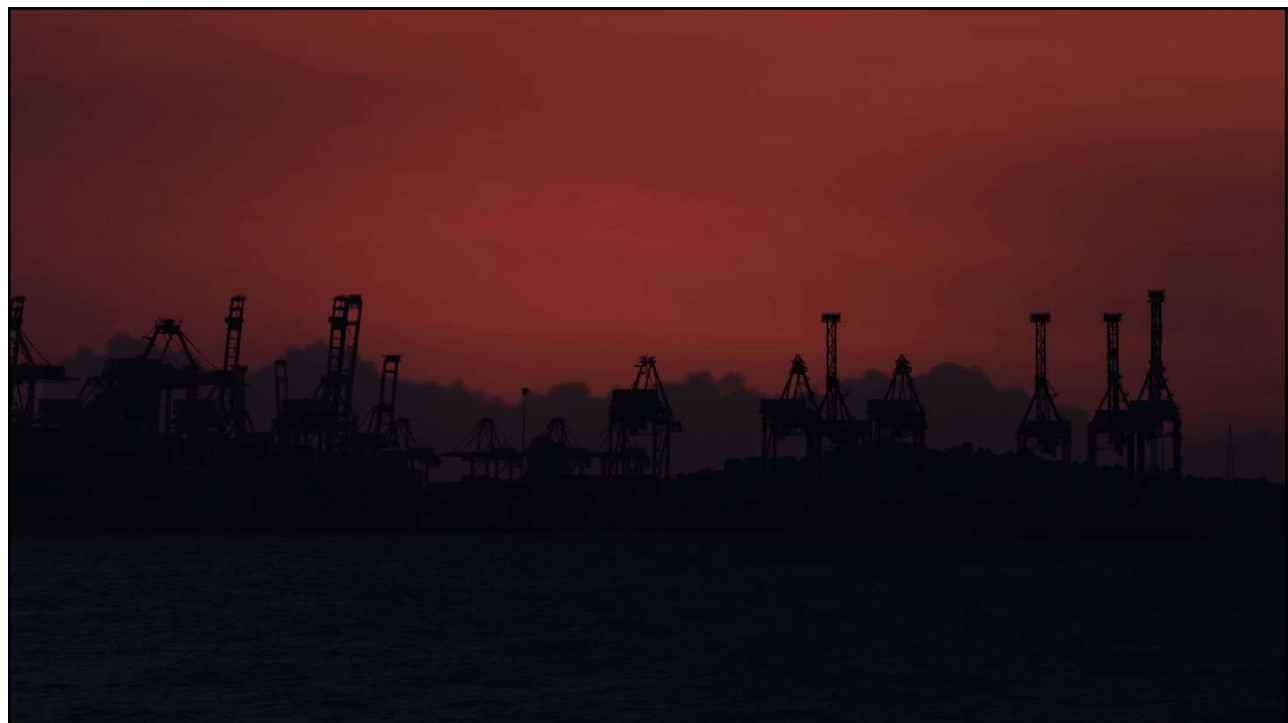




# How the Australian Port Sector is ushering ports across the world into a new digital age

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Marine Engineer, DHI

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# Australian Innovation Leading the Sector



