X Serve

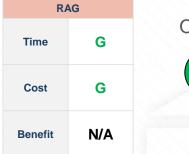
UIG Task Force Progress Report

Change Management Committee 10/07/19

Background

- Modification 0658: 'CDSP to identify and develop improvements to LDZ settlement processes' approved by Ofgem on 6th July 2018
 - Modification raised to authorise the CDSP to assign resources and incur costs related to a Task Force to investigate the causes and influencers of Unidentified Gas (UIG), with a target of reducing the volatility and scale of UIG and developing a robust predictive model for daily UIG for use by all parties.
- BER for Change Reference Number XRN4695: 'Investigating causes and contributors to levels and volatility of Unidentified Gas' approved at ChMC on 11th July 2018
 - This Change Proposal added an additional service line into the DSC to enable Xoserve access to investigate, using resources and technology, causes and contributors to levels and volatility of Unidentified Gas. Xoserve is to provide monthly update reports and recommend proposals and subsequent changes or modifications for the industry.
- The following slides provide:
 - Task Force dashboard
 - POAP
 - Recommendation stats
 - Reporting on budget
 - Advanced machine learning next steps
 - Task Force next steps

UIG Task Force: Dashboard



Overall	RAG	status:*	
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Progress since last month - key milestones	Date	Status
Executive Summary Update	w/c 03/06/19	Complete
Attend May Change Management Committee	12/06/19	Complete
Attend May Contract Management Committee	19/06/19	Complete
Attend June UIG Work Group	24/06/19	Complete
Attend UIG Work Group Mod 0681	07/06/19	Complete
Attend Work Group 674	26/06/19	Complete

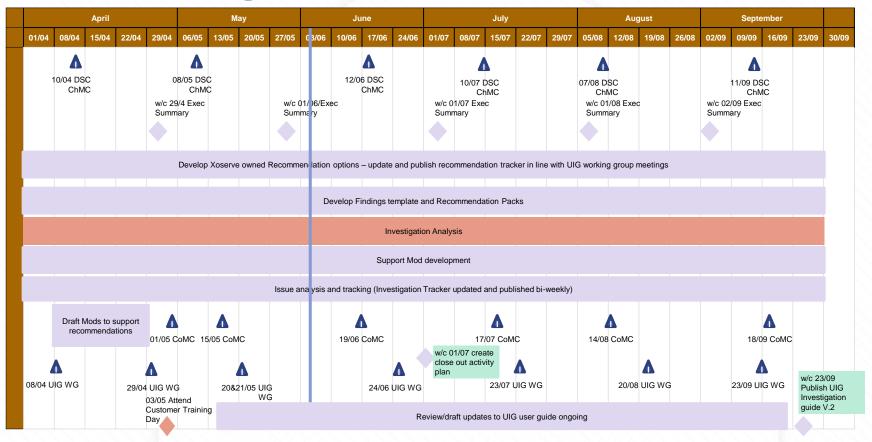
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Date	Status
July ongoing	G
End of June	Α
23/07/19	G
10/07/19	G
17/07/19	G
10/07/19	G
01/07/19	Ongoing
July	G
	July ongoing End of June 23/07/19 10/07/19 10/07/19 01/07/19

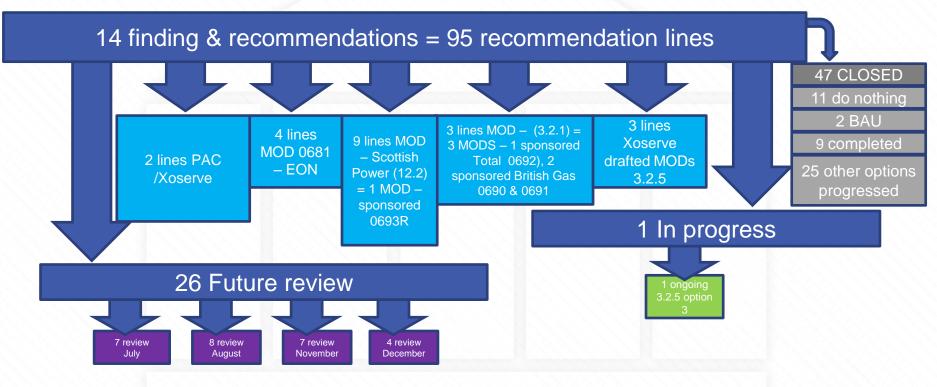
Plan on Page new

C Completed activity

Delivery team milestone Advanced Analytics Governance



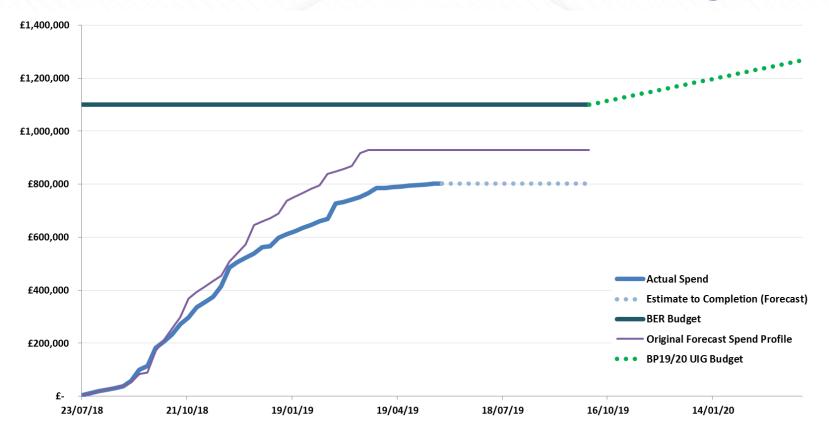
Recommendations - where we are



All future reviews include non task force related changes that are pending, defects with planned resolution dates, other options which may be considered if engagement/PAC reporting does not deliver results. (PAC can look to deliver these when PAC reporting is updated).

As at 25/06/19

Overview Of Task Force Funding



Task Force Next Analysis Steps

- Xoserve will endeavour to produce a Machine Leaning Video to highlight the benefits, considerations and implementation challenges of using Machine Learning algorithms to allocate NDM Energy
- We are working with our Analytics Partner to complete:
 - Rerunning the Neural Network performance comparison against the existing NDM algorithm for more recent Gas Days for EUC 01 only (propose 01/06/2018 – 31/05/2019).
 - Develop improved estimation models for EUCs 2-8 to demonstrate whether the ML benefit can be seen across the whole market.
 - Explore using the models and findings developed to date to look at building a UIG predictive model.
 - Continue modelling work, focussing on reducing modelled volatility further.

Task Force Next Steps

- Use the UNC UIG Work Group as the mechanism to **share progress** on all recommendations where options residing with Xoserve.
- Provide updates to the "Recommendation Tracker" in line with UNC UIG Work Group timescales.
- **Continue analysis** on existing investigation lines, identify any **new** investigation lines & publish investigation tracker updates as required.
- **Publish any new findings/recommendations** drawn from investigation lines which are currently "work in progress" when completed.
- Supporting MOD development to progress all live and draft modifications.
- **Complete** complex machine learning next steps with Analytics partner & share outputs with the Industry.