



# E-CONTROL

WORKING FOR YOU – WHEREVER YOU NEED ENERGY.



**E-CONTROL**



## **Liberalization Process of European Natural Gas Markets**

**How Austria evolved into a Liquid Market place**

# Agenda



E-CONTROL

- 
- Energy market liberalisation in the EU
  - Entry-exit and virtual trading point
  - Balancing
  - Capacity allocation and congestion management



**E-CONTROL**



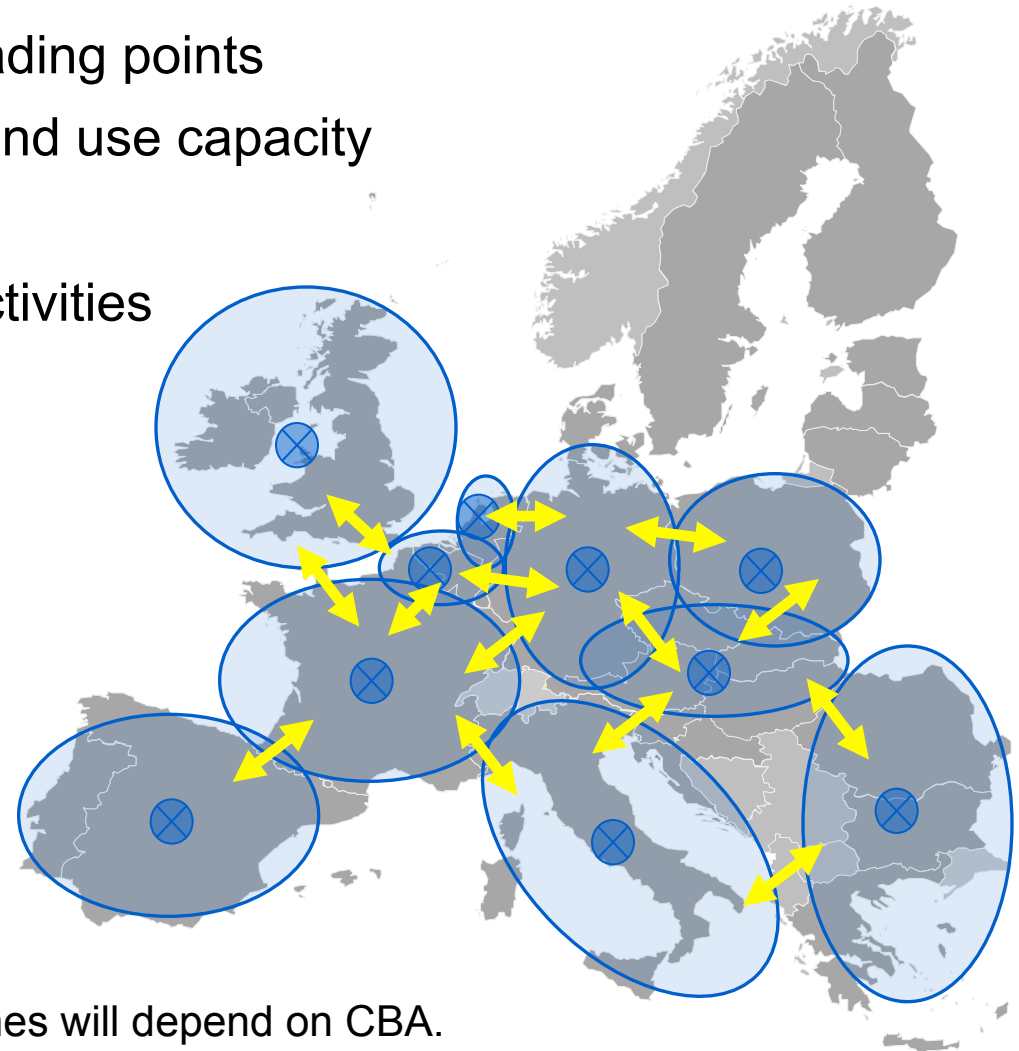
## **Energy market liberalisation in the EU**

# Principles of EU gas market



E-CONTROL

- Entry-exit zones with virtual trading points
  - Shipper can flexibly book and use capacity at entry and exit points
  - Concentration of trading activities at one virtual trading point
- Liquid hubs with sufficient and efficiently used infrastructure
- Functioning markets in all of Europe



