



CWE MC external parallel run report



Introduction

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;

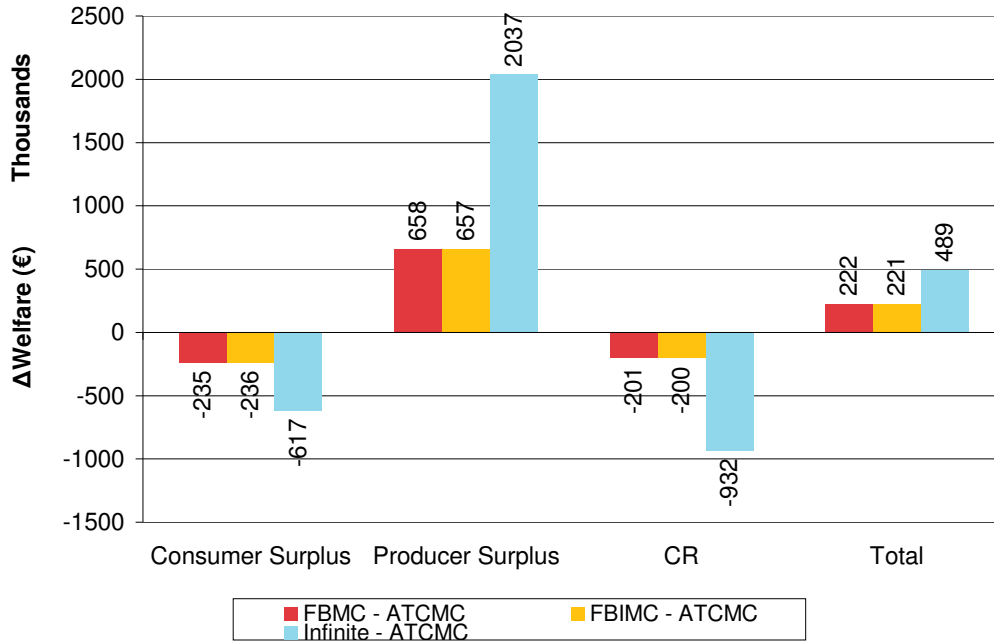
Dates included in this report

Week	Wed	Thu	Fri	Sat	Sun	Mon	Tue
36	04 Sep	05 Sep	06 Sep	07 Sep	08 Sep	09 Sep	10 Sep
37	11 Sep	12 Sep	13 Sep	14 Sep	15 Sep	16 Sep	17 Sep
38	18 Sep	19 Sep	20 Sep	21 Sep	22 Sep	23 Sep	24 Sep
39	25 Sep	26 Sep	27 Sep	28 Sep	29 Sep	30 Sep	01 Oct
40	02 Oct	03 Oct	04 Oct	05 Oct	06 Oct	07 Oct	08 Oct
41	09 Oct	10 Oct	11 Oct	12 Oct	13 Oct	14 Oct	15 Oct
42	16 Oct	17 Oct	18 Oct	19 Oct	20 Oct	21 Oct	22 Oct
43	23 Oct	24 Oct	25 Oct	26 Oct	27 Oct	28 Oct	29 Oct
44	30 Oct	31 Oct	01 Nov	02 Nov	03 Nov	04 Nov	05 Nov

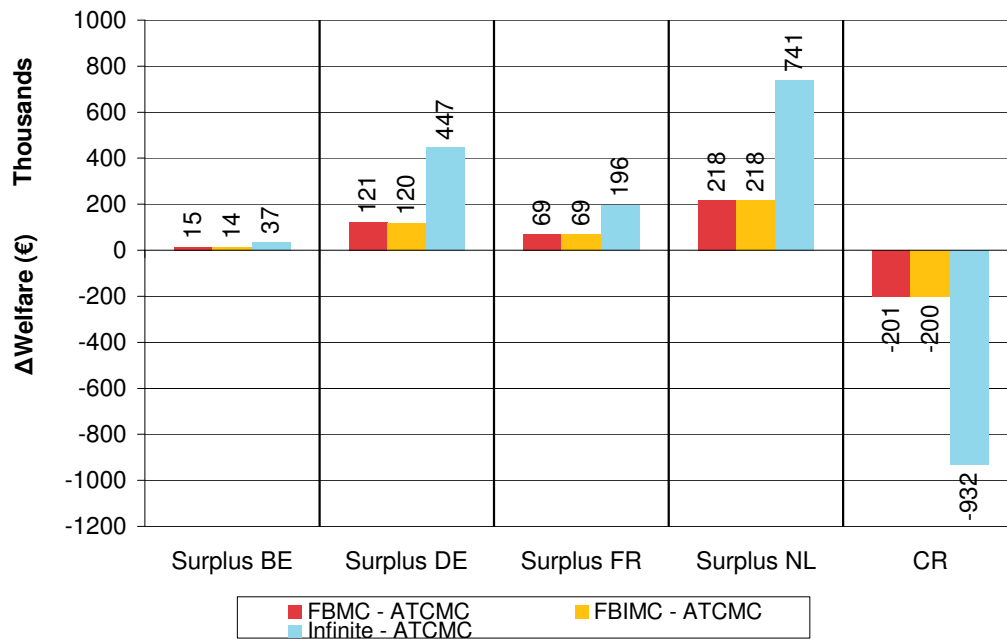


Day ahead market welfare

Daily average welfare difference (relative to ATC)

