

Transmission Access Review Industry Seminar

New Connaught Rooms, London
18 March 2008

nationalgrid

Introduction

Alison Kay

Commercial Director, Transmission

National Grid

Introduction

- ◆ Government commitment to meet its share of European 2020 target of 20% of energy from renewable sources
- ◆ Unprecedented challenge for electricity networks
- ◆ Transmission access review has potential to play a key role in:
 - ◆ Increasing amount of renewable energy contributing to electricity demand
 - ◆ Ensuring that GB customers continue to enjoy high reliability at reasonable cost

Industry governance arrangements

- ◆ Existing industry governance arrangements recently criticised
- ◆ But, may be the most timely means of implementing findings of transmission access review
- ◆ Opportunity for industry to demonstrate that these arrangements
 - ◆ Allow complex issues to be analysed and debated
 - ◆ Allow potentially significant reforms to be implemented

Agenda

Time	Description	Presenter
10.00	Welcome and introductions	Alison Kay
10.10	Context	Duarte Figueira, BERR
10.25	Ofgem's vision for transmission access reform	Steve Smith, Ofgem
10.55	Q&A	Ofgem & BERR
11.10	Coffee	
11.30	Proposed suite of framework changes	Hêdd Roberts, NG
12.00	Process and next steps	Chris Bennett, NG
12:20	What do we want from the TAR process? <ul style="list-style-type: none">◆ Generation developers' views◆ Scottish TOs' views	Paul Jones, E.ON UK Nic Rigby, Chairman - BWEA Grid Strat Group Mike Barlow, SHETL Alan Michie, SPT
1.00	Q&A	Alison Kay (Chair) All speakers
1.30	Lunch	

Aims

- ◆ We're hoping everyone gets a good understanding of:
 - ◆ the access model building blocks and straw men
 - ◆ the next steps
- ◆ We hope everyone agrees that
 - ◆ development of the framework changes to implement the models of access reform is a “no regret” move that should be pursued

Proposed suite of framework changes

Hêdd Roberts

Electricity Charging and Access Development Manager

National Grid

Proposed suite of framework changes

Agenda

- ◆ What can be achieved with access reform?
- ◆ What's wrong with the existing regime?
- ◆ What are the straw man models?
 - ◆ Connect & manage
 - ◆ Evolutionary change
 - ◆ Capacity auctions
- ◆ A suite of framework changes that will allow these models to be considered and implemented
- ◆ Big issues
- ◆ Other interactions
 - ◆ Exit

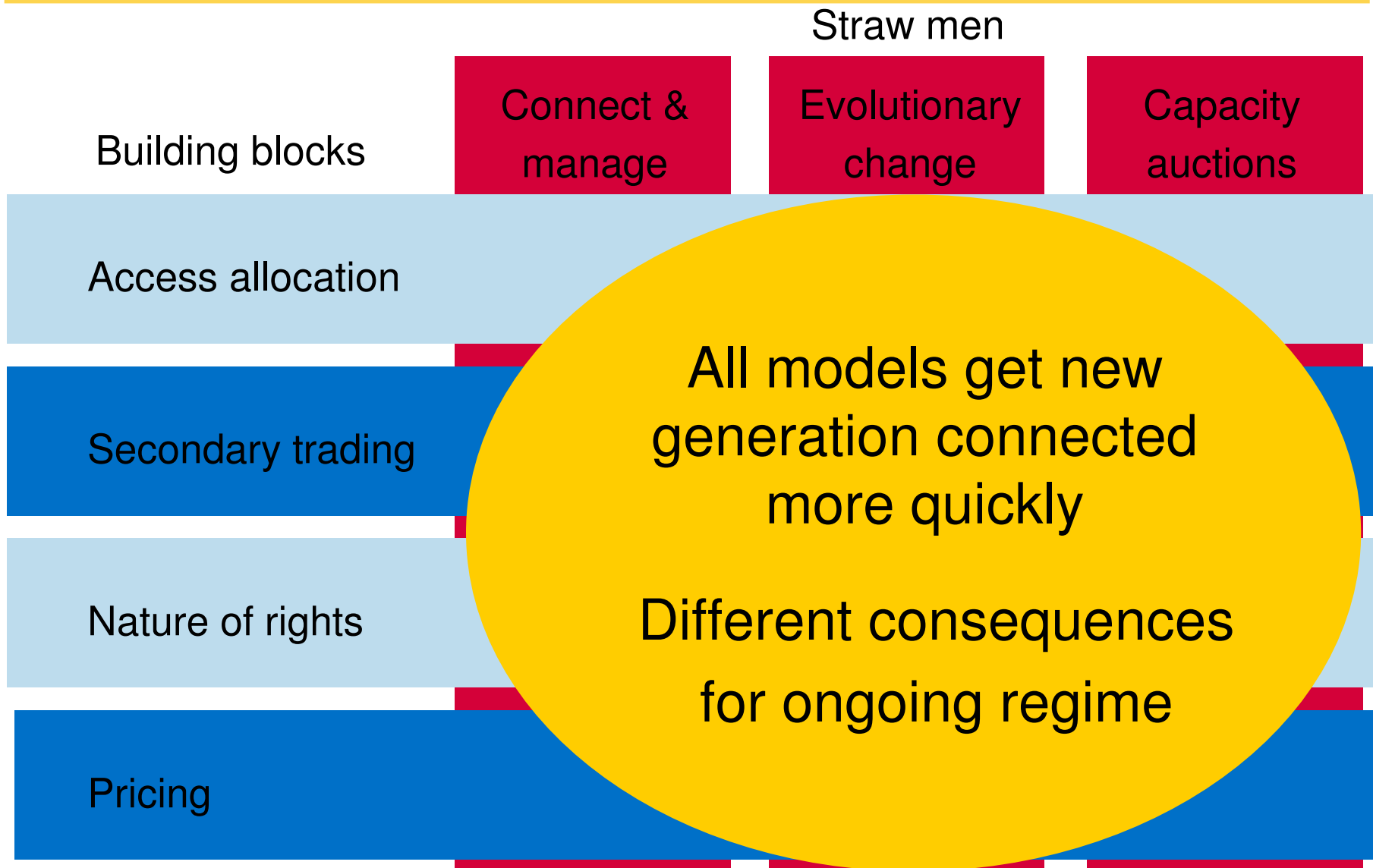
What can be achieved with access reform?

