UIG Task Force Update

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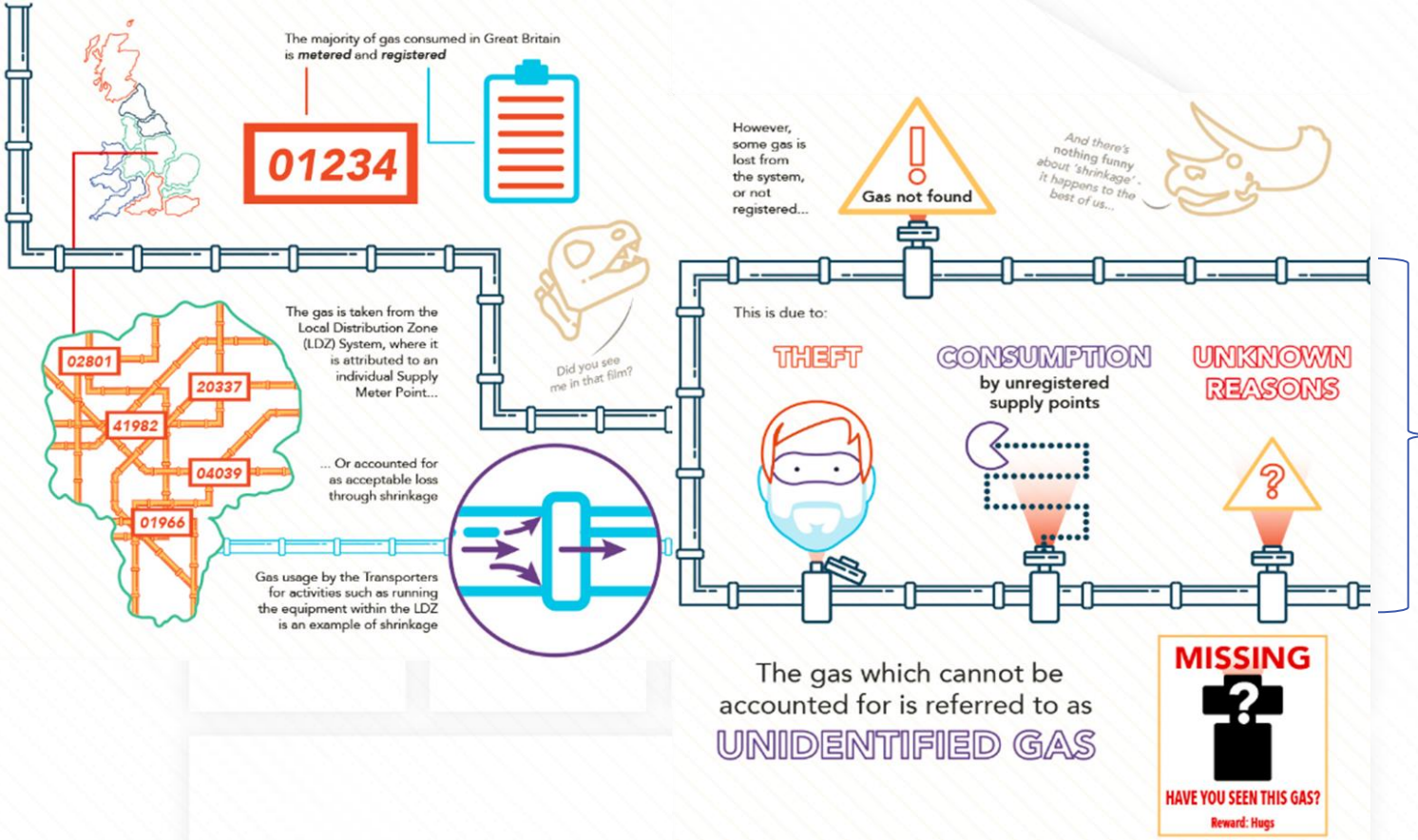
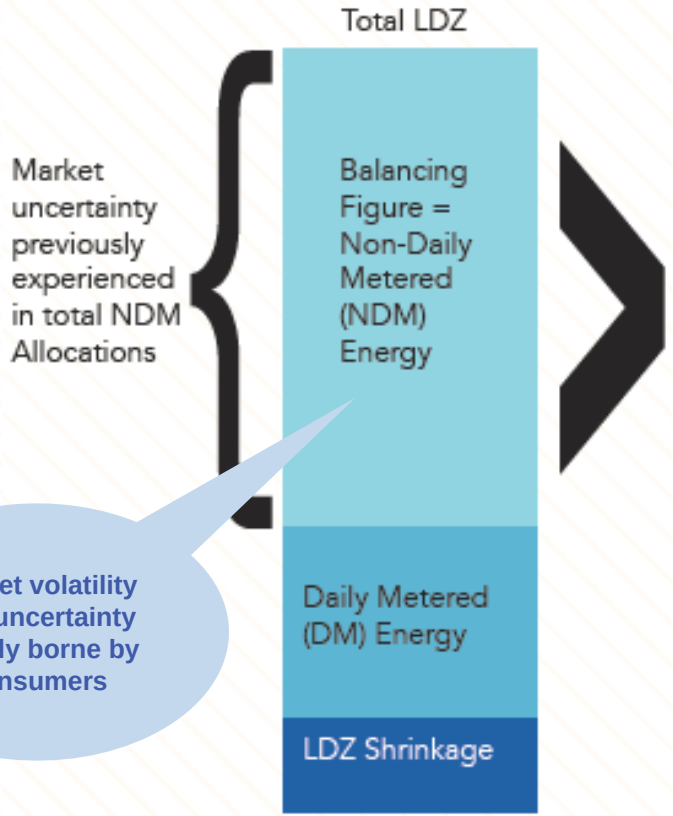
V1.1 13.11.18