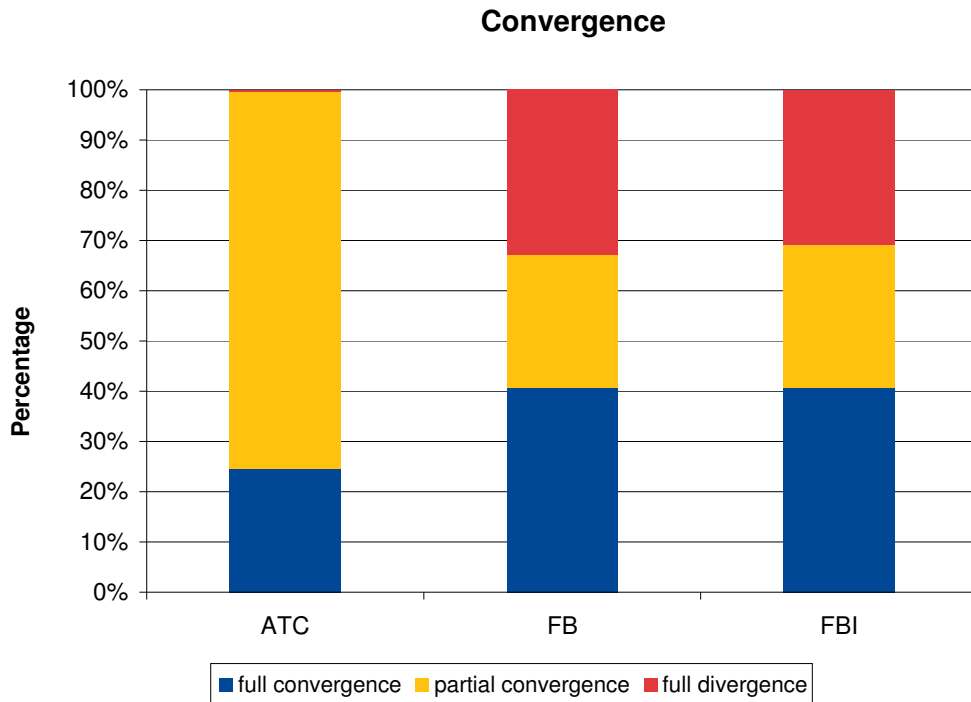


Daily average welfare difference (relative to ATC)





Price convergence



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

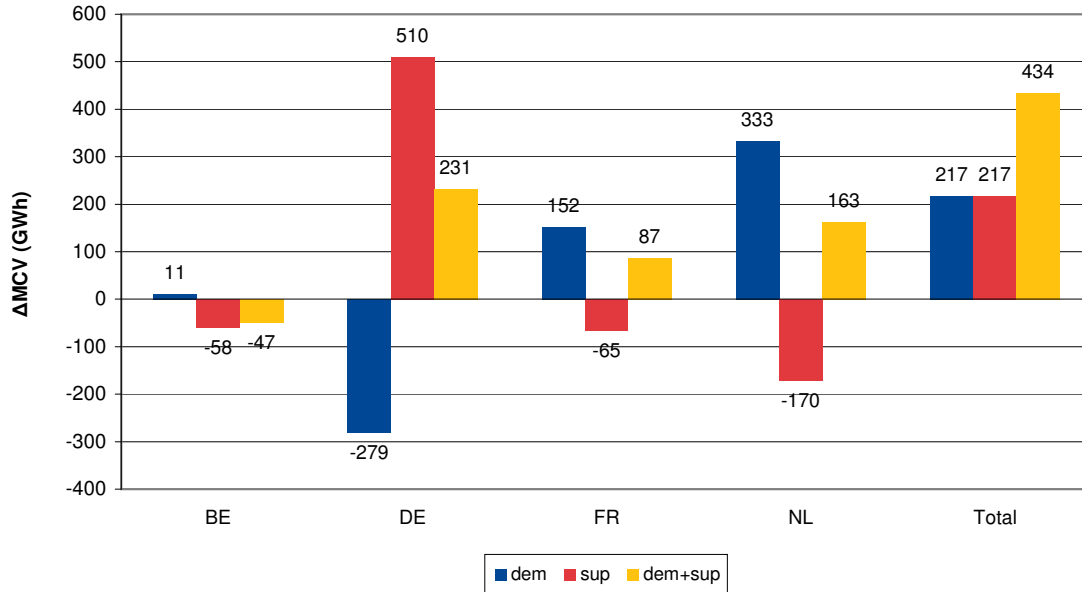
Note we distinguish three market clearing volume indicators:

dem: total accepted demand in an area

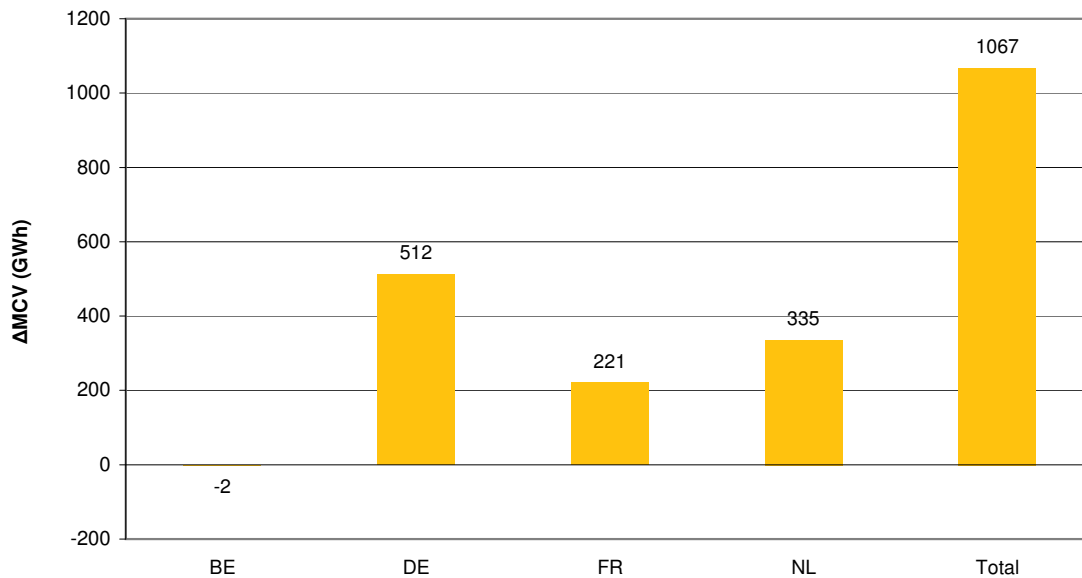
sup: total accepted supply in an area

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)

