ofgem E-Serve Promoting choice and value
for all gas and electricity customers

Ofgem E-Serve/DECC Stakeholder Event:

Offshore Electricity Transmission

21st September 2010
London

AGENDA

- **Introduction -** *Bob Hull*
- **Background –** *Emily Bourne*
- **OFTO and Generator Build Options -** *Sam Cope*
- *Coffee Break (11:40 – 11:50)*
- **Implementation** *– Bridget Morgan*
- **Co-ordination** *– Emily Bourne*
- **Panel Q&A –** *Chaired by Bob Hull*

Introduction

Bob Hull, MD Commercial – Ofgem E-Serve

Aims for event

- An update on the first transitional tender round
- An overview of the enduring regime consultation:
  - OFTO build options
  - Generator build options
  - Implementation of new models
  - Co-ordination
- Event provides an opportunity to ask specific questions about the enduring regime – to inform consultation responses

Investment is key

- £200 billion of investment required by 2020
- Network investment:
  - 'RIIO': Revenue = Incentives + Innovation + Outputs
  - Offshore Transmission
- Third package
- Effective Competition

Overview of regulatory regime

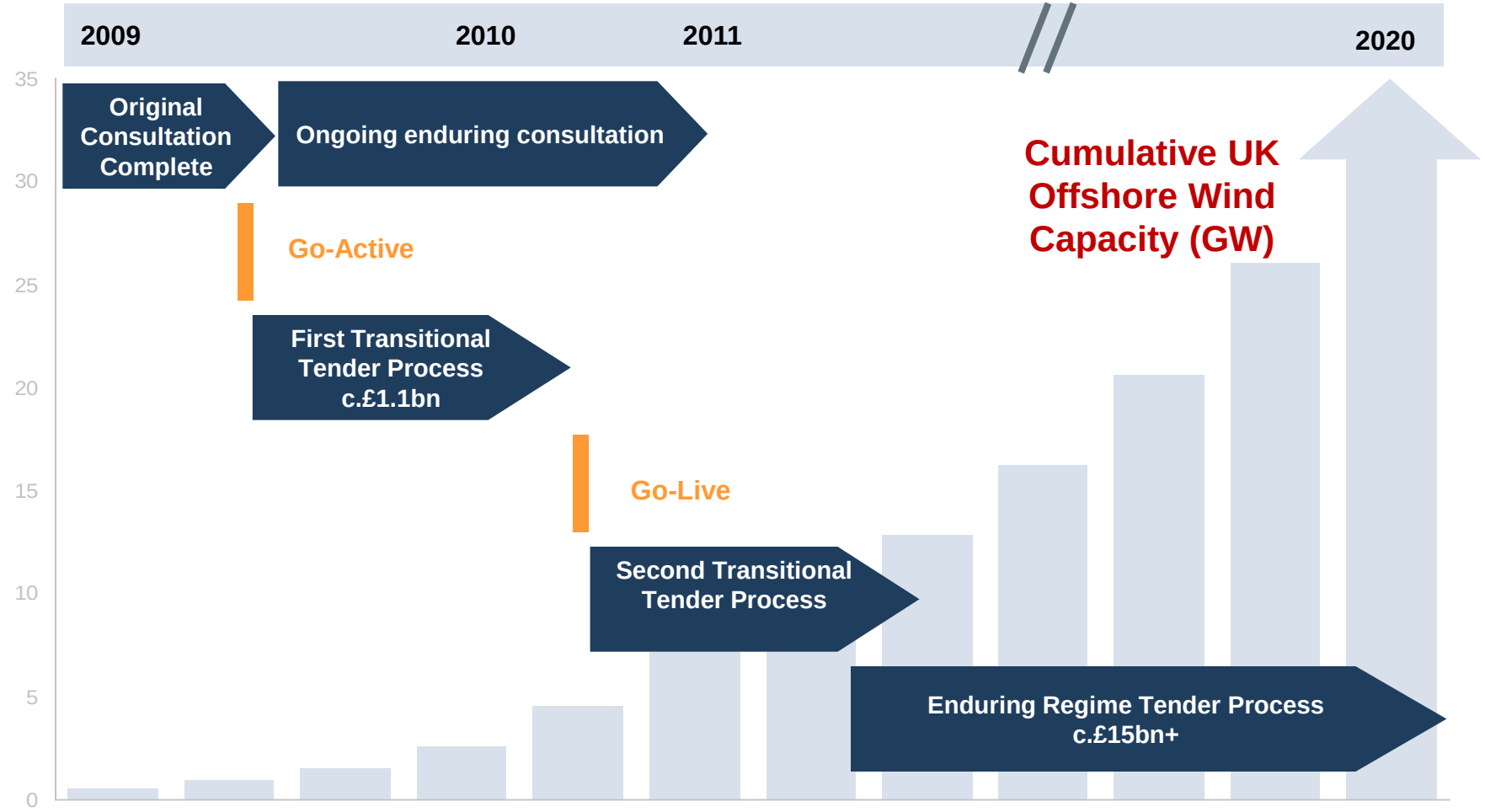
Low Risk Revenue Stream

- 20 year revenue stream from GBSO
- availability based
- no automatic periodic regulatory review
- no energy or stranding risk
- low counterparty risk – no generator exposure
- well defined and proven regulatory regime – extending onshore precedent
- well defined tender process
- upside: performance on operating costs, increased capacity, certain on regulated services and reactive power

Revenue Adjustments

- availability incentives and penalties both capped at 10% of revenue
- revenue fully indexed to RPI
- cost pass through and pre-defined adjustments for business rates, Ofgem costs, leases, code changes
- pass through of extra decommissioning costs if change of law
- incremental capex up to cumulative 20%
