



CWE MC external parallel run report



The CWE FB project has started the FB external parallel run in January 2013. At the request of the regulators, the CWE project proposes to publish the indicators described in this document on a bi-monthly basis.

The proposal of the CWE project is based on a subset of indicators given in the feasibility report as well as on the additional indicators requested by the regulators.

Indicators

The following text will contain the different indicators comparing the following market coupling models:
 ATCMC: ATC market coupling;
 FBMC: Flow Based market coupling;
 FBIMC: Flow Based Intuitive market coupling;
 Infinite: Market coupling under infinite ATC;

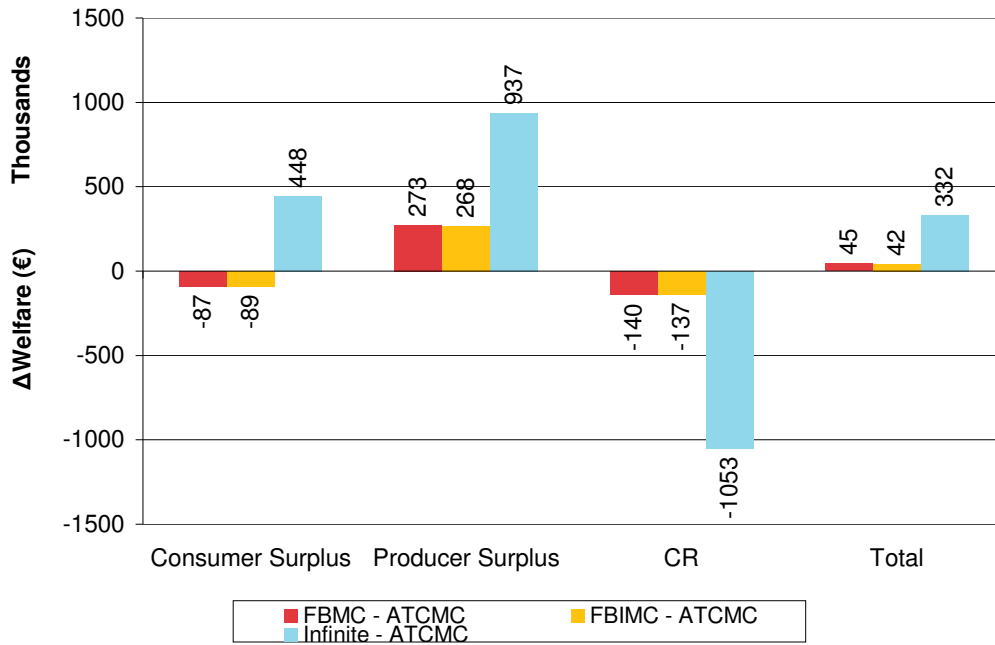
Dates included in this report

Week	Wed	Thu	Fri	Sat	Sun	Mon	Tue
27	03 Jul	04 Jul	05 Jul	06 Jul	07 Jul	08 Jul	09 Jul
28	10 Jul	11 Jul	12 Jul	13 Jul	14 Jul	15 Jul	16 Jul
29	17 Jul	18 Jul	19 Jul	20 Jul	21 Jul	22 Jul	23 Jul
30	24 Jul	25 Jul	26 Jul	27 Jul	28 Jul	29 Jul	30 Jul
31	31 Jul	01 Aug	02 Aug	03 Aug	04 Aug	05 Aug	06 Aug
32	07 Aug	08 Aug	09 Aug	10 Aug	11 Aug	12 Aug	13 Aug
33	14 Aug	15 Aug	16 Aug	17 Aug	18 Aug	19 Aug	20 Aug
34	21 Aug	22 Aug	23 Aug	24 Aug	25 Aug	26 Aug	27 Aug
35	28 Aug	29 Aug	30 Aug	31 Aug	01 Sep	02 Sep	03 Sep

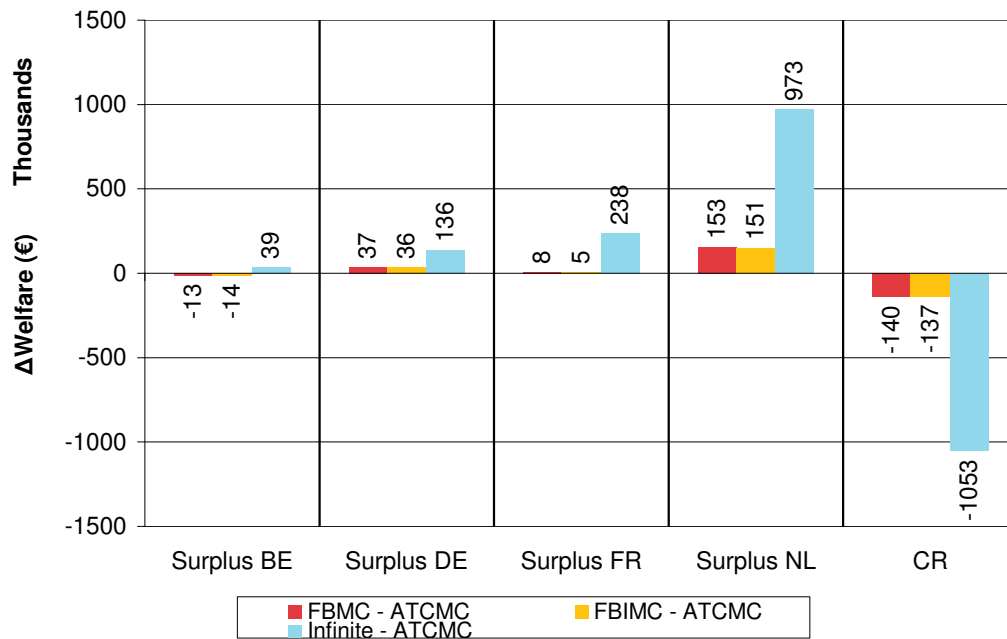


Day ahead market welfare

Daily average welfare difference (relative to ATC)

