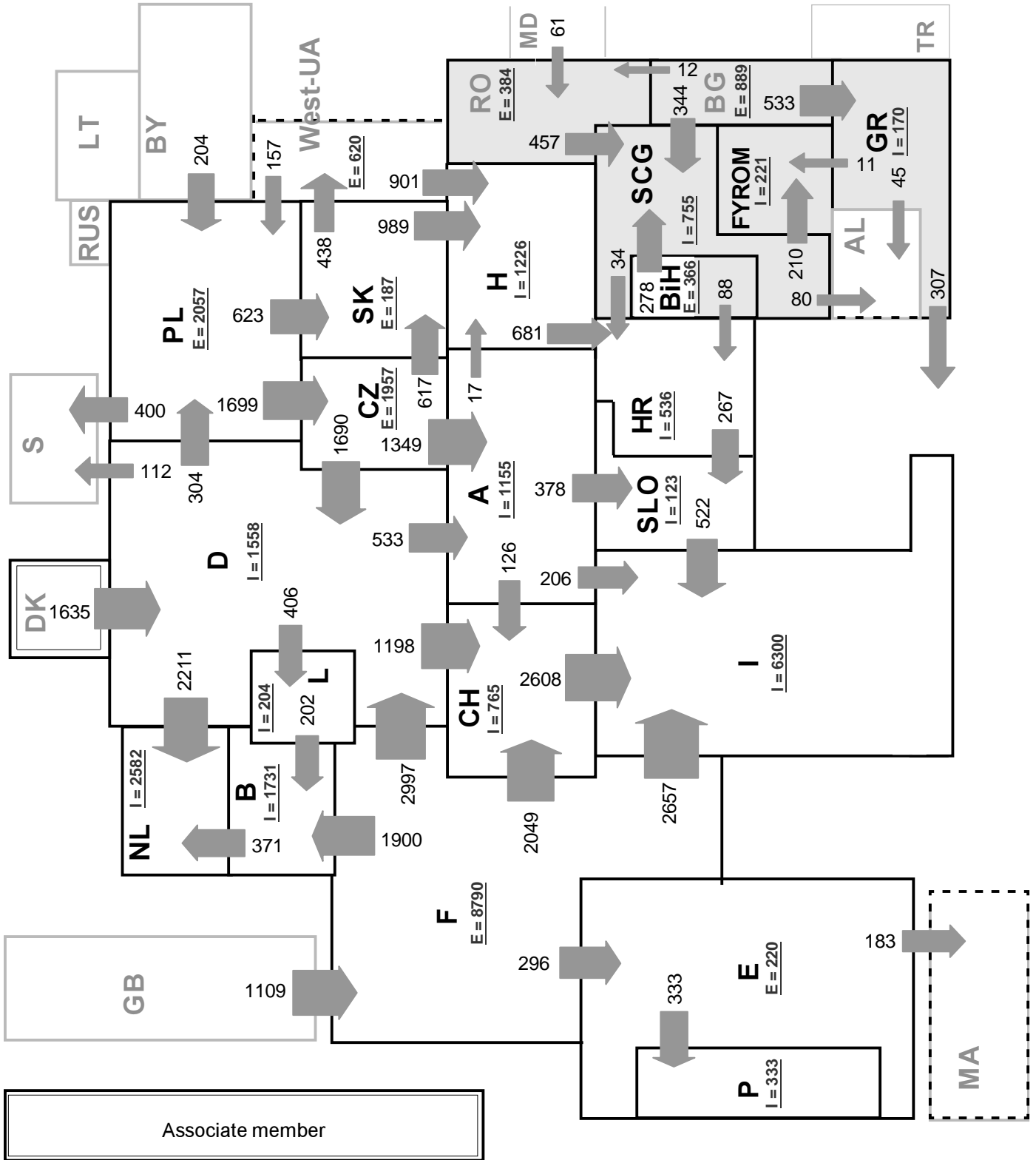
Sum of load flows in MW:

UCTE = 29334 Total = 32567

* Central European Time (CET)

