# EU Gas Market Reform – what does it mean in practice?

Alex Barnes, Head of Regulatory Affairs

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# European gas markets are facing major changes . . .

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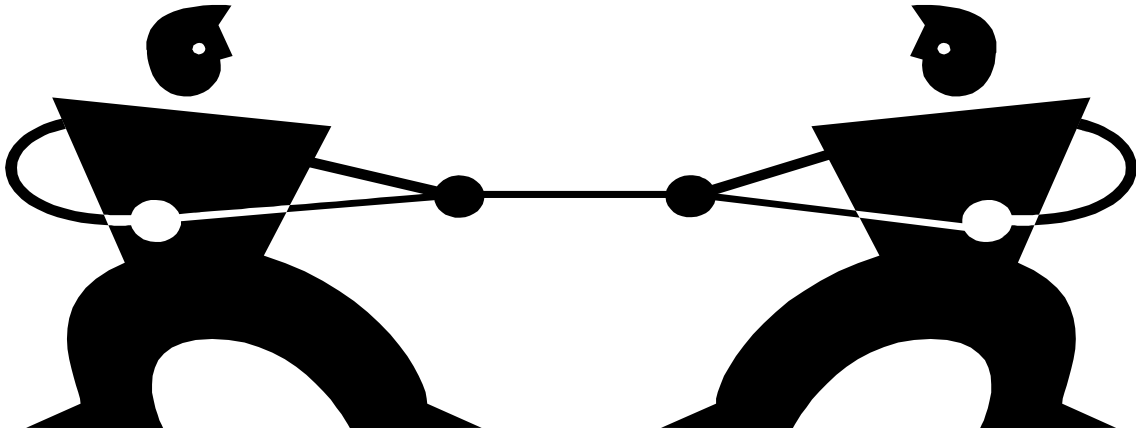
DG MARKETS

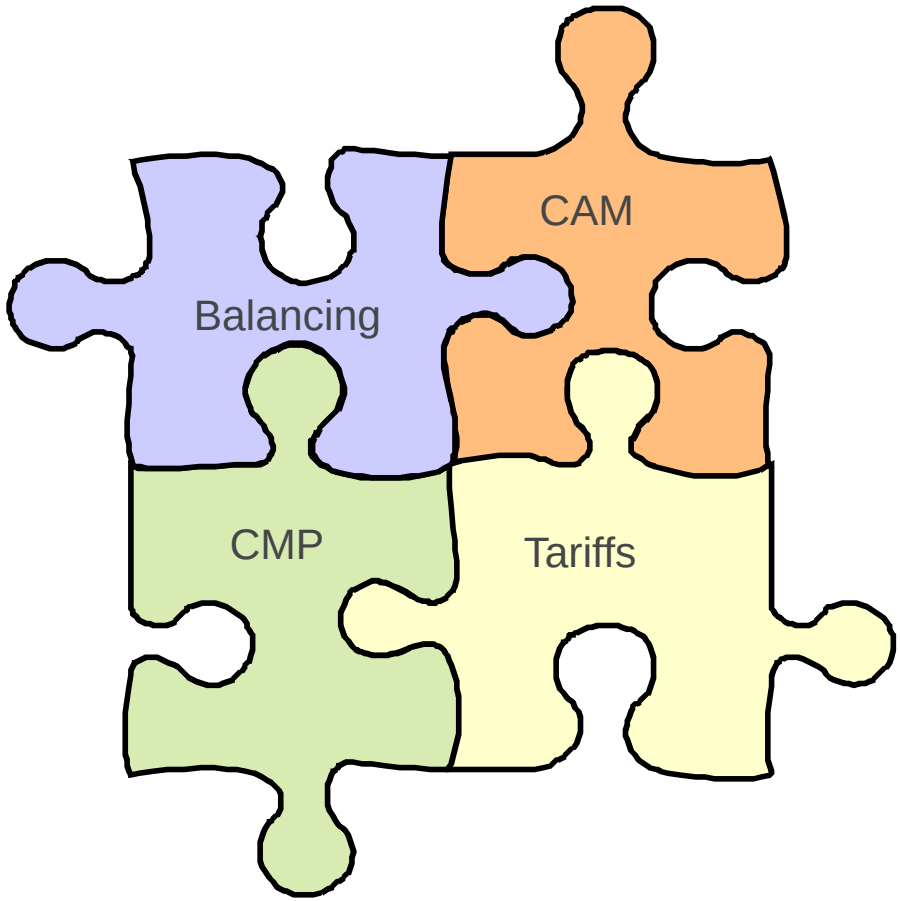


- Fully functioning internal market
- Hub to hub trading

- Tighter control of commodity trading
- Clearing of derivatives
- Position limits

