



BSP Energy Exchange

What's coming: coupling, intraday,
liquidity

En.trading 2019, Skopje, September 2019

Ownership

Borzen

 **ELES**

50%

50%

Power Market
Operator



Transmission System
Operator

BSP at glance (2018)

7,77
TWh

Total trading volume

37
members

13 European countries



468
million EUR

Net financial settlement



17,81
million EUR

Assets



871.535
EUR

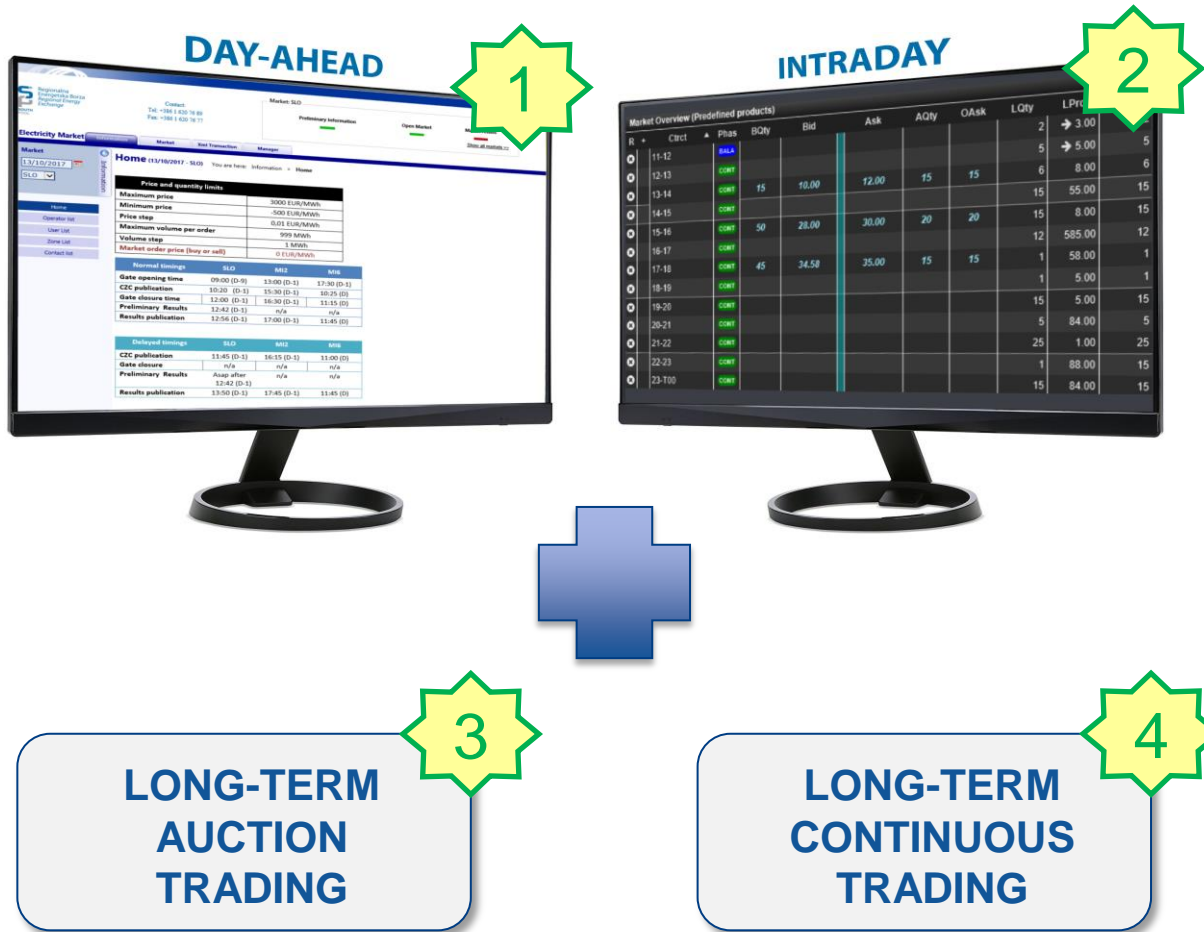
EBITDA



7,13
million EUR

Equity

BSP = Whole spectrum of trading opportunities



Products



- **DA and ID Auction Trading**

- Hourly products (1-24) for DA and MI2
- Hourly products (17-24) for MI6
- Block products & negative prices for DA
- Negative prices for MI2 and MI6



- **ID Continuous Trading**

- Base (00:00-24:00);
- Peak (08:00-20:00);
- Hourly Products;
- Quarterly Products;
- User Defined Products.



