## PIXEL PORTS ASSOCIATION

## Where IoT meets the Port of the Future









First IoT integrated platform focused on the real needs and limitations of small and medium ports, scalable to large ports

Monitored Real-time **Environmental** Performance as a quantitative composite indicator computed from the IoT infrastructure

**Data-driven** optimization of operations through smart models (energy, pollution, port calls and multimodal transport and COVID19 planning)

Secured dashboard with **Big Data Engine** and Plug'n'Play IoT data acquisition agents with templates and custom framework



Joao Costa, Innvation Manager Blueware Slovenija 2022









## XLAB MARITIME DATA ANALYTICS





Intelligent road traffic modelling and predictions for a greener and more efficient portcity relation



Powerful Al algorithms improving business intelligence from **Maritime Data Analytics** from vessel calls and AIS



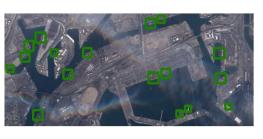
Comprehensive and flexible Big Data **Information Hub** with APIs for 3rd party integration

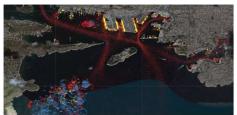


Automatic feature identification from **Low-cost Satellite** Image based on own machine learning



Easy and meaningful interactive dashboard & alerts with potential to Port Community System (PCS) integration











Joao Costa, Innvation Manager Blueware Slovenija 2022









List

Piraeus

Trieste

PILOT BOAT PY55

OCEAN 3

Summary

00h08min

00h00min

00h00min

00h25min

00h26min 1D 16h60min 1D 17h24min

01h01min

00h25min

00h52min Finished

00h00min Finished

Arrival time	~
Last year	×
Vessel type	•
Status	
○ Active ○ Finished ● All	
	C Refresh data
Vessel Type	
All	40040
All Unknown	49940 1302
Unknown Reserved	1302
Unknown Reserved	1302 21
<ul><li>Unknown</li><li>Reserved</li><li>Wing In Ground</li><li>High-Speed Craft</li></ul>	1302 21 2
<ul><li>Unknown</li><li>Reserved</li><li>Wing In Ground</li><li>High-Speed Craft</li></ul>	1302 21 2 50
<ul><li>Unknown</li><li>Reserved</li><li>Wing In Ground</li><li>High-Speed Craft</li><li>Special Category</li></ul>	1302 21 2 50 31585
Unknown Reserved Wing In Ground High-Speed Craft Special Category Passenger	1302 21 2 50 31585 4166
Unknown Reserved Wing In Ground High-Speed Craft Special Category Passenger Cargo	1302 21 2 50 31585 4166 8450
Unknown Reserved Wing In Ground High-Speed Craft Special Category Passenger Cargo Tanker Other	1302 21 2 50 31585 4166 8450 4043
Reserved Wing In Ground High-Speed Craft Special Category Passenger Cargo Tanker	1302 21 2 50 31585 4166 8450 4043

S	PORT NAME	SHIP NAME	VESSEL TYPE	VESSEL SIZE	ARRIVAL TIME ↓	DEPARTURE TIME	TIME MOVING	TIME MOORED	TIME IN PORT AREA	TIME ANCHORED	STATUS
身急	Piraeus	KAPETAN MICHALIS	Tanker	0.00 m	31.12.2021 23:26	31.12.2021 23:36	00h09min	00h00min	00h09min	00h00min	Finished
息	Piraeus	ALEXANDROS	Special Category	27.00 m	31.12.2021 22:42	02.01.2022 10:31	01h30min	1D 10h18min	1D 11h49min	00h00min	Finished
	Trieste	DAVIDE	Special Category	32.00 m	31.12.2021 22:18	01.01.2022 07:23	00h22min	08h42min	09h04min	00h00min	Finished
<b>A</b>	Trieste	TAUR	Special Category	30.00 m	31.12.2021 22:05	01.01.2022 06:55	00h25min	08h25min	08h50min	00h00min	Finished
<b>A</b>	Piraeus	PILOT BOAT PY55	Special Category	14.00 m	31.12.2021 22:03	31.12.2021 22:40	00h36min	00h00min	00h36min	00h00min	Finished
	Piraeus	IOSIF K	Cargo	133.00 m	31.12.2021 20:47	03.01.2022 14:58	00h28min	2D 17h37min	2D 18h10min	00h04min	Finished
<b>.</b>	Monfalcone	BREMEN	Special Category	31.00 m	31.12.2021 20:23	01.01.2022 09:01	38s	00h00min	12h37min	12h37min	Finished
<b>A</b>	Trieste	DELFINO VERDE GOLD	Passenger	27.00 m	31.12.2021 20:10	01.01.2022 10:33	00h54min	13h28min	14h23min	00h00min	Finished
<b>.</b>	Piraeus	MED DENIZLI	Cargo	152.00 m	31.12.2021 19:40	02.01.2022 06:17	00h20min	1D 10h17min	1D 10h37min	00h00min	Finished
息	Piraeus	IFESTOS 2	Special Category	30.00 m	31.12.2021 19:37	01.01.2022 07:07	00h39min	10h50min	11h29min	00h00min	Finished
泉	Piraeus	LEON	Special Category	34.00 m	31.12.2021 19:26		00h14min	00h00min	00h14min	00h00min	Finished
<b>A</b> (	Trieste	OCEAN 3	Unknown	18.00 m	31.12.2021 19:13	03.01.2022 11:27	10h43min	1D 19h54min	2D 16h14min	09h36min	Finished
泉	Trieste	OCEAN1	Special Category	17.00 m	31.12.2021 19:11	31.12.2021 23:34	01h09min	02h52min	04h22min	00h21min	Finished
<b>.</b>	Piraeus	PANTHER Z	Special Category	30.00 m	31.12.2021 18:38	01.01.2022 10:08	00h22min	15h07min	15h29min	00h00min	Finished

14.00 m 31.12.2021 18:31 31.12.2021 19:33

18.00 m 31.12.2021 18:22 31.12.2021 18:48

120.00 - 21.12.2021.10-20 02.01.2022.11-45





Category Special

Category

Unknown