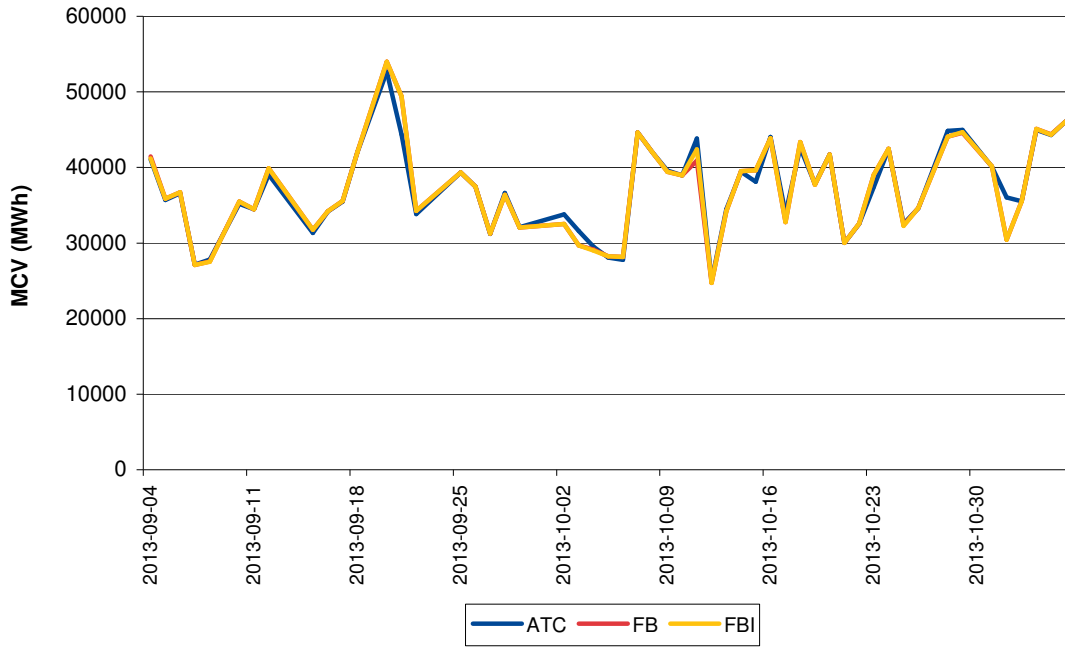


ΔMCV (FBMC - ATCMC)

