

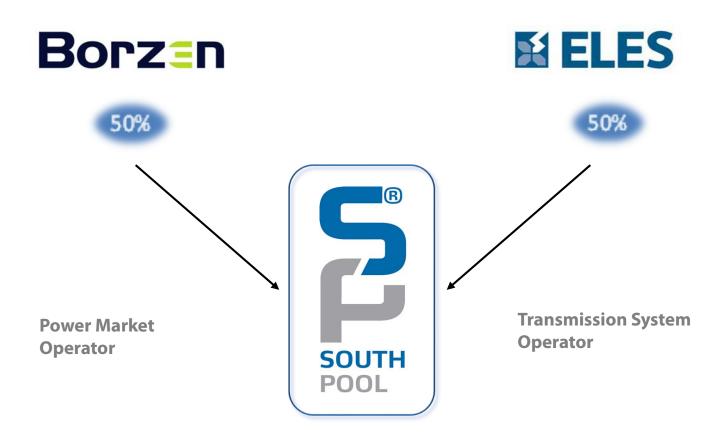
Market coupling – the role of a PXs as market place

BSP SouthPool, Energy Exchange

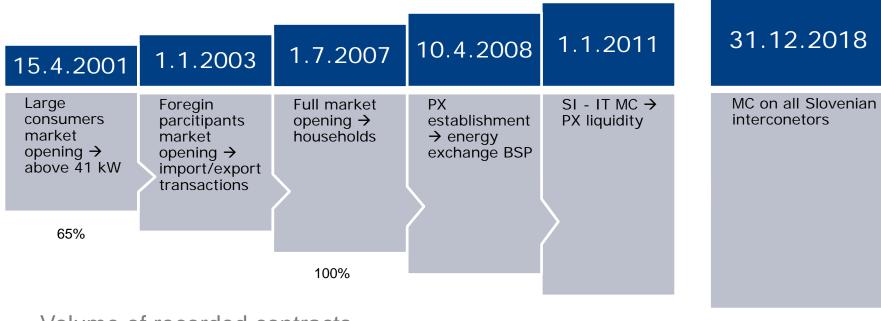
Trading Course on Electricity Markets and Trading, Podgorica, 03.10.2019



Ownership



Market opening process



Volume of recorded contracts

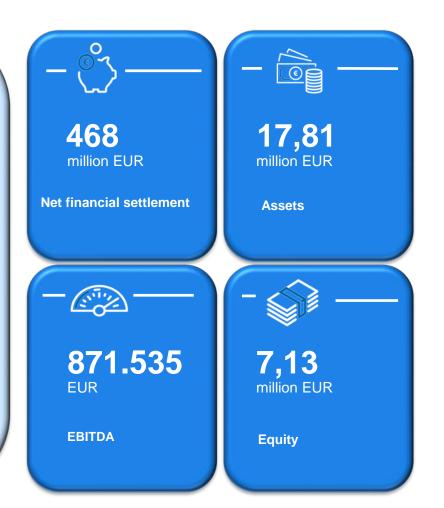


BSP at glance (2018)



37 members

13 European countries



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



 Long-term Auction Trading with Physical Futures Products





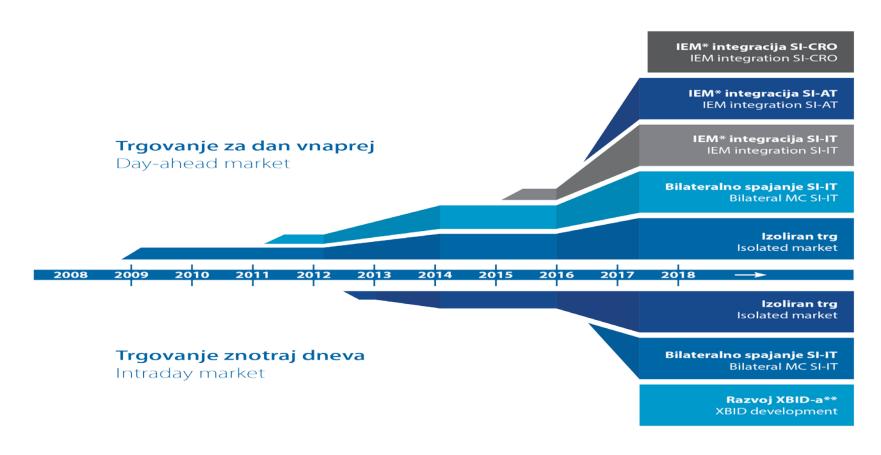
- ID Continuous Trading
 - Base (00:00-24:00);
 - Peak (08:00-20:00);
 - Hourly Products;
 - Quarterly Products;
 - User Defined Products.



