

Distribution – Strawman Assessment against Criteria/Questions 22 Nov 2002

- Nodes at entry/exit points to/from the Total System
- Bilateral agreement between NGC and DSO (payments in either direction)

Criterion/Question	Response	Comments
<b>1) How should rights be defined</b>		
a) Type of rights	Financially firm commercial right	
b) Explicit/Implicit	Explicit defined ex ante as a fixed volume e.g. 1kW for one year.	Implicit defined as ex post measured with limitation only physical, e.g. connection capacity (analogous to CEC)
c) Definition of right	i) Right to export (import) 1 kW for one year at an entry point on the distribution/ transmission system	On a customer basis Ideally metered at the entry/exit point, otherwise metered elsewhere and adjusted to that entry/exit point. May need to treat each half hour individually.
	ii) Right to compensation in the event of breach of provision of right	Production - BSC P80/87 for Transmission outages only, if approved by the Authority.  Consumption (works for Transmission & Distribution outages): i) NHH – insurance via GSPGCF - spreads effects of outage across all Suppliers in GSP Group ii) HH – System Sell Price compensation  Interconnector – special case
	iii) Subject to reasonable control of the operator	For example, DSO action in either system can affect flows between systems.
d) Obligations	i) Pay DUoS & TNUoS	
	Prudent operator responsibility not to exceed max of the defined right	
	Pay overrun charges	Overrun Extra connection & infrastructure charges – see also Structure of Electricity Distribution Charges (OFGEM) Extra DUoS & TNUoS charges.
e) Duration	1 year or multiples of one year, but issues re i) optional extension, ii) price structure iii) risk, & iv) discrimination	See Appendix 4 on Duration issues.
f) Variation of Rights	i) When? <i>Suggest at any time, but financial commitment for rest of period</i>	Change at any point in the period, or only at say year-ends?

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	ii) By how much? <i>Suggest by any multiple of 1kW, limited by physical capacity of connection &amp; system</i>	Is 1 kW the minimum, and is there a maximum?
	iii) With what notice? <i>Suggest immediate effect downwards, subject to process upwards</i>	
1g Initial Allocation	How done?	<i>On basis of current connection agreements</i>
<b>2) Who buys and sells and trades these rights</b>		
	Party-Party possible at entry/exit point Party-DSO possible at entry/exit point Trading between entry/exit points requires DSO facilitation at extra cost	<i>Will non-physical players want to trade? Access is location specific. Scope for trading very small.</i>
	Rights tagged to each customer at an entry/exit point, traded by Supplier for SVA entry/exit and customer for CVA entry/exit points	<i>Issues: Demand side how would it work, given unlimited consumption rights of customers? Entry/Exit points cannot be related to a specific GSP</i>
<b>3) What are the consequences of breaching?</b>		
a) Breach by service provider	Compensation for loss of access, based on DUoS	Energy issues dealt with in BSC. Note consequential losses for customers not dealt with. What about physical damage to customer plant?
b) Breach by Party	i) Additional DUoS/connection charge ii) 'Endorsement/loss of Licence'	
		<i>Note asymmetry: 1 year's DUoS additional for over export, versus 1/2 hour's DUoS for loss of system</i>
<b>4) Who are the players? &amp; What are their contractual relationships?</b>		
	DSO - Licensed Party	Bilateral agreement Licences
	DSO - Unlicensed customer	Bilateral agreement directly, or indirectly via licensed party (e.g. Supplier & embedded LEG)
<b>5) DSO + NGC Investment Decisions</b>		
	i) Facilitating mechanism - DSO & NGC trade access both ways short/long term to optimise use of System.	Bilateral agreement DSO – NGC Effect on the planning standard P2/5

