

2019

**1st CASPIAN
PORTS & SHIPPING 2019**

**Digitization helps Ports grow
sustainably**

D B A GROUP



DBAGROUP

is an **independent** holding **specialized** in providing services and solutions focused on **building and infrastructure lifecycle management**

47

MN OF EUROS IN
PRODUCTS AND
SERVICES

300+

ACTIVE CLIENTS

500+

SKILLED
PROFESSIONALS

8

COUNTRIES

28

YEARS OF
EXPERIENCE

DBA Group is an Italian Company listed on the AIM segment on the Italian Stock Exchange since December 2017

TYPICAL PORT INFRASTRUCTURE LIFECYCLE



Port Authority and Terminal Operators



- ✓ BIM
- ✓ DBA Project +
- ✓ Design and works supervision services
- ✓ Maintenance optimisation oriented design



19 PORTS



3 PORTS



- ✓ PM Services
- ✓ PORTLINE process digitisation
- ✓ Operations Management



14 PORTS



- ✓ Services Big Data IoT
- ✓ DSS prediction



2 PORTS



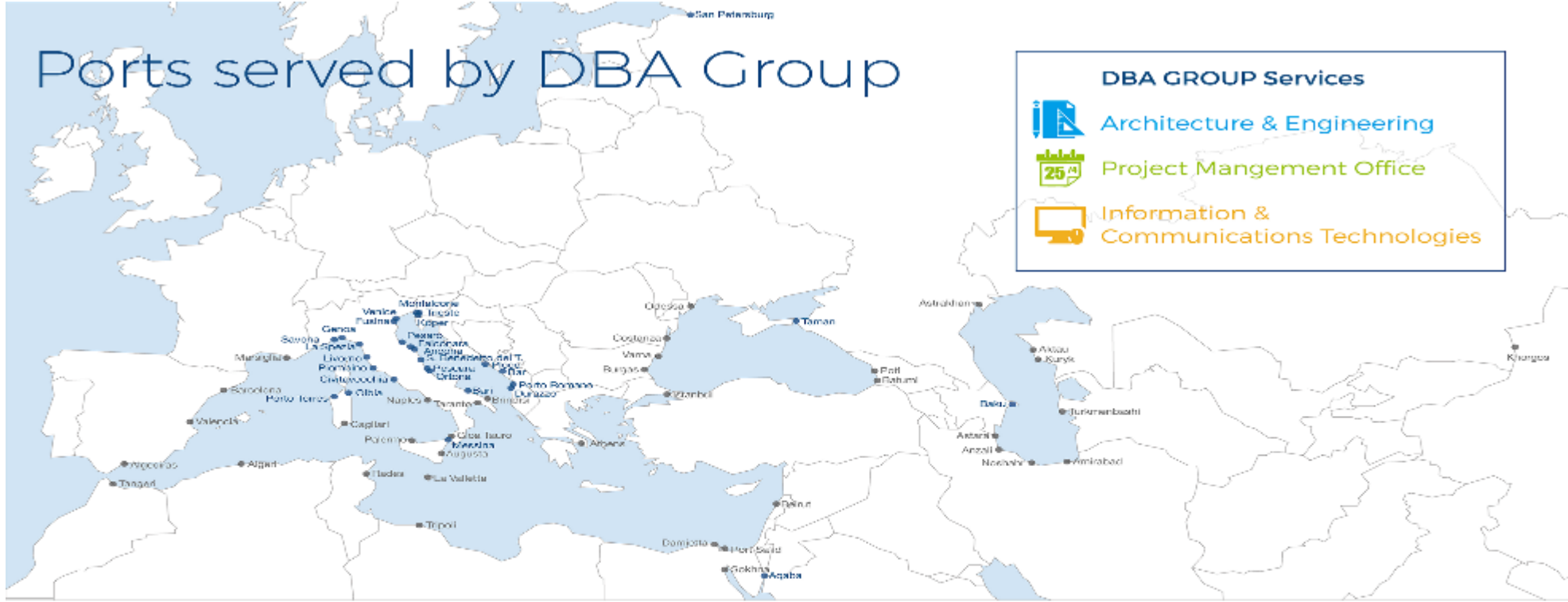
DBAWORLDWIDE

Ports

Ports served by DBA Group

DBA GROUP Services

- Architecture & Engineering
- Project Management Office
- Information & Communications Technologies



