

Review of BSUoS Charges



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Introduction

Review of BSUoS

- Europe: Driver for Change
- Market Generation Operating Costs
- Factors influencing market flows
- Impact of BSUoS:
 - Why is it an issue for cross-border exchanges
 - Effect on imports into GB
 - Effect on exports from GB

- Next Steps

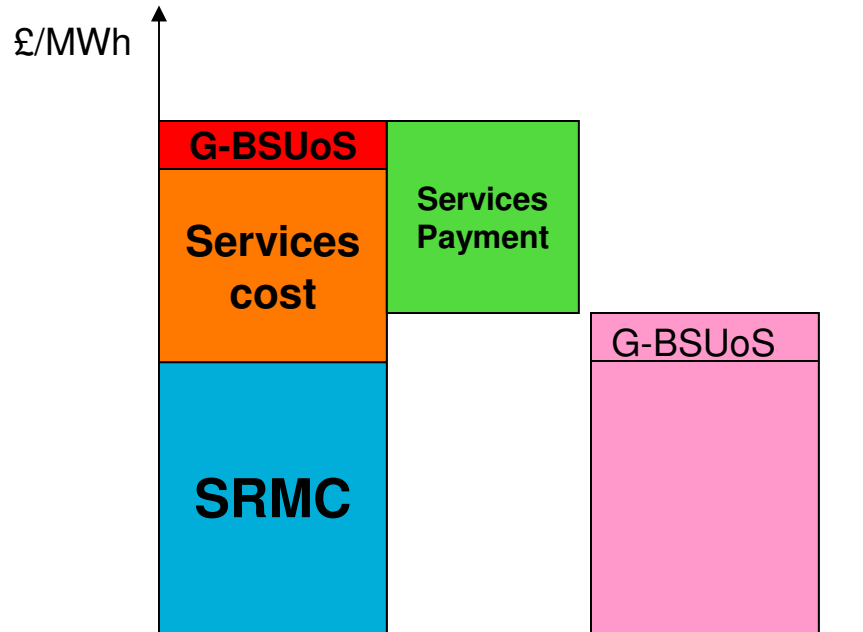
Europe: Driver for change

- European Objective:
 - Market Harmonisation / Single Market in Electricity
 - Article 4: Regulation EC 714 on condition for access to networks for cross-border exchanges in electricity
 - “All TSO shall cooperate at Community level to promote the completion and functioning of the internal market in electricity and cross-border trade”

- What is Harmonisation?
 - No additional charges for hosting cross-border flows
 - Market based charges delivered through Target Model
 - Target model still being developed.

Operating costs of GB generators

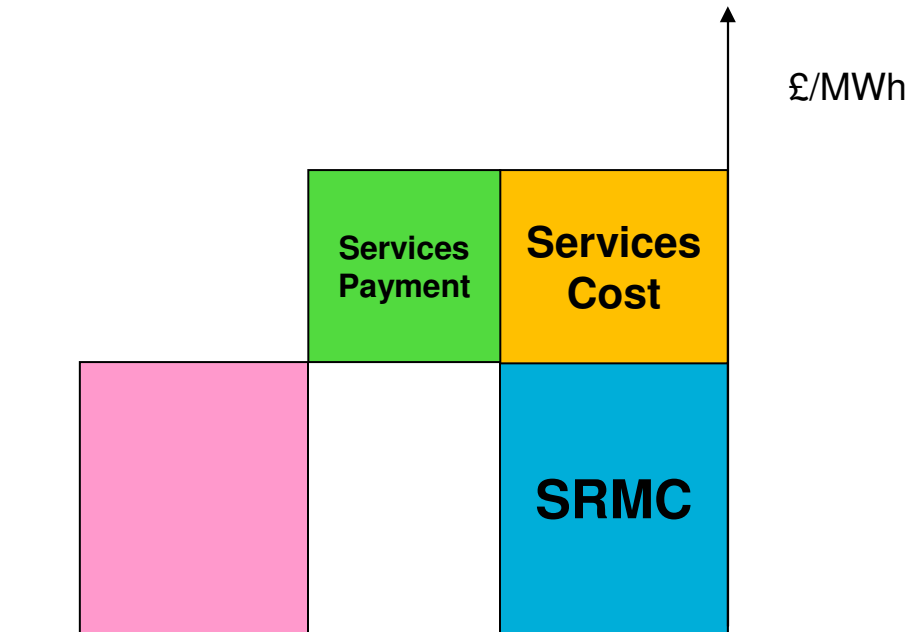
- Operating costs (+ve *and* -ve) of generators are sum of:



