

# **INFORMATION SYSTEMS FOR VESSEL TRAFFIC MANAGEMENT AND DATA EXCHANGE IN BULGARIAN PORTS**

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## MAIN AREAS OF ACTIVITY OF BPI Co.

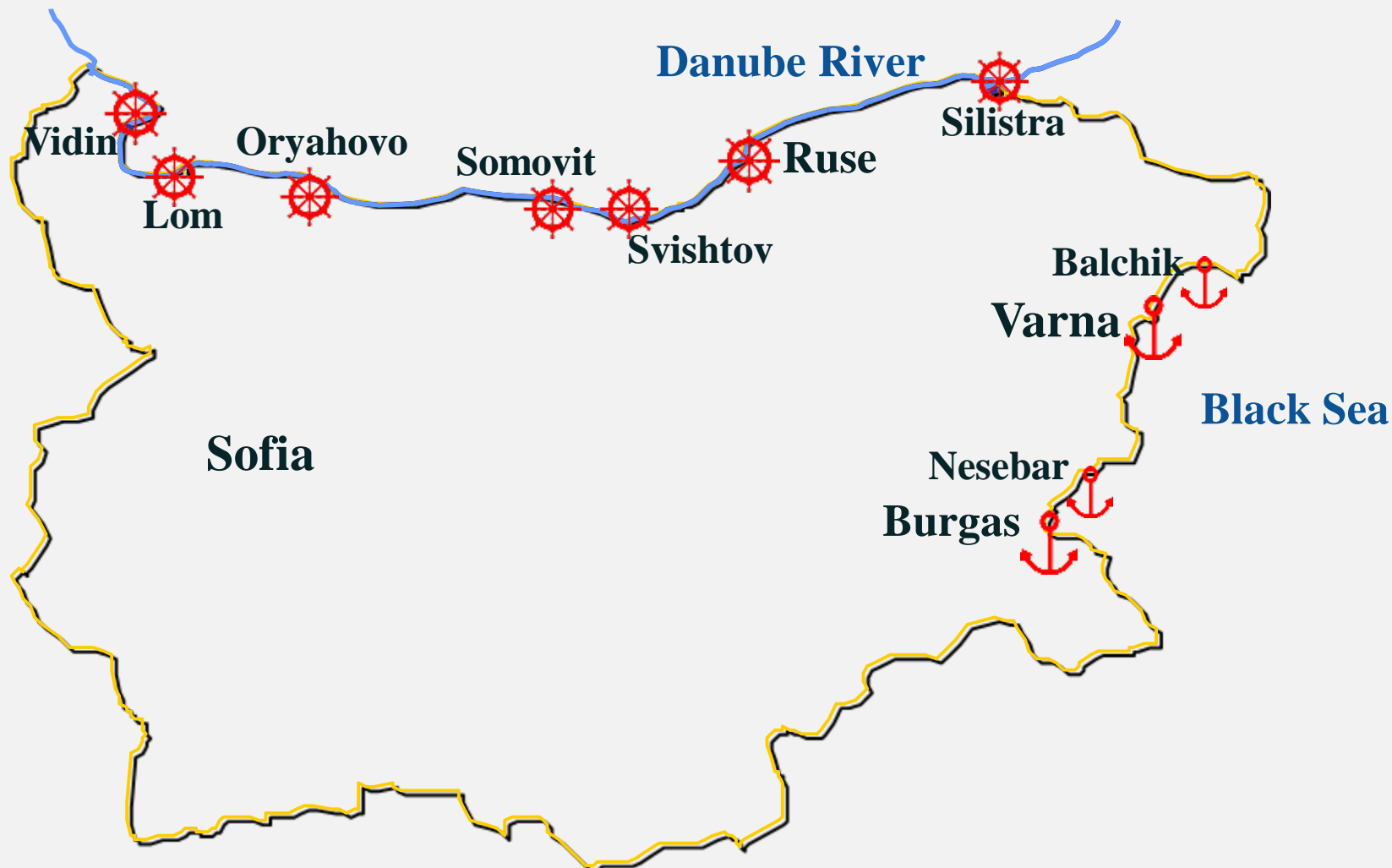


- Maintain and manage the property of the public ports of national importance
- Construct, reconstruct, rehabilitate the port facilities
- Maintain the existing and construct access canