

Streamlining Ports & Terminals Operations Through Technology



Come by to our booths 8 & 24



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Who we are



We **digitalise port** and **terminal** operations



Main provider of technology solutions **for ports in Spain**



Some **numbers**:
27 Spanish Port Authorities
4 Regional ports
3 National Port Agencies
15+ countries
10+ terminals
200+ ports & terminals digitalised
Offices in **Valencia** (for Spain), **Algeciras** (for Africa), and **Lima** (for LATAM)



Digitalisation 101: First Steps



Key elements for successful digitalisation



**Putting people
at the centre of
its concerns**



Collaboration



**Have the right
tools**

PEOPLE & COLLABORATION

People **works with** projects

People **leads and executes** projects

People **uses** the projects and services

What **tools** can be used to digitalise a port?

01

PMIS | Internal management

- *Port Management Information System* -

Digitalise and optimise all administrative tasks related to your port.

02

PCS | Efficient exchange of information

- *Port Community System* -

It provides a secure and efficient exchange platform for smooth trading.

03

Operations | Interoperability

Achieve operational efficiencies through a single source of truth for all stakeholders.

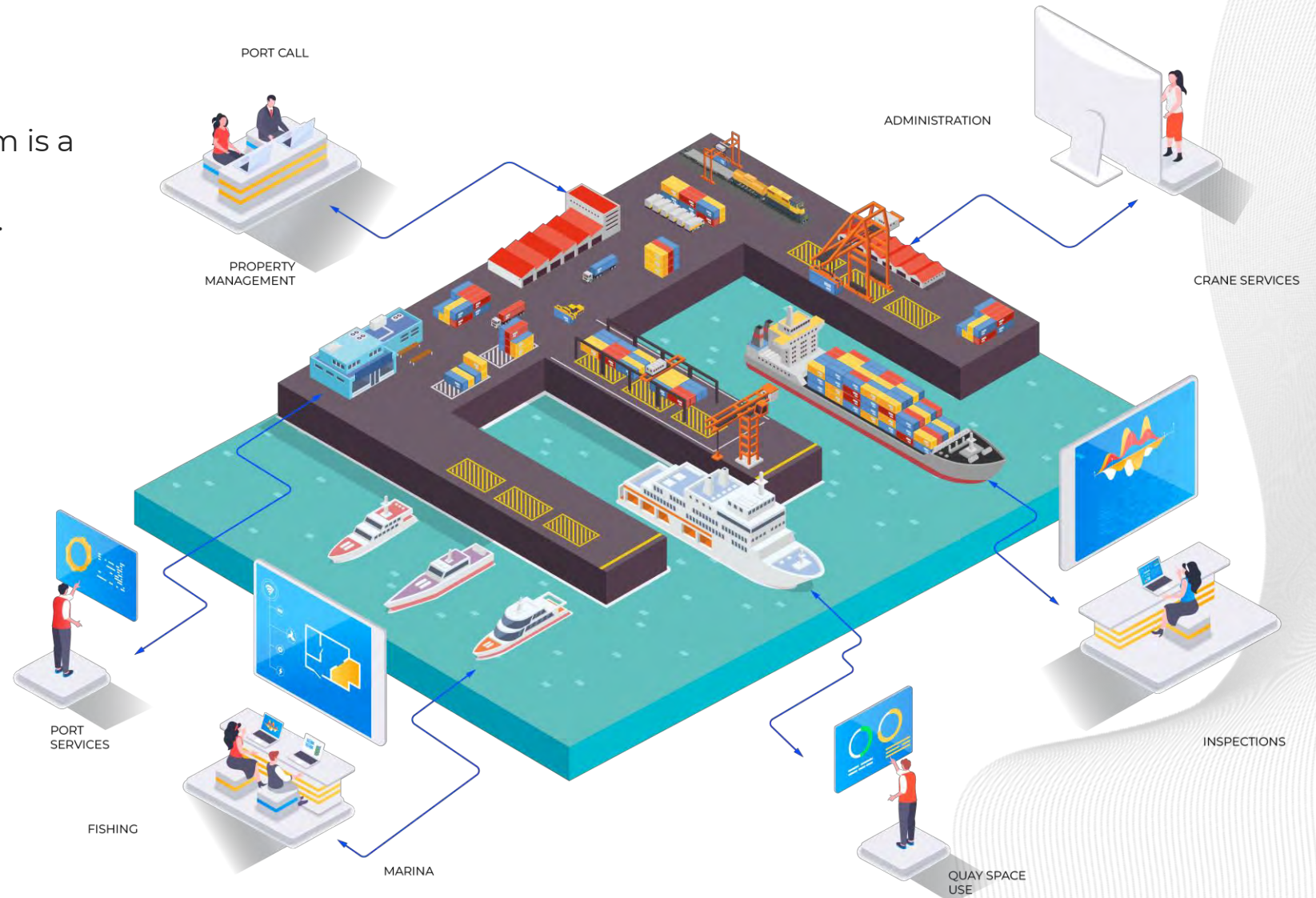
04

Smart Port | Discover the 4.0 benefits

Measure results, analyse data, and make decisions based on real events.