- possible extension or re-tender at the end of the revenue stream

Timeline


2009
2010
2011
2020
35
30
25
20
15
10
5
0
Original Consultation Complete
Ongoing enduring consultation
Go-Active
First Transitional Tender Process c.£1.1bn
Go-Live
Second Transitional Tender Process
Enduring Regime Tender Process c.£15bn+
Cumulative UK Offshore Wind Capacity (GW)

TR1 - Outcomes

- ITT Bid submissions received on 16 March - bids received totalled nearly £4 billion investment
- PB Decisions announced 5 August 2010:

Project	Preferred Bidder
Barrow, Gunfleet Sands, Robin Rigg	Transmission Capital
Thanet	Balfour Beatty
Walney I and II, Sheringham Shoal	Macquarie

- Estimated £350 million in savings from competitive approach - passed on to developers and consumers
- Calculated by comparing the average annual revenue bids based on the bids received with the annual revenues allowed for the onshore Transmission Owners during the last transmission price control review.

Next steps

First Transitional Tender Round

- Entered process to close for remaining first round projects
- Ormonde has proceeded to a Best and Final Offer stage
- Due to the structuring of the commencement orders, it has proved necessary to re-run the ITT stage for Greater Gabbard

Second Transitional Tender Round

- 2010 Tender Regulations in place
- Expect to take decisions on qualifying projects this month
- Expect to commence TR2 for those projects that have met the Qualifying Project Requirements in full at the end of 2010

Enduring Consultation

- Consultation Deadline – 29 September 2010

Development of offshore transmission regime

Emily Bourne

Government objectives for energy and climate change

Overarching DECC objective: Support the transition to a secure, safe, low carbon, affordable energy system in the UK

Role of Government is to act as a catalyst for private sector investment by developing a clear, transparent, long-term policy framework