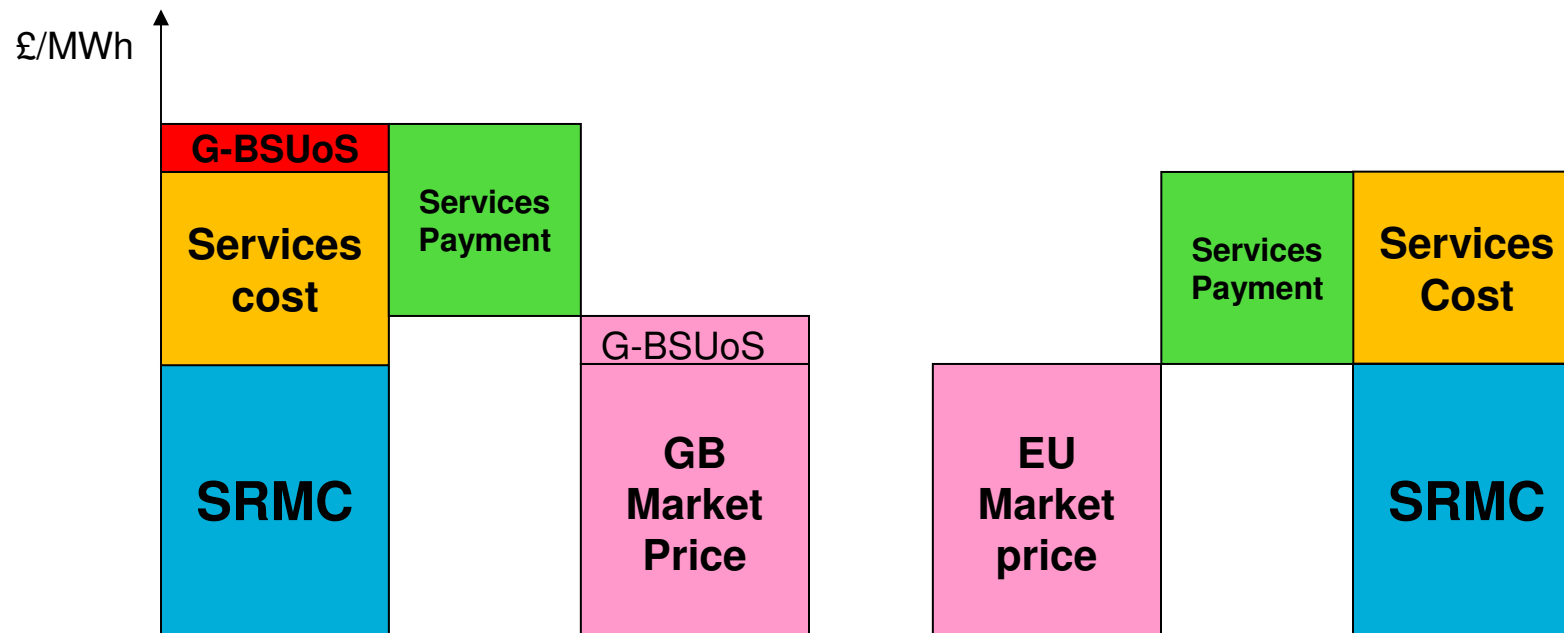
- + SRMC of generator (fuel etc.)
- + Cost of provision of system services
- + BSUoS
- Ancillary service payments (i.e. payments to generators)
- = TOTAL OPERATING COST

Operating costs of EU generators

- Operating costs (+ve *and* -ve) of generators are sum of:
 - + SRMC of generator (fuel etc.)
 - + Cost of provision of system services
 - Tariff payments
(although not clear that EU generators are compensated, we understand they are)
- = TOTAL OPERATING COST

