The marine and offshore industries regularly incorporate new technologies on their assets that have no service history in the proposed application or environment. An asset becomes a novel concept if the incorporation of any new technology(ies) appreciably alters its service scope, functional capability, and/or risk profile as it introduces proposed applications that have not been proven in the marine and offshore industry.

Individual new technologies can be qualified by following the ABS New Technology Qualification (NTQ) process, however, the classification of a novel concept may introduce additional requirements. These are driven by the integration with existing conventional technologies and the asset itself and will not be satisfied through the NTQ process alone.

The ABS Marine Vessel Rules Part 1D offers clients a path for classification of a novel concept through four major milestones as shown in the figure below. The figure also illustrates the alignment of the NTQ process with the evolution of a novel concept. The outlined process facilitates the incorporation of “Technology Qualified” product(s) on an ABS Classed-asset. Details regarding the required submittals and key interaction points with ABS during the new technology development are specified.

**APPROVAL IN PRINCIPLE (AIP)**

As part of the novel concept class approval process, ABS grants an AIP at an early conceptual design phase to assist the client in demonstrating project feasibility to its project partners and regulatory bodies. Clients have an option to request an AIP at an early concept design phase or in later design phases.

Through concept engineering evaluation and concept risk assessment, the AIP process confirms that the proposed novel concept that includes the new technology complies with the intent of the most applicable ABS Rules and Guides as well as required appropriate industry codes and standards, subject to a list of conditions. These conditions are stated in an Approval Road Map which outlines the list of activities and associated submittals necessary to be completed in later phases of the project in order to obtain final class approval.

For additional assistance with New Technology Qualification or Approval In Principle, please contact innovate@eagle.org.