- | | | | | |
|---------|---------------|------------|---------------------|---------------------------|
| Ancona | Brindisi | Koper | Pesaro | Savona |
| Aqaba | Civitavecchia | La Spezia | Pescara | Taman |
| Augusta | Dammam | Livorno | Piombino | Taranto |
| Baku | Falconara | Messina | Ploce | Trieste |
| Bangkok | Fusina | Monfalcone | Porto Roman | Venice |
| Bar | Genoa | Olbia | S. Benedetto del T. | |
| Bari | Gioia Tauro | Ortona | San Petersburg | Ports served by DBA Group |



Caspian Sea - Black Sea | Main Ports

NOT AN EASY JOB



**THESE EAST-WEST LOGISTIC PATHS ARE MULTICOUNTRY AND MULTIMODAL
THEY NEED EFFICIENCY AND INTEROPERABILITY TO REDUCE COSTS**

NEED: make the East-West “terrestrial” logistic corridor **MORE** attractive to transport goods

TASK: make the corridor **MORE** efficient and hence economically **MORE** attractive by reducing transit **time** and **prices**

SOLUTION: informatise the **WHOLE** chain by using software that are integrating **ALL** different stakeholders along the New Silk Road(s).


Efficiency is created by sharing **in advance, adequate information** among all players

Efficiency will also be a competitive advantage for a port to attract ship callings and goods

WHERE

 Rail Transport

 Trucks

 Maritime transport

 Customs

TRANSPORT & LOGISTICS SOFTWARE

PORT OF BAKU

IMPLEMENTATION OF PORT MANAGEMENT SYSTEM | PORT OF BAKU



Port Solution

DBA develops the Port Management System composed of 5 basic modules to automatize operations in Port of Baku and Alyat.