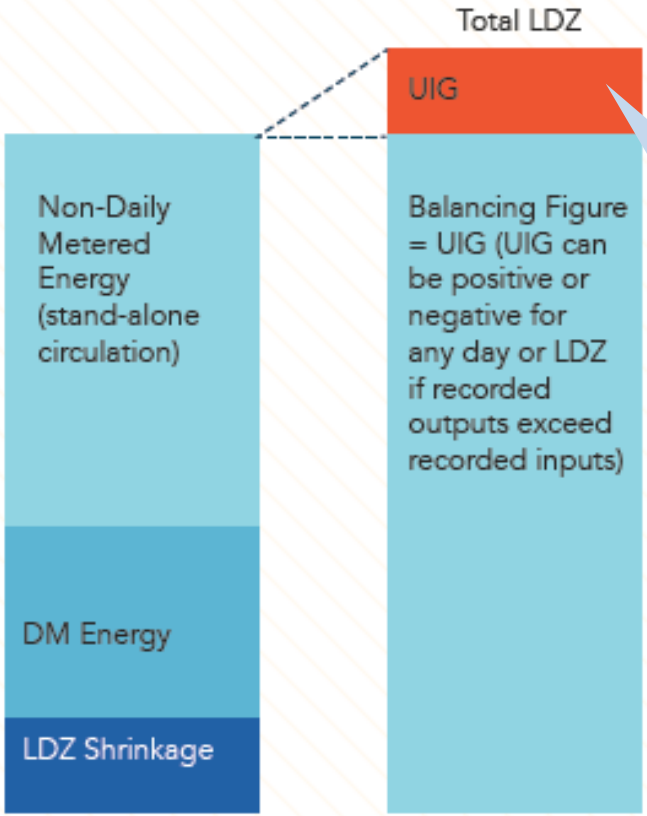
What is UIG?



AUGE analysis predicts UIG = 0.7% post reconciliation (up to 4 years)

Why is UIG suddenly a new issue?



