



ERGEG's Balancing framework guideline consultation - preliminary ENTSOG feedback

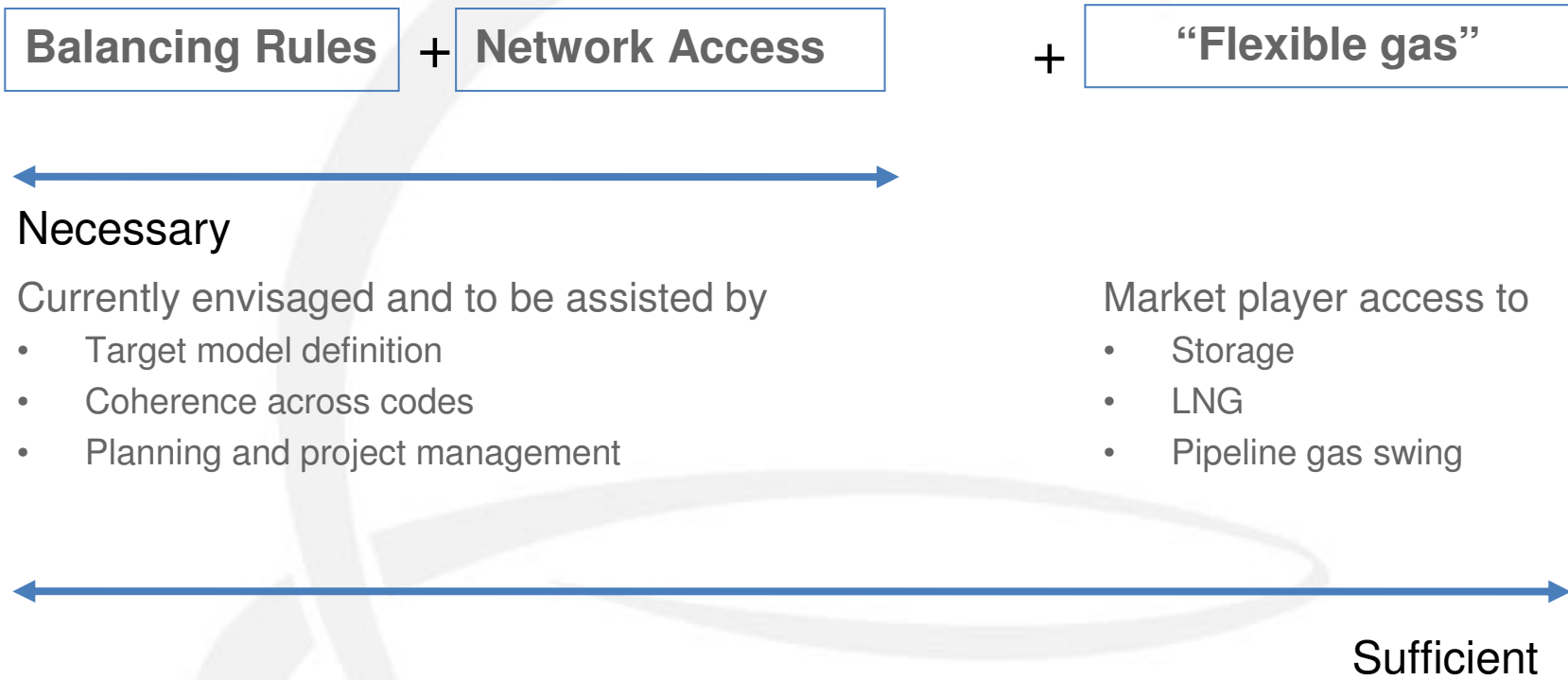
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Essential conditions for gas market functioning



TSO rules can enable short term balancing market but may need other political and regulatory support to enhance “flexible gas” competition to ensure market functioning

National v European aspiration?

