

NTS Flexibility Capacity Release Processes

EOWG 9th August 2006 update

... significant EOWG progress simplifying NTS Exit reform

... simplification of longer term release processes

“prevailing rights”

increments/decrements and user commitment

... flexibility nearly fixed

assumption no explicit build to support flexibility capacity

physically firm “22 mcm” release

locational migration and trading

... only very short term flexibility release to resolve

Primary flexibility capacity release philosophy

Prevention

Flex capacity release quantities anticipated to be capable of simultaneous utilisation

High degree of firmness

Less frequent

Primarily with NTS

Low

Low

Low

System management tool deployment

Constraint cost responsibility

Dependence on overruns/incentives

Utilisation of system

Probability of emergency

Cure

Seek to satisfy users flow requirements as they arise

Recognises risks that all user flow requirements might not be satisfied ... but commercial remedies will enable flow management within system

More frequent

Essentially socialised

High

potentially higher

potentially higher

NGG NTS advocate a “preventative” approach to flex release

NTS position driven by

- ◆ The experience of current regime operation
 - ◆ The absence of commercial offering of buy-back (eg recent St Fergus experience)
 - ◆ Limited liquidity of “locational offers” on OCM

NTS approach is not to oversell, so risks of within-day system management are low, but ensure that

- ◆ Flex capability is sold and assessed on a zonal basis to recognise substantial diversity (Intra-LDZ)
- ◆ Flex capacity is efficiently allocated (application of zonal and area maximum)
- ◆ Flex capacity is fully tradeable
 - ◆ Inter-zone up to 12:00 D-1
 - ◆ Intra-zone before and during the Gas Day
- ◆ Effort expended to assess capability on close to a real time basis to ensure maximal release

In the absence of a high degree of confidence about system management tool effectiveness to manage within-day constraints NTS would consider it to be imprudent to oversell flex capacity

“Physical firm” flexibility capacity release quantities

Auction processes will rank bids in price order and then select subject to the following restrictions:

Area	Zone	Max value for each Zone ZM_i	Max Area Value (from Network Analysis) AM_{Area}	National Max
North	0	3.58	9.00	
	1	4.60		
	2	0.40		
	3	3.19		
	4	5.95		
Central	5	1.54	8.00	
	6	0.64		
	11	2.67		
	12	2.21		
	15	1.46		
West	7	2.02	5.00	
	14	1.62		
East	8	2.03	8.00	
	9	3.01		
	10	1.29		
	13	3.26		
	16	1.21		

Processes address user concerns:

Zonal release

– reflects intra-LDZ diversity

Area maxima

- enables value based migration

Annual Flex Bundle Trading

- enables further re-attribution

Daily Flex Trading

- enables fine tuning before and during the day

22

Above quantities for 2010/11

Understanding implications

- ◆ Long term “physically firm” flexibility release
 - ◆ permits migration to where/who values it most
 - ◆ Primary auction allocation
 - ◆ Secondary market “annual bundle” trading
 - ◆ Secondary market “daily bundle” trading after last annual auction release
 - ◆ not clear whether all “demands” will be satisfied
 - ◆ 22 mcm “physically firm release” should provide sufficient for DN requirements?



Some users may require additional access/capacity

Shorter term flexibility capacity release is therefore likely to be necessary closer to gas flow