- ◆ Improvements to the access regime can deliver:
 - ◆ A level playing field for all generation technologies
 - ◆ More efficient use of the existing transmission assets
 - ◆ Improved signals to invest in new transmission assets
- ◆ But cannot deliver additional transmission capacity
 - ◆ Significant investment in transmission system extension still required
 - ◆ Subject to planning, etc.

What's wrong with the existing regime?

- ◆ New generation can't get timely access to the transmission system
 - ◆ GB queue stretching out beyond 2015
 - ◆ Closure uncertainty
- ◆ May not be appropriate with increased volume of renewable generation
 - ◆ Characteristics of wind mean that sharing of capacity (between wind and conventional) much more important

What are the models?



Connect & manage strawman

Access allocation

- Allocate then invest for long-term rights when accompanied by suitable long-term commitment
- Eligibility criteria must be met (e.g. [3] years after connection offer accepted; local works complete)

Secondary trading

- No secondary trading

Nature of rights

- Nodal long-term rights

Pricing

- Local asset charge
- Full TNUoS

Efficient pricing of rights

Await establishment or release of physical capacity

Obtain immediate (short-term) firm access

		<p>“Invest then allocate”</p> <p>Long-term rights efficiently priced and allocated</p>
	<p>“Evolutionary change”</p> <p>Efficient short-term allocation & rationing</p>	<p>“Connect & manage”</p> <p>Existing right holders subsidise new short-term right holders</p>

Pay short-run (operational) costs

Pay long-run (investment) costs

Evolutionary change strawman

Vision

- ◆ Short-term products are made available by SO and holders of long-term rights
- ◆ Older conventional plant make use of short-term products because they are inexpensive when the wind is not blowing
- ◆ Long-term access rights are made available for some new renewable generators
- ◆ Users only purchase long-term rights when short-term rights are more expensive – efficient transmission system

Evolutionary change straw man

Access allocation

- Invest then allocate for long-term rights when accompanied by suitable long-term commitment
- Short-term rights identified and auctioned by SO
- Overrun

