

ETCSEE 2017

ENERGY | CENTRAL & SOUTH
TRADING | EASTERN EUROPE

14 - 15 June 2017 | Prague



innogy

*Another tough year for
storage operators,
will it end soon?*

Zbynek Pokorny, innogy Gas Storage

Thank you for choosing ETCSEE over many other competing events in Prague!



ICSMESSP 2017

International Conference on Structural and Mechanical Engineering for Security and Prevention 2017



But you can still make these...

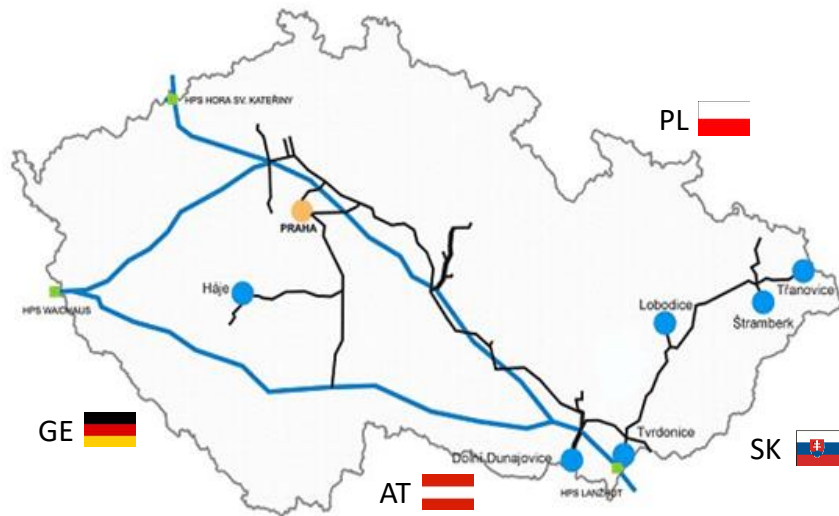
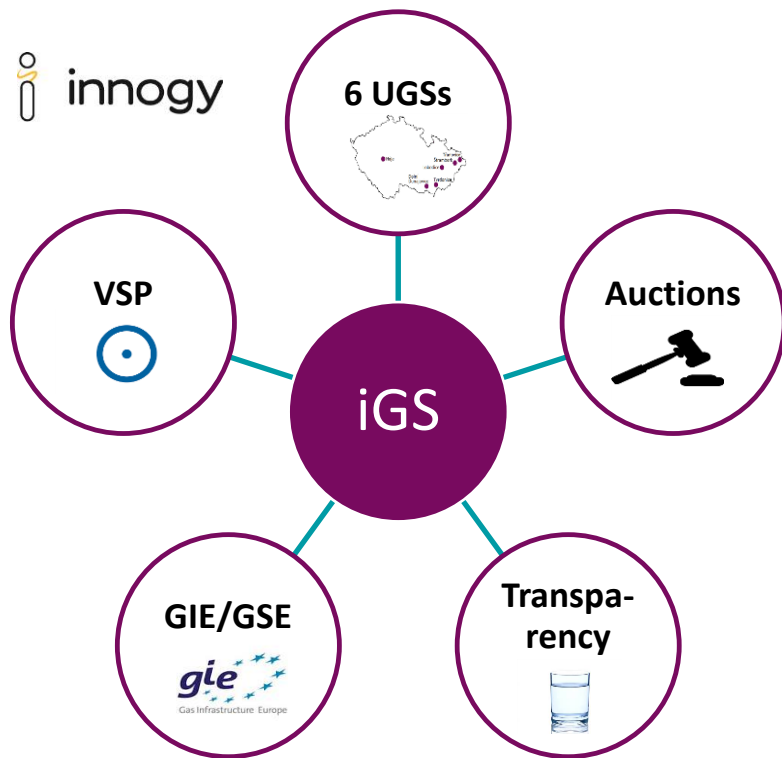


