National Maritime Single Window for the ports of Cyprus

The JUPIl platform and its PCS improve the management processes of the Cyprus Ports Authority (CPA)

Indra Mova Solutions

Unlocking mobility, life happens

Αρχή Λιμένων Κύπρου

Cyprus Ports Authority (CPA)

The Cyprus Ports Authority, established in 1973 and based in Nicosia, is a semi-autonomous Cypriot government agency responsible for supervising and controlling the ports and port facilities of the Republic of Cyprus.

The Authority's jurisdiction includes the commercial ports of Lemesos (Limassol) and Larnaka, the port of Paphos, the fishing port of Latchi and the oil terminals of Vassiliko and Moni.

JUPIl, our Port Logistics management platform, improves port traffic management processes in Cyprus

Indra has implemented its JUPIl platform in Cyprus, a national maritime single window with PCS (Port Community System) extension, developed for the Portuguese ports of Lisbon, Leixões and Sines. Its multiport character allows it to provide support to all port activities carried out at Cyprus port.

JUPIl allows the different actors and authorities of the port community to interact electronically and provide the information required during stopovers of vessels only once at any port across the country. The system automates the workflows and is responsible for forwarding this information to the corresponding bodies to meet the operational and legal requirements.

This system ensures compliance with the European Directive EU/65/2010, which requires Member States to have systems to complete, send, share and consult electronically all vessel data during stopovers.

In addition to guaranteeing the port's operations, the Port Community System deployed for the Cyprus Ports Authority (CPA) enables the integration of the systems of each port for the comprehensive management of the operations of all port activity actors, such as customs, consignees, shipping companies, terminals, etc. This makes it easier to notify the cargo manifest and obtain the necessary authorisations in the goods importation process.

Challenges and achievements (1/2)

Elimination of all paper in port management processes

Comprehensive management of information related to **passengers, goods and transport modes**

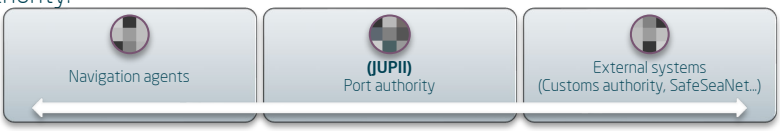
Critical situation pre-alerts and management of warnings to optimise the operation

Control, monitoring and preparation of reports to improve the operation of **ships and goods**

Security and **access** management of the platform's stakeholders

Indra's solution is aimed at **optimising transport and goods management**, **integrating** all **control and surveillance mechanisms** required to guarantee the monitoring of operations and compliance with administrative procedures.

JUPII **optimises the monitoring of operations by** facilitating access to queries, support reports on the operation, and the exchange of manifests, allowing the validation and correction of information. Therefore, the deployed platform ensures all port activity actors are in contact**, serving as a communication node** of the Port Authority with navigation agents and other systems, such as the SafeSeaNet European maritime information exchange system and the customs authority.



Processes focusing on transport management:

- **Arrival notice and authorisations**. The operator manages the arrival of the vessel before the port authority. The corresponding authorities authorise or deny entry of the vessel into the port area. This is communicated to the national node of the SafeSeaNet system.
- **Declaration of security under the ISPS code** (International Ship and Port Facility Security Code). Delivered by vessels upon arrival to the port, in which the navigation agent declares the vessel's security conditions. This information is sent to the SafeSeaNet national node.
- **Hazmat statement** (Hazardous materials). With regards to hazardous goods, this statement must be completed and submitted by the navigation agent to the port authorities for consideration and will also be integrated into SafeSeaNet.
- **Waste statement**. This includes tracking waste at the entrance and exit of ships. This information is also integrated into the SafeSeaNet system.
- **Maritime health statement.** In this way, the sanitary condition of passengers and crew is reported to guarantee compliance with the international health regulations.
- **Crew/passenger list**. The system records the information of the passenger and crew lists whose data can be verified by the authorities.
- **Manoeuvre request**. Under this instruction, the navigation agents request the management and authorisation of the manoeuvres required by the vessels.
- **Statement of manoeuvre.** This allows the navigation agents to respond to the request, providing the port authority with all the necessary resources to handle the request (landing, transit, mooring, etc.)
- **Pilotage, mooring and towing**. After the manoeuvres have been performed, the services provided and the results of the operations in the monitoring points are recorded.
- **Operational milestones**. The details of all operations are recorded and can be checked at the control points.
- **Notification of departure and departure authorisation**. According to this process, the navigation agencies announce the departure of the vessels, indicating the forecast departure information and receive the authorisation of the corresponding authorities, such as the sanitary, maritime, customs and port authorities. The ship's clearance is issued with the port authority's authorisation for departure.

Challenges and achievements (2/2)

PCS Extension

Our platform allows the deployment of a PCS system for CPA, through which the operations of the transport modes intervening in port activity are coordinated. Therefore, JUPII can be used to **coordinate the container loading and unloading** procedures from vessels, with the **storage and operation of other modes of transport** for the reception and delivery of goods from the port.