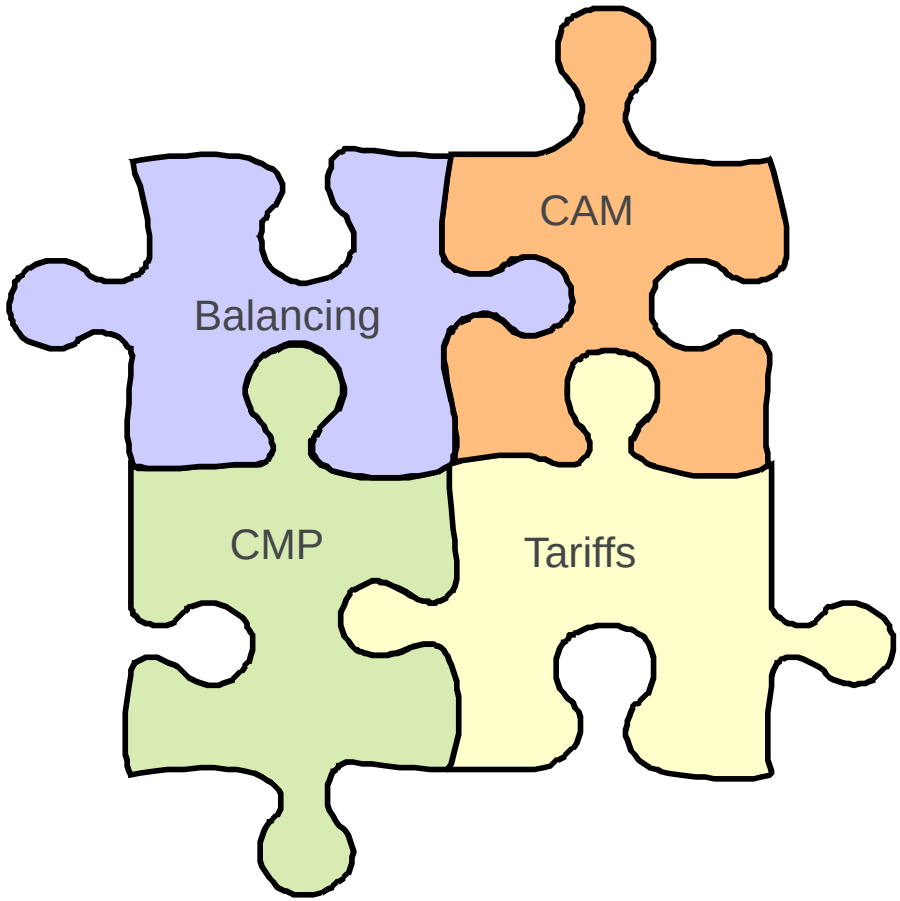
**Which will have greatest impact on European gas markets?**

# EU Gas Market Reforms – Network Codes




- All the network codes are inter-dependent
- Challenge of developing codes separately but ensuring consistency across and within codes
- Trade-offs within and between codes is inevitable
- Consistency across Europe is important but must recognise the difficulties of a one size fits all approach

# EU Gas Market Reforms – Network Codes

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- Challenge of developing codes separately but ensuring consistency across and within codes
- Trade-offs within and between codes is inevitable
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"The Devil is in the Details"