I = Import balance

E = Export balance



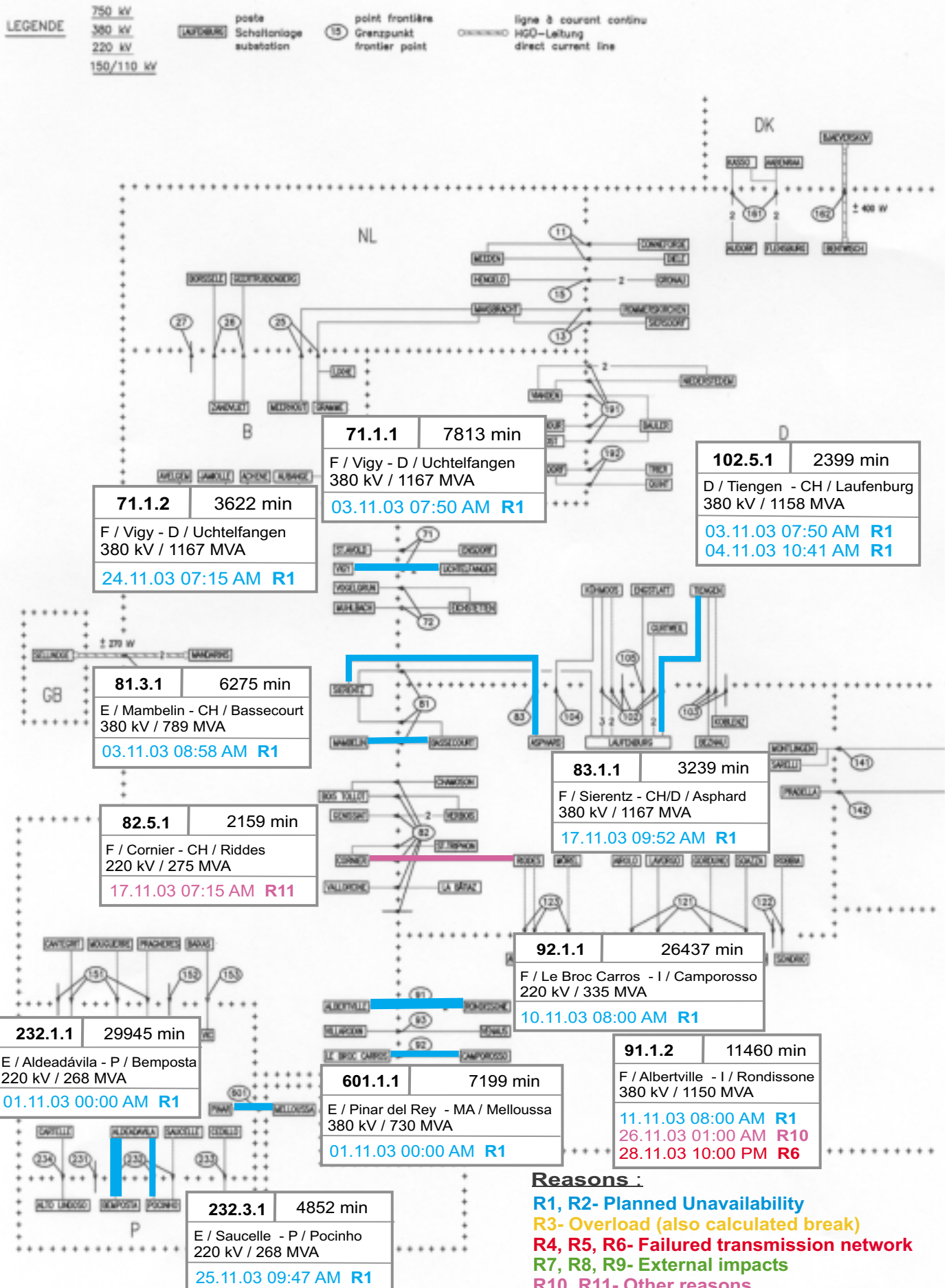
Sum of load flows in MW:

