

**Gas System
Operator**

Implementation of Common Data Exchange Solutions: GB Experience

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Background

- **The EU Interoperability Network Code (Commission Regulation (EU) 2015/703) became EU law on 30th April 2015**
- **TSOs across Europe were required to comply with its requirements by 1st May 2016**
- **The purpose of this Code is to remove barriers to cross-border gas flows in Europe**
- **One of these barriers was determined to be a lack of harmonisation in the way that data is exchanged between TSOs and between TSOs and shippers**
- **TSOs were therefore required to implement ‘Common Data Exchange Solutions’ in their nominations and capacity trading arrangements with adjacent TSOs and shippers at Interconnection Points (IPs)**
 - IUK and BBL at Bacton (ICs to Belgium & Netherlands)
 - Moffat in Scotland (IC to Rol and NI)

Common Data Exchange Solutions (CDES)

The CDES as per Article 21 of the Interoperability Code are shown below:

		Data content format		Data exchange protocol	
'Toolbox' item	Network	Structure Format	Content Format	B2B standard	Comm Protocol
Document based	Internet	XML	Edig@s	AS4	HTTP(S)
Integrated	Internet	XML	Edig@s	SOAP	HTTP(S)
Interactive	Internet	None			HTTP(S)

Context

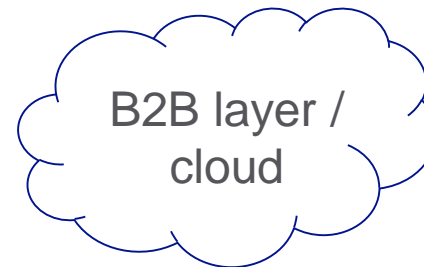
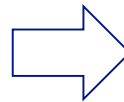
- **GB had market-based arrangements for capacity allocation and system balancing prior to the Third Energy Package**
 - No fundamental changes required to accommodate CAM and BAL Codes
- **INT Code largely based on voluntary EASEE-gas Common Business Practices, which NW Member States had adopted but not GB, NI or RoI**
- **The EASEE-gas CBP for data exchange set out use of Edig@s over the internet**
- **Since the commencement of the GB national network code in 1996, the means of data exchange for capacity and nominations with shippers has been a private data network (the Information Exchange or IX)**

GB Approach

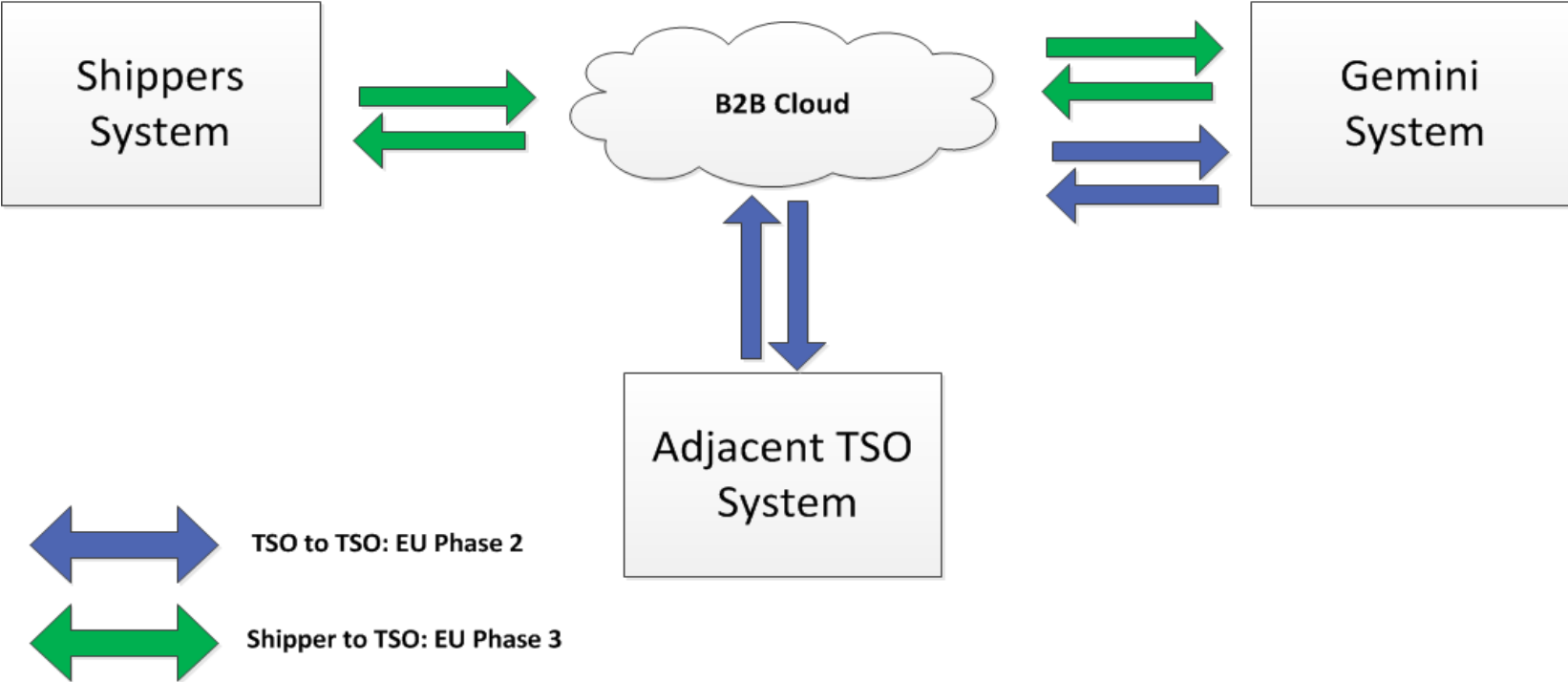
- To meet compliance timescales, we had to start implementation activities for CAM, BAL and INT before those Regulations were finalised
- At that time, it was not clear which CDES would be required for each business process
- Our IT assessment concluded that ‘integrated’ data exchange (web services) would be the preferred fit with National Grid systems
- Some of our counterparties preferred the ‘document based’ solution

PROBLEM!

SOLUTION?



B2B Layer / Cloud



'TSO to Shipper' Data Exchange

- **National Grid consulted GB shippers about whether they would want to use the CDES for their commercial operations at IPs**
- **All preferred to carry on using the IX (private data network)**
- **We therefore sought and received approval from our NRA (Ofgem) under Article 23(2) to enable shippers to continue using IX, whilst having the capability to offer the CDES in the future**
- **TSO-TSO CDES implemented in October 2015**
 - to facilitate nominations matching
- **TSO-Shipper CDES implemented in May 2016**
 - to meet the compliance date in the INT Code

The Future?

- **FUNC issue on data exchange is likely to require TSOs to extend the application of CDES from IPs only to include ‘virtual trading points’**
 - ‘Trade nominations’ at the NBP in our case
- **Some (but not all?) GB shippers would like us to adopt Edigas for all entry and exit points**
- **‘Piecemeal evolution’ or ‘revolution’?**
- **We intend to open a debate the future of IX in GB shortly**

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