# Potential Conflicts between the Network Codes and Third Package Goals

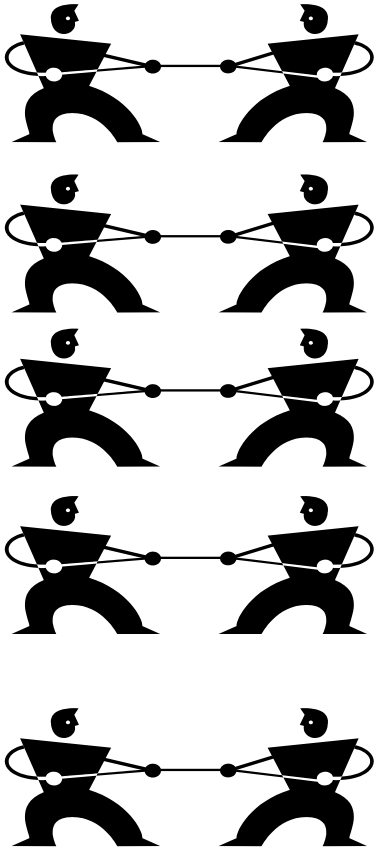
Capacity Maximisation

Market based balancing

Prevention of contractual congestion

Economic and efficient systems

Creation of entry exit systems



Limited release due to bundling

Restrictions of re-nomination rights

Inflexible capacity products

Creation of stranded assets via CAM requirements for additional new capacity

Capacity rights for shippers

# Capacity Issues

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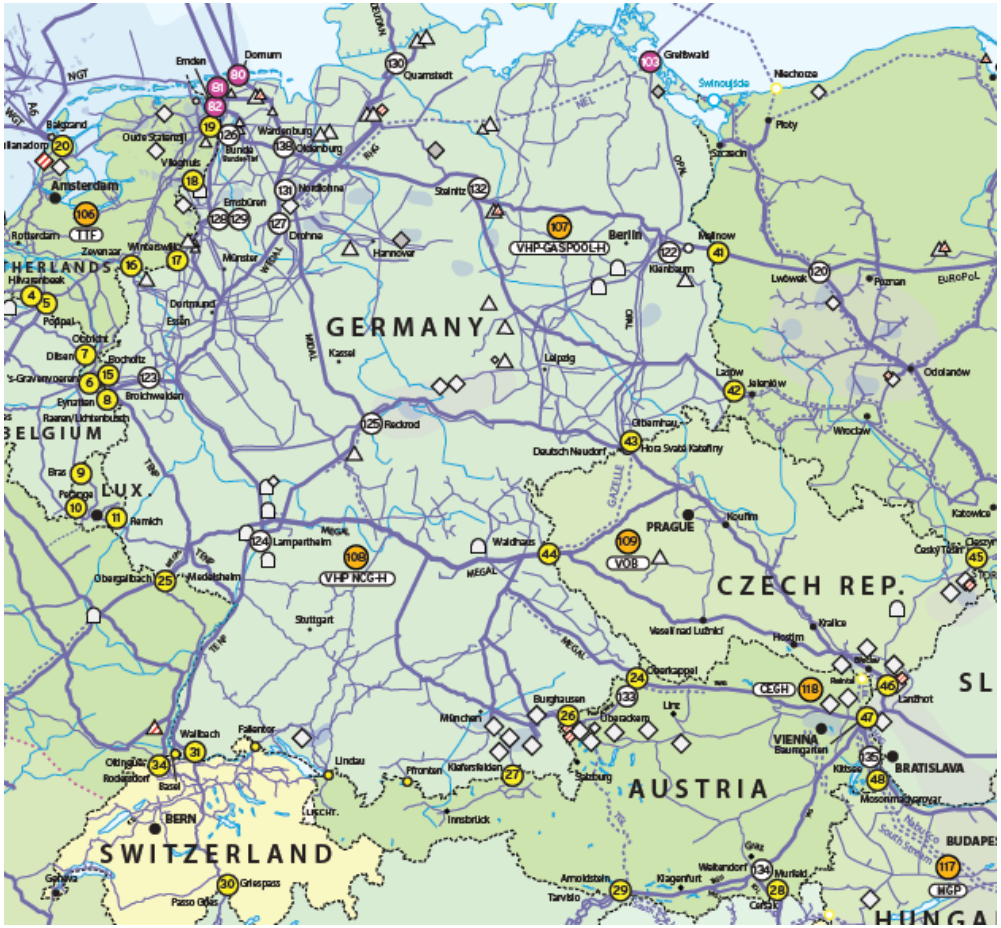
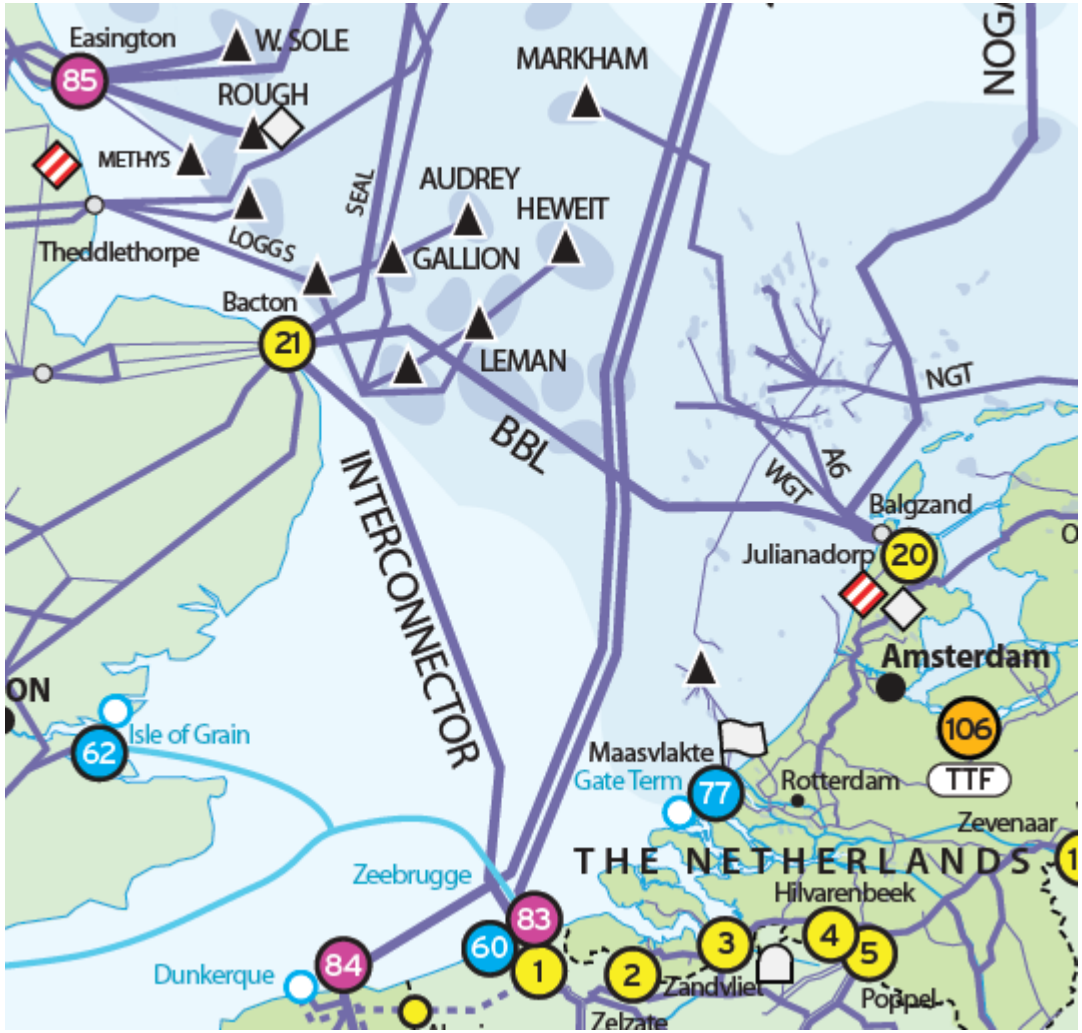
# How will capacity bundling work in practice?