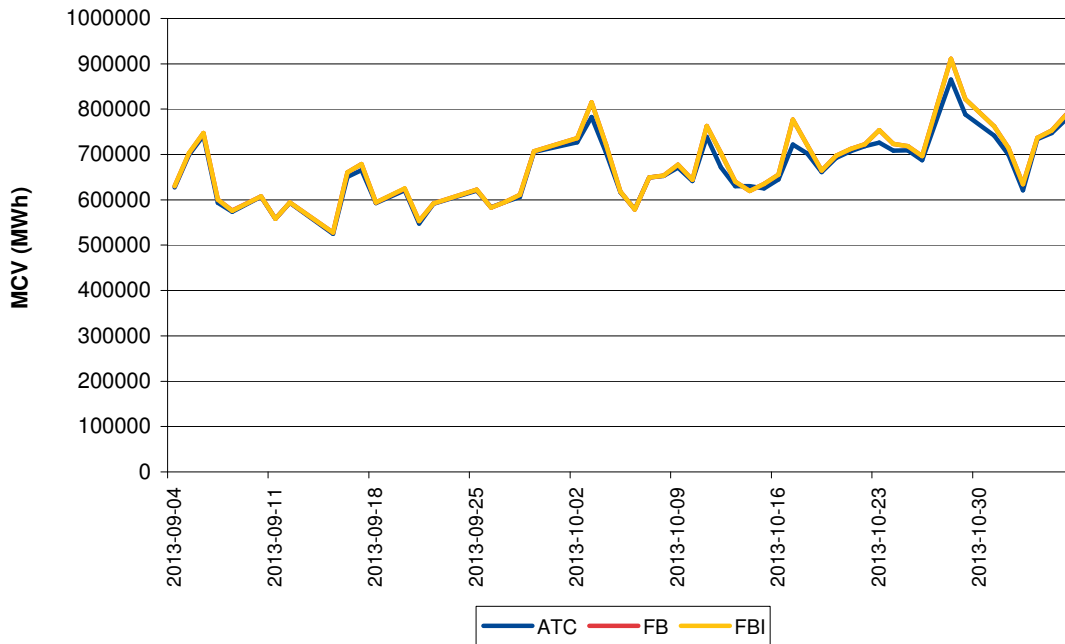




MCV - BE

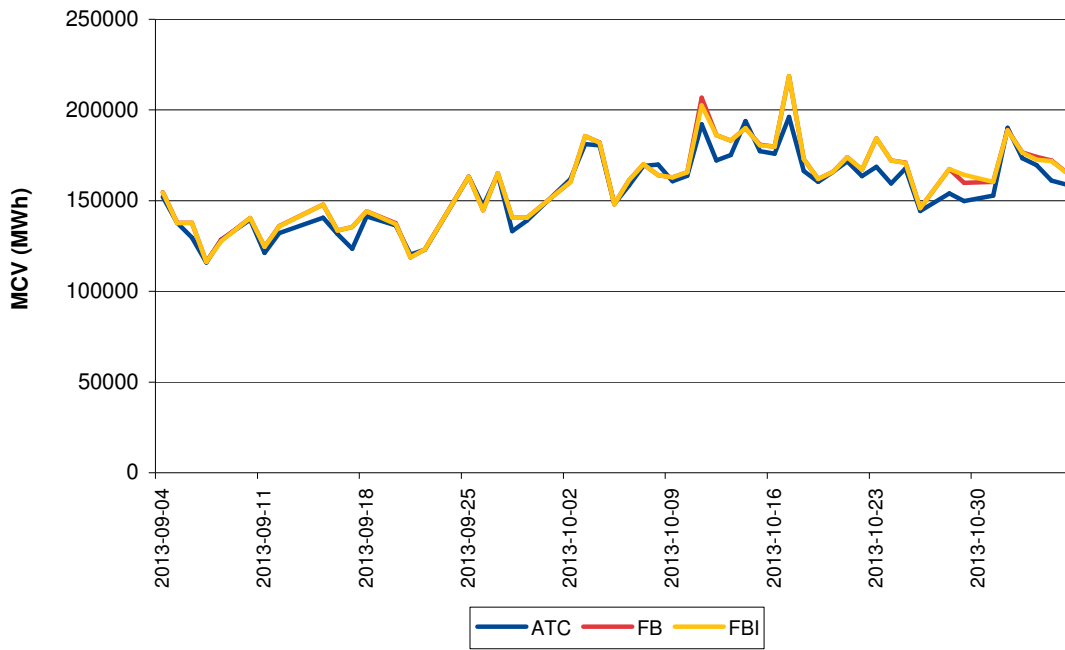


MCV - DE

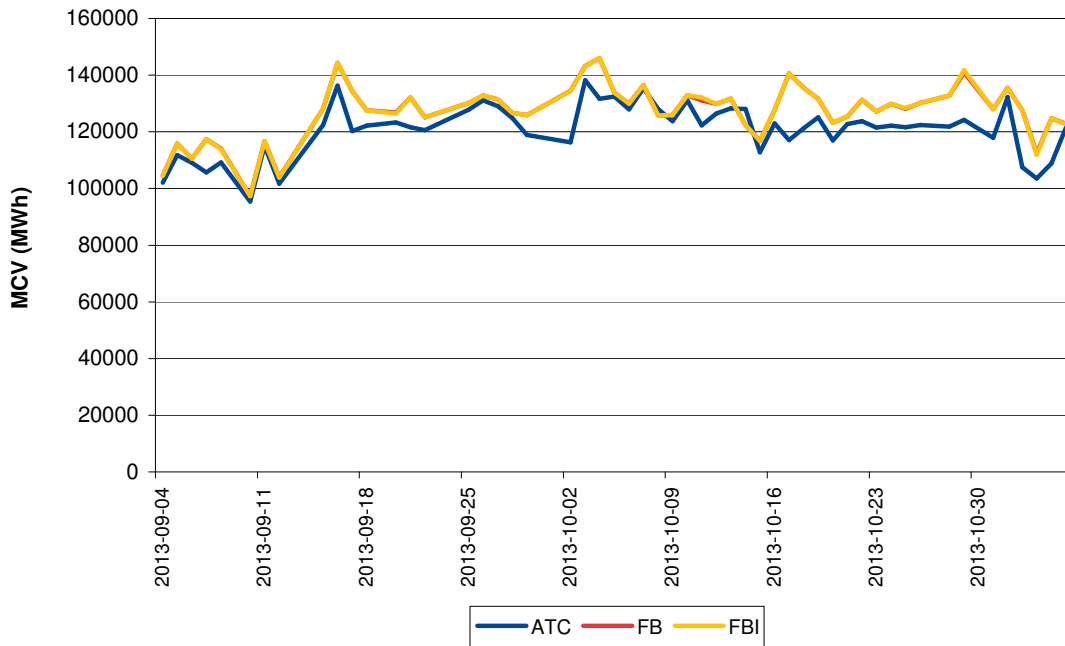




MCV - FR

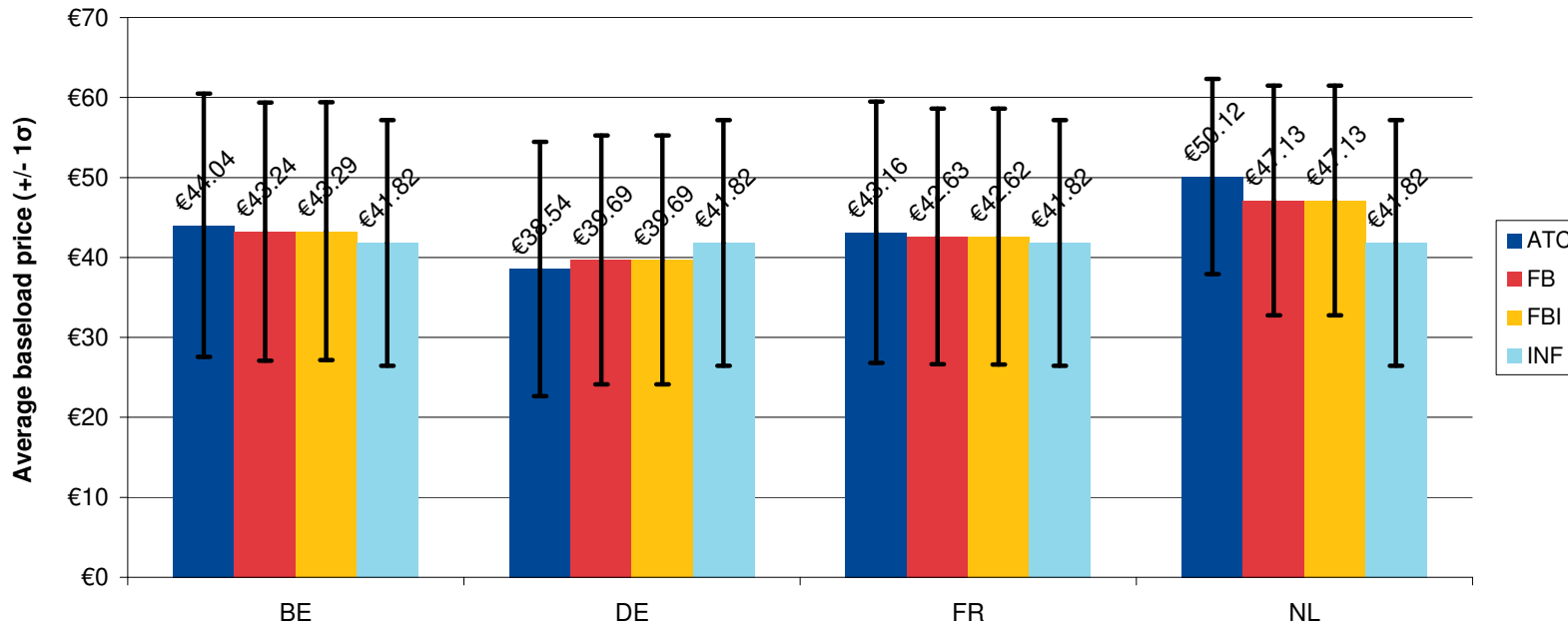


MCV - NL



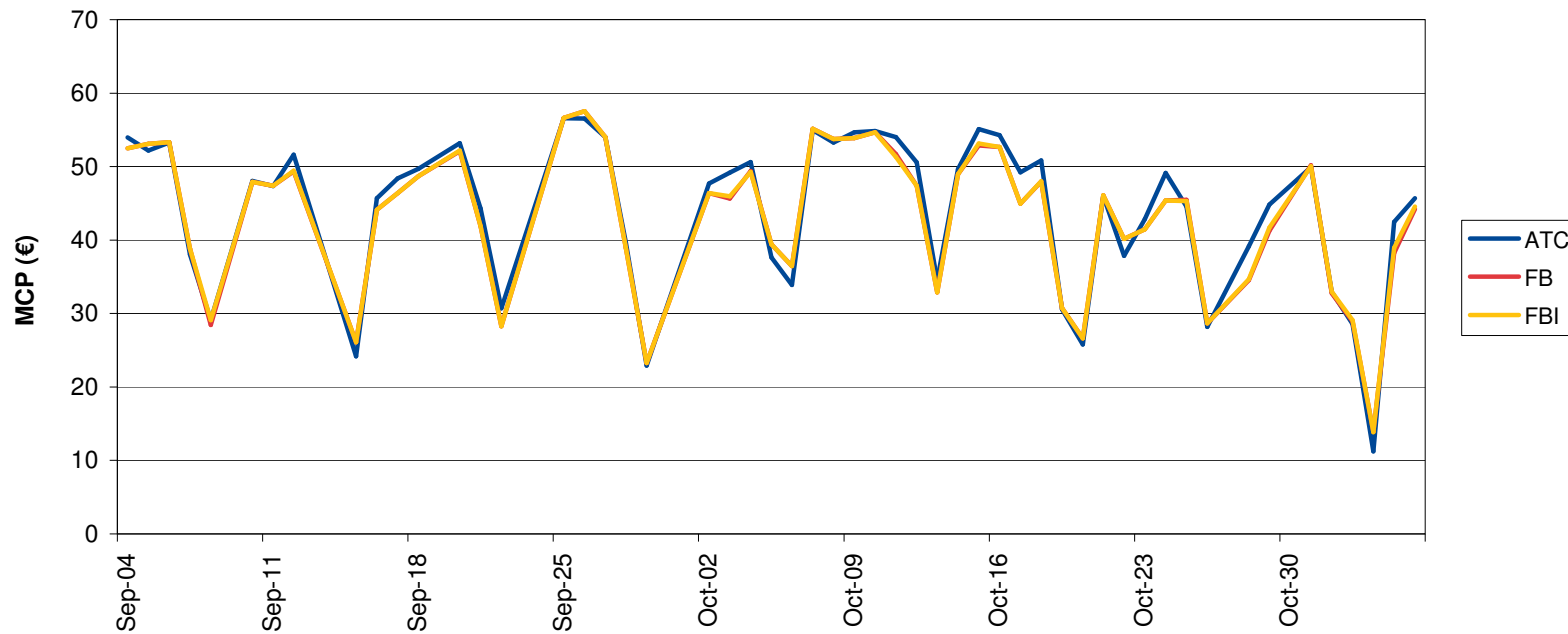


Average baseload price



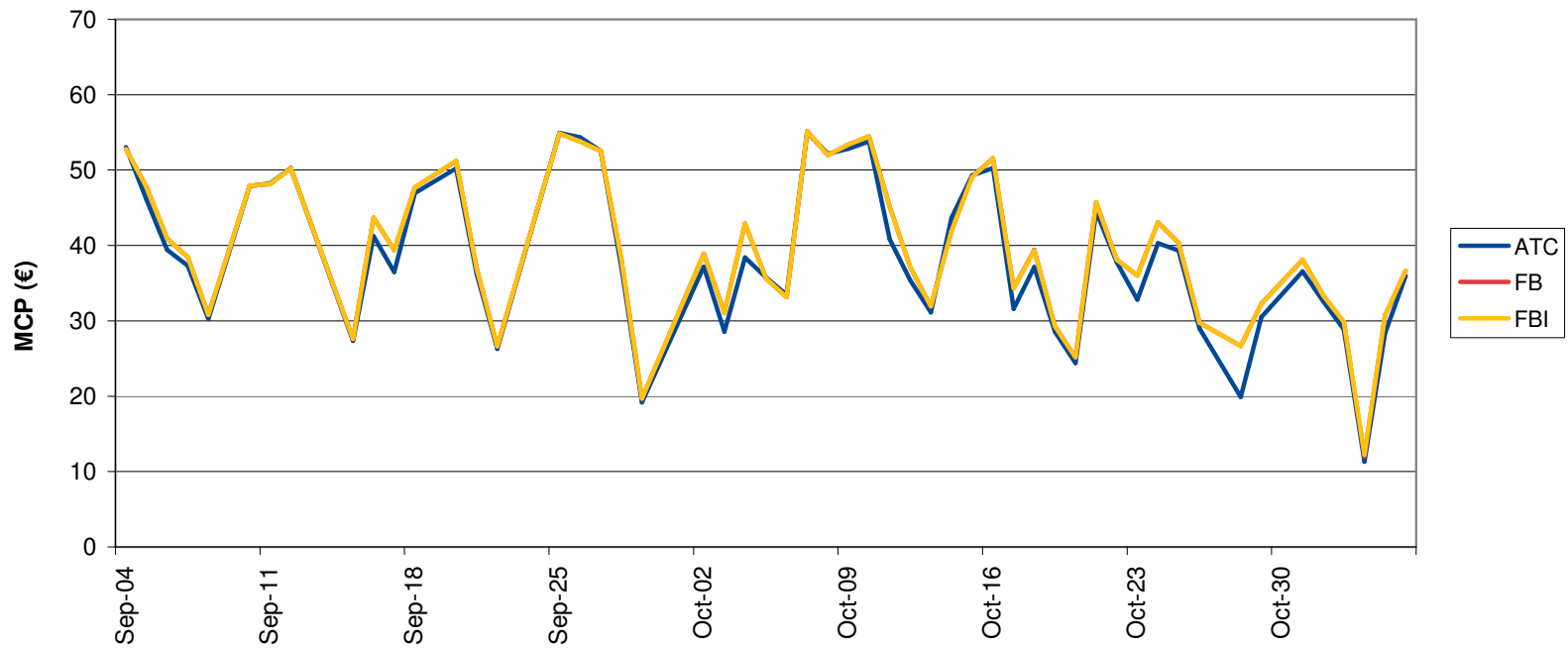