Connecting offshore wind

Offshore wind will be crucial to delivering our renewable and low carbon targets

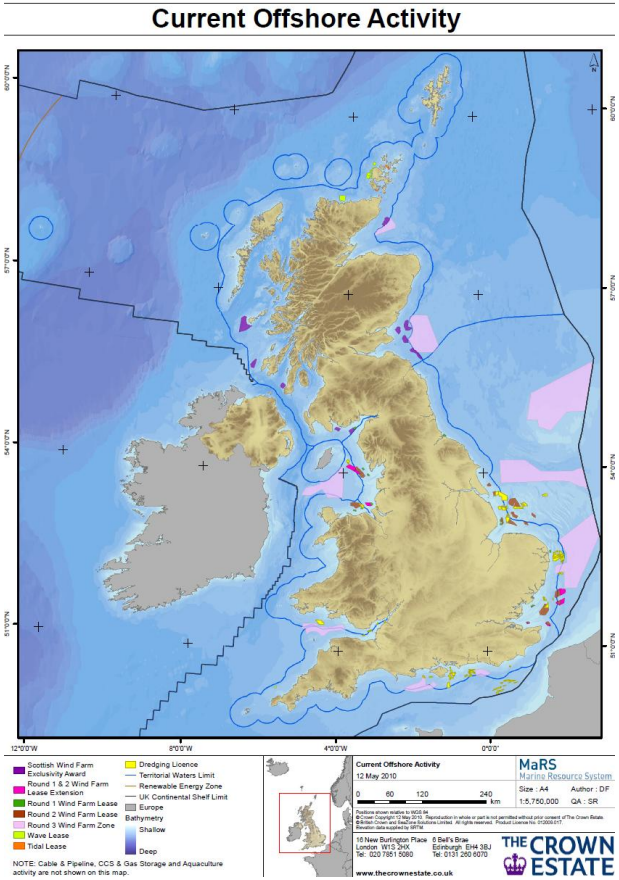
Major investment needed in offshore grid (over £15bn) and onshore grid reinforcements

Industry currently plans significant amounts of offshore wind – up to 49 GW installed capacity

Objectives for offshore transmission

DEPARTMENT OF ENERGY & CLIMATE CHANGE

Secure, timely and cost effective delivery of connections to the onshore grid



Deliver fit for purpose transmission infrastructure to facilitate the connection of offshore generation and facilitate the realisation of significant carbon savings

Provide certainty and best value to consumers through the competitive process

Attract new entrants to the sector

Progress to date

2004	Powers taken in Energy Act 2004
2005	Consultation on 'light touch' or Regulated Asset Base approach
2006	Decision to opt for Regulated Asset Base approach Consultation on 'area-based' or 'point to point' licences
2007	Decision to opt for 'point to point' licences Consultation on who should run competitive tenders – decision to appoint Ofgem
2008	Powers taken in Energy Act 2008 to enable Ofgem to run tenders
2009	New regime went "active" June 2009 – enabled Ofgem to start first tender for offshore grid licenses– July 2009 and created NETSO
2010	**July Annual Energy Statement announced go live for transitional projects – enabling Ofgem E- Serve to conclude first tender round** **Tender regulations approved enabling Ofgem E-Serve to run next tender round and potential for more projects to join** **Open letter signalled intent to consult on the enduring regime**

ofgem E-Serve Promoting choice and value
for all gas and electricity customers

Extended range of options for enduring regime

Sam Cope

Enduring consultation to date

Background

- Overall framework for the enduring regime (for OFTO build) put in place by the DECC at "Go Active" (June 2009)
- Ofgem published an open letter and consultation in 2009 setting out detailed aspects of the enduring regime
- Respondents suggest proposed regime would increase risk for developers and potentially delay certain projects taking steps towards construction

Recent developments

- Tender Regulations 2010 enable "cusp" projects the opportunity to qualify for the TR2
- Ofgem/DECC joint statement and setting out intention to consult on including an enduring generator build option

