

Deliverable I.4 Cross-border balancing services (XBBS) among TSOs -BALIT project-

Analysis of first months of BALIT

(17th IG meeting, Madrid, October 6th 2014)

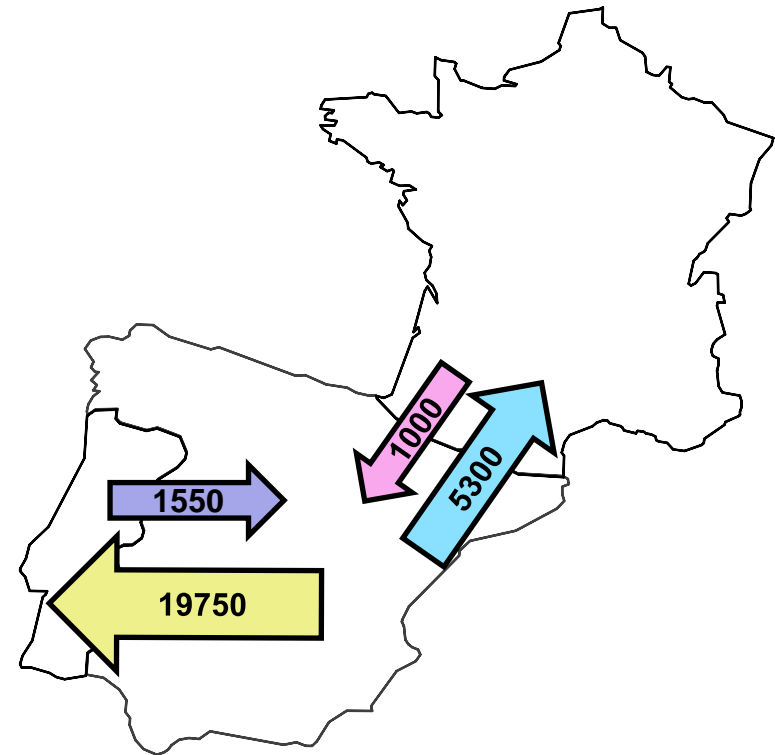
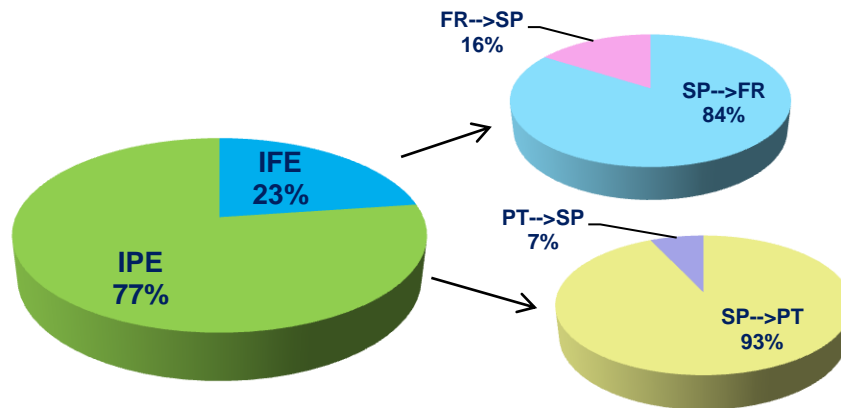
Cross border energy exchanged (June – Aug)

❖ **June 2014:** Successful launch of cross border balancing services (XBBS) in SWE in two phases:

❖ **IFE:** 11th June 2014

❖ **IPE:** 17th June 2014

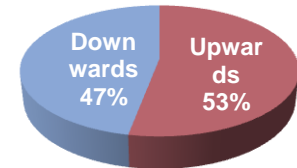
Direction	Exchanged volume (MWh)	Exchanged volume (MWh)	Direction
SP→FR	5.300	19.750	SP→PT
FR→SP	1.000	1.550	PT→SP
Total	6.300 MWh	21.300 MWh	Total