Baseload price - BE



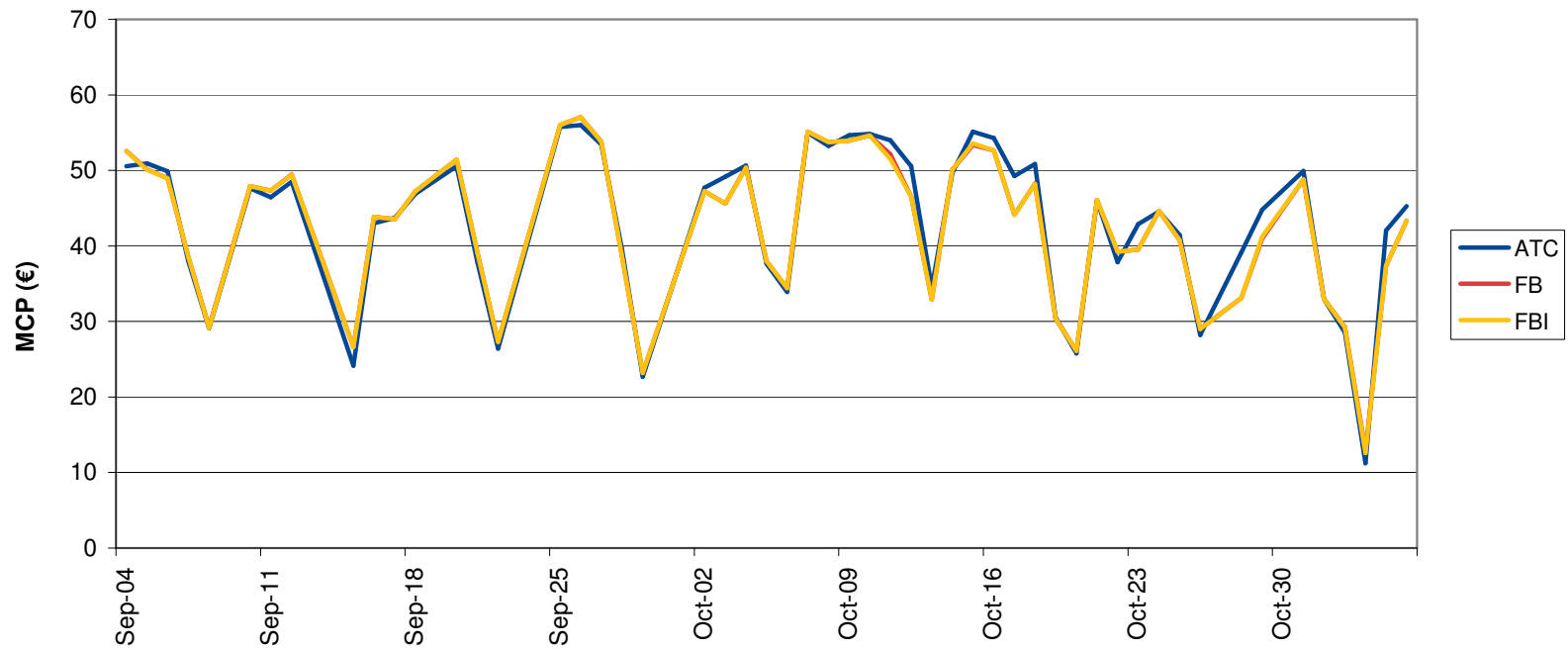


Baseload price - DE



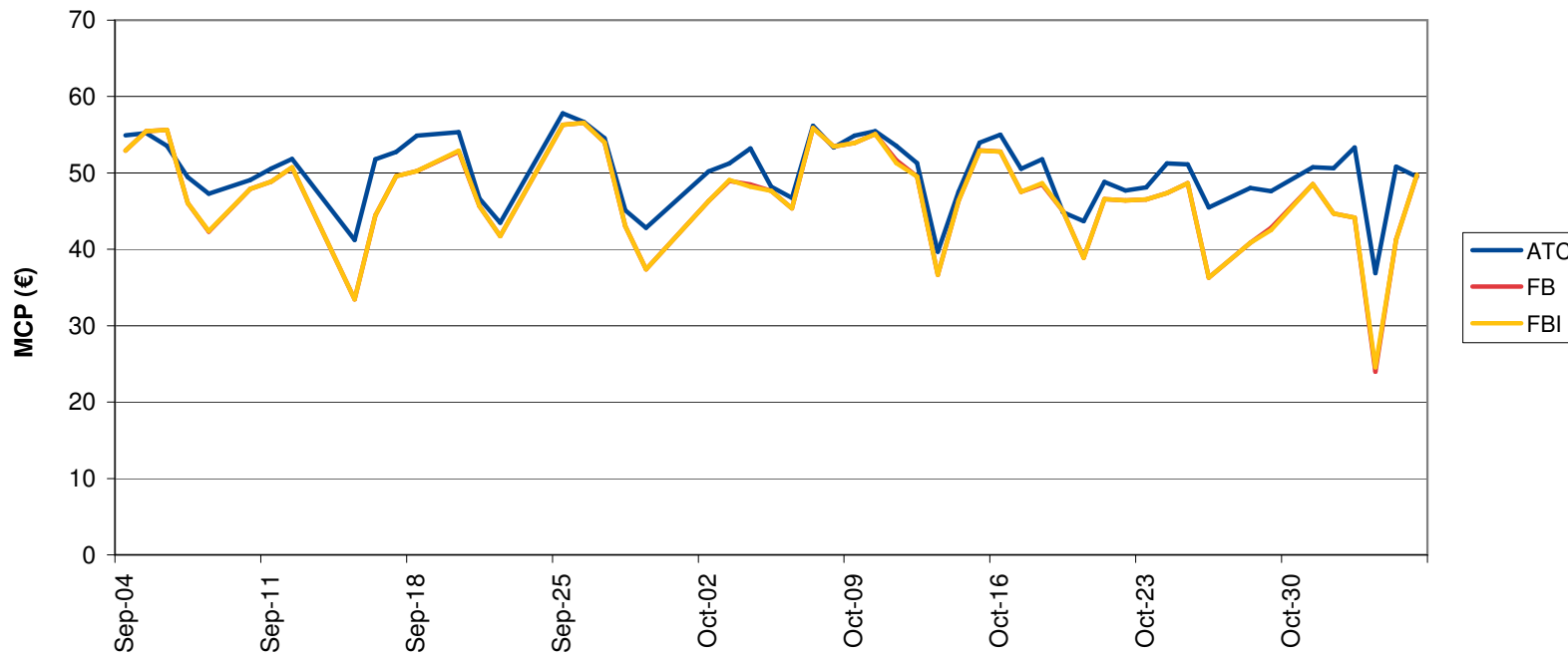


Baseload price - FR



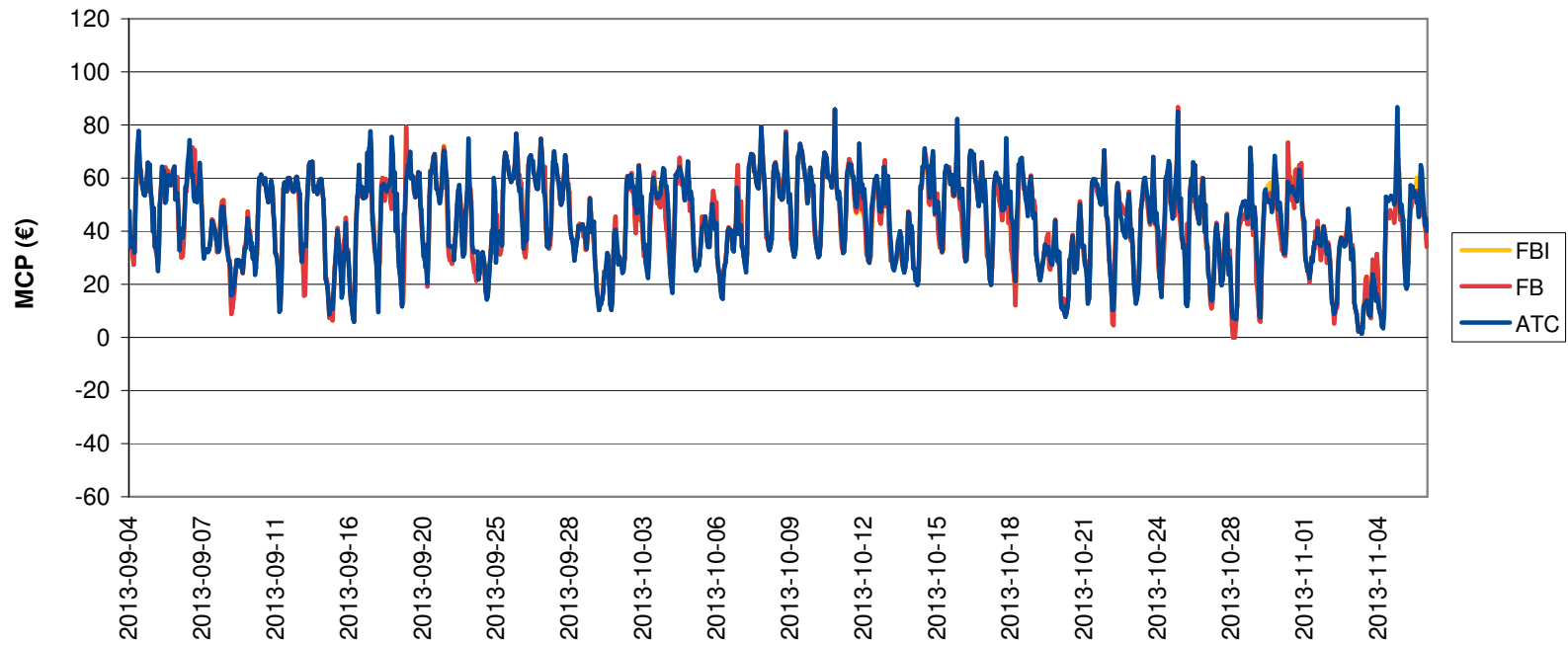


Baseload price - NL



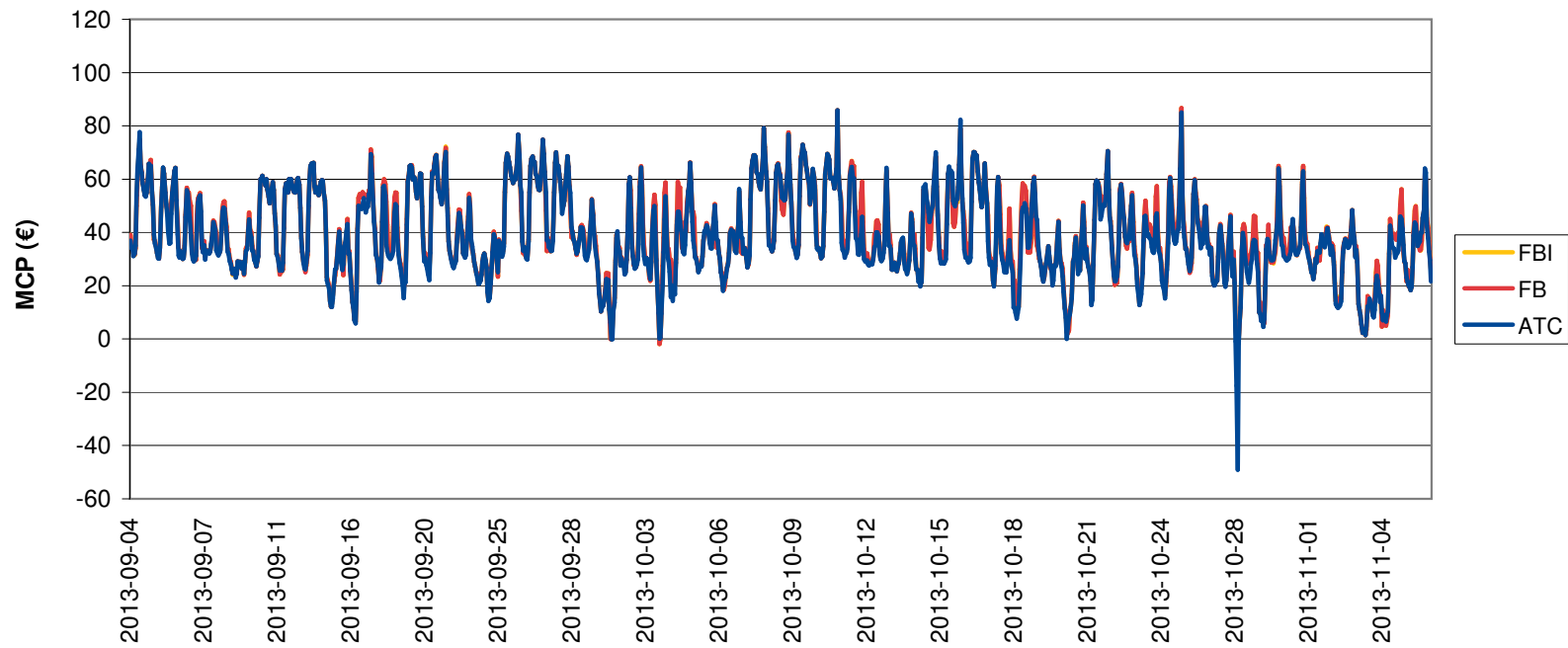


MCP - BE