Objective: to optimise balancing regimes from a European perspective

Some changes may be sub-optimal from a local perspective

- Local market may see higher costs because of gas price convergence

Aspiration a single model that affords sufficient scope to address some local diversity in implementation to deliver Europe wide benefits

Challenge is to enable actors to think and act beyond local and self interest



Framework guideline/code development reality

- High complexity, impact and risks
- Tight project management essential
 - detailed project plans essential
 - quality and understanding of framework guideline essential
- Integrated processes
 - must have right stakeholders involved at right time
 - AHEG process helpful but not enough
 - ENTSOG to have greater access during framework guideline development
- Interactions with other code activities
 - capacity
 - tariffs
 - interoperability

High level view of Process

| Balancing | 2010 | | | | | 2011 | | | | | | | | | | | | 2012 | | | | | | | | | | | |
|--|------|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|
| | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D |
| ERREG Framework guideline development | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | | | | | | | | | | | | | | | | | | | |
| ACER framework guideline endorsement | | | | | | | | █ | █ | █ | █ | | | | | | | | | | | | | | | | | | |
| Commission invitation to ENTSOG | | | | | | | | | | | █ | █ | | | | | | | | | | | | | | | | | |
| Balancing network code development | | | | | | | | | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| Code development plan and stakeholder commitment process | | | | | | | | | | | █ | | | | | | | | | | | | | | | | | | |
| Interactive development & Stakeholder Joint Working Sessions | | | | | | | | | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| Code proposal | | | | | | | | | | | | | | | | | | | | | | █ | █ | | | | | | |
| Consultation period and refinement process | | | | | | | | | | | | | | | | | | | | | | █ | █ | █ | | | | | |
| Stakeholder support process | | | | | | | | | | | | | | | | | | | | | | █ | █ | | | | | | |
| ENTSOG internal governance | | | | | | | | | | | | | | | | | | | | | | █ | █ | █ | | | | | |
| Code submission to ACER | | | | | | | | | | | | | | | | | | | | | | | █ | █ | | | | | |
| ACER assessment | | | | | | | | | | | | | | | | | | | | | | | █ | █ | | | | | |
| Commission preparation for Commitology process | | | | | | | | | | | | | | | | | | | | | | | | █ | █ | █ | | | |
| Commitology process starts | | | | | | | | | | | | | | | | | | | | | | | | | | █ | | | |

now

High quality code essential

Interaction, discipline and project management essential



Transmission system design optimisation

Downstream considerations

demand levels and short term shape

- Distribution load
- Direct connect loads
- Connected storage facilities
- Other transmission networks

Upstream considerations

availability and short term flexibility

- Production
- Other networks
- Storage

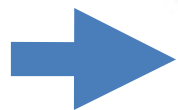
System design assumptions

Legal and political requirements

- planning standards
- security of supply standards

Historical legacy

Past can influence future



**Transmission systems are designed differently,
and function differently**

Market based balancing

Critical issue is balancing regime design

Concept

- devolve some balancing responsibility to system users
- encourage wholesale market where multiple buyers/sellers

