



Exploration of advanced modelling and simulation for securing new contracts

Northwest based, BiSN Technologies Ltd provides independent consultancy and innovative solutions to the upstream oil and gas industry using biological, chemical and advanced engineering.

CHALLENGE

BiSN Technologies approached the VEC to provide simulation and modelling to accelerate development and to provide a high level communication tool to demonstrate their new bridge plug technology for use in the process of securing abandoned oil and gas wells.

SOLUTION

Utilising the advanced modelling and simulation expertise of the VEC team, BiSN was able to use the models and visualisations to support their international field trials and provided the evidence required to obtain first stage certification and approval by the relevant UK and US bodies.

In addition, the multiple simulations enabled an exploration of different scenarios for different environmental conditions.

The ability to show a visible representation of the process in situ has been a valuable factor in gaining customer confidence in this novel technology.

BENEFITS

Since working with the VEC, there has been considerable worldwide interest and press coverage for BiSN's new technology solution with significant potential revenue streams to follow.

Key benefits include:

- Advanced modelling and simulation to support field work trials and predict product performance in a range of environmental conditions.
- Accelerated technology exploitation and faster speed to market
- High level client demonstration tool
- Flexible technology to support bespoke client requirements

"The advanced modelling and simulation analysis delivered by the Virtual Engineering Centre has enabled BiSN to understand and validate the behaviour of our new material and demonstrate the effectiveness of new technology for use in the oil and gas sectors.

Following recent US field trials, we anticipate significant sales and market penetration. The VEC's professional standing and expertise has helped to promote confidence in our product and has accelerated our current negotiations with US State bodies."

- Paul Carragher, Director for BiSN Technologies Ltd