Casc Publication Handbook CWE Market Coupling

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Contents

1	Pre-	coupling operational data (D)-1)3
	1.1.	Graphical views	
		1.1.1. Market View	
		1.1.2. Market graphs	4
			4
			5
	1.2.		6
		1.2.1. PTDFs (Early Publication).	6
		1.2.2. Long Term Nominations (I	LTN) 7
		1.2.3. PTDFs	[*]
		1.2.4. ATCs	8
		1.2.5. Max net pos	9
		1.2.6. Max exchanges (Maxbex)	9
		1.2.7. Shadow Auction ATC	10
2	Doct	-coupling aparational data (D-1)11
_	F USI	t-coupiniy operational data (U-I)II
_	2.1.		11
_		Net Position	
_	2.1.	Net PositionAllocated Capacities	11
_	2.1. 2.2.	Net Position	11 11
_	2.1. 2.2. 2.3.	Net Position	11 11 12
_	2.1.2.2.2.3.2.4.	Net Position	
	2.1. 2.2. 2.3. 2.4. 2.5.	Net Position	
	2.1. 2.2. 2.3. 2.4. 2.5.	Net Position	
	2.1. 2.2. 2.3. 2.4. 2.5.	Net Position	
	2.1. 2.2. 2.3. 2.4. 2.5. Add 3.1. 3.2.	Net Position	
	2.1. 2.2. 2.3. 2.4. 2.5. Add 3.1. 3.2.	Net Position	
3	2.1. 2.2. 2.3. 2.4. 2.5. Add 3.1. 3.2. 3.3.	Net Position	
3	2.1. 2.2. 2.3. 2.4. 2.5. Addi 3.1. 3.2. 3.3.	Net Position	

1 Pre-coupling operational data (D-1)

1.1. Graphical views

1.1.1. Market View

Please note that the all data presented in this document is available through one single platform which is the CASC Utility Tool. In the last section you will find information on how to get access through the web service.

Publication day or time is also indicated for each item: please consider that "D" stands for the delivery day; therefore, "D-1" stands for the Day-Ahead on which most of the data is provided as part of the market coupling process and finally "D+2"

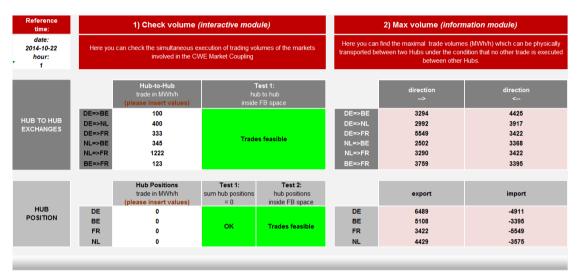


Figure 1: Screenshot of the "Market View" tab

The "Market View" tab is split into 2 sections:

- Check volume: the user can insert volumes of commercial trades (in terms of hub-to-hub exchanges or hub net export positions) in order to test their feasibilities. Please note that those feasibility checks are performed on all 24 hours. This implies that if Test 2 indicates 'Constrained Transmission System', at least in one of the 24 hours a constraint was violated.
- Max volume: this section gathers the information of the tabs "Max net pos" and "Max exchanges (Max-bex)".

Please note that if one changes the value of the date picker, it will update the figures of all the tabs of the excel file according to the chosen date.

1.1.2. Market graphs

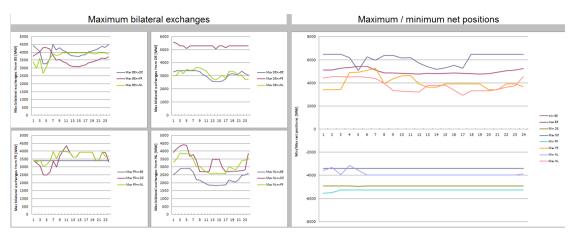


Figure 2: Screenshot of the "Market graphs" tab

The "Market graphs" tab gathers the graphs representing the Flow-Based indicators of the tabs "Max net pos" and "Max exchanges (Maxbex)" for the 24 hours of the selected day.

Publication time: 10.30 am (D-1)

1.1.3. **CWE** map

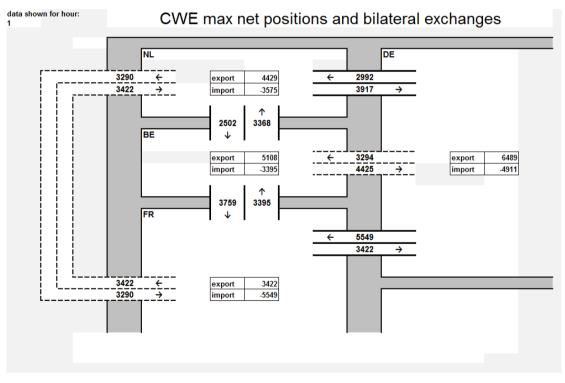


Figure 3: Screenshot of the "CWE map" tab

The "CWE map" tab displays the indicators of the final Flow-Based matrix in a different manner: it shows the maximum bilateral exchanges of each border and the min/max net positions of each hub on a map representing the CWE configuration.

