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PRESENT SITUATION OF COASTAL STRUCTURES IN HORMOZGAN PROVINCE, IRAN

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Abstract

This paper describes a study conducted into the assessment of the coastal structures in the Hormozgan shoreline which is a part of the monitoring and modelling studies of Coastal Zone of Hormozgan Province to review past practices of breakwaters and to identify major defects in their design and construction and then, to give recommendation for the future design of coastal structures in the region.

The main types of the breakwater constructed in the area are rubble mound breakwater utilizing locally-sourced rock. Through the present study, the common problems prevailing throughout the region were identified. This paper outlines how these defects impacts on the stability and functionality of the breakwaters.

Introduction

As part of Monitoring and Modeling Studies of Coastal Zone of Hormozgan Province a number of ports and harbours in the region were visited [1]. Locations of the visited sites are shown in Fig. 1.

In the Hormozgan Province, breakwaters in situ are causing some problems on the operation of harbours, because of poor design and several signs of distress and construction limitations.



Fig. 1) A satellite image showing the visited developments (from Google Earth 2012).

Port lay-out

Inadequate layout of breakwaters and insufficient overlap of port breakwaters relative to the direction of wave propagation which causes excessive wave agitation inside the harbor are