

Provision of restricted access rights

ARODG Seminars

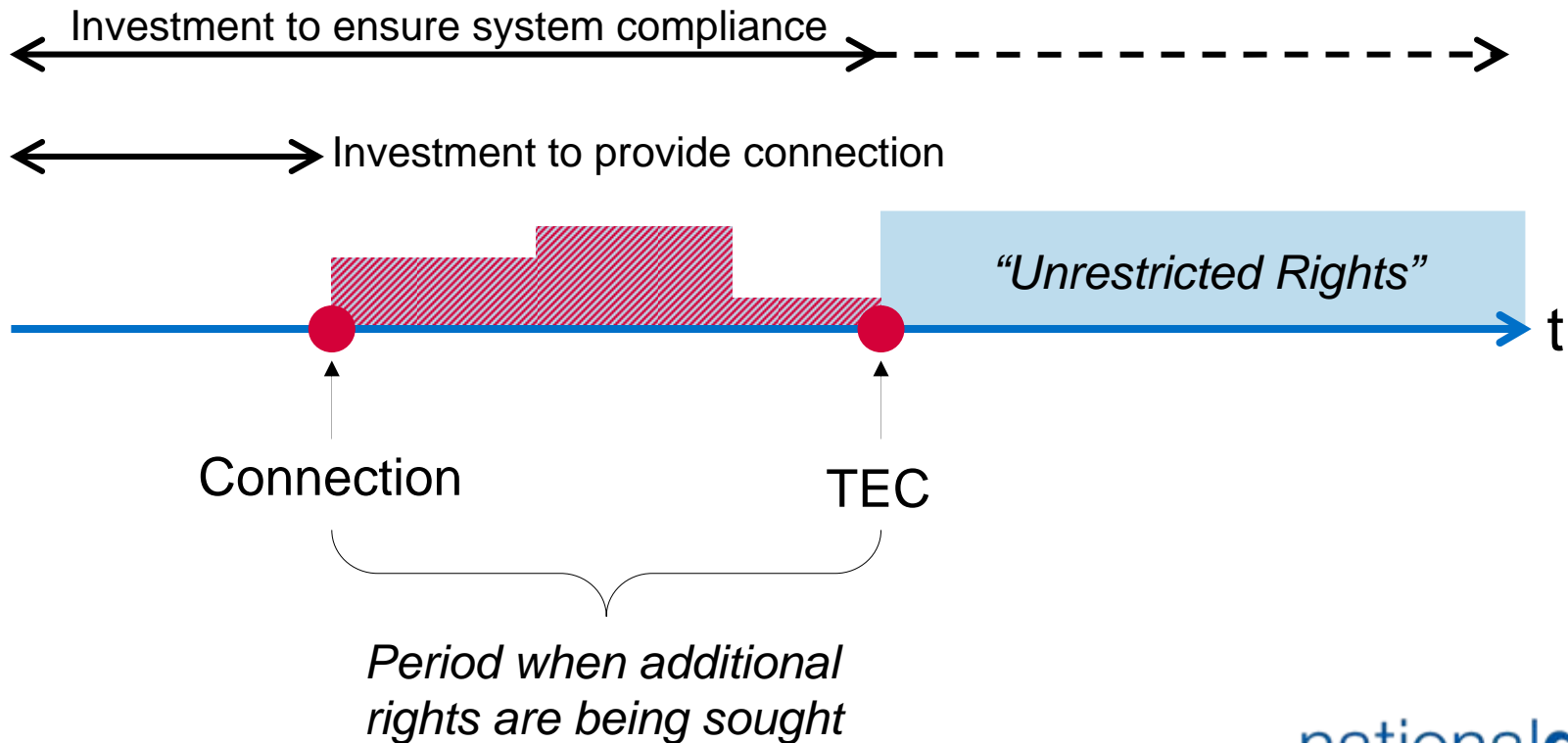
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Agenda

- ◆ Recap of existing arrangements
 - ◆ access products
 - ◆ trading arrangements
- ◆ High-level options and prerequisites
- ◆ Additional access products
- ◆ Trading existing rights
- ◆ Rights beyond the operational year
- ◆ Conclusions & Next Steps

Background

- ◆ To provide rights to Users that have a connection but are awaiting completion of the wider reinforcements needed for the network to be compliant with the Security Standards



Existing short-term firm products

	STTEC	LDTEC
Maximum duration of rights	4, 5, or 6 weeks	45 weeks
Notice of firmness	1 or 2 weeks	7 – 45 weeks
Volume provided	Maximum MW	Profiled MW
Long-term rights (>1 year)	None	None
Compensation if rights withdrawn (CAP048)	Yes	Yes