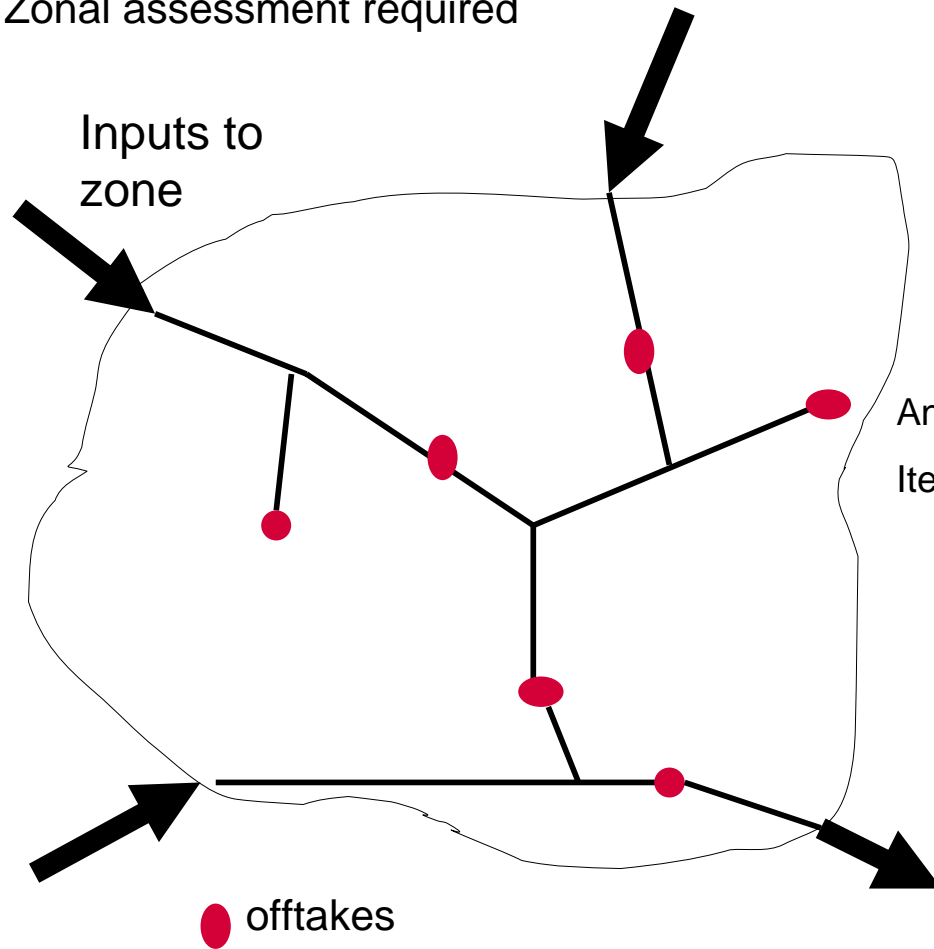
Major challenges include

- assessing capability
- assessing capacity utilisation against holdings

Assessing system capability

Major challenge for NTS

Zonal assessment required



Model inputs

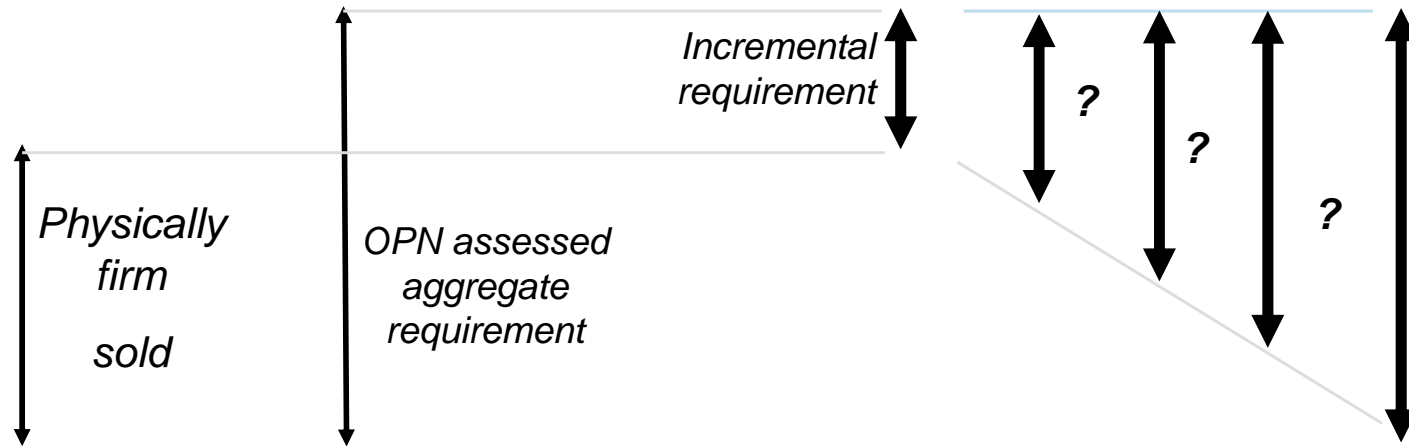
- Opening linepack position
- Predicted zonal supply input patterns/profiles
- Predicted offtake patterns/profiles

Analysis will indicate acceptability/otherwise
Iterative model will be required to establish "capability"

