



North Sea
Transition
Authority

North Sea Transition Authority revolutionises its Pipeline Works Management with a built-for-purpose solution for managing the application process

key facts.

Problem

The Pipeline Works Authorisation (PWA) team at the North Sea Transition Authority (NSTA) manages applications for installation, modification, and decommissioning of pipelines across the UK Continental Shelf. Previously, these complex applications were managed entirely using a paper-based system. This brought about a huge administrative burden and difficulty in picking up errors. As a consequence of this, there were also difficulties in recruiting and retaining staff to take on the work.

Solution

Fivium Digital, using its unique knowledge of the public sector IT landscape, created an online service with the NSTA to help them manage this process. The existing consenting process, for petroleum related pipelines is now fully digitalised and deals with every aspect of petroleum related pipeline management, from initial installation to changes of use, changes of ownership, modifications to layout, and decommissioning. The solution delivered provides an excellent starting point for future enhancements, such as consenting pipelines to be used for the purpose of carbon storage and for improving the way pipeline related data is reported to the NSTA.

Benefits

Now, there are substantial time savings as heavy administrative tasks have been eradicated, team morale is at an all-time high, clerical errors have been reduced, and the team's ability to recruit and retain staff has greatly improved.

The North Sea Transition Authority (NSTA) manage the consenting process for the construction and use of an extensive network of pipelines across the UK Continental Shelf (UKCS) which operators manage.

There are 7,033 pipelines currently in the UKCS with a total length of 156,000km. Their contribution to energy supply is significant; around 50% of the UK's oil and gas needs are met by production that flows through these pipes to 15 land-based terminals. This figure is even greater if pipelines linked to floating production facilities that offload their oil to tankers are included. When amendments are needed for these pipelines, it is up to the Pipeline Works Authorisation team (PWA) to manage this process.

the business problem.

The PWA team at NSTA handles over 500 applications a year for installation, modification, and decommissioning of pipelines. With this large number of complex applications for works on pipelines, the paper-based system that they were using proved both laborious and unreliable for licensing staff. Licensees could take days to complete the required information. This created a huge administrative burden and was error-prone due to the highly manual nature of applications. This brought about further issues with recruitment and staff retention due to the convoluted nature of the work involved.



The new PWA system helps the NSTA to oversee changes to the 156,000km of pipelines across the UK Continental Shelf

With no system in place, applications would vary significantly, from brief, shorthand notes to long and complex prose. This meant startling inconsistencies in the applications themselves and, with no oversight of all cases, there were also many duplicate applications.

the solution.

With many other areas of the NSTA significantly modernised, it was clear the PWA application process needed to be brought online. The NSTA approached Fivium Digital to assist them in this project due to their extensive experience delivering purpose-built Government IT solutions. The new online service significantly reduces the time it takes for licensees to complete an application and for the NSTA to process the request.

The solution deals with every aspect of pipeline management, from initial installation to changes of use, changes of ownership, modifications to layout, and decommissioning.

Information from previous applications is retained against a licensee's account, saving licensees from having to undertake the time-consuming task of supplying the same data multiple times.

The NSTA now benefits from one system for applicants to record all data and for staff to process applications.

The PWA team is now considered to be one of the most efficient operators within the organisation

the results.

For industry users, consent for work is now quicker and easier to request, saving them time and money. It has also allowed the NSTA to build a more comprehensive map of the pipelines on the seabed, which supports the vital decision-making regarding exploration, production and selection of carbon storage sites.

Because the pipeline information is now securely stored, applicants also save significant time because there's no need to duplicate content in their applications. In addition, they no longer have to complete the bi-annual Section 34 'Information and Samples request', as comprehensive pipeline details are captured when they initially register. Due to the digital nature of the new service, significant time is saved as all information is searchable and accessible immediately instead of being stored in paper documents.

Having lagged behind other teams in the NSTA, the PWA team is now considered to be one of the most efficient operators within the organisation, thanks to their new service. The quality of applications has improved, the likelihood of clerical errors has reduced, and teams have the capability to do value-added tasks. As a result of this, recruitment and retention of staff have become much easier, bringing about further cost savings.

“NSTA's service for pipeline works authorisation applications streamlines the process and reduces industry admin burden by simplifying, streamlining and reducing the potential for errors. This has been achieved by creating a user-friendly service that supports the applicant to put in the required information in a complete and error-free way thereby reducing the potential for waste and rework.

Andy Studman, Principal Pipeline Engineer, Shell

working with fivium digital.

Key to NSTA's success was its working relationship with Fivium Digital in building the service.

To begin, the team taught and established the principles of the agile working methodology to the NSTA, ensuring everyone was working from the same page. From there both teams discussed the desired end goals and ensured all development and meetings thereafter were purely focused on achieving the best outcomes for the NSTA and its industry partners. Sprints were completed fortnightly followed by show and tells. Following the development of user stories, the stories were reviewed and signed off by the NSTA product owner in user acceptance testing.



“When I first started working with Fivium Digital, I knew that I was working with a very talented bunch of people who really know their subject matter. Every member of the team brought something to the table and their experience of complex public sector projects shone through. All of our discussions were focussed on getting the best outcome.

Claire Grant, Project Manager, North Sea Transition Authority

Our core purpose is to make the work of the public sector easier and simpler whilst creating opportunities for our people.

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