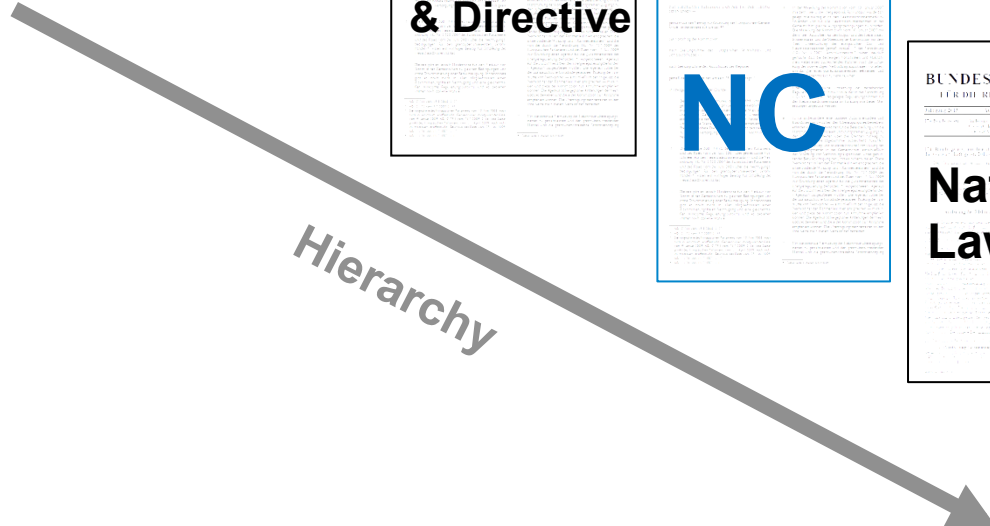
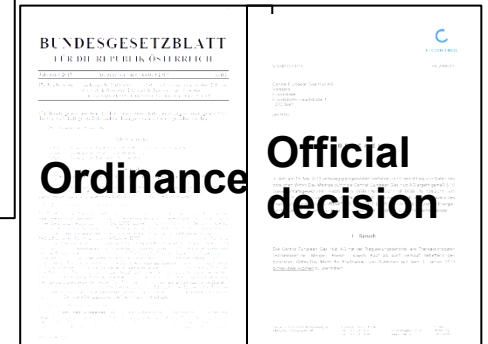
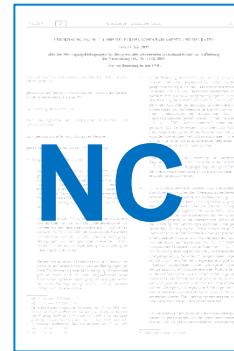
⊗ Hub

\* Zones drawn for illustration. Size of zones will depend on CBA.

# Hierarchy of legislation



E-CONTROL





**E-CONTROL**



## **Entry-exit and virtual trading point**

# From point-to-point to entry-exit



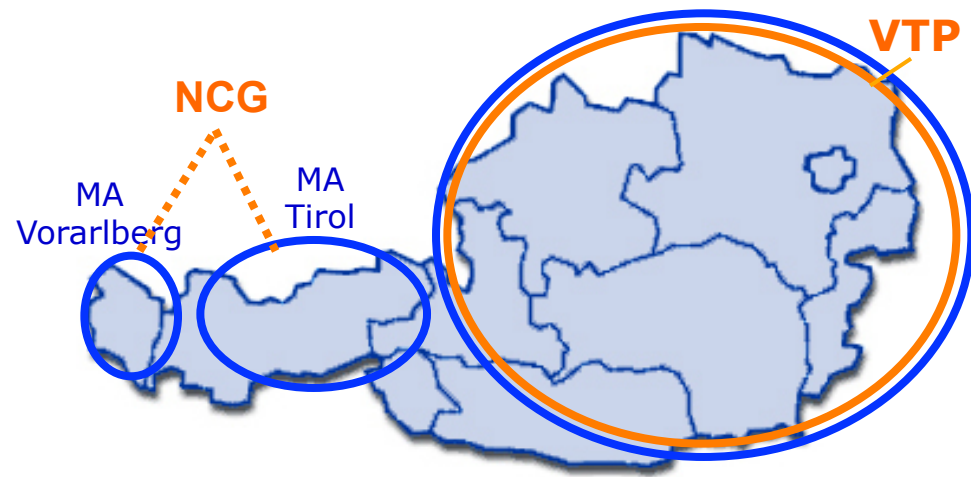
E-CONTROL

- Three market areas in Austria
  - Market Area East
  - Market Area Tyrol (distribution system)
  - Market Area Vorarlberg (distribution system)
- Market Area East is one Entry-Exit zone (transmission system) – concentration of the trading activities at one virtual trading point (VTP)