Current Consultation

Joint Ofgem E-Serve/DECC consultation

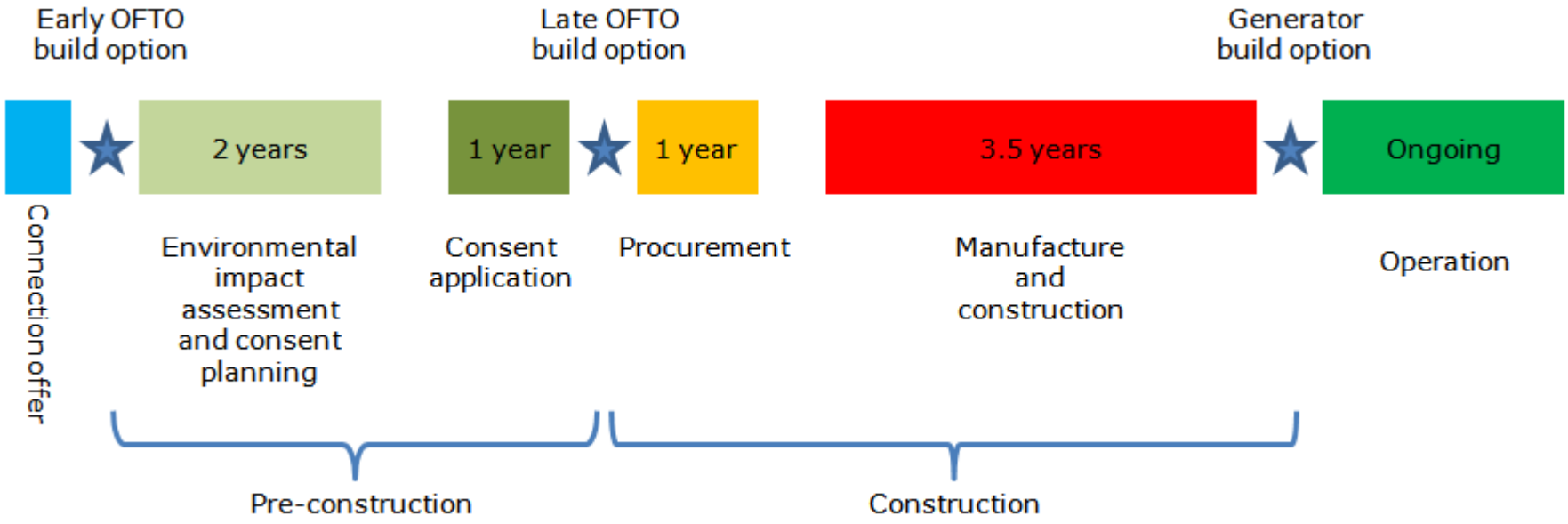
- Consultation builds on previous decisions, responses to December consultation and engagement with stakeholders
- It gives an opportunity to comment on:
  - OFTO build options
  - Generator build option
  - Implementation of new models
  - How the regime facilitates co-ordinated offshore networks

Performance Incentive

- Ongoing licence revisions as part of TR2

Appointment options

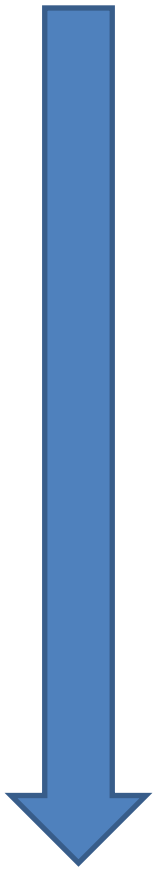
- Our proposals can reflect the different preferences of offshore developers so the optimal decisions can be made – a spectrum of options
- We present three approaches: **Early OFTO build, Late OFTO build** and **Generator build**



- Irrespective of timing of OFTO appointment, offshore transmission needs to comply with unbundling requirement