Secondary trading

- Sharing allowed in pre-defined zones with 1:1 sharing factor

Nature of rights

- Zonal short or long-term rights for a defined period

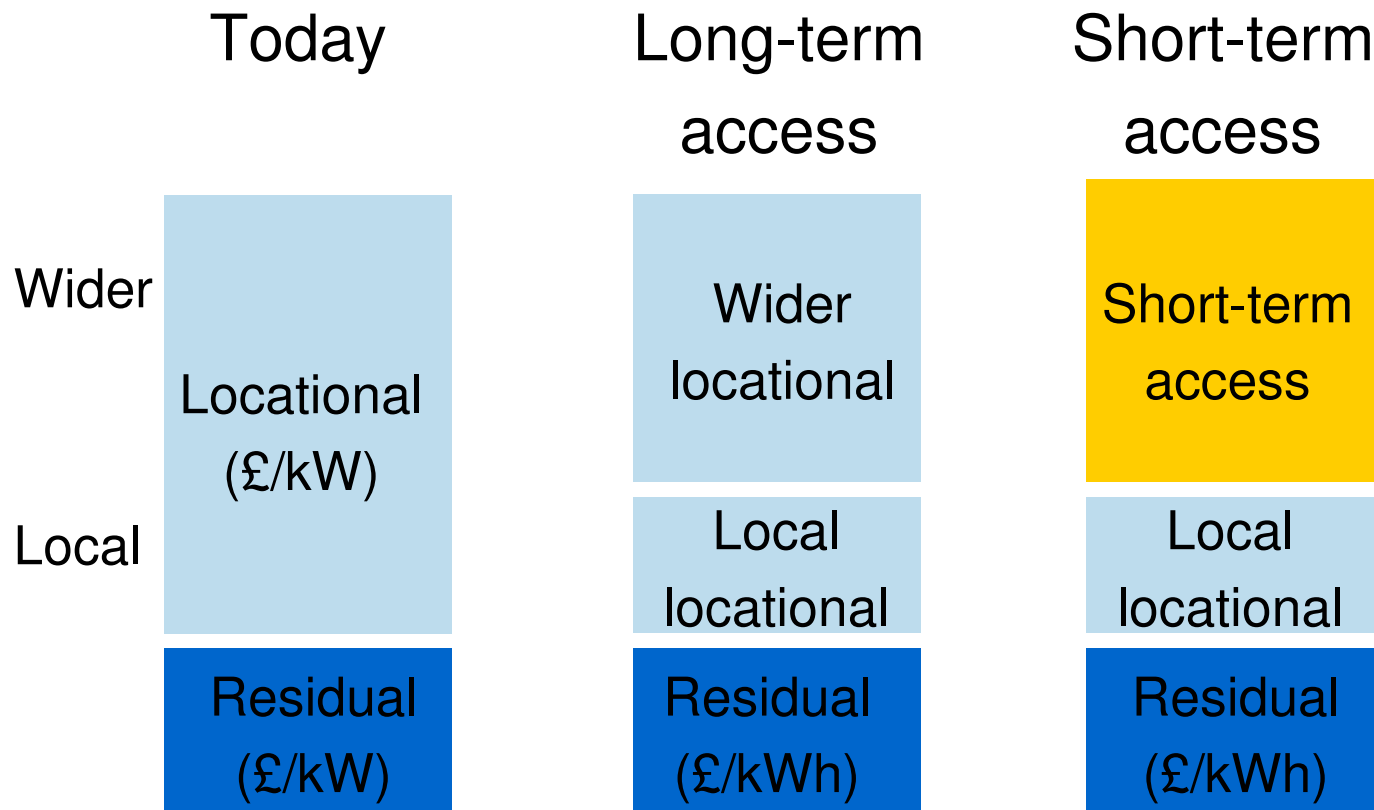
Pricing

- Residual (£/kWh) and local asset charge
- LRMC for long-term
- “Pay as bid” for SO released; ex post SRMC for overrun

Evolutionary change strawman

Impact on transmission charging

- ◆ Evolutionary change straw man requires significant changes to transmission charging



Capacity auction straw man

Access allocation

- Long-term rights (invest then allocate) auctioned
- Suitable long-term commit required for inc cap
- Short-term rights identified and auctioned by SO
- Overrun