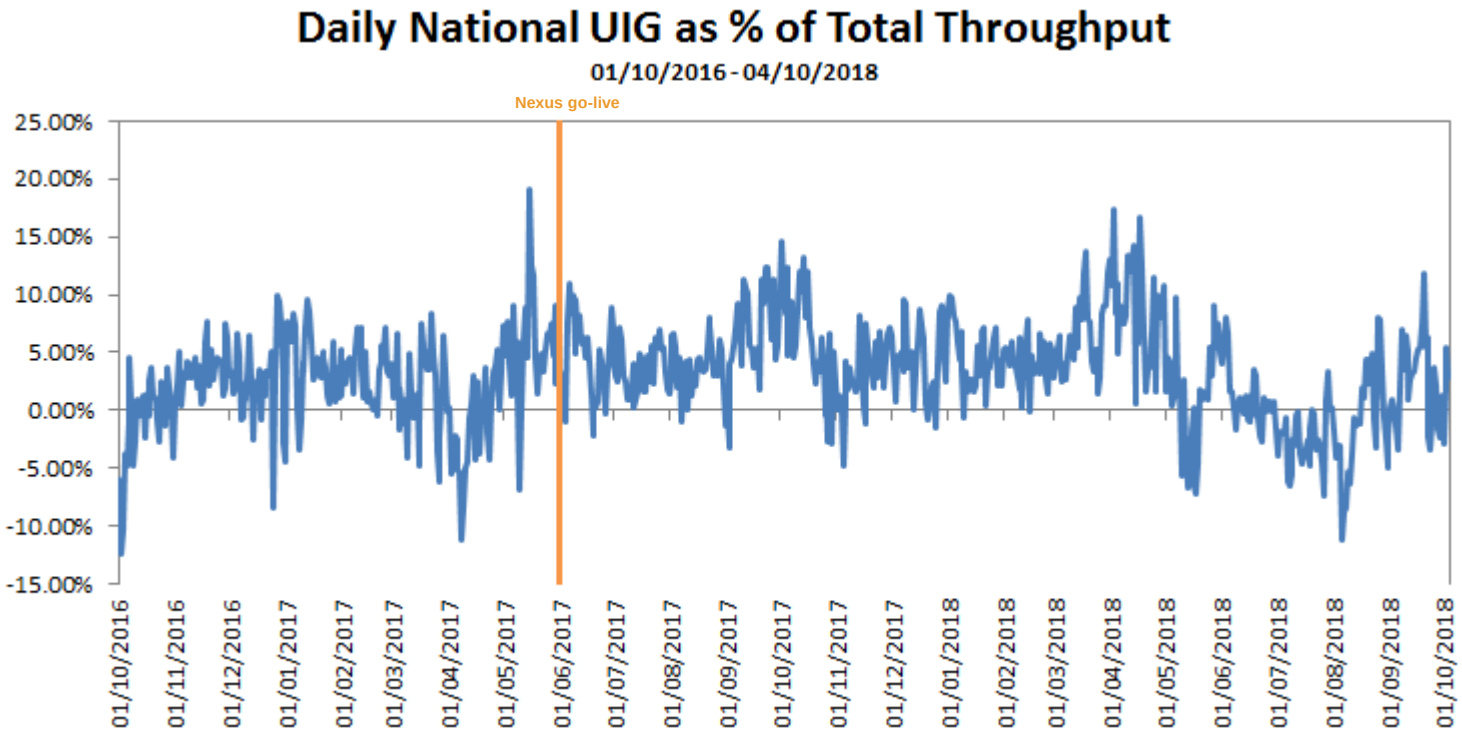


Market volatility and uncertainty largely borne by consumers

Market volatility and uncertainty borne by all….