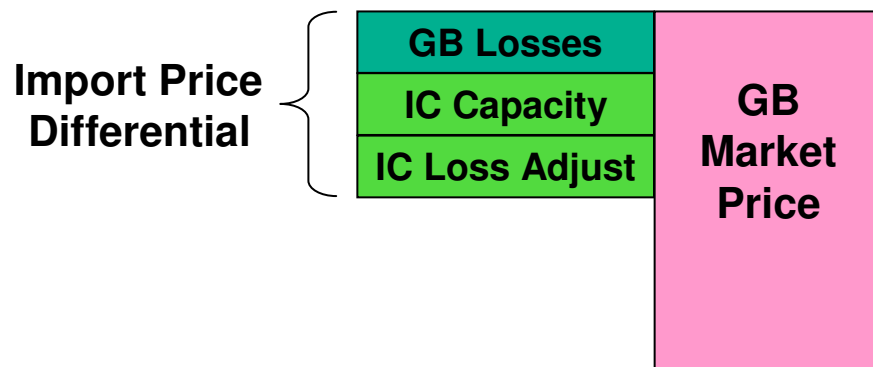


Comparison



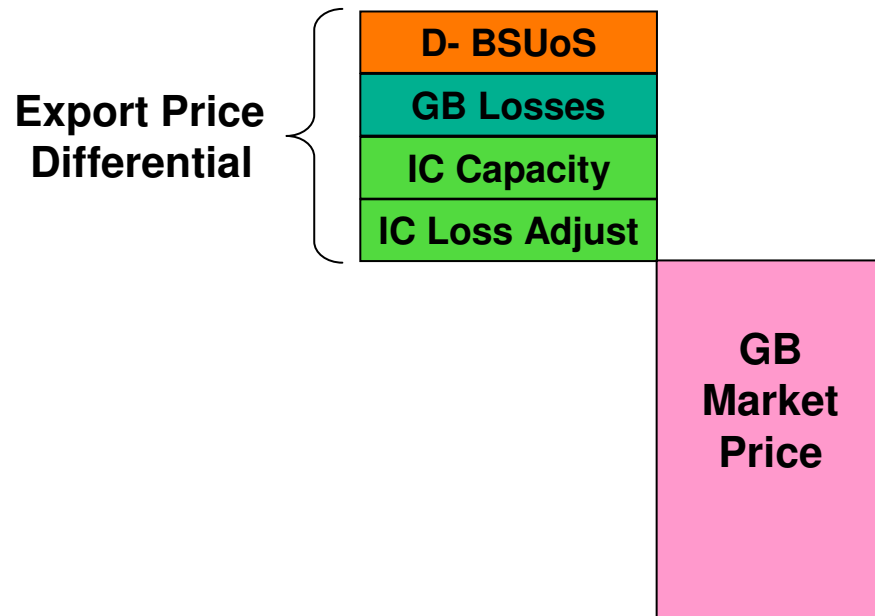
- GB & EU Generation costs may be constituted differently
 - Net position broadly comparable, other than BSUoS

Factors Influencing Flows



- Interconnector costs:
 - Capacity Price: Determined by market differentials
 - I/C Losses: fixed percentage
 - GB Loss adjustment

Factors Influencing Flows



- Interconnector costs:
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 - GB Loss adjustment
 - Exports also attract Demand BSUoS

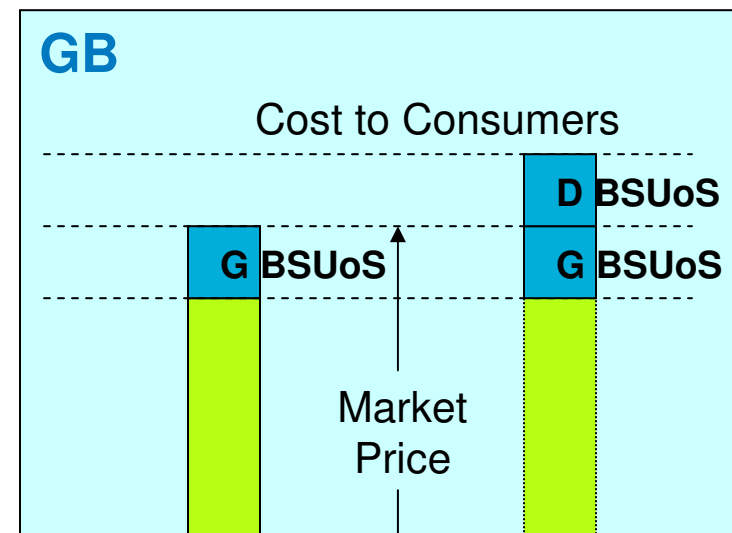
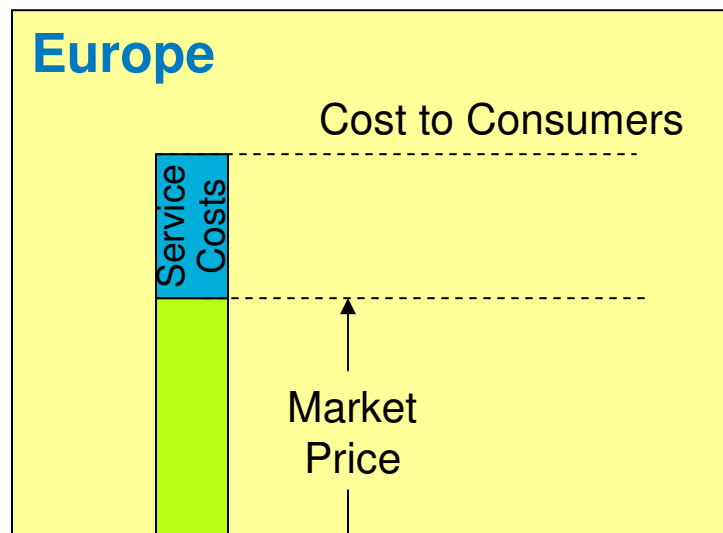
Improving Market Integration

