





2ND PIANC ASIA PACIFIC CONFERENCE LEADERS AND PROFESSIONALS COMING TOGETHER 4 - 7 SEPTEMBER 2022 MELBOURNE, AUSTRALIA

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# **Conference Program**

(subject to change)

## Sunday 4th September 2022

5.30pm – Registration Desk Open

**7.30pm** Ballroom Foyer, Pullman Melbourne on the Park

5.30pm – Welcome Reception

**7.30pm** Trade Exhibition Area, Ballroom Foyer, Pullman Melbourne on the Park

Includes drinks and canapés.

Sponsored by

Port of Melbourne



## Monday 5<sup>th</sup> September 2022

8.00am	Conference	Registration
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Ballroom Foyer, Pullman Melbourne on the Park

9.00am – 10.10am		Session 1 – Opening Plenary  Ballroom 3	
9.00am – 9.05am	Welcome to Country		

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9.30am	The Hon. Melissa Horne MP, Victorian Minister for Ports and Freight

9.30am – Keynote Address

**Conference Opening** 

9.05am -

10.10am Nick Ellul, General Manager Maritime / Harbour Master, Port of Geelong

10.10am – Session 2 – Update of PIANC Commission Activities Internationally and in Australia & New 11.00am Zealand (ANZ) Ballroom 3

PIANC Maritime Commission (MarCom) **Scott Keane**, *Cardno now Stantec* 

PIANC Co-operation Commission (CoCom) **Ron Cox,** Water Research Laboratory UNSW

PIANC Recreational Navigation Commission (RecCom)

Greg Fisk, BMT

PIANC Environmental Commission (EnviCom)

Marika Calfas, NSW Ports

11.00am – 11.30am Morning Tea

<b>Session 3</b> 11.30am – 12.45pm	3A: Ports and Marine Facilities - Design and Construction Sponsored by	3B: Dredging and Reclamation	3C: Port Operations and Management
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	Christopher To	Stuart Bettington	Jordan Butler
11.30am – 11.55am	Centerm Container Terminal Improvements: Meeting Demand for Increased Container Throughput <b>Michael Coull</b> WSP Australia Pty Ltd	Beneficial Reuse of Dredged Material for Beach Nourishment in WA <b>Karim Ghaly</b> <i>BMT</i>	How Australia's Port Sector is Ushering the Industry into the Digital Age Sasha-Lee Pretorius DHI
	Questions	Questions	Questions
11.55am – 12.20pm	Granite Island Causeway (Bridge) Replacement <b>David McKay</b> <i>WGA</i>	Garden Island Contaminated Dredging & Disposal Case Study Justin Sayer Birdon	Ship-in-channel intelligence using rapid-deploy inertial devices Jack Bucher OMC International
	Questions	Questions	Questions
12.20pm – 12.45pm	Swanson Dock East Berths Remediation and Strengthening Stephan Leppert McConnell Dowell	Rock Dredging Simon Burgmans In2Dredging Pty Ltd	The Future of Optimised Underwater Asset Management Matt Curtain Roving Intelligence Pty Ltd
	Questions	Questions	Questions

12.45pm – 1.50pm Lunch

<b>Session 4</b> 1.50pm – 3.30pm	4A: Ports and Marine Facilities - Design and Construction Sponsored by	4B: Climate Change Impacts and Adaptation	4C: Sustainability and Stakeholder Engagement Sponsored by NSWPorts
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	David Dack	Claire Treeby	Peter Engelen
1.50pm – 2.15pm	Ōpōtiki Harbour Development Project – Construction Monitoring in a Digital Age Tom Shand Tonkin + Taylor	Investigating Sea Level Rise from the AHD to the AR6 Baseline Period Julian O'Grady CSIRO	Role of Stakeholders' Expectations and Organisational Culture in Sustainable Port Operation Talal Alharbi Curtin University
	Questions	Questions	Questions
2.15pm – 2.40pm	Darwin Shiplift Project: Approaches to Port Planning Challenges Richard Mocke WGA	Waterborne Transport : A 2021 Update of Climate Change Drivers and Impacts Ron Cox Water Research Laboratory UNSW	Sustainability Aspects of Brotherson Dock Life Extension Project Carsten Varming NSW Ports
	Questions	Questions	Questions
2.40pm – 3.05pm	Design and Construction of Breakwaters on Soft Seabeds – MarCom WG205 Update Stuart Bettington Royal HaskoningDHV	Climate Change Adaptation Planning for Ports and Inland Waterways - WG 178 <b>Tanja Mackenzie</b> <i>Rhelm</i>	Ship 'Rumble': Rio Class Low Frequency Noise Mitigation Rebecca McGrouther Port Otago Limited & Craig Fitzgerald Marshall Day Acoustics
	Questions	Questions	Questions

3.05pm – 3.30pm	Guidance for Ports in Small Island Countries - MarCom WG240 Update Justin Cross Royal HaskoningDHV	Determinants to Decarbonize Ports During Planning Process Shivaprakash Rao BMT Singapore	The Importance of Materiality in Strategy  Jackie Spiteri  Sustainable ESG
	Questions	Questions	Questions