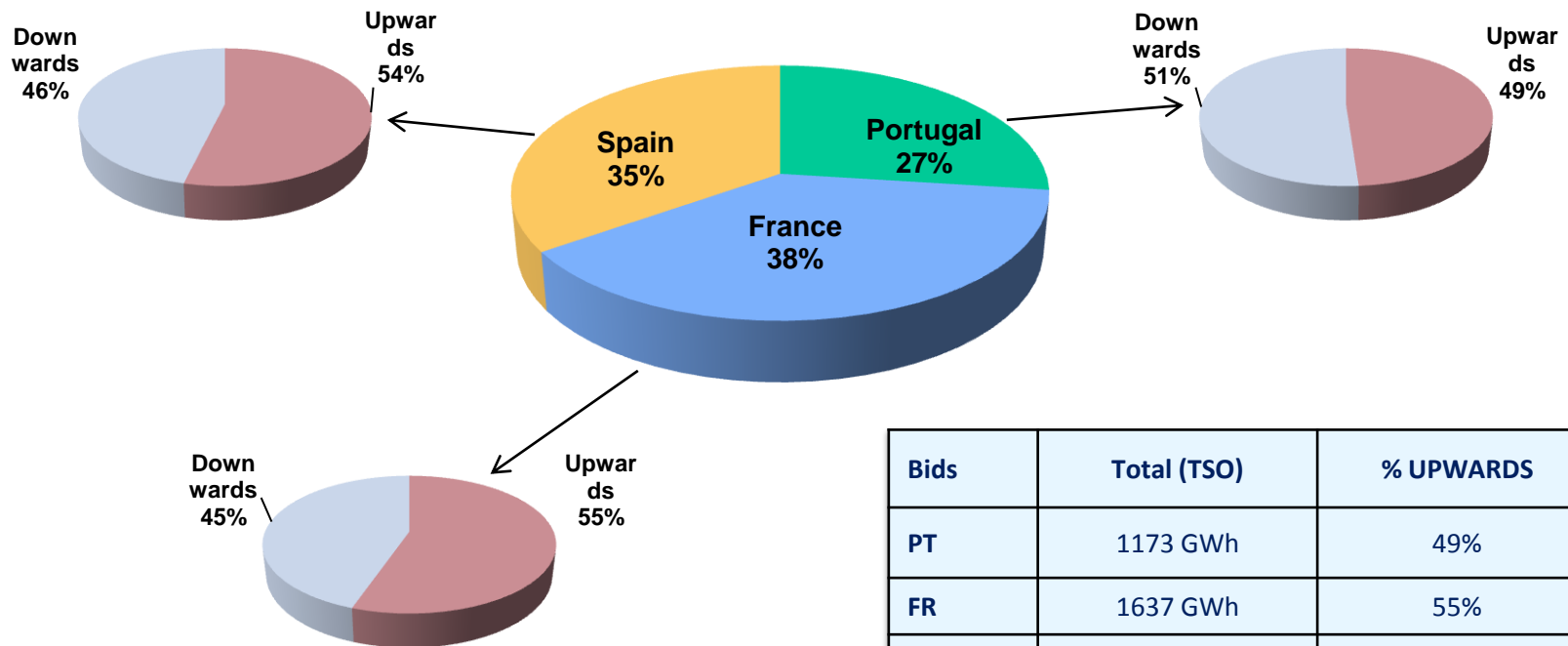
- Until 31/08: **27.600 MWh** exchanged bilaterally in SWE region
- 3 out of 4 MWh scheduled in IPE, especially in direction SP→PT (93% of the total amount of IPE)

Offered cross border balancing bids (Volume)

❖ Total volume: 4332 GWh offered for XB-BS in the SWE region (53% upwards)