A Port Management Information System is a software designed to cover all the management needs of Port Authorities.

- **Port Calls**
- **Port Operations**
- **Nautical-technical services**
- **Resources**
- **Inspections**
- **Public domain**
- **Invoicing**
- **Miscellaneous services**

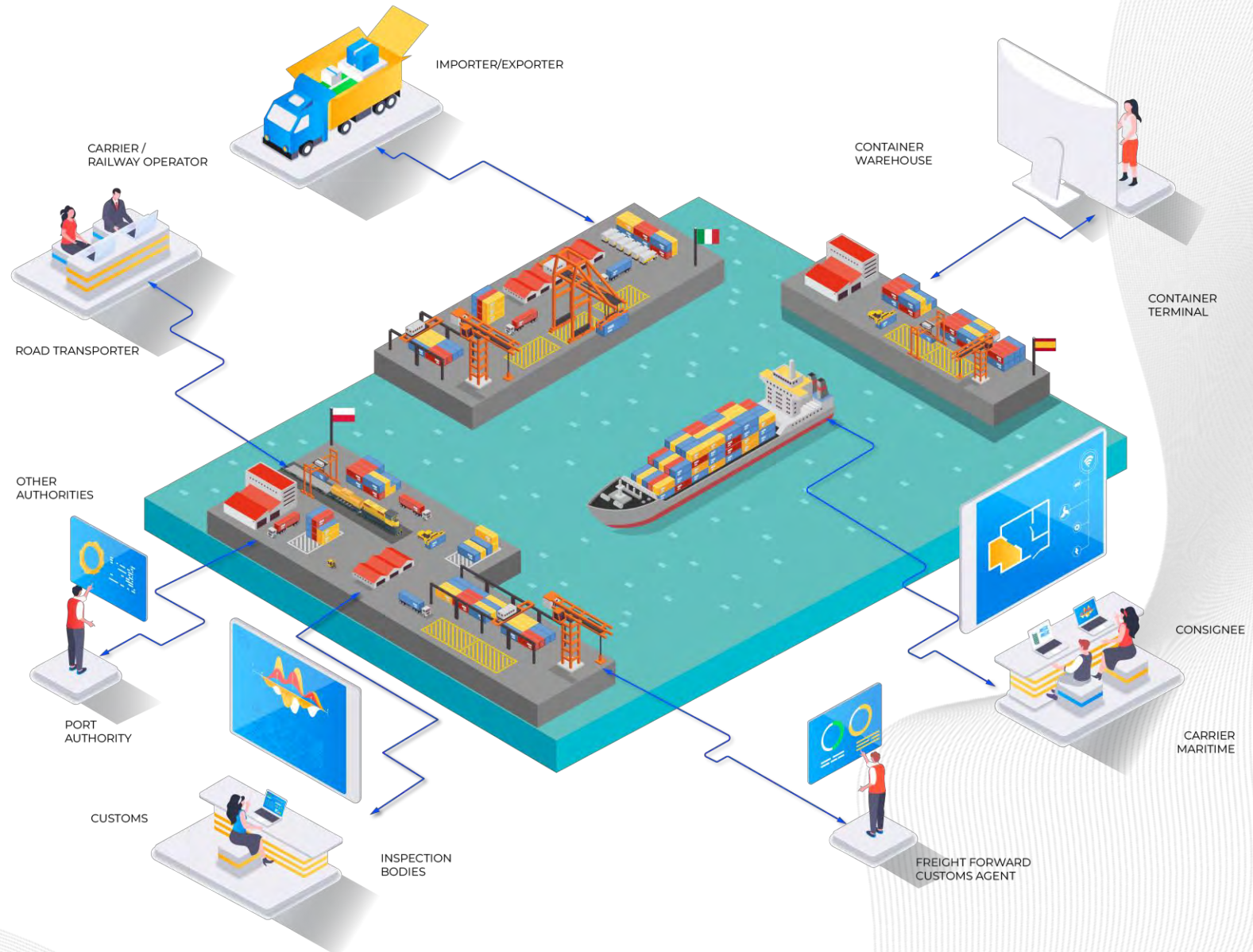


Port Community System – PCS – & Maritime Single Window – MSW –

Posidonia PCS (Port Community System) is a digital platform for the exchange of documents specially developed so that the port community can work in an agile and safe manner.

In this way, the public and private entities involved in port activity see their **competitiveness improved, as they optimise, manage and automate all the processes** of delivering information in the logistics chain on a single platform.

Other modules (rail, truck rendezvous, IMDG, gatepass...) make it possible to offer greater added value and improve the service to the port community.

