

Outline of the Project & Stakeholders' Views

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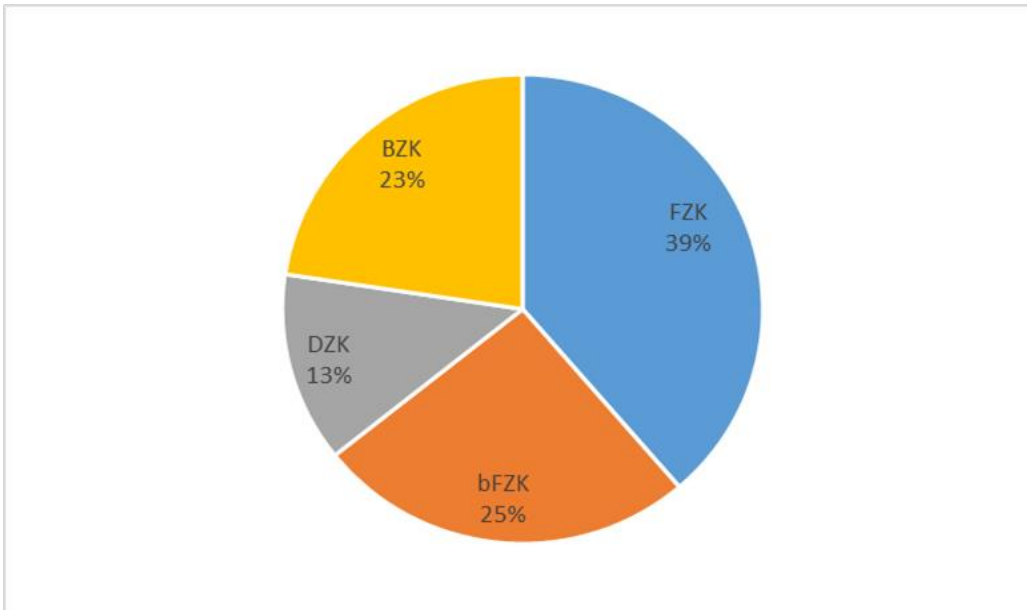
**Stakeholders' Workshop
Brussels, 4 December 2018**

Outline of the Project

- ❑ Task 1: Overview & Description of Conditional Capacity Products (CCP) offered in the EU Member States
 - Information and opinions collected by Questionnaires and Interviews with all NRAs and TSOs
 - Quantitative data mining from TSO / ENTSOG websites
- ❑ Task 2: Analysis of CCP impacts on the gas market
 - Assessing Impacts of CCP removal on hub prices, key market concentration and Security of Supply indicators
 - Estimating changes in flows and suppliers' market shares
 - Cost-benefit analysis of CCP: pilot study on a Member State
- ❑ Task 3: Other stakeholders' views
 - Collected by Questionnaires and Interviews with stakeholders', their Associations and Brussels Workshop

Stakeholders' Consultations

- ❑ Few answers but from important gas traders and storage operators (also on behalf of their clients)
- ❑ Large majority of respondents is based or active in Germany
- ❑ Respondents reports significant use of CCP



(Based on Respondents' qualitative assessment – no quantitative estimate)

CCPs: Stakeholders' views & issues

□ CCP Benefits:

- Allow higher capacity use for a given network
- Are preferable to "hidden" (i.e. unconditional) interruptibility
- May enhance cost effective cross-border trade

□ CCP Drawbacks:

- Limit access and hence reduce volume on hubs (VTPs)
- Reduced VTP liquidity damages storage operators
- Increase complexity and costs for network users
- Hamper the creation of Virtual Interconnection Points