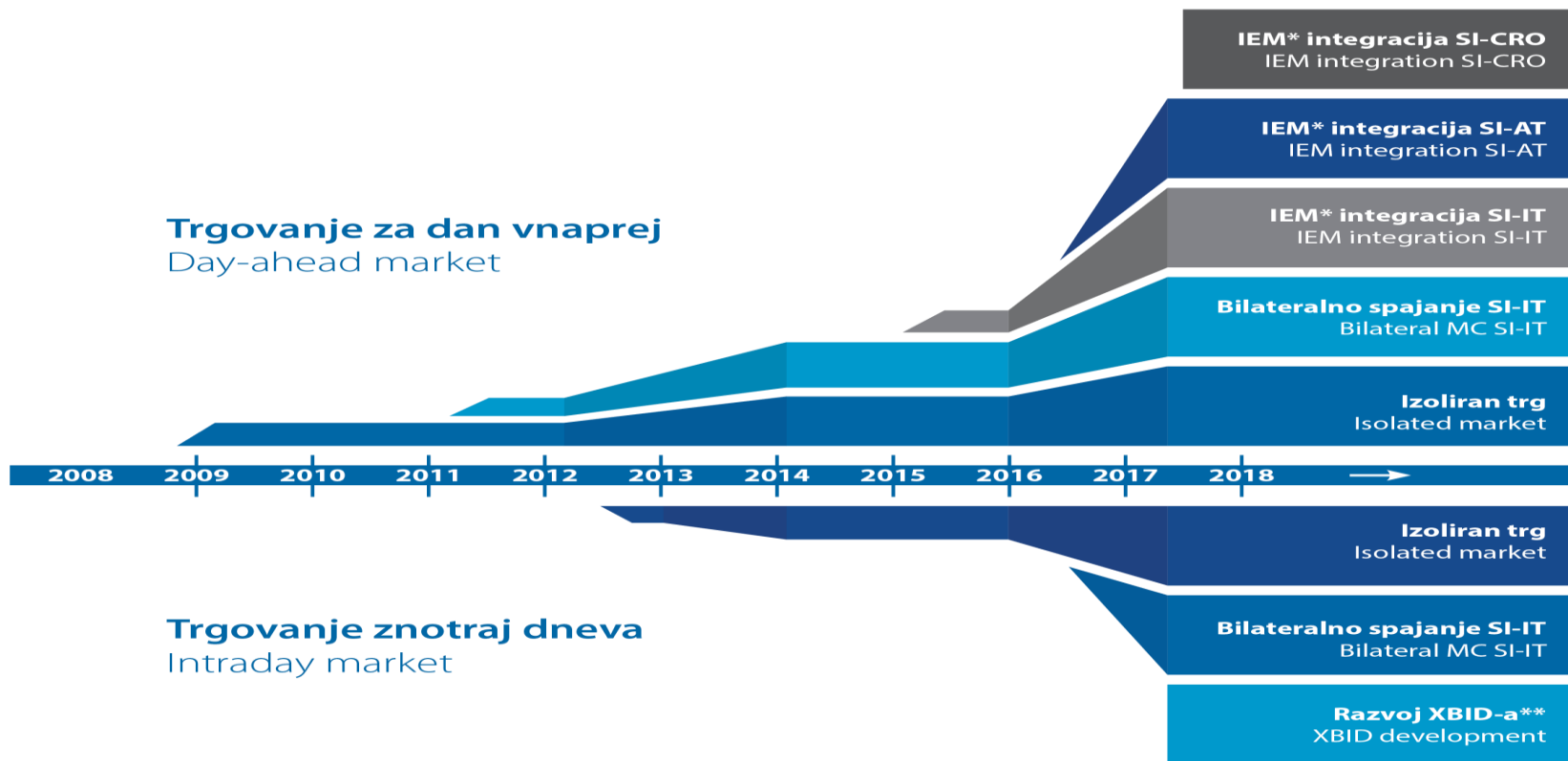
- **Long-term Auction Trading with Physical Futures Products**