1.1.4. Border Data Overview

Date:	2015-03-04						
Border:	NL-BE		Choosing another Bus	iness Day on this sheet	will also u	pdate the following sheets:	
			ATCs, Allocated Capac	cities, Price spread, Co	ngestion In	come, LTN, Shadow Auctio	n ATC and ID ATC
Hour	ATC (MW)	BEC (MW)	Price Spread (€/MWh)	Congestion Income (€)	LTN (MW)	Shadow Auction ATC (MW)	Intraday ATC (MW)
1	#N/A	288,9	0	#N/A	52	924	850
2	#N/A	337,7	0	#N/A	52	950	818
3	#N/A	325,9	0	#N/A	52	919	775
4	#N/A	503,6	0	#N/A	52	1066	934
5	#N/A	620,6	0	#N/A	52	1140	996
6	#N/A	657,6	0	#N/A	52	1022	833
7	#N/A	753,1	0	#N/A	52	1227	880
8	#N/A	499	0	#N/A	52	850	761
9	#N/A	427,9	0	#N/A	52	727	418
10	#N/A	369,8	0	#N/A	52	727	591
11	#N/A	389,9	0	#N/A	52	729	309
12	#N/A	287,1	0,5	#N/A	52	735	0
13	#N/A	287,5	0,55	#N/A	52	737	0
14	#N/A	287,7	0,6	#N/A	52	738	0
15	#N/A	262,7	0,3	#N/A	52	735	0
16	#N/A	300,4	0,36	#N/A	52	853	0
17	#N/A	351,5	0	#N/A	52	957	599
18	#N/A	415,9	0,12	#N/A	52	983	0
19	#N/A	345,3	0,64	#N/A	52	1064	0
20	#N/A	460,9	0	#N/A	52	936	275
21	#N/A	336,9		#N/A	52	898	0
22	#N/A	369,7	0,76	#N/A	52	1010	0
23		336,4		#N/A	52	949	0
24	#N/A	328,1	0	#N/A	52	1129	748

Figure 4: Screenshot of the "Border Data Overview" tab with a CWE border

This tab gathers the general pieces of information for a selected border for each hour of a market coupling date:

- The ATC in MW offered for the Day-ahead market coupling (for the non-CWE borders);
- The allocated capacity (or BEC¹) in MW after market coupling;
- The Price Spread in €/MWh;
- The Congestion Income in €;
- The nominated volume of the long term allocated product (LTN) in MW;
- The Shadow Auction ATC, being the ATC that would be provided to a shadow auction mechanism, in MW;
- The Intraday ATC, being the left-over capacity after the FBMC expressed as initial ATC, in MW.

Please note that for the CWE internal borders, the ATCs and Congestion Income are not available on a border basis (see Figure 4) and for the other borders, the long term nominations, the Shadow Auction ATCs and the intraday ATCs will not be available (see Figure 5).

¹ Bilateral Exchange Computation

Date:	2015-03-04						
Border:	FR-IT		Choosing another Bus	iness Day on this sheet	will also u	pdate the following sheets:	
			ATCs, Allocated Capa	cities, Price spread, Con	gestion In	come, LTN, Shadow Auctio	n ATC and ID ATC
Hour	ATC (MW)	BEC (MW)	Price Spread (€/MWh)	Congestion Income (€)	LTN (MW)	Shadow Auction ATC (MW)	Intraday ATC (MW)
1	2529	0	-33,31	0	#N/A	#N/A	#N/A
2	2529	0	-32,36	0	#N/A	#N/A	#N/A
3	2529	0	-32,05	0	#N/A	#N/A	#N/A
4	2529	0	-34,14	0	#N/A	#N/A	#N/A
5	2529	0	-35,66	0	#N/A	#N/A	#N/A
6	2529	0	-38	0	#N/A	#N/A	#N/A
7	2529	0	-39,87	0	#N/A	#N/A	#N/A
8	2684	0	-42,74	0	#N/A	#N/A	#N/A
9	2624	0	-43,24	0	#N/A	#N/A	#N/A
10	2624	0	-43,99	0	#N/A	#N/A	#N/A
11	2624	0	-44,29	0	#N/A	#N/A	#N/A
12	2624	0	-45,19	0	#N/A	#N/A	#N/A
13	2624	0	-45,35	0	#N/A	#N/A	#N/A
14	2624	0	-44,25	0	#N/A	#N/A	#N/A
15	2624	0	-44	0	#N/A	#N/A	#N/A
16	2624	0	-43,2	0	#N/A	#N/A	#N/A
17	2624	0	-42,45	0	#N/A	#N/A	#N/A
18	2624	0	-43,12	0	#N/A	#N/A	#N/A
19	2624	0	-41,56	0	#N/A	#N/A	#N/A
20	2624	0	-37,14	0	#N/A	#N/A	#N/A
21	2684	0	-39,03	0	#N/A	#N/A	#N/A
22	2684	0	-34,03	0	#N/A	#N/A	#N/A
23	2684	0	-33,42	0	#N/A	#N/A	#N/A
24	2529	0	-29,92	0	#N/A	#N/A	#N/A

Figure 5: Screenshot of the "Border Data Overview" tab with a non-CWE border

Publication time: As soon as data is available (D-1)

1.2. Raw network data

1.2.1. PTDFs (Early Publication)

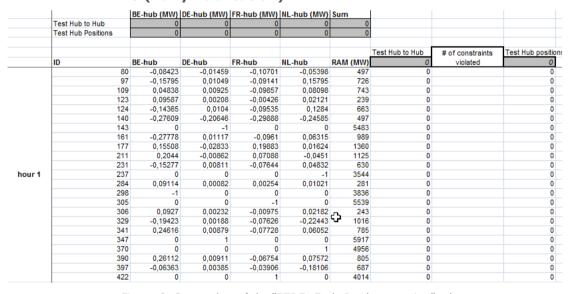


Figure 6: Screenshot of the "PTDFs Early Implementation" tab

Description:

This tab contains the presolved Flow-Based matrices of the selected day **before long term nominations** (24 FB matrices). In each FB matrix, one can find:

- one line per presolved CBCO² with an anonymous ID
- one column per hub with the PTDF³_{hub} value per CBCO
- one column with the Remaining Available Margin (RAM) per CBCO

These **FB matrices are not the final values** used as input network data for the market coupling process.