Understanding the short-term firm flex release issue

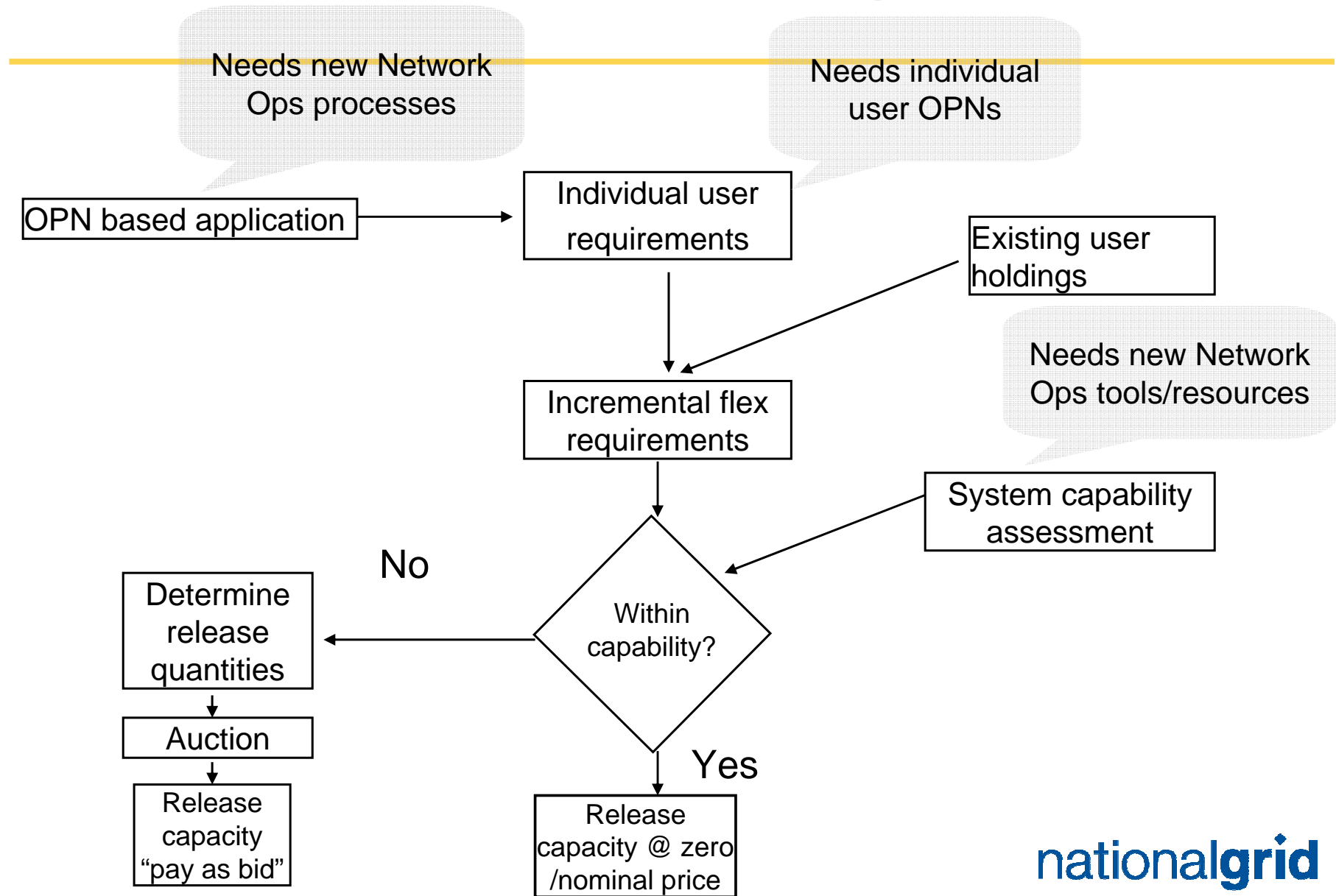
... in the context of the OPN based approach

Significant issue for Network Operations to factor into processes



... but the real incremental requirement may be difficult to determine since it is not clear how much of the "flex capacity holding" is being used

Short term release via OPN based or Auction processes



New system management tool and implications

“Cumulative flow reduction of x GWh over y hours”

Users would be advised of

- the quantity requirement
- the necessary timing
- the geographical location of the requirement

Users (if any) would then offer service and an offer stack would be constructed

	Offer Size	unit price	
User 3	.2	£20	↓ Bid acceptance down the stack until requirement satisfied
User 1	.4	£30	
User 3	.1	£50	
User 1	.1	£60	
User 3	.1	£80	
User 1	.1	£90	
User 1	.2	£125	

Acceptances to revise User’s flexibility capacity holdings and marginal price to feature in flex overrun calculation

National Grid NTS – Way forward

Milestone	Date
National Grid NTS issue overview of proposed model	18 th Aug
EOWG discussions	23 rd Aug
National Grid NTS issue detailed Business Rules	31 st Aug
Transmission Workstream discussions	Dates to be arranged
Submission of UNC Proposal to Mod Panel	12 th Sept
Mod Panel decision (National Grid NTS to request proposal issued for consultation)	21 st Sept
Consultations: <ul style="list-style-type: none"> ➤ UNC Modification Proposal consultation ➤ Charging proposals ➤ IExCR Methodology Statement 	Oct 2006
Applications for: <ul style="list-style-type: none"> ➤ additional prevailing flat capacity from Oct 2010 ➤ annual flexibility capacity for Gas Years 2010/11 and 2011/12 	July 2007