- GB-ECM26 – Remove TNUoS from Interconnectors
- BSC P278 – Remove GB loss adjustments from Interconnectors

- Remaining Issue: BSUoS
 - Determined ex-post
 - More volatile than other elements
 - Difficult to hedge, but same for all users
 - Disparity between Imports and Exports

Market Comparison

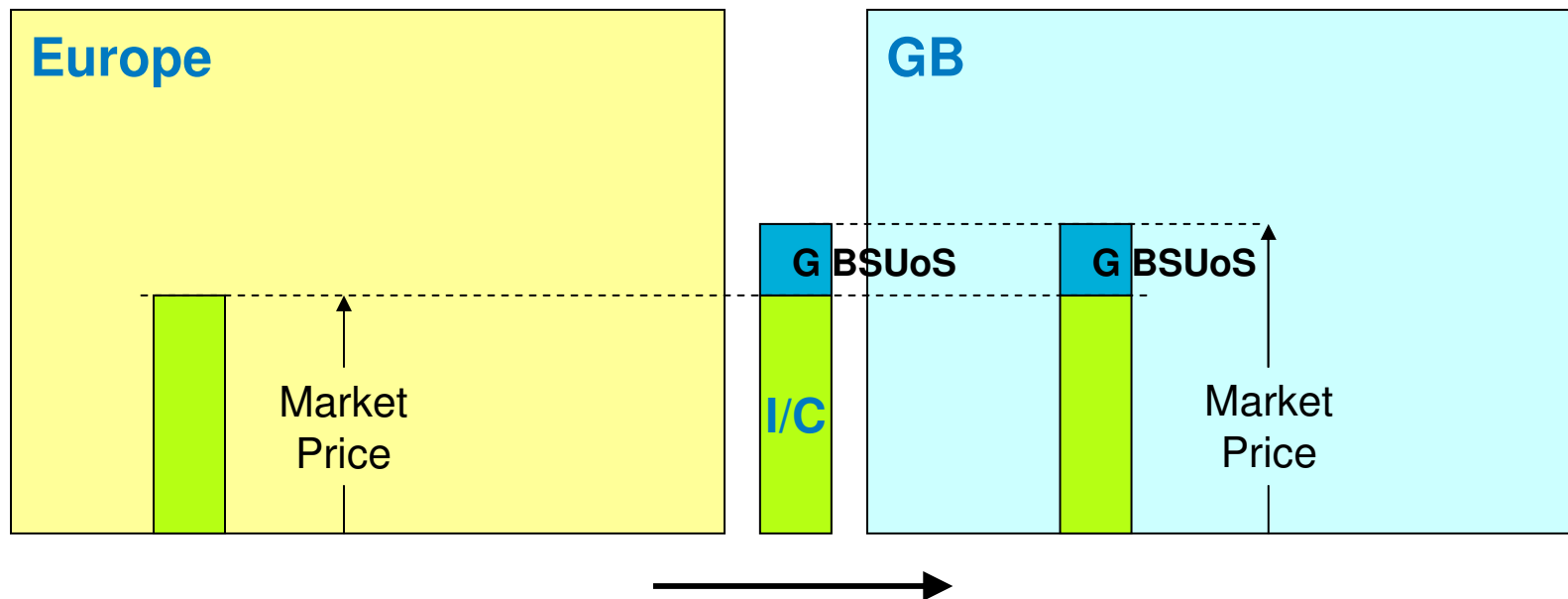
- GB BSUoS Charged equally to both G & D
 - Each Interconnector user treated as G or D depending on nominated flow
 - GB Wholesale price “uplifted” by Generator BSUoS
 - GB Consumer ultimately pays both
- EU “BSUoS” typically charged to Consumers only



