

# Market Failures



European Gas Quality Workshop

18 November 2009



# European Supply

Interconnector provides transportation & flexibility

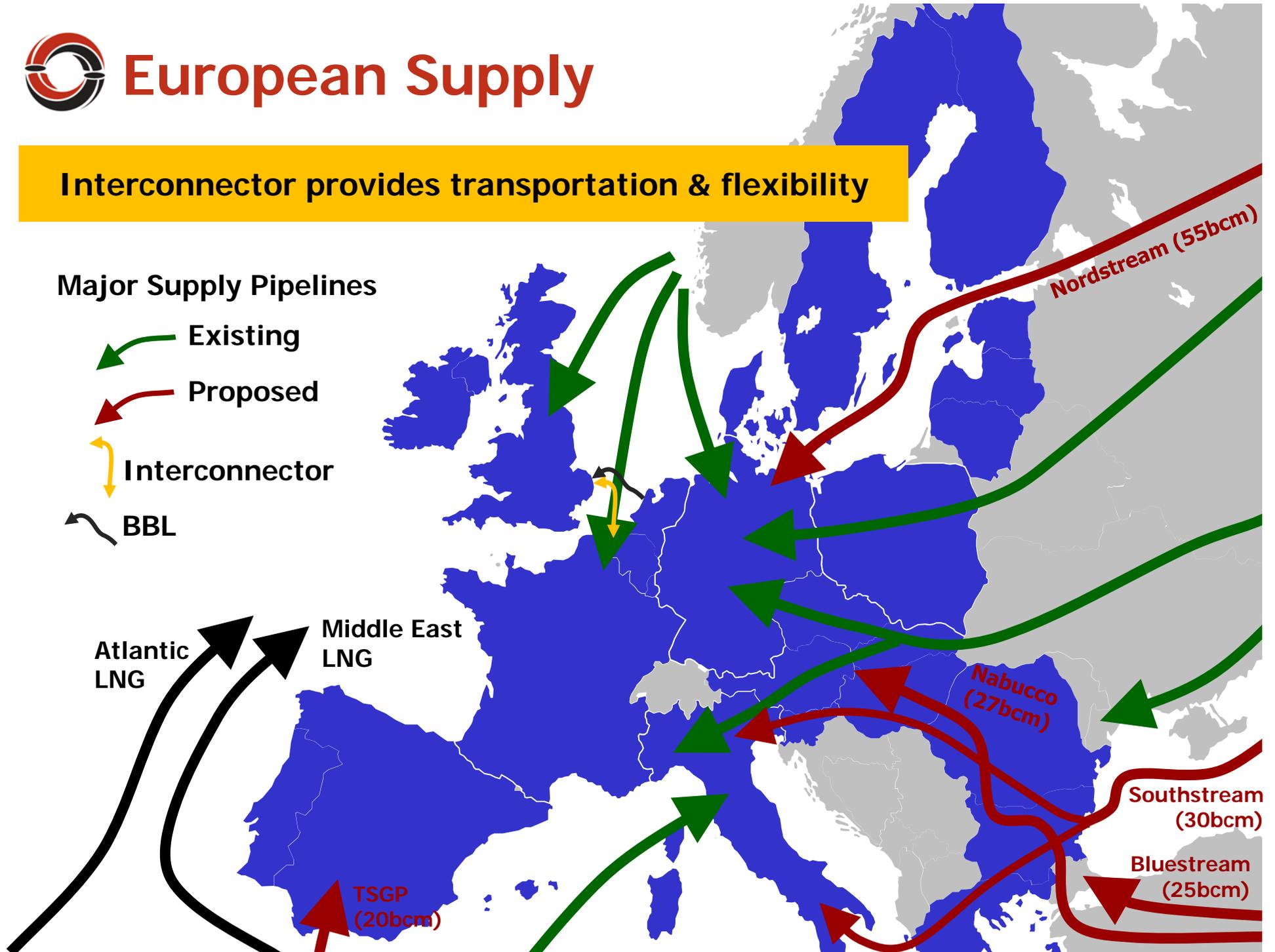
## Major Supply Pipelines

Existing

Proposed

Interconnector