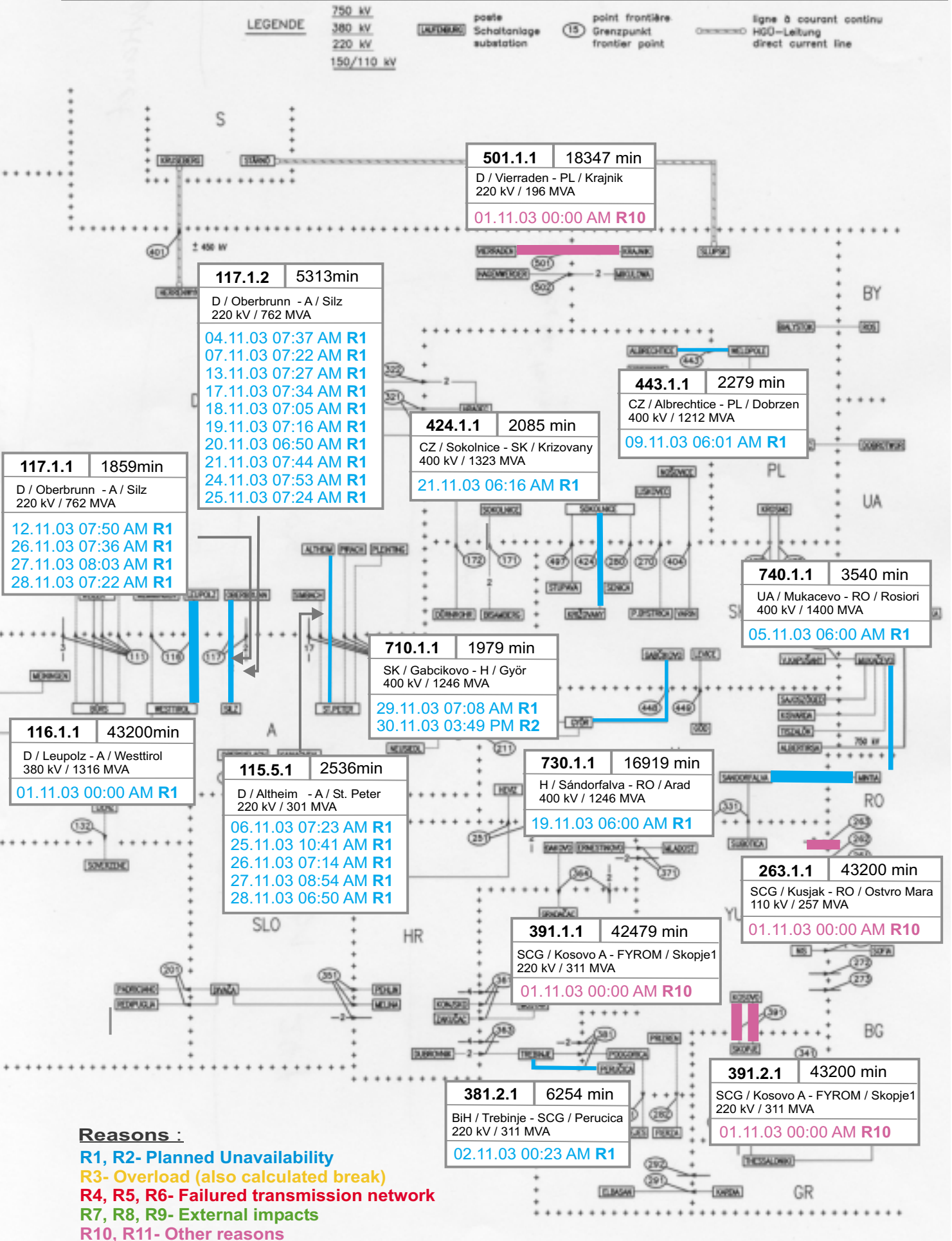
UCTE = 29503 Total = 34828

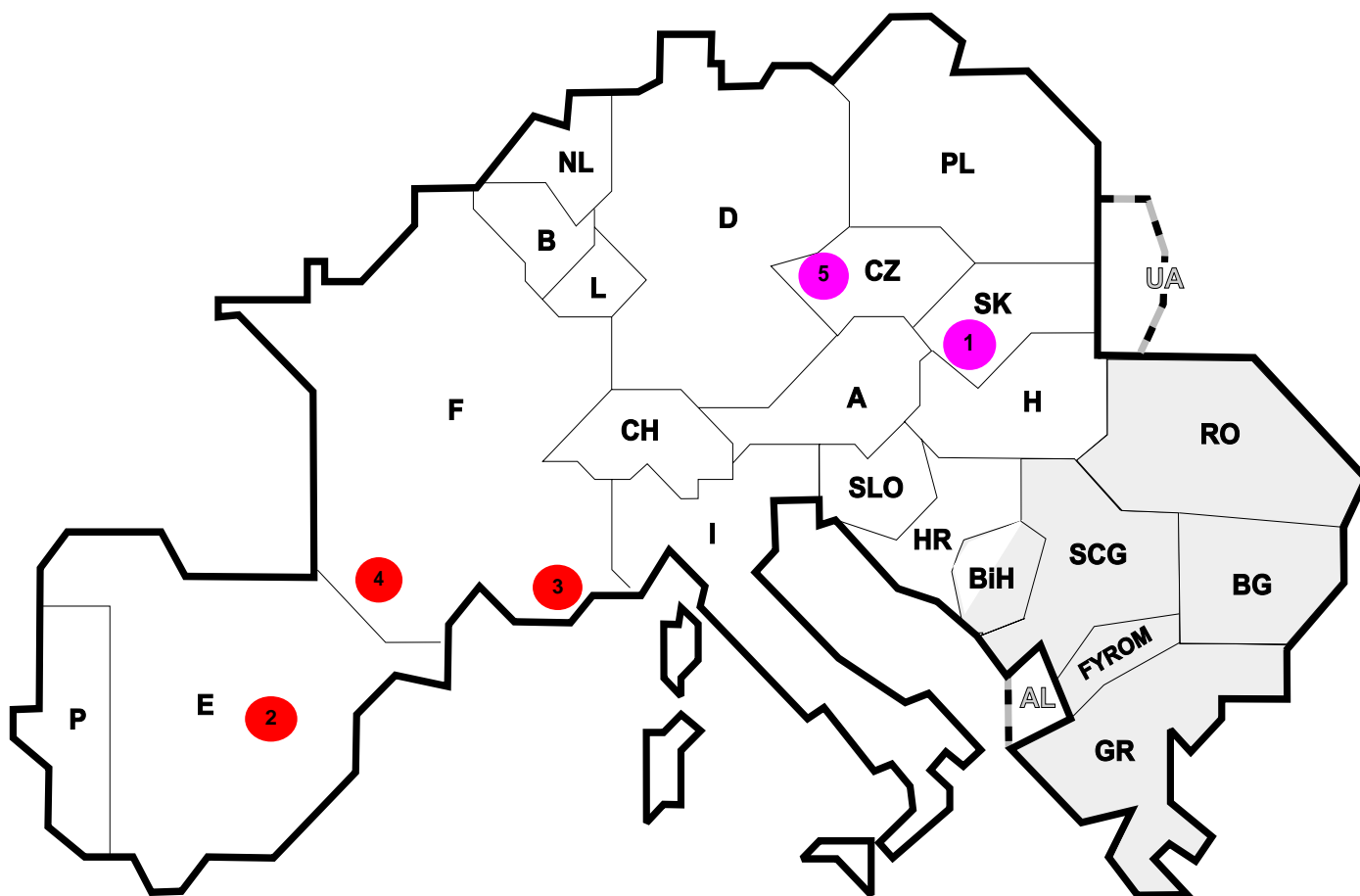
* Central European Time (CET)

I = Import balance

E = Export balance







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 tim of interruption
1	SK	EVO1	R11	943	220	437	4,38
2	E	Sabon 220 kV	R5	13	0	7	0,00
3	F	Lingostière	R6	3	17	11	0,02