Interconnected Markets

GB Imports

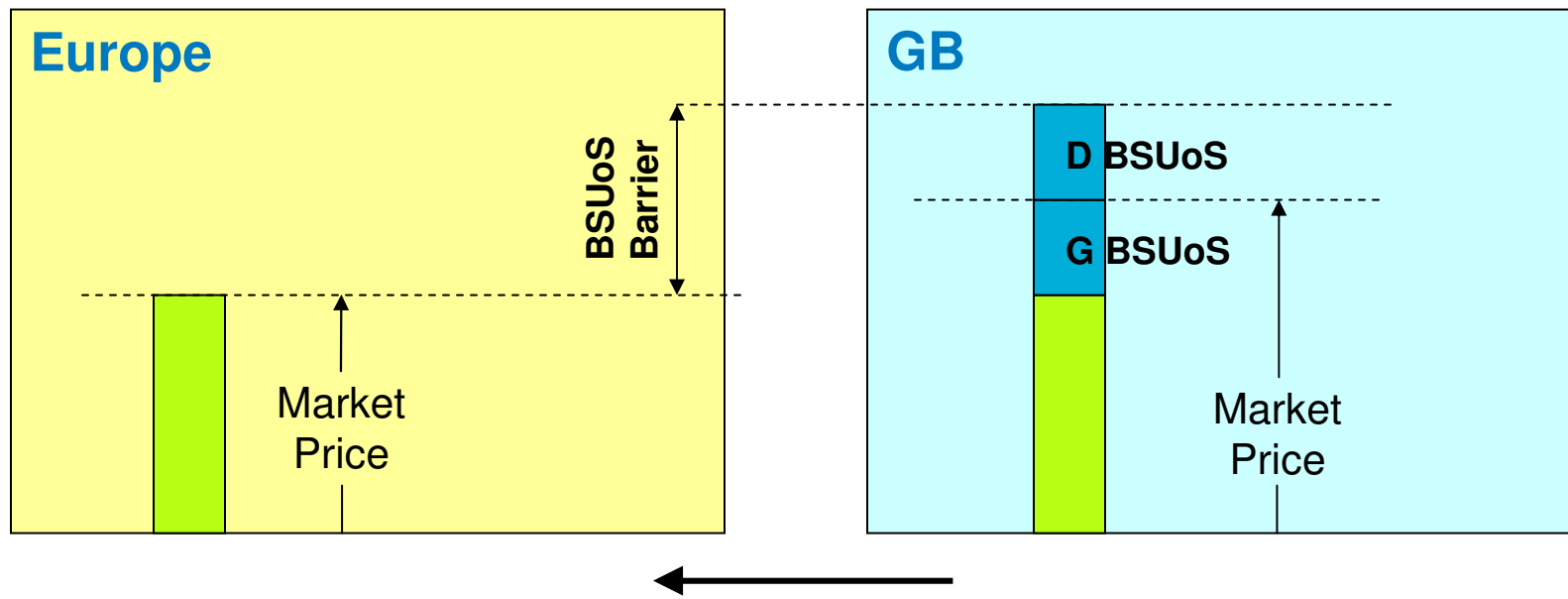
- Current: (BSUoS charged equally all users)
 - Interconnector sees *apparent* lower EU wholesale price
 - But Interconnector pays same G-BSUoS contribution
 - Therefore equal “price” – does not restrict efficient trade
 - Equivalent EU generation same as in GB stack



Interconnected Markets

GB Exports

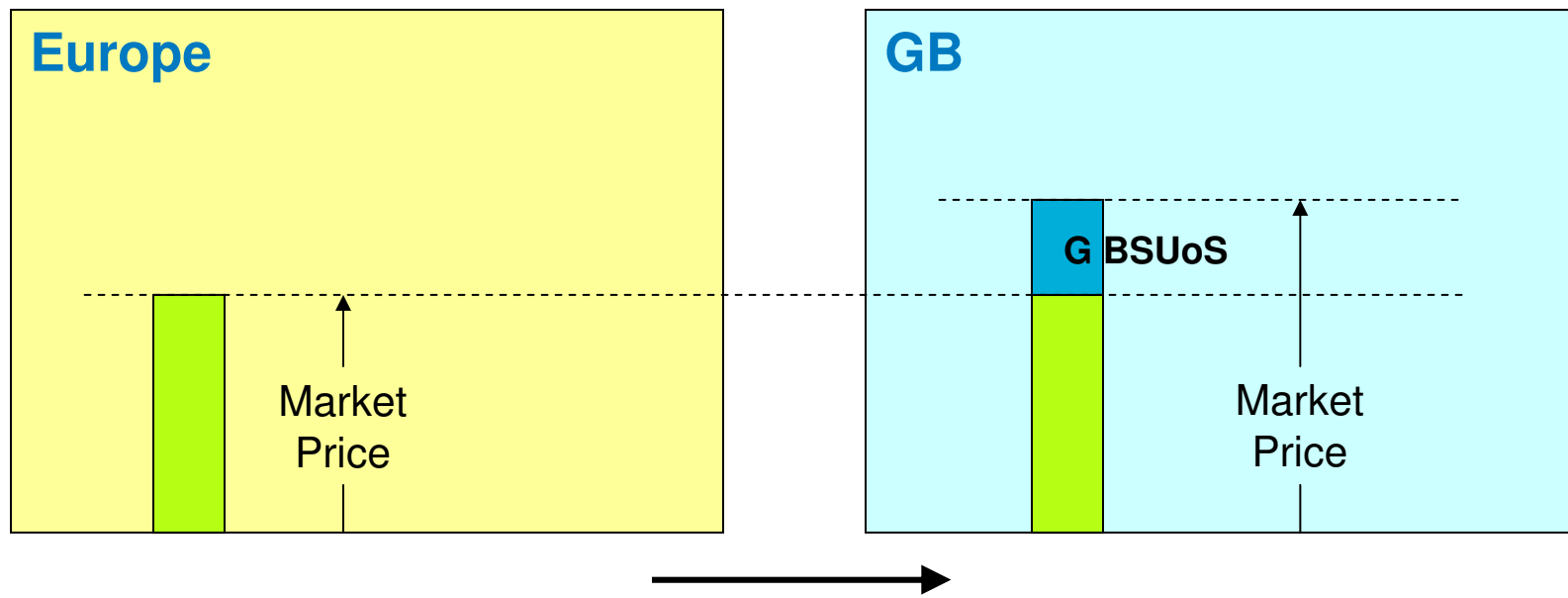
- Current: (BSUoS charged equally all users)
 - GB Wholesale Price will *be* higher than EU (includes G-BSUoS)
 - plus Interconnector also charged D BSUoS on any export
 - Equivalent GB generation not same as in EU stack
 - BSUoS Restricts Exports