BBL

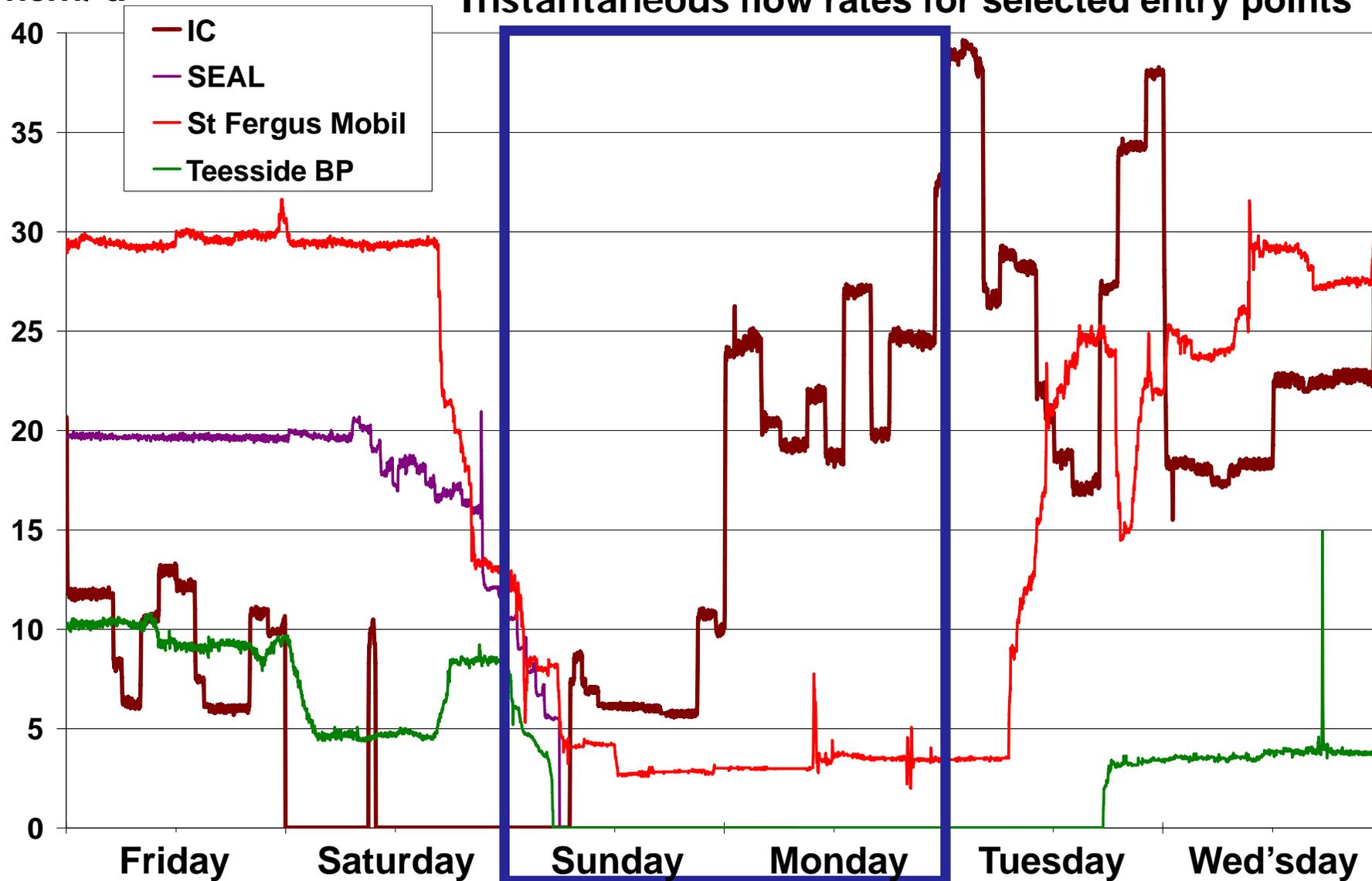




# Grangemouth Strike (27 & 28 April 08)

mcm/d

Instantaneous flow rates for selected entry points





# **Contractual Arrangements**

**Gas quality arrangements involve multiple parties**