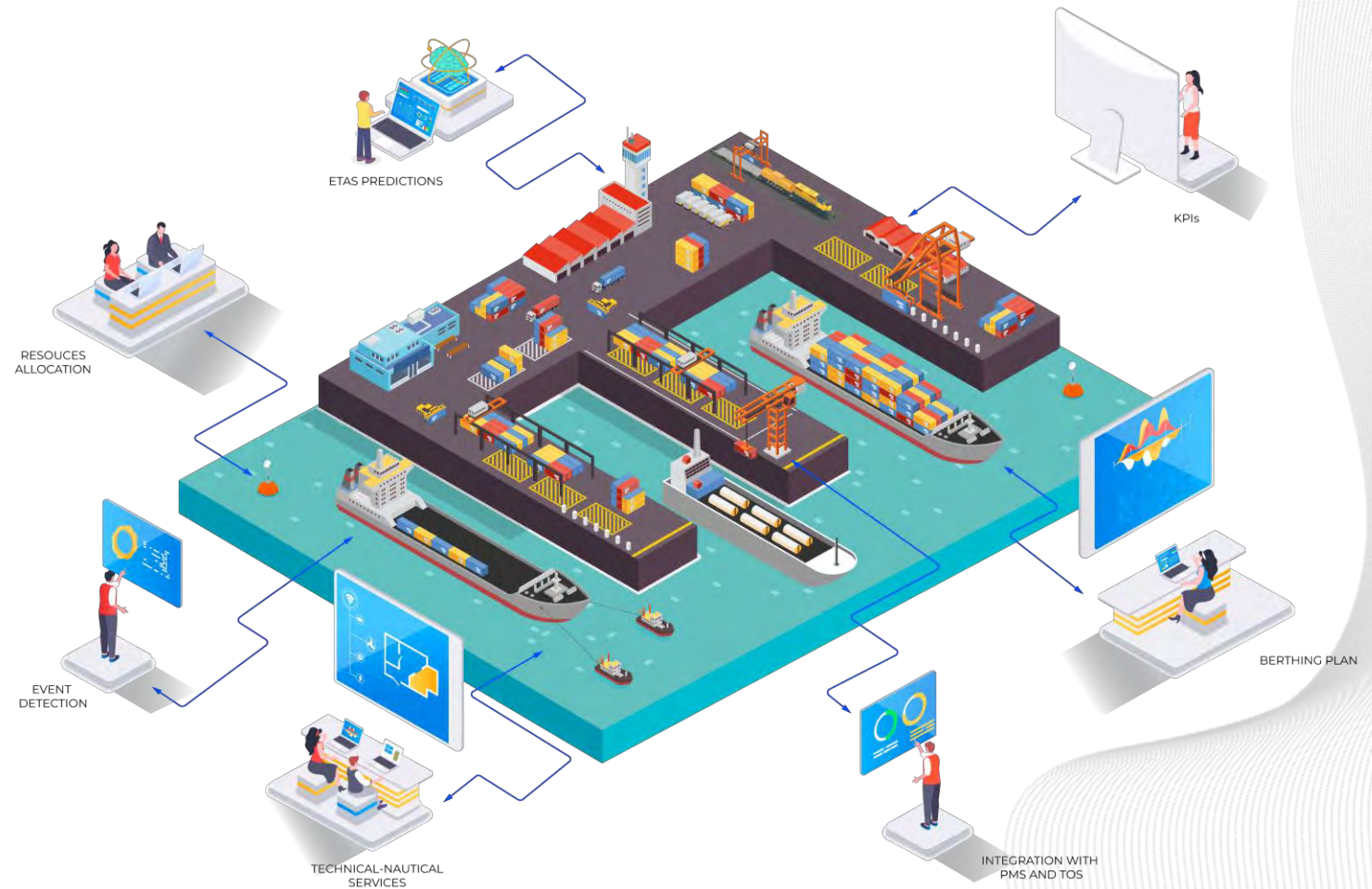


Port Operations System – POMS –

PRODEVELOP @ INTERMODAL AFRICA 2024

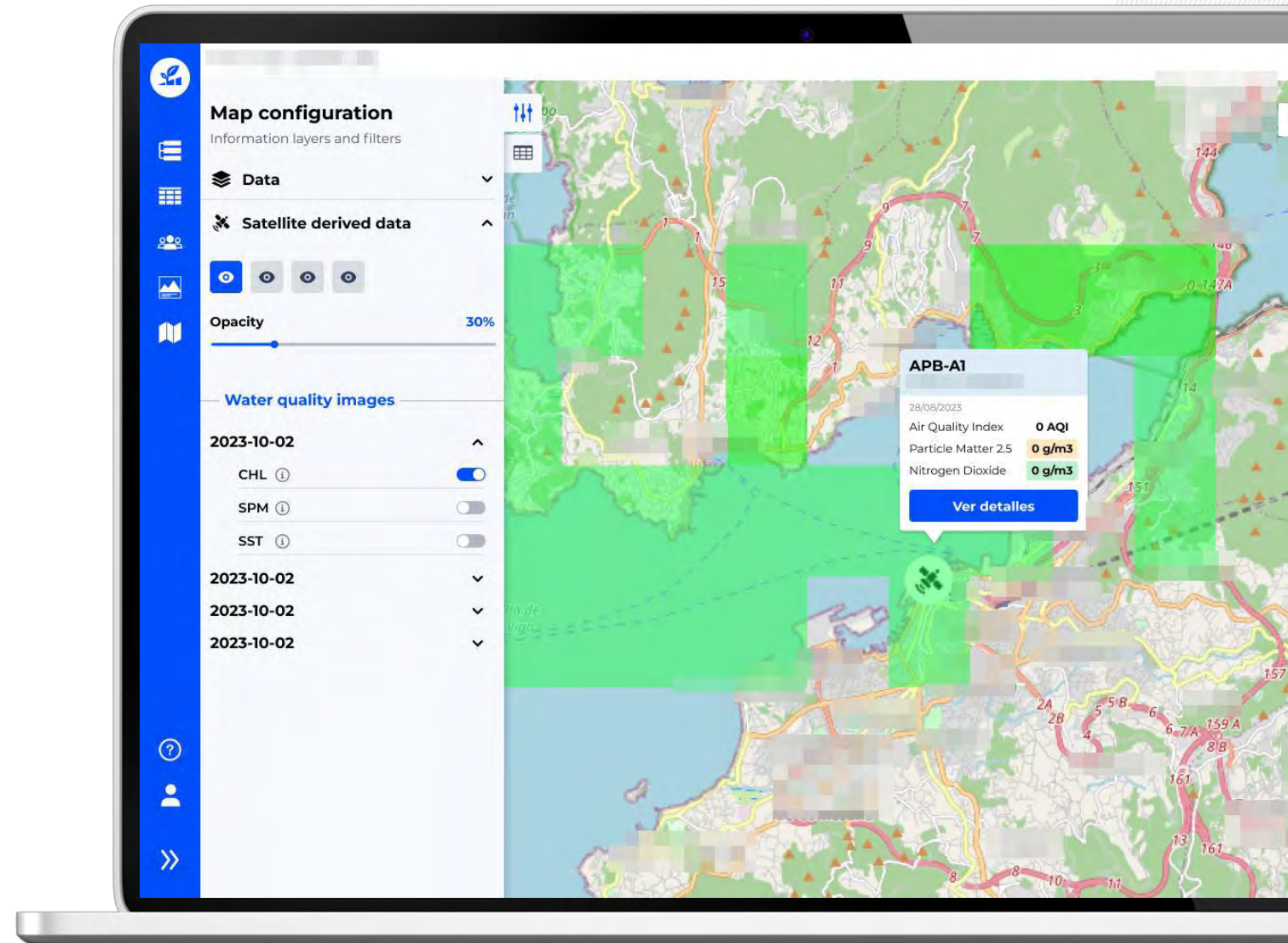
An Integrated Port Operations Management System to **optimise all operational maritime activities** related to the different phases of ship traffic in the port, integrating all relevant actors and information systems, **offering a single channel of information.**

In short, it allows you to **manage maritime operations from a single, secure and confidential environment.**



A powerful IoT platform, designed to make the Port of the Future a reality, a key step in the digitalisation of the port environment.

New technologies like IoT, blockchain, and machine learning now allow cyber-physical systems to make real-time decisions about their operations. The idea of a Smart Port, capable of delivering comprehensive services to customers, is becoming a reality through collaboration and data transparency, with safeguards to ensure trust and security.



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Tools for Digital Transformation at Ports

Integrated Port Management



Public assets

Identifier > 88

Code >

Type >

Occupation end date >

Polygon area > 2,624,2 m²

Port > Palma

Description >

Occupation start date >

Floor / Level >

MacBook Pro

Posidonia Management

How does Posidonia Management improve efficiency in any Port?

- 1. Port Resource Management Optimisation:** Centralises and coordinates port resources, from quays to accesses and equipment, improving allocation and utilisation in the yard and reducing waiting times for carriers.
- 2. Process Automation and Tracking:** Automates key operations such as dock allocation, access management, and land traffic control, enabling port agents to make data-driven decisions in real-time.
- 3. Predictive Planning and Data Analytics:** Offers advanced business intelligence and predictive analytics tools, allowing you to plan activities in the Port in advance and adjust resources according to demand.

Communication & Efficiency in the Port

Escalas

Administrador (PRODEVELOP S.L.)