- ◆ Limited duration, capacity and notice of availability
- ◆ Allocated on f-c-f-s bases, assuming that:
 - ◆ no increase operational costs
 - ◆ does not fetter ability to take outages for maintenance / construction

Existing TEC trading arrangements

- ◆ Bilateral between two parties:
 - ◆ at least one with a non-zero TEC
 - ◆ both physically able to export from point of connection
- ◆ Exchange rate determined using planning standards
- ◆ Trades effective from 1 April in following year
- ◆ Two steps to effect a reciprocated trade i.e. $A \rightarrow B \rightarrow A$
 - ◆ (no guarantee that exchange rates will be the same)

High-level options

Additional access products

- ◆ Prerequisites:
 - ◆ unused capacity must exist i.e. no risk of additional constraints, or
 - ◆ option to withdraw rights with zero compensation (non-firm)

Transfer existing rights

- ◆ Prerequisites:
 - ◆ willing seller(s) and willing buyer(s) in electrically similar locations

Additional access products

Availability of un-used capacity

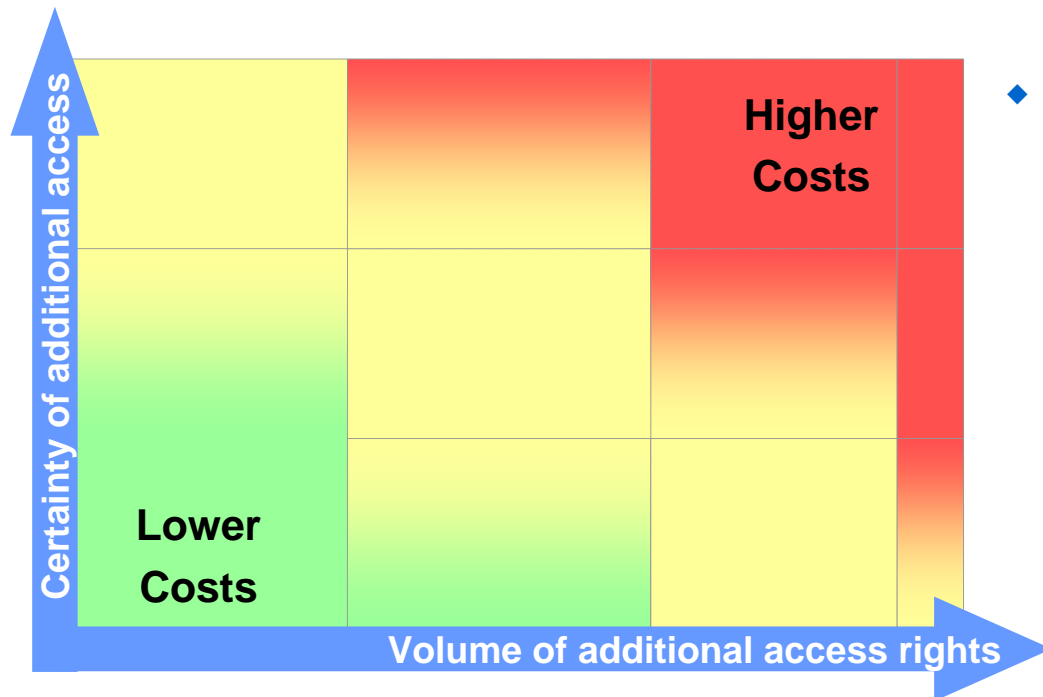
- ◆ Export constraints exist when allocated rights exceed network transfer capability
 - ◆ significant constraints in Scotland (even when system intact)
- ◆ Firm rights allocated prior to completion of reinforcements
 - ◆ 4 GW of plant contracted to connect by 2008
 - ◆ associated wider reinforcements planned to complete in about 2011
 - ◆ significant outage programme required
- ◆ Allocation of further additional firm rights will increase operational costs

 Volume of unused capacity will be very limited

Additional access products

Implications for design of firm products

- ◆ Restricted-firm products manage extent of cost increase
- ◆ Risk / costs increase as:
 - ◆ the volume (including duration) of rights increase
 - ◆ the certainty / firmness of rights increase
 - ◆ the notice period of firmness increase



- ◆ Borne by:
 - ◆ new generators?
 - ◆ socialised (current model)?