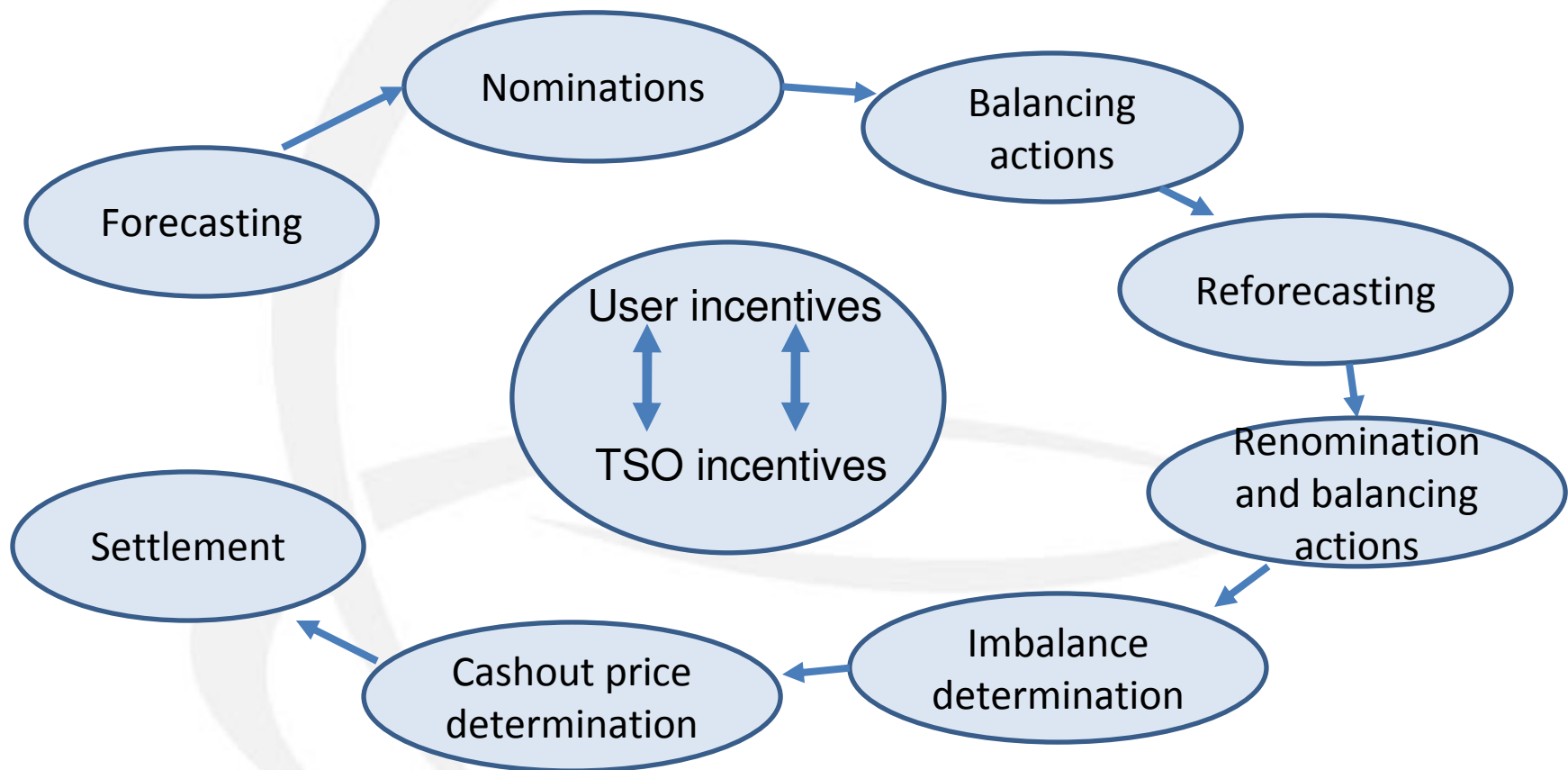
Delivered via

- financial “balancing” responsibility with system users; incentives designed to ensure commercial behaviours aligned with physical flow requirements leaving an acceptable (ideally small) role with TSOs
- TSO market based procurement (wherever possible) for specific requirements beyond wholesale market availability

Progress towards market based balancing will involve change for all market players particularly TSOs



Balancing – process building blocks



Balancing processes are continuous; core role of TSO and users in real-time every day