**PORT of BRISBANE**  
*Here for the future*

Port of Melbourne



**SOUTHERN PORTS AUTHORITY**

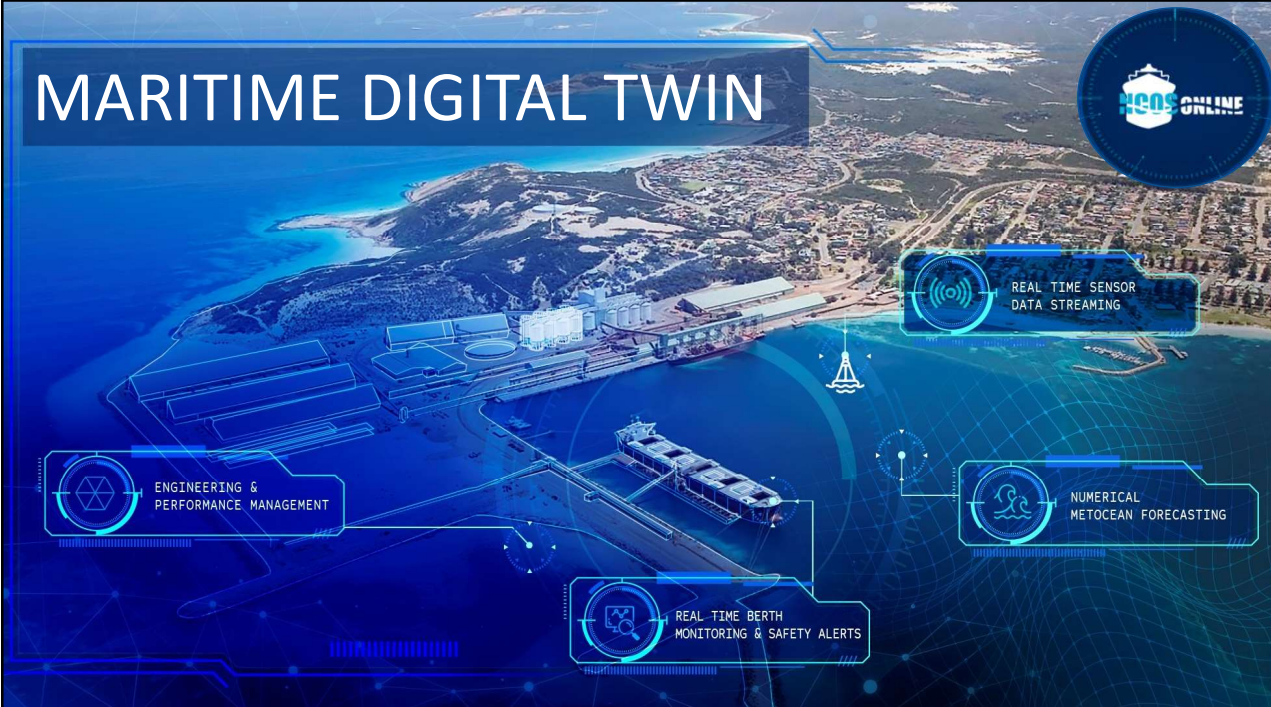


**Flinders Ports**



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# MARITIME DIGITAL TWIN



**HCOS ONLINE**

REAL TIME SENSOR DATA STREAMING

ENGINEERING & PERFORMANCE MANAGEMENT

NUMERICAL METEOCEAN FORECASTING

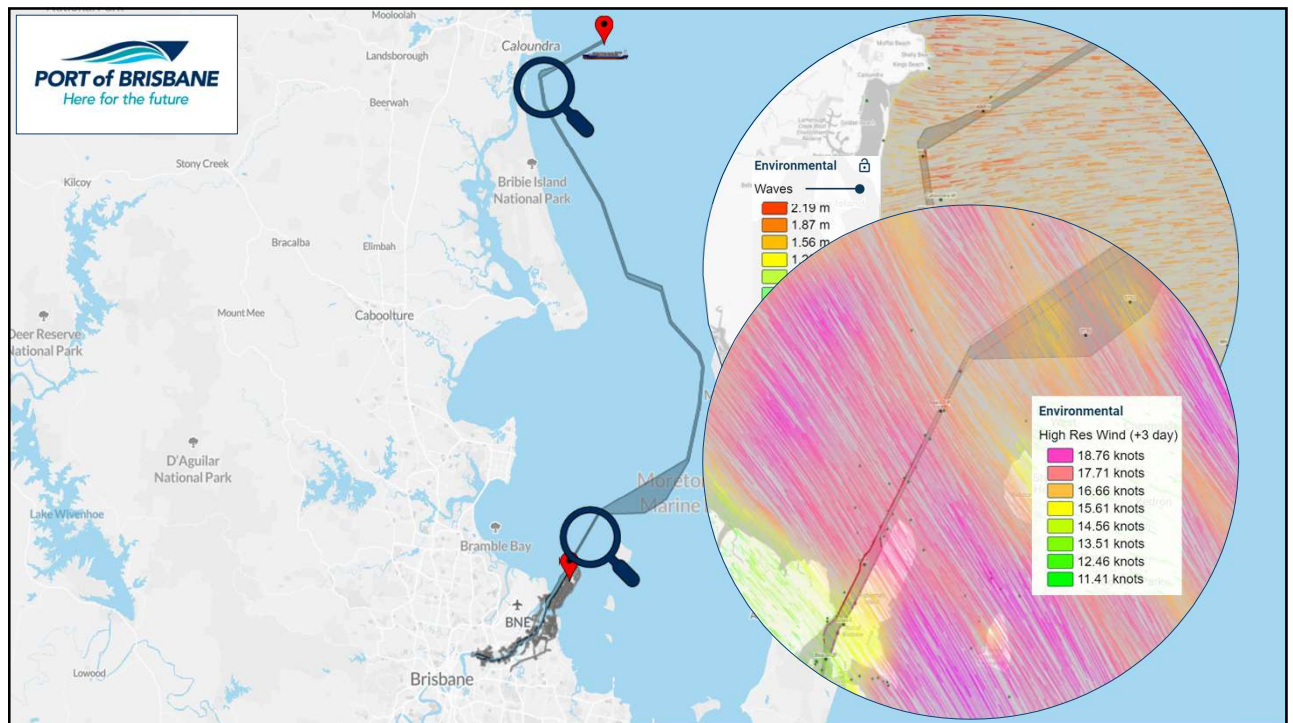
REAL TIME BERTH MONITORING & SAFETY ALERTS