…including the commercially savvy industrial market

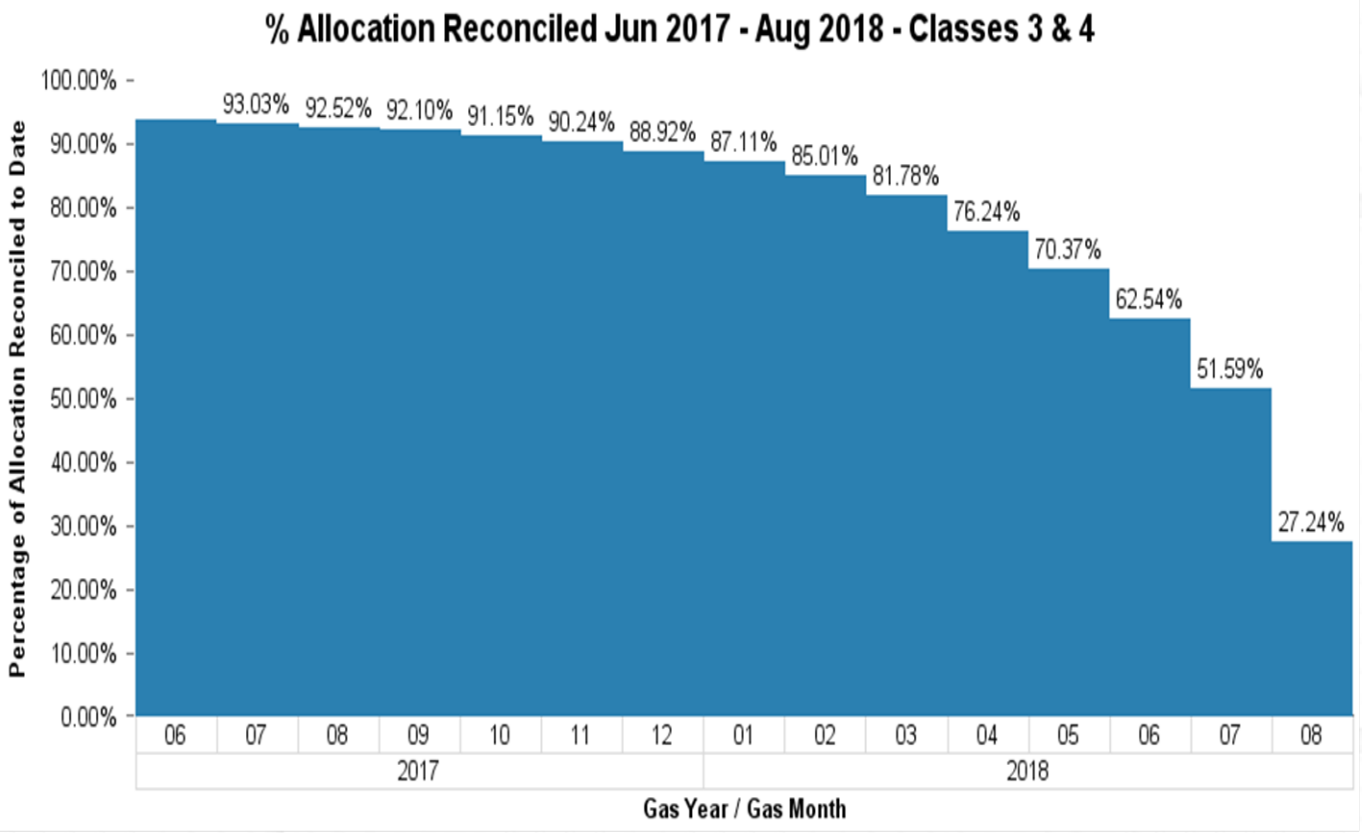
Why is UIG currently such a hot topic?



Absolute UIG and UIG volatility have been with us for a long time….