3.30pm – 4.00pm Afternoon Tea

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<b>Session 5</b> 4.00pm – 5.40pm	5A: Port Operations and Management Sponsored by	5B: Navigation	5C: Climate Change Impacts and Adaptation Sponsored by PORTS VICTORIA
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	Luke Campbell	Jack Bucher	Tanja Mackenzie
4.00pm – 4.25pm	Mooring Line Barriers – Better Understanding the Risks we're Mitigating <b>Nicholas Deussen</b> <i>WGA</i>	What Else Can AIS Data Provide? <b>Zhen Kok</b> <i>AMC Search</i>	Climate Change Impacts and Adaptation Measures for Napier City, New Zealand <b>Rehan Shaikh</b> Napier City Council
	Questions	Questions	Questions
4.25pm – 4.50pm	Breaking Point: Understanding the Dynamics of Parted Mooring Lines and Protection Barriers  Jordan Butler  WGA	Using PIANC Guidelines to Develop an Operating Tool for Planning Ship Manoeuvres Daniel Bruce HR Wallingford	Coastal Hazard Management at Fremantle Ports Joel Bonsel Fremantle Ports
	Questions	Questions	Questions
4.50pm – 5.15pm	Operationally Forecasting Required Tug Resources for Vessel Turning Jacob Suhr Seaport OPX	Managing safe navigation and asset protection in areas exposed to strong propeller and thruster flows  Andrew Bradford  Baird Australia	Climate Change Resilience – Implementing Practical Approaches for Ports and Harbours Greg Fisk BMT
	Questions	Questions	Questions
5.15pm – 5.40pm	Addressing Mooring Forces and Snap-back Hazards Sam Mazaheri Dalrymple Bay Coal Terminal	Update of WG171 - Ship handling Simulation Dedicated to Channel and Harbour Design <b>Neil Lawson</b> Neil Lawson and Associates Pty Ltd	Navigation risk impacts from offshore wind developments: insights from large USA projects  Sean Garber  Baird Australia
	Questions		Questions

5.40pm Close of Day One

6.30pm –

Young Professionals Networking Function (all welcome)

8.30pm

Imperial Hotel Bourke Street Includes drinks and canapés.

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# Tuesday 6<sup>th</sup> September 2022

#### 8.30am

## **Conference Registration**

Ballroom Foyer, Pullman Melbourne on the Park

 9.00am –
 Session 6 – Plenary

 10.10am
 Ballroom 3

9.00am – Opening Remarks

9.15am PIANC LOC and ANZ Chairs

9.15am – Platinum Sponsor Addresses

9.30am

9.30am – Keynote Address

10.10am A Blue Future: The Race to Create Natural Capital Markets and a Blue Economy

Will Glamore, Past Chair, PIANC ANZ

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<b>Session 7</b> 10.10am – 11.00am	7A: Ports and Marine Facilities – Design and Construction	7B: Coastal Processes and Risk Implications	7C: Working with Nature, Environment and Ecosystem Services
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	Paul Constance	David Aubourg	Nicola Stokes
10.10am – 10.35am	Management and Refurbishment of Heritage Buildings - C Shed <b>Colin Hedderwick</b> <i>Fremantle Ports</i>	Apollo Bay, Victoria, Wave Climate Study <b>James Mason</b> Cardno now Stantec	Manning River Entrance Project: Preliminary Environmental Investigations for a Permanently Open Entrance Tanja Mackenzie Rhelm
	Questions	Questions	Questions
10.35am – 11.00am	Design of the Eden Wave Attenuator <b>Ben Morgan</b> Advisian Pty Ltd	Measurement and Modelling of Seiche Phenomena in NSW Harbours Indra Jayewardene Manly Hydraulics Laboratory	NO PRESENTATION
	Questions	Questions	Questions

## 11.00am – 11.30am Morning Tea

<b>Session 8</b> 11.30am – 12.45pm	8A: Ports and Marine Facilities - Design and Construction	8B: Port Planning  Sponsored by	8C: Working with Nature, Environment and Ecosystem Services
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	Sam Mazaheri	Michael Coull	Greg Fisk
11.30am – 11.55am	Appropriate Test Data & Durability Design of Concrete Marine Structures Frank Papworth BCRC	Green Hydrogen Port Site Selection <b>David Aubourg</b> Advisian Pty Ltd	Beneficial Use for Sustainable Waterborne Transport Infrastructure Projects Robert Nave Port of Brisbane Pty Ltd
	Questions	Questions	Questions