4





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## Safe Berth Management Module

Identifies optimal mooring arrangement

Forecasts expected loads on mooring infrastructure

Allows port to:

Evaluate multiple arrangements

Optimise berth utilization

Reduce risk of mooring failure

News

### Port of Melbourne welcomes largest container capacity vessel call

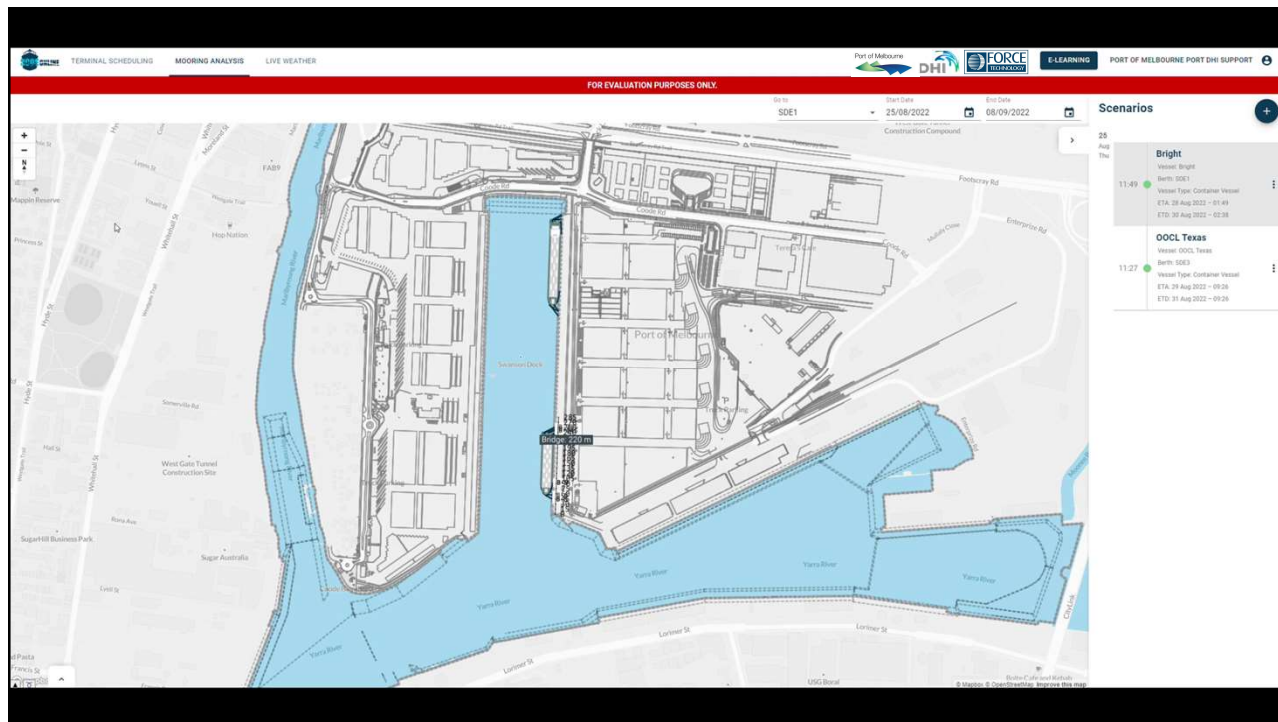
June 26, 2020  
By Jack Donnelly

TWITTER FACEBOOK LINKEDIN EMAIL