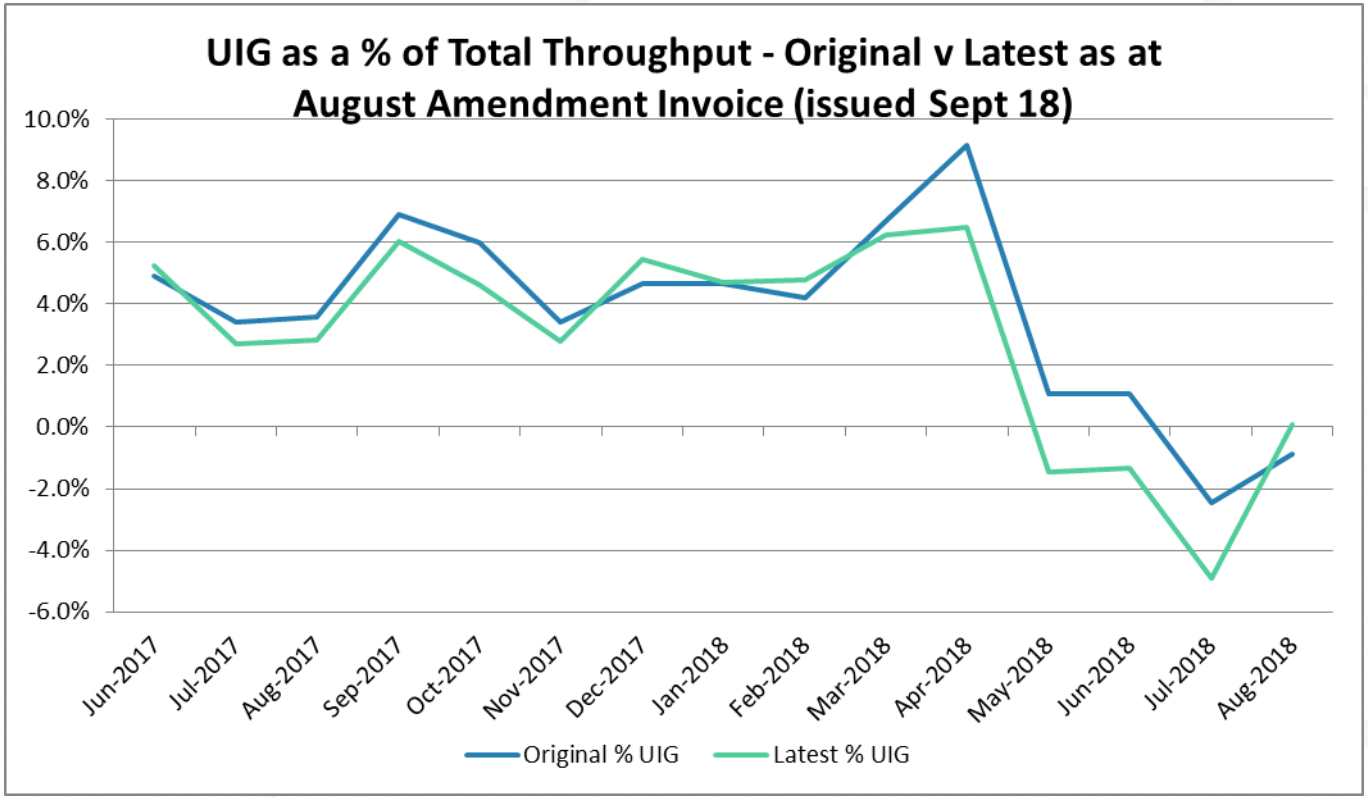
The question is should it be THIS volatile and will the ABSOLUTE levels post reconciliation reach 0.7%?

15 months on from Project Nexus....



c.80% of the energy allocated in the 15 months since Project Nexus go-live has reconciled in the UK Link system.

...UIG has dropped from 4.65% to only 4%*



UIG has averaged at 4.65% at allocation for the 15-months since Nexus.