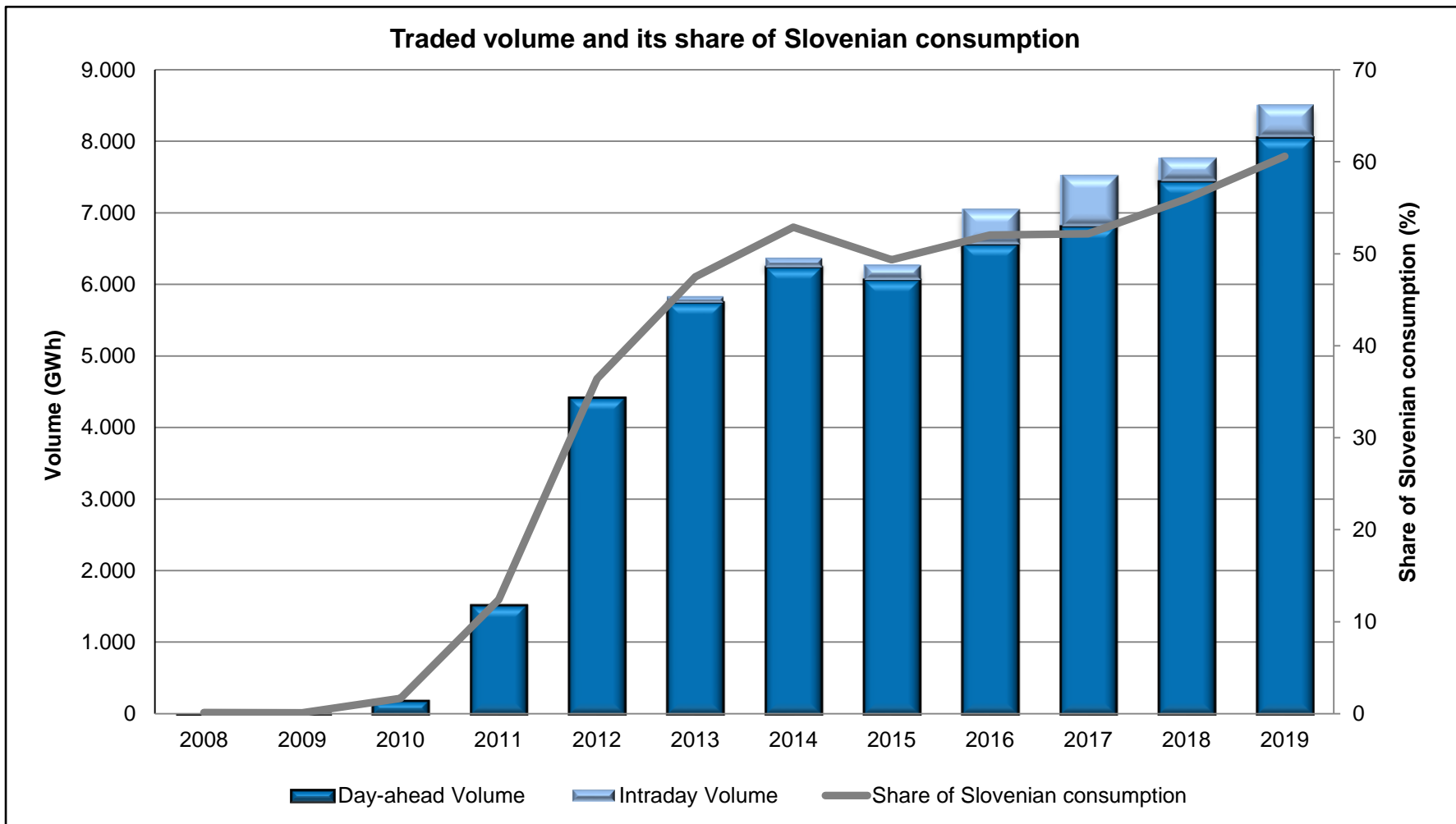
- **Long-term Continuous Trading with Financial Futures Products**