## **Shippers/Suppliers**

- Retain responsibility for the quality of their gas

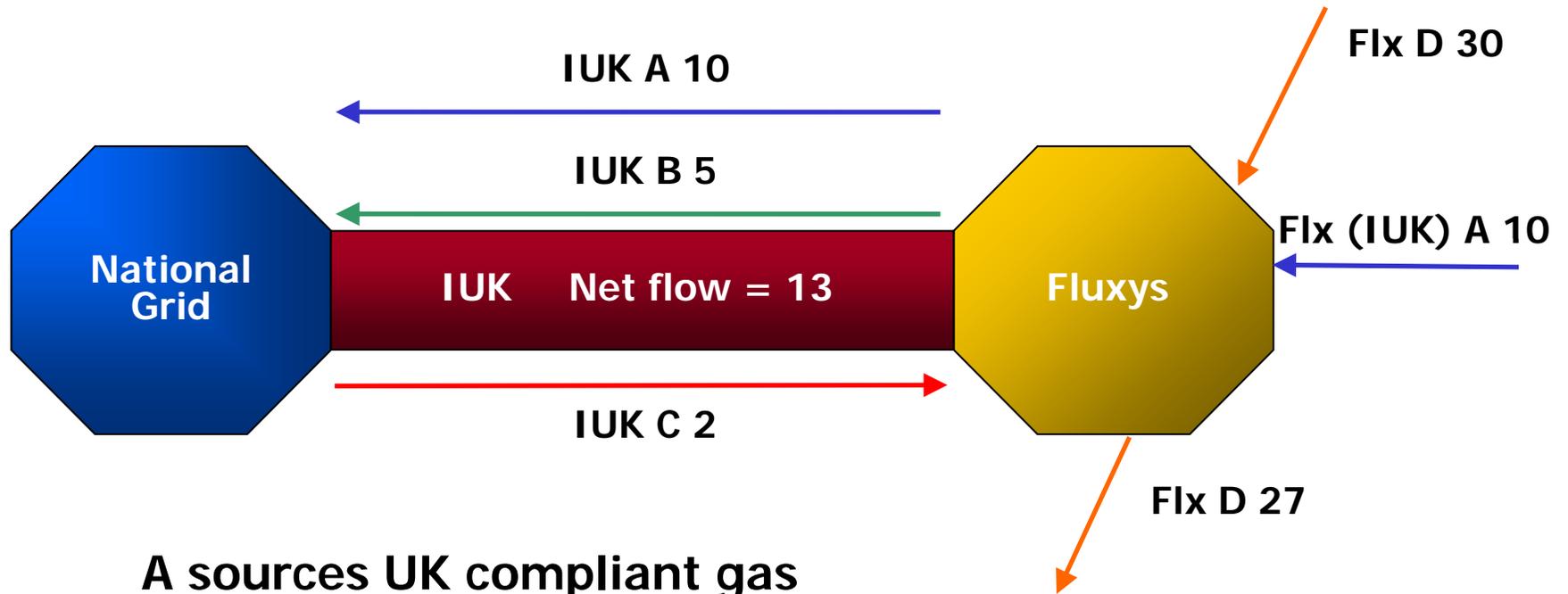
## **Operators**

- Manage the operations safely
- Co-ordinate arrangements with neighbours
- Deliver the service to shippers

