

The International Maritime Transport and
Logistics Conference “Marlog 10”

Arab Academy
for Science Technology & Maritime Transport



Digitalization

in Ports & Maritime Industry

Recommendations



The International Maritime Transport and Logistics Conference MARLOG 10 concludes its sessions with 12 culminated recommendations, all of which work in the favour of bettering port terminal performance through digitalisation and integration of novel technologies. Those recommendations are stated as follows:

1

Stressing the necessity of establishing a strategic plan to advance and develop information technology infra-structures within ports. This is to be done with the aim of allowing for the integration of advanced technologies and digital platforms in ports.

2

Widely implementing the usage of digital technologies in ports to support and facilitate container traffic and the influx of goods. A strategic plan is to be set in place to regulate a ports development into a smart port. This shall, consequently, affect the development of the logistic aspect in ports.

3

Implementing a digital connection in ports using cloud computing technologies and Big Data to facilitate exchanging information between shipping lines, ports and transport service providers that support supply chains and global trade.



4

Using Internet of Things IoT technologies in ports and container terminals, as well as, automating port operations to offer services tip tier international services. With regards to performance and maritime safety and security with the aim of reinforcing the competitive streak in all ports and container terminals.

5

Advancing rapidly into utilising Block Chain technologies and the implementation of smart contracts and advanced cargo information systems to ensure security, transparency, and timely transport procedures.

6

Implementing cyber security procedures in dealing with cyber threats that endanger digitalised port systems, while minding privacy and confidentiality in ports.



7

Focusing on training and qualifying port staff in dealing with the newly digitalised systems and further utilising the simulation systems in training. Furthermore, parties are expected to opt for a hybrid training system that combines both online and face-to-face attendance and participation.

8

Supporting the role of seaports as a full integrative hub that provides all ship-related services and in-port container/goods support, whether within the port or in nearby areas. This is to be done with the goal of lowering the overall costs and expenses, increasing the quality of the offered services, and supporting the global trade network.

9

Efficiently planning the infrastructure through linking ports, railways, roads, waterways, with investment zones as part of the integrated overall vision.



10

The necessity of having port authorities develop strategic plans that limit the adverse environmental effects of ports, in compliance with the definition of green ports that reinforce the concept of sustainable development in ports.

11

The importance of adopting a legislative framework that agrees with the newly digitalised systems. Those are to allow for better implementation of digitalisation and investment in ports.

12

Calling academia researchers, governments, and the maritime sector to focus on digitalising the various components of maritime transport; namely, maritime navigation, ship operation management, environmental aspects, security, safety, alongside, logistic activities related to maritime transport. This is expected to support the performance of the maritime sector.