The Port of Melbourne (PoM) has welcomed the CMA CGM Ural, the largest container ship by maximum capacity call at the port.

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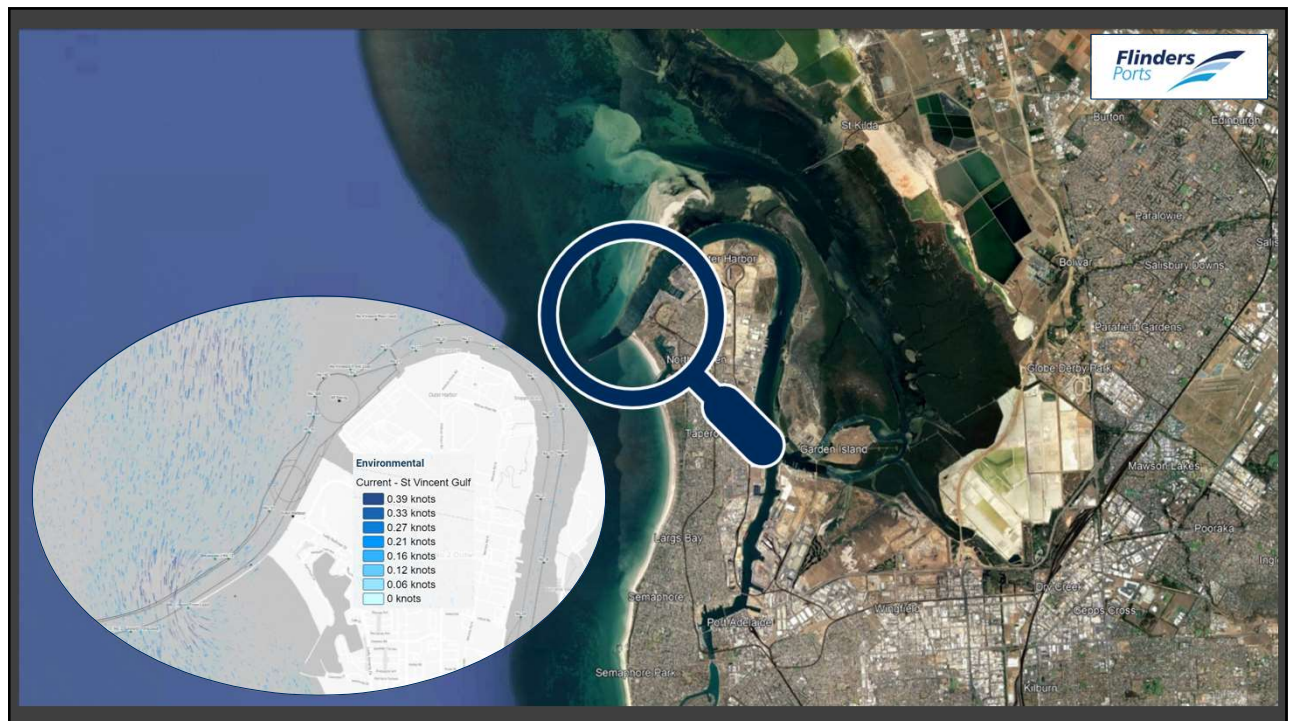
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## Safe Swinging and Towing Optimisation Module



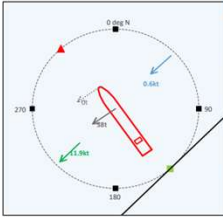


NCOS ONLINE Towing Support  
Vessel - CMA CGM Ural  
Towing Planning Forecast  
Issued 10:39 26 Aug 2022