Client

Port of Baku -
Baku International Trade Seaport CJSC

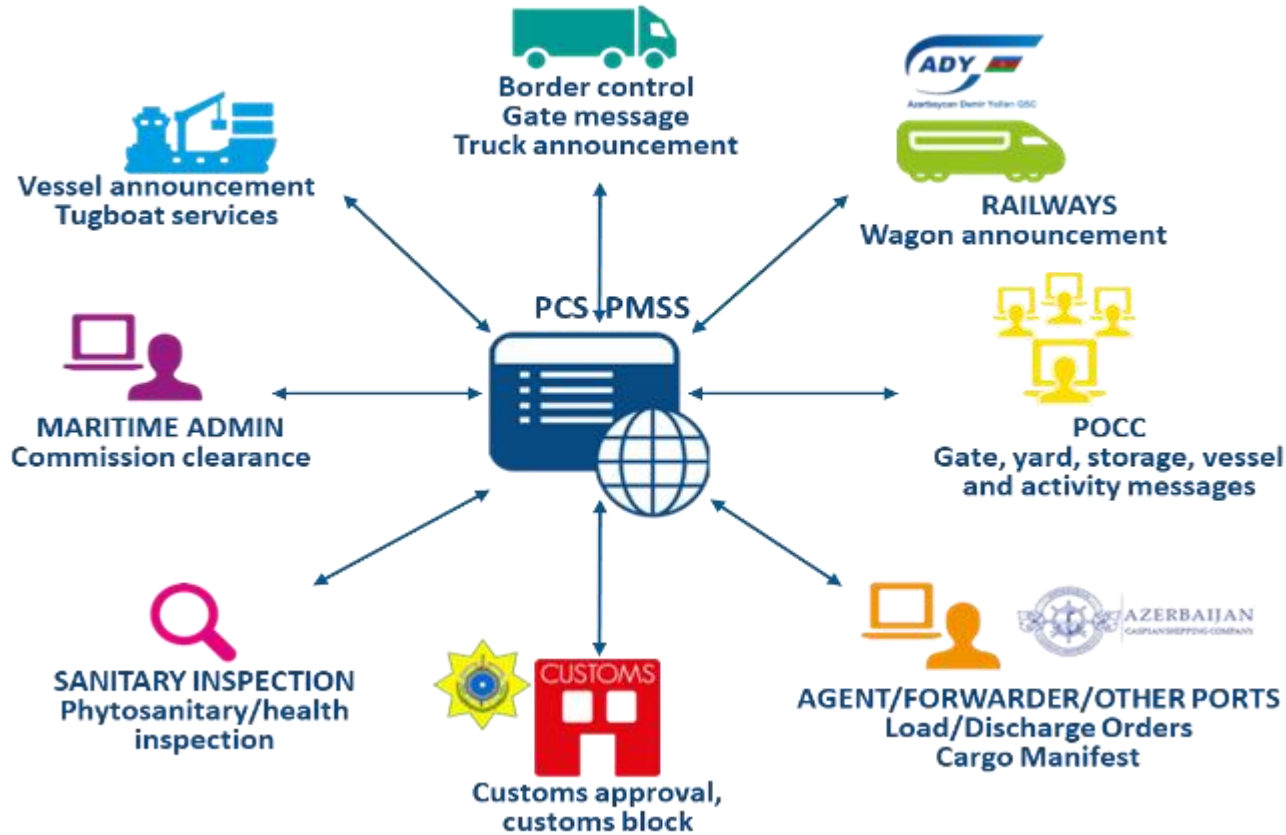
Application Modules

- PCS
- Ro-Ro TOS
- General Cargo TOS
- Billing
- Control Room

TRANSPORT & LOGISTICS SOFTWARE

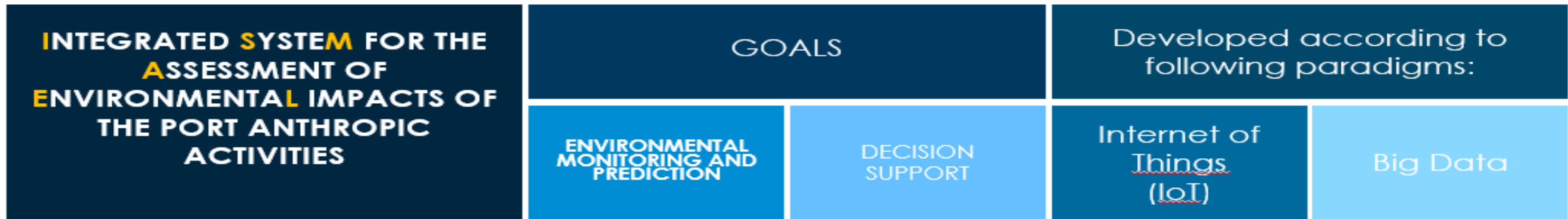
PORT OF BAKU

IMPLEMENTATION OF PORT MANAGEMENT SYSTEM | PORT OF BAKU




Port Community System

is a centralized open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the port communities.




METADATA



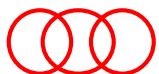
Port Information System:

- Vessel's schedule with cargo details
- Vessels technical details
- Type of vehicles
- Type of vehicles handled by ferries
- Fuel consumption

SENSORS



- Air
- Water
- Meteo
- Traffic



BIG DATA PLATFORM


Historical data:



- Dust/gas (from env. Agency)
- Meteo (from env. Agency)
- Historical metadata from port management system