Festival of Microbreweries




Minibeer Festival




Like many others, innogy Gas Storage operates on a fully open market



VIRTUAL STORAGE POINT



innogy

	WGV: 2.7 bcm
	Injection: 316 GWh/d
	Withdrawal: 422 GWh/d

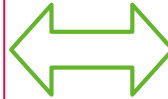
iGS offers storage capacity electronically via its Auction System or Customer Portal

Online AUCTIONS

- > **Yearly contracts (firm)**
 - Existing capacity
1 to 5 years
 - Newly built capacity
up to 15 years
- > **Monthly contracts (firm)**
1 to 24 months



- On-line ascending clock auctions
- All conditions known ahead of the auction



Online REQUESTS

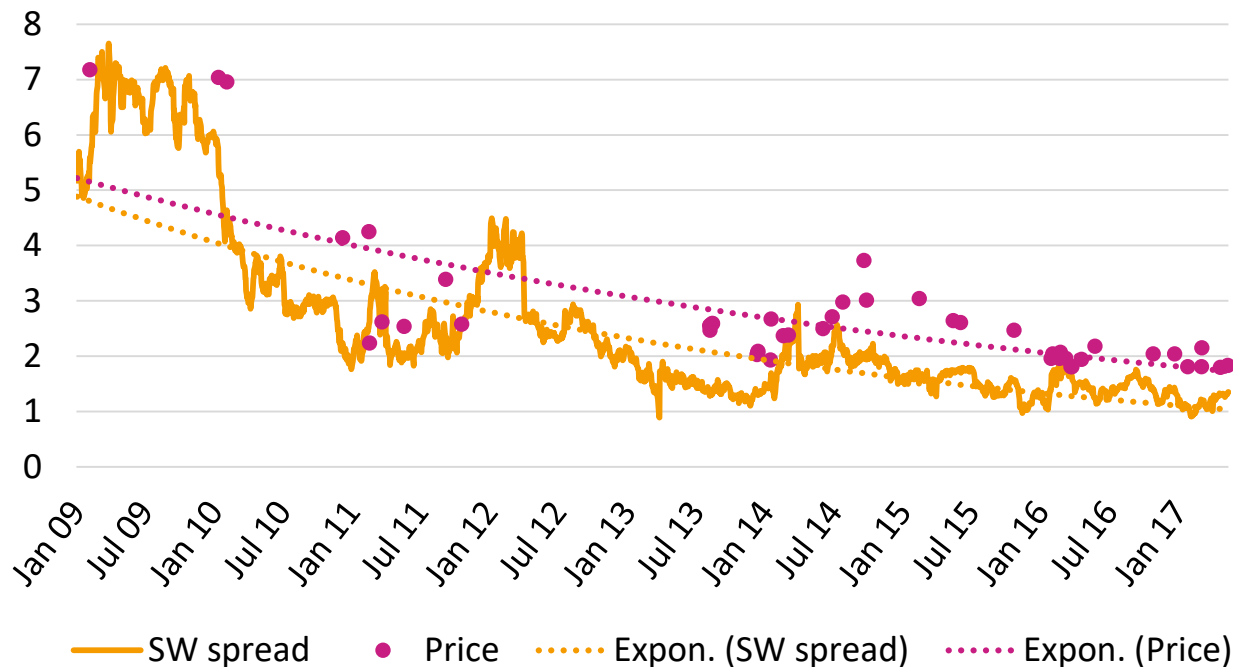
- > **Daily contracts (firm)**
1 to 90 days
- > **Daily contracts (interruptible)**
1 day
- > **Within-day contracts (firm) interruptible)**



- On-line bidding platform with auction components
- Interruption probability decreases with higher bids
- + Management of contracts and reports