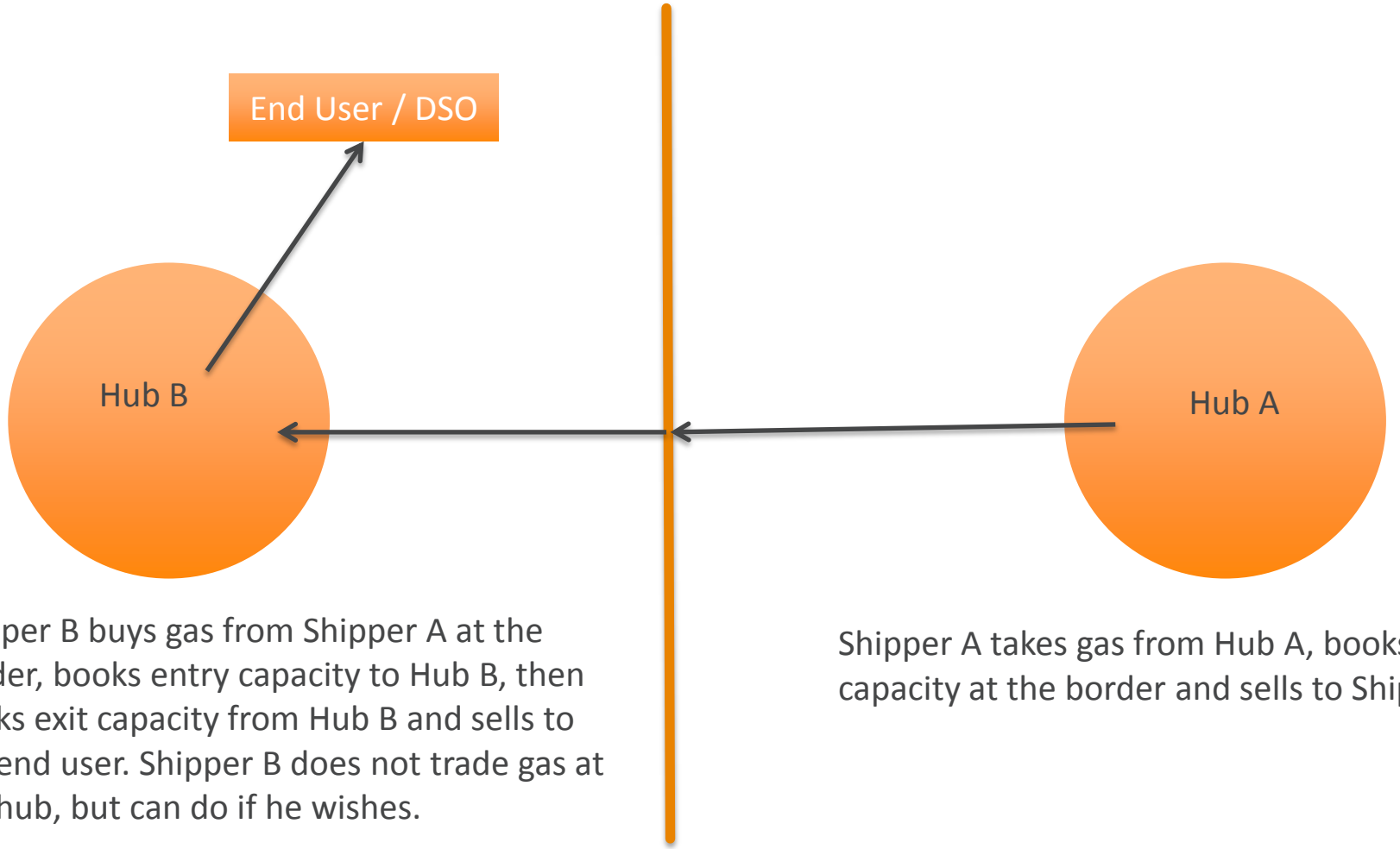

- Capacity at Interconnection Points is determined by flows within the system
- Possible that there will be different available capacities on either side of an IP (e.g. German – Dutch border)
- Bundled capacity will be determined by the side with the least capacity
- If capacity is bundled, potential limits to shippers optimising capacity via trading
- How to calculate capacity available from overselling and buyback?

# How will capacity bundling work in practice – an example.




- Currently a shipper can book entry capacity at Bacton which he can use to receive gas from BBL, Interconnector or UK North Sea fields
- Under bundling the shipper will not be able to do this as Interconnector and BBL will be bundled
- Shippers will be denied the opportunity to optimise their capacity holdings.
- And how to deal with interconnectors?

