



# CASE STUDY

ENGINEERING & DESIGN

FLOWLINE CROSSOVER

## AT A GLANCE

**Problem:** A UKCS Operator requested GDi to design and engineer a Crossover arrangement to re-route flow to allow ongoing operations during a riser change out.

**Challenge:** Operator was time constrained and urgently needed to facilitate a riser switch over but faced a discrepancy between as-built drawings and site conditions.

**Solution:** GDi utilised Vision and existing point cloud data to identify the discrepancy and provide a bespoke solution.

**Outcome:** GDi saved the Operator significant time, effort, and costs by delivering a fully fabricated scope within 4 weeks which allowed the riser switch over to go ahead, whilst under full production.

## SOLUTION

By using Vision and accessing site-specific point cloud data, GDi identified the discrepancy between the as-built drawings and the actual site layout.

With this information, GDi identified various options for re-routing the flow effectively which led to the development of a robust and fit for purpose solution with minimal impact both in time and cost.



Laser Scanning &  
Data management



Vision



Engineering  
& Design



Construction &  
Fabric Maintenance

## CHALLENGE

In August 2021, a UKCS Operator approached GDi with a pressing issue. They needed to reconfigure a flow line set to facilitate a Riser replacement. According to the as-built drawings, it appeared at first to be possible with the existing pipe and valving arrangement, however following a remote survey using Vision it became apparent that the site conditions did not match the as-built drawings.

## OUTCOME

GDi's solution proved to be successful for the client. By identifying the discrepancy and providing a suitable solution, GDi not only ensured the successful re-routing of the flow but also saved the client a substantial amount of aborted time, effort, and money that would have been wasted had they progressed based on the as-built data.

**The new pipework was delivered to the client within four weeks not only meeting the client's urgent time frame but also showcased GDi's dedication to delivering effective solutions and ensuring client satisfaction.**

The successful completion of this project demonstrated the value of GDi's expertise, technology, and commitment to innovation in solving complex engineering challenges.