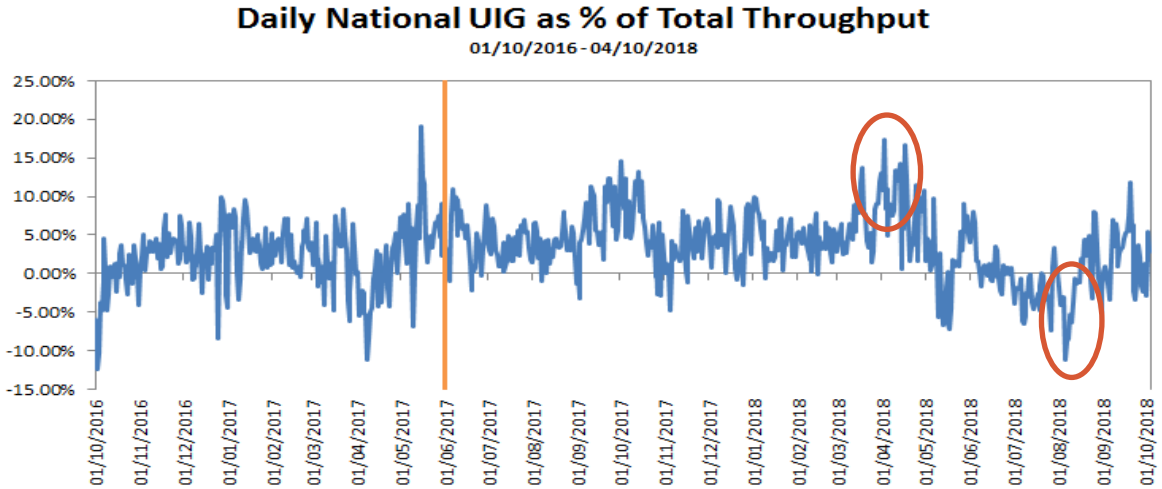
Our customers believed it would average 1%.

This created an unexpected cost of around £18m a month.

The national UIG average has reduced from 4.65% at allocation to 4% at reconciliation.

* National average

Xoserve UIG Task Force – two pronged approach



Work-stream 1 objective: remove extreme volatility
The Xoserve task force is using advanced data analytics and machine learning to unpack the NDM algorithm, the input data and the way the market is operating – this is a very complex model and a large data set.

Work-stream 2 objective: reduce the absolute level of UIG
The Xoserve Task Force is using deep industry knowledge to identify all the drivers of absolute UIG and suggest ways in which industry can reduce this exposure.

Progress so far...Weather

Relationship to UIG	Task Force Hypothesis	Discoveries to date	Perceived timescales to fix
Daily weather is a key input into the daily estimation of gas usage of Non-Daily Metered (NDM) sites.	“At allocation, the NDM estimation algorithm doesn’t react well enough to weather-related changes in usage”	We’ve found that introducing extra weather data, for variables such as rainfall and solar radiation, into the NDM estimation algorithm could reduce the level of UIG.	More than 1-year

...Annual Quantities

Relationship to UIG	Task Force Hypothesis	Discoveries to date	Perceived timescales to fix
The AQ is a site's estimated gas consumption total over a 12 month period. If an AQ is wrong, this will lead to UIG.	"A lack of regular meter readings will contribute to UIG: the AQ is updated if an actual meter reading is accepted by Xoserve."	We have identified a number of sites within a sample which are using significantly more gas than is indicated by their UK Link system AQ. These outliers alone are contributing around 0.2% of national throughput to UIG.	3 to 6 months

...Estimated Reads for Daily Metered Sites

Relationship to UIG	Task Force Hypothesis	Discoveries to date	Perceived timescales to fix
Estimated reads are used where no actual reads are available. This may not be a good representation of the actual consumption and the difference would contribute to UIG.	“A lack of regular meter readings will contribute to UIG: where actual reads are not received or are rejected, for Class 1 or 2 sites a D-7 estimate is used.”	We’ve found a handful of large sites that should be daily metered. Whilst they remain NDM, the difference between their actual and estimate usage is contributing to UIG. We estimate this to be around 0.4% of total national throughput.	3 to 6 months