# Will bundling improve trading at hubs? How an entry exit system works today.

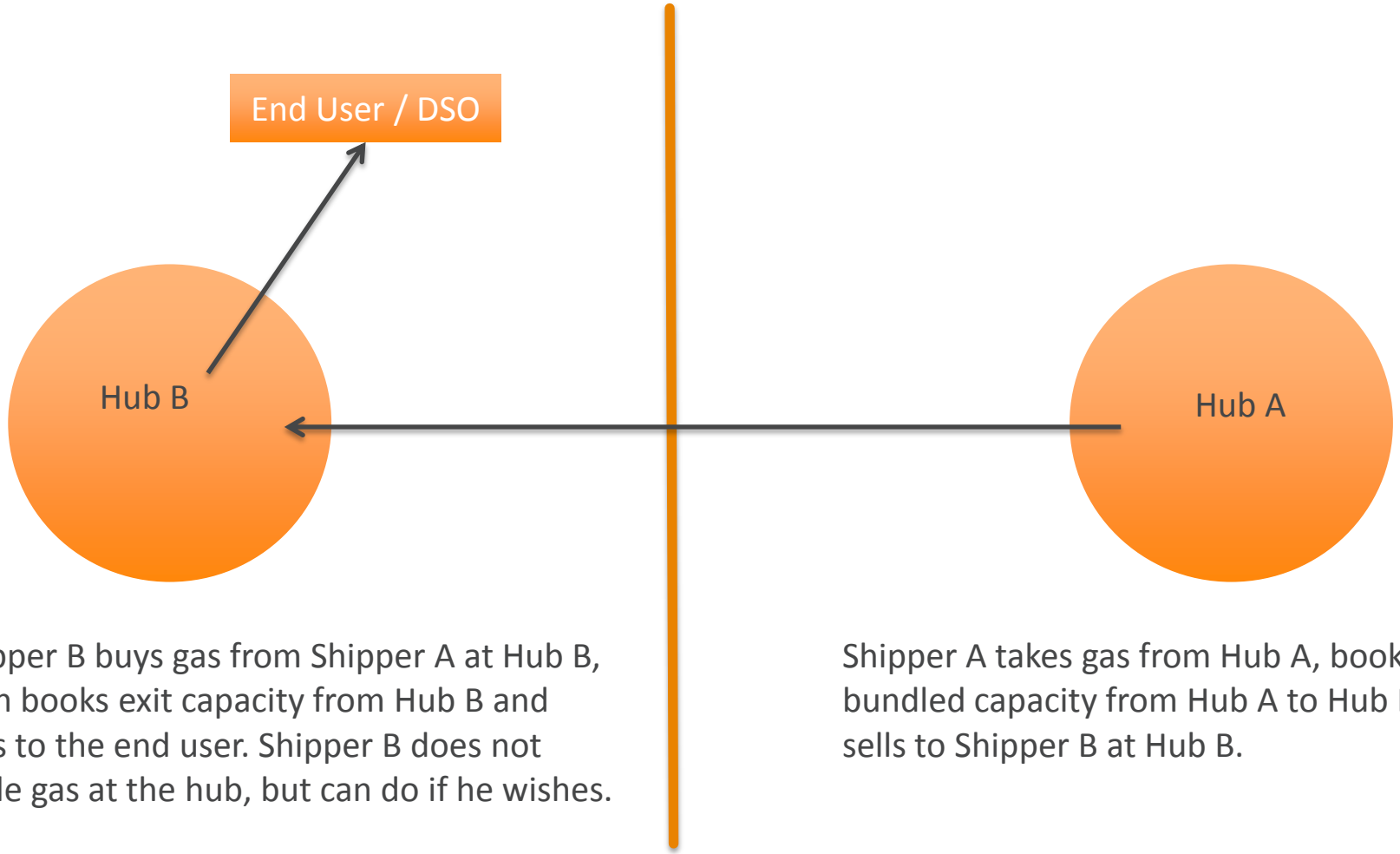



Shipper B buys gas from Shipper A at the border, books entry capacity to Hub B, then books exit capacity from Hub B and sells to the end user. Shipper B does not trade gas at the hub, but can do if he wishes.

Shipper A takes gas from Hub A, books exit capacity at the border and sells to Shipper B

**NBP, TTF, PEG Nord, German VTPS all grew successfully with this model with trading moving to hubs naturally**

# Will bundling improve trading at hubs? How an entry exit system will work with bundled capacity in the future.




Shipper B buys gas from Shipper A at Hub B, then books exit capacity from Hub B and sells to the end user. Shipper B does not trade gas at the hub, but can do if he wishes.

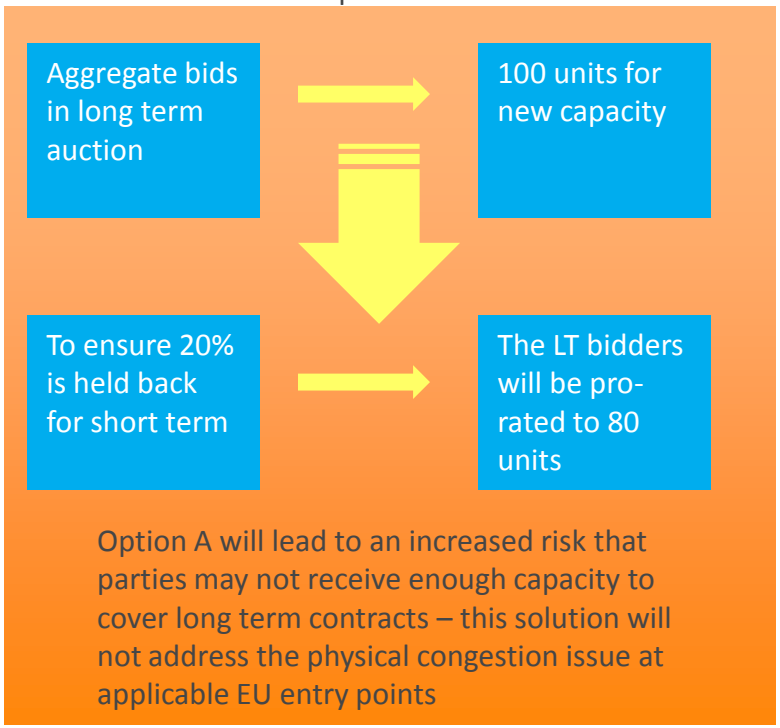
Shipper A takes gas from Hub A, books bundled capacity from Hub A to Hub B and sells to Shipper B at Hub B.

**The same quantity of gas flows via the hub as before and does not have to be traded there**

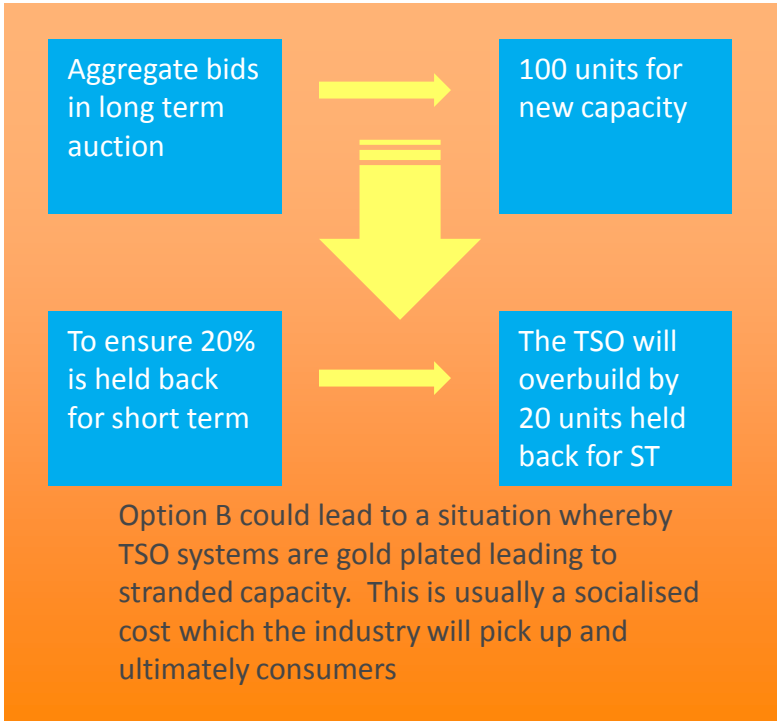
# Capacity Allocation Mechanism – Risk of creating stranded assets