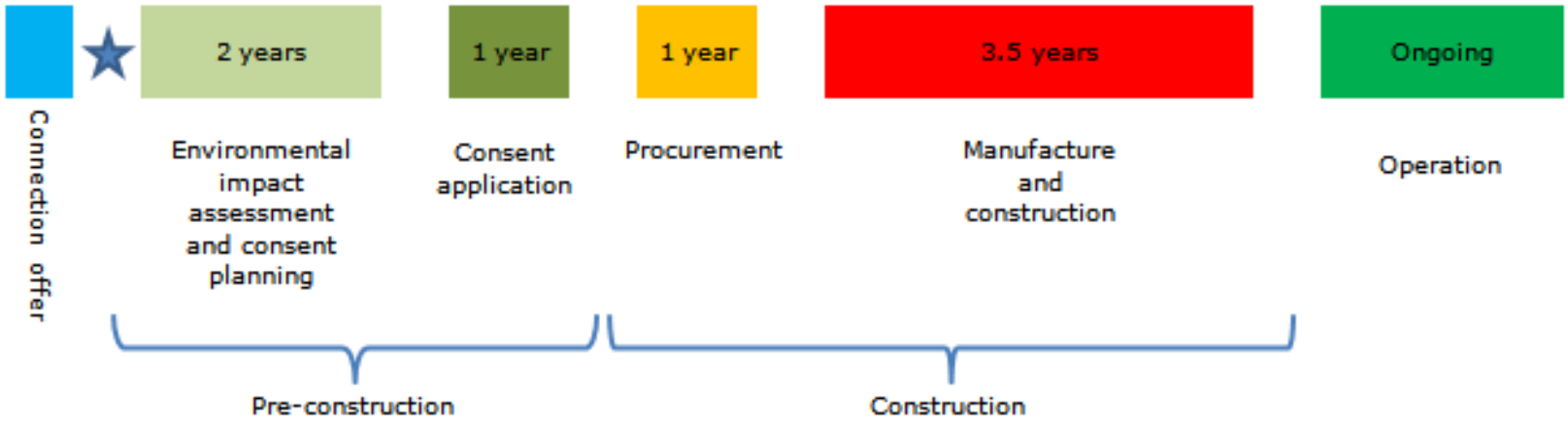
Consistent principles and processes

➢ There are a series of common features to the regime irrespective of timing of appointment:



Initial interactions	• Early dialogue between the generator, NETSO, potential OFTOs and the supply chain
Connection	• Generator applies to NETSO for connection, including capacity and timing • NETSO makes an initial connection offer to the generator
Tender process	• Generator and project meet certain pre-conditions to trigger tender • Authority invites and evaluates bids from parties
Transfer of responsibility	• Facilitates the transfer of assets, consents etc from the generator to an OFTO and remuneration of generator
Licence Grant	• Licence is granted to the successful bidder
Rights, obligations and incentives	• OFTO owns and operates transmission system and receives 20 year availability based revenue stream

1. Early OFTO build



- OFTO would be responsible for all aspects of consenting, design, procurement, construction and operation of transmission assets
- Approach offers greatest scope for design innovation and has much in common with approach used successfully onshore
- Approach may be challenging due to level of risk bidders would need to assume (see contingencies)

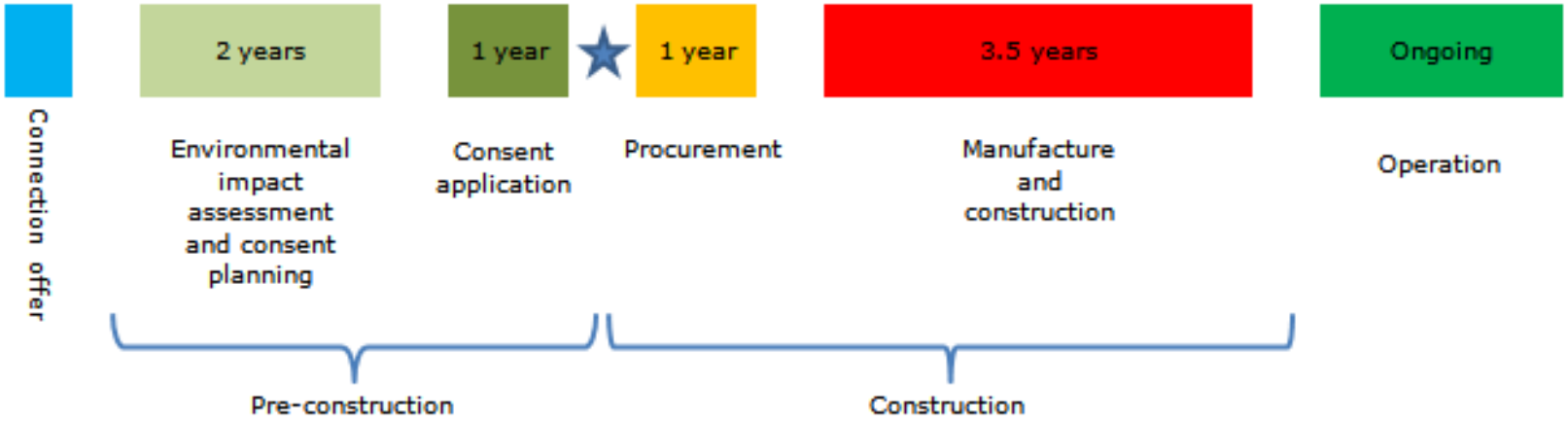
Early OFTO build – factors affecting basis of bid