³ Power Transfer Distribution Factor

2

² Critical Branch Critical Outage

In addition, the two columns "Test Hub to Hub" and "Test Hub positions" indicate whether a CBCO is constrained with the respective set of "Hub to Hub exchanges" or "Hub positions" (0 means no violation and 1 means violation).

Publication time: 08.00 am (D-1)

1.2.2. Long Term Nominations (LTN)

Date:	2015-03-04							
				LT Nominatio	ns (in MW)			
Hour	BE-NL	NL-BE	DE-NL	NL-DE	BE-FR	FR-BE	FR-DE	DE-FR
1	0	52	758	0	0	612	0	325
2	0	52	758	0	0	612	0	325
3	0	52	758	0	0	612	0	325
4	0	52	758	0	0	612	0	325
5	0	52	758	0	0	612	0	325
6	0	52	758	0	0	612	0	325
7	0	52	758	0	0	612	0	325
8	0	52	758	0	0	612	0	325
9	0	52	758	0	0	612	0	325
10	0	52	758	0	0	612	0	325
11	0	52	758	0	0	612	0	325
12	0	52	758	0	0	612	0	325
13	0	52	758	0	0	612	0	325
14	0	52	758	0	0	612	0	325
15	0	52	758	0	0	612	0	325
16	0	52	758	0	0	612	0	325
17	0	52	758	0	0	612	0	325
18	0	52	758	0	0	612	0	325
19		52	758	0	0	612	0	325
20	0	52	758	0	0	612	0	325
21	0	52	758	0	0	612	0	325
22	0	52	758	0	0	612	0	325
23	0	52	758	0	0	612	0	325
24	0	52	758	0	0	612	0	325

Figure 7: Screenshot of the "LTN" tab

Description:

The first column indicates the hour of the nomination (24 lines overall). The next eight columns represent the nominated capacity in MW per border in the two directions.

Publication time: 10.30 am (D-1)

1.2.3. PTDFs

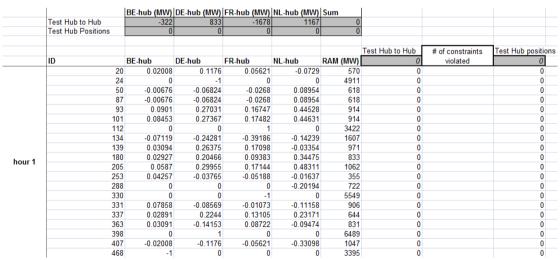


Figure 8: Screenshot of the "PTDFs" tab

Description:

This tab contains the presolved Flow-Based matrices of the selected day **following long term nominations** (24 FB matrices). In each FB matrix, one can find:

- one line per presolved CBCO with an anonymous ID (this ID will be updated two days after the delivery date with the fixed ID label see chapter 2.15)
- one column per hub with the PTDF_{hub} value per CBCO
- one column with the Remaining Available Margin (RAM) per CBCO

These **FB matrices are the final values** used as input network data for the market coupling process.

In addition, the two columns "Test Hub to Hub" and "Test Hub positions" indicate whether a CBCO is constrained with the respective set of "Hub to Hub exchanges" or "Hub positions" (0 means no violation and 1 means violation).

Publication time: 10.30 am (D-1)

1.2.4. ATCs

e:	2014-10-22					in only after		90		
	ED E0	EO ED	DICA DE	DE DIZA	ATC (in I		ATIT	IT AT	OLIT	IT OI
Hour	FR-ES	ES-FR	DK1-DE	DE-DK1	FR-IT	IT-FR	AT-IT	IT-AT	SI-IT	IT-SI
1	7040	24468	43606	7163	2345	2500	300	350	300	35
2	6513	23632	40841	6469	7893	2500	300	350	300	35
3	6076	23302	40004	6030	900	2500	300	350	300	35
4	5889	23167	36809	5994	398	2500	300	350	300	35
5	5812	23041	35299	5909	383	2500	300	350	300	35
6	5747	22429	34982	5841	3000	2500	300	350	300	35
7	5898	22714	35575	5932	8976	2500	300	350	300	35
8	5864	25435	36131	6364	6758	2500	300	350	300	35
9	6243	26670	37982	6993	789	2500	300	350	300	35
10	6665	27460	39642	7540	678	2500	300	350	300	35
11	6971	27793	42063	8116	308	2500	300	350	300	35
12	7198	28632	43195	8431	936	2500	300	350	300	35
13	7229	28369	44788	8587	8907	2500	300	350	300	35
14	7065	27125	43417	8598	3647	2500	300	350	300	35
15	6937	27365	41278	8526	7464	2500	300	350	300	35
16	6916	26891	39832	8430	7464	2500	300	350	300	35
17	7069	26909	39748	8841	7464	2500	300	350	300	35
18	7816	30975	43254	9309	7464	2500	300	350	300	35
19	7971	31704	47895	9362	7464	2500	300	350	300	35
20	7890	30992	49485	9200	7464	2500	300	350	300	35
21	7593	29816	48078	8947	7464	2500	300	350	300	35
22	7301	28062	45541	8743	7464	2500	300	350	300	35
23	7568	28150	45130	8208	7464	2500	300	350	300	
23	7479	25870	45130	7295	7464	2500	300	350	300	35 35

