



## **Applied Sea Ice Research**

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In the late 1960s oil and gas development became an issue in the northern coastal areas of Alaska and Canada. More lately this has also become an issue in the Euroasian Arctic with the Barents and Kara Seas as example on where offshore hydrocarbon production now is being planned. In such waters the key questions prior to a development are related to water depths at the site and in case of ice, how frequent and what type of ice features will be met. Especially the ice conditions and knowledge about them are very decisive for the field development solutions to be chosen. The paper will highlight examples on development solutions where the ice conditions have played a paramount role in the field development plans. An example is the consequences of iceberg threaten in an area and the effect sudden changes in ice drift directions may have on the exploration and drilling solutions chosen. The paper will also discuss how to derive design ice actions values for such waters including scaling from nature to model ice basins.