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	ii) Alternative/complement to capital investment.	
	ii) How are DSOs & NGC rewarded for squeezing more capacity out of existing system without capital investment?	Change to regulatory incentives. Duration of reward? Link to costs incurred, or equivalent capital cost of access increment?
		<i>If planning consent for station or connection, or infrastructure is delayed who bears the risk?</i>
Appendix 2		
<b>1 Improved short-run efficiency of operation of transmission &amp; distribution system</b>		
	Potentially yes,	Is this any more than the bilateral contracting options that can already deliver this? Incentives are needed.
1a Constraint and losses costs	System will probably become more potentially constrained with time, but overall sum of DUoS + BSUoS + TNUoS should not increase so quickly	System costs will decrease, and there will be less physical assets, offset by higher administration costs. Difficult for DSO to get cost messages across.
1b Reduction of risks of failure	Planning standard n/a, therefore actual risk of system failure increased, but operational standard is adequate	Knock on effect to Guaranteed Standards of Performance
1c Choice of Firmness	This does nothing to facilitate or prevent choice of firmness as all pay one rate of DUoS + TNUoS	Choice of firmness achieved by:
		a) Choice of Connection agreement
		b) Possibility of overlaying bilateral contract with DSO/NGC
<b>2 improved long term Investment efficiency</b>		
	Yes see 1a above	
2.1 Incentives to network reinforcement	Range of options for new access leads to more cost-effective reinforcement decisions.	
2.2 Incentives to locate	Only through connection charge or locational DUoS/TNUoS	
2.3 Improve incentives to decommission	Stiffening of monetary obligations.	Production - Sharpens decision to decommission Consumption – assign to newcomer
<b>3 Other Criteria</b>		
Undue discrimination	Implicit vs. explicit rights	Explicit for consumption expensive

Criterion/Question	Response	Comments
Benefits concomitant with complexity	Large increase in cost & complexity Possibility of tripartite discussion prior to connection, earlier release of moribund access	New half hourly settlement system required with maximum demand monitoring, unless demand left implicit, in which case no added value via DSO
<b>Appendix 3: CUSC Applicable Objectives</b>		
<b>Efficient discharge of Licence obligations</b>	Access may be available more quickly but at a cost & with more complexity	Extra costly systems and extra step in supply chain = Inefficiency. New DSO/NGC bilateral agreements required
<b>Competition in supply and generation</b>	i) New administrative barriers to market entry ii) More dynamic	Increased costs and complexity

#### **Appendix 4: Duration of Access - Issues**

Duration of access - issues:

- **1 yr or multi-year:** If there is choice, then there are problems of choice of period and price risk for the connected party. How would the party exit and trade their remanent access period?
- **Diversity:** Season, time of day and diversity need to be in the package, possibly related to half hourly settlements. Costs and benefits to be apportioned. Different treatment for NHH and HH entry/exit points. Is implicit the only option for NHH?
- **Cost recovery:** If DSO/NGC is allowed to always recover costs then there is a problem of discrimination between connected parties if they are charged differing amounts depending on when they commit to buying access.
- **Renewal Optionality:** The automatic option to renew year on year prevents volume access risk. Removal of optional renewal would increase pressure to buy multi-year access. However, even at the end of the multi-year access, the problem of judging renewal period, timing and price would remain.
- **Price Structure:**
  - **Current Price Structure:** Connected Parties currently have small annual price risk. Regulatory oversight and the structure of charging means that on average there will be small smoothed annual changes in price. This is consistent with the nature of the asset base that underpins the service. Note, however, that a rapid change in the volume of connected power stations would produce lumpy changes, albeit smoothed a little.
  - **Fixed prices:** If NGC & DSO were to offer fixed prices for access this is likely only to be attractive, compared with the current system, if parties perceive volatile access prices, or if their valuation of future price trends suggests that this will be a cheap price. By offering fixed prices alongside current price structures, NGC & DSO risk charges of undue discrimination between parties. Greater risk for NGC & DSO.
  - **Fixed Structure prices:** A variant of fixed prices would be prices with a pre-determined rate of change, such as in line with an inflation index. This has the same problems as fixed prices.
  - **Customer must be able to predict charges:** This means NHH customers cannot be directly linked to TRIAD charges as they stand now.