Figure 9: Screenshot of the "ATCs" tab

Description:

Each row represents one market coupling hour (24 rows). After the first column "hour", the next ten columns gather the ATC values in MW for the two directions of the following borders made available for the day-ahead market coupling:

- FR-ES
- DK1-DE
- FR-IT
- AT-IT
- SI-IT

1.2.5. Max net pos

	Prog	BE	DE	FR	NL	hour	n	nin BE	max BE	Min DE	Max DE	Min FR	Max FR	Min NL	Max NL
	MinBE	-3395					1	-3395	5108	-4911	6489	-5549	3422	-3575	4429
	MaxBE	5108					2	-3395	5113	-4911	6489	-5479	3422	-3291	4535
	MinDE		-4911				3	-3395	5281	-4911	6489	-5280	3445	-3939	4535
hour 1	MaxDE		6489				4	-3395	5330	-4911	6195	-5280	4904	-3156	4505
nour r	MinFR			-5549			5	-3395	5444	-4939	5089	-5280	4915	-3555	4535
	MaxFR			3422			6	-3395	5432	-4911	6266	-5280	5095	-3965	4497
	MinNL				-3575		7	-3395	5124	-4911	5972	-5280	5266	-3965	4404
	MaxNL				4429		8	-3395	4866	-4911	6375	-5280	3947	-3965	3963
	MinBE	-3395					9	-3395	4870	-4911	6394	-5280	4347	-3965	3329
	MaxBE	5113					10	-3395	4829	-4911	6152	-5280	4607	-3965	3282
	MinDE		-4911				11	-3395	4813	-4911	6187	-5280	4632	-3965	3256
hour 2	MaxDE		6489				12	-3395	4768	-4911	5706	-5280	3917	-3965	3227
nour z	MinFR			-5479			13	-3395	4829	-4911	5399	-5280	3621	-3965	3803
	MaxFR			3422			14	-3395	4815	-4911	5180	-5280	3621	-3965	3778
	MinNL				-3291		15	-3395	4833	-4911	5308	-5280	3921	-3965	3807
	MaxNL				4535		16	-3395	4862	-4911	5526	-5280	3921	-3965	3383
	MinBE	-3395					17	-3395	4825	-4911	5263	-5280	3921	-3965	2934
	MaxBE	5281					18	-3395	4808	-4911	6489	-5280	3921	-3965	3315
	MinDE		-4911				19	-3395	4765	-4911	6489	-5280	3921	-3965	3326
hour 3	MaxDE		6489				20	-3395	4801	-4911	6489	-5280	3422	-3965	3323
nour 3	MinFR			-5280			21	-3395	4932	-4911	6489	-5280	3422	-3965	3442
	MaxFR			3445			22	-3395	5059	-4911	6489	-5280	3921	-3965	3639
	MinNL				-3939		23	-3395	5103	-4911	6489	-5280	3900	-3965	3771
	MaxNL				4535		24	-3395	5248	-4911	6489	-5280	3697	-3872	4535

Figure 10: Screenshot of the "Max net pos" tab

Description:

These tables describe the minimum and maximum CWE net positions in MW of each hub for each hour of the day. These indicators are extracted from the vertices of the final Flow-Based domain given for market coupling. Please note that these min/max net positions depend on the net positions of the other hubs i.e. they are not simultaneously feasible.

Publication time: 10.30 am (D-1)

1.2.6. Max exchanges (Maxbex)

hour	Max BE=>DE	Max BE=>FR	Max BE=>NL	Max DE=>BE	Max DE=>FR	Max DE=>NL	Max FR=>BE	Max FR=>DE	Max FR=>NL	Max NL=>BE	Max NL=>DE	Max NL=>FR
1	4425	3759	3368	3294	5549	2992	3395	3422	3422	2502	3917	3290
2	4245	3889	2983	3395	5479	3066	3395	3219	3291	2669	4151	3507
3	4054	4038	3617	3395	5280	3417	3395	3072	3445	2890	4312	3867
4	3253	4285	2670	3395	5280	3156	3395	2495	3012	2903	4412	3825
5	3259	4284	3060	3395	5089	3493	3395	2491	3156	2910	4363	3834
6	3532	4222	3576	3395	5280	3415	3395	2665	3374	2910	3672	3814
7	4484	3809	3880	3395	5280	3439	3395	3376	3965	2683	3780	3478
8	4141	3500	3788	3395	5280	3645	3395	2995	3525	2191	3392	2993
9	4291	3549	3846	3343	5280	3620	3395	3689	3965	2164	2693	3034
10	4120	3407	3965	3098	5280	3493	3395	4042	3965	2060	2693	2871
11	4033	3325	3965	3001	5280	3376	3395	4348	3965	1943	2704	2691
12	3851	3174	3965	2766	5280	3088	3395	3917	3917	1853	2732	2601
13	3765	3104	3965	2586	5280	2807	3395	3621	3621	1841	3501	2585
14	3741	3094	3965	2548	5056	2701	3395	3621	3621	1830	3454	2596
15	3731	3083	3965	2561	5280	2863	3395	3921	3921	1839	3513	2587
16	3818	3144	3965	2607	5280	3045	3395	3921	3921	1836	2942	2587
17	3851	3192	3965	2787	5131	2809	3395	3921	3921	1867	2695	2591
18	4021	3339	3965	3100	5280	3326	3395	3921	3921	2162	2691	3011
19	4070	3376	3937	3177	5280	3351	3395	3921	3921	2087	2710	2897
20	4143	3439	3894	3100	5280	3237	3395	3422	3422	2042	2719	2824
21	4229	3509	3965	3131	5280	3008	3395	3422	3422	2196	2741	3035
22	4373	3633	3965	3368	5280	3074	3395	3921	3921	2458	2762	3398
23	4312	3582	3965	3163	5280	2722	3395	3900	3648	2501	2814	3415
24	4472	3705	3872	3058	5280	2757	3395	3333	3697	2611	3850	3583