**Interconnector pipeline is operated to the UK Specification**



# An Example



A sources UK compliant gas

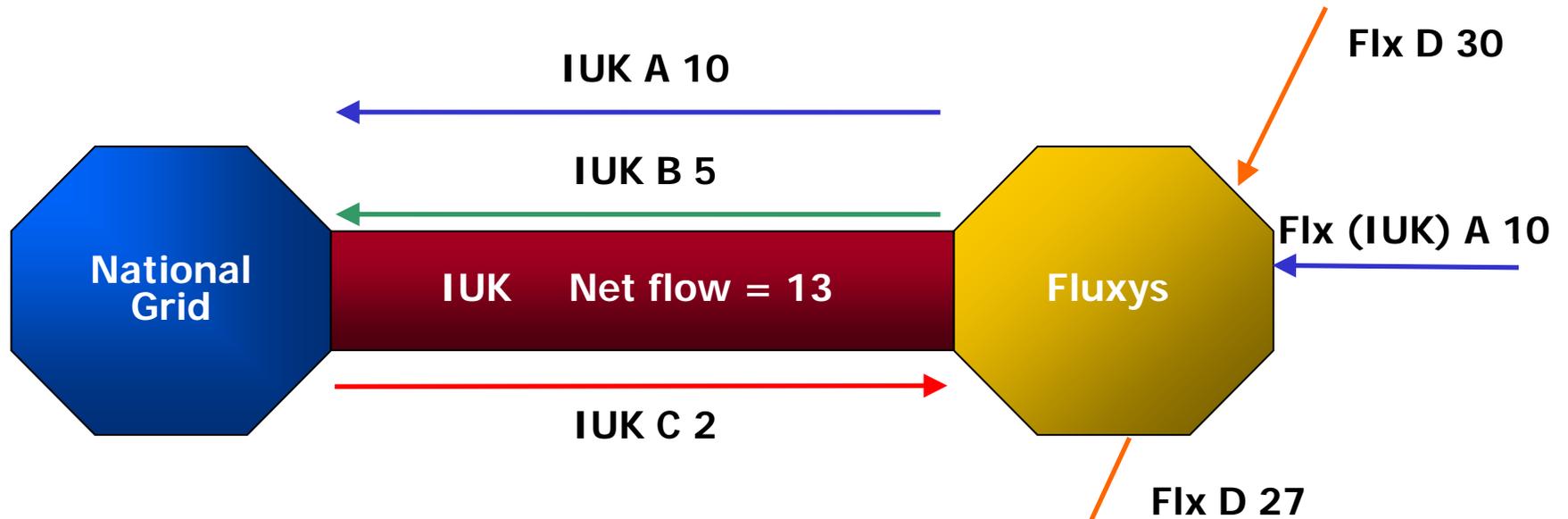
B buys gas on the market

C is bringing UK gas to Zeebrugge

D is shipping high WI gas to France and selling some on the market



# An Example



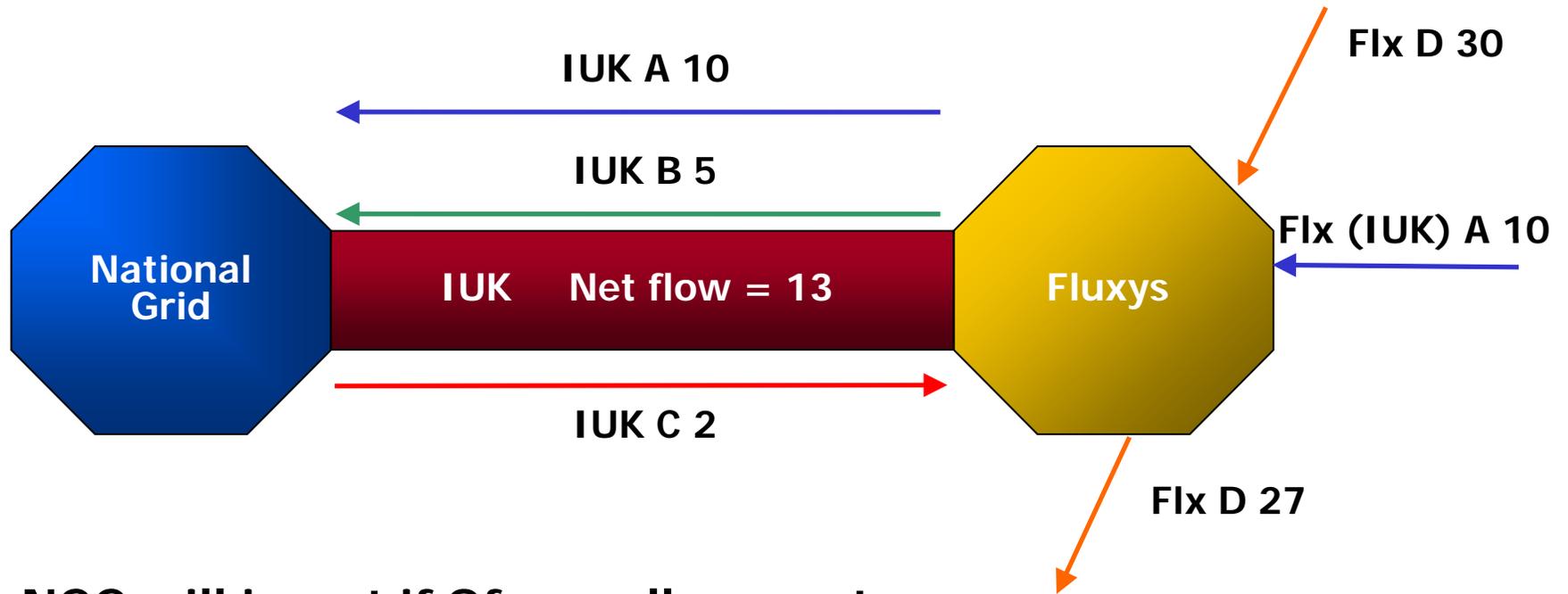
A and B are jointly liable to meet IUK spec