Markets development



*IEM = Itegriran evropski trg
 **XBID = Čezmejno trgovanje znotraj dneva

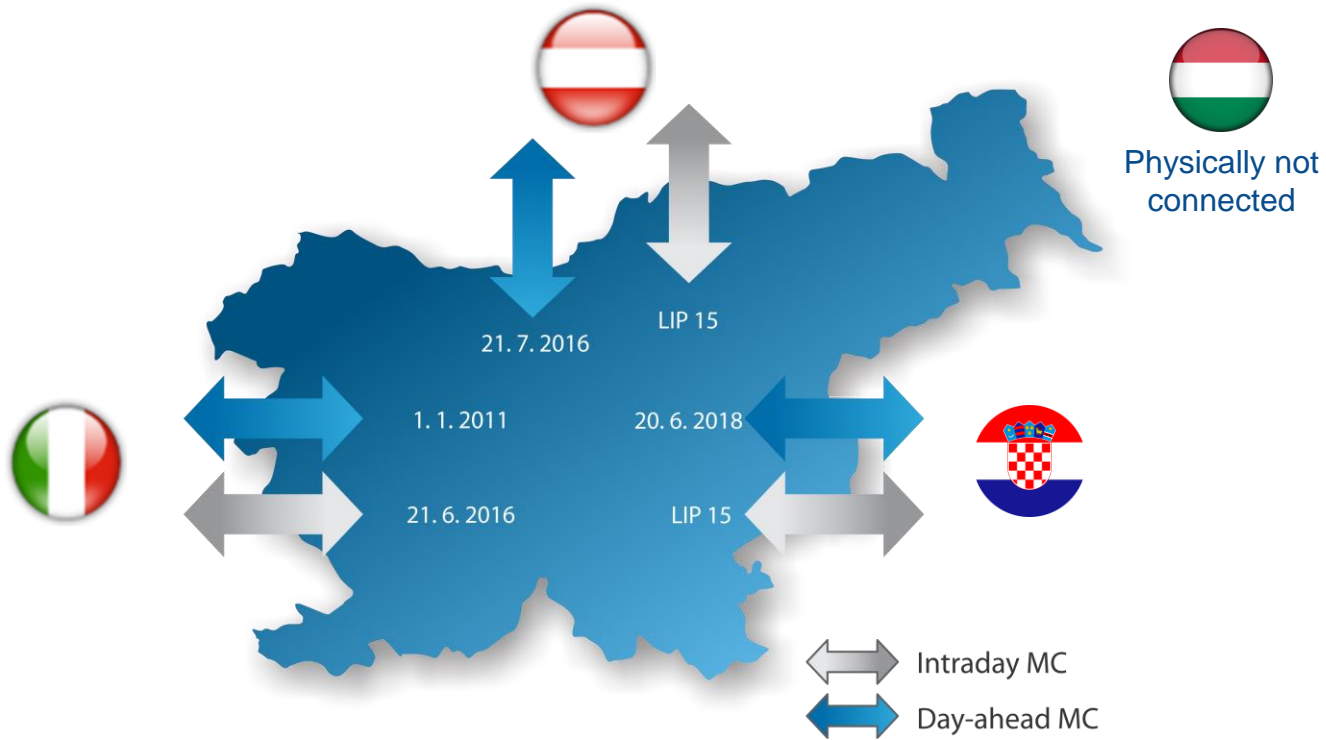




37 members
13 countries



Market Coupling



What next?

