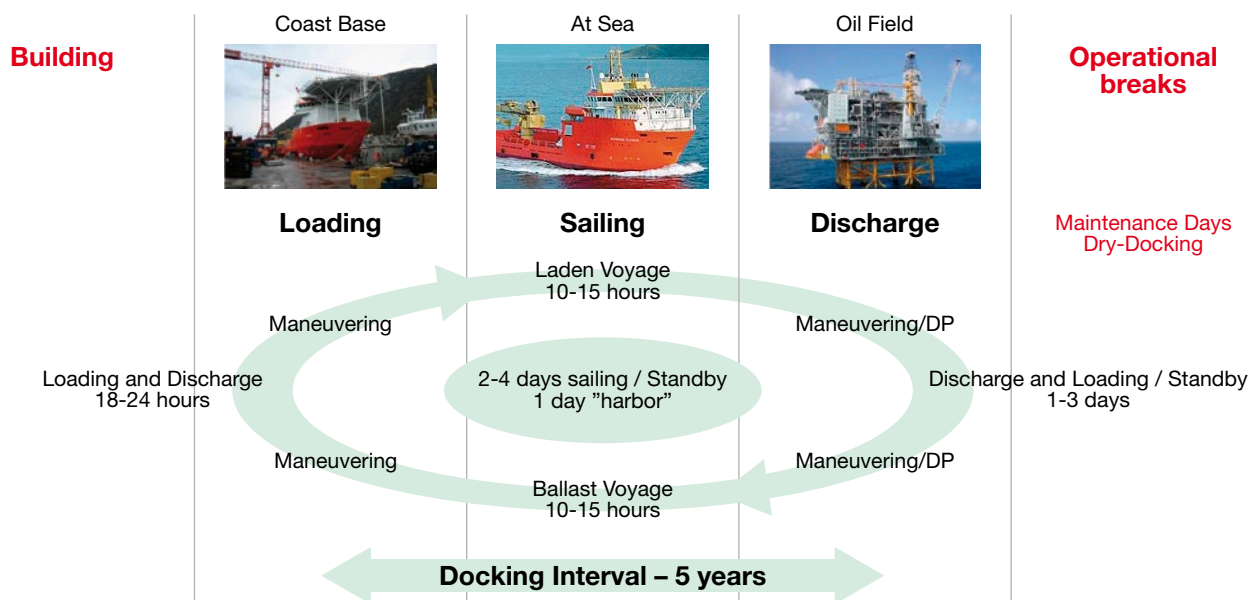


## Global Service on Offshore Support Vessels (OSV)

### Typical operating profile for a supply vessel



There are approximately 80 electric propulsion OSV ships with ABB power products, sailing and operating around the world. Typical ABB deliveries on these ships are; frequency converters, transformers and motors for the propulsion systems. In addition, we also deliver main switchboards and generators.

Most of the ships are operating in the North Sea area and are serviced by ABB Norway.

In the last few years we have seen a significant increase in diesel electric ships with ABB equipment operating outside the west coast of Africa. These ships are served by ABB in Norway and ABB in Durban, South Africa.

Ships operating in the Gulf of Mexico are served by ABB in Norway and the ABB office in Houston, Texas.

We have made an agreement with Norwegian Partner Marine (NPM) to be our service partner in the Russian territorial sea. In future we will try to extend this agreement to include service in the Murmansk area.

We are confident that the OSV market in Brazil will expand for ABB in the near future, and we are looking

into how we can best conduct service in this area.

Until now, there are no maintenance contracts between ABB and OSV ship owners, only purchase agreements and the cost of service engineers are settled.

The vessel crew perform the maintenance themselves, or by using service companies.

In emergency situations or where service is required, the operators rely on rapid and professional response from the suppliers. This means that we need to supply reliable 24/7 telephone support, and to be able to perform service onboard with short notice to avoid "off hire" for the ships. If the problem is not solved by telephone support our customer's expectation is that an ABB service engineer has to be ready on the pier with the necessary spare parts when the ship arrives at the harbour.

ABB has managed to perform service on the ships according to the ship owner's expectations and we believe that this is one of the main reasons why ABB deliver frequency converter packages to about 50 % of all the newbuildings with electric propulsion.

If we look at the number of ships

delivered with ABB equipment on them from the mid 90's, and knowing that we have supplied equipment to approximately 75 new ships that will be delivered up to 2009, it is obvious that we need to develop a service relationship with the ships based on preventive service, rather than on emergency call out.

There have been discussions with the ship owners about different models of maintenance and/or service contracts, I believe that this kind of contracts are essential to be able to serve the ships in a professional and effective manner.

A maintenance contract will give the ship and its owners systems that are more reliable and easier to maintain.

At the same time we must not forget to be flexible and to work as a life-cycle partner to the ship owners. We know that installed equipment will need servicing sooner or later, and that the most important thing is not why, but *how* we manage that.

**Mikael Schakenda**

Operation Manager, Marine Services  
mikael.schakenda@no.abb.com