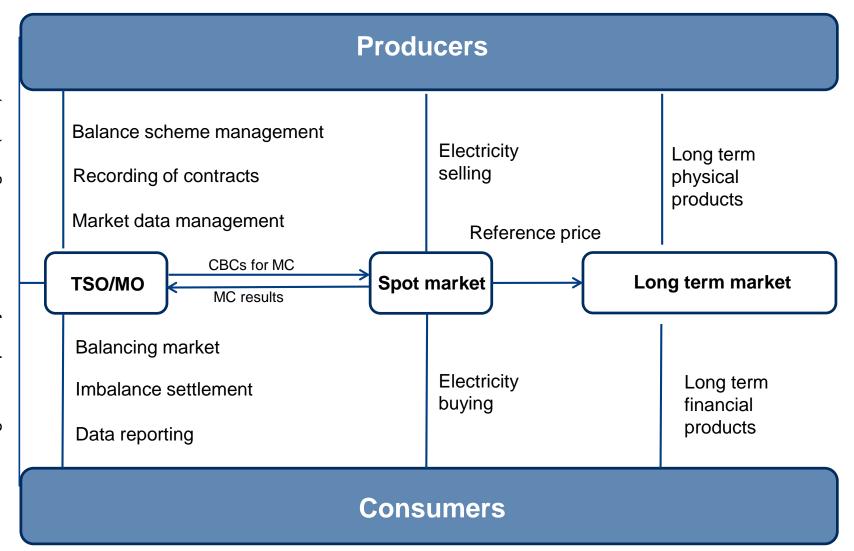
Long-term Continuous Trading with Financial Futures Products

