Editorial

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Welcome to the second issue in 2021 of the *Maritime Engineering* journal, where two articles on the topics of port suitability and swell monitoring have been featured respectively. Both the papers share the same keyword ‘observation’, in which the one focuses on the academic research aiming to deliver fundamental environment design basis for the developments of new marine infrastructures through in situ swell observation data, and the other one concentrates the practical application targeting to improve the operational efficiency of the existing port resources by adopting the business observation tool (BOT).

The first paper (Megías, 2021) studies the frequencies and features of the swells coming from the extratropical region of the southern hemisphere to the Canary Islands, through one-year on-site monitoring from the south coast of Tenerife. The existing scientific research on the south-western Atlantic swells to North Atlantic islands was shown somehow limited, where the oceanic swells arriving from the north-west had been well studied and documented. To fill the research gap and minimize the risk of according marine infrastructure design, systematic visual observations of waves approaching the south coast of the island of Tenerife have been conducted from April 2019 to March 2020, where the wave models and buoy records were compared. There were a total of six events recorded based on the strict premise. For example, the swell with the maximum significant height (1.3 m) was observed on 23rd October 2019 from the south-south-west direction (194°) at a peak period of 15.0 s. The one with the greatest peak period (17.6 s) was captured on 21st December 2019 from the south direction (186°) with a very low significant height (0.3 m). The paper eventually highlights the importance of considering swells for the development of new coastal infrastructures due to their long wave periods.

On the second paper, Santos Martín *et al.* (2021) present a detailed analysis on the sustainable development of the Spanish port system, through a graphic tool named BOT. To factually identify the present situation of Spanish port development and constructively establish potential scenarios of

the business for according promotion, the adopted BOT contained a total of 136 indicators from economic, social, environmental and institutional perspectives, which were evaluated by the panel of experts. For example, one indicator – the case of automation aimed to cut down the number of workers by up to 45%, provided 24 h works with largely reduced manual errors. The results show that only 3% of all the terminals worldwide were fully or partially automated and – in Spain, only 2 (Barcelona and Algeciras) out of 46 were semi-automated. In addition, there were only 27.5% of the average annual staff of each port authority receiving training courses. The analysis results where the level of port sustainability development was 60% through the 136 indicators showed certain gaps to suitable objective. To promote the sustainable developments of ports, by focusing on digitalization and decarbonization, the models based on integrating logistics, mobility and environmental dimensions have been proposed.

Finally, with increasingly broader *Maritime Engineering* coverage and growing submissions, we welcome several new members to the editorial panel, and I would like to thank those who have been consistently dedicated to serving the journal, especially during the world’s pandemic crisis. We regularly ask for fresh faces to join the editorial panel, would still welcome further additions, in particular from sustainability and marine renewable energy sectors. If you are interested or look for further information, please contact the Journal Editor, Craig Schaper (email: craig.schaper@icepublishing.com).

REFERENCES

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