Several physical trading points  
+ 3 control areas



One VTP in the MA East = one  
Entry-Exit zone

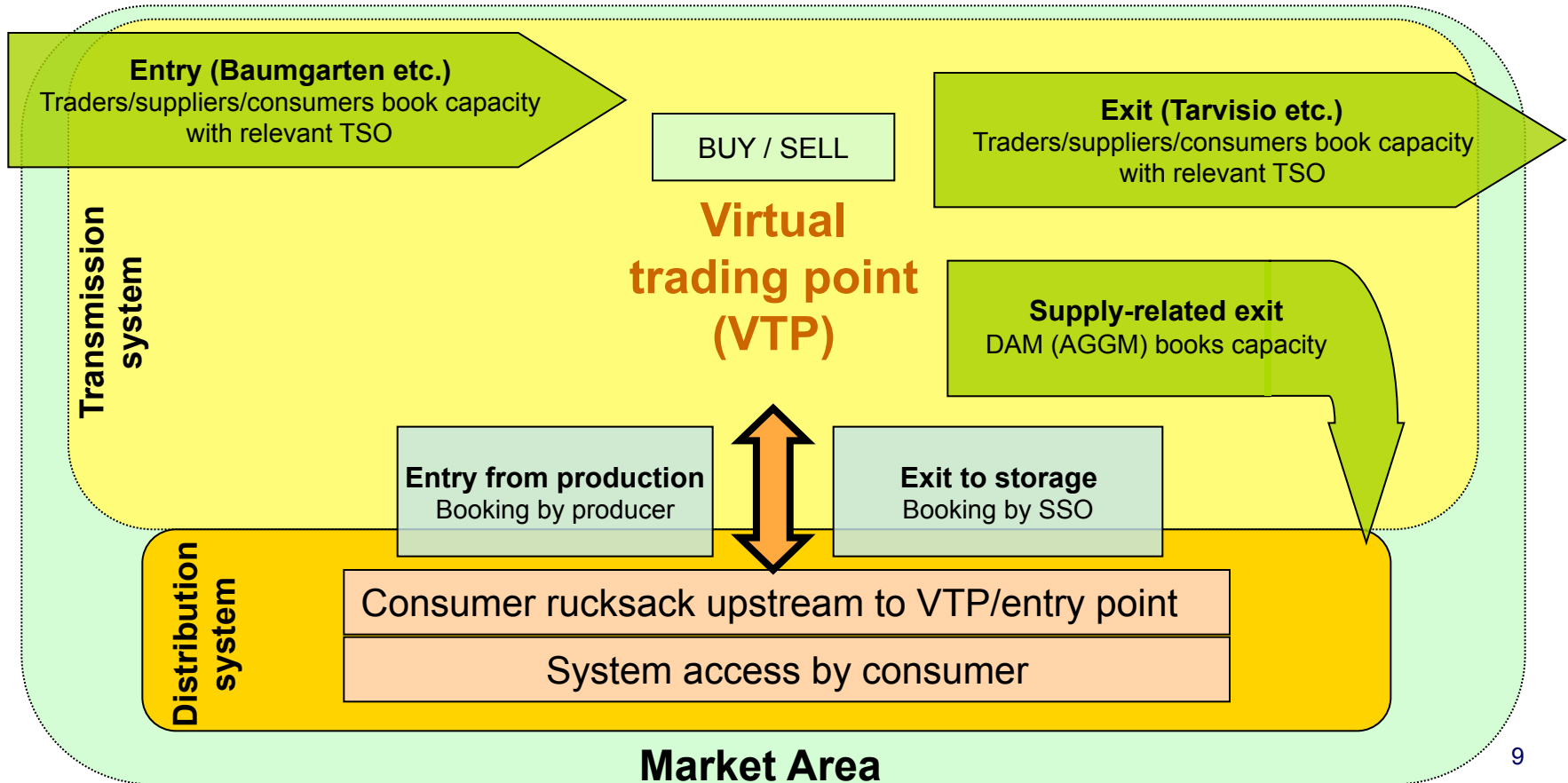




# Virtual Trading Point



E-CONTROL





**E-CONTROL**



# **Balancing**

# Balance Group Model



E-CONTROL



MAM..... Market Area Manager  
 DAM..... Distribution Area Manager  
 VTP..... Virtual Trading Point  
 BGC..... Balance Group Coordinator  
 DSO..... Distribution System Operator  
 TSO..... Transmission System Operator