Single Day Ahead Coupling - status

2013 – several regions

2014 – 4th February
MC NWE region

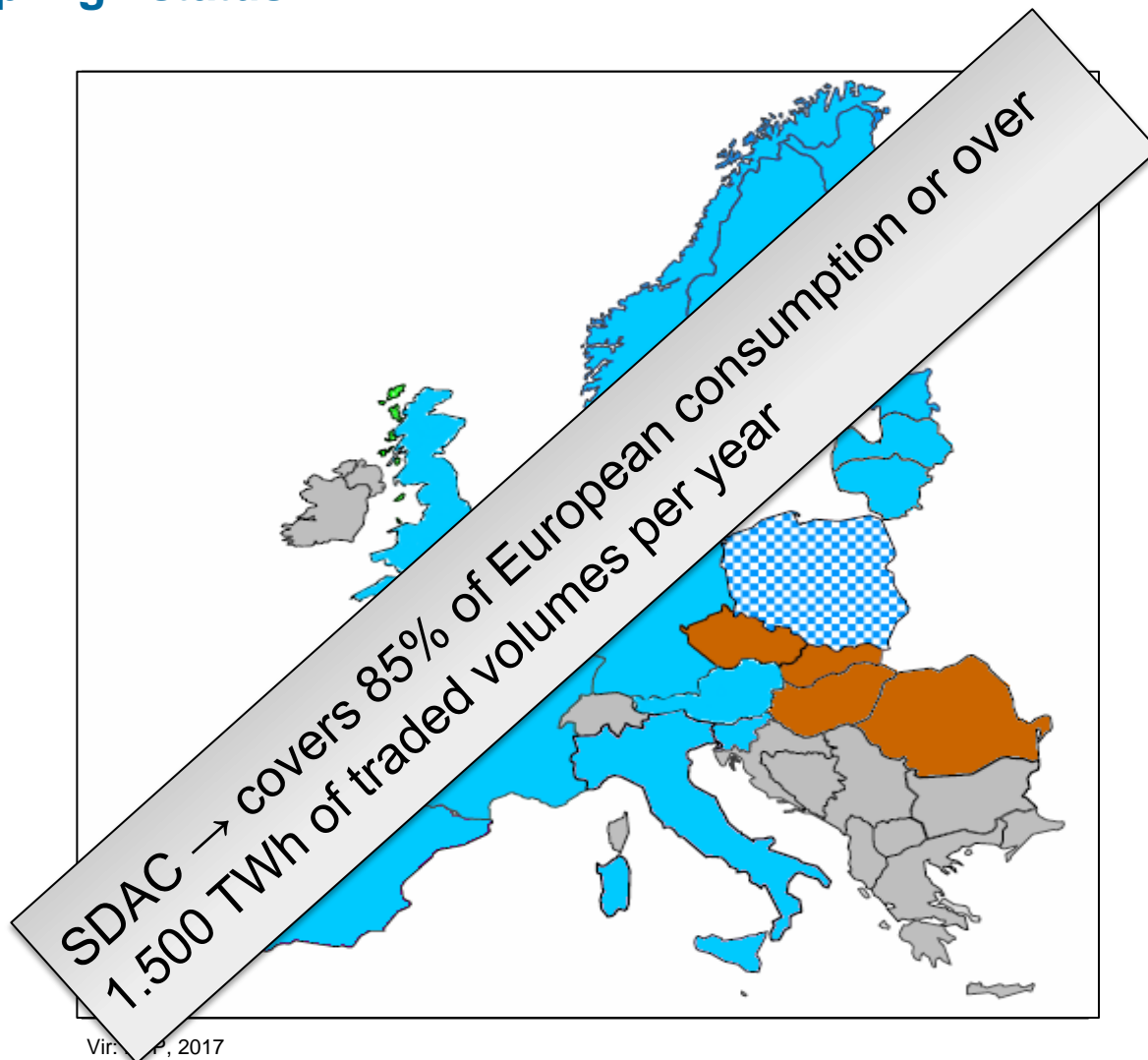
2014 – 14th May
MC NWE+SWE region →
MRC

2014 – 19th November
3M MC → 4M MC

2015 – 24th February
MC MRC+CSE region

End 2020 – CORE FBMC
– implementation phase

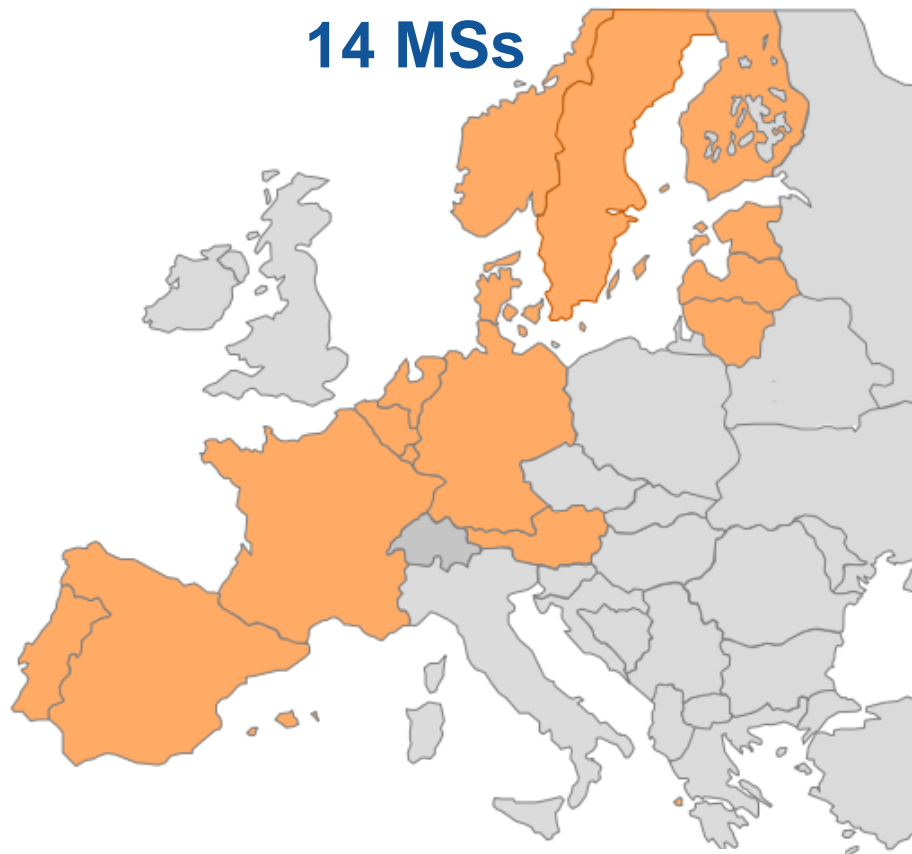
? – SEE – design phase



Single IntraDay Coupling – XBID

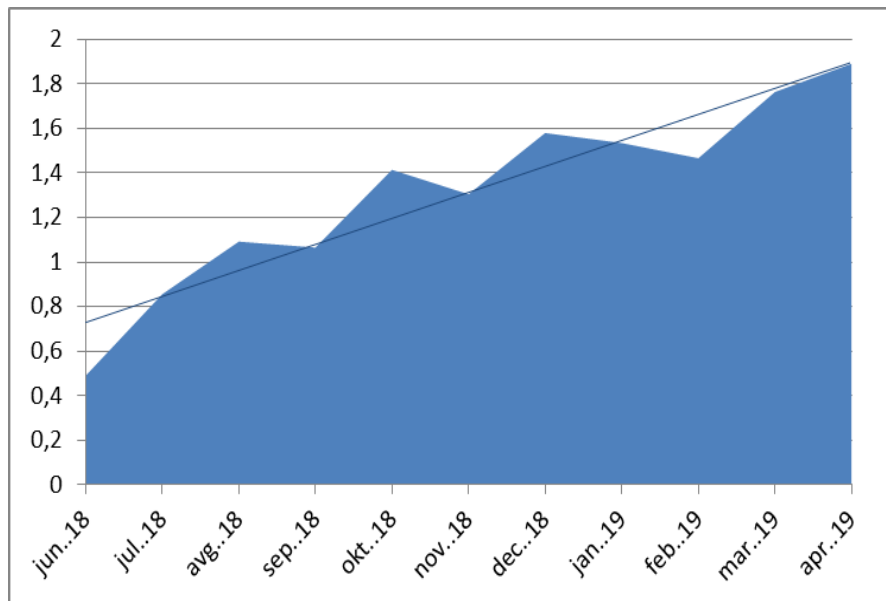
1st Wave Go-Live 14 MSs

| Delivery areas coupled at first go-live |
|---|
| 50Hertz Transmission GmbH |
| Amprion |
| Austria |
| Denmark West |
| Denmark East |
| Estonia |
| Elia System Operator |
| Finland |
| Finland-Russia Exchange Area |
| Lithuania |
| Latvia |
| Morocco Delivery Area |
| Netherlands |
| Norway 1-5 |
| Portugal Delivery Area |
| France |
| Sweden 1-4 |
| Spain Delivery Area |
| TransnetBW GmbH |
| TenneT TSO GmbH |