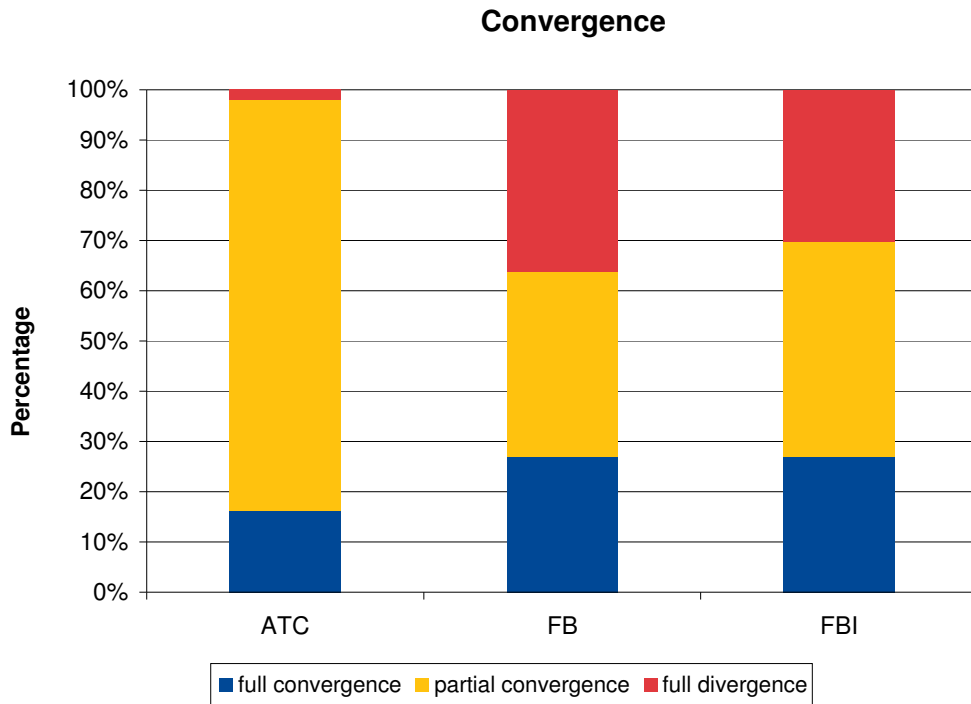


Daily average welfare difference (relative to ATC)





Price convergence



Convergence of price difference between areas in proportion to the number of situations (tolerance: 0.02 €/MWh)

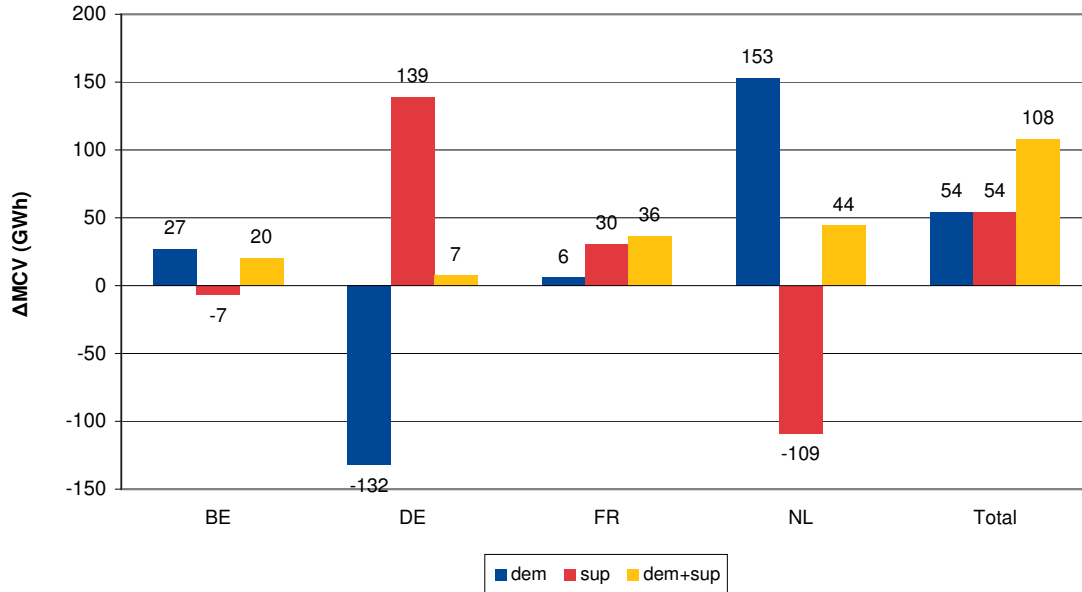
Note we distinguish three market clearing volume indicators:

dem: total accepted demand in an area

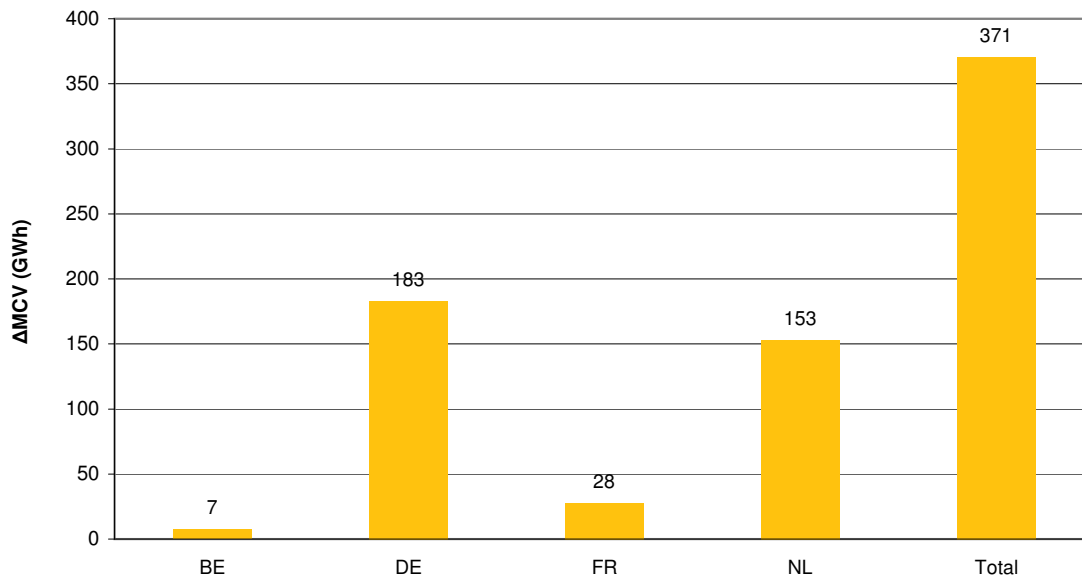
sup: total accepted supply in an area

mcv: the larger of total demand and supply in an area. The rationale is that the difference is the net position, i.e. additional supply from adjacent areas (import), or additional demand from adjacent areas (export).

