National Defence Technology Centre

SH DEFENCE

NATO Center of Excellence for

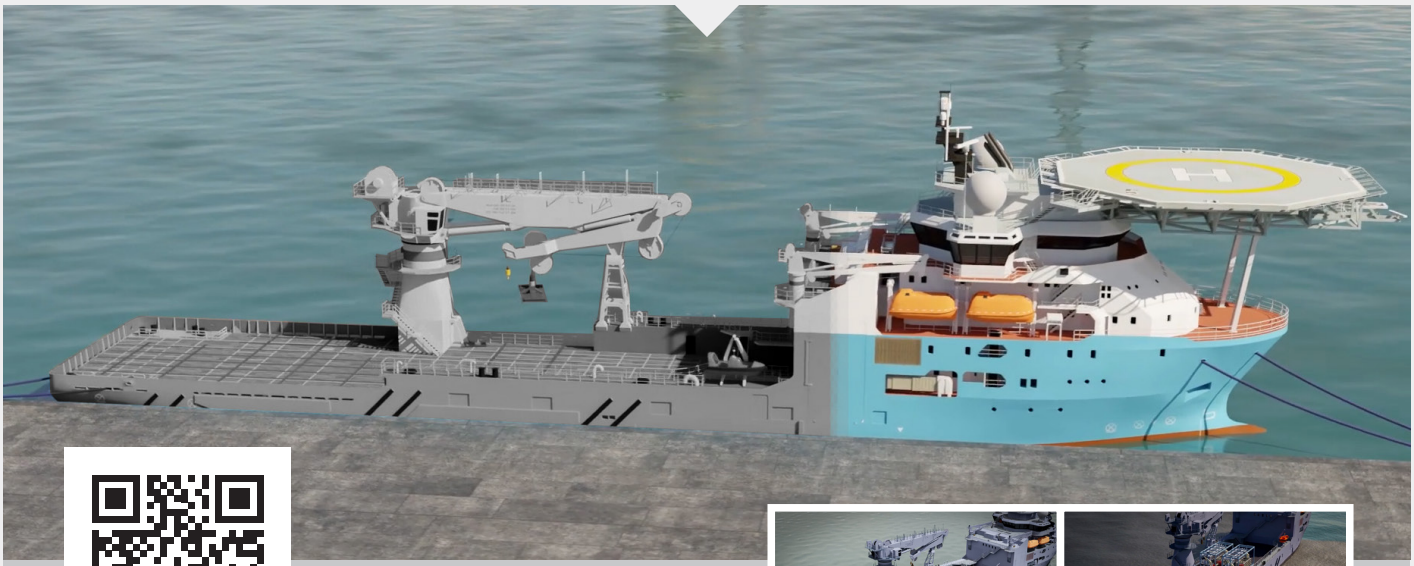
Maritime Mission Modularity

The overall purpose of the new platform (A rebuild OSV):
To test new underwater and maritime technologies in general, in and around Denmark and the Arctic area. To be able to function as a Mothership for unmanned technologies.

It is for use by Danish authorities for, e.g., marine environment tasks and RDN for various operational tasks and classified tests of equipment and systems.

The platform is made available to Danish and foreign industrial companies and research institutions testing their innovations for educational and research purposes and as part of triple helix projects.

The platform is also available for EDA (European Defense Agency), NATO, and other allied partners, military or academic.



Watch concept animation
https://shdefence.com/nfc/

Nationalt Forsvars-teknologisk Center

National Defence Technology Centre

Who:

The platform is owned, operated and staffed by the Danish state in collaboration with RDN (Royal Danish Navy), DALO (Defence Acquisition and Logistics Organisation), NFC (National Defense Technology Centre), AAU (Aalborg University), SDU (University of Southern Denmark), DTU (Technical University of Denmark) and FORCE Technology.

What:

The following operational tasks are considered: Anti Submarine Warfare (ASW). Mine Countermeasures (MCM) for operating autonomous mine hunting systems. Naval Mine Warfare. Seabed Surveillance. Naval Disaster Relief Operations (NDRO). Oil Spill Recovery (OSR). Maritime Search and Rescue (SAR).

Test and deployment of existing and new technologies within unmanned systems such as UAVs, USVs, ROVs and AUVs and other underwater and maritime technologies.

Test of new alternative energy sources like Hydrogen, Methanol, LNG, Fuel cells, or just testing improved battery storage modules or stronger genset solutions.

How:

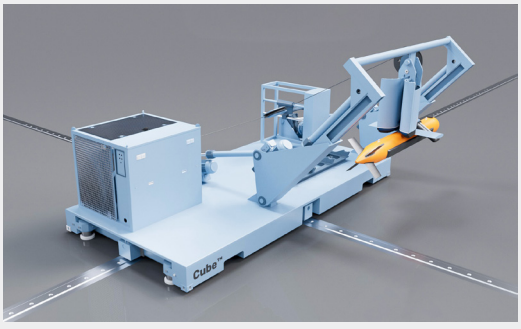
A flexible handling system on the main working deck is necessary to store, prepare and deploy new ways to deliver naval capabilities.

The Cube™ system, which is already planned for all new platforms for RDN, is an obvious choice as a foundation for embracing and handling modules with innovative equipment, machinery and autonomous solutions.

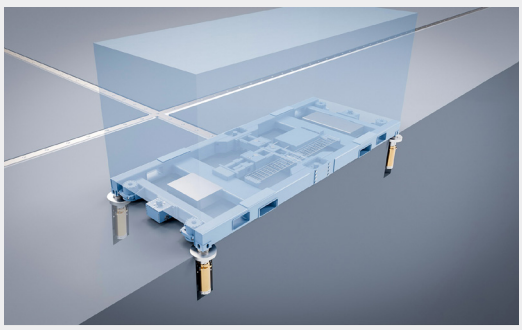
The Cube™ system transfers, secures and moves modules from quayside to deployment from the platform. The modules are mechanically fixed to the deck and connects to any Ship Systems such as IPMS, CMS and MMS with a standard interface.

For autonomous payloads, the Cube™ System uses a skidding system for handling and activation remote-controlled from land or sea.

The Cube™ System is system agnostic and will adapt to (almost) any equipment placed on the platform.



Autonomous MCM test module


Module handling and Twistlocks