

A methodology to prioritize investments to reduce risks in ports

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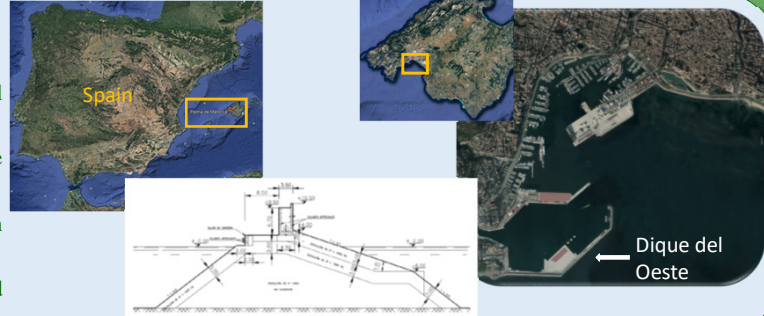
1. INTRODUCTION

Nowadays, many efforts are devoted to conservation and maintenance of coastal structures which are also subject to climate change.

These facts encourage the coastal engineering community towards the development of reliable risk management and decision-making tools.

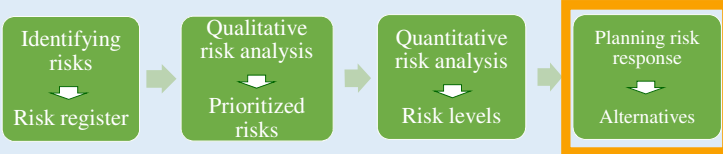
A key point in the decision process is how to prioritize investments when deciding about adaptation or mitigation alternatives.

A proposal for prioritizing based on risk levels has been developed and applied to a rubblemound breakwater located in Palma de Mallorca (Spain).

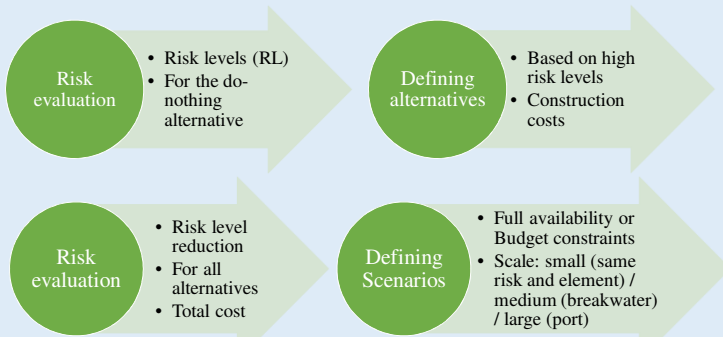


2. METHODOLOGY

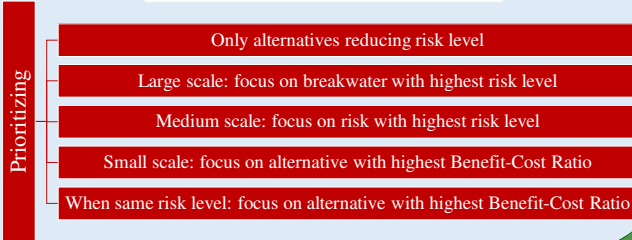
Risk management processes



Steps for prioritizing investments



$$\text{Benefit - Cost Ratio} = \frac{\Delta RL}{\text{Cost}}$$



3. RESULTS

Risk Level	Sliding	Overtopping	Extraction	Overtopping
Very high	0.64	0.8	0.064	0.2

Risk level	Range
Very high	>0.6
High	0.36-0.6
Medium	0.2-0.36
Low	0.05-0.2
Very low	0-0.05
Null	0



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