XBID – 1st Go-Live observations

A significant increase in volumes and total number of trades since XBID go-live on 12th June 2018



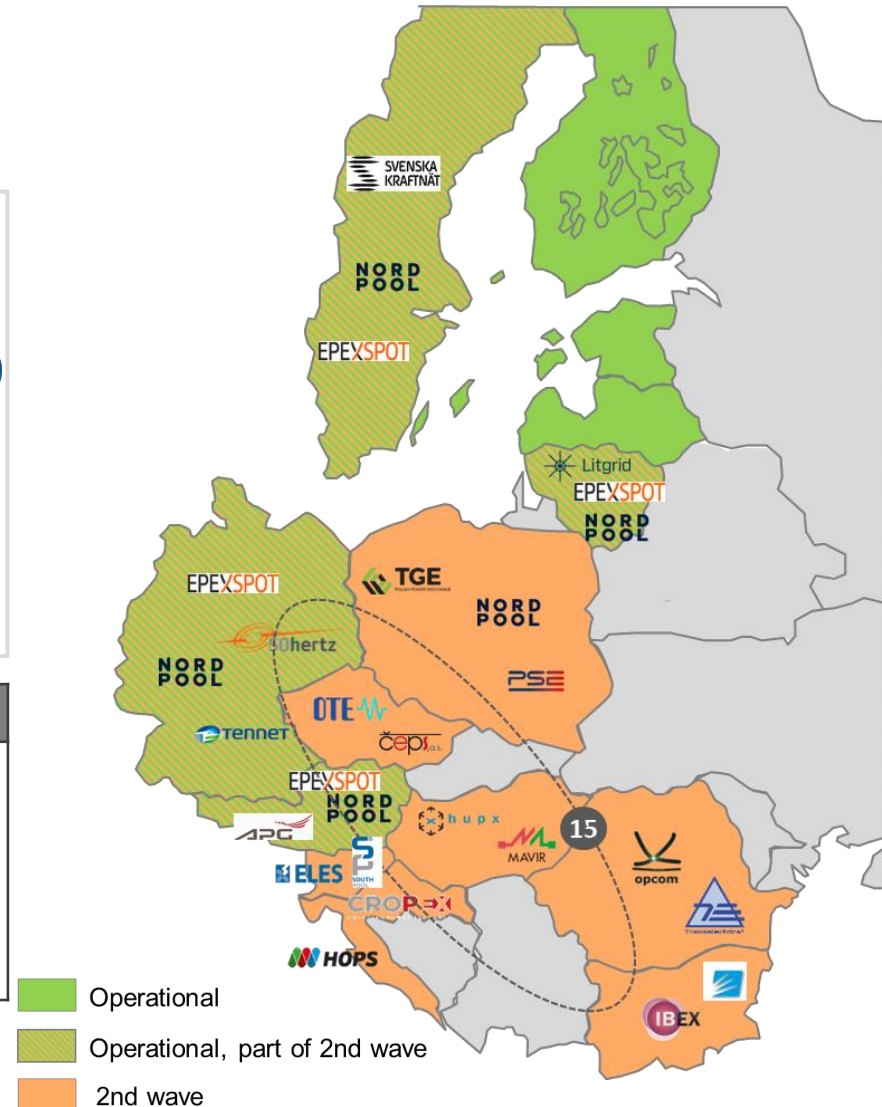
| Month | In Million trades / month |
|----------|---------------------------|
| Jun 2018 | 0.490 |
| Jul 2018 | 0.856 |
| Aug 2018 | 1.092 |
| Sep 2018 | 1.065 |
| Oct 2018 | 1.414 |
| Nov 2018 | 1.304 |
| Dec 2018 | 1.579 |
| Jan 2019 | 1.534 |
| Feb 2019 | 1.466 |
| Mar 2019 | 1.763 |
| Apr 2019 | 1.890 |

Single IntraDay Coupling – XBID

2nd Wave Go-Live

- Go-Live Scheduled prior to end of 2019
- 7 MSs – Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania & Slovenia (subject to successful testing)

| LIP | Participants |
|-----|--|
| | <p>NEMOs: BSP, Cropex, EPEX, HUPX, IBEX, Nord Pool, OPCOM, OTE</p> <p>TSOs: 50Hertz, APG, CEPS, ELES, ESO, HOPS, MAVIR, PSE, Transelectrica, TTG</p> |



Experience learned from implicit DA and ID allocation of electricity cross border capacities

- Removed risks (and additional costs) of trading transmission capacity and energy separately → one-step process;
- Maximizes utilization of allocated interconnection capacity → priority on interconnectors based on price difference between domestic and neighboring markets;
- Increases market depth and traded volumes especially → encourages liquidity share between coupled markets;
- Allows all spot market participants to benefit from cross-border access → reduced market concentration/increased number of market participants;
- Enabled formatting of market price indices → reliable price indices;
- Markets really merge into one single market when there is enough capacity → areas merge at that moment.