Interconnected Markets

GB Imports – No I/C BSUoS

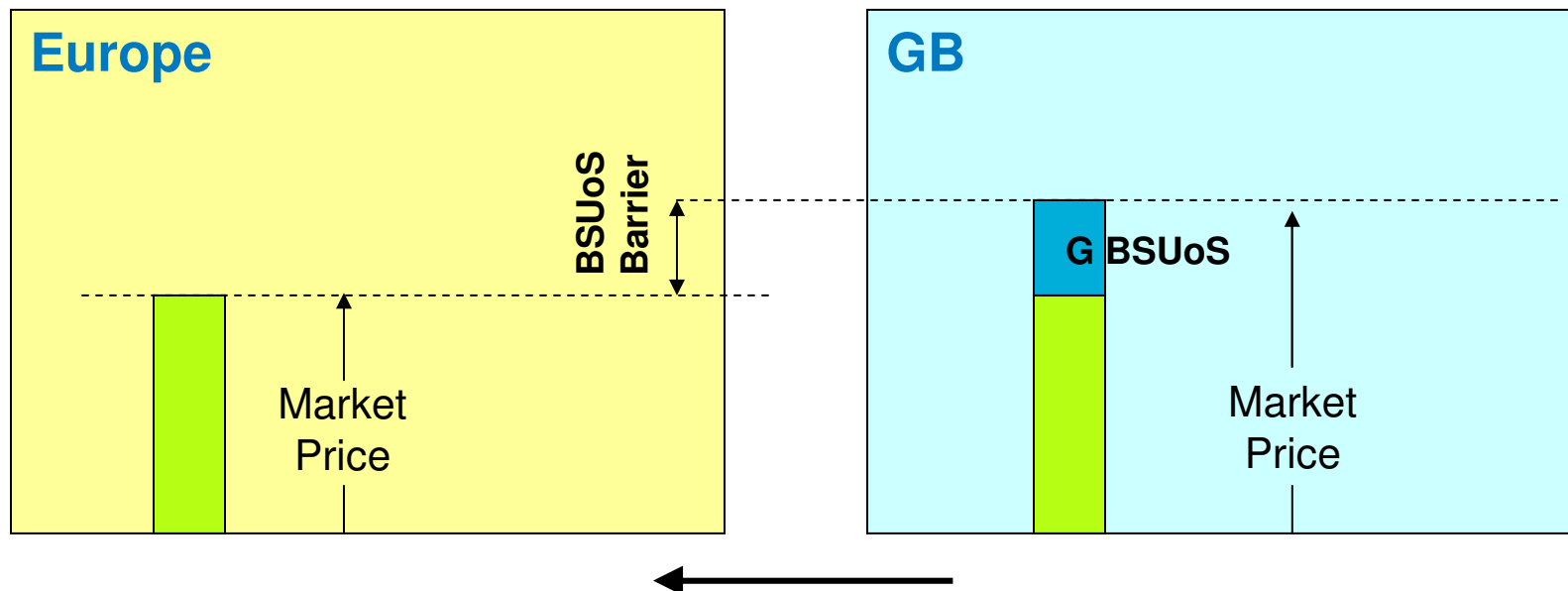
- If BSUoS removed from Interconnectors only:
 - Interconnector trader sees “BSUoS” price difference
 - Interconnector *may* flow because of BSUoS
 - Equivalent EU generation appears cheaper in GB stack