Two important dimensions to balancing

temporal

Within balancing period injections might need to be profiled

locational



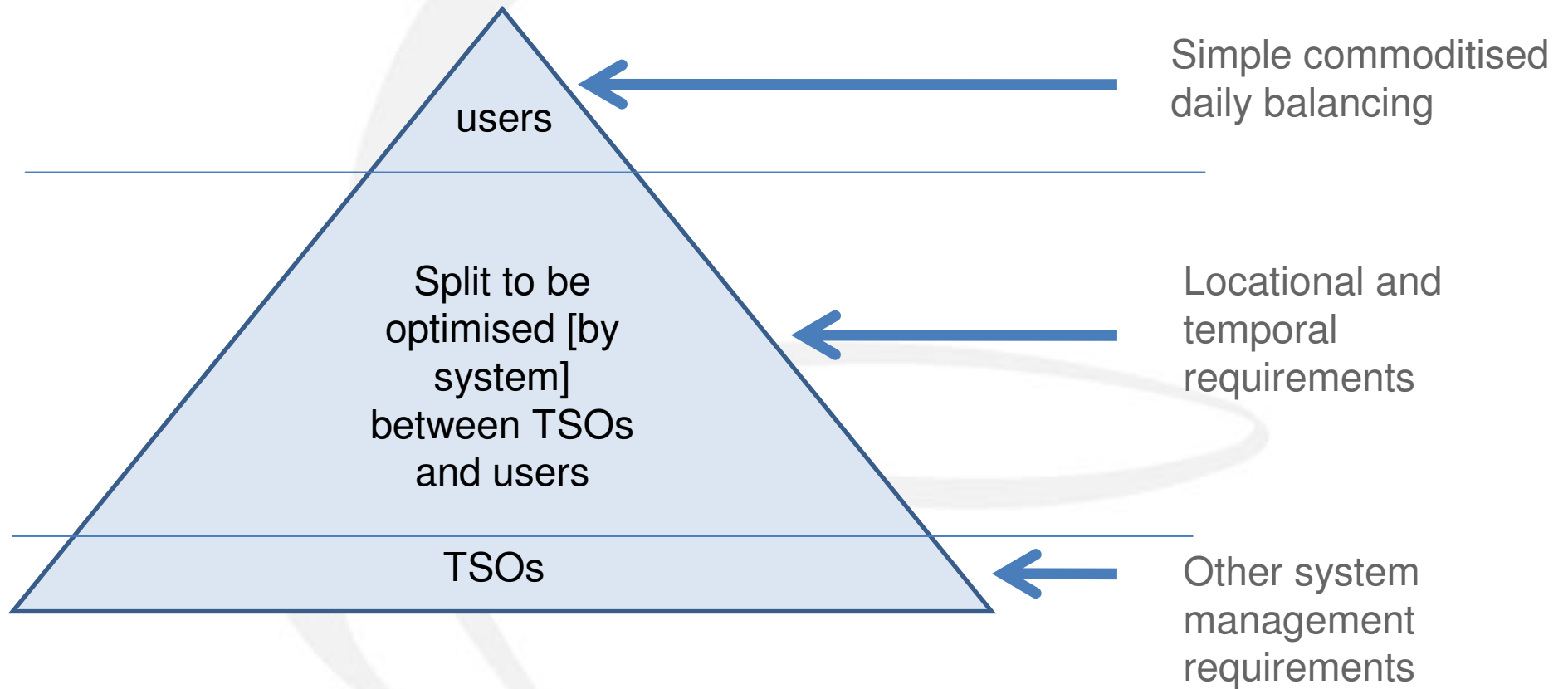
Simple commoditised daily balancing concept

Balancing (actually settlement) period

- Commercial concept
- NOT the fundamental issue; but an important element in the regime design
- Physical concept is to keep flows on and off systems within operational envelope

In many systems simple daily settlement might be just the tip of the iceberg; the challenge is how do we address what lies “below the water”?

Addressing the balancing complexity



Design issue is how to manage the split of responsibility between TSOs and users

Initial observations – Roles and Responsibilities

How are roles/responsibilities apportioned to keep systems within operational limits?

| | System user activity | TSO activity |
|----------------------------|--|--|
| Daily Commercial Balancing | <p>Portfolio balancing</p> <ul style="list-style-type: none"> Trading as a tool to manage end of day imbalance Incentives to: <ul style="list-style-type: none"> balance individual gas accounts offer flexibility into the market | <p>TSO balancing</p> <ul style="list-style-type: none"> Residual balancing role |
| Physical System Management | <p>Within day system management requires an optimal apportionment of responsibility to system users and TSOs. Options include:</p> <ul style="list-style-type: none"> Mandatory shaping of input/offtake profiles; or Commercial incentives to deliver input/offtake profiles; or Within day cash-out; and/or TSO tool deployment to ensure system integrity | |

How much of the complexity of the physical system management should be reflected in the system user rules via individual system user financial incentives?