Main elements of integrated European market design

- Coordinated explicit auctions for long term CBCs
- DA GCT at 12:00; results publication at 12:52
- ID GOT at D-1 15:00; ID GCT D H-1
- European clearing and settlement cycle
 - Clearing in Euro (XB)
 - Payment cycle T+1 or T+2
- Regulatory changes
 - Legislation supporting bilateral trading and trading on PX
 - VAT Reverse Charge Mechanism
 - Abolishment of duties/fees for cross-border trading with electricity
- 365/24/7 trading

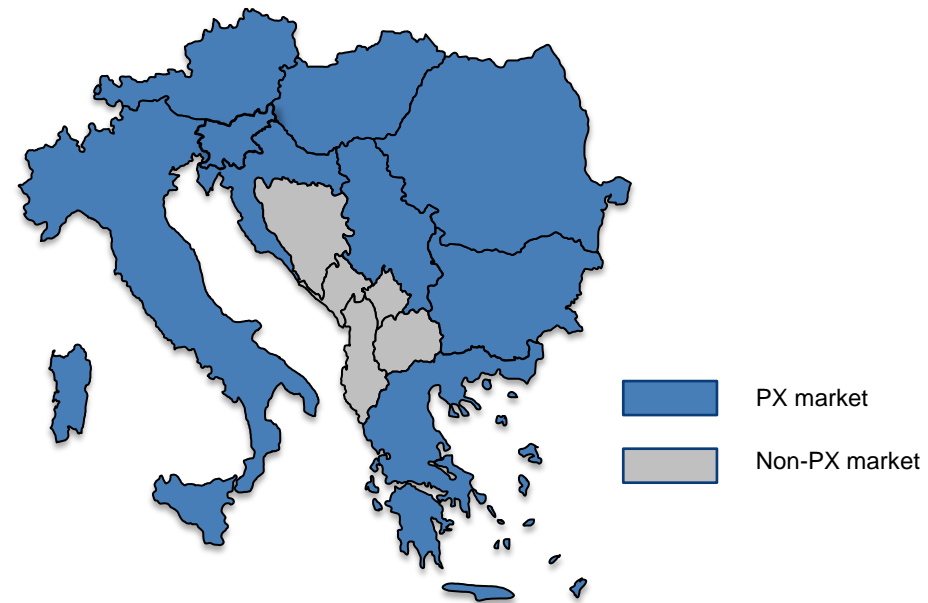
Regional PX liquidity

Markets in the region with operating PX and sufficient market depth for formation of DA price indices

| PX | VOLUME (in TWh) | CONSUMPTION (in TWh) | SHARE (in %) |
|--------|--------------------|-------------------------|-----------------|
| GME | 295,56 | 322,22 | 92% |
| EXAA | 6,58 | 7,14 | 9% |
| BSP | 7,77 | 14,37 | 52% |
| HUPX | 19,91 | 42,50 | 47% |
| OPCOM | 23,54 | 57,93 | 41% |
| HENEX* | 51,58 | 51,58 | 100% |
| CROPEX | 2,10 | 18,18 | 12% |
| SEEPEX | 2,32 | 39,09 | 6% |
| IBEX | 6,06 | 34,06 | 18% |