4	F	Pragnières	R6	0	0	11	0,00
5	CZ	Slavetice	R11	0	390	60	3,42

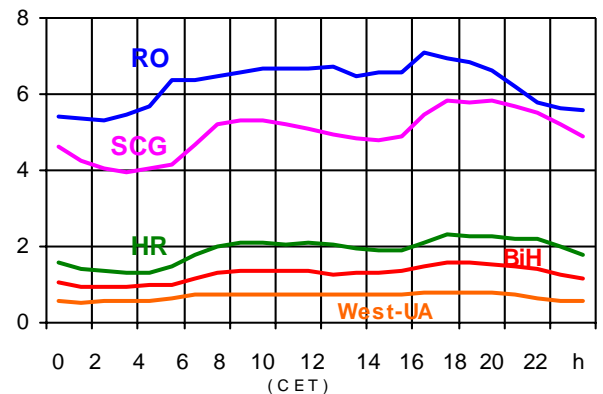
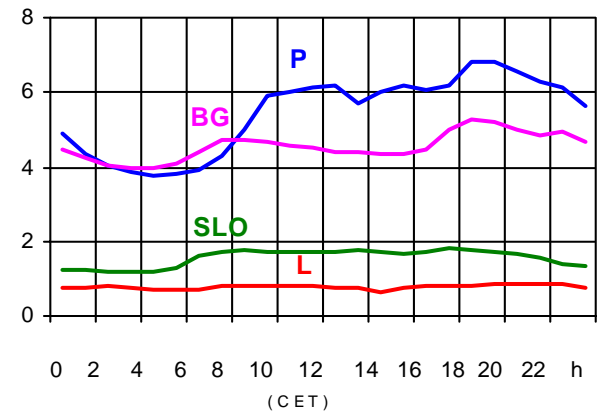
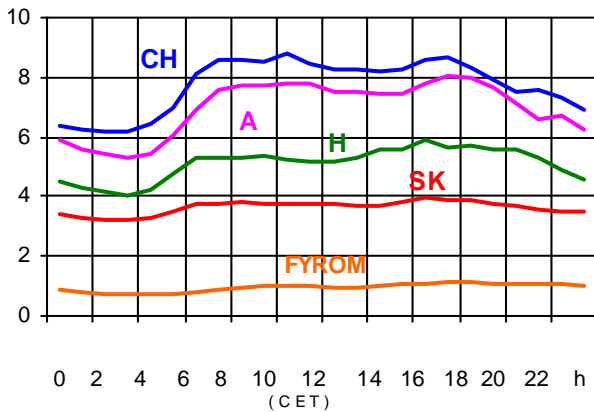
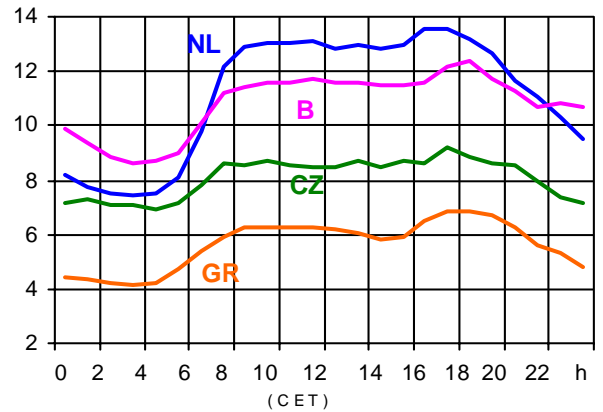
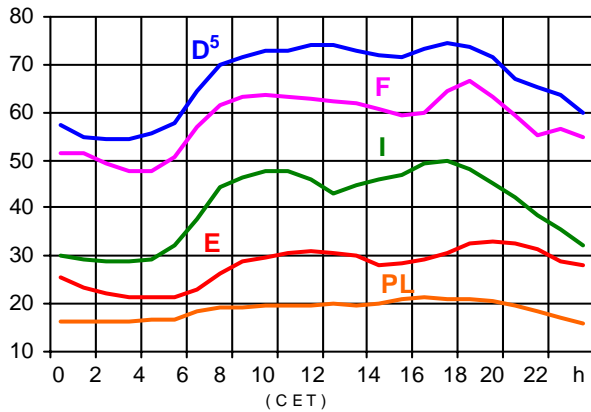
¹ (year [in min] * power loss) / consumption last 12 months