Figure 11: Screenshot of the "Max exchanges (Maxbex)" tab

Description:

Each row represents one market coupling hour (24 rows). After the first column "hour", the next twelve columns gather the maximum bilateral exchanges between two CWE hubs in MW with the assumption that the other net positions are null. These indicators are calculated from the final Flow-Based domain given to the day-ahead market coupling.

For instance: Max BE=> DE is the maximum exchange feasible from BE to DE within the Flow-Based domain given to the power exchanges, with $NP_{FR} = NP_{NL} = 0MW$.

1.2.7. Shadow Auction ATC

e:	2015-03-04							
			Sha	adow Auction	ATC (in MW))		
Hour	BE-NL	NL-BE	DE-NL	NL-DE	BE-FR	FR-BE	FR-DE	DE-FR
1	954	924	2228	2604	1401	1538	2878	12
2	1071	950	2159	2698	1482	1588	2784	13
3	1163	919	2209	2703	1533	1529	2779	12
4	1281	1066	2262	2800	1635	1713	2682	16
5	1176	1140	1694	2822	1565	1791	2557	17
6	1081	1022	2462	2724	1490	1684	2758	15
7	958	1227	2111	2470	1404	1939	2574	15
8	926	850	689	2219	1414	1634	2385	9
9	1136	727	952	2117	1313	2285	1679	7
10	1138	727	2203	2117	1316	2628	1714	8
11	1132	729	1416	2118	1333	2821	1692	10
12	1044	735	614	2405	1320	1987	2526	6
13	1261	737	615	2526	1322	1996	2518	6
14	1225	738	615	2850	1323	1996	2518	6
15	1173	735	614	2870	1318	1996	2518	6
16	1077	853	681	2781	1427	2013	2500	7
17	1019	957	1642	2548	1450	1823	2690	10
18	887	983	1498	2367	1351	2014	2499	9
19	840	1064	867	2165	1316	2103	2410	7
20	876	936	1799	2322	1343	1916	2597	9
21	907	898	832	2434	1366	1802	2711	7
22	918	1010	928	2501	1375	1996	2518	8
23	853	949	831	2228	1326	1996	2518	7
24	866	1129	1924	2276	1336	1996	2518	9

Figure 12: Screenshot of the "Shadow Auction ATC" tab

Description:

Each row represents one market coupling hour (24 rows overall). The eight next columns represent the ATC for Shadow Auctions in MW per border in the two directions. These ATCs are calculated from the Final Flow-Based domain and may be used as fallback in case of a market decoupling situation.

2 Post-coupling operational data (D-1)

2.1. Net Position

Date:	2014-10-12		ata publica	tion in this s
	Interr	nal CWE Net P	osition (in N	/W)
Hour	BE	DE	FR	NL
1	7040	-24468	10265	7163
2	2 6513	27859	-40841	6469
3	3 10672	23302	-40004	6030
4	4 -5889	-23167	35050	-5994
5	5 -5812	35202	-35299	5909
6	5 -5747	-22429	34017	-5841
7	7 6929	22714	-35575	5932
8	-5864	-25435	37663	-6364
9	9 -6243	37232	-37982	6993
10	-6665	-27460	41665	-7540
11	1 6971	26976	-42063	8116
12	2 -6132	-28632	43195	-8431
13	7229	46146	-44788	-8587
14	4 -7065	-27125	28417	5773
15	-6937	39689	-41278	8526
16	-6916	-26891	42237	-8430
17	7 7069	23838	-39748	8841
18	-7816	-30975	29482	9309
19	9 7971	-31704	33095	-9362
20	-7890	-30992	48082	-9200
21	1 6929	22714	-35575	5932
22	2 -5864	-25435	37663	-6364
23	-6243	37232	-37982	6993
24	4 -6665	-27460	41665	-7540

Figure 13: Screenshot of the "Net Position" tab

Description:

Each row represents one market coupling hour. After the first column "hour", the next four columns indicate the CWE net positions in MW which were computed by the market coupling algorithm. In other words: the CWE net positions respecting the FB domain.

Publication time: 1.00 pm (D-1)

2.2. Allocated Capacities

ate:	2015-03-30																	
	T							В	lateral Excha	nges (in MW)							
Hour	FR-ES	ES-FR	DK1-DE	DE-DK1	BE-NL	NL-BE	DE-NL	NL-DE	BE-FR	FR-BE	FR-DE	DE-FR	FR-IT	IT-FR	AT-IT	IT-AT	SI-IT	IT-SI
	1 0	24468	43606	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
- 1	2 0	23632	40841	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
	3 0	23302	40004	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
	1 0	23167	36809	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
	5 0	23041	35299	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
- (5 0	22429	34982	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
	7 0	22714	35575	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
	3 0	25435	36131	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
	0	26670	37982	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
10	0	27460	39642	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
11	1 0	27793	42063	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
12	2 0	28632	43195	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
13	3 0	28369	44788	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
14	1 0	27125	43417	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
15	5 0	27365	41278	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
16	5 0	26891	39832	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
17	7 0	26909	39748	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
18	3 0	30975	43254	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
19	0	31704	47895	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
20	0	30992	49485	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
2	1 0	29816	48078	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
22	2 0	28062	45541	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	
2		28150	45130	0	1234	0	4321	o o	1234	0	4321	0	1234	0	4321	0	1234	
24		25870	47515	0	1234	0	4321	0	1234	0	4321	0	1234	0	4321	0	1234	