Español Búsqueda rápida

ETA desde: ETA hasta: Buque: Estado: Calendario de cruces

Estado	Buque	ETA	ETD	ATA	ATD	Estado Capi...	Consignatario	Último mensaje	Estado listas
Pendiente (Borrador)	ILLETAS JET	18/10/2023 20:20	18/10/2023 20:30				MEDITERRANEA LA NAVIERA FORMENTERA	Pendiente de envío	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Pendiente (Borrador)	ILLETAS JET	18/10/2023 18:10	18/10/2023 18:15				MEDITERRANEA LA NAVIERA FORMENTERA	Pendiente de envío	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Rechazada	A. GAUDI	15/10/2023 00:00	15/10/2023 01:00				PRODEVELOP S.L.	Rechazado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	AVEIRO	14/10/2023 00:00	14/10/2023 01:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	AVEIRO	13/10/2023 00:00	13/10/2023 01:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	AVEIRO	12/10/2023 00:00	12/10/2023 01:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	AVEIRO	11/10/2023 00:00	11/10/2023 01:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	A. GAUDI	09/10/2023 00:00	15/10/2023 00:00			Autorizada salida capitania	PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Autorizada	AMBER	06/10/2023 00:00	07/10/2023 00:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S ATD
Rechazada	AMBER	05/10/2023 00:00	06/10/2023 00:00				PRODEVELOP S.L.	Rechazado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	AMBER	03/10/2023 00:00	04/10/2023 00:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Finalizada	AMBER	03/10/2023 00:00	04/10/2023 00:00	11/09/2023 15:20	11/09/2023 15:40		PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	A. GAUDI	03/10/2023 00:00	08/10/2023 00:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Aceptada	AMBER	01/10/2023 00:00	02/10/2023 00:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Autorizada	AMBER	24/09/2023 22:00	24/09/2023 23:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Autorizada	AMBER	24/09/2023 20:00	24/09/2023 21:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S
Autorizada	AMBER	24/09/2023 17:00	24/09/2023 18:00				PRODEVELOP S.L.	Aceptado	1 DS 2 H 3 M 4 S 5 T 6 P 7 S

