

## **The role and status of E&P technology from a North Sea perspective: history and future**

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In the mid to late sixties, Norway experienced its first encounters with oil and gas. Few had dreamed about the magnitude and profound role the coming oil adventure in the North Sea would have. In these early days, there was little knowledge about oil exploration and production in the countries surrounding the central North Sea, and it was natural to look to the number one oil pioneer in the world – the U.S.

During the eighties, the North Sea rapidly developed into an arena that was to play a dominant role in the development of exploration and production technology. It was to become the major playing field for the development of 3D marine seismic, 4D seismic, horizontal drilling, IOR / EOR and the integration of disciplines (geology, geophysics, reservoir- and production technology) to name just a few. Furthermore, we have seen a strong and increasing focus on HSEQ and the roles of stakeholders have gradually changed.

The North Sea went from importing technology and expertise in the early days, to a stage serving as an exporting ground for technology and best practices back into the global arena.

Today, the North Sea has become a mature oil and gas province, with declining oil production. It is diverse in terms of players and technology, and future challenges will be quite different from those experienced in the past. What remains certain, though, is that technology will continue to play an ever more important role in securing a successful exploitation of remaining oil and gas resources – both in the North Sea and in the rest of the world.

In this presentation, key technologies relevant to the development of the North Sea will briefly be summarized, and examples of recent and emerging technologies will be discussed.