- The OFTO is appointed before consenting is complete and design fully developed
- Bids including firm equipment and finance costs may not be feasible due to high risk premiums - uncertainty over prices
- Two approaches identified in consultation:

1. Bidder outlines indicative price and a series of indices or contingencies
2. Bidders evaluated on the basis of their proposed approach to procurement and financing

We requested views on these approaches to the tender process

2. Late OFTO build



- OFTO would be responsible for procurement, construction and operation of transmission assets
- Allows generator to take responsibility for consenting and high level design of the offshore transmission system (which sets tender spec) and provides greater scope for firm prices
- Provides less scope for OFTO led design innovation relative to the early OFTO build approach

Late OFTO build – basis of bid

- Over the course of the development of the regime some respondents raised concerns about exclusivity arrangements between bidders and suppliers

- Three approaches identified in consultation (bidders submit firm prices in all). Based on:

  1. Negotiated equipment prices

  2. Indicative equipment prices

  3. 'Heads of terms' offering by equipment manufacturers

- The tender process needs to ensure supply chain is engaged in the best way and barriers to entry are not onerous

We ask for respondents views on which of these approaches enables the greatest level of competition

Common features of OFTO build proposals

Pre-construction costs

- To be defined on a case by case basis - Ofgem to ensure costs have been incurred efficiently and economically

Contingencies

- To be managed on a case by case basis – a balance needed between contingencies, hedging instruments and assuming risk

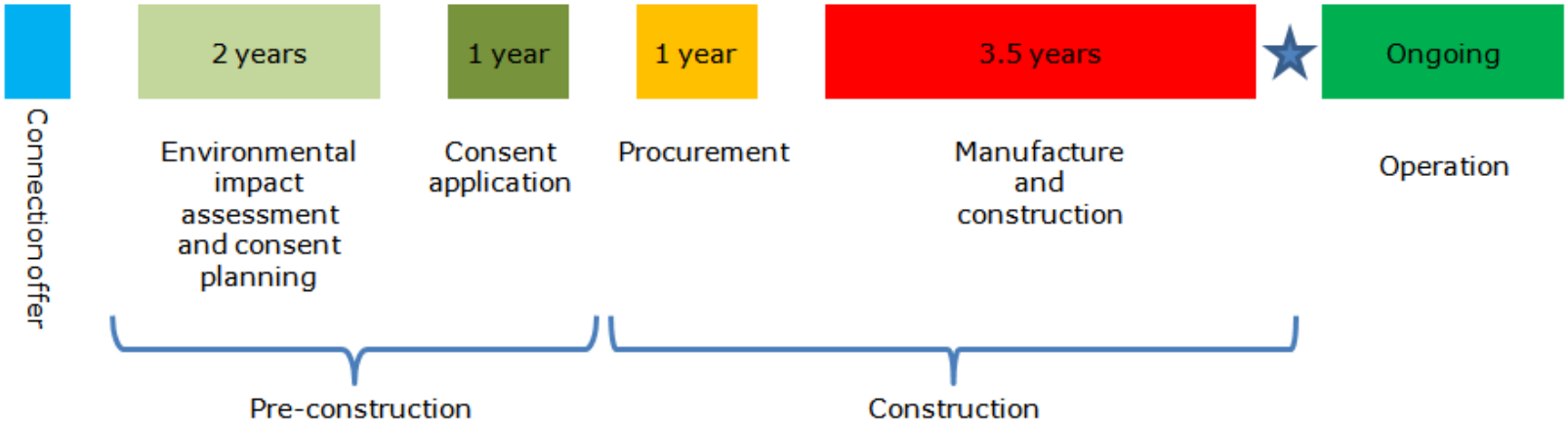
Evaluation

- Views sought on impact of allowing generators a role in informing technical criteria and commenting on technical sections of submissions

OFTO of Last Resort

- Views sought on need to extend these arrangements for enduring regime and considering to whom the obligations should be extended

3. Generator build



- Generator would take responsibility for all aspects of design, consent procurement and construction of offshore transmission infrastructure

- An extension of the transitional regime would not deliver equivalent of OFTO build arrangement

A) Standard Framework
B) Property Transfer
C) Cost assessment

Generator Build: Areas for consideration

Standard Framework

- Time limited transitional arrangements in place to deal with the situation where generator had designed/constructed offshore connections whilst regime was developed.