B has no idea where the gas physically comes from

IUK will stop flow if the WI exceeds GS(M)R



# Will the Operators Build a Facility?



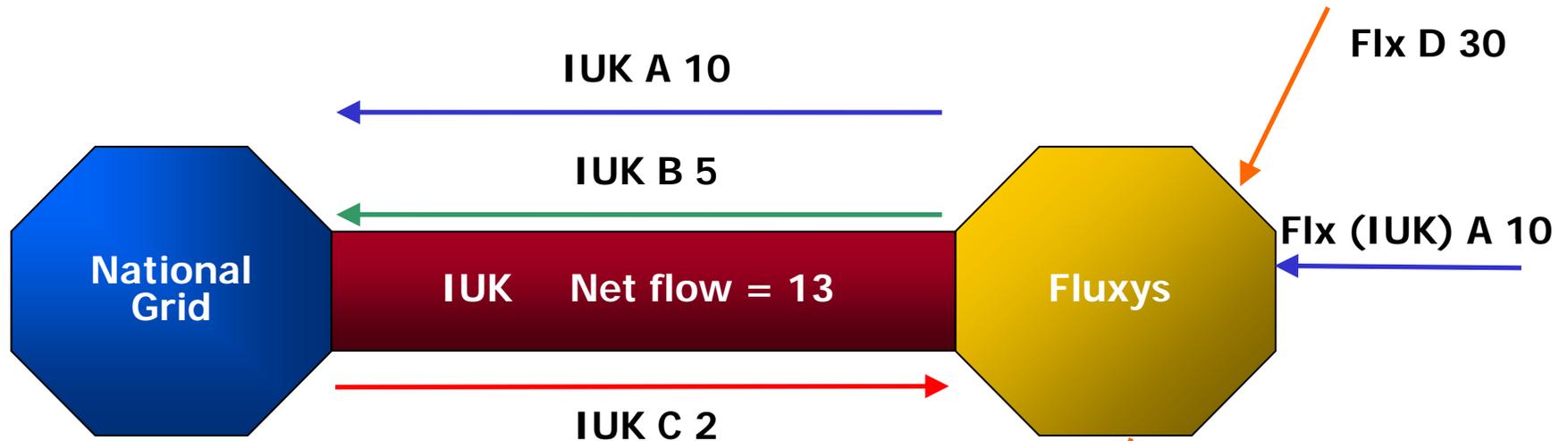
**NGG will invest if Ofgem allow a return**