Initial observations - Information

Requirements will increase to support all players activities

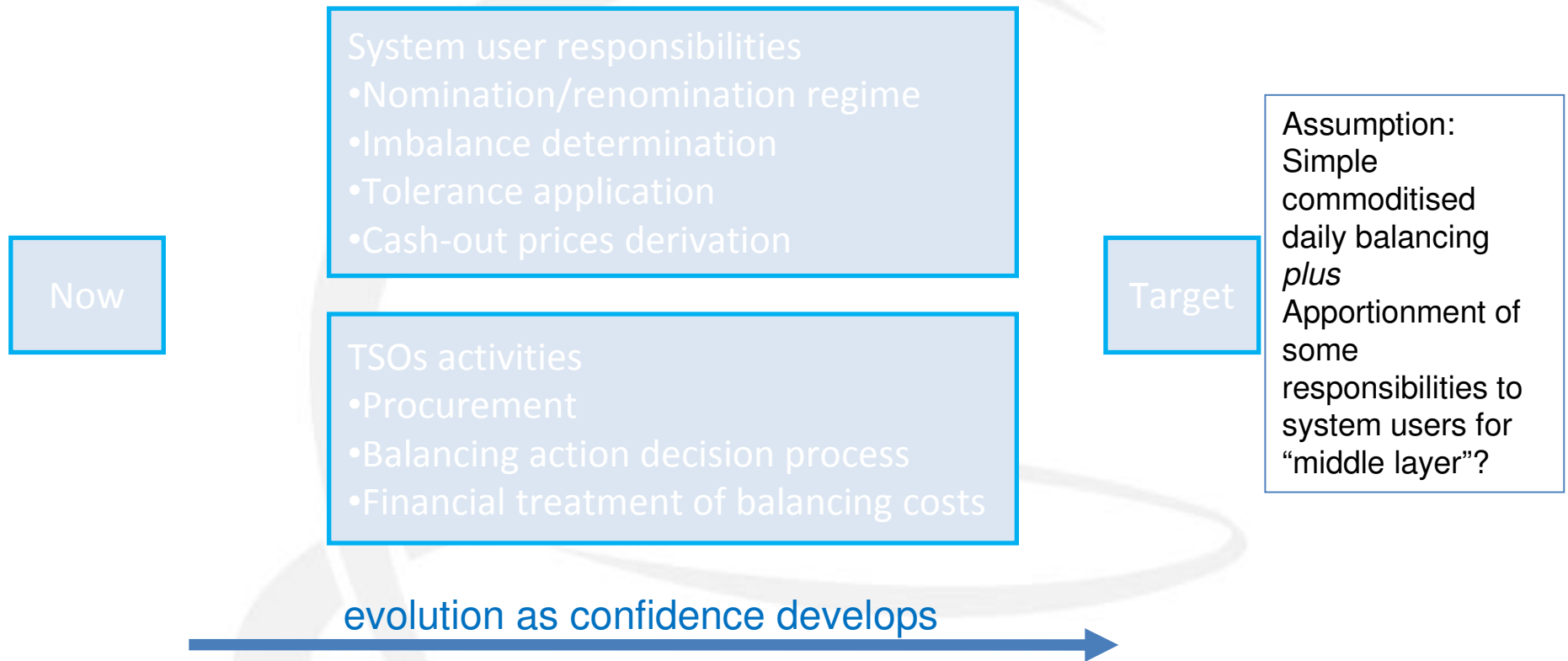
- all players must be able to manage their risks and opportunities

Within day info to system users will require TSOs in “info broker role”

- user portfolio/downstream demand may be required from DSOs
- specific project will be required to investigate

Information requirements will need to be established as more detailed aspects of the regime are defined

Transition



Balancing framework must encourage

- Information availability
- Balancing platform
- Wholesale market

Multiple steps may be necessary:

- Roadmap approach
- Assessment at each stage
- Market player and TSO evolution



Balancing rules to support short term market evolution

Rules to encourage system user participation in short term market

- information about imbalance exposures to enable risk mitigation
- encourage developments to enhance access to storage/LNG/pipeline gas flexibility

Rules to encourage TSOs participation in short term market

- enable identification and offer of any TSO surplus storage based gas flexibility
- encourage participation in short term service market
- provide positive incentives to accelerate progress

Conclusions

Balancing is a critical element of the IEM design

Framework guideline and network code development

- looking for a European optimisation
- protectionist local approaches unhelpful

Regime development must recognise commercial v physical trade-offs

- target balancing model welcomed
- “middle layer” requires substantial development
- implementations may look different

Transition

- transition and interim steps will be essential to build confidence



Thank-you

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