- In future, whether OFTO or generator build, all offshore transmission assets should be required to meet the same minimum standard of technical performance

Property Transfer

- Arrangements must be in place to ensure effective, timely and fair transfer of offshore transmission assets. Current transfer scheme will expire 2016 (at latest)

Generator Build: Areas for consideration

Cost Assessment

- Given maturity of process – does there remain a case for guaranteeing recovery of a minimum level of costs

- As with onshore, only efficiently and economically incurred costs as assessed by Ofgem will be recoverable under the enduring regime

Cost Allocation

- Need to consider approach to ensuring costs appropriately assigned to Generation and Transmission

OFTO of Last Resort

- Views sought on need to extend these arrangements for enduring regime and considering to whom the obligations should be extended

ofgem E-Serve Promoting choice and value
for all gas and electricity customers

Implementation & Next steps

Bridget Morgan

Implementing proposed extended range of options - overview

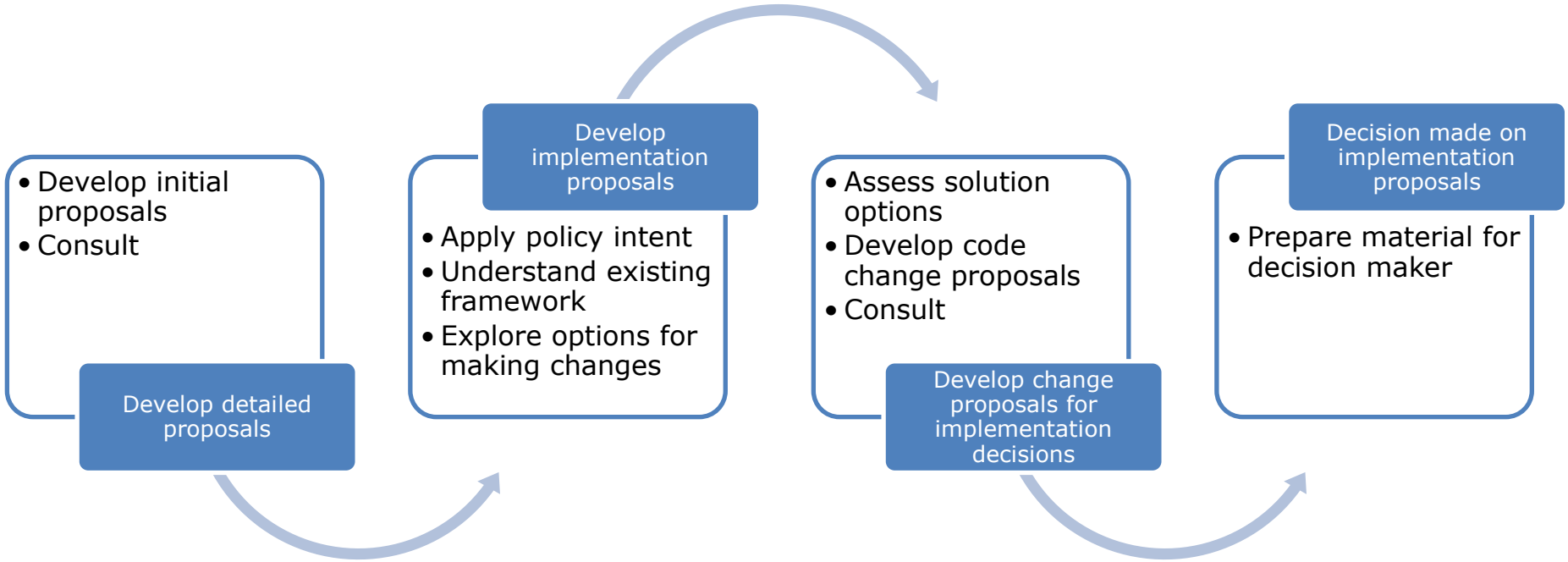
- Small policy development can have wide reaching consequences on the standard framework
  - Proposed extended range of options for offshore generators falls within this category