- Under the proposed rules, TSOs have to hold back 20% of capacity for the short term auctions (includes new and existing capacity)
- How will this work in practice for new capacity?
- One of two things will need to happen:

Option A

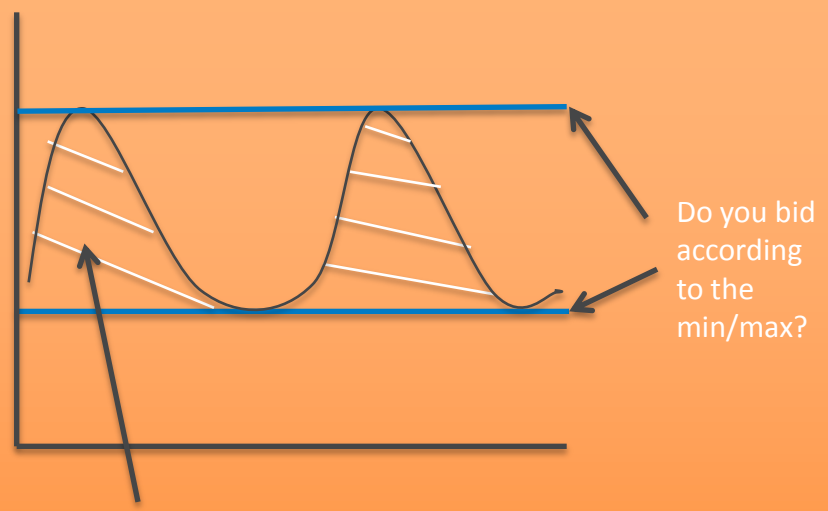



Option B



# Capacity Allocation Mechanism – Capacity Products

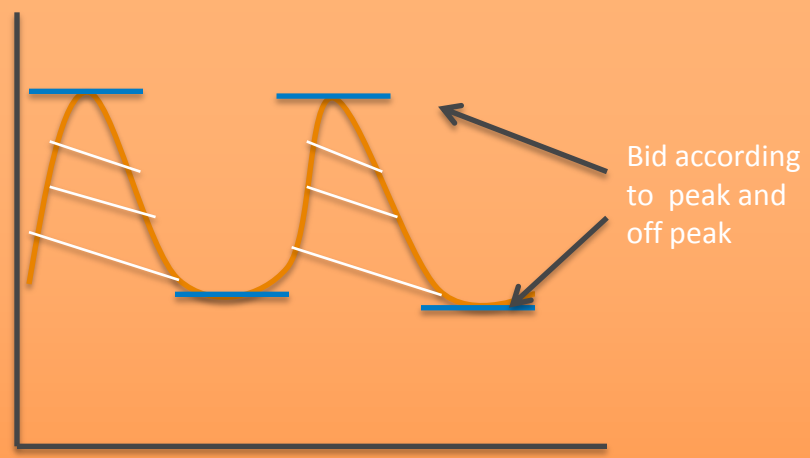
Annual auctions mean that you cannot size your bidding strategy according to seasons/demand




•If bid at min need to pick up the shaded area in rolling monthly and shorter term auctions
•Risk that this capacity will be much more expensive than long term capacity. price risk likely to be transferred to customers

•If bid at max a party will hold too much capacity.
•This can be sold to the market but if the price paid by the market is cheaper than the LT price, parties are liable for the difference

Quarterly auctions allow you to size your bidding strategy according to seasons/demand – more efficient




•Quarterly auctions allow parties to optimise their bidding strategy by profiling the bidding
•Allows capacity that is not needed to remain in the market

•Parties can use the rolling monthly and daily auctions to make up any small capacity shortfalls
•Parties that want flat annual capacity just need to bid for 4 quarters
•No disadvantage as majority of demand in winter – higher capacity price in winter than summer
•Under annual auctions higher price all year round

# Tariff Issues

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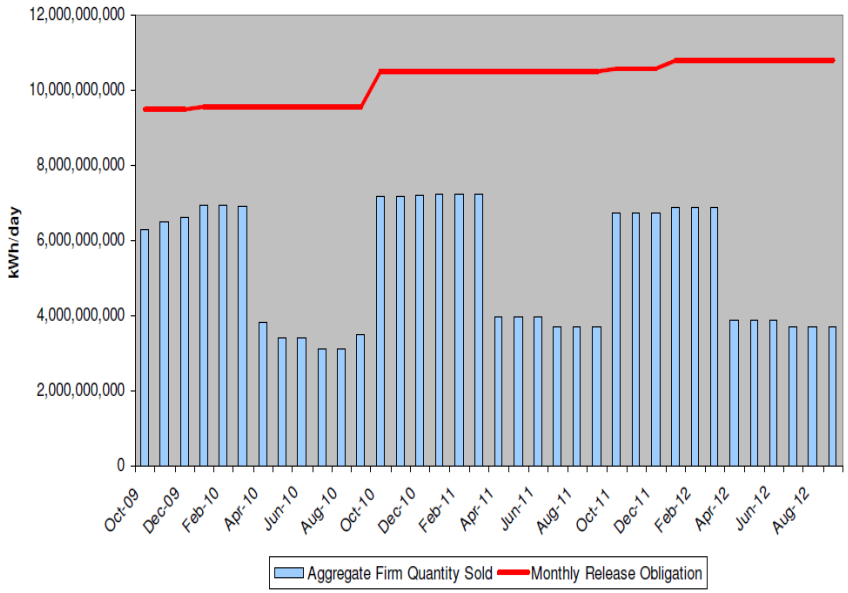
# Tariffs and Cost Allocation Issues