MacBook Pro



Posidonia PCS

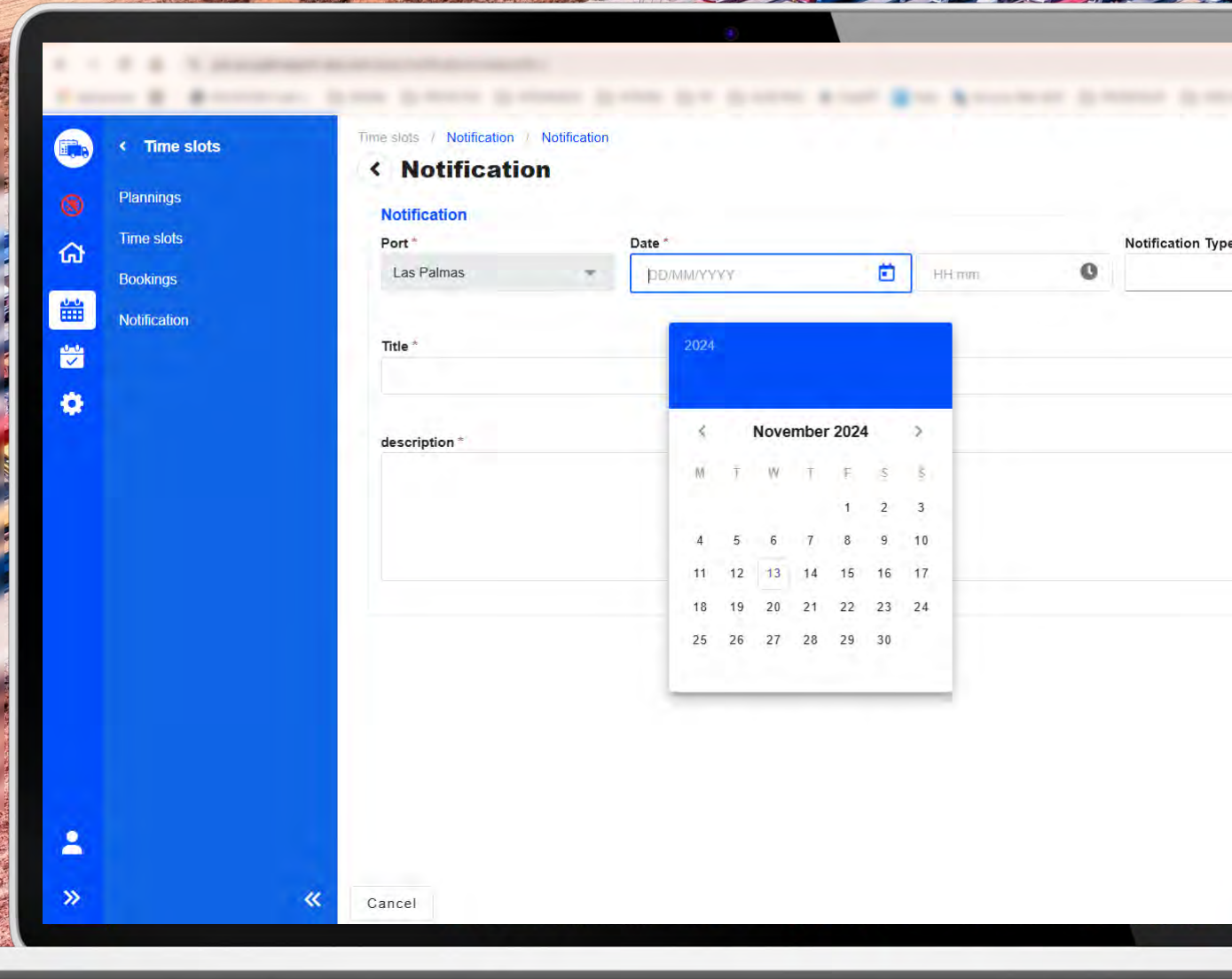
How does Posidonia PCS optimise the Port?