Secondary trading

- Sharing allowed in pre-defined zones with 1:1 sharing factor

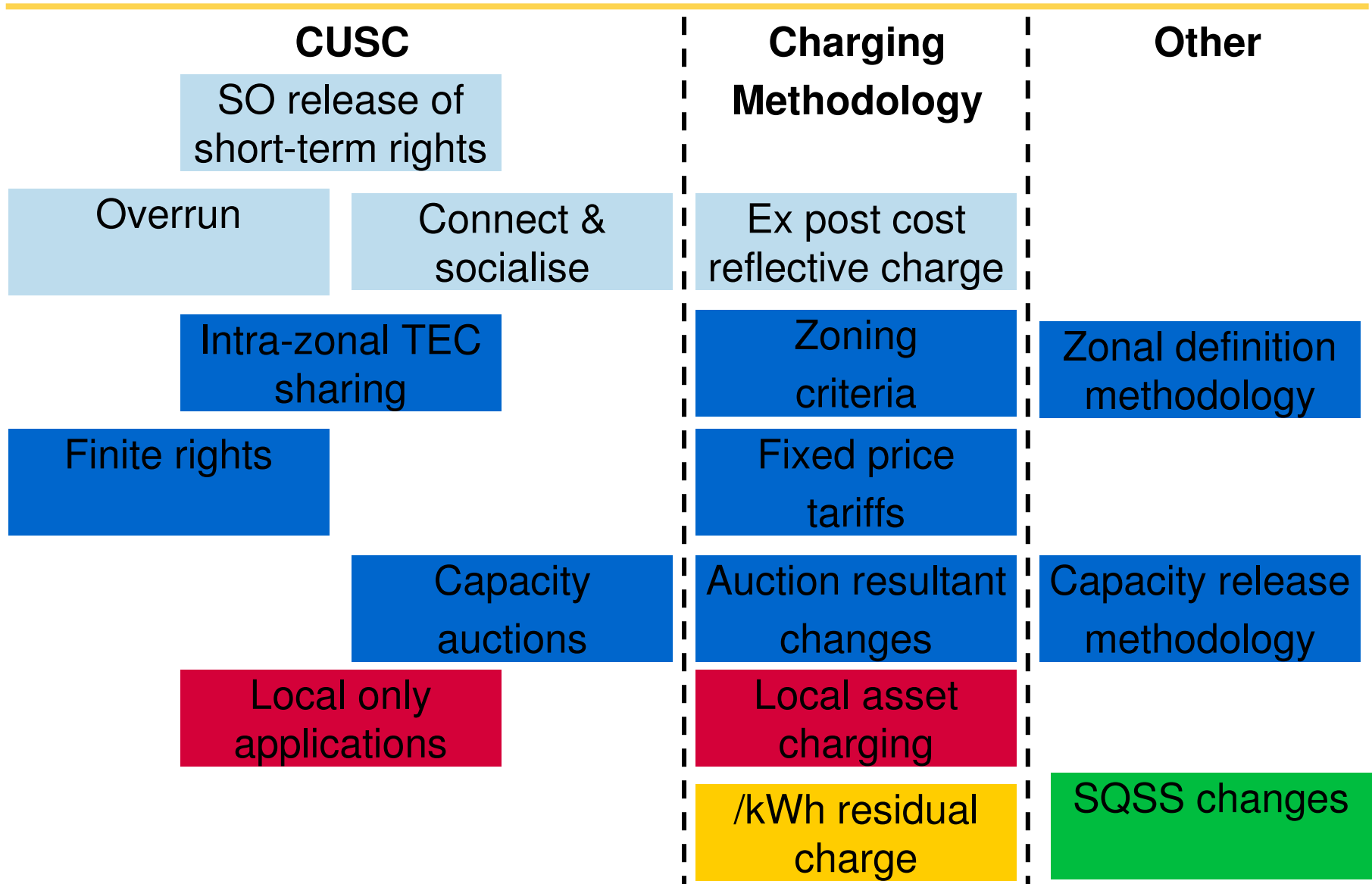
Nature of rights

- Zonal short or long-term rights for a defined period