**IUK will invest if all IUK shippers require a service**

**Fluxys will invest if Fluxys Shippers require a service**



# Who Needs a Service?



**A does not – his gas meets GS(M)R** - he will not agree spec change or increased risk or cost

**B may do but is unlikely to invest** – he doesn't know that he needs a service

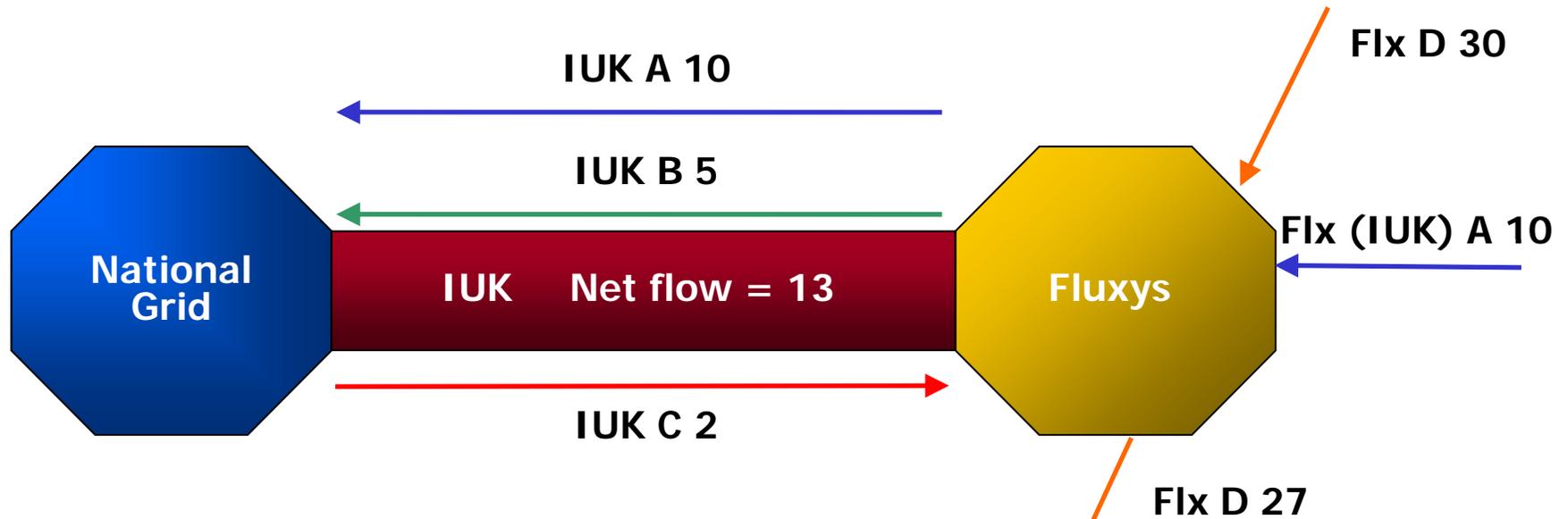
**C does not** – he will not agree spec change or increased risk or cost

**D may do but his business is selling gas to the French market.** He may need to treat all of his gas to sell any at the hub

**How can you recover costs from a 'polluter' in another country?**



# There's No Clear Answer



Each party takes comfort that they don't have the information or it's not their liability...