Digest of iGS prices vs sum-win spread at the date of auction

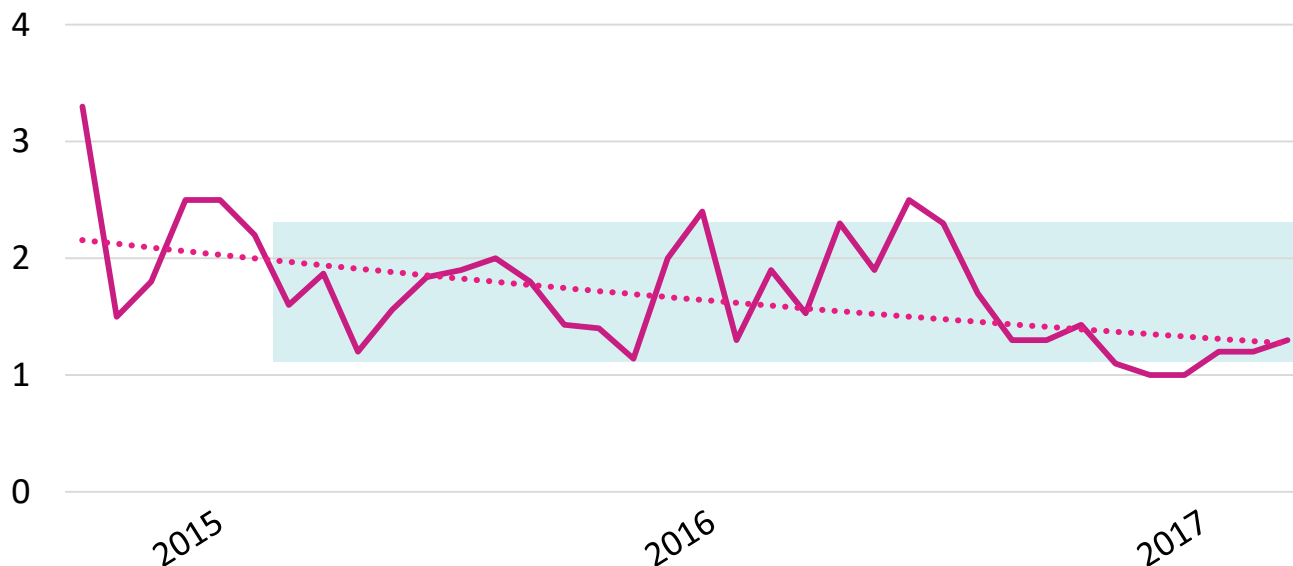
iGS final auction prices (EUR/MWh)



- Selection of auctions
 - Similar storage products (firm bundles)
 - yearly
- Comparison of prices not so simple as shown here

Storage prices in Europe at the level of S-W spread; genuine prices published rarely

Digest of storage prices in CEE and NWE (€/MWh)



- More types of products (bundles)
- w/ or w/o fuel gas and/or other fees
- SW spread linkage
- No guarantee

Source: Prices collected by innogy Gas Storage from different public sources

We live in a „Kingdom of (SW) Spreads“ Hey, there are other kingdoms out there!



NCG: Daily reference price SPOT (€/MWh)



NCG: EGIX (€/MWh)



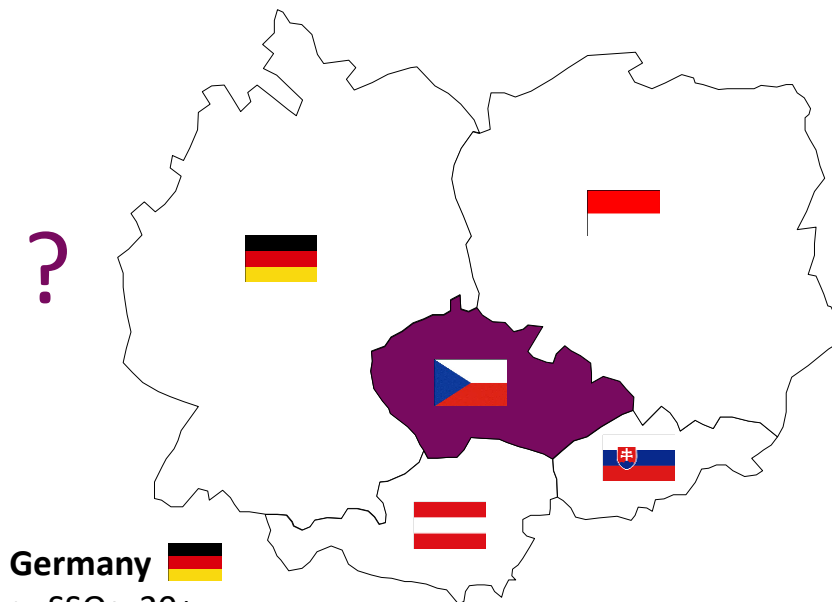
... but the SW
spreads always rule
us all