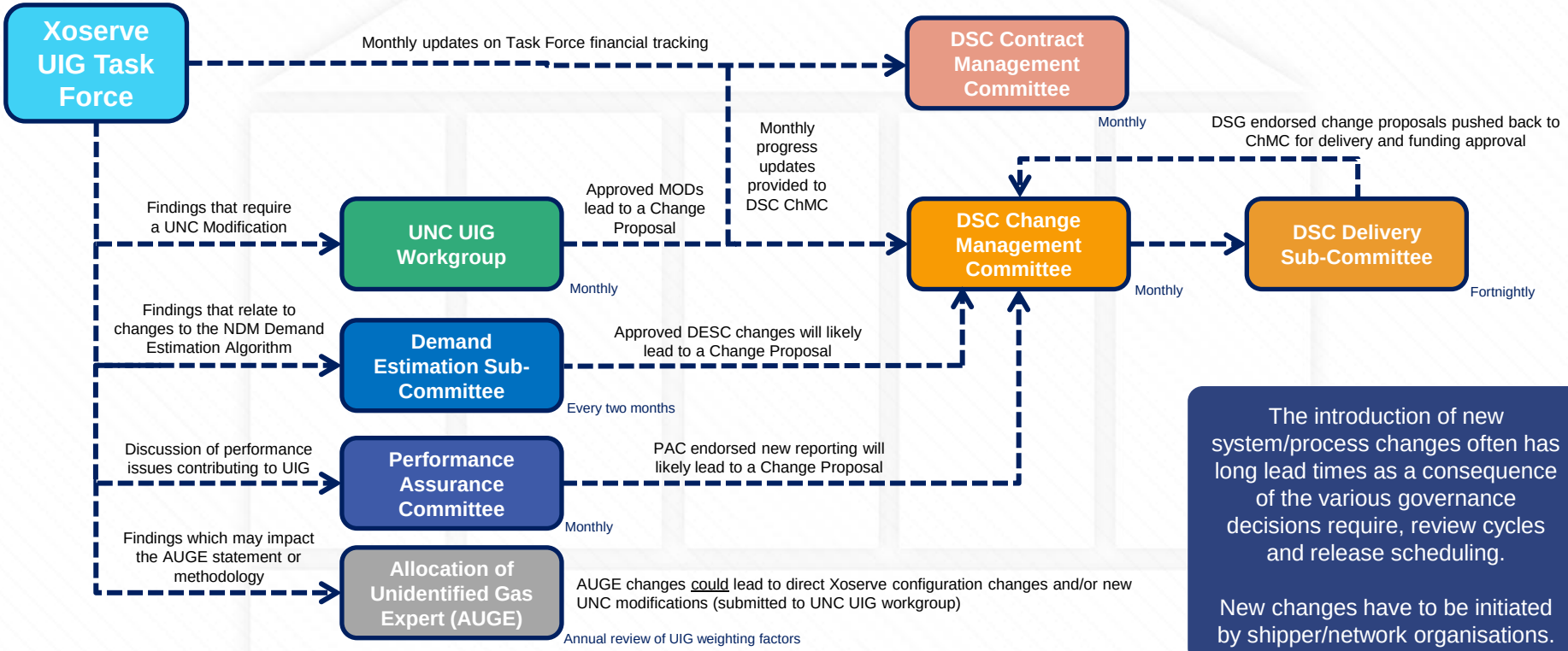
...Standard Volume to Energy Conversion Factors

Relationship to UIG	Task Force Hypothesis	Discoveries to date	Perceived timescales to fix
The value used to convert cubic meters of gas into energy measured in kilowatt hours (kWh).	“All sites under 732,000kWh AQ have a single industry standard conversation factor specified in legislation. Any difference between this standard value and a more accurate value would contribute to UIG.”	The standard volume to energy conversation factor for all smaller NDM sites contributes to higher UIG in winter and reduces in summer. Annualised impact is weather dependent and we estimate a 0.4% of total national throughput contribution to UIG.	More than 1-year