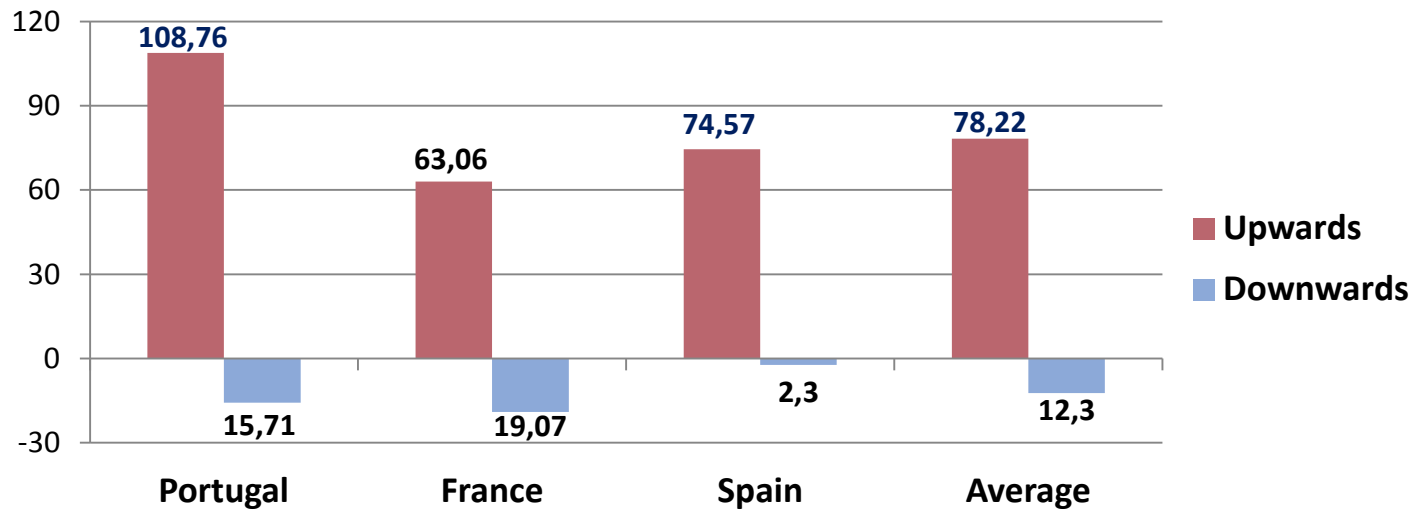
❖ Volume offered: France > Spain > Portugal



Bids	Total (TSO)	% UPWARDS
PT	1173 GWh	49%
FR	1637 GWh	55%
SP	1522 GWh	54%
Total	4332 GWh	53%

Offered cross border balancing bids (Price)

❖ Weighted average price of the bids (€/MWh)



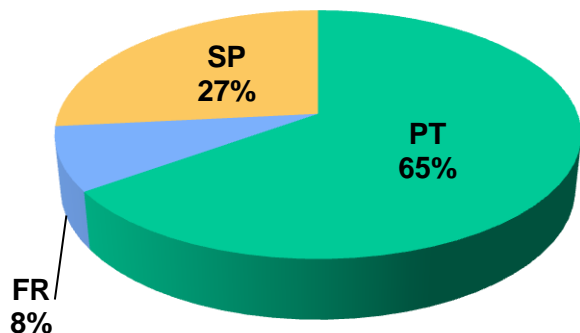
Prices	UPWARDS	DOWNWARDS
Portugal	108,76 €/MWh	15,71 €/MWh
France	63,06€ €/MWh	19,07 €/MWh
Spain	74,57 €/MWh	2,3 €/MWh
Weighted average price	78,22 €/MWh	12,3 €/MWh

XB scheduled balancing activations (Volume)

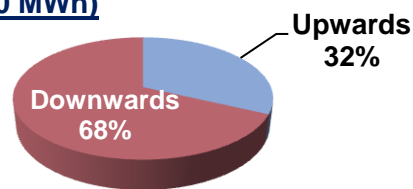
IFE	Exchanged volume (MWh)	Requested - SP	Requested - FR
SP→FR	5.300	56,6%	43,4%
FR→SP	1.000	100%	0%
Total	6.300	63,5%	36,5%

IPE	Exchanged volume (MWh)	Requested - SP	Requested - PT
SP→PT	19.750	10,1%	89,9%
PT→SP	1.550	87,1%	12,9%
Total	21.300	15,7%	84,3%

Requests per system



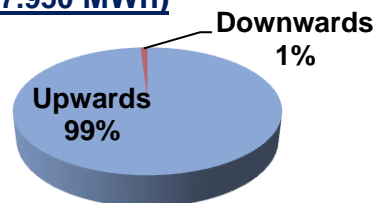
Spain (7.350 MWh)



France (2.300 MWh)

