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Exploring for reliable, robust traps is a key factor to future success along the UK Atlantic Margin

It took twenty years and over 100 exploration and appraisal wells before the first commercially viable discovery was made - the BP operated Foinaven Field. Following the discovery of Foinaven and Schiehallion Fields in early 1990's, exploration success outside of UK Quadrant 204 area of the Faroe-Shetland Basin has been rather limited.

Generally, exploration success on the UK Atlantic Margin is viewed as disappointing with a success rate of approximately 1 in 7. This is a consequence of a number of factors, which have been recently analysed. Up until the end of 2002, 144 exploration wells have been drilled, of which approximately 65% were positioned on sparse, 2D seismic data often of poor quality. A high number of unsuccessful exploration wells were based on weak and somewhat flawed geologic concepts.

The key geologic explanation for a large number of failed exploration wells relates to the trap being fundamentally ineffective. Therefore, one of the major tasks ahead, which undoubtedly will facilitate future success, is through identifying and exploring for reliable and robust traps.

The challenge ahead lies in enhancing the possibility of finding further hydrocarbons in commercial quantities along the UK Atlantic Margin. There are still levels of geologic uncertainty, with many areas either under or unexplored. Nonetheless, lessons learnt from earlier activity, and improved evaluation methods indicate there is scope to improve the success rate and successfully compete with other deepwater areas of the world.