Two very similar auctions and very different results...

Date	March 2017	March 2017
Capacity offered	100 GWh	100 GWh
Product	90 days	83 days
Starting price	2 EUR/MWh	2.04 EUR/MWh
Nr. of auction rounds	5	x
Final price	2.15 EUR/MWh	x
SW spread	1.22 EUR/MWh	1.29 EUR/MWh
Nr. of shippers	6 (3)	0

CEE countries generally well equipped with storage capacity... Until when?



Germany

- SSOs: 20+
- Storage capacity: ~20 bcm
- Some storage sites already closed(!)

Czech Republic

- innogy Gas Storage: 2,707 mcm
- MND Gas Storage: 280 mcm
- Moravia Gas Storage: 170 (450) mcm
- SPP Storage*: 576 mcm

Slovakia

- Nafta: 2,705 mcm
- Pozagas: 655 mcm

Poland

- Gas Storage Poland: 2,985 mcm
- PGNiG: 250 mcm

Austria

- OMV Gas Storage: 2,650 mcm
- RAG Energy Storage: 1,615 mcm
- astora: 985 mcm
- GSA (Gazprom): 1,840 mcm
- Uniper Energy Storage: 1,830 mcm

* At the moment connected to Slovakian distribution grid only

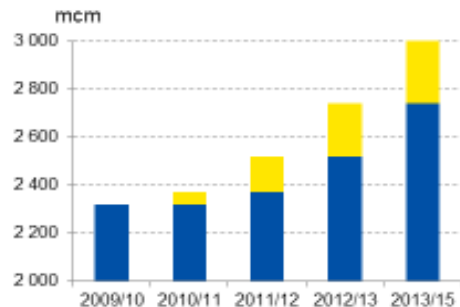
Source: Gas Storage Europe, web pages of individual SSOs

Expansion plans in the drawers already covered with dust...

Back in 2011 (ETCEE)

Current low demand for storage forces SSOs to revise their capacity development plans

Development of RGS's capacity (plan 2010)

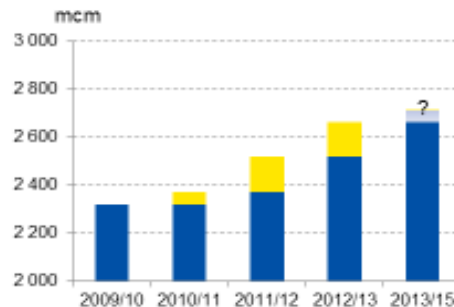


- > Some studies¹⁾ estimated that until 2030 Europe would require additional 50–70 bcm
- > Many SSOs planned to invest in new capacities (apart from the allocation regime)
- > But: All investments must assure an adequate payback – is it possible under current environment?