Figure 14: Screenshot of the "Allocated Capacities" tab

Description:

Each row represents one market coupling hour. After the first column "hour", the next eighteen columns indicate the capacity allocated by the market coupling algorithm in MW in the two directions for the following borders:

- FR-ES
- DK1-DE
- BE-NL
- DE-NL
- BE-FR
- FR-DE
- FR-IT
- AT-IT

• SI-IT

For the exchanges in the CWE region, those allocated capacities are computed from the CWE net positions with the so-called 'bilateral exchange computation' (BEC) under the constraint of remaining intuitive. For the other borders, they come from the post-processing of the Euphemia algorithm (flow calculation).

Publication time: 1.00 pm (D-1)

2.3. Price Spread

									Price Spread	in #/MM/h)								
lour	FR-ES	ES-FR	DK1-DE	DE-DK1	BE-NL	NL-BE	DE-NL	NL-DE	BE-FR	FR-BE	FR-DE	DE-FR	FR-IT	IT-FR	AT-IT	IT-AT	SI-IT	IT-SI
1	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
2	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
3	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
4	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
5	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
6	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
7	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
8	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
9	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
10	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
11	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
12	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
13	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
14	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
15	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
16	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
17	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
18	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
19	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
20	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
21	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
22	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
23	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	
24	10	-10	5	-5	0	0	12	-12	4	-4	6	-6	12	-12	4	-4	6	

Figure 15: Screenshot of the "Price Spread" tab

Description:

Each row represents one market coupling hour. After the first column "hour", the next eighteen columns indicate the market price spread in €/MWh for the two directions of the following borders:

- FR-ES
- DK1-DE
- BE-NL
- DE-NL
- BE-FR
- FR-DE
- FR-IT
- AT-IT
- SI-IT

2.4. Intraday ATC

Date:	2015-03-04												
	Intraday ATC (in MW)												
Hour	BE-NL	NL-BE	DE-NL	NL-DE	BE-FR	FR-BE	FR-DE	DE-FR					
1	931	850	1903	1956	657	1650	4693	968					
2	998	818	2084	1910	657	1575	4935	1280					
3	1058	775	2306	1903	650	1521	4894	1270					
4	1191	934	3112	1843	800	1709	4535	1341					
5	1062	996	2760	1621	719	1797	4293	1321					
6	919	833	3505	1528	593	1627	4534	1196					
7	854	880	1827	1348	605	1960	5096	848					
8	648	761	341	1533	1042	1588	5602	373					
9	1538	418	247	2238	542	2879	4027	122					
10	1513	591	400	1959	626	2728	3945	197					
11	1700	309	190	2354	436	2854	3853	92					
12	2089	0	0	3081	0	2817	3479	0					
13	2299	0	0	3249	0	2818	3480	0					
14	2310	0	0	3373	0	2823	3475	0					
15	2262	0	0	3423	0	2826	3419	0					
16	2138	0	0	3389	0	2932	3418	0					
17	1581	599	350	2520	613	2831	3769	174					
18	2344	0	0	3696	0	2567	3535	0					
19	1704	0	0	3426	0	3137	3401	0					
20	1540	275	160	2424	375	3064	3974	79					
21	1962	0	0	3322	0	2915	3627	0					
22	1954	0	0	3484	0	2923	3750	0					
23	1829	0	0	3225	0	2885	3654	0					
24	915	748	560	2080	554	2616	4164	252					

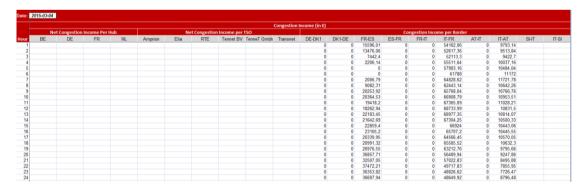
Figure 16: Screenshot of the "Intraday ATC" tab

Description:

Each row represents one market coupling hour. After the first column "hour", the next eight columns indicate the remaining capacity left after the day-ahead capacity allocation, expressed as **initial** ID ATCs in MW for the two directions of the CWE borders. Please note that these values are not the final values for the intraday market and therefore will not be updated throughout the day.

Publication time: 1.00 pm (D-1)

2.5. Congestion Income



Description:

This tab gathers the net congestion income per hub and per TSO for the CWE region, and the gross congestion income (without UIOSI taken into account) for the non-CWE borders.