Interconnected Markets

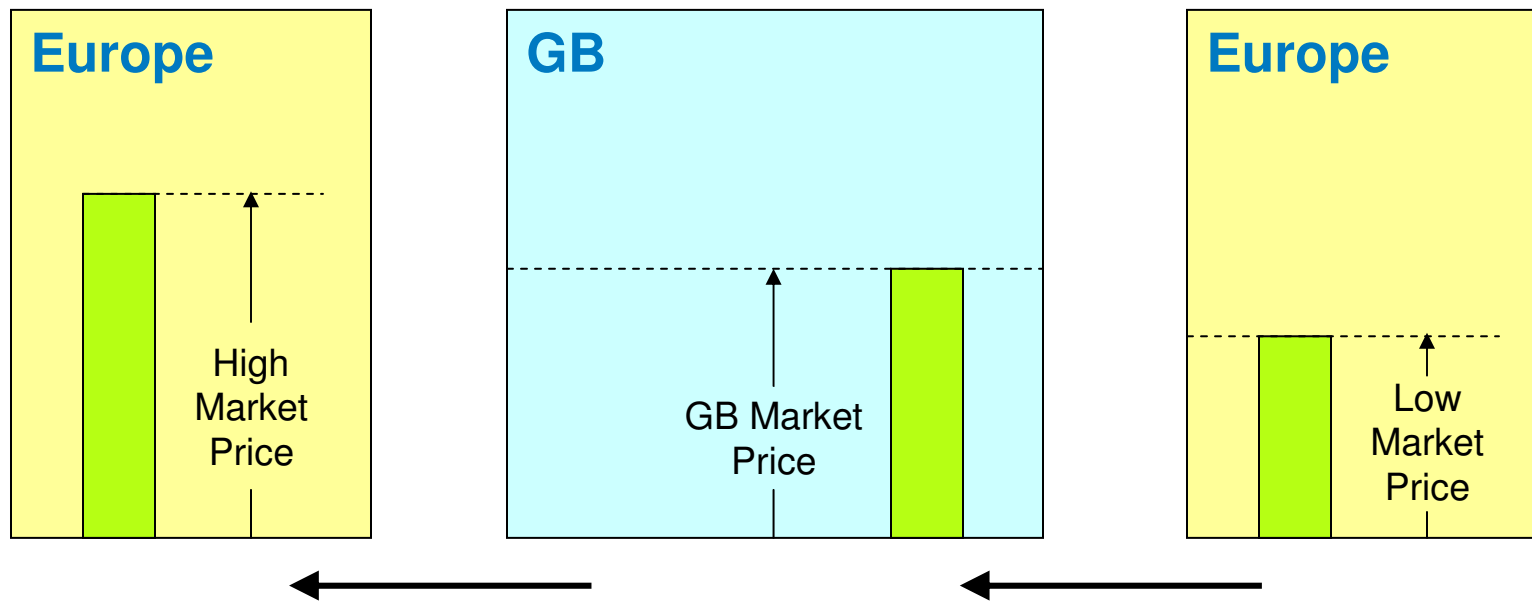
GB Exports – No I/C BSUoS

- If BSUoS removed from Interconnectors only:
 - GB Wholesale Price still higher than EU model
 - Removing BSUoS for Interconnectors reduced barrier
 - National G-BSUoS charge still impacts



Interconnected Markets

- If BSUoS removed from Both Generation & I/C
 - GB Wholesale Price, *in theory*, comparable to EU
 - Increased opportunity to trade
 - Interconnector Flows – depending on differential