- 1. Improved Communication between Stakeholders:** Facilitates the exchange of information in real-time between all port stakeholders (authorities, carriers, consignees), allowing for quick and coordinated decisions.
- 2. Paperless Operations:** Automates processes and eliminates the need for physical documentation, reducing delays and simplifying the entry and exit of goods by ground.
- 3. Simple and Scalable Integration:** Its modular design and compatible with international standards allows the incorporation of new flows and adapts to the needs of the port, optimising the management of resources.



Facilitating truck flows

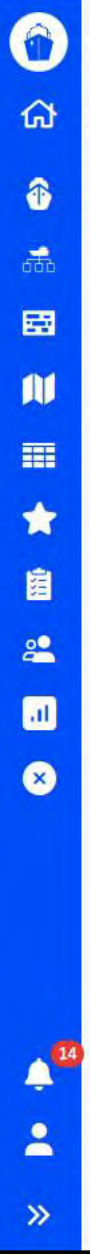
Activate digital services (VBS and appointment booking)



Posidonia VBS

Why set up a Vehicle Booking System?

- 1. Port Traffic Optimisation:** Posidonia VBS helps to reduce congestion and truck waiting times in the port, allowing smooth and efficient traffic in the loading and unloading areas.
- 2. Improved Operational Planning:** Facilitates the early organisation of ground transportation, allowing arrivals to be strategically adjusted and downtime to be minimised.
- 3. Automation of Administrative Processes:** Thanks to digitalisation and real-time data integration, Posidonia VBS reduces the administrative burden, avoids unnecessary travel and speeds up appointment management.



Configuration

Visualization map

Ship type

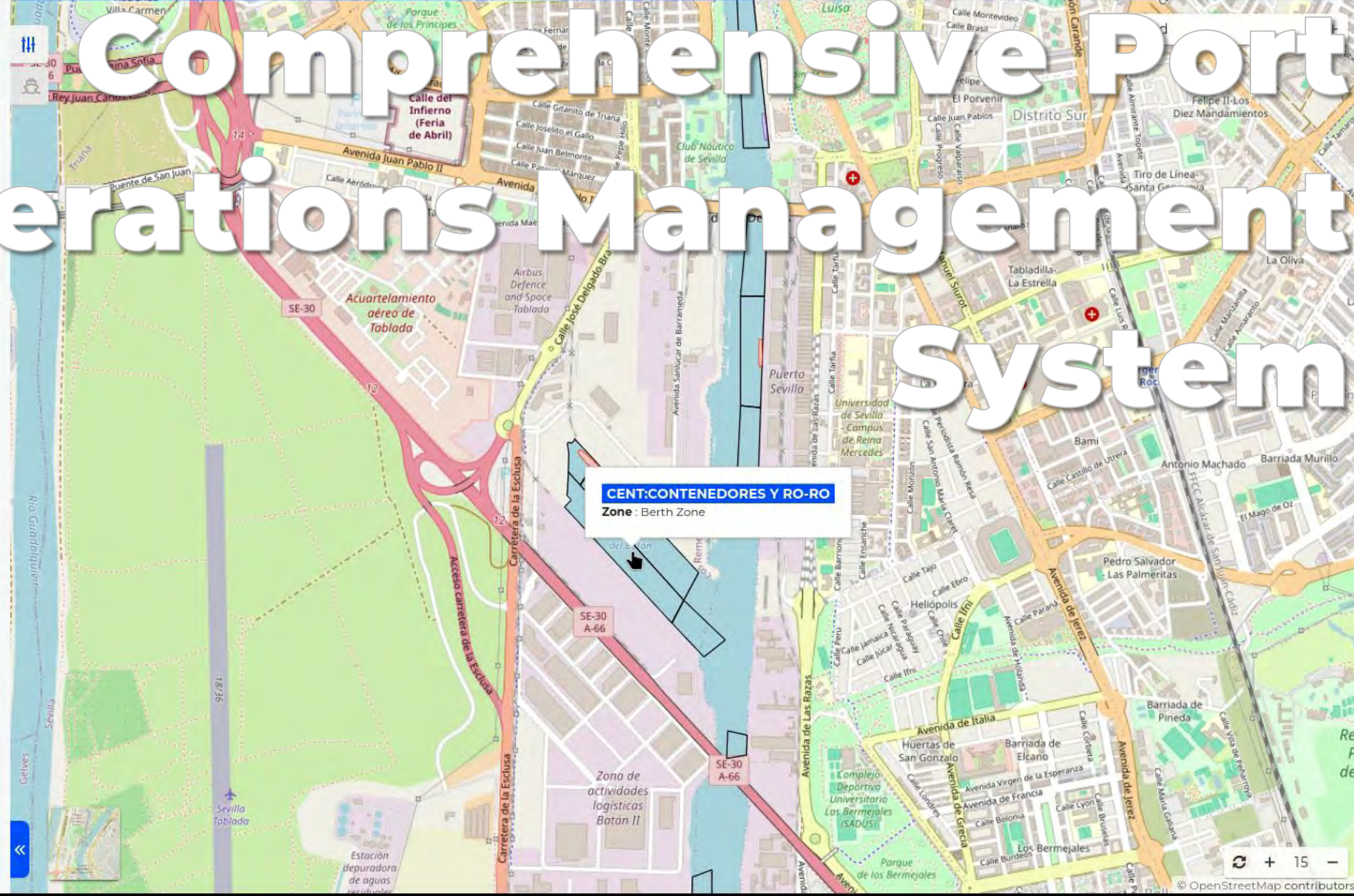
Layers

+ Ais ⓘ

+ Prevision ⓘ

Zones ⓘ

Comprehensive Port Operations Management System



CENT:CONTENEDORES Y RO-RO
Zone : Berth Zone

Posidonia Operations

How does Posidonia Operations improve the Port operations?