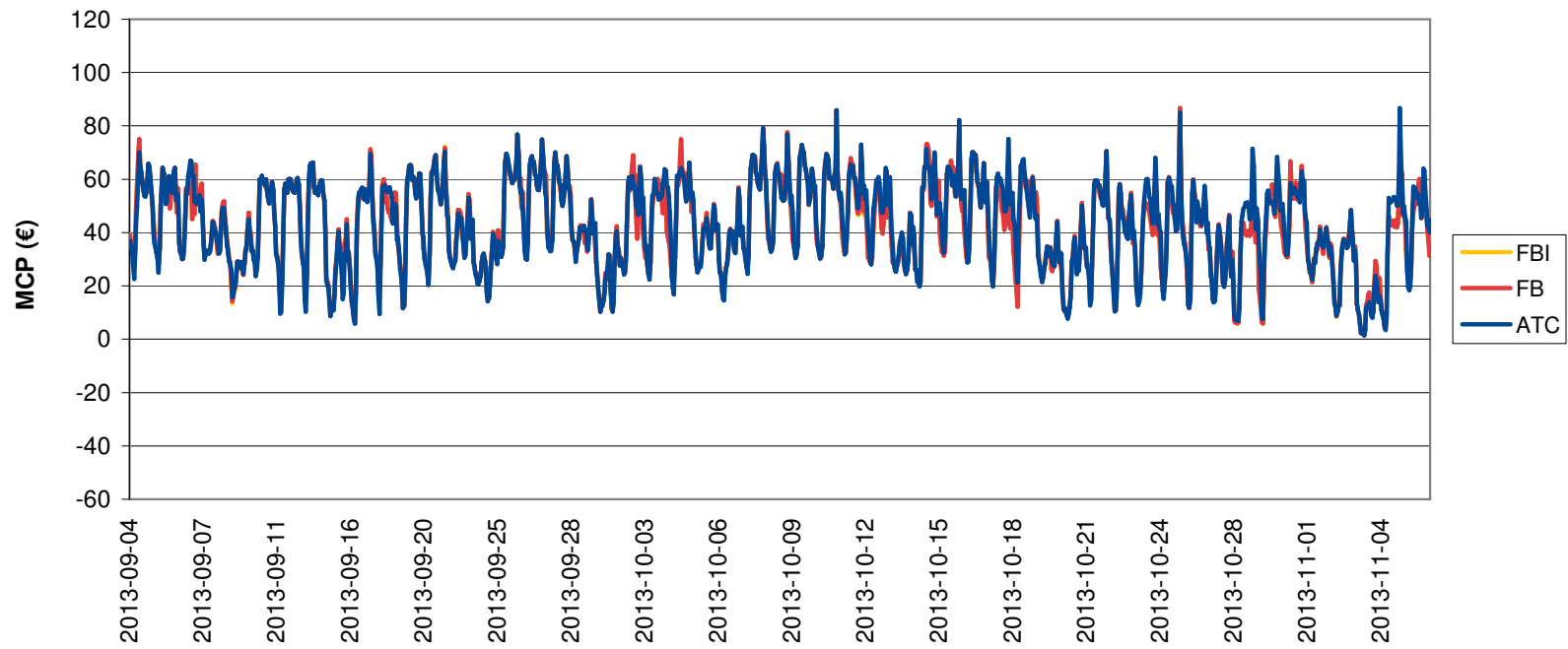


MCP - DE



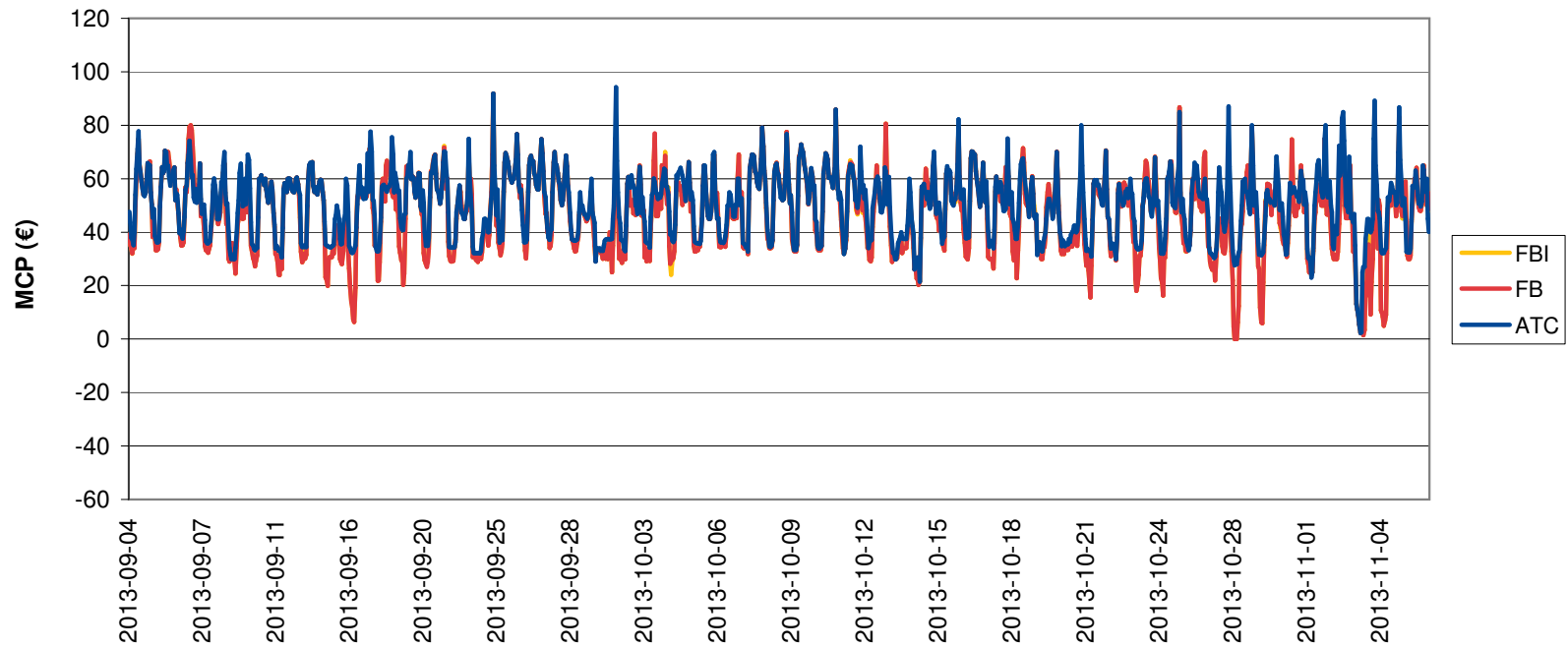


MCP - FR





MCP - NL



Intuitiveness

Frequency

The period under consideration contains 1272 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	37	2.9%	4.9%
FBI	0	0.0%	0.0%
INF	0	0.0%	0.0%

Involvement

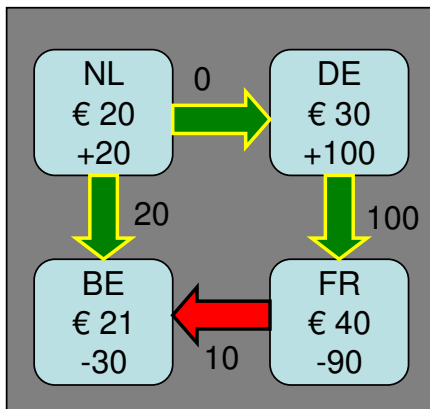
In most non-intuitive situations, the areas are said to be involved in the non-intuitive situation if they belong to one of these sets:

- 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	21	2	8	3



Paradoxically rejected block orders

	Number of PRBs	PRB Utility value
ATCMC	370	€572,448
FBMC	357	€354,272
FBIMC	349	€360,687
Infinite Capacity	159	€45,256
Isolated	960	€5,851,999

Block Bids

Proportion of accepted block orders in the Total	BE	DE	FR	NL
ATCMC	10.2%	5.3%	10.3%	9.0%
FBMC	9.0%	5.5%	10.5%	9.7%
FBIMC	9.2%	5.5%	10.5%	9.7%
Infinite Capacity	8.0%	6.1%	10.8%	11.7%
Isolated	17.4%	5.4%	11.9%	19.3%