The Wider Market

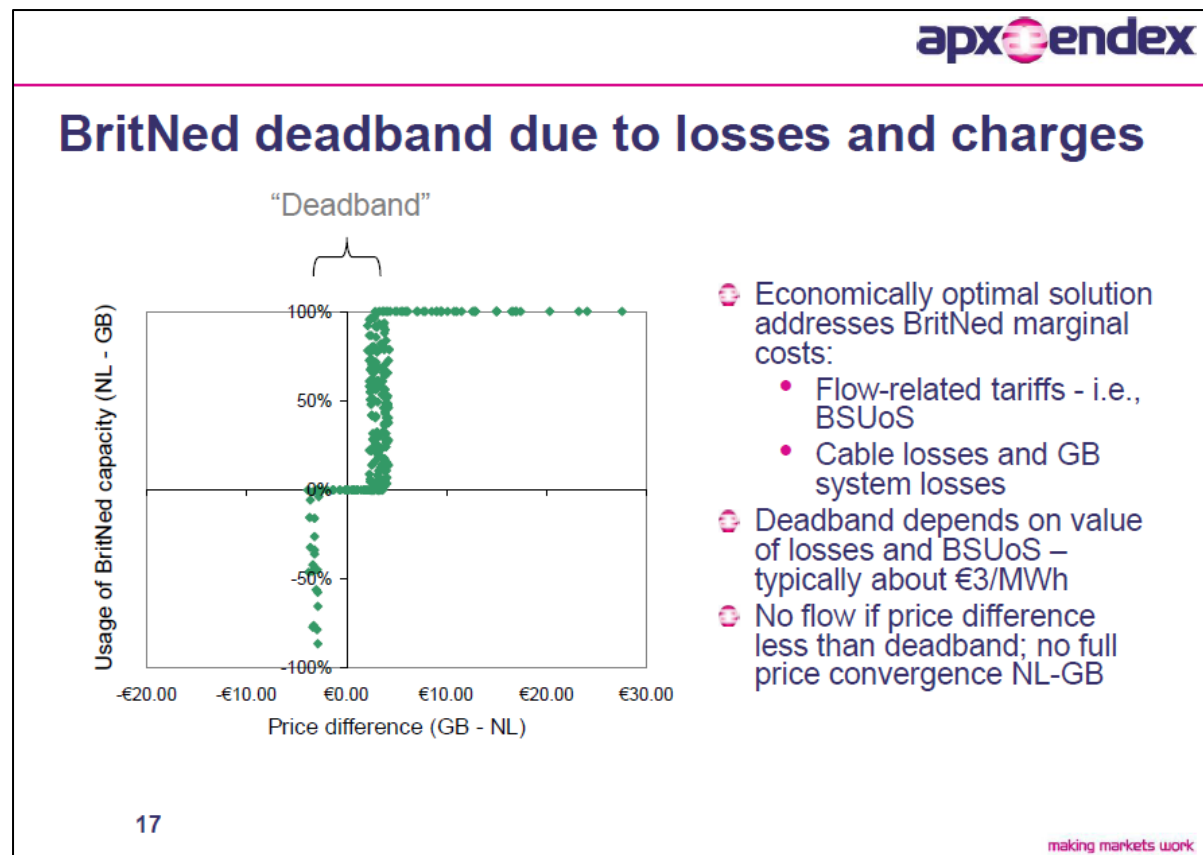
- GB Non Physical Trade:

- Buys / Sells within GB
- No physical position
 - Does not pay BSUoS

- EU Trade

- Buys / Sells within European Market
- Physical position in member state; no physical position in wider single European market.
 - No charge on continent; BSUoS charge in GB.
 - Concern: Pan European Trade

Does it factor in trades? – a view.



From All Island Project website: Slides from Workshop on Emerging Electricity Target Models

Presentation: Andrew Claxton -Business Services Director APX-ENDEX

<http://www.allislandproject.org/GetAttachment.aspx?id=5d08e1ca-45a6-4e1a-b0ff-bbaafcdcb807>

Share of Network Operator Charges

- France
 - 2% Generation, 98% Load
- Great Britain
 - 50% Generation, 50% Load
- Netherlands
 - 0% Generation, 100% Load
- Northern Ireland
 - 25% Generation, 75% Load

Next Step

- BSUoS impacts on Interconnector utilisation.
- Remove BSUoS from Interconnectors
 - Harmonise with European model & facilitates EC objectives
 - Facilitates European Market
 - Equitable treatment of EU traders with GB traders
 - BSUoS on Interconnectors circa £15m
- Consequential Impact on GB
- Remove BSUoS from Generators
 - Better alignment of GB & European Markets
 - Wider issues to consider
 - BSUoS on Generation: circa £350m
- Raise two CUSC modification proposals
 - December 2011

BSUoS Charges - Overview



Background

- Allows National Grid to recover costs incurred from Balancing Services Activities
- Calculated based on energy taken from/supplied to the transmission system in each half-hour settlement period
- Determined Ex-post
- All CUSC parties liable to pay
- Split 50/50 between Generation & Demand

What does it include?

- As defined in The Statement of Use of System Charges:
 - Total Cost of Balancing Mechanism (e.g. bids & offers)
 - Total Balancing Services Contract Costs
 - Payments / Receipts from National Grid Incentive Scheme (BSIS)
 - Internal SO costs
 - Costs associated with contracting for and developing Balancing Services
 - Pass-through costs associated with National Grid's Licence

Link: <http://www.nationalgrid.com/uk/Electricity/Charges/chargingstatementsapproval/>