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Overview of the coastal zones and its management in Portugal

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Portugal is a country located in the southwest part of Europe, with territory at the western zone of Iberian Peninsula and archipelagos in North Atlantic. Its continental coast is bordered by the Atlantic Ocean along an estimated length of 987 km, being part of one of the most affected coastlines worldwide by the erosion phenomenon. Presentday shoreline evolution is mainly conditioned by the energetic wave climate, the presence of numerous manmade structures mostly implemented since 70's of XX century and the progressive weakening of the alluvial sources, nowadays responsible for the retention of approximately 80% of the sediments that could be potentially transported in natural conditions (GTL, 2014). From economic, cultural and environmental point of views, Portuguese coastal areas face multiple challenges and conflicts which demand a deep restructuration interfering with the coastal management policy, the functionality of the governmental services and the responses to the society/affected citizens. Any action affecting coastal areas should look for a balance between enhancement of the land use and preservation of the environmental values. This implies necessarily some qualitative and quantitative understanding of the coastal morphological processes, as a precondition for a successful coastal management project, so all the parties concerned can be in position to understand not only the past, but also how the present situation has developed and how to anticipate future evolution tendencies. The present paper gives a general overview of the recent morphological coastal development in Portugal, summarizes some past experiences on coastal protection and identifies potential problems and challenges in order to assess the influence of different cross-cutting issues on coastal evolution. Special focus is given to the legal status and policy on coastal monitoring, by analyzing the administration responsibilities concerning coastal management as well as the instruments and schedules for field data collection. The paper ends with a brief analysis of some of the future coastal protection measures that are part of a national coastal adaptation strategy proposed to fulfill a set of goals established until 2050. This strategy falls into a national program, initially established for a deep reflection about the coastal zones aiming the definition of a set of practical guidelines to reduce risks and promote the sustainable development of the littoral.