1) Clingendael, IEA, Societe Generale
Energy Trading CEE, Prague, 8-9 June 2011

Development of RGS's capacity (plan 2011)

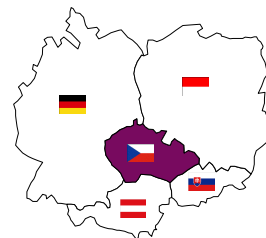


- > Today many SSOs revise their expansion plans due to the low interest
- > „Sell before build” or even „Do not build at all” principle
- > Short-term vs. long-term contracts

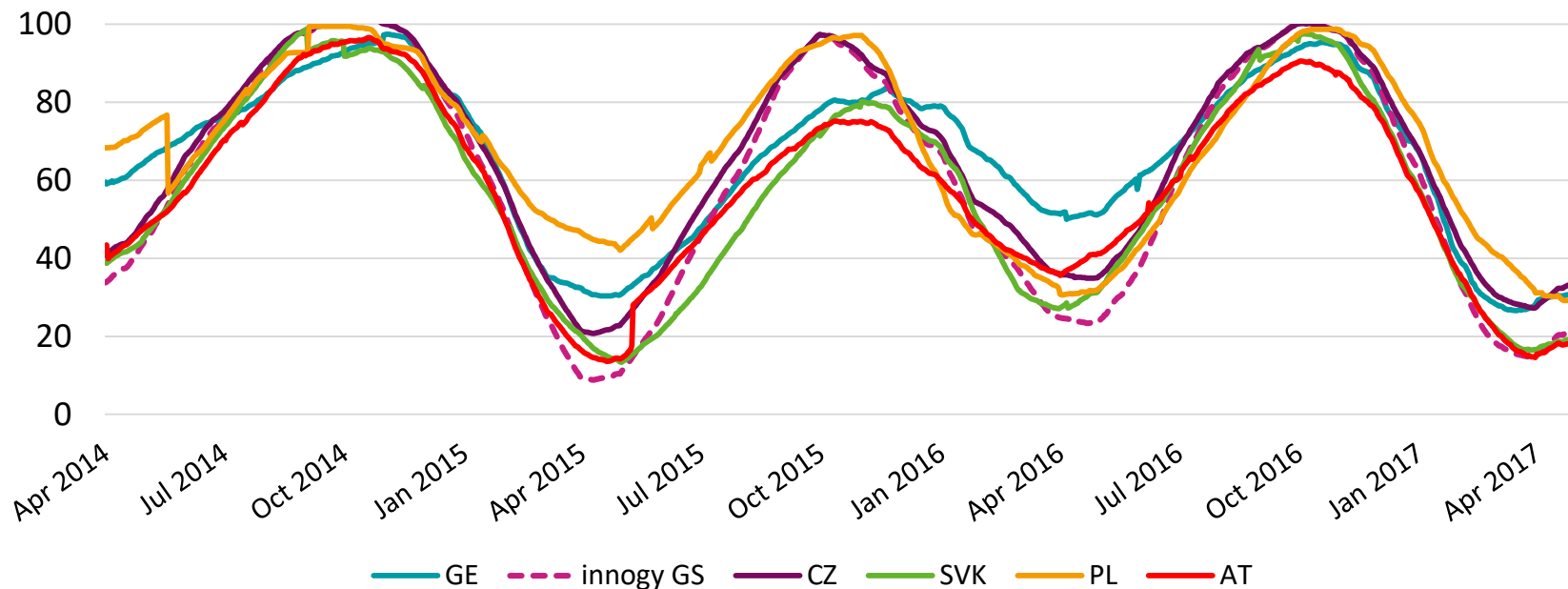