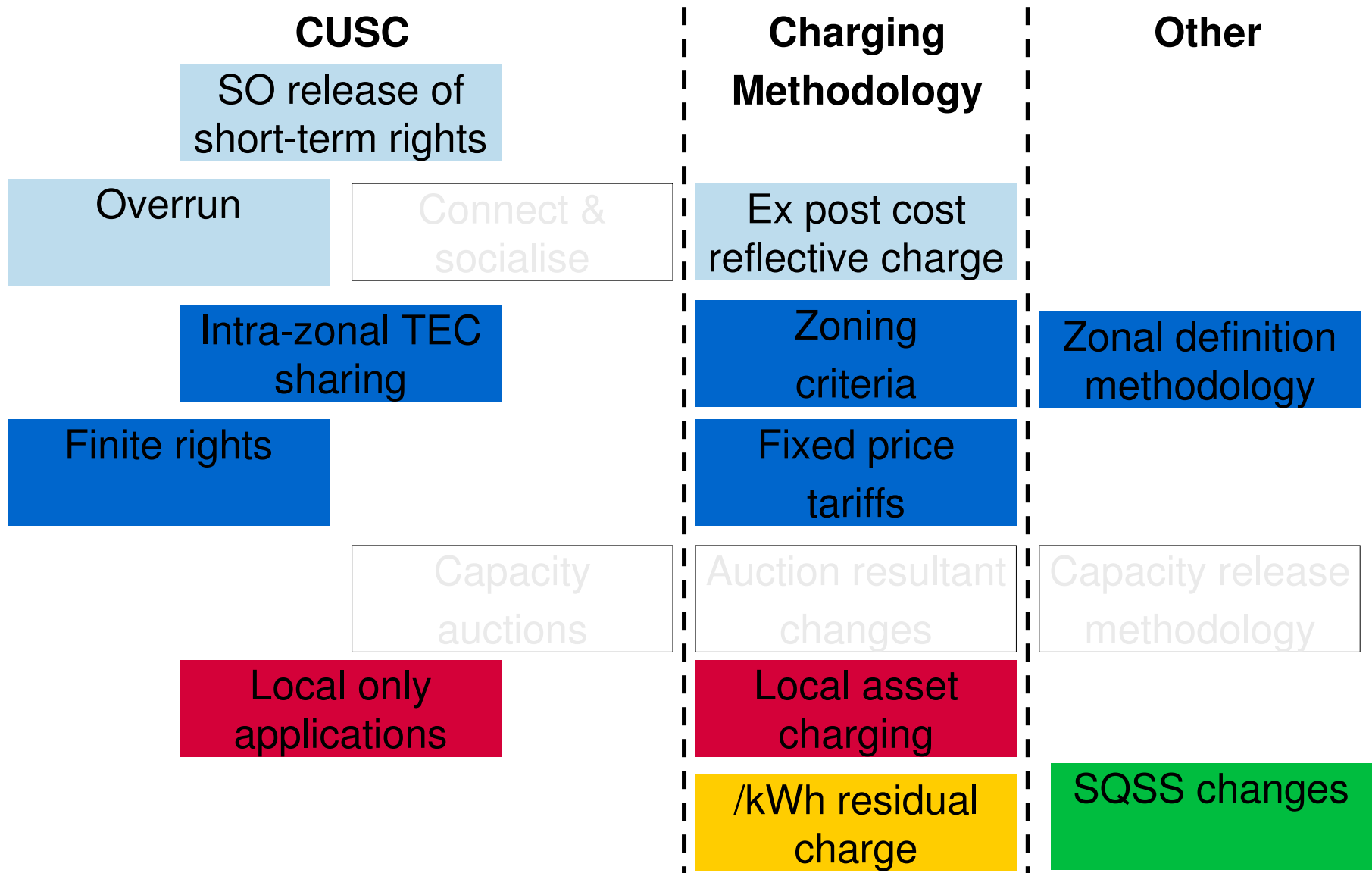
Pricing

- Residual (£/kW) and local asset charge
- “Pay as bid” for long-term
- “Pay as bid” for SO released; ex post SRMC for overrun