- 1. Unified and Real-Time View:** Offers a complete and real-time geospatial view of all port operations, allowing for more accurate planning and better coordination of resources in the port.
- 2. Process and Resource Optimisation:** Facilitates collaboration between all port stakeholders (authorities, terminals, shipping companies, carriers), improving resource allocation and decision-making to reduce waiting times and optimise the flow of goods.
- 3. Automation and Motion Control:** Allows the automated management of internal entrances, exits and movements, reducing congestion and facilitating a more organised and efficient hinterland.





Configuration de la carte

Couches d'informations et filtres



Opacité

50%



- Paramètres del terrain ⓘ
- Paramètres météorologiques ⓘ
- Qualité de l'air ⓘ
- Qualité de l'eau ⓘ

< novembre 2024 >

L	M	M	J	V	S	D
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Paramètres del terrain

LST (10:41) ⓘ



LST (21:02) ⓘ



NDVI (10:41) ⓘ



OTCI (09:39) ⓘ



SWE (10:41) ⓘ



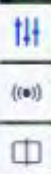
SWE (21:02) ⓘ



SWI (10:41) ⓘ



SWI (21:02) ⓘ



Wed Nov 13 2024 10:02:16 GMT+0100

Légende

Environmental Monitoring Application: Pollution Identification and Prediction

Qualité de l'air

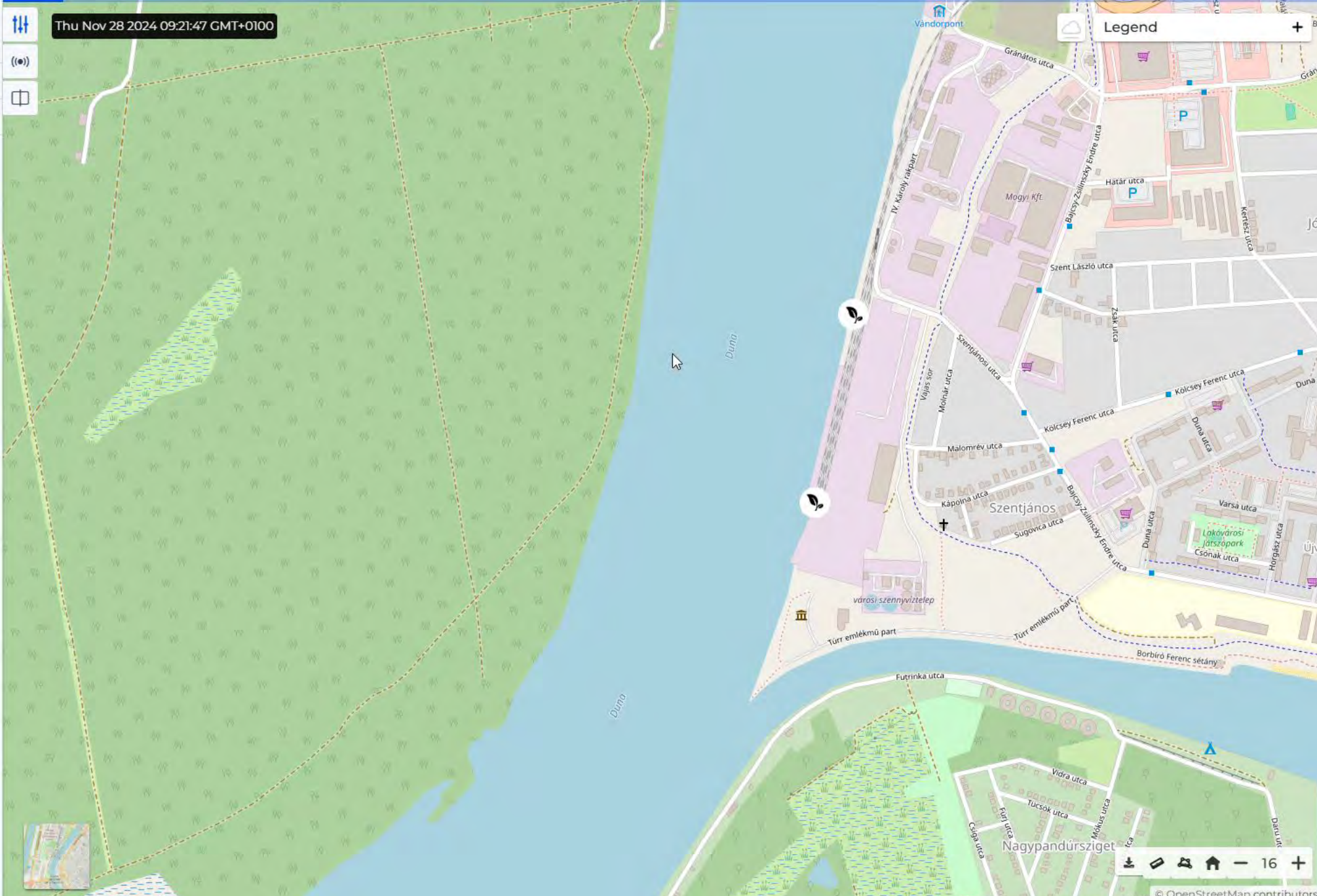
NDVI ⓘ 0.324

Map configuration