ΔMCV (FBMC - ATCMC)

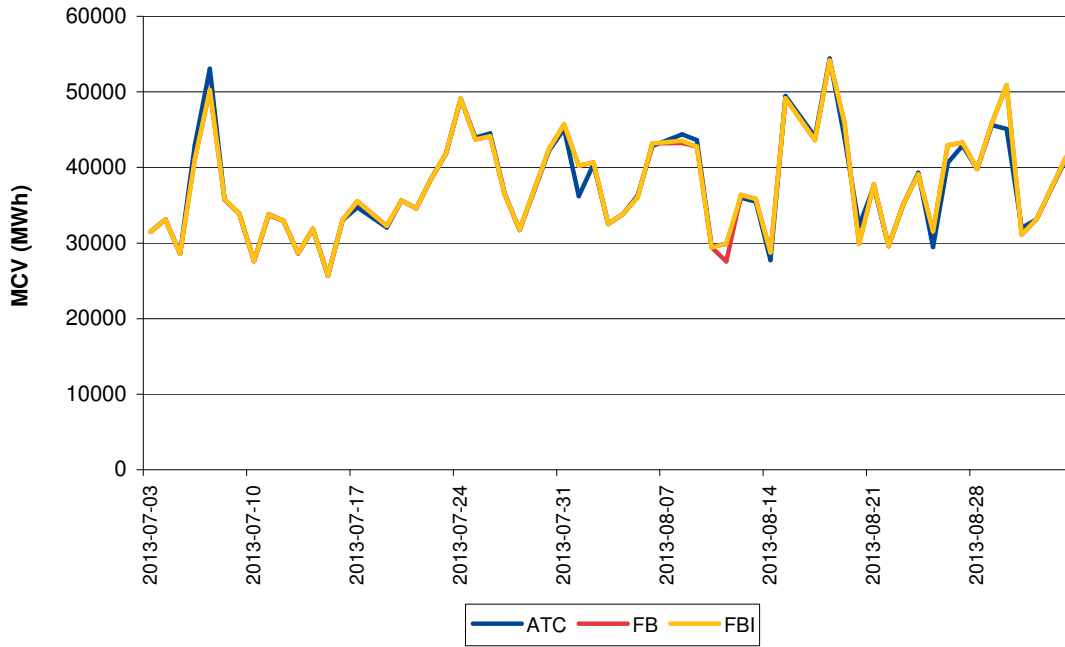


ΔMCV (FBMC - ATCMC)