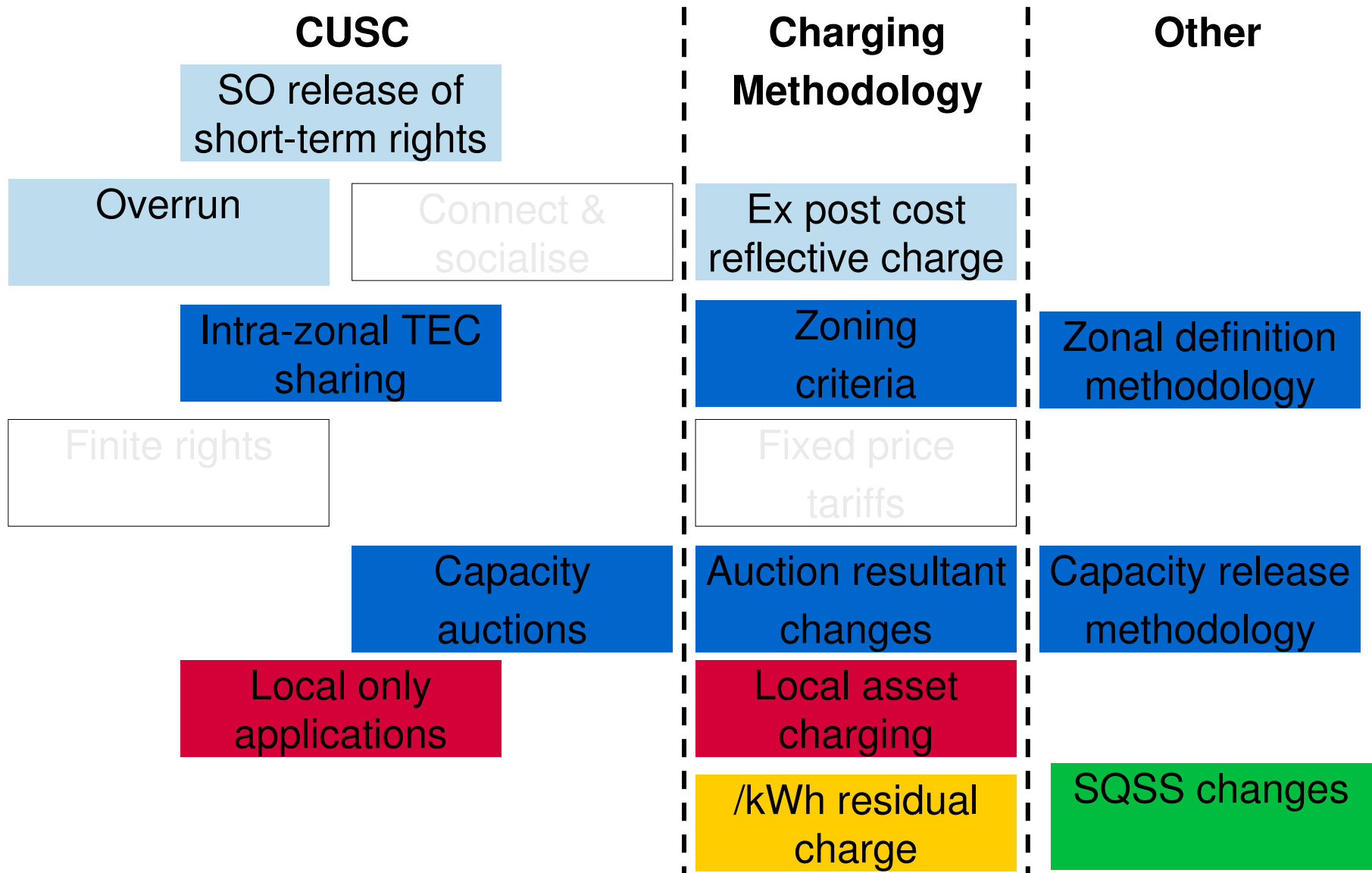
Framework amendment proposals required



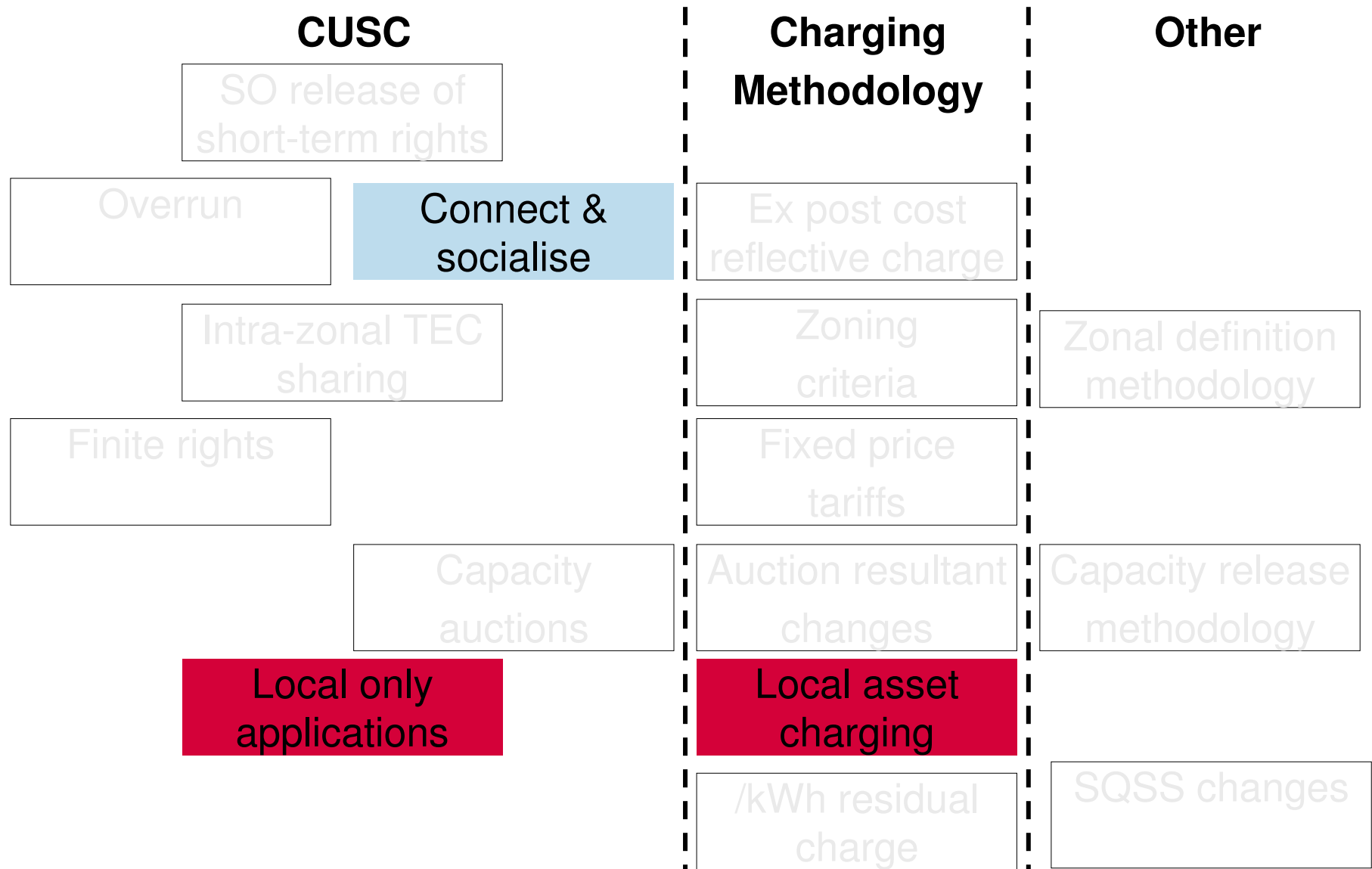
Implementing evolutionary change straw man