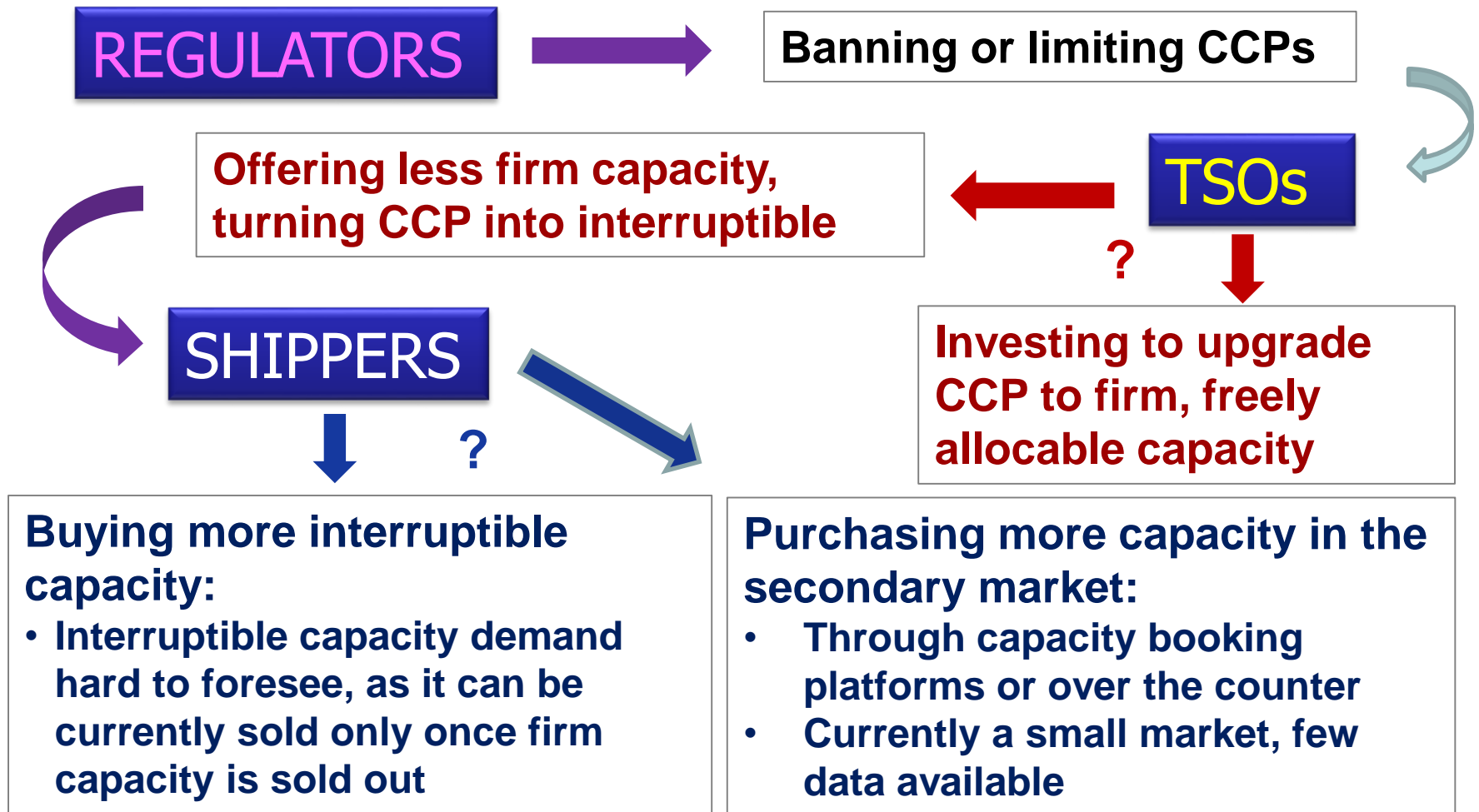


□ Should CCPs be eliminated?

CCP Removal: Stakeholders' Views

- ❑ Scheduled NCG–Gaspool merger expected to require even more CCPs, to avoid capacity cuts
- ❑ Most interviewed shippers believe that capacity expansion as a way of turning CCPs into firm capacity would be probably too costly and inefficient
- ❑ However, some suggest alternative solutions:
 - Enhanced overcapacity and buy-back mechanism
 - Flow commitments
- ❑ Others would not agree:
 - In tight systems, overbooking and buy back may become very costly – and paid by network users, consumers
 - Flow commitments not better than BZK/DZK, feared by regulators as anti-competitive

CCP Removal: What would happen?



Cost-Benefit Analysis of CCPs: Principles

- ❑ In principle, CBA should be based as much as possible on market valuations
- ❑ Market valuations should be surrogated/integrated by other assessment methods only in case of externalities...
 - e.g. environmental impacts, impacts on other TSOs/markets
- ❑ ... or public goods
 - e.g. security of supply
- ❑ Externalities: impact of CCP introduction or elimination may partly fall on third countries
 - E.g. BZK or DZK may move liquidity “downstream”, as access to the VTP is restricted or provided on interruptible basis only
 - EU-GaME (European gas market model) used to estimate market impacts

CCP Cost-Benefit Analysis: The Framework

- Investment projects aimed at removing conditionalities may also pursue other goals
 - For instance, the project that is upgrading capacity from DZK to FZK at Arnoldstein (TAG, Austria) allows access to new supply sources, enhancing market competitiveness and security of supply
 - In fact, the Austrian regulator approved the project mostly on improved security of supply grounds
- Assessment of investment projects should be consistent with the (ENTSOG) methodology, used to assess other projects

Cost-Benefit Analysis: How to assess benefits

- ❑ In general, market demand (Willingness To Pay) should be key criterion for benefit assessment
- ❑ Market players certainly prefer firm to conditional or interruptible capacity, but: how much are they ready to pay for it?
 - Econometric analysis has found some inverse relation between tariffs and capacity demand
 - This offers some insight into willingness to pay for different capacity types
 - Regulation of interruptible capacity tariffs limits the possibility to detect market players willingness to pay for it
- ❑ Alternative approach: market tests
 - Market tests could be arranged, in line with the Incremental Capacity framework (CAM NC)

Cost-Benefit Analysis: Estimating costs

- ❑ Main problem: TSOs did not answer Questions requesting to estimate costs of conditionality removal
 - An aggregated estimation of costs needed to remove conditionalities and retain capacity offer has been provided by TSOs for Germany (approx. 10 bn. Euros)
 - If related to current CCP offer, this estimate yields an average cost of over 2 MEUR / (GWh/d)
 - Project is developing a pilot case-study
 - Seeking investment costs for TAG, Austria where a project is ongoing for upgrading of DZK to FZK
- ❑ Costs of capacity upgrade likely to be very case-specific

**STUDY ON THE CONDITIONALITIES STIPULATED IN
CONTRACTS FOR STANDARD CAPACITY PRODUCTS FOR
FIRM CAPACITY SOLD BY GAS TSOs**

Thank You!

Comments and views very welcome