Today



Physical usage of individual storages among the countries/SSOs/UGSs varies



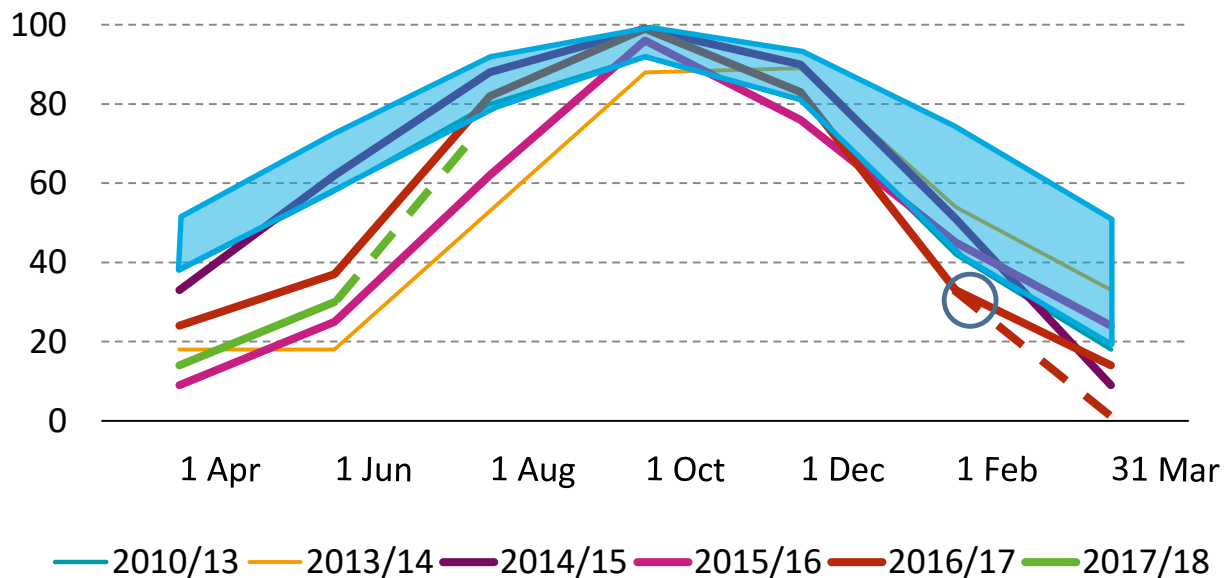
Filling levels of storages in individual countries (%)



Source: Gas Storage Europe, AGSI+

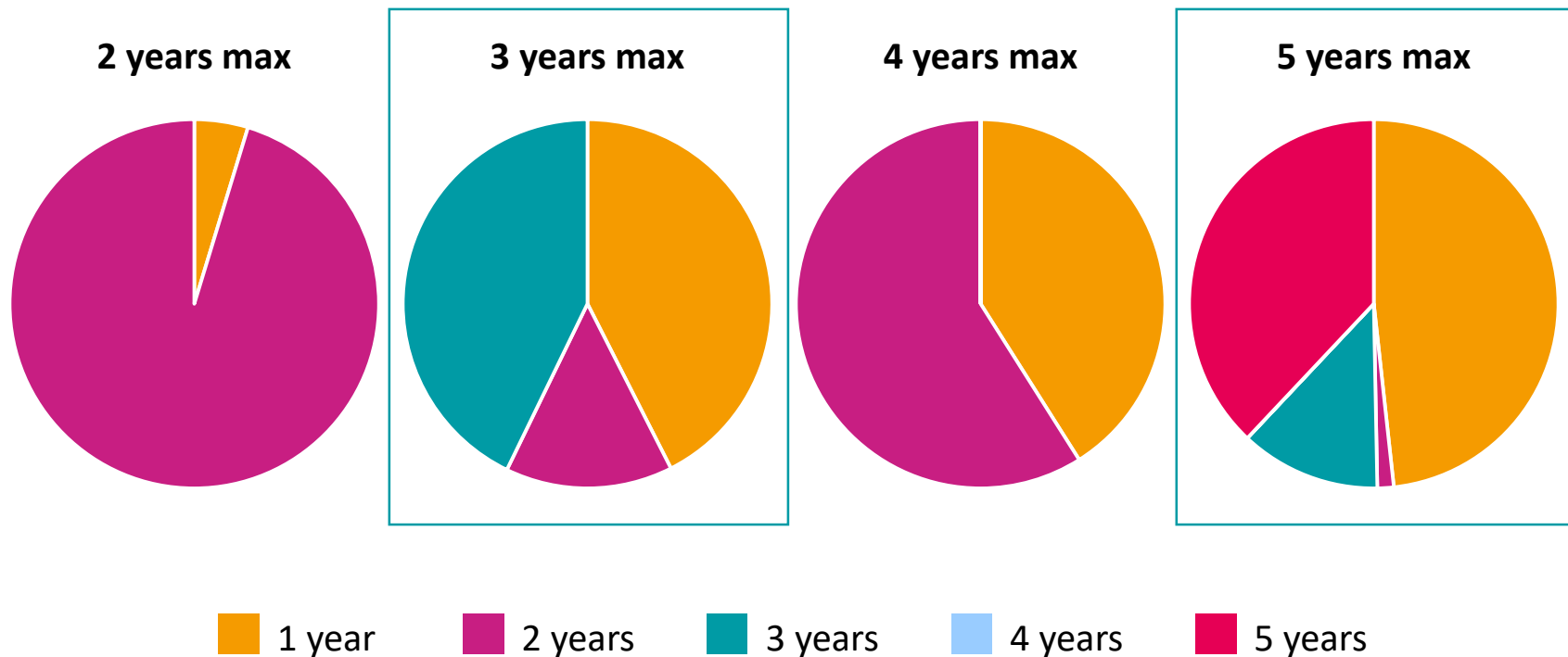
This winter, iGS experienced heavy usage of its storages; gas stock level at the end of January 2017 at 34% (lowest ever)