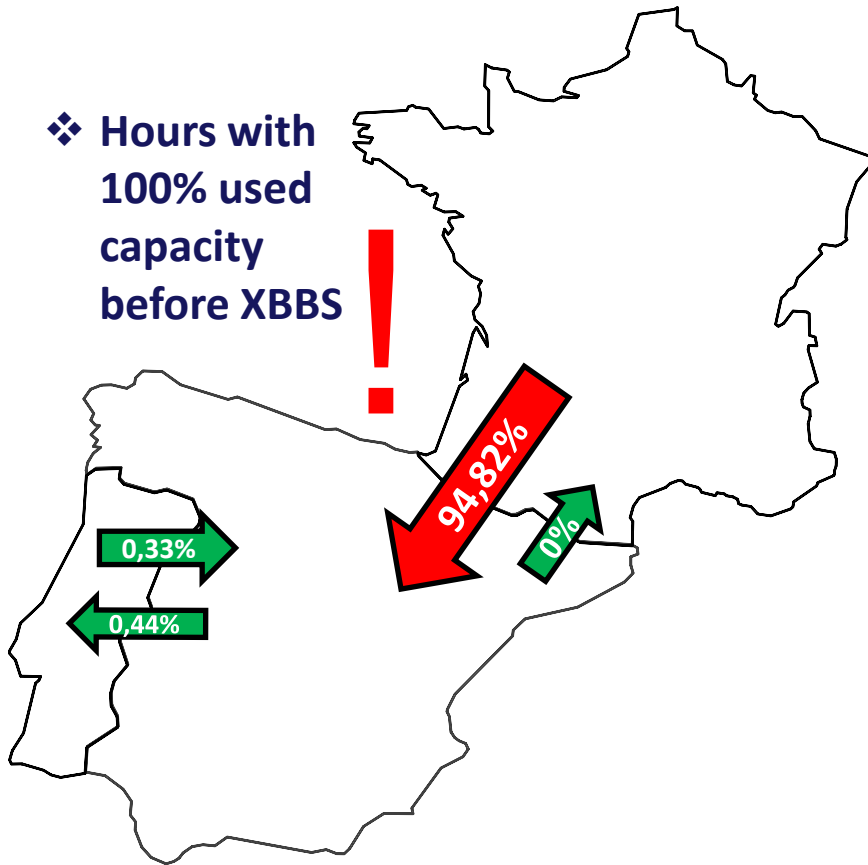


Portugal (17.950 MWh)



Analysis of interconnection capacity – Available ATC after ID

❖ Hours with 100% used capacity before XBBS



IFE 11/06 12:00 – 31/08

- 94,82 % of hours with 100% used capacity before XB-BS in direction FR→SP.
- 99,6% of the hours with requirement of Upwards balancing energy in the Spanish system, 100% use of cross border capacity FR→SP after ID

IPE 17/06 12:00 – 31/08

- Less than 1% of the hours with 100% used capacity before XB-BS in both directions (SP→PT, PT→SP)

Results summary (Spain)

- Cross border balancing energy activated by the Spanish system in XB-BS: 7350 MWh (2350 MWh upwards, 5000 MWh downwards), representing **0,73% of the total balancing energy (TER + XB-BS) activated in the Spanish system in the period 11/06 – 31/08:**
 - 0,3% for upwards balancing energy
 - 2,1% for downwards balancing energy
- These values could have been higher if cross border capacity in direction FR→SP had been available for cross border balancing services
- Positive results in the Spanish system by use of cross border balancing services in SWE region.

Upwards	Volume activated
Used tertiary regulation	780 GWh
XB-BS IFE (FR→SP)	1.000 MWh
XB-BS IPE (PT→SP)	1.350 MWh

Downwards	Volume activated
Used tertiary regulation	234 GWh
XB-BS IFE (SP→FR)	3.000 MWh
XB-BS IPE (SP→PT)	2.000 MWh

Results summary (Portugal)

- Cross border balancing energy activated by the Portuguese system in XB-BS: 17950 MWh (17750 MWh upwards, 200 MWh downwards), representing **5,29% of the total balancing energy (RR + XB-BS) activated in the Portuguese system in the period 17/06 – 31/08:**
 - 19.5% for upwards balancing energy
 - 0,1% for downwards balancing energy

- Positive results in the Portuguese system by use of cross border balancing services in SWE region.

Upwards	Volume activated
Used Regulating Reserve	91 GWh
XB-BS IPE (SP→PT)	17 750 MWh

Downwards	Volume activated
Used Regulating Reserve	248 GWh
XB-BS IPE (PT→SP)	200 MWh