Implementing capacity auction straw man



Implementing connect & manage straw man



What are the big issues?

- ◆ Earlier connection means increased congestion costs
 - ◆ Should these costs be socialised or targeted at the users that cause them?
- ◆ “Evergreen” rights for existing generators
 - ◆ Leads to closure (and therefore network investment) uncertainty, but basis on which generation investment decisions have been made
- ◆ Impact on transmission investment planning
 - ◆ What are the associated SQSS changes?
- ◆ Long-terms rights transfer
 - ◆ Confers advantage to rights holders. How should rights be allocated?

Interactions

- ◆ Framework changes focus on entry arrangements, although charging changes will have significant impact on demand
- ◆ Development of these changes needs to be mindful of extension to demand in the future
- ◆ Transmission arrangements for distributed generation also need to be considered
 - ◆ Two broad models
 - ◆ Gross – treat as directly connected with discount
 - ◆ Net – treat as negative demand
 - ◆ National Grid intend to publish high-level consultation March 2008

Process and next steps

Chris Bennett
Regulatory Frameworks Manager
National Grid

Process and next steps

Agenda

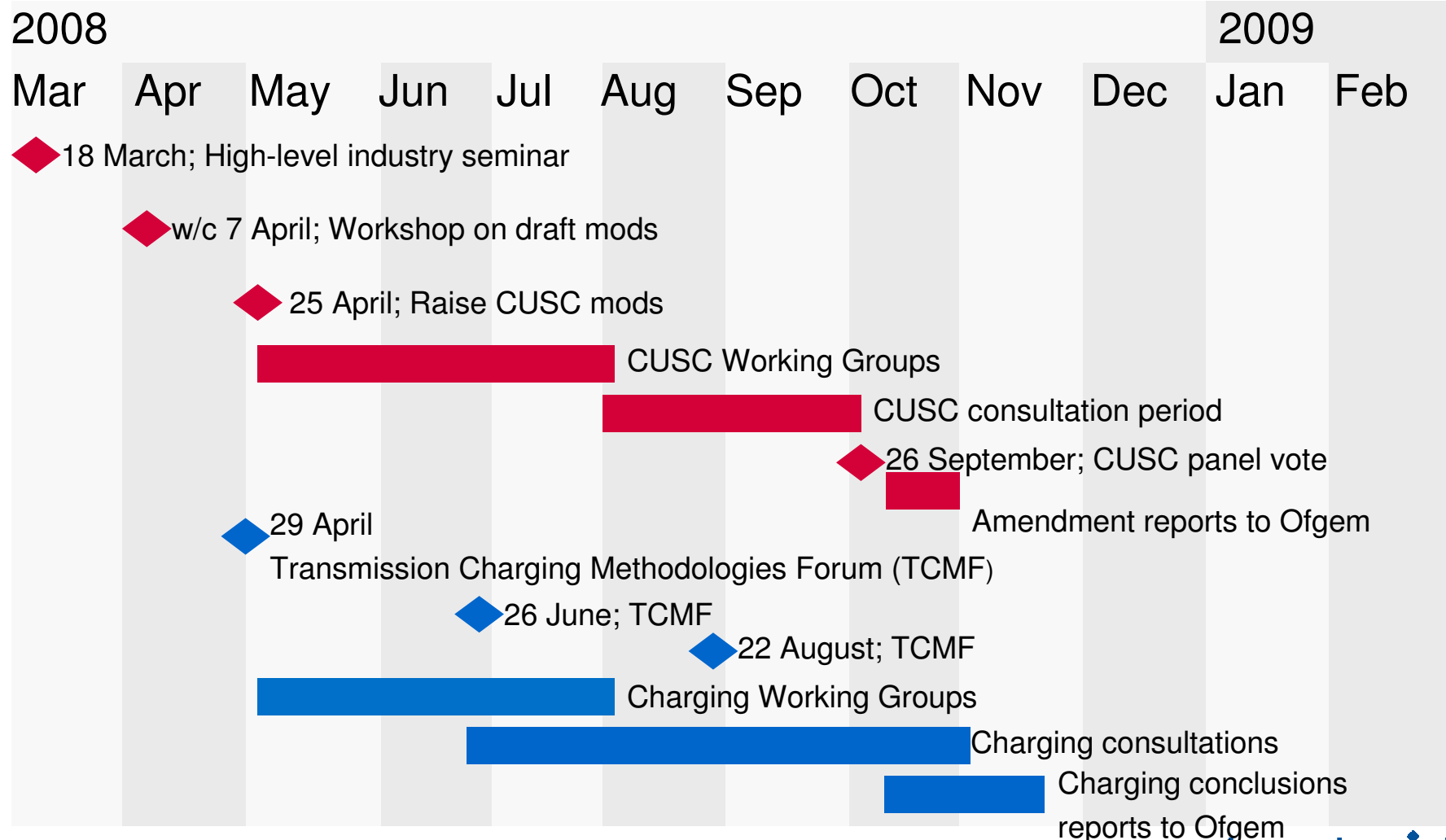
- ◆ A different approach
- ◆ Timeline
- ◆ The process
 - ◆ Industry workshop
 - ◆ Dealing with charging & access issues efficiently
- ◆ Taking the opportunity

