

LEARNING BY DOING

AYEYARWADY NAVIGABILITY STUDY FOR THE MOST IMPORTANT TRANSPORTATION ROUTE

The Ayeyarwady is a highly dynamic river: very shallow during the dry season, fast-flowing and deep in the rainy season. Sandbanks constantly shift, making the Ayeyarwady a 'dancing river'. At the same time, the river is extremely important for the economic development of Myanmar. The Ayeyarwady navigability study, carried out by Dutch specialists, shows to what extent navigability can be improved. The study is also significant for a substantial project of the World Bank, which is also aimed at improved navigability.

The Ayeyarwady connects Myanmar's two primary cities, Yangon (5 million inhabitants) and Mandalay (1 million inhabitants), with the hinterland. The river forms the most important transportation route for the many resources the hinterland has to offer, such as agricultural products, wood, gas, oil and coal. Improving and intensifying the navigability of the Ayeyarwady is expected to greatly benefit the country's economy.

The Ayeyarwady is very dynamic and is therefore called a 'dancing river'. In the dry season, the river is sometimes just one metre deep and can only be navigated by vessels with a shallow draught. It is tremendously difficult to avoid the sandbanks. In the rainy season, the water level can rise by up to seven metres and it flows extremely rapidly. That poses different problems for shipping. The

river's dynamism also means that the sandbanks are constantly shifting. This complexity makes it difficult to intervene effectively. The study shows what the possibilities are regarding aspects such as reducing the need to dredge and influencing the course of the river in a subtle way.

Royal HaskoningDHV carried out the assignment in collaboration with the Rebel Group and Arcadis. The consortium started the feasibility study in November 2014 and the final results were presented in January 2016. The consortium carried out the following activities:

- Review of the current river training works;
- Update of the River Training Master Plan developed by Royal Haskoning in 1988 and assessment of the technical and economic feasibility of the measures proposed in the Master Plan;
- Identification of the optimal river training works in two pilot areas through river modelling;
- Designing the river training works for the two pilot locations;
- Development of a plan for improved navigation aids.

The study's recommendations will be incorporated in the larger World Bank Project–AIRBM (Ayeyarwady Integrated River Basin Management) program—and particularly its Navigation Enhancement component, which is aimed at improving the navigability of the Ayeyarwady, with a budget of approximately 30 million.