Publication time: 7.00 pm (D-1)

3 Additional data publication (D+2)

3.1. Aggregated D2CF data

Date:	2015-03-03	Т	he data for 20	015-03-03 has	been retriev	ed successfu	illy.					
	D2CF (in MW)											
	Vertical load				Generation				Best Forecast Net Positions			
TimeStamps	BE	DE	FR	NL	BE	DE	FR	NL	BE	DE	FR	NL
20150303 0	7034	21574	45295	7027	5657	35852	51453	6025	-1599	12337	5256	-1137
20150303 1	6687	21094	42338	6689	5102	34853	48570	5465	-1800	11987	5345	-1342
20150303 2	6494	19970	41678	6638	4852	32143	47867	5454	-1851	10612	5304	-1290
20150303 3	7074	21102	38247	6711	5262	30974	46829	5654	-2018	8395	7609	-1157
20150303 4	6735	23315	38237	6967	5351	32144	47646	5964	-1585	7449	8436	-1090
20150303 5	7383	26243	40595	7606	5900	37317	48238	6682	-1692	9489	6684	-1028
20150303 6	8573	33467	46244	8809	6375	43962	55443	7980	-2423	8793	8192	-956
20150303 7	9211	36998	52343	10012	7131	47403	61243	9042	-2317	8571	7938	-1101
20150303 8	9206	35481	54657	11101	7730	46539	63006	9701	-1712	9203	7392	-1554
20150303 9	9176	33530	55717	11437	7968	46160	64074	9980	-1444	10719	7374	-1625
20150303_10	8984	31717	55600	11290	7681	45062	63787	9987	-1535	11367	7225	-1469
20150303 11	8951	30820	55209	10973	7743	43793	63582	10032	-1439	10878	7403	-1106
20150303 12	8595	29675	54566	10629	7360	42309	62923	9902	-1460	10691	7395	-878
20150303 13	8623	31131	53447	10590	7019	42940	62312	9993	-1829	9997	7900	-747
20150303_14	8585	32559	52259	10447	7027	43282	61187	10015	-1783	8979	7960	-575
20150303_15	8653	34353	50617	10467	7008	44773	60635	10027	-1869	8719	9097	-585
20150303_16	8754	36025	49934	10597	6977	45419	60228	9939	-2003	7847	9374	-801
20150303_17	9146	39526	50806	10493	7023	48061	60780	10026	-2357	7161	9049	-603
20150303 18	9756	42746	54522	10476	7710	50692	62046	10047	-2297	6679	6578	-561
20150303_19	9751	42782	59016	10529	7976	50271	66070	10170	-2036	6205	6038	-498
20150303_20	9251	38532	56685	10024	7567	49332	64558	9856	-1941	9130	6902	-307
20150303_21	8764	38800	53116	9301	7031	47360	62125	10120	-1971	7127	8099	695
20150303_22	8924	36065	52734	8580	7070	44029	61687	9497	-2092	6641	8054	803
20150303_23	8686	31957	55116	7930	6741	38375	61984	8506	-2178	5234	5972	468

Figure 17: Screenshot of the "D2CF" tab

Description:

For capacity calculation purposes, each CWE TSO generates one individual grid model per hour. This tab publishes the aggregated assumptions that are taken in the common and individual grid models for each market coupling hour:

- "Vertical load" is the load as seen from the transmission grid in MW in the Common Grid Model;
- "Generation" is the generation in MW in the Common Grid Model;
- "Best forecast net position" is the forecast of the overall balance of the countries in MW in the Individual Grid Models (please note that DE contains also the information of Denmark West (DK1) before merging into the Common Grid Model.

Publication time: D+2 (ex-post)

3.2. Refprog

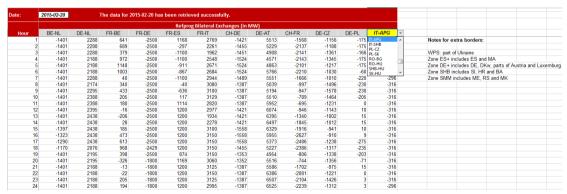


Figure 18: Screenshot of the "Refprog" tab

Description:

The "Refprog" are the reference bilateral exchanges used during the merging process of the Common Grid Model. They do not strictly correspond to the best forecast of the net positions.

Publication time: D+2 (ex-post)

