

Annex B: Profiles of PUB's Coastal Protection Expert Panel

Professor Chan Eng Soon (*chair*)



Prof Chan is currently Chief Executive Officer of the Technology Centre for Offshore and Marine, Singapore (TCOMS), Professor at the National University of Singapore's (NUS) Faculty of Engineering and chairman of the Scientific Advisory Panel for the National Sea Level Programme, under the Centre for Climate Research Singapore (CCRS).

His research interests lie in marine processes, including marine hydrodynamics, wave-structure interactions, sediment transport and coastal protection. He has held several key appointments in NUS, including being Vice Provost (Special Duties) in the Provost Office, Keppel Chair Professor at the Department of Civil and Environmental Engineering, Dean of Engineering, Director of the Tropical Marine Science Institute and Executive Director of the Centre for Offshore Research and Engineering.

Professor Marcel J.F. Stive



Prof Stive is currently Professor Emeritus of Coastal Engineering in Delft University of Technology in the Netherlands, with over 40 years of worldwide experience in research and consultancy projects in the fields of hydraulic engineering, coastal morphodynamics, coastal bio-geomorphology and coastal and estuarine management.

He was a member of the Delta Committee for the Netherlands and Scientific Advisory Council of Deltares, and a contributor to the Intergovernmental Panel for Climate Change (IPCC) on Coastal Zone Vulnerability. He has advised national governments in Belgium, Monaco, China, Vietnam and Myanmar on coastal and littoral matters.

He is also the inventor of the "Sand Engine", an innovative and cost-effective solution of creating a sand peninsula which protects the Netherlands' western coastline.

Professor Robert Nicholls



Prof Nicholls is currently Director of the Tyndall Centre for Climate Change Research, based at the University of East Anglia in Norwich, UK. He was previously Professor of Coastal Engineering at the University of Southampton. Much of his work has focused on sea-level rise and climate change, as well as analysing long-term coastal engineering problems and their solutions.

He was a lead author to five reports of the Intergovernmental Panel for Climate Change (IPCC) assessment process, a review editor to the fifth IPCC assessment and a contributing author to the recent IPCC Special Report on the Oceans and Cryosphere (2019). He has advised national governments in the UK, Netherlands, Bangladesh and the Maldives on climate change and coastal issues, and was involved in the Building and Construction Authority's Coastal

Adaptation Study.

Professor Robert A. Dalrymple



Prof Dalrymple is currently Willard & Lillian Hackerman Professor Emeritus of Civil Engineering in John Hopkins University, as well as Distinguished Professor of Coastal Engineering in Northwestern University, both in the US. A member of the US National Academy of Engineering, his research has been in the field of coastal engineering, including water waves and their impact on shorelines, structures, the ocean bottom and natural hazards such as rip currents and tsunamis.

He was a long-serving chair of the American Society of Civil Engineers' Coastal Engineering Research Council until 2014, and also previously chaired the Water Institute of the Gulf Science and Engineering Advisory Council and the National Research Committee on Sea Level Rise in California.

Professor David Balmforth



Prof Balmforth is currently Visiting Professor at Imperial College London, where he specialises in climate change adaptation, urban flood risk management and urban pollution control.

He was previously Executive Technical Director of global water engineering firm MWH (now part of international engineering company Stantec) and also served a period as President of the UK-based Institution of Civil Engineers. He has advised governments and municipalities on flood risk management in the UK, United States and New Zealand, and was on PUB's Expert Panel for Drainage Design and Flood Protection Measures from 2011 to 2017.