

# SHEET YANGON RIVER MAIN

YANGON RIVER MAINTENANCE DREDGING PROJECT MONKEY POINT, MYANMAR

PROJECT

#### INTRODUCTION

Located close to the city centre on the Yangon River, Yangon Port has been the main port to Myanmar since colonial times. Currently, the port has capacity for vessels of up to 15,000 –20,000 DWT and works are scheduled to increase the port's capacity for vessels up to 35,000 DWT.

Since the introduction of reforms in 2011, there has been strong growth in the Myanmar economy. As a result, imports have increased placing significantly higher demand on port capacity.

However, access to the port for deep draft vessels is constrained by two shallow areas, the outer bar near Elephant Point and the inner bar near Monkey Point, and by the river meanders. The channel through the inner bar is stable in location but local authorities carry out regular maintenance dredging using trailer suction hopper dredgers, particularly during low water levels between December and May. The authorities requested the assistance of

Boskalis in a period of excessive sedimentation

FEATURES	
Client	Myanmar Port Authority
Location	Yangon, Republic of the Union of Myanmar
Period	March 2016



- A Location map
- B TSHD Cornelis Zanen





# YANGON RIVER MAINTENANCE DREDGING PROJECT MONKEY POINT. MYANMAR

Boskalis executed urgent maintenance dredging works at Monkey Point, deploying the medium-size trailer suction hopper dredger (TSHD) Cornelis Zanen, and depositing the material at the designated area.

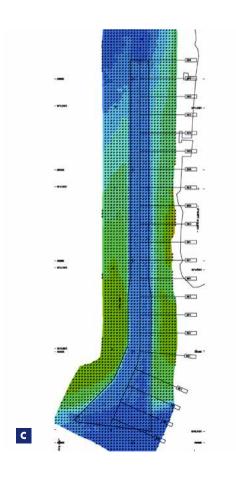
## **SCOPE OF WORK**

Boskalis mobilized from Indonesia the TSHD Cornelis Zanen with a hopper capacity of 8,600 m³. The channel was deepened to a minimum depth of 6 m CD over the full width of 100 m. In addition, the approach channel was widened to allow vessels more manoeuvring capabilities when entering the inner port.

#### **CHALLENGES**

#### TIGHT TIMELINE

Dredging operations started immediately on the arrival of Cornelis Zanen, leaving limited time for project preparation. Working in close cooperation with the Myanmar Port Authorities and working with local subcontractors and suppliers, the Boskalis project team finalized the bathymetric riverbed survey measurement campaign within several days of signing the contract.





### RIVER CONDITIONS

Navigation from the pilot station 32 km seaward of Elephant Point is generally on the flood tide, and to ensure sufficient depth, crossing both the inner bar and outer bar is timed for high tide. The average tidal range is about 6 m at spring tide and 2.5 m at neap tide. While waves in the Yangon River do not hinder maritime operations, the current velocity of 4 to 6 knots at spring tide has to be controlled. As the channel width of 100 m at Monkey Point is relatively limited, navigation and particularly the dredging operations demanded close attention.

# SAFETY AND COOPERATION WITH OTHER PARTIES

The Boskalis No Incident and No Accident (NINA) safety program was implemented and within the short time period available, all parties were informed and were fully compliant with the high safety standard throughout the project.

To minimize safety risks to cargo and fishing vessels, a security vessel was deployed on each side of the channel during the dredging operations. These vessels ensured timely communication with small craft about the dredging activities and unhindered access of cargo vessels to the inner port area.

#### **CONCLUSION**

Boskalis completed the dredging works in compliance with the contract requirements and in partnership with the Myanmar Port Authority. The works were completed within the budget and the required time frame without accident, incident or spill.

- C Channel Bathymetric Survey Measurements
- D Crew and survey vessel Stevedore3

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