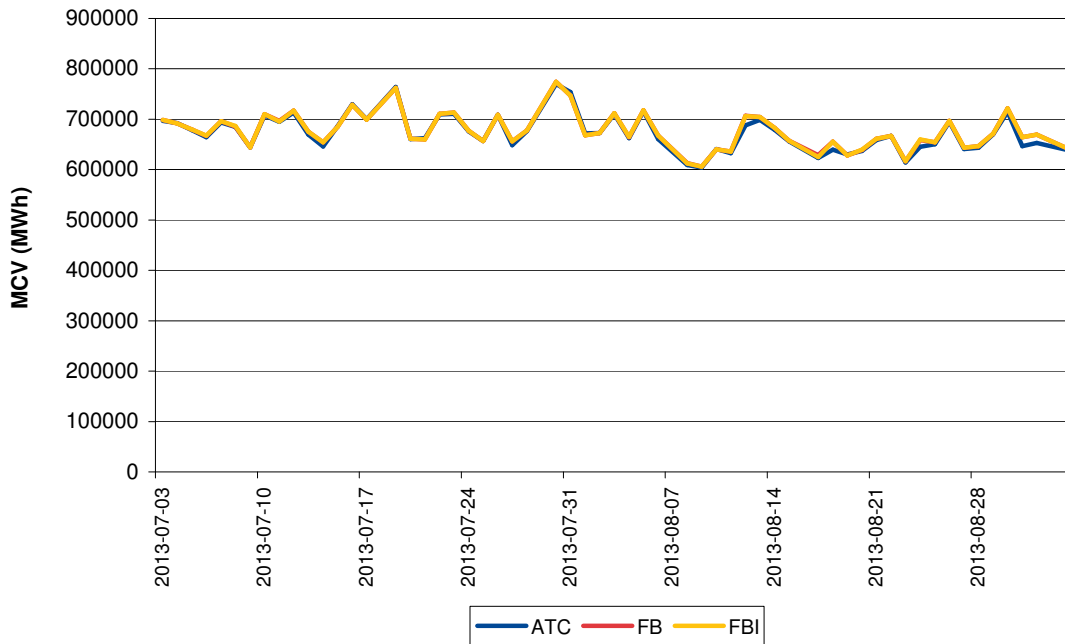




MCV - BE

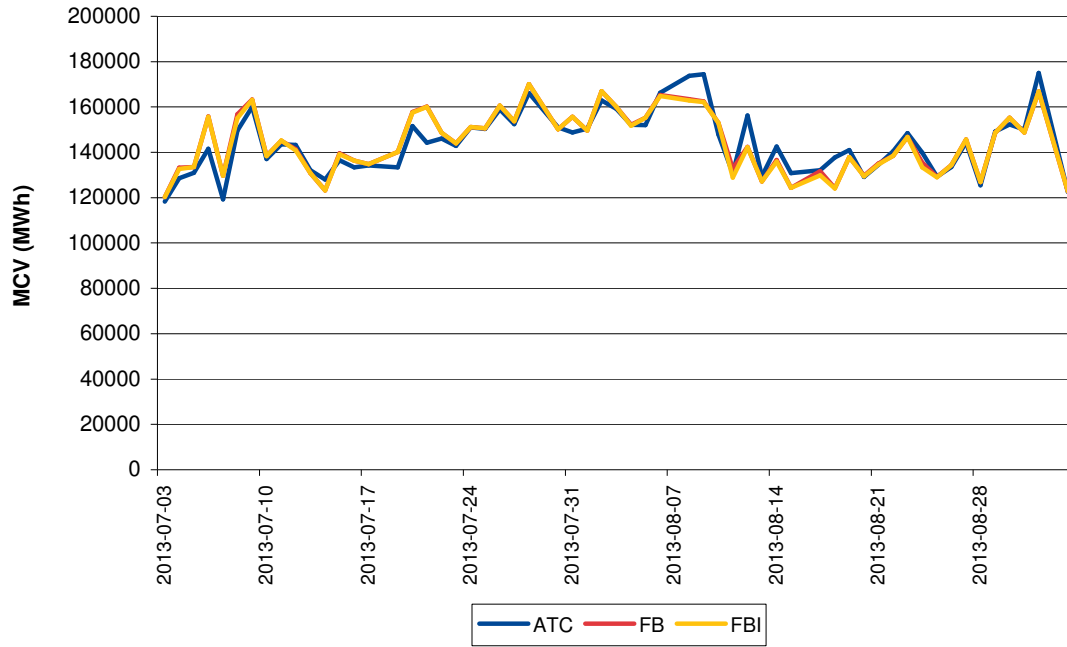


MCV - DE

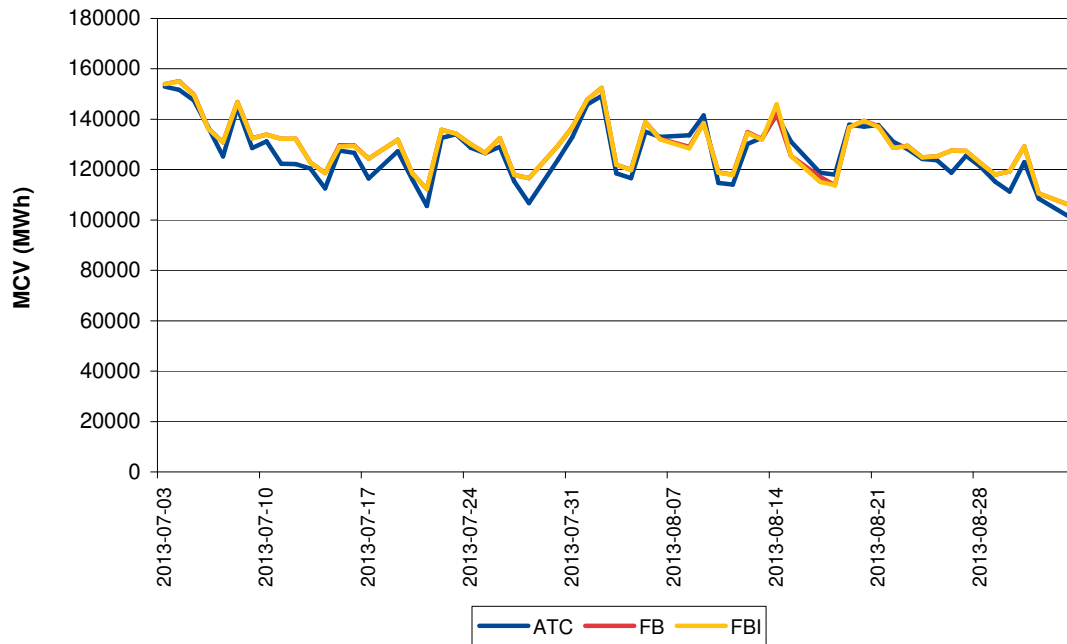




MCV - FR

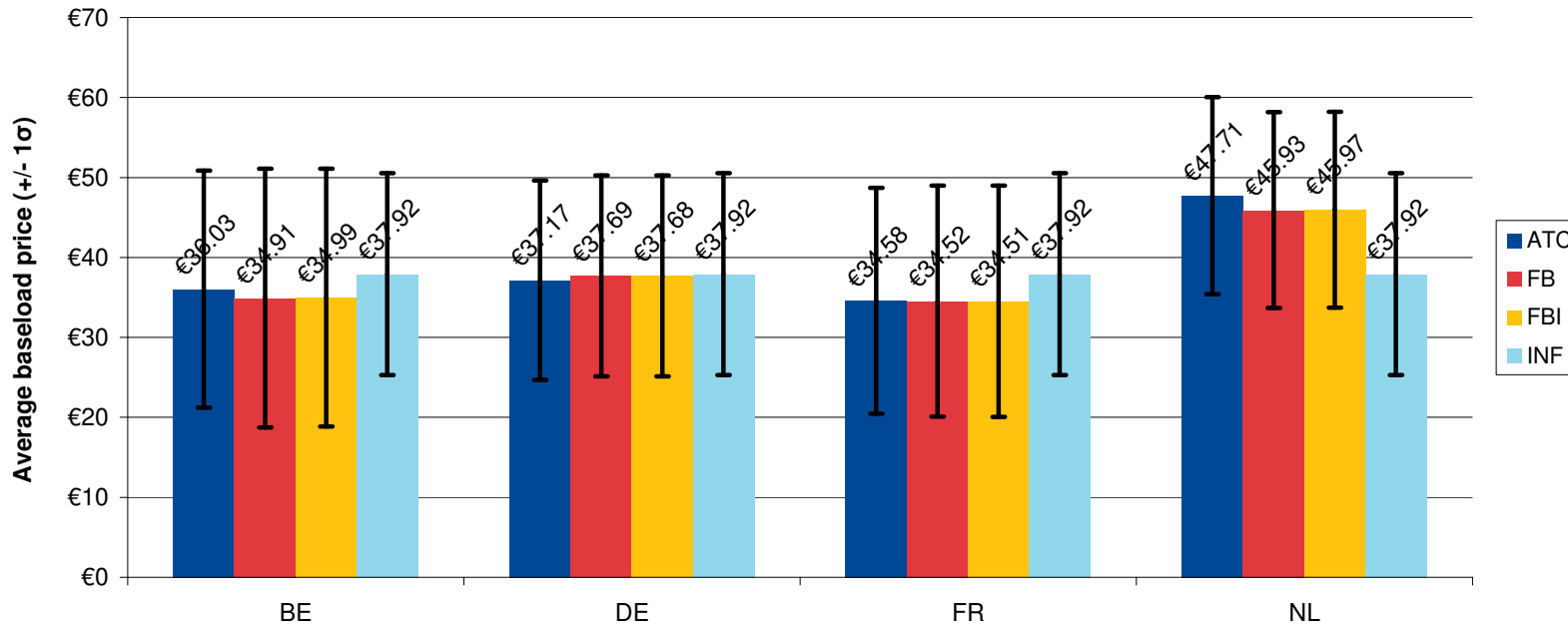


MCV - NL



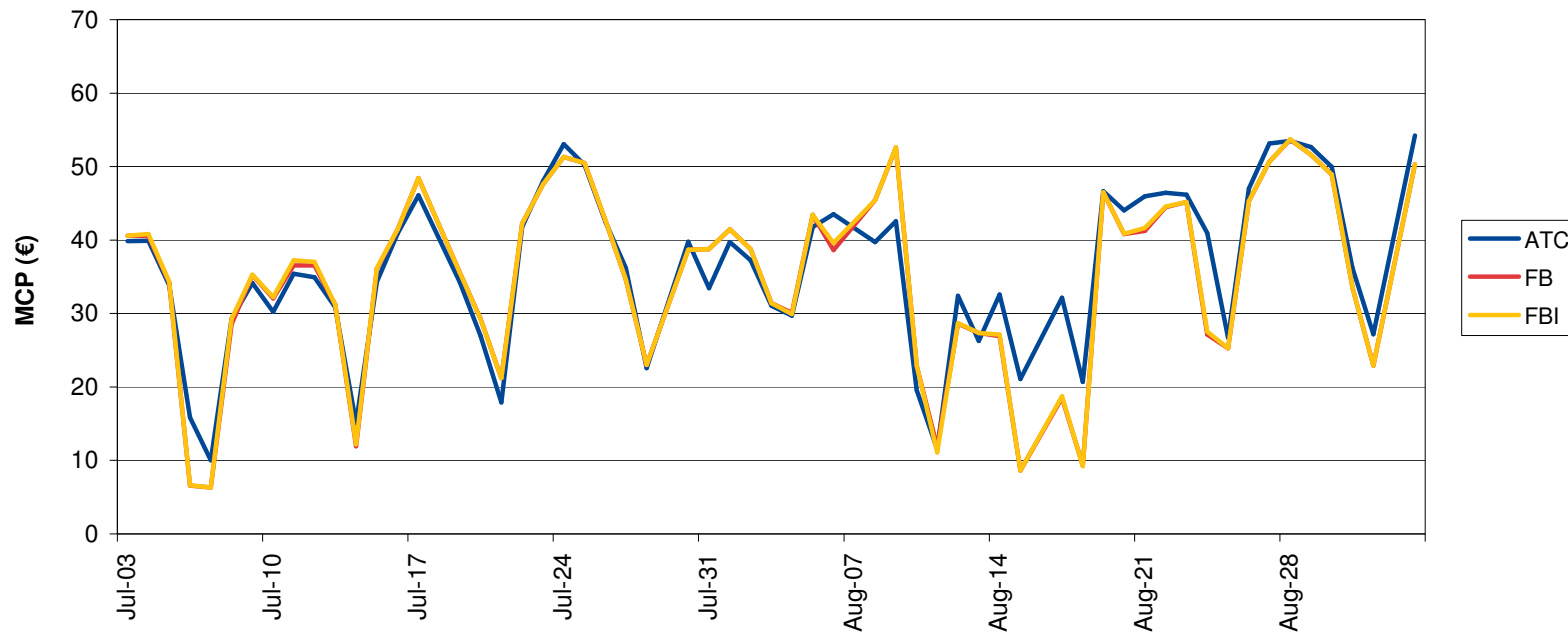


Average baseload price



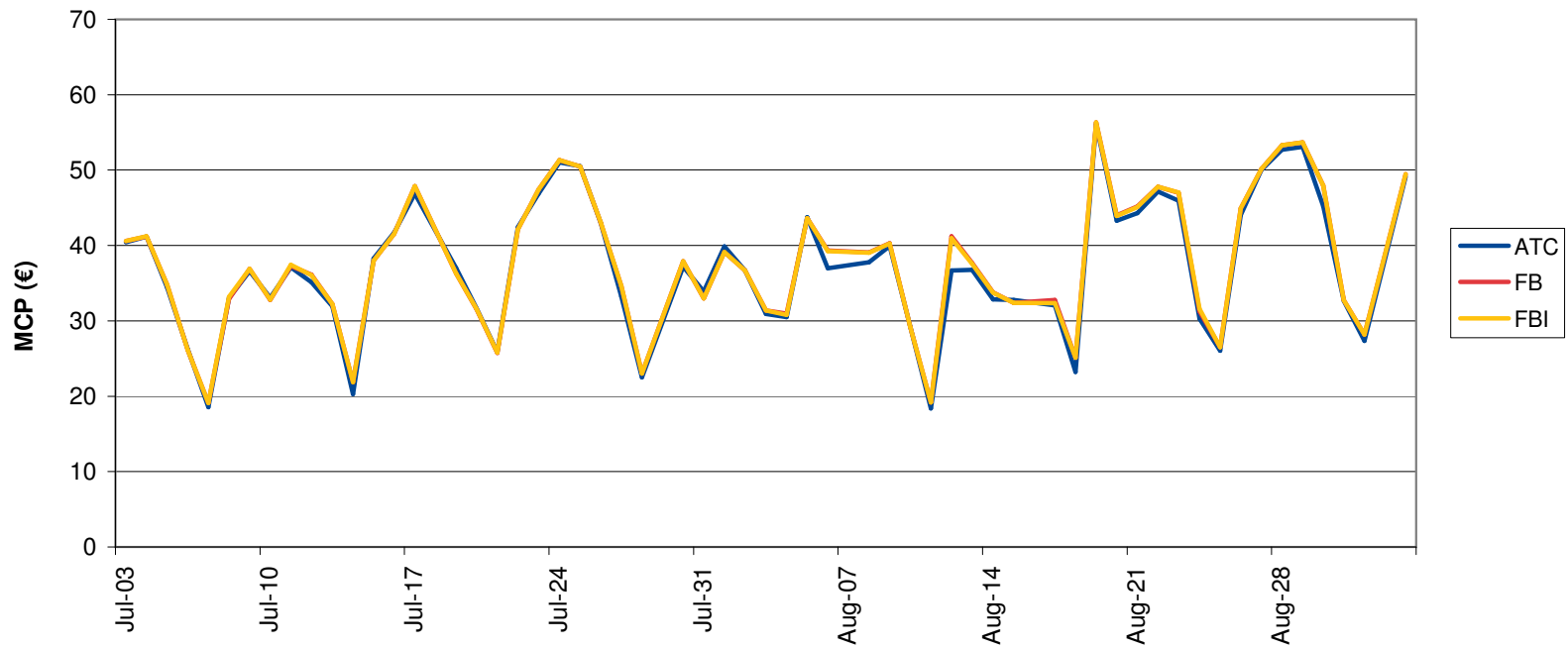


Baseload price - BE



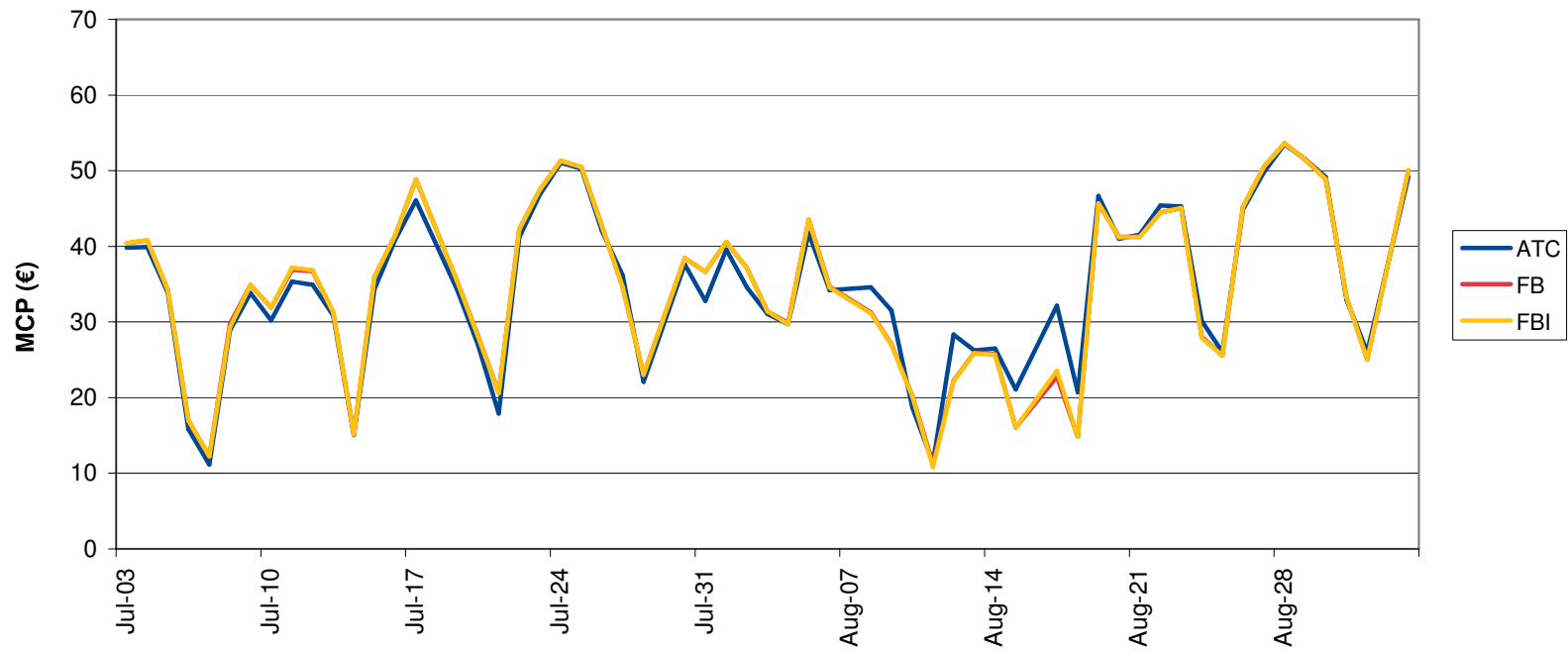


Baseload price - DE



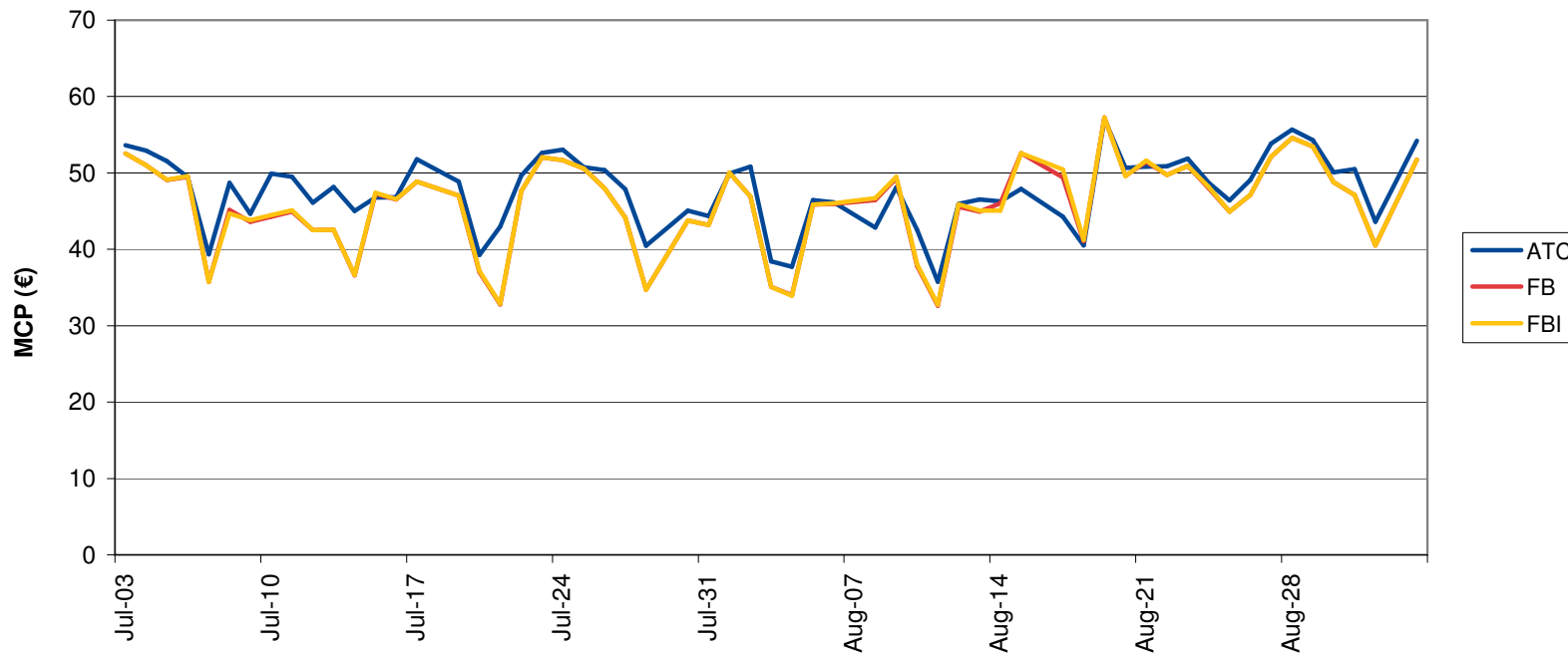


Baseload price - FR



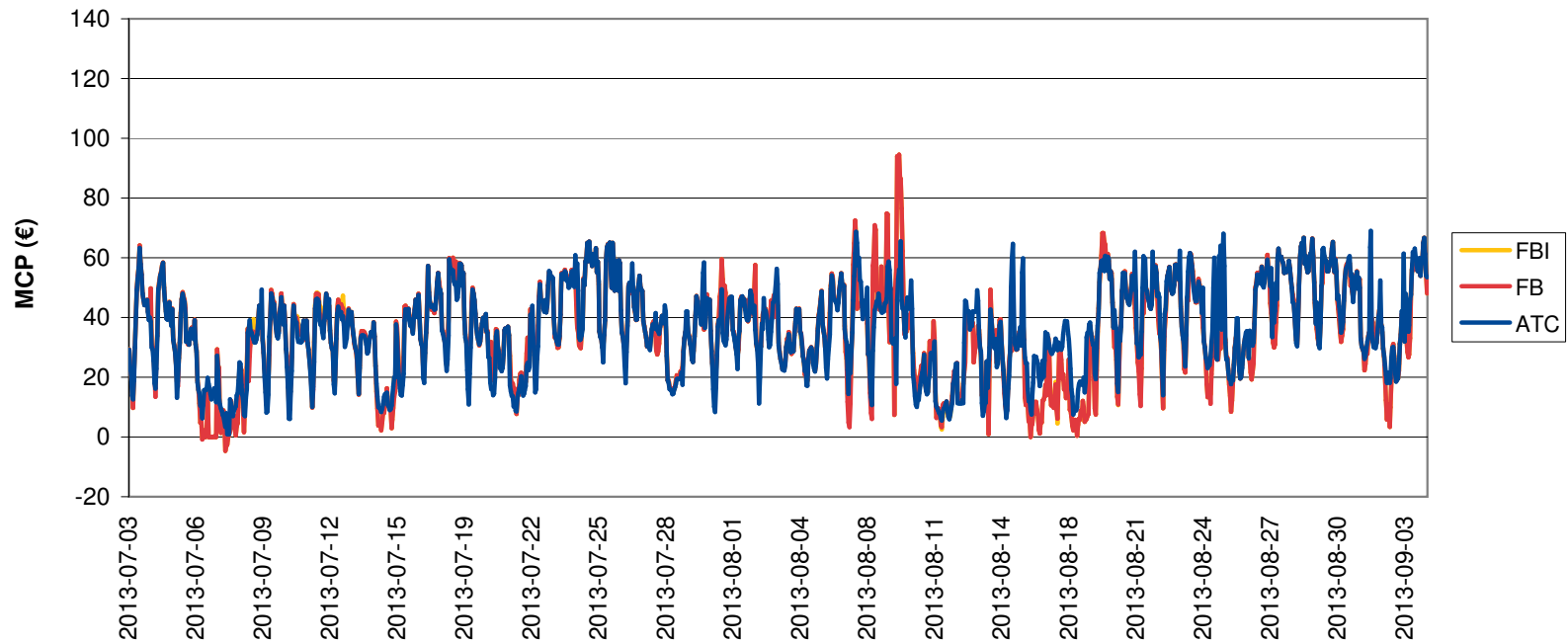


