EUROPORT DEMONSTRATION PROJECT

- **ARTES-20** Demonstration Project
- Follow-up to “EUROPORT Feasibility Study”
- Involved Countries: **Poland, Portugal**
- Duration: **30 months**
- Prime Contractor:
  - GMV INNOVATING SOLUTIONS SP.Z O.O (Poland)
- Partners:
  - GMVIS SKYSOFT, S.A. (Portugal)
  - TIS.pt (Portugal)
EUROPORT DEMONSTRATION PROJECT

- Users currently involved:

Demo Site Portugal
- APSS
  Port Authority
- SADOPORT
  Multi-use Terminal
- Transitex
  Logistics Company
- Transportes Gama
  Transport Company
- MacAndrews
  Shipping Line
- CP Carga
  Train Operator

Demo Site Poland
- STK
  Gdansk Container Terminal
- UNIFEEDER
  Shipping Line
- Morska Agencja Gdynia
  Transport & logistics company

Advisors
- APS
  Port of Sines
- Port Authority
- DCT Gdansk
  Container Terminal
Who We Are

GMV
GMV

- Multinational conglomerate founded in 1984
- Private capital
- Offices in Spain, Portugal, Poland, Germany, Romania, France, USA, Malaysia, Colombia and India
- Over 1200 employees all over the world
- Roots tied to the Space and Defense industries
WHAT IS GMV TODAY

GMV technology is deployed in **6 continents**

115M€ (total revenue)

Over **1,200 employees** worldwide

CMMI

Level 5
Who We Are

TIS.pt
TIS.PT

- TIS.PT is a Portuguese, independent, private, consulting company devoted to consultancy, research & innovation in the field of transports and mobility since 1992 with offices in Portugal and Brazil
- Highly Qualified Team: 60% of the team postgraduate, master's or doctoral
- Frequent presence in the European top of SMEs with higher number of research contracts for the European Commission
- More than 60 R&D projects for the European Commission over the last 15 years
- High customer satisfaction index: 4.3 on 5
Key
Issues
The following issues were identified as key issues for the optimization of intermodal operations in ports (considering that port infrastructure remains the same):

- Optimise the accuracy of the forecast of arrival (ETA) and departures (ETD) of ships in ports;
- Optimise the accuracy of the forecast of arrival and departures times of trucks to/from terminal and port gates;
- Improve port gate-in and gate-out operations in order to reduce time consumed by these operations;
- Improve the efficiency of pick-up and delivery operations in the yard.
EUROPORT SERVICES

Service 1 – Haulage Operations

Aggregates functionalities which will improve the haulage process by optimizing operations directly affecting or related with port operations.

Includes issues like:

- Orchestration of “haulage operations”, including the support to planning of operations and not only the execution of such operations;
- Real-time monitoring of trucks/trains: status, service, location, activities and routes;
- Estimation (for trucks/trains) of ETA/ETD at/from ports.
EUROPORT SERVICES

Service 2 – Ship Voyages Optimization

Provides functionalities which will improve the calculation of ship ETA and ETD to/from ports.

Includes issues like:

- Ship Positioning Tracking: Acquire, display and share information on ship positions;
- Optimal Ship Route Calculation: Based on satellite observation data and monitoring of weather “en route”, suggests the ship optimal route in order avoid adverse weather/wave and currents;
- Estimation (for ships) of ETA/ETD at/from ports;
Service 3 – Port Operations

Provide functionalities that support the planning and optimization of intermodal transport operations in ports and terminals, such as:

- Transport-related Operations:
  - Access to relevant documents (ship call, cargo manifest, shipping instructions, by plan and load/unload lists);
  - Transport order management;

- Gate Operations: Reception of notices of arrival at the gate, reception and transmission of documents, yard operations (pick-up and delivery), generation of gate-in and gate-out reports;
System Architecture
SYSTEM ARCHITECTURE
User Involvement
USER INVOLVMENT TIMELINE

- September 2014
  - User Requirements Gathering

- September 2014 – March 2015
  - System analysis and Design

- March 2015 – November 2015
  - System Development

- November 2015 – June 2016
  - System Validation at trial sites

- June 2016 – March 2017
  - Trials and Trials Evaluation and assessment
TRIALS

Service 1 – Haulage Operations – System usage

- Receive transport order and assign to a specific truck.
  - This causes a pre-alert message for the port for a Gate-In with na ETA
  - The device now starts transmitting data from this transport order

- Import Operations
  - After unload lists are confirmed
  - For pre-cleared cargo never before ship calls are confirmed

- Export Operations
  - After port call and shipping instructions are confirmed
TRIALS

Service 2 – Ship Voyages Optimization

• Captain receives the recommended optimize route

• Vessel Location Awareness

• Notification of delays at Port
TRIALS

Service 3 – Port Operations – System usage

• Receive Pre-Alert message for inbound truck with ETA for Gate-In/out

• Send the Confirmation Message with the Gate-In Order

• Information Exchange with the trucks via EUROPORT Services

• Receive confirmation for container pick up

• Send the Gate-Out Confirmation

• Receive notification for vessel possible delays

• Visualize the status of incoming vehicles/vessels
Thank You

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