# Fundamentals of the Balancing System



E-CONTROL

## Balancing Rules

Balancing according to the principle „allocated as nominated“

Daily balancing regime  
(Gas day 06:00 – 06:00)

Cash out of daily imbalances by balancing BGs at the gas exchange

Hourly incentive scheme as WDO

## Operational Balancing

Coordinated use of linepack within the Market Area

Procurement of physical balancing gas at the gas exchange

No further balancing instruments

Last resort: curtailment of critical balance group imbalances

## Information Provision

Balancing components are available „ex-ante“ in the form of confirmations

Information about BG-imbalance with reaction time of 1h15min for BGR

Publication of hourly market area net position and usable line pack

Non-binding SLP-prognosis by DAM



**E-CONTROL**



# **Capacity allocation and congestion management**



# Allocation mechanism

- Standard capacity allocation mechanism: **Auctions**
- Yearly product start date: 1<sup>st</sup> October
- 10% reservation for short-term capacity ensures that capacity is always available as quarterly and/or shorter duration products (< 1 year products: Q, M, D, WD)
- 10% reservation for mid-term capacity (yearly products,  $\geq 1$  year,  $\leq 5$  years)

Standard capacity product	Frequency of auctions	Number of products per auction per IP
Yearly	Annual	15
Quarterly	Annual	4
Monthly	Monthly (rolling monthly auction)	1
Daily	Every day	1
Within-day	Every hour	1 (balance of day)



# Booking platforms

---

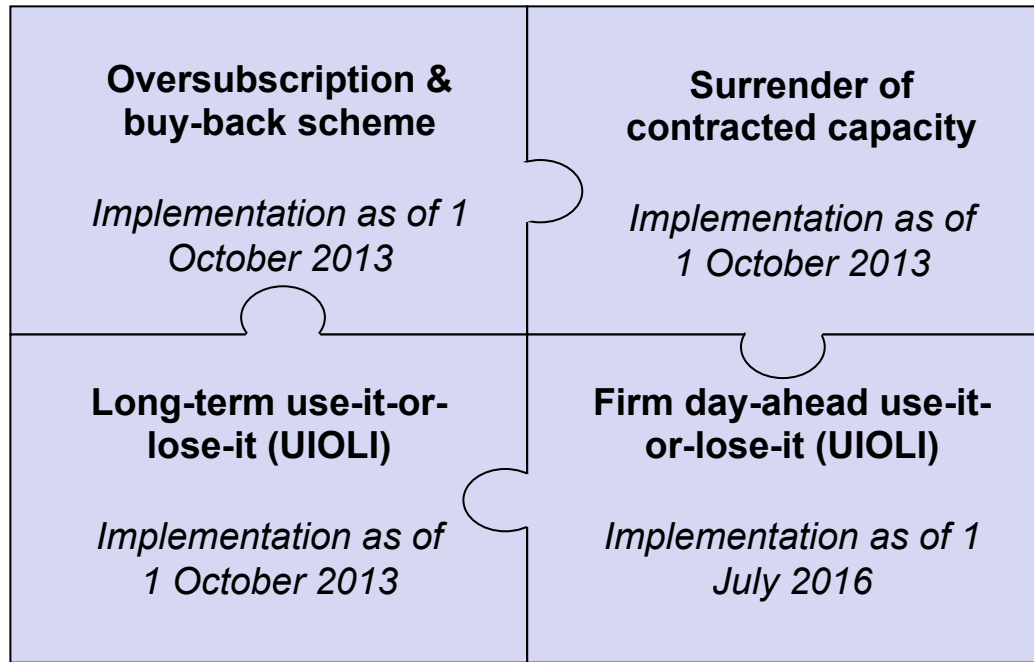
- PRISMA: Initiative to build a European-wide capacity booking platform
- most European TSOs became member of PRISMA
- <https://platform.prisma-capacity.eu/>
- 2 more regional booking platforms emerged, one in Poland (GSA) and one in Hungary (RBP)

# Congestion Management Principles



E-CONTROL

ACER Monitoring (Report on Congestion)



Data provision (additions to Transparency Guidelines)

**Problem:** at most European IPs capacities were fully booked (long-term), but the physical flows was much lower

**Objective:** measures to free up unused capacities

## Scope

- CMP Guidelines apply at IPs between adjacent entry-exit systems
- Application to IPs with non-EU countries decided by the NRA