Additional access products

Implications of non-firm products

- ◆ What is meant by “non-firm”?
 - ◆ no financial compensation when physical rights removed
- ◆ Developers need bankable rights, which requires firmness
 - ◆ e.g. defined events to withdraw rights, committed MWh running, etc
- ◆ Congestion typically on major boundaries
 - ◆ non-discriminatory removal of rights is a non-trivial issue

Trading existing rights

Introduction

- ◆ Many models identified in ARODG report
 - ◆ ad hoc facilitated bilateral trades
 - ◆ facilitated trades based on pre-published exchange rates
 - ◆ centralised trading close to real-time (c.f. TASG discussions)
 - ◆ Does not increase the volume of rights in circulation
 - ◆ only option when no spare capacity
 - ◆ mitigates some risk of additional constraints
- ➡ Focusing on trading rather than releasing additional rights to provide bankable short-term rights

Trading existing rights

Work in progress

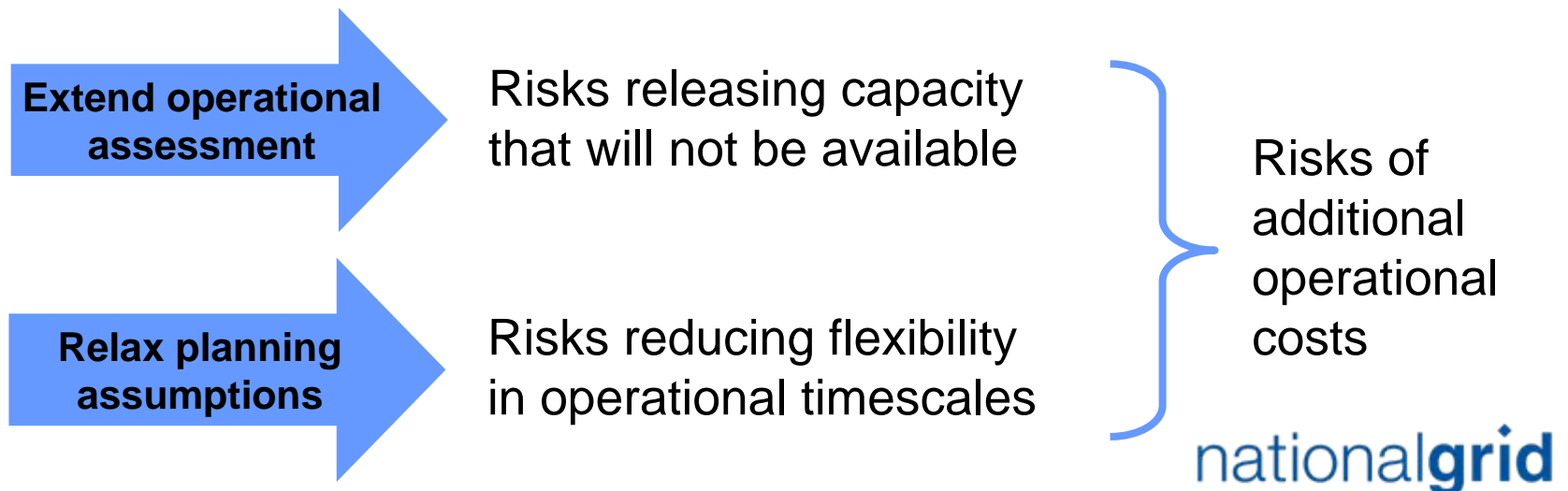
- ◆ Investigating frameworks that would:
 - ◆ be facilitated by National Grid e.g. exchange rate determination
 - ◆ use National Grid as an agent i.e. common terms
 - ◆ trade a defined product: complexity vs flexibility vs liquidity
 - ◆ seek to allow within-year / multi-year / cross-year trades
 - ◆ not necessarily first come first served

 - ◆ Non-trivial design issues
 - ◆ developing adequate description of the network
 - ◆ ensuring sufficient liquidity of trades
 - ◆ potential interactions with charging e.g. duplicate charges for TEC
 - ◆ determination of exchange rates spanning range of time horizons
- } nodal vs zonal
exchange rates

Arrangements beyond the operational year

Background & Risks

- ◆ Quality of information poorer in planning timescales (+1yr)
 - ◆ generation / demand background, network configuration
- ◆ Therefore more stringent rules applied to cater for range of scenarios that might occur in operational timescales
- ◆ Two classes of option:



Arrangements beyond the operational year

Work in Progress

- ◆ Need to establish whether these concerns are mitigated by:
 - ◆ revised provisions for providing information to GBSO / TOs, e.g.
 - ◆ information about generation running
 - ◆ information about closures / outages
 - ◆ restrictions to trading future rights in different timescales
- ◆ Interactions with
 - ◆ Security Standards
 - ◆ Grid Code
 - ◆ CUSC
 - ◆ STC
- ◆ May need derogations from Security Standards

Conclusions / Next Steps

- ◆ Restricted-firm products manage risk of constraint increase
- ◆ Non-firm products are unlikely to be bankable
- ◆ Trading existing rights
 - ◆ is the only option when there is no spare capacity
 - ◆ do not increase rights in circulation
- ◆ Overcoming the “operational wall” is a challenge
- ◆ Focusing on models to facilitate flexible trading