11.55am – 12.20pm	Sheet Pile Wall Protection with Denso SeaShield™ 2020SP <b>David Edelman</b> <i>Edelman Projects Pty Ltd</i>	Compressed Hydrogen: An Alternative Approach to Shipping Hydrogen Christopher To WSP Australia Pty Ltd	Engineered Fringing Reefs: Engineering with Nature Solutions for Coastal Erosion Control Matthew Allen Subcon
	Questions	Questions	Questions
12.20pm – 12.45pm	Evaluating the Impact of Hydrogel Technology on Concrete Permeability <b>Douglas Hamlin</b> <i>Markham</i>	Revision to PIANC WG184 – Design Principles for Dry Bulk Marine Terminals <b>Grace Go</b> Aspec Engineering	Effects of Shading on Health of Two Branching Corals in Queensland, Australia Ralph Alquezar Vision Environment
	Questions	Questions	Questions
12.45pm – 1.50pm		Lunch	
<b>Session 9</b> 1.50pm – 3.30pm	9A: Ports and Marine Facilities - Design and Construction Sponsored by SHIBATAFENDERTEAM  ▶ on the safe side	9B: Port Operations and Management Sponsored by NSW Ports	9C: Working with Nature, Environment and Ecosystem Services
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	Laurence Benn	Carsten Varming	Jackie Spiteri
1.50pm – 2.15pm	How Ports Benefit from a Holistic Approach to Fender System Design <b>Thore Kollmorgen</b> ShibataFenderTeam	Expansion of Operability Assessment Criteria in Bulk Carrier Transhipment Operations Sam Dickson DHI	Implications of Invasive Alien Species for Waterborne Transport Infrastructure: Envicom WG218 Update Nicola Stokes North Queensland Bulk Ports Corporation
	Questions	Questions	Questions
2.15pm – 2.40pm	Updates of PIANC Working Group 211: Fender Guidelines <b>Harvinder Singh</b> <i>Jacobs</i>	Monitoring and Managing Aids to Navigation in the Digital World <b>Malcolm Nicholson</b> Sealite	EnviCom WG227: Decision- Making for Environmental Windows & Seasonal Restrictions for Marine Works <b>David Petch</b> <i>GHD</i>
	Questions	Questions	Questions
2.40pm – 3.05pm	Taking the Guesswork out of Berthing Energy Assessment <b>Arne Nilsen</b> Aurecon Australasia Pty Ltd	Monitoring and Analysis of Wake-Induced Vessel Motions: An Innovative Case-Study - Williamstown, Melbourne <b>Daniel Machado</b> BMT	Approaches to foreshore management using adaptive nature-based solutions and living foreshores  Nick Lewis  Royal HaskoningDHV
	Questions	Questions	Questions
3.05pm – 3.30pm	Assessment of Larger Ships Berthing at a Salt Export Terminal <b>Ben Spalding</b> <i>HR Wallingford</i>	Introducing Key Indicators for Structural Integrity Risk Analysis of Port/Maritime Assets Sam Mazaheri Dalrymple Bay Coal Terminal	Laboratory Settlement Testing to determine Settling Characteristics of Fine Crushed Rock Rick Plain Royal HaskoningDHV
	Questions	Questions	Questions
3.30pm – 4.00pm		Afternoon Tea	

<b>Session 10</b> 4.00pm – 5.15pm	10A: Pacific Island Ports	10B: Port Operations and Management Sponsored by PORTS VICTORIA	10C: Ports Design and Planning  Sponsored by  SHIBATAFENDERTEAM  ▶ on the safe side
Location	Ballroom 3	Ballroom 2	Ballroom 1
Chair	Tom Shand	Colin Hedderwick	Thore Kollmorgen
4.00pm – 4.25pm	Beyond the Roadmap: Approaching Environmental Sustainability Challenges in Pacific Island Ports Edward Rowe Arup	Achieving Australia's Deepest Ever Container Vessels Brendan Curtis OMC International	PIANC MarCom WG 194 – A Framework for Early Contractor Involvement David Kinlan Kinlan Consulting
	Questions	Questions	Questions
4.25pm – 4.50pm	Good Practice in Environmental Impact Assessment for Coastal Engineering in the Pacific Andrew Fielding Royal HaskoningDHV	Planning for Automation of Container Terminals Carsten Varming NSW Ports	MarCom WG164 Update – Upgrade of Port Berths by Increasing Dredged Depth Michael Coull WSP Australia Pty Ltd
	Questions	Questions	Questions
4.50pm – 5.15pm	Connectivity Assessment for the Pacific Region based on Work for World Bank Richard Hill GHD	Intermodal Terminal Automation – Opportunities & Challenges <b>Mahim Khanna</b> <i>TBA B V</i>	Update on WG 224 Planning of Fishing Ports <b>Meysam Rad</b>
	Questions	Questions	Questions

5.15pm Close of Day Two

7.00pm – 11.00pm **Conference Dinner & Awards** 

Ballroom, Pullman Melbourne on the Park

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# Wednesday 7<sup>th</sup> September 2022

#### **Technical Tours**

Buses depart from, and return to, street adjacent to Pullman Melbourne on the Park

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## **Technical Tour 1: Port Melbourne Boat Tour**

Departs: 9.15am Returns 12.45pm (approx.). Morning tea included.

#### **Technical Tour 2: Port Infrastructure Technical Tour**

Departs 9.00am, Returns 2.30pm (approx.). Lunch included.