*Mandatory Pool

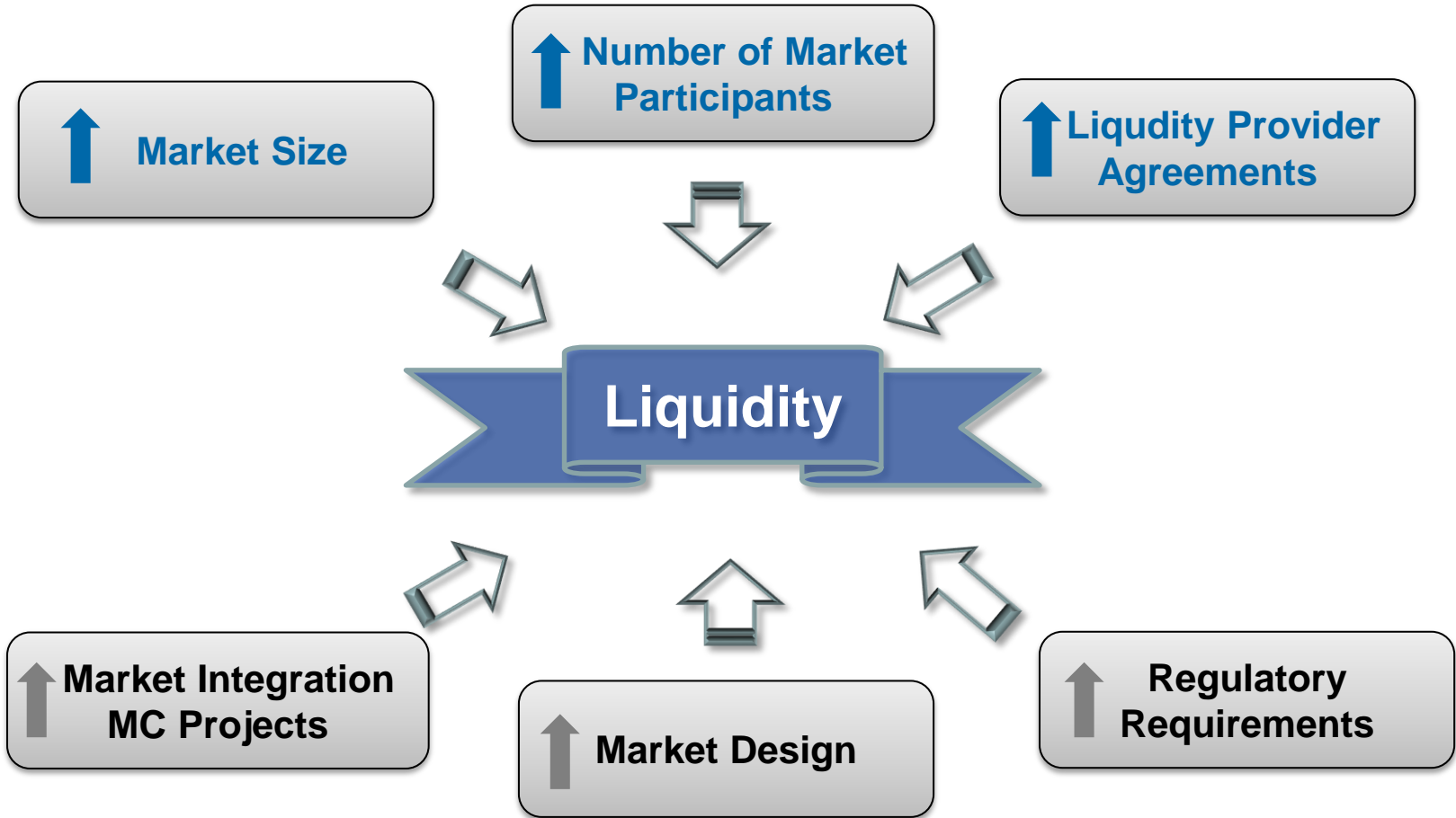
Source: PX Annual Reports/webpage and ENTSO-E Factsheet





BSP's experiences of boosting liquidity in the developing power market

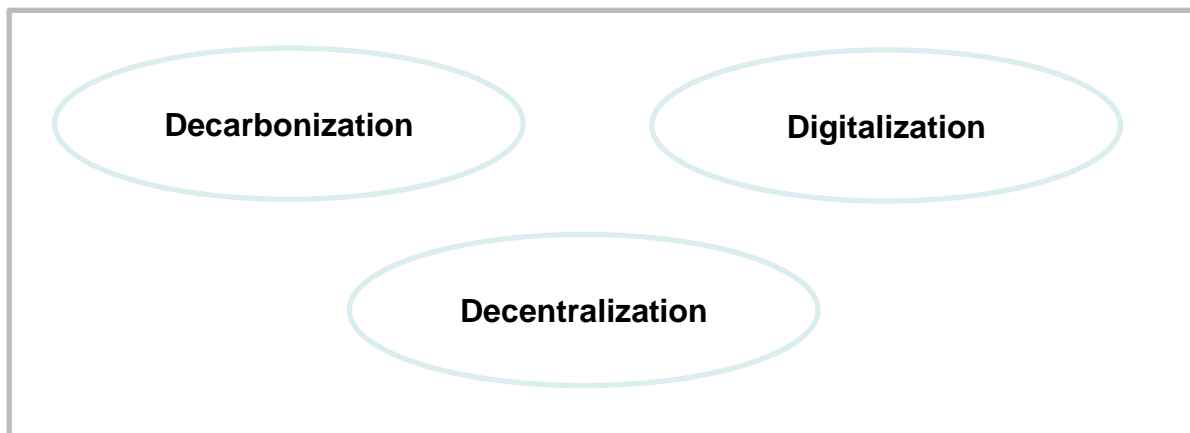
Main drivers behind liquidity growth



Upcoming challenges

- *CACM implementation*
 - *Finalization of pan-European electricity market in line with Capacity Allocation and Congestion Management Guideline and other Network Codes*
 - *Implementation of CACM on the markets out of current geographical scope of SDAC and SIDC*

- *Implementation of Clean Energy Package requirements → 3 Ds*



Direct impact on PXs – i.e. introduction of 15 minute products

Thank you for attention!

M.Sc. Anže Predovnik
Director

Phone: +386 1 620 7 671
Email: anze.predovnik@bsp-southpool.com



We keep you well informed!

