

# ICT Solutions and Digitalisation in Ports and Shipping

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The aim of this work is to examine the application of ICT solutions and digitalisation to the movement and clearance of freight at seaports globally. It provides conceptual clarity on the applicability of the different technologies and systems used for this purpose, and the relevance of such projects for different types of ports, from a trade facilitation perspective.

## TOPICS COVERED INCLUDE

- The global trade facilitation regulatory framework and the role of ICT
- Maritime ports and cybersecurity; e-navigation and shore-based monitoring systems
- Maritime transportation along the Northern Sea Route
- Smart shipping beyond e-navigation
- Maritime communications; emerging radio communication technologies in the maritime domain
- A data-driven methodology for maritime patterns of life discovery
- Real-time information with its technology; digital supply chain and port information modelling (PIM)
- ICT innovation in port-hinterland transport services
- Decarbonisation technologies in shipping and the question of transition fuels
- The advent of shore-based navigation: from vessel traffic services (VTS) to e-navigation maritime service portfolio (MSP).

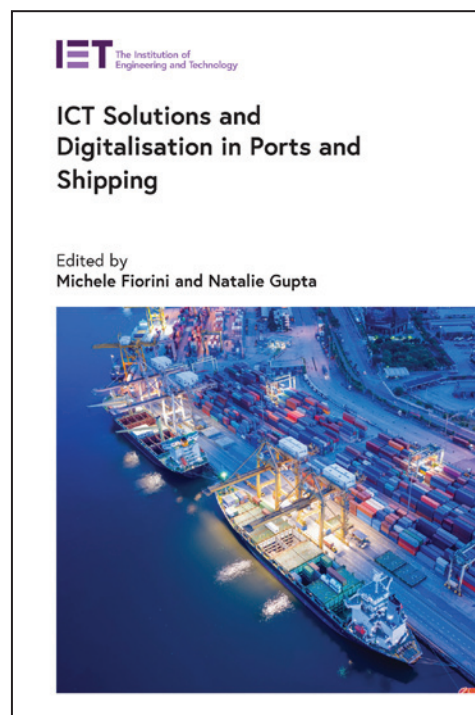
## READERSHIP

The book is a valuable reference for anyone involved in port logistics in a managerial or operational capacity, and to port authorities.

## EDITOR INFORMATION

**Michele Fiorini**, MBA, Ph.D., CEng, FIET acts as a principal in large international projects and global organisations where he leads (or is a member of) cross-cultural teams providing guidance, problem-solving attitude and engineering management as well as educational mentoring.

**Natalie Gupta** is an independent consultant focusing on ports and trade facilitation. She works through her own consultancy Port Processes Ltd and is the Chair of Independent Port Consultants (IPC), a network of port consultants working internationally.



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