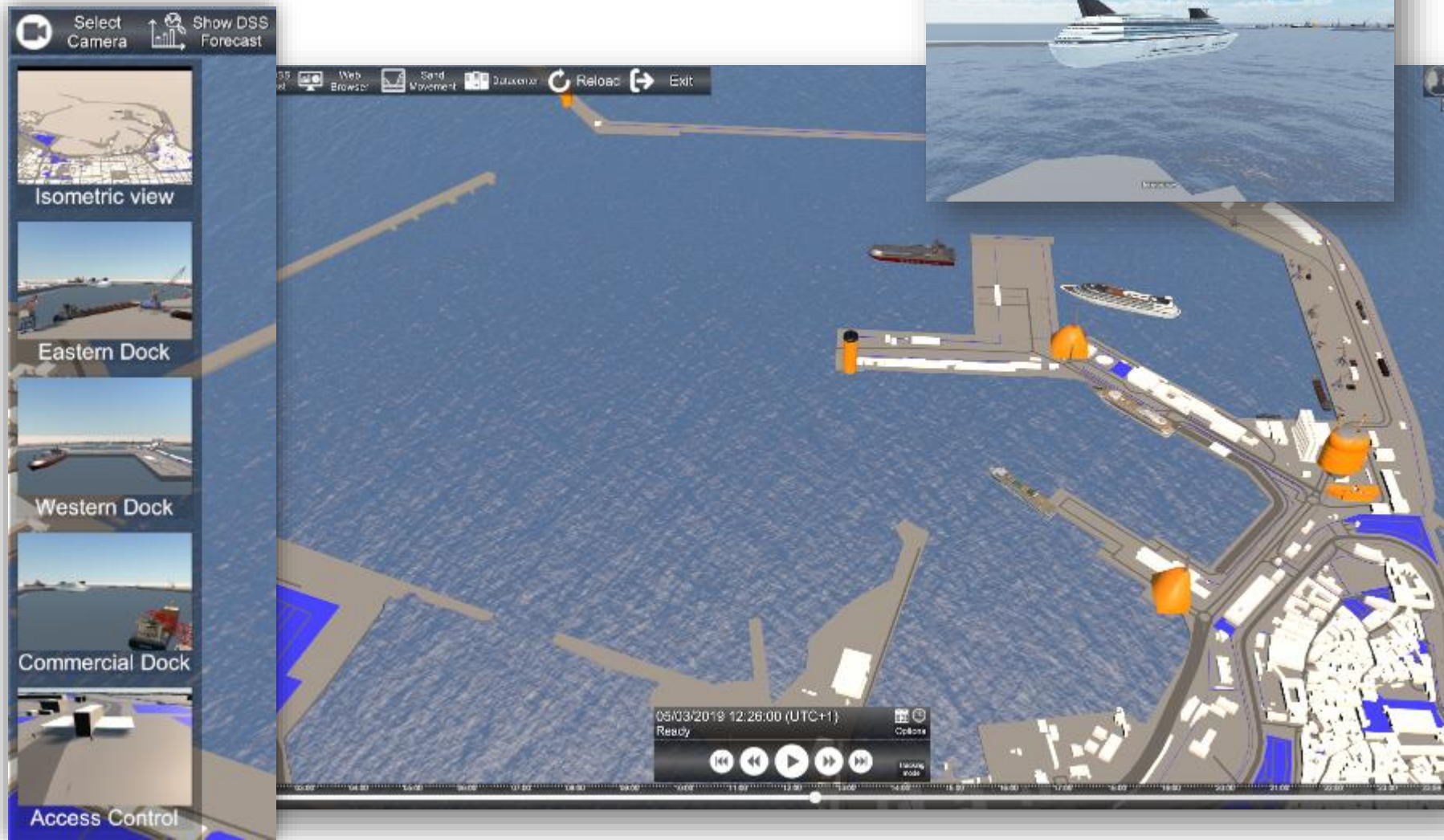
External data:

- Meteo forecasts
- Road Viability status
- Road Viability forecasts
- Ship's Catalogue