A different approach

- ◆ National Grid is looking to propose a suite of framework changes that could be used to implement each of the straw men discussed
- ◆ Why?
 - ◆ Industry engagement on formal framework changes is required to move debate forward
 - ◆ Consideration of all options more likely to result in the right answer
 - ◆ Consideration of theory and practice together

You're the experts

Draft timeline



The process

- ◆ Industry workshop; w/c 7 April
 - ◆ Opportunity to....
 - ◆ Discuss the suite of framework changes in further detail
 - ◆ Discuss draft CUSC amendment proposals
 - ◆ Agree process going forward
- ◆ CUSC amendment proposals to be raised at 25 April meeting



CUSC



Charging

- ◆ Need to think about how CUSC, charging and other issues are co-ordinated....

CUSC, Charging and other issues

- ◆ Terms of reference and reporting under relevant industry governance
- ◆ But, organise suite of framework changes into working groups which cover:
 - ◆ CUSC
 - ◆ Charging
 - ◆ Other issues
- ◆ Use content of working group discussions to produce:
 - ◆ CUSC working group reports
 - ◆ Charging Methodology pre-consultation and consultation documents
 - ◆ Drafts of any other methodology documents
 - ◆ E.g. Auction Incremental Capacity Release Methodology

Proposed Working Groups

WG1	CUSC	Charging Methodology	Other
<p data-bbox="289 574 596 708">Overrun</p>	<p data-bbox="407 418 823 548">SO release of short-term rights</p> <p data-bbox="632 574 1045 708">Connect & socialise</p>	<p data-bbox="1087 574 1499 708">Ex post cost reflective charge</p>	
<p data-bbox="163 756 281 808">WG2</p> <p data-bbox="180 886 596 1024">Finite rights</p>	<p data-bbox="407 737 823 862">Intra-zonal TEC sharing</p> <p data-bbox="632 1052 1045 1195">Capacity auctions</p>	<p data-bbox="1087 732 1499 862">Zoning criteria</p> <p data-bbox="1087 886 1499 1024">Fixed price tariffs</p> <p data-bbox="1087 1052 1499 1195">Auction resultant changes</p>	<p data-bbox="1549 737 1955 862">Zonal definition methodology</p> <p data-bbox="1549 1052 1955 1195">Capacity release methodology</p>
<p data-bbox="163 1224 281 1276">WG3</p>	<p data-bbox="407 1219 823 1344">Local only applications</p>	<p data-bbox="1087 1219 1499 1349">Local asset charging</p> <p data-bbox="1087 1357 1499 1484">/kWh residual charge</p>	

Making the governance work....

WG1 Agenda

1. **CUSC**

- Working Group Terms of Reference will be drafted appropriately

2. **Charging Methodology**

- Working Groups will be established as Transmission Charging Methodologies Forum (TCMF) sub-groups

Taking the opportunity

- ◆ Reform of transmission access is needed....
....and is going to happen
- ◆ Transmission access is a complex area, and the expertise lies with the industry
- ◆ This is the industry's opportunity to develop new transmission access arrangements that achieve the aims of the review
- ◆ Your commitment is required to make it happen
- ◆ Sensible approach required from participants
 - ◆ Alternatives for substantive issues only?



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Q&A Panel

Alison Kay

National Grid

Chair

Chris Bennett

Hêdd Roberts

Stephen Smith

Ofgem

Duarte Figueira

BERR

Paul Jones

E.ON UK

Nic Rigby

BWEA Grid Strategy Group

Alan Michie

SPT

Mike Barlow

SHETL

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