

**Abstracts of Papers****Engineering investigations in coastal development works**

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Natural forces and processes predominating in a coastal environment significantly influence development works within a coastal regime. In order to ensure the safety and stability of structures built in this zone, it becomes necessary for the engineer to understand these coastal processes in order to be able to estimate the forces acting on the structure.

In a coastal zone, the ground condition is closely related to the coastal processes and hydrodynamic forces influencing the sediment transport, deposition and erosion. A thorough understanding of the origin of our shorelines is essential to the proper execution of development works within the coastal zones. It is thus necessary for the engineer to understand the depositional history of the ground he intends to build on in order to assess the safety and stability of the structures. This knowledge is commonly obtained from executing a desk study followed by an effective investigation programme in the appropriate areas.

The primary objective of the desk study and the investigation programme is to gather information concerning the site conditions within the construction zone and in the surrounding areas with the aim of obtaining sufficient information to characterise the ground and understand the engineering behaviour of constructions on it. The information to be gathered shall be relevant to the needs of the project in relation to the development of the design and successful implementation of the construction works.