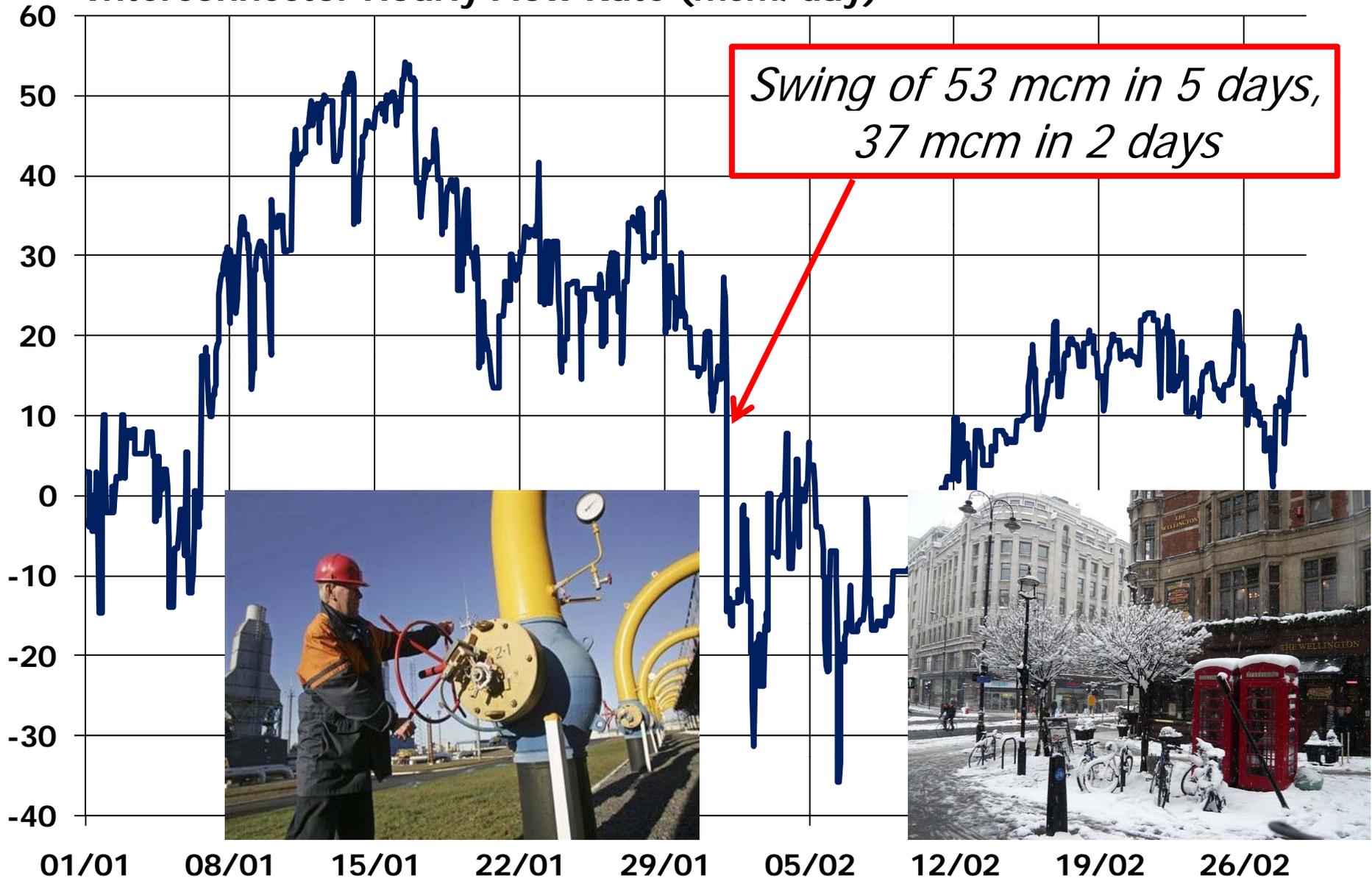
The UK market loses access to gas – the market fails...

No treatment plant is built until it's too late...



# January/February 2009

Interconnector Hourly Flow Rate (mcm/day)





# What Happens When Markets React Late?

energy\_Users demand that National Grid be given control of spare capacity on the pipeline linking the UK to Europe

## Where's the gas.

ENERGY POLICY  
Power struggle

## Scandal of the half-empty Interconnector

By Tim Webb

Leading manufacturers fear that energy prices are being forced up thanks to Britain's

in the rest of Europe - the pipeline has only been operating at half capacity this winter.

The Energy minister, Malcolm Wicks, has called for an invest-

Jeremy Nicholson, the director of the Energy Users Group, said which he said supply and

Pipeline is still not fully used as prices soar

By Tom McChie

SOME of the world's most powerful economies are being threatened by access to gas imported by



make me so angry

Natural gas Chilling

Winter worries mean gas prices have gone haywire

Britain has the most liberal gas market in Europe

# Gas giants warned over supply fiasco



# What Happens When Markets React Late?

energy\_Users demand that National Grid be given control of spare capacity on the pipeline linking the UK to Europe

*"British customers paid nearly £1 billion more for their gas this winter notably because of the failure of the Belgium-UK Interconnector pipeline to import at its full rate. If this happens again next winter, British wholesale prices could be up to £3 billion higher"*

*Ofgem, Statement, 16 February 2006*

*"The greatest risk to security of supply appears to be maintaining gas supplies through a severe winter"*

*Ofgem, Project Discovery, Energy Market Scenarios*

## Gas giants warn over supply fiasco

gas market in Europe



# Summary

## **UK WI Specification**

- Significantly tighter than in Continental markets
- Not expected to change for the foreseeable future

## **Continental Gas Quality**

- WI is increasing and upstream flexibility is exhausted

## **UK Security of Supply**

- Import dependency increasing rapidly
- UK compliant gas may not be available this winter via IUK / BBL

## **This is a UK, not a continental issue**

- Shippers can supply high WI gas to the rest of Europe
- Market has not delivered, is unlikely to deliver until it's too late
- UK may be unable to source gas from the Continent
  - during a shortage of supply
  - in future years when increased imports are required