Filling level of iGS storages (%)

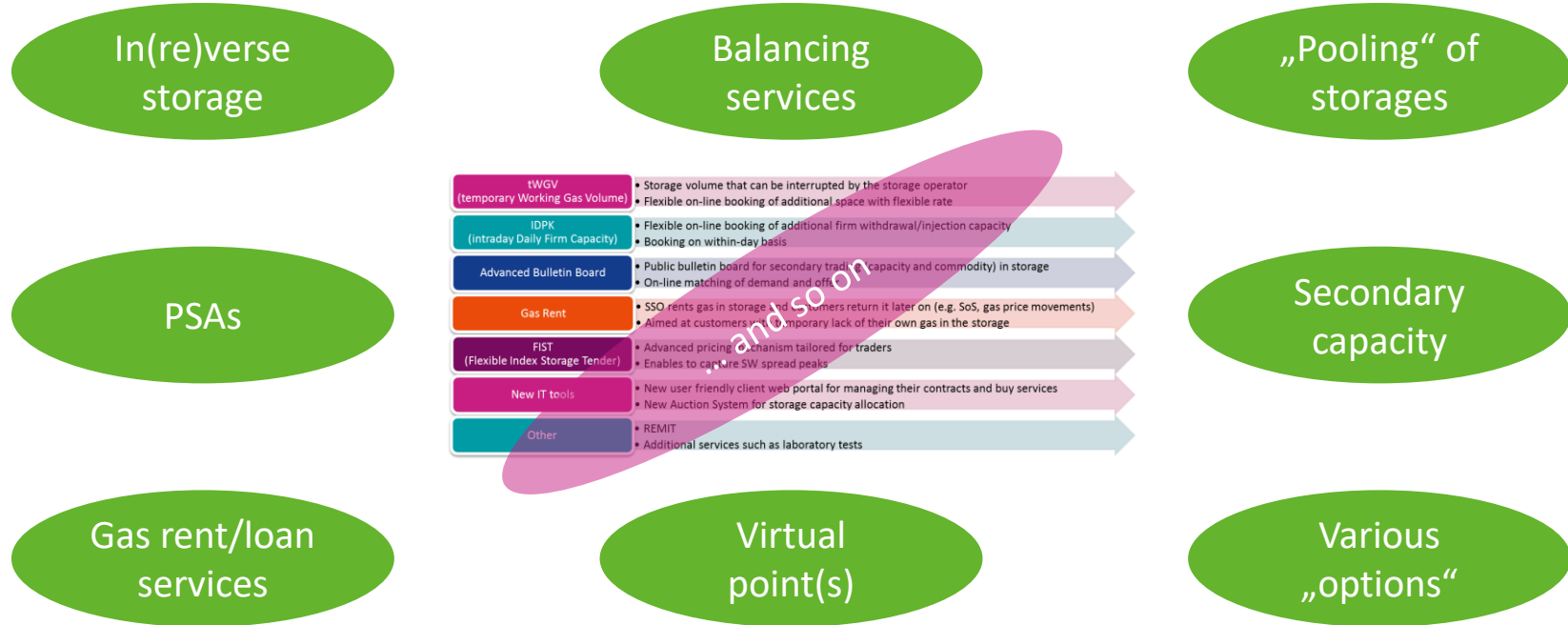


- Massive withdrawals in 2016/17 winter together with customers' forecasts indicated iGS storage to be **practically depleted** at the end of March 2017
- In March, the situation **changed** dramatically

When iGS capacity offered on long-term basis, shippers still ready to book for 3+ years



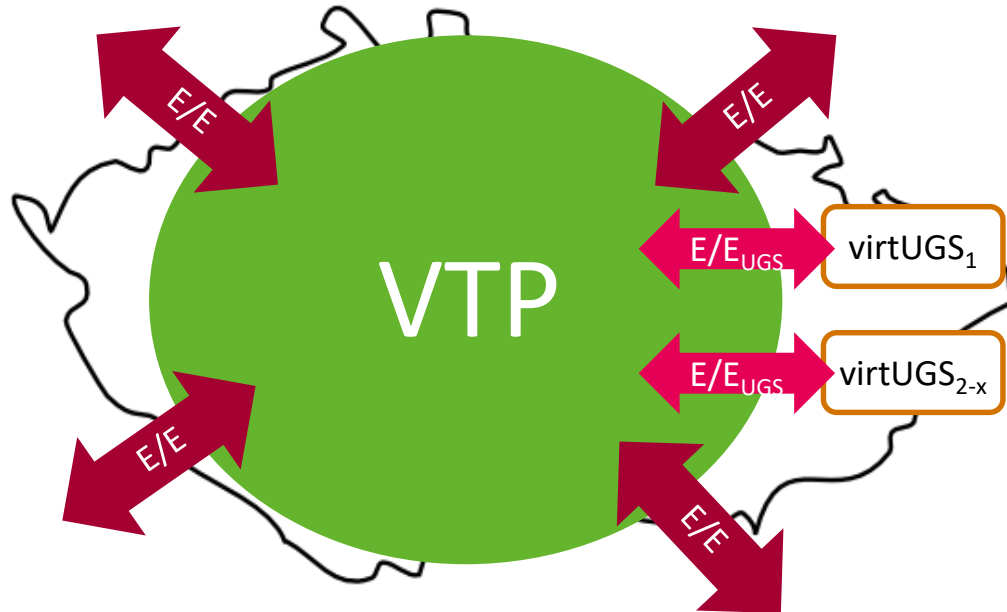
SSOs try to support their main product with additional services but...



Backup



Advanced virtualization of the Czech virtual storage point – under discussion



Virtual storage point at the Virtual Trading Point

- > Simplification of the administration for shippers
- > Elimination of transmission fees to/from storage

Today



Entry/Exit to/from CZ

- Booking/Contract
- (Re-)Nomination
- fee



Entry/Exit to/from UGS

- Booking/Contract
- (Re-)Nomination
- fee

Proposal



Entry/Exit to/from CZ

- Booking/Contract
- (Re-)Nomination
- fee



Entry/Exit to/from UGS

- ~~• Booking/Contract~~
- ~~• (Re-)Nomination~~
- ~~• fee~~