

Title: DNV GL DP Capability Standard ST-0111- Challenges and Updates One Year from Publishing

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Abstract

In July 2016, DNV GL published a new standard for the assessment of vessel DP capability, DNV GL ST-0111. The new standard includes methodologies for documenting a vessels DP capability in three different levels: DP Capability Level 1, 2 and 3.

Together with the standard, a free web-app was developed and released on My DNV GL for supporting the DP Capability Level 1. Level 1 is based on a prescriptive static method with generalized environmental and propulsion forces such that results calculated for different vessels will be fully consistent and comparable. Level 1 is applicable only for ship-shaped mono-hull and employs a Beaufort weather scale. During the last year, DNV GL has collected feedback and suggestions from the industry, including MTS, both regarding improvements for the standard and new features for the web-app. Some challenges on how to apply and use the standard and web-app have also emerged.

A common request from industry has been to have DP Capability Level 2 and Level 2-Site available in the web-app to be able to support vessel/project specific calculations. Based on this feedback a new version of the web app will be released on the My DNV GL this year, where users will be able to run Level 2 and Level 2-Site calculations. The new version will also provide the opportunity to compute the vessel DP Capability for other vessel shapes than mono-hulls (like semi-submersibles and catamarans), to apply site-specific environmental conditions, include external forces, and vessel specific environmental load coefficients and thruster forces. The paper will include a description of the new features and their applications.

The aim of this paper is also to share with industry the experience gained and challenges encountered so far with the use of the new standard and web-app and how these have been solved.