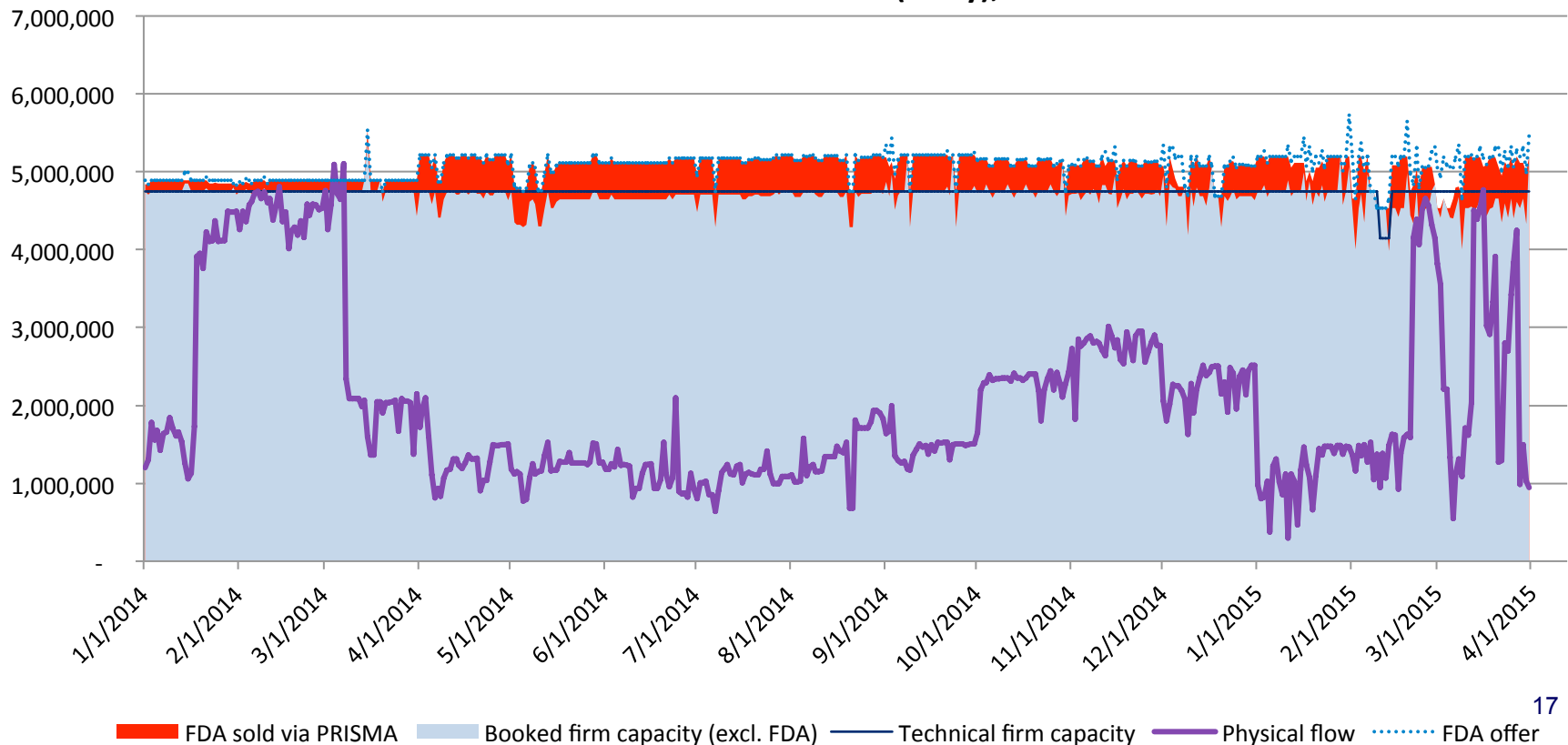




# Effects of firm day-ahead UIOLI

- FDA UIOLI freed up 10% of technical capacity
- Capacity successfully allocated in Day Ahead auction

Überackern SUDAL (entry); DE->AT





# Conclusions

---

- Entry-exit systems do not distinguish between transit and domestic shippers
- Concentration of trading activities at VTP to realise a functioning wholesale market
- Balancing based on liquid wholesale market
- Auctions as market-based and non-discriminatory allocation mechanism
- Congestion management to ensure efficient use of the existing infrastructure



## Contact

### Markus Krug



+ 43 1 24 7 24 804



[markus.krug@e-control.at](mailto:markus.krug@e-control.at)



[www.e-control.at](http://www.e-control.at)



# E-CONTROL

WORKING FOR YOU – WHEREVER YOU NEED ENERGY.