

Comparing Marine Geohazards Risk

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When the oil industry only operated in shelf waters defining geohazards risk was fairly simple as the variety of risk elements was limited: shallow gas, maybe punch through for jack-up legs, and little else that may have been a factor in driving major accident risk potential.

However in the current day we are faced by a rich variety of marine environments and new geography, and with it a similar variety of marine geohazard risk sources that may be the cause of a major accident.

How therefore can one properly compare different areas and effectively communicate risk to management?

This paper looks towards a method by which different basins, locations, and fields can be compared for their fundamental geohazard risk, and that can then be used to indicate the level of effort that is required to manage that risk from the initial take up of a license, through wildcat drilling, on into field development and through the life of production operations.

To do so by looking at every conceivable source of risk at the outset would be onerous and provide such a multi-faceted outcome that simple comparison of different areas would be difficult. This paper therefore describes an attempt that has been made to reduce the number of factors that need to be looked at to a minimum, by looking at their inter-dependency in driving risk of specific geohazard issues, and thence to portray the totality of risk in a simple, clear, and consistent manner.