- Unlike a normal market the TSO always receives the revenue it is allowed under its Price Control
- Therefore cost allocation is complicated since marginal costing can lead to revenue under recovery (see following slide)
- An integrated system means it is complex to assign specific costs to a particular entry or exit point
- Virtual Interconnection Points – will be an average of the costs of the component interconnection points which could lead to distortions as shippers booking behaviour will no longer be driven by relative costs of the connection points
- Marginal pricing for backhaul could lead to cross subsidies if backhaul customers receive low cost firm service.
- Need for transparency so shippers can understand how costs can evolve
- True variable costs (e.g. compression) should be flow based
- Case can be made for greater share of costs on exit as gas that crosses borders also pays exit

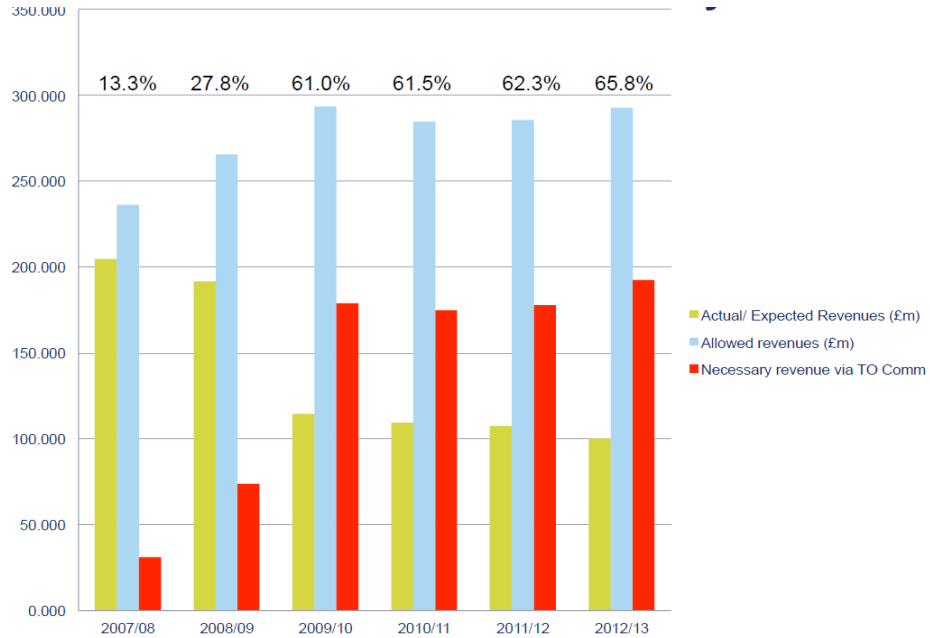
# Can pricing lead to cross subsidiaries? A case study.

