



Offshore Magazine | Offshore Oil & Gas Executive Perspectives Special Report

Decommissioning – It's all in the planning

Despite the inevitability of decommissioning, the oil and gas industry has been historically under prepared. The rush to develop fields has left a legacy of challenging to remove facilities, and oil and gas basins now dominated by aging infrastructures.

As with anything, planning is the key to successful execution, and this is no different for decommissioning.

Global energy consultancy, Xodus, is recognised as the trusted advisor for decommissioning in the UKCS, having supported over 60% of all recent approved decommissioning plans. With over 270 decommissioning scopes completed to date, all necessary decommissioning disciplines in a single organisation, and a continual pursuit of improvement, Xodus has the capability to deliver efficient results for its clients creating a holistic and integrated plan that is fit for purpose, both technically and from a regulatory standpoint.

Planning for Decommissioning

Xodus was engaged by an international energy company in 2019 to support the decommissioning of its North Sea assets. Complex structures including large steel piled jackets, multiple subsea tie-backs, large subsea structures and over 800 km of pipelines and umbilicals, meant this was no small task.

To help steer a path through the regulatory requirements Xodus facilitated a road mapping workshop with key stakeholders, helping to understand the project at a high-level and identify potential hurdles and key milestones. A strategy was developed into defined scopes of work, initially including environmental appraisals (EA) of the topside facilities and comparative assessments (CA) for the steel piled jackets and pipeline infrastructure.

Comparative Assessment

Xodus has a tried and tested approach to comparative assessment (CA) which complies with the Department for Business, Energy and Industrial Strategy's (BEIS) decommissioning guidance and is well received within industry for its transparency and clarity of conclusions.

Using the client's data, decommissioning method statements are developed within Xodus' proprietary process to extract key metrics required for evaluation between options. This ensures an appropriate level of evidence is available for scrutiny whilst maintaining efficiency. Workshops are facilitated which allow stakeholders to compare options in an intuitive and collaborative manner using the analytical hierarchy process.

Environmental Appraisal

Platform topside EAs for each facility were developed by Xodus' environmental team and submitted along with their respective decommissioning programmes. This approach meant common learnings could be efficiently applied across all deliverables. Xodus' eBase system was used to streamline environmental approval management, capturing and transferring EA data into future permits to provide consistency from planning to execution.

Decommissioning Programmes

Recommendations from the pipelines CA are dovetailed, with standard guidance for subsea structures and deposits, to produce straightforward and clear programme documents fully aligned with all reports.



The single cross-discipline team approach ensures that delivery is standardised. Regulator turnaround time is reduced as issues are addressed in the first version with subsequent iterations focusing only on project specific factors.

Asset Retirement Obligation Estimates

The subsea inventory data set was expanded to include all the subsea facilities which Xodus used to generate subsea asset retirement obligation (ARO) estimates on the operator's behalf. Through forward planning a common framework for activity estimates was established which allowed the same data to be used to generate environmental metrics for the subsea fields' EAs, avoiding unnecessary duplication of work.

Trusted Partnership

Xodus' team will continue to work with this client over the next few years to deliver all the planning requirements to ensure that decommissioning execution of these complex and interconnected assets is performed safely and efficiently whilst minimising emissions.