Baseload price - NL



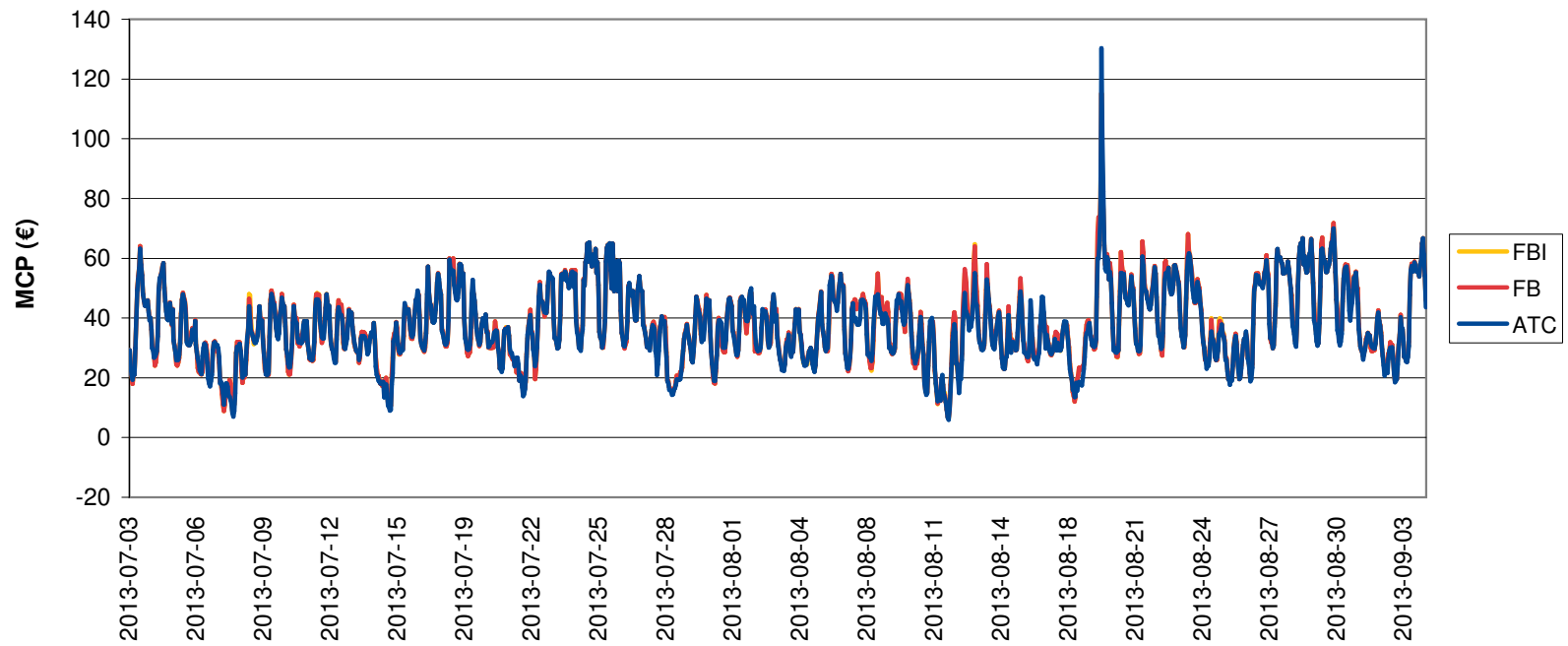


MCP - BE



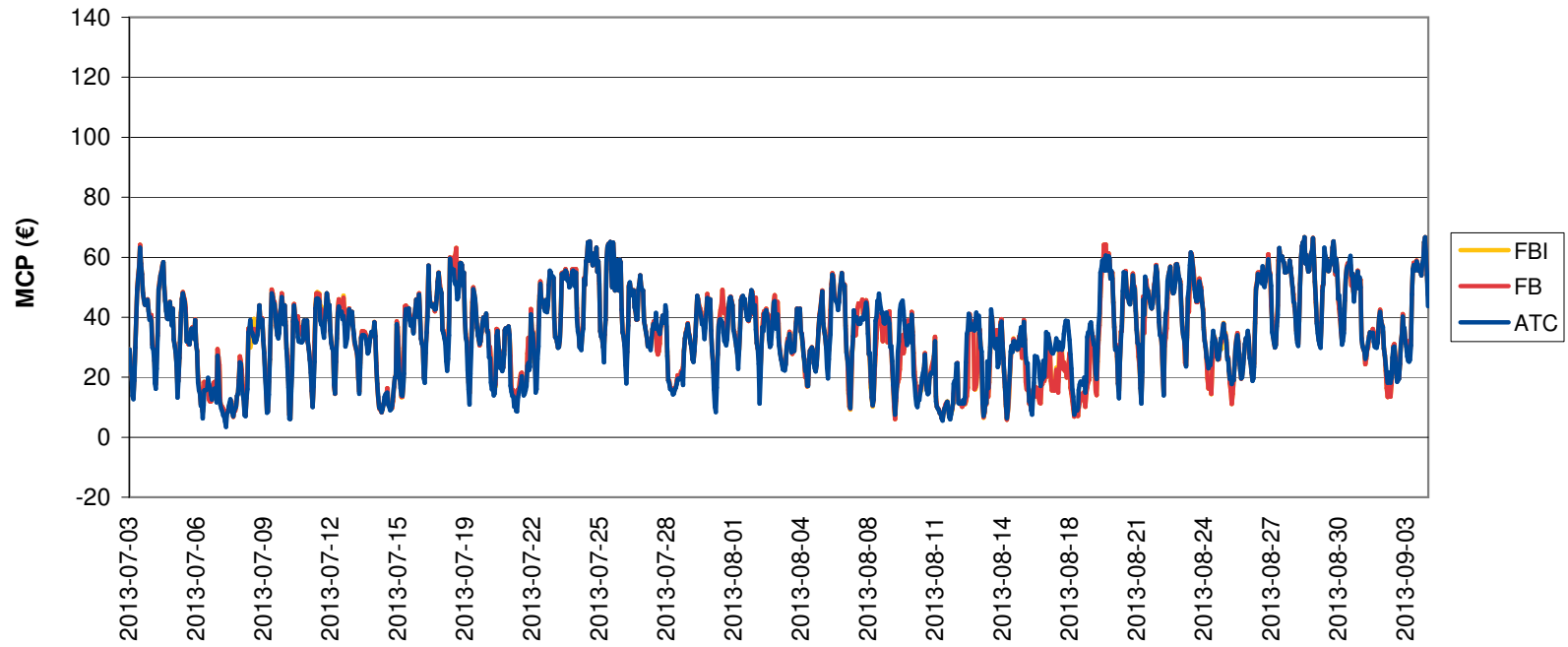


MCP - DE



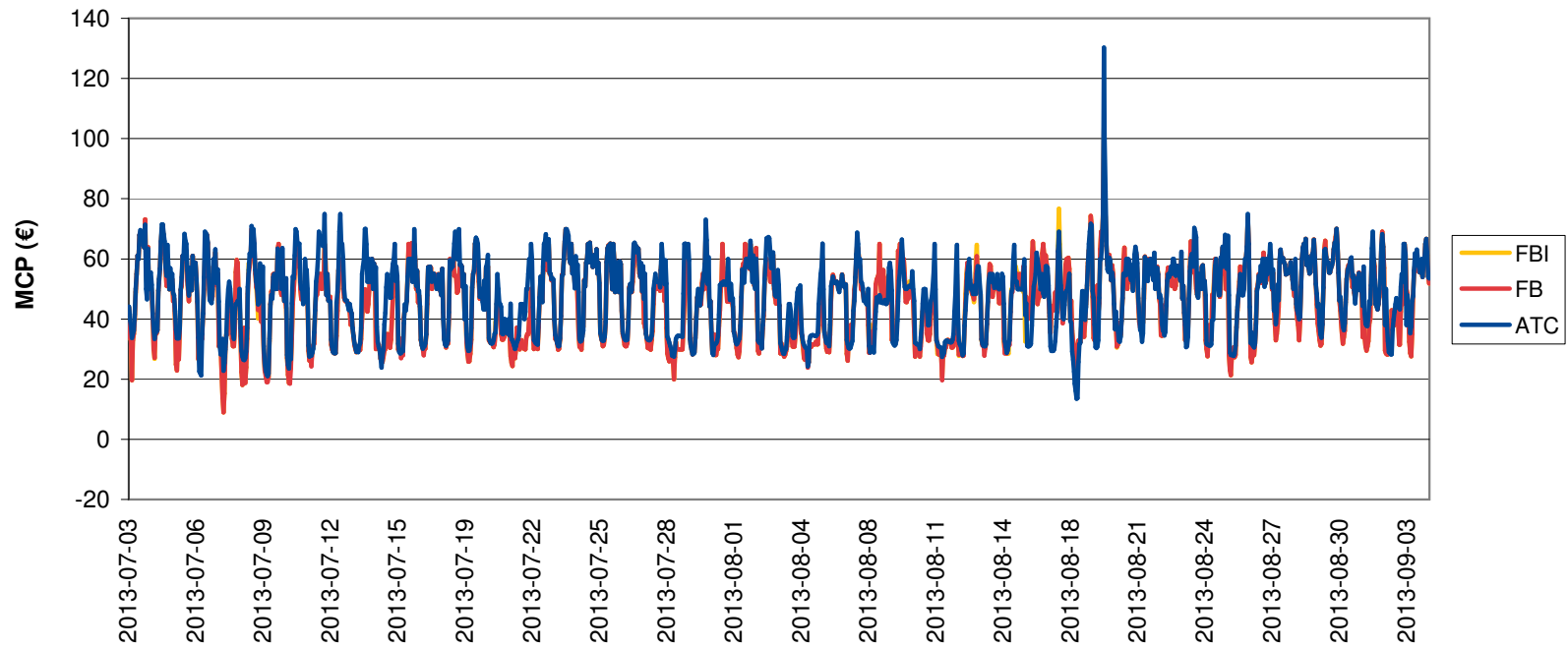


MCP - FR





MCP - NL





Intuitiveness

Frequency

The period under consideration contains 1392 hours.

Non-intuitiveness

	Number of hours where the situation is bilateral non-intuitive	Proportion of hours where the situation is bilateral non-intuitive	Proportion of congested hours where the situation is bilateral non-intuitive