Ship Specification		Transit Summary	
Class	Container Vessel	Transit Start Time	18:20 28 Aug 2022
LDA	300m	Swing Start Time	19:40 28 Aug 2022
Beam	40m	Start Location	PBG A
Draft	10m	End Location	#5 Swing Basin
DWT	83293t	Swing To	Port
Displacement	87150t	Swing Basin Wind (From)	11.9kt, 45 deg N
Loading %	80%	Swing Basin Current (To)	0.6kt, 227 deg N
		Swing Basin Tide	1.6mCD

Towing Support		Towing Support	
Max Tug Bollard Pull (Total)	58t	Swing Net UKC	5.6m, 56.1%T
Heading At Max. Bollard Pull	325 deg N	Wind & Current Drag Force	58t
Recommended Min. # Tugs	2(70 70 1 B.P.)	Wind & Current Yaw Moment	0t



Heading	Maximum Tug Bollard Pull (t)
NE	26
N	52
NW	58
W	46
SW	31

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**SOUTHERN PORTS AUTHORITY**



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*Here for the future*

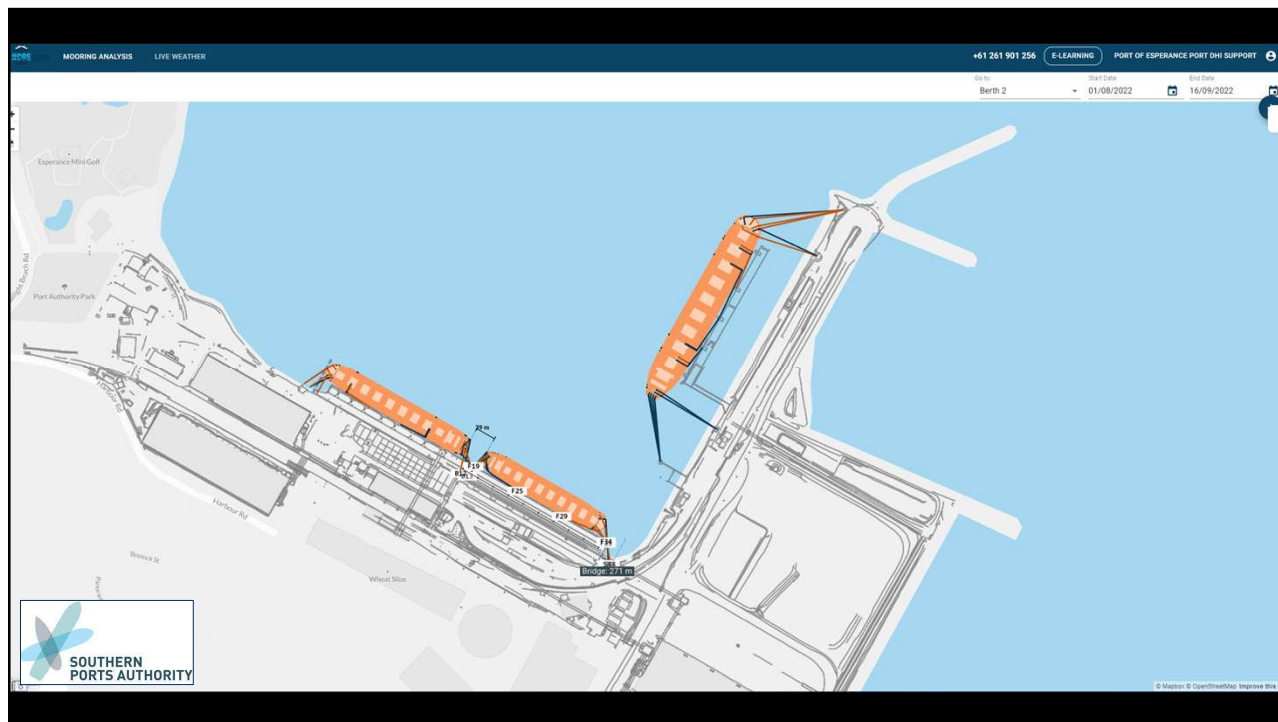


Port of Melbourne



**Flinders Ports**

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The Australian Port sector has come together to co-develop pieces of a digital twin technology that has ushered ports around the globe into a new digital age

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THANK YOU