Information layers and filters

 Data 

 Satellite data 



Legend

Nagypandúrsziget

Posidonia Green

How does our app improve environmental monitoring?

- 1. Accurate Pollution Level Analysis:** Uses satellite imagery and advanced AI techniques to accurately identify pollution levels in air, water, and soil, providing a clear and detailed view of the environmental situation.
- 2. Prediction of Pollution Events:** Through predictive algorithms, the app anticipates pollution events, allowing authorities and organisations to take preventive measures to mitigate negative impacts on the environment.
- 3. Real-Time Monitoring and Informed Decision-Making:** Provides real-time data on the status of pollution, facilitating evidence-based decision-making to improve environmental management and optimise emergency response.



Tools for Digital Transformation at Terminales

Digitalise terminal operations

To improve efficiency and processes

- WI
- Vessel
- RS
- ECH
- RTG
- STS
- Selected Terminal
- Terminus Cluster
- TT

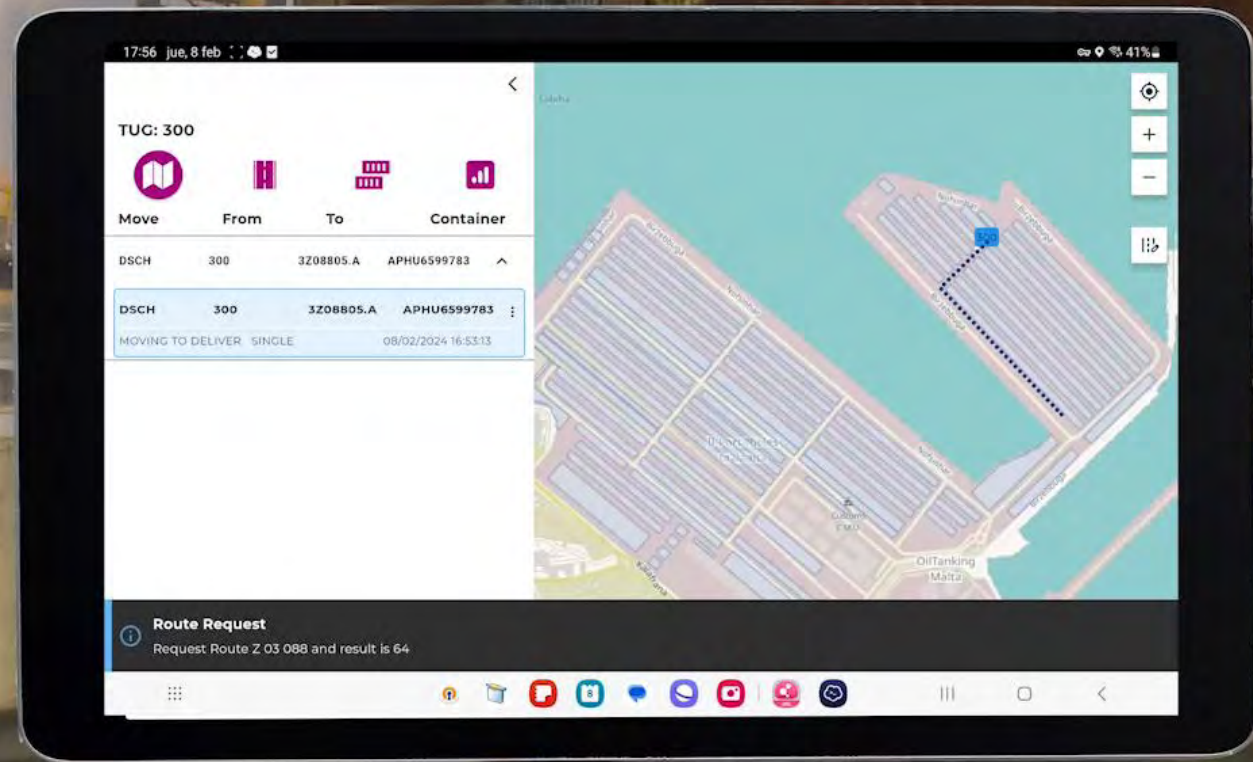
- Cartography
- TT Path

- Satellite
- Base Map
- Backup Map

Streamline processes

To increase safety

This Mobile App is a PoC. It can support truck drivers along their corresponding work instructions cycle



Thank you very much!



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