Control area	Prog_exp	Prog_imp	Prog_exp3	Prog_imp3	Prog_exp11	Prog_imp11
B	527233	1324993	509	1749	555	2031
D	2984371	2631501	5577	3727	3886	4537
E	402685	362295	787	740	705	301
F	8270627	2057499	11274	2751	11707	2915
GR	180044	310182	442	379	360	515
I	31628	3979462	0	5105	0	6300
SLO	571768	590574	840	927	811	903
HR	282718	647472	567	720	430	631
BiH	79	127	487	165	459	165
FYROM	5100	124200	0	78	0	215
SCG	318254	727419	294	779	474	1269
NL	331438	1700082	685	2108	518	3098
A	693000	497943	467	1077	740	1352
P	180976	382529	0	560	693	1049
CH	1678444	2553148	1770	4294	2753	3510
CZ	2278054	761873	3047	796	3306	1267
H	263406	1007137	471	1229	327	1531
PL	1330039	190820	1387	135	2231	160
SK	642526	350625	760	392	995	712
RO	208418	142960	142	51	460	90
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
West-UA	289197	0	330	0	450	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 curves¹ on 19.11.03

Values in GW



	Peak load MW	Δ % ²	Cons_load_repr ¹ %	Parallel load ³ MW
B	12359	-0,9	100	9831
D	74600	0,9	91	80900
E	33106	2,7	94	31035
F ⁴	66686	1,0	97	73234
GR ⁴	6883	-0,5	93	6108
I	49733	0,5	100	42737
SLO	1810	5,1	95	1590
HR	2323	13,0	100	2096
BiH	1567	n.a.	100	1725
FYROM	1132	n.a.	100	731
SCG	5836	n.a.	96	4471
L	861	4,1	99	800
NL	13580	-1,9	90	10461
A	8030	-6,5	82	7467
P	6804	8,2	92	5885
CH	8803	0,7	100	8807
CZ	9247	0,9	100	10954
H	5887	5,5	100	4019
PL	21307	1,9	100	21654
SK	3953	2,0	100	3938
UCTE	341434	1,8		341770
DK ⁶				2555
RO	7109	n.a.	100	6702
BG	5285	n.a.	100	5442
West-UA	813	n.a.	100	1183

¹ Percentage as referred to total values in %

² Variation as compared to corresponding month of the previous year

³ Including autoproduction

⁴ 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%.

⁵ Values estimated on the basis of former data from the German Federal Office for Statistics

⁶ Denmark (Jutland)



Contact

Boulevard Saint-Michel, 15
B-1040 Brussels - Belgium
Tel +3227416940 - Fax +3227416949

info@ucte.org
www.ucte.org