With regards to vessel container loading and unloading operations, our platform **allows port operators to have all the information required by the port authority**, ensuring these are monitored through standardised electronic messaging.

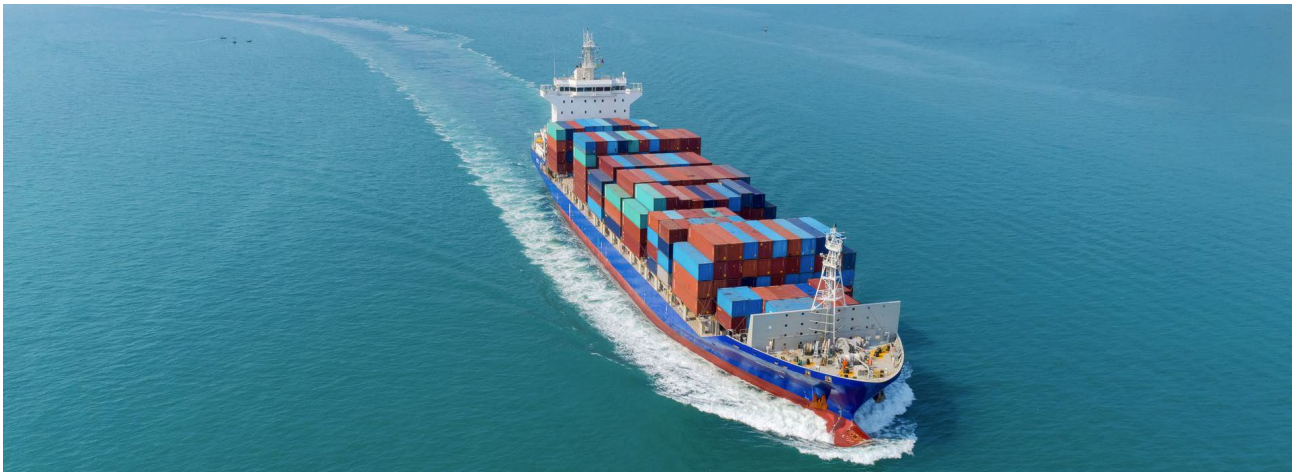
Processes related to goods management

- **Cargo manifest.** Upon arrival of the vessels, the navigation agents must provide the information regarding the general declaration of cargo, recording all goods and allowing port operators to declare the cargo manifest, recording imports, exports and transit of goods. This makes it possible to improve the coordination of transport operations and provide the information require for the customs' records.
- **Movement of containers or other types of goods.** The platform allows the registration of all operations related to the management of containers, general cargo or vehicles, recording the reception, dispatch and transit of goods in the terminal.

Control processes

- **Control of vessel manoeuvres.** JUPII controls and monitors vessel manoeuvres within the port, identifying possible blockages, displaying the necessary warnings and validating each process to control efficiency within the terminal.
- **Control of the movement of goods.** The platform allows the monitoring of cargo at the port from its arrival, allowing the detection of possible inconsistencies with the cargo manifest and with the data provided by the terminal's concessionaire.

In addition to these processes, Indra's solution features different **modules** to automate the **pre-invoicing** of port services, facilitating the communication of **messages and alerts** to improve the operation, and **managing security and access** for all of the platform's stakeholders.



Differential value

- The **multi-port solution** provides access to the platform in the country's different ports, allowing free access to all port operation actors.
- The technology developed by our company becomes a collective efficiency tool, as it **contributes to speeding up the management of stopovers**, anticipating the movement of goods and passenger traffic. All of this improves the capacity and competitiveness of the port logistics network.
- **PCS-JUPII automates workflows**, allowing different stakeholders of the port community to exchange information, improving the efficiency and competitiveness of ports.
- The solution includes a **specific module to manage the operations of each terminal** (Multi-Purpose Operation System-MPOS), which allows terminal loading operations to be planned and recorded, including containers, vehicles or general cargo, as well as invoicing of all movements from the time of loading and unloading vessels; management of storage spaces in yards; and control of the reception and delivery of goods in the terminal.
- Another advantage of this system is that it creates **a 100% paper-free port,** making port operations faster and more transparent for all stakeholders. Likewise, it offers users multi-channel access with **24x7 availability.**

Indra has deployed its logistics systems for other port authorities, adapting its solutions to the specific needs of each client.

In addition to the case of Portugal, where JUPII is also operating, it is worth mentioning the operation of our Silogport platform in Chile, designed to coordinate a new logistics platform, ZEAL (logistics support extension area) in the port of Valparaíso. This allows transport to be coordinated outside the port and in a control enclosure adjacent to the port.

In the case of JUPII, the platform was initially designed for various ports in Portugal (Lisboa, Sines and Leixões), capable of coordinating the logistics chain through different modes of transport, managing road and rail traffic.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At the core