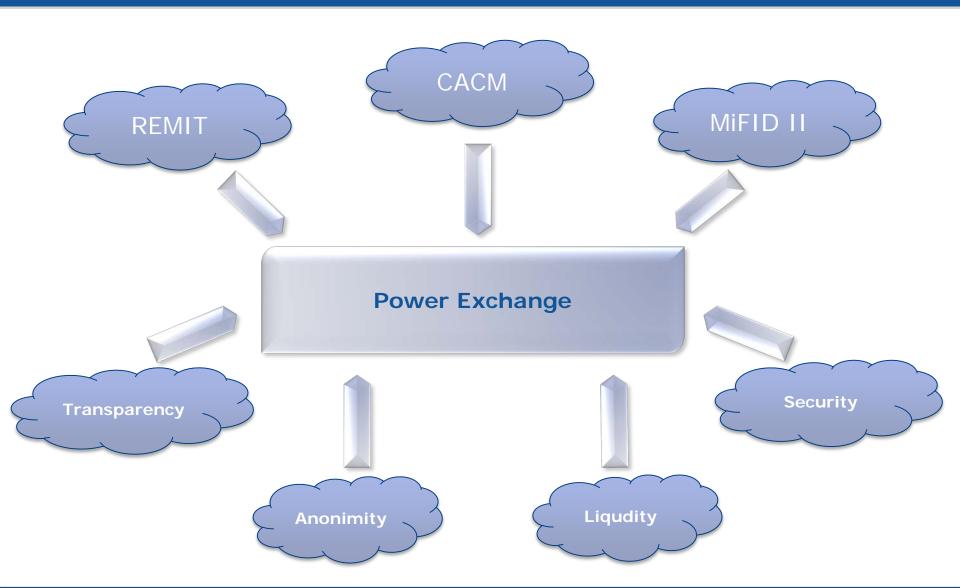


Markets development



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







Single Day Ahead Coupling - status

2013 – several regions

2014 – 4th February MC NWE region

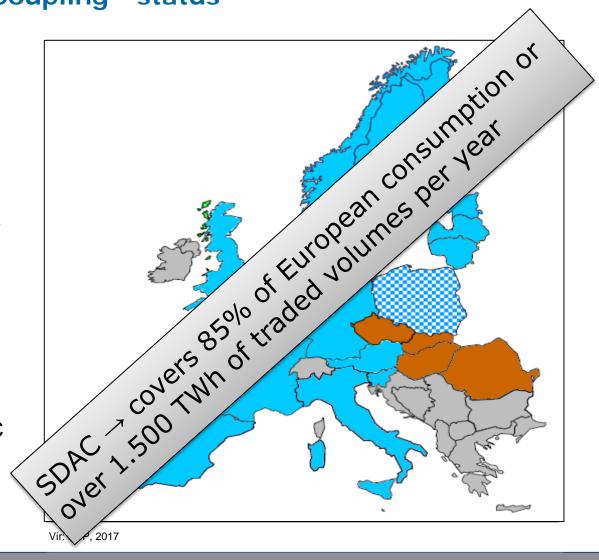
2014 – 14th May MC NWE+SWE region → MRC

2014 - 19th November3M MC \rightarrow 4M MC

2015 – 24th February MC MRC+CSE region

End 2020 – CORE FBMC – implementation phase

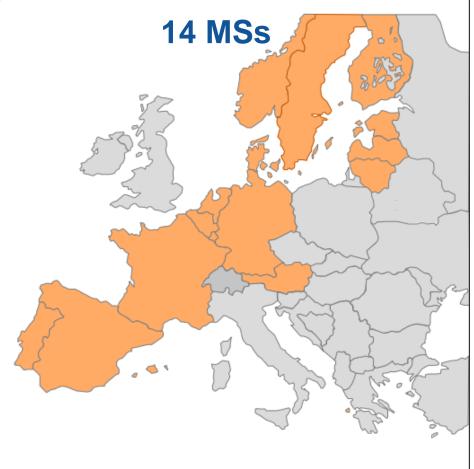
? - SEE - design phase



Single IntraDay Coupling – XBID

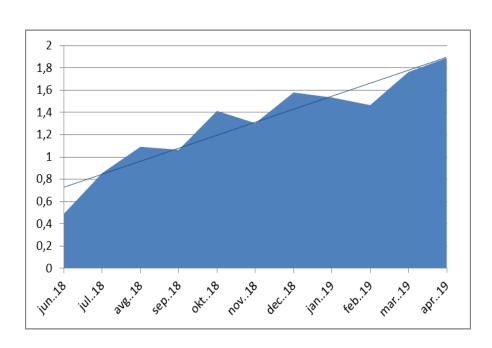
1st Wave Go-Live

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
Tellier 100 dilibit



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
15	HU, BG-RO, CZ- DE, CZ-PL, DE-	NEMOs: BSP, Cropex, EPEX, HUPX, IBEX, Nord Pool, OPCOM, OTE TSOs: 50Hertz, APG, CEPS, ELES, ESO, HOPS, MAVIR, PSE, Transelectrica, TTG

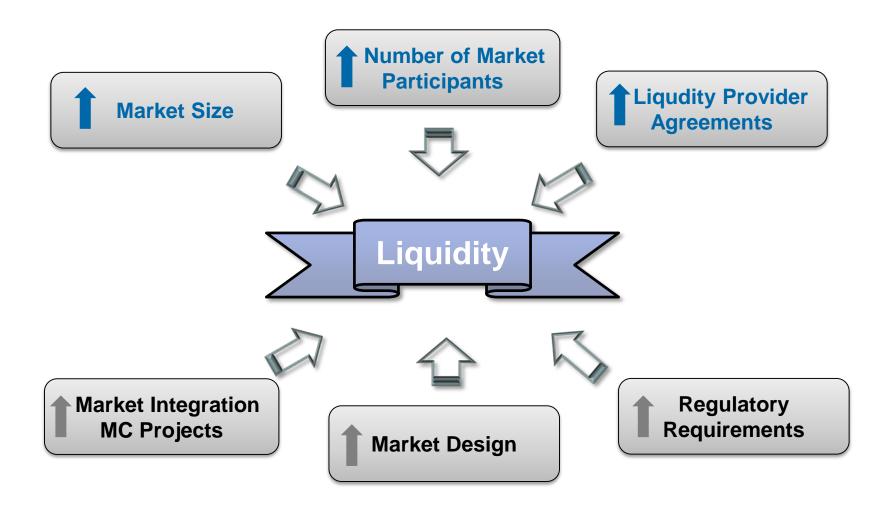


Market Coupling in Slovenia





Main drivers behind liqudity growth



Main elements of market design in Europe

- 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
 - XB Clearing in Euro
 - 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

Experiences learned from implicit allocation of electricity CBCs

- 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;
- Allows all spot market participants to benefit from cross-border access → increased number of market participants /reduced market concentration;
- Increases market depth and traded volumes especially → encourages liquidity share between coupled markets;
- 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.