HISTORICAL AND EXTERNAL DATA



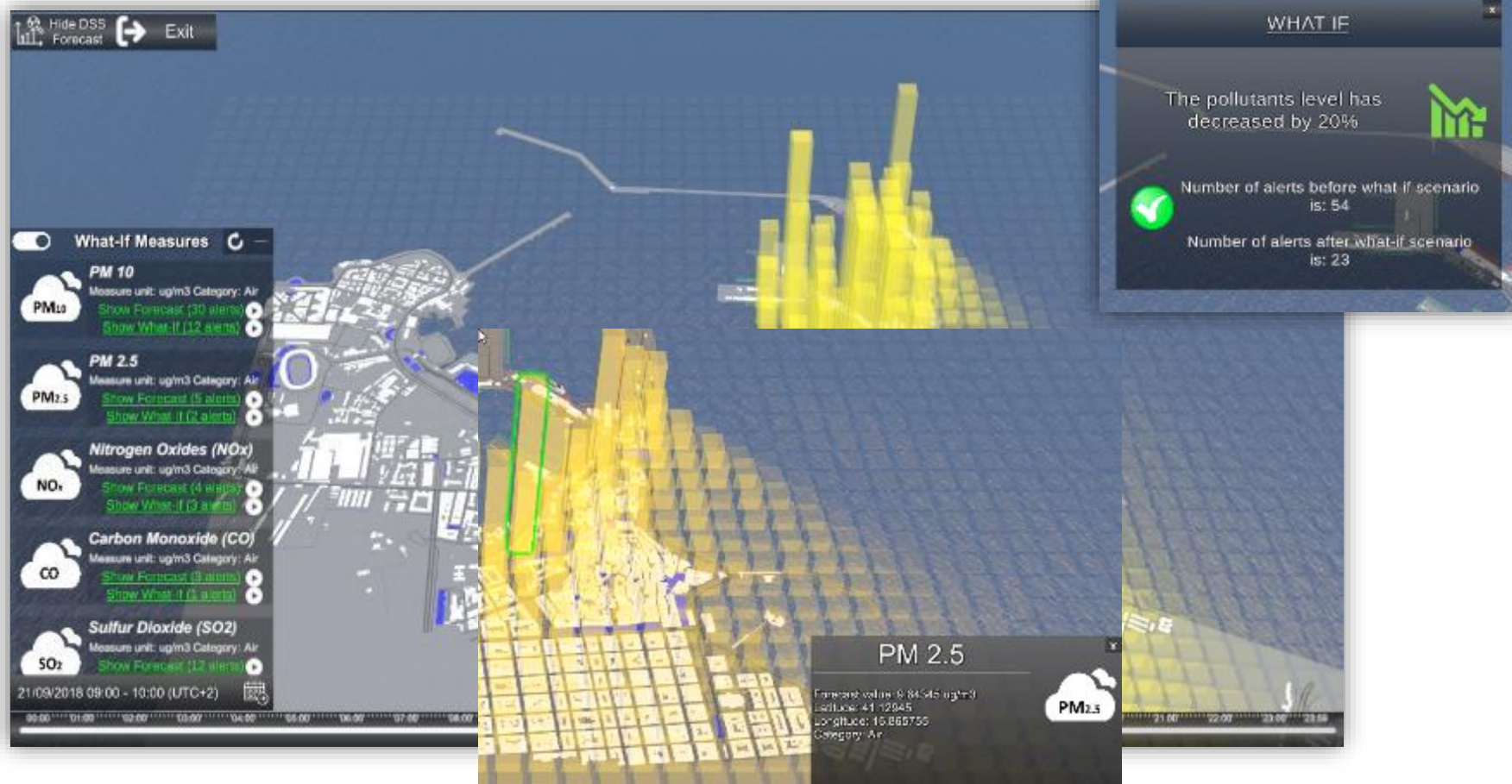





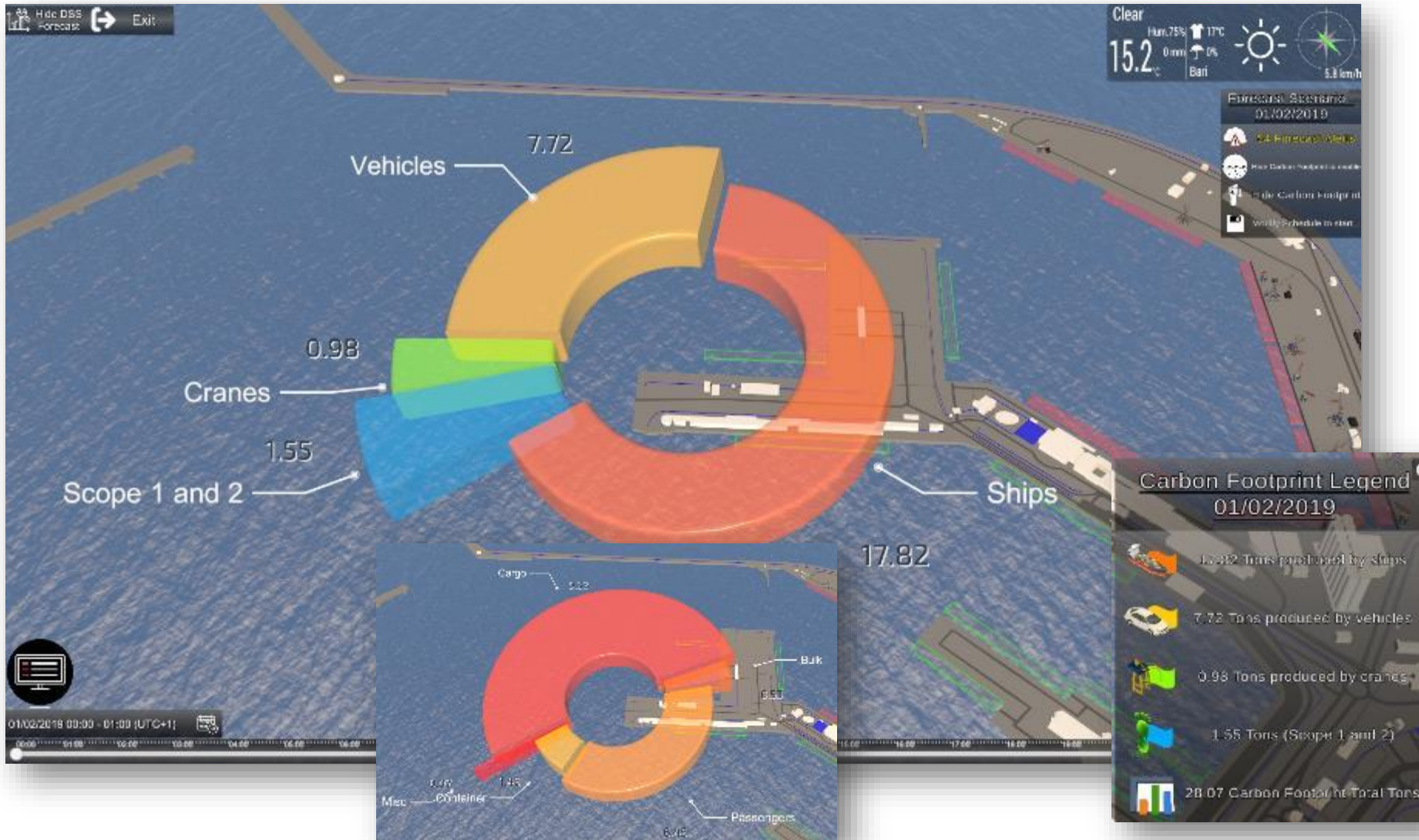
- 3D reconstruction of the scenario related to the port area
- Visualization through different points of view in order to emulate CCTV cameras on-site, bird's eye view, etc. ..
- «Ship catalog» integration from external information sources (updated technical data)



- Decision support system (DSS) based on the daily schedule of the port
- User-friendly schedule change interface, which uses the drag'n'drop of the ships on the docks and on the timeline of the day
- Creation of "What-If" scenarios (user defined) calculated in batch datacenter, on the basis of the port conditions for the following 24 hours and of the new schedule modified by the user



- Forecasting simulations of pollutants detected by environmental sensors installed on-site
- Hourly display of the polluting maps provided for in the forecast scenario and in the context of the one created by the user (what-if)



- Forecasting the levels of CF produced by port activities
- Visualization of the different sources of Equivalent CO2 production
- Total daily indication of the Carbon Footprint produced by port operations

This is
no small
project.

That's why we're doing it.

GROUNDUP
VISIONARIES
H THE HARVARD COMPANY

WE'RE READY
FOR YOUR PROJECT

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