

CASE STUDY

Delivering a transformative technical strategy during lockdown

Triad completed the entire Discovery phase for the Renewable Transport Fuel Obligations Unit (RTFO) at Department for Transport (DfT) during the CoVid-19 lockdown period. This critical project managed to successfully set out a future technical strategy which will enable a step change in the way the RTFO Unit operates within the legislative framework for the next 12 years and beyond.

Systems originally built to support implementation of the Renewable Transport Fuel Obligations Order in 2008, and still in use today, enable fuel suppliers to report the amounts of fuel they provide for road transport in the UK. However, with the legislation set to run to 2032, the DfT wanted to assess the existing platform for longevity and its ability to meet the Unit's needs going forward.

Transport sector expertise, combined with a tried and tested Agile approach aligned to GDS principles, enabled Triad to deliver a comprehensive set of technical analysis and research around user needs.

This enabled the Triad team to deliver a robust business case and proposed technical strategy that was welcomed by the DfT – all achieved despite the added pressure of working with teams that were entirely distributed during the lockdown period.

About the client

The DfT is a key ministerial department in the UK, responsible for the transport networks that support UK businesses and residents moving goods and themselves around the country, including the maintenance of 400,000 kms of roads. The DfT also has a critical role in ensuring that the UK Government achieves its legally required reductions in CO2 emissions.





“Triad performed a detailed assessment of all aspects of our current platforms and then provided a clear and extremely intelligent strategy to support our business transformation, with a thorough business case that underpins it. We were extremely pleased with the depth and breadth of output from this 6 week Discovery project.”

- **Richard Lynn** | Project Sponsor & Head of Compliance, Department for Transport

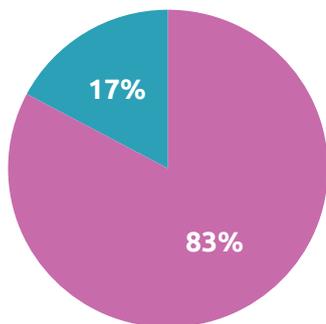
The challenge

The RTFO Unit commissioned the development of a fuel monitoring system in 2008 to fulfil the Renewable Transport Fuel Obligations Order 2007, which required all fuel suppliers in the UK to report fuel supplied for the purpose of road transport. The system has evolved over the last 12 years to accommodate numerous and significant legislative changes. Not only had the needs of the RTFO unit moved on considerably during this time but significant changes occurred also within the technological landscape.

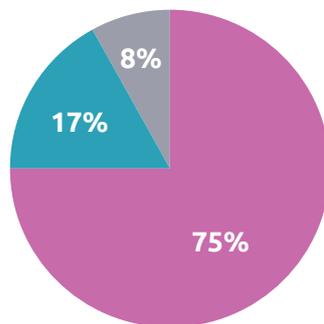
Another significant challenge was the need to complete the Discovery project, from start to finish, during lockdown so that a business case to support their future technical strategy would be ready to action in the next budgetary cycle.

Gap analysis of existing legacy systems to technical standards

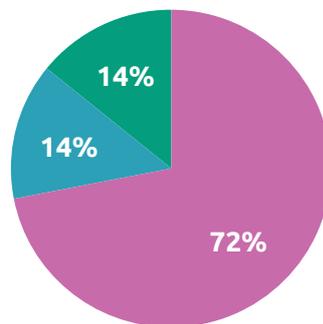
● Non compliant ● Partially compliant ● Fully compliant ● Not applicable



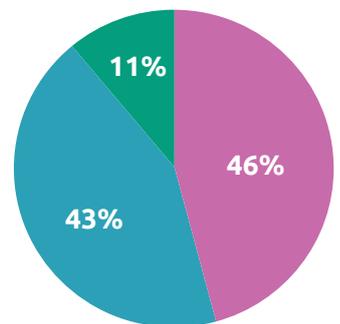
Quality of code



Technology Code of Practice

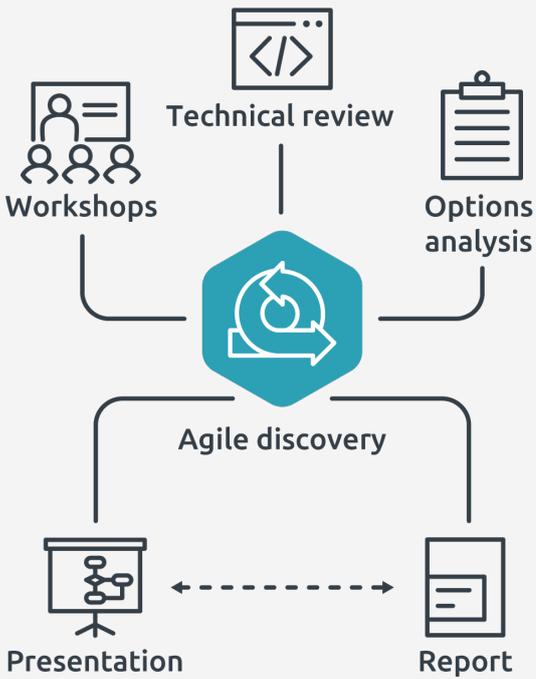


Service Standard



DfT Architecture Principles and Standards

The solution



DfT chose Triad to perform the deep-dive assessment due to Triad's extensive expertise in the transport sector and renewable fuels legislation. The scope included platforms in use within RTFO alongside an assessment of current and future needs.

Using a tried and tested framework for GDS aligned project delivery, Triad organized the backlog and structured a knowledge base around the service standard, ensuring each service point was addressed with evidence to support it.

Entirely remote workshops were held with the RTFO Unit to capture user needs. The structure of each workshop was defined up-front alongside the creation of a virtual whiteboard template to cover each topic and to guide ideation sessions and collation of points. Points were progressively 'themed' in parallel, allowing outputs to be summarised efficiently.

In addition to user research, a core part of this Discovery was an in-depth assessment of the technology platforms used by the RTFO. Triad performed a point by point audit of each system against the GDS Service Standard, GOV.UK Technology Code of Practice, DfT's architectural principles, and the WCAG Accessibility Standard. Following this, low level code analysis using SonarQube, as well as hands-on inspections, were completed to produce a clear and comprehensive assessment of each platform's strengths and weaknesses.

The result



Triad produced a grassroots report on the current state of the RTFO Unit's technology platforms, the unit's future needs and a future technology strategy. This, in turn, provided a business case from which the RTFO could embark on a major transformation of their processes.

During the Discovery phase, technology platforms were audited and risk-assessed point by point against all relevant Government standards. Triad also examined in detail code structure, quality, and accessibility.

This six-week Discovery project was delivered entirely during lockdown, working with other Government departments, end users and key stakeholders utilising innovative collaboration tools to capture user needs and pain points. By facilitating the conversation and allowing stakeholders to converge on a common understanding of the way forward, Triad was also able to deliver a business case for a major investment in building a technology platform that has future needs covered.