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Editorial

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I recall attending sessions organised by Bob Earl and Sue Gubbay, in their Marine Conservation Society days, to discuss the pros and cons of new legislation to protect the marine environment – and this was at least 20 years ago! After many more years of debate, the UK has now introduced a major piece of legislation aimed at doing just that. This brings together a number of roles under the umbrella of the Marine Management Organisation (MMO), as the government's principal regulator, as well as its delivery body, for English territorial waters and UK offshore marine areas (for those matters that are not devolved). The role of the MMO is explained more fully by James Cross in the first of the briefings in this issue (Cross, 2010). However, the position for the UK as a whole is more complex and still evolving. In Wales, the Welsh Assembly government will take on the role of the MMO and fisheries management for Welsh waters. Scotland has already promoted its own act, the Marine (Scotland) Act 2010 (Scottish Government, 2010), to address devolved matters not covered in the UK Marine and Coastal Access Act 2009 (2009) and in Northern Ireland the Northern Ireland Marine Bill is to become an Act in 2012. In Scotland, Marine Scotland is the lead marine management organisation, bringing together the functions of the Fisheries Research Services (Marine Scotland Science), the Scottish Fisheries Protection Agency (Marine Scotland Compliance) and the Scottish Government Marine Directorate.

Our second briefing in this issue is a short technical note that looks at a low-cost solution to protecting eroding cliffed shores (Hawes, 2010). The erosion of the coast around Dunwich on the east coast of the UK has a long history, and most of the village dating back to the 13th century has now been lost to the sea. The trial reported is for a low-cost soft defence that slows but does not stop coastal erosion. After an extensive planning period, the scheme was installed in 2007 and Andrew Hawes reports on performance over the last 3 years.

Before introducing the papers in this issue, I would like to take a moment to congratulate the authors of two papers that appeared in last year's *Maritime Engineering*. This year a Telford Premium prize was awarded to Bob Kirby and Christian Retière for their paper comparing barrages on the Severn and Rance estuaries (Kirby and Retière, 2009) and David Prandle was the winner of the Halcrow prize with his paper on tidal barrage schemes (Prandle, 2009).

In my editorial for the September issue, I noted the importance of practical papers to record how schemes are actually implemented

and impart some of the experience gained by those involved. It is therefore great to have an issue dedicated to the construction of three very major schemes from around the world. The first is in South Korea, where the enclosure of the Saemangeum coastal waters with a 33 km dike connecting a number of islands demonstrates how low-cost techniques can be used to good effect, even when the hydraulic conditions are highly demanding (Ha *et al.*, 2010). A sort of inverse problem is addressed by Close *et al.* (2010), who present the works associated with the design and construction of a series of islands and connecting causeway off the eastern province of Saudi Arabia in the Arabian Gulf, without closing off the area behind. The coastal shallows provide a habitat for a number of coral reefs and both the placement of materials and dredging had to be managed to avoid any impacts on the reefs. The third paper, by García Navarro (2010), examines the complex problem of maintaining port access when having to handle and dispose of contaminated sediments. For the port of Huelva in Spain, the solution adopted was to construct a series of confined disposal facilities along the sides of the main channel. The paper details the construction from pilot scheme through to the construction of new wharfs. Taken together, these papers provide a remarkable insight into what can be achieved and how much we can adapt and alter our environment. In all three schemes environmental issues have been a dominant concern. Indeed, the Saemangeum scheme was delayed for 3 years due to legal proceedings related to environmental issues. As we move forward this is likely to become an ever greater issue, as we seek to live within our planetary boundaries (ICE, 2010; Rockström *et al.* 2009).

On a highly seasonal note, and providing you the opportunity to give someone a real surprise for Christmas, we have a number of book reviews that would make excellent reading for the New Year (but perhaps not over the festive season!). These include two books on hydraulic modelling, one by Chau entitled *Modelling for coastal hydraulics and engineering* and the other by Novak *et al.* entitled *Hydraulic modelling – an introduction: principles, methods and applications*. Continuing the hydraulic theme, we have a review of the book *Contemporary issues in estuarine physics* which is edited by Valle-Levison and provides a topical review of some of the latest thinking on estuarine dynamics. Finally, and with a completely different thrust, John Carlton provides an in-depth guide to the subject of his book *Marine propellers and propulsion*.

We conclude this issue with an obituary for Phil Besley who died earlier this year. I was only a colleague of Phil's for a short while

and his calm and assured approach always engendered confidence, which, I am sure, is why he was so well respected by all those who had the opportunity to work with him over the years. He will be sadly missed.

REFERENCES

- Close D, al Dakhil O, Brett D and Albarillo R (2010) Manifa field causeway, Saudi Arabia. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 163(4): 157–169.
- Cross J (2010) UK Marine Management Organisation. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 163(4): 141–142.
- García Navarro P (2010) Management of dredged material in the port of Huelva, Spain. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 163(4): 171–177.
- Ha JW, Eo D, Kim KO and Choi BH (2010) Final closure of the Saemangeum tidal dike, South Korea. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 163(3): 147–156.
- Hawes A (2010) Dunwich coastal protection demonstration project. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 163(4): 143–146.
- ICE (Institution of Civil Engineers) (2010) *Engineering to Live Within Planetary Boundaries: Civil Engineering Research Needs*. ICE, London. See <http://www.ice.org.uk/Information-resources/Document-Library/Engineering-to-live-within-planetary-boundaries> (accessed 01/11/2010).
- Kirby R and Retière C (2009) Comparing environmental effects of Rance and Severn barrages. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 162(1): 11–26.
- Marine and Coastal Access Act 2009 (2009) *Elizabeth II: Chapter 23*. Her Majesty's Stationery Office, London.
- Prandle D (2009) Design of tidal barrage power schemes. *Proceedings of the Institution of Civil Engineers – Maritime Engineering* 162(4): 147–153.
- Rockström J, Steffen W, Noone K *et al.* (2009) A safe operating space for humanity. *Nature* 461(7263): 472–475.
- Scottish Government (2010) Marine (Scotland) Act 2010. The Stationery Office, Edinburgh, 2010 asp 5.