3.3. All CBCO Fixed Label

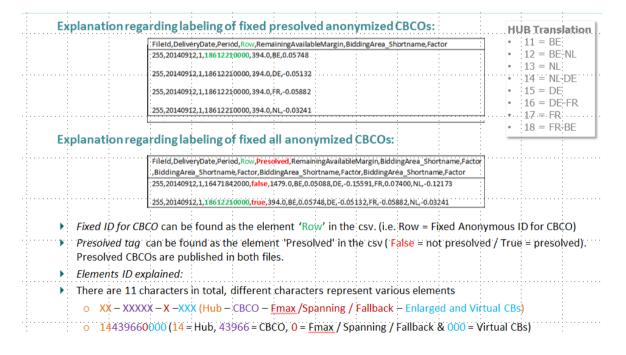
FileId D	eliveryDate Period	Row	Presolved	RemainingAvailableMargin BiddingArea_Shortname	Factor I	BiddingArea_Shortname	Factor BiddingArea_Shortname	Factor BiddingArea_Shortname	Factor
321	20141117	1 17794022000	FAUX	1738 BE	-0.01041 E	Œ	-0.06876 FR	-0.15327 NL	-0.0375
321	20141117	1 17794021000	FAUX	1738 BE	-0.01041 E	DE	-0.06876 FR	-0.15327 NL	-0.0375
321	20141117	1 17794020000	FAUX	1449 BE	-0.01041 E	DE	-0.06876 FR	-0.15327 NL	-0.0375
321	20141117	1 18325472000	FAUX	1520 BE	0.04673 E	Œ	0.11003 FR	0.16262 NL	0.06688
321	20141117	1 18325471000	FAUX	1520 BE	0.04673 E	DE	0.11003 FR	0.16262 NL	0.06688
321	20141117	1 18325470000	FAUX	1210 BE	0.04673 E	Œ	0.11003 FR	0.16262 NL	0.06688
321	20141117	1 18447132000	FAUX	1743 BE	0.04185 E	DE	0.18253 FR	0.30936 NL	0.10473
321	20141117	1 18447131000	FAUX	1718 BE	0.02231	Œ	0.10374 FR	0.19414 NL	0.05904
321	20141117	1 18447130000	FAUX	1358 BE	0.02231 E	DE	0.10374 FR	0.19414 NL	0.05904
321	20141117	1 17112902000	FAUX	1443 BE	0.0122	Œ	-0.0381 FR	-0.08932 NL	-0.01709
321	20141117	1 17112901000	FAUX	1244 BE	0.01151 E	DE	-0.03387 FR	-0.0853 NL	-0.01491
321	20141117	1 17112900000	FAUX	969 BE	0.01151	Œ	-0.03387 FR	-0.0853 NL	-0.01491
321	20141117	1 18913952000	FAUX	1785 BE	0.05952 E	DE	0.16255 FR	0.27154 NL	0.09673
321	20141117	1 18913951000	FAUX	1785 BE	0.05952 D	Œ	0.16255 FR	0.27154 NL	0.09673
321	20141117	1 18913950000	FAUX	1425 BE	0.05952 E	DE	0.16255 FR	0.27154 NL	0.09673
321	20141117	1 16979072000	FAUX	1004 BE	0.0358	DE	-0.15187 FR	0.08622 NL	-0.10107
321	20141117	1 16979071000	FAUX	1004 BE	0.0358 E	Œ	-0.15187 FR	0.08622 NL	-0.10107
321	20141117	1 16979070000	FAUX	822 BE	0.02059 E	DE	-0.09211 FR	0.0734 NL	-0.06399
321	20141117	1 17870832000	FAUX	1770 BE	-0.01072 E	Œ	-0.06961 FR	-0.15054 NL	-0.03823
321	20141117	1 17870831000	FAUX	1770 BE	-0.01072 E	DE	-0.06961 FR	-0.15054 NL	-0.03823
321	20141117	1 17870830000	FAUX	1481 BE	-0.01072 E	Œ	-0.06961 FR	-0.15054 NL	-0.03823
321	20141117	1 18461522000	FAUX	1483 BE	0.03147	DE	0.12729 FR	0.19529 NL	0.07378
321	20141117	1 18461521000	FAUX	1483 BE	0.03147	Œ	0.12729 FR	0.19529 NL	0.07378
321	20141117	1 18461520000	FAUX	1173 BE	0.03147	DE	0.12729 FR	0.19529 NL	0.07378
321	20141117	1 17616972000	FAUX	1650 BE	0.00584	DE	0.00778 FR	-0.0488 NL	0.00833
321	20141117	1 17616971000	FAUX	1364 BE	0.00584 E	DE	0.00778 FR	-0.0488 NL	0.00833
321	20141117	1 17616970000	FAUX	1089 BE	0.00584	DE	0.00778 FR	-0.0488 NL	0.00833
321	20141117	1 17589442000	FAUX	1504 BE	0.01158	DE	-0.0398 FR	-0.08391 NL	-0.01853
321	20141117	1 17589441000	FAUX	1218 BE	0.01158	DE	-0.0398 FR	-0.08391 NL	-0.01853
321	20141117	1 17589440000	FAUX	943 BE	0.01158	DE	-0.0398 FR	-0.08391 NL	-0.01853
321	20141117	1 17727032000	FAUX	1655 BE	-0.00862 E	DE	-0.07683 FR	-0.16576 NL	-0.04159
321		1 17727031000		1655 BE	-0.00862 E		-0.07683 FR	-0.16576 NL	-0.04159
321	20141117	1 17727030000	FAUX	1366 BE	-0.00862 E	Œ	-0.07683 FR	-0.16576 NL	-0.04159
321		1 16809682000		1516 BE	0.02142 E		-0.09027 FR	0.05144 NL	-0.06047

Figure 19: Screenshot of the "All CBCO Fixed Label" tab

Description:

This tab shows all the information about the CBCOs used for a particular date ("DeliveryDate") with a fixed label ("Row"). Each row gathers the features of one CBCO per hour:

- FileId: the identity number of the file;
- DeliveryDate: the corresponding Business Day;
- Period: the corresponding hour;
- Row: the fixed label of the CBCO;
- Presolved: if the value is TRUE then the corresponding CBCO constrains the FB domain (see PTDFs tab);
- RemainingAvailableMargin: the remaining available margin of the corresponding CBCO in MW;
- BiddingArea_Shortname: the bidding area of the following ptdf (Factor);
- Factor: the ptdf of the previous hub (BiddingArea_Shortname).



Publication time: D+2 (ex-post)

4 CASC Utility Tool Web Service

The web service can be accessed by 2 different URLs, each one with a different technology. The same methods with the same results can be called on each URL. The next section will explain each URL further.

4.1. ASMX Service

URL: http://utilitytool.casc.eu/CascUtilityWebService.asmx

WSDL: http://utilitytool.casc.eu/CascUtilityWebService.asmx?WSDL

This web service can be accessed by the following protocols: SOAP 1.1, SOAP 1.2, HTTP GET and HTTP POST.

For more information on using the ASMX, please visit the URL. This URL can also be used to query the data with a web browser for testing purposes.

4.2. SVC Service

URL: http://utilitytool.casc.eu/CascUtilityWCF.svc

WSDL: http://utilitytool.casc.eu/CascUtilityWCF.svc?singlewsdl

This web service can be accessed by the following protocols: SOAP 1.1 and SOAP 1.2.