## GB Entry Capacity




Source: National Grid

## GB TSO Revenues



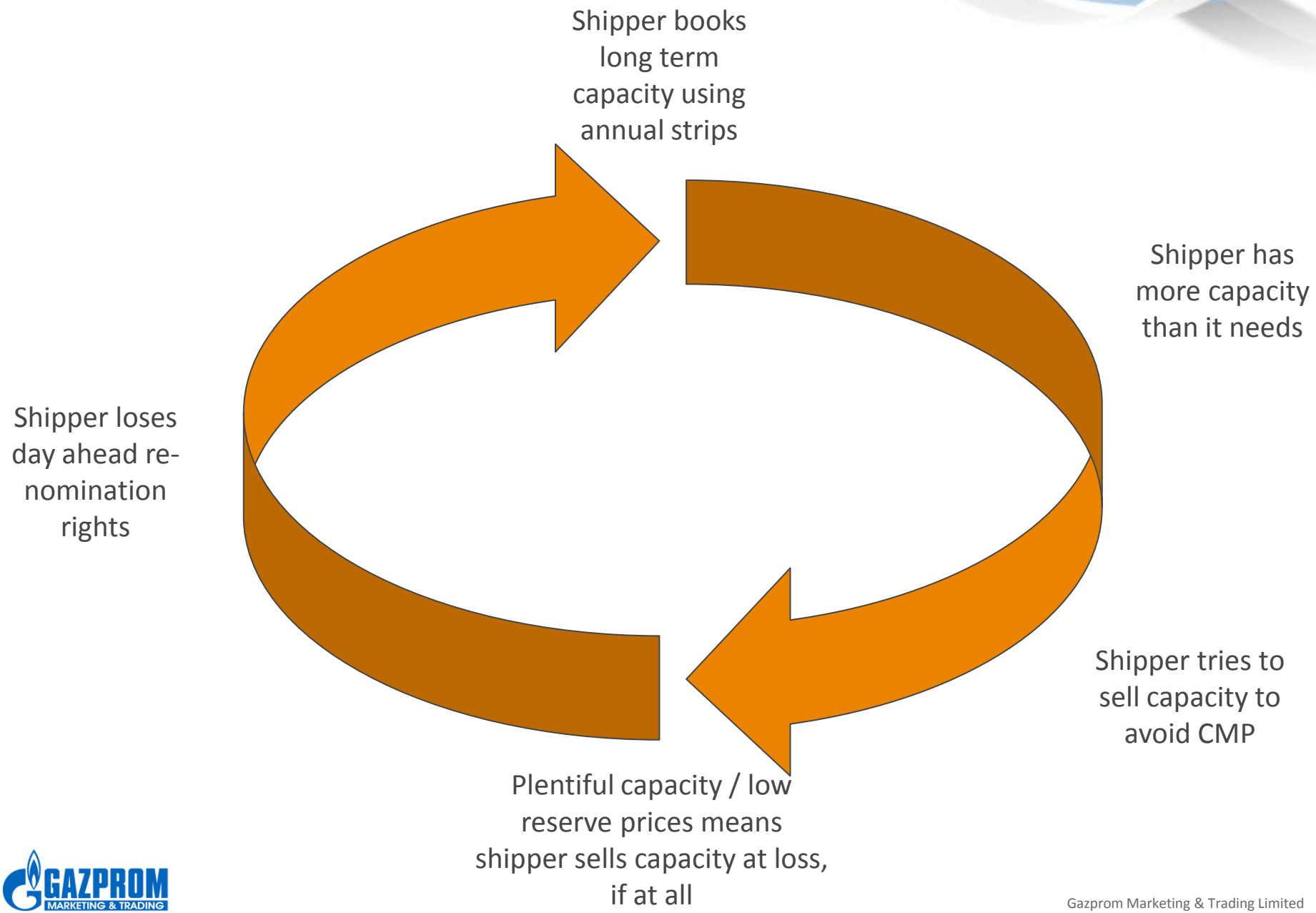

Source: National Grid

- Availability of capacity plus pricing design of capacity impacts TSO revenue recovery
- How to deal with under-recovery without distorting competition / creating cross subsidies?

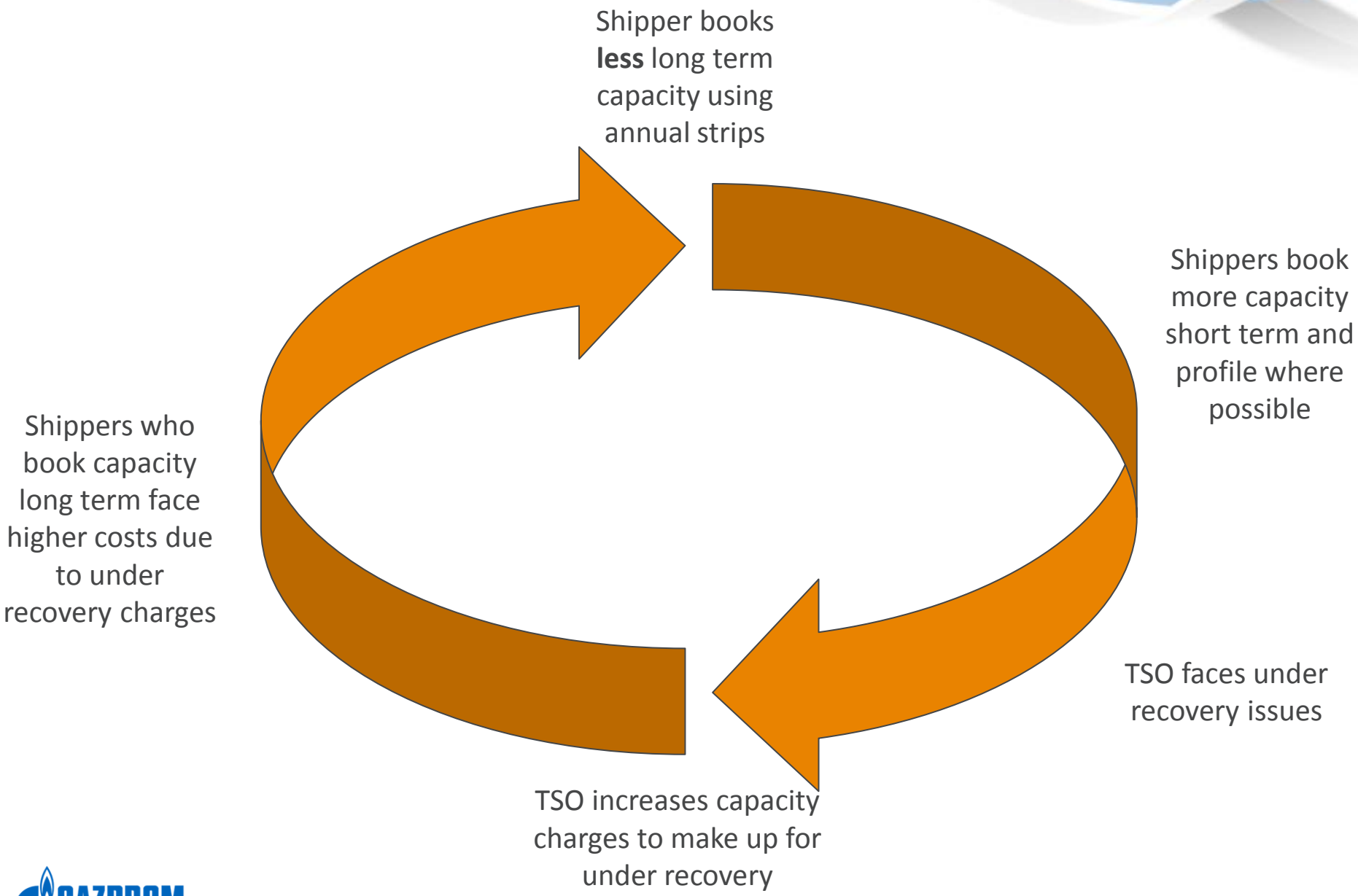
# Key messages on tariff design

- Tariff harmonisation requires series of explicit trade-offs – there is no single correct solution
- For example low or zero reserve pricing for capacity can facilitate trading but can also lead to cross subsidies between users
- Close linkage with the availability of capacity and structure of capacity allocation mechanism
  - For example requirement for new capacity to include 20% to be held back for short term trading could lead to surplus capacity thereby creating incentives to book short term capacity leading to revenue recovery issues
- Risk that combination of measures such as CMP restriction of re-nomination rights, implicit auctions etc. make it unattractive for long term suppliers to the market.
- Need to get the balance right between trading and long term supply to an import dependent market

# A vicious circle? Stage 1.



# A vicious circle? Stage 2.



# Cooperation is the key to successful market design

- Need to balance interests of consumers, producers, importers and suppliers
- Effective participation in market development process is essential
- Need to recognise trade-offs explicitly when making policy decisions
- Need to recognise that market participant behaviour will change as new rules are introduced.

# Thank you for your attention!