INCREASED NUMBER OF MARKET PARTICIPANTS











37 members 13 countries

































































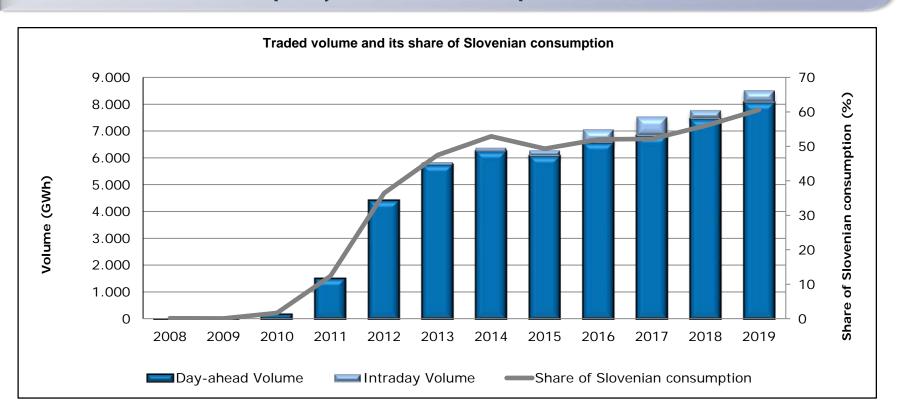




Experience obtained from introduction of MC on SI-IT border

INCREASED LIQUIDITY

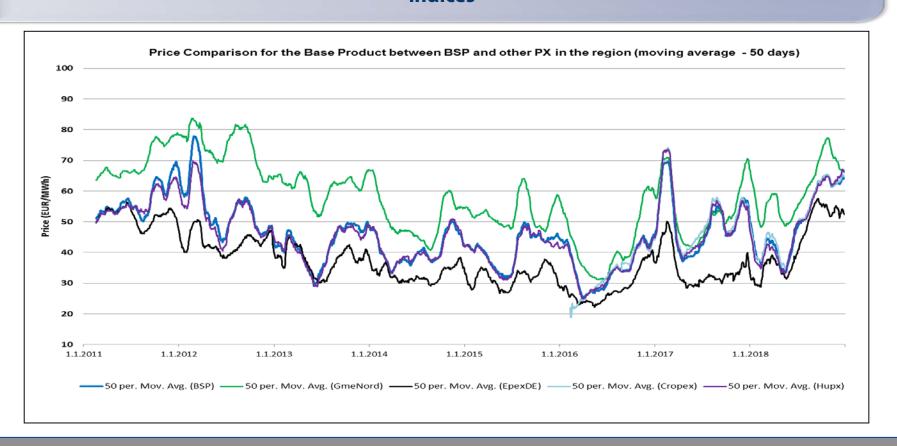
Increases market depth and traded volumes especially on SI DA market \rightarrow encourages liquidity share between coupled markets



Experience obtained from introduction of MC on SI-IT border

RELIABLE SIPX INDEX

Enabled formatting of regionally recognized SI DA market price indices → **reliable price indices**



Specific experiences obtained from introduction of MC on SI borders

PX	TRADED VOLUME (in TWh)				Δ (in No. Mem)	
SI-IT	0,195 (2010)	6,248 (2014)	3.200	26 (2010)	48 (2014)	+22
SI-AT (*)	5,931	7,013	18	39	37	-2
SI-HR (**)	7,195	7,608	6	37	36	-1

^{*1.7.2015-30.6.2016} vs 1.7.2016-30.6.2017

	PRICE SPREADS (in €)			Δ n €)	PRICE CONVERGENCE (in %)		Δ (in %)
SI-IT	61,98 (GME 2010) 47,33 (BSP 2010)	70,01 (GME 2011) 57,20 (BSP 2011)	14,65	12,81	0,01 (BSP=GME 2010)	20,08 (BSP=GME 2011)	20,07
SI-AT (*)	29,02 (EPEX) 38,43 (BSP)	34,21 (EPEX) 44,39 (BSP)	9,41	10,18	4,39 (BSP=EPEX)	34,92 (BSP=EPEX)	30,53
SI-HR (**)	47,17 (CROPEX) 45,99 (BSP)	56,16 (CROPEX) 55,96 (BSP)	1,18	0,20	3,05 (BSP=CROPEX)	99,00 (BSP=CROPEX)	95,95

^{*1.7.2015-30.6.2016} vs 1.7.2016-30.6.2017

^{** 1.7.2017-30.6.2018} vs 1.7.2018-30.6.2019

^{** 1.7.2017-30.6.2018} vs 1.7.2018-30.6.2019

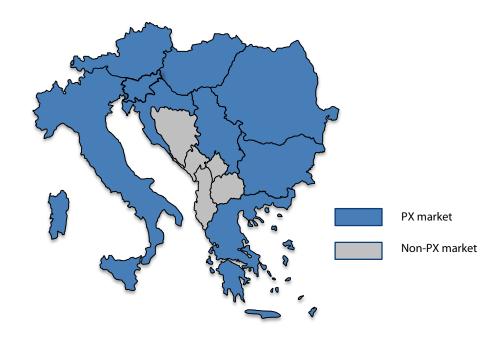
Regional PX liquidity in 2018

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

РХ	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%

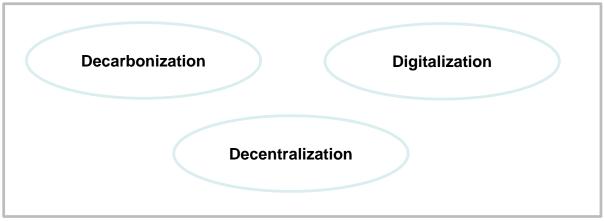


Source: PX Annual Reports/webpage and ENTSO-E Factsheet



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!