ATC	0	0.0%	0.0%
FB	103	7.4%	10.1%
FBI	0	0.0%	0.0%
INF	0	0.0%	0.0%

Involvement

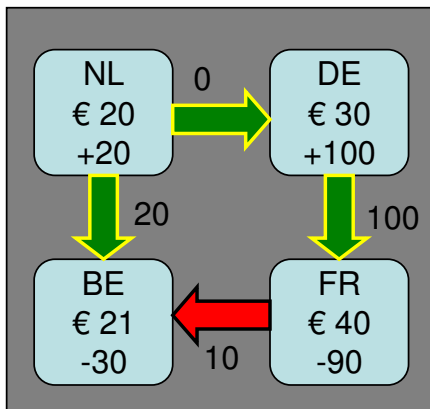
In most non-intuitive situations, the areas are said to be involved in the non-intuitive situation if they belong to one of these sets:

- The largest set of areas with the highest prices such that all areas of the set are exporting;
- The largest set of areas with the lowest prices such that all areas of the set are importing;

Note

With this definition of involvement it could happen that a situation is considered non-intuitive, yet none of the areas is considered to be involved.

Example



BE+NL are together importing, yet are the cheapest markets. This means no bilateral exchanges can be found that do not include at least one counter intuitive flow (FR-BE in our example). Yet none of the markets are involved: NL is the cheapest market and is exporting. Even though the set {BE, NL} is exporting in aggregate, they are not all exporting individually as stated in our definition. Hence no markets are involved.

Number of Involvements	BE	DE	FR	NL
FB "plain" MC	43	41	0	0



Paradoxically rejected block orders

	Number of PRBs	PRB Utility value
ATCMC	401	€433,811
FBMC	388	€457,250
FBIMC	408	€442,138
Infinite Capacity	135	€39,288
Isolated	787	€7,313,045

Block Bids

Proportion of accepted block orders in the Total	BE	DE	FR	NL
ATCMC	6.4%	4.2%	9.2%	8.0%
FBMC	7.1%	4.2%	9.3%	8.0%
FBIMC	7.2%	4.2%	9.3%	8.1%
Infinite Capacity	6.7%	4.3%	9.3%	10.8%
Isolated	11.6%	4.2%	11.2%	23.2%