- Under a generator build approach, a licensed TO is not constructing the transmission assets

- Under a late OFTO build approach, there may not be a licensed TO at pre-construction design stage

- For enduring arrangements there is value in generic requirements being defined in public documents (such as industry codes). Need:
  - to provide clarity about applicable technical performance obligations to ensure that minimum standards of transmission system infrastructure are met
  - for sufficient information exchange - rights and obligations are in place to ensure that offshore generators and NETSO are able to make use of extended range of options

Stages of Implementation



Initial assessment of changes required

- Potentially a wide reaching impact on three parts of the current standard framework:

CUSC and Grid Code	• Define new offshore generator connection application options
STC	• Reflect new options for offshore generators in contractual arrangements between NETSO and other transmission licensees (including OFTO)

Some likely impacts of changes required

- High volume of minor changes to existing processes, rights and obligations
- Introduction of new standard arrangements to manage transfer of contractual relationship between NETSO and offshore generator under CUSC to a contractual relationship between NETSO and OFTO under the STC in respect of offshore transmission system assets and/or detailed design information
- Standard obligations in respect of information sharing about the NETS to enable an offshore generator to make an informed choice between application options

Standard Framework Consultation – a preview of some core questions

Key aspects of change:

- New process to manage transfer of contractual relationships with NETSO
  - How should changes to the scope and purpose of the interface between the NETSO and Offshore Generator and the NETSO and OFTO before, during and after construction be managed?

- Additional data exchange requirements
  - What information will offshore generator need?
  - What information will others users of the NETS permit the NETSO to share?
  - How can user concerns about necessary data sharing be addressed?

- Range of options for offshore generators
  - Under what circumstances (if any) should the NETSO be able to refuse to offer terms on the option chosen by the offshore generator in its application?
  - What flexibility to change between options is needed?
  - What flexibility can be accommodated by the NETSO and how should the change process be managed?

Timetable

- We aim to make these changes using the Secretary of State's powers under sections 90 and 91 of the Energy Act 2004
- These expire on 19 December 2010 - therefore we are working to the following timetable:

Milestone	Date
Consultation response deadline	29 September
Standard framework consultation opens	Late October
Standard framework consultation closes	Late November
Decision document published	Mid December
Secretary of State's powers expire	19 December

- We recognise that these are challenging timescales
- Changes of this nature have been achieved in a timely manner in the standard framework before
- **We will require significant industry co-operation to deliver the necessary changes to the standard framework**

Coordination of network development

Emily Bourne

Coordinated development

Aim: Secure, timely and cost effective delivery of connections
Encourage efficient development of the NETS, onshore and offshore

Stakeholders have raised concerns that the regime will not provide a coordinated offshore transmission system

We recognise that a coordinated onshore and offshore network may bring significant benefits

Coordination requires a framework which allows efficient network design without exposing consumers to unnecessary cost or stranding risk

The current regime supports coordinated network development

The competitive tender process is sufficiently flexible to accommodate tenders for coordinated infrastructure

National Electricity Transmission System Operator:

- Licence responsibility to develop and maintain an efficient, coordinated and economical system of electricity transmission
- Manages the contractual interface of the NETS
- Publishes annual Offshore Development Information Statement

Generators:

- Responsible for decisions about how much capacity to request and where

Crown Estate:

- Co-investor in Round 3 zones
- Well placed and incentivised to help ensure coordination

Our consultation seeks views on ensuring coordinated network development

DEPARTMENT OF ENERGY & CLIMATE CHANGE

Do our proposals create sufficient opportunities for coordinated development of offshore transmission infrastructure?

Are there circumstances where additional offshore transmission infrastructure development would be in the wider interests of the NETS?

Do you consider there to be any issues in respect of interoperability and standardisation?

We would welcome views on the materiality of issues surrounding interfacing with other regimes

Panel Q&A

Chaired by Bob Hull

ofgem E-Serve

Promoting choice and value for all gas and electricity customers