Smart ports: Moroccan initiatives

- ➤ Smart Ports enable fluid exchanges between various port stakeholders, facilitate data sharing, and secure communication to expedite decision-making and thereby enhance the economic attractiveness and competitiveness of the port.
- ➤ To this end, Tanger Med uses its proprietary digital solution, Port Community System providing cutting-edge services on par with global best practices to all port, logistics, and industrial ecosystem stakeholders.
- ▶ The Tanger Med Port Community System is an interconnected electronic platform (88 interconnected systems, an average of over 40,000 electronic messages exchanged daily), that provides all Port users with dematerialized services such as maritime call management, cargo unit port transit, container collection and delivery management, remote invoicing, multi-channel payment, and seamless tracking, thereby streamlining freight transit operations through the port area and optimizing transit time with a focus on transparency and predictability.

- With its wide array of services, this portal enables Tanger Med to meet a number of challenges :
 - Improve competitiveness, reliability, and administrative and operational efficiency;
 - Enhance the safety of maritime traffic;
 - Optimize the planning of port movements;
 - Optimizing maritime service resources.
- Additionally, Tanger Med ensures eco-responsible water management by means of an oil-polluted water treatment plant, recycling of industrial and port wastewater, and collection of solid waste from ships. The port's environmental commitment was rewarded in 2020 with the "Ecoports" label from the European Sea Ports Organization, making Tanger Med the first African port to earn this distinction.
- ▶ On the civic front, Tanger Med works for human development in the northern region through the Tanger Med Foundation. Established in 2007, this association supports local actors in implementing projects focused on education, health, professional training, and socio-cultural development.



Smart ports: Moroccan initiatives

- ➤ The port of Casablanca has been collaborating with the Italian port of La Spezia on a program to build a logistics corridor. With standardized electronic exchanges and mutual recognition of control formalities, notably using the Internet of Things and Block Chain technology, this project ultimately aims to streamline and optimize import/export operations between these ports.
- ▶ Other Moroccan initiatives include the National Ports Agency's 2008 launch of PortNet, the National Single Window Platform for Foreign Trade Procedures, which uses Electronic Data Interchange (EDI) by integrating all national and regional stakeholders, such as customs, port and airport authorities, shipping agents and control bodies.
- ► The platform provides a seamless information system for all stakeholders, enabling dematerialized port procedures and vessel tracking throughout Morocco, and providing users with a single electronic window for easy, efficient, and secure monitoring of business operations.

PortNet aims to ensure:

- greater efficiency of supply chains for economic agents and public and private service providers;
- faster cross-border movement of goods for import and export;
- users have access to an environment that enhances their economic competitiveness and enables just-in-time operations;
- reduced uncertainty on delays and logistics costs;
- better business climate and governance and greater transparency in business-government dealings;
- expedited administrative procedures for the flow of goods;
- Improved operational traceability, anticipation, and planning capabilities through proper communication flows.



Smart ports: Moroccan initiatives

- Ports Agency held the first "Smart Port Challenge" in late 2020, in partnership with PortNet and the Global Trade Facilitation Alliance. This online event brought together over 500 national and international participants from a variety of backgrounds (companies, start-ups, academia,...), to present innovative solutions to challenges facing Morocco's port industry.
- At the end of the competition, four winning teams were selected, with projects as follows:
 - ❖ Take up Scout: democratizes electronic payment in port operations, thus ensuring payment speed and traceability;
 - Duck the line: streamlines vehicle traffic in the port by providing a virtual waiting area for users to track operations (delivery, weighing, etc.) in real-time, thereby reducing pollution and improving the flow of traffic;
 - ❖ Port Tech Payment: using the PortNet platform, this project aims to encourage users to select online payment over other payment options.

❖ Eco Wave Power: the idea behind this project, developed by a Swedish company, is to put floaters on port maritime structures that harness wave movements to generate clean electrical energy, thus reducing the use of fossil fuels.

Smart Port Challenge



Source: National Ports Agency



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References

- Agence nationale des ports.
 https://www.anp.org.ma/Services/Pages/Portnet.aspx
- Ministère de l'équipement et de l'eau, Maroc, 2021. Clôture du 1er Hackathon "Smart Port Challenge", dédié à l'innovation dans le secteur portuaire au Maroc [online]
- Le Maroc et la mer. Marine & Océans n°272 [online]
- Tanger Med [online].
- Tanger Med. Tanger Med port community system [online]
- Tanger Med [en ligne] https://www.tangermed.ma/wp-content/uploads/2021/04/Tanger-Med-Rapport-Annuel-2020-WEB.pdf
- Ministère de l'équipement et de l'eau, Maroc, 2020. Le Maroc et l'Italie expérimentent des solutions innovantes pour fluidifier les procédures d'import/export [online].



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