...EUC Winter Annual Ratio Bands

Relationship to UIG	Task Force Hypothesis	Discoveries to date	Perceived timescales to fix
The Winter-Annual Ratio (WAR) of larger NDM sites should determine which End User Category (EUC) a site is assigned to. If a site consumes gas differently to its EUC/WAR Band profile, this leads to UIG.	“If a large proportion of eligible sites are not in a specific WAR Band EUC, their daily gas allocation will be less accurate, with the difference being UIG.”	28% of eligible sites do not have a WAR Band EUC as at 01/09/2018. The Task Force estimates that this is contributing 0.15% of total national throughput to UIG, and as much as 0.7% on peak winter days.	3 to 6 months

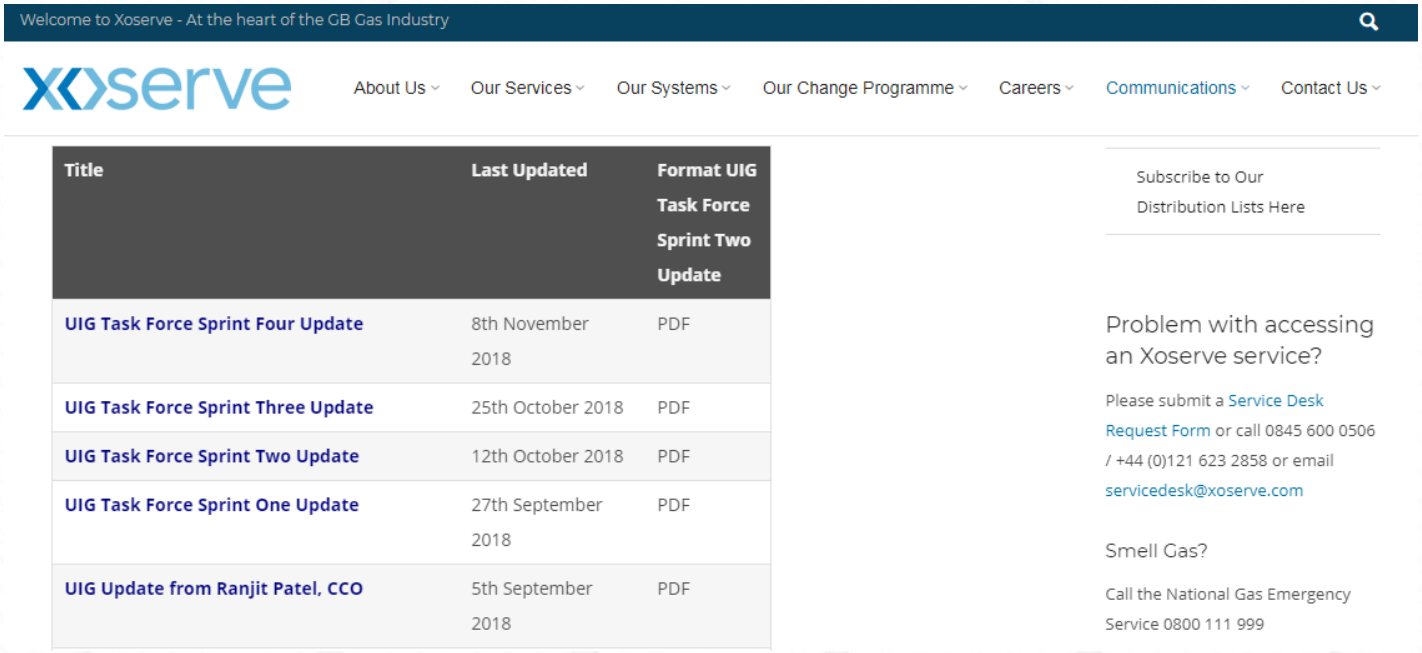
We operate within a complex and often time consuming industry change landscape...



The introduction of new system/process changes often has long lead times as a consequence of the various governance decisions require, review cycles and release scheduling.

New changes have to be initiated by shipper/network organisations.

Transparency and communication is key



The Xoserve UIG Task Force provides fortnightly updates and complete visibility of our progress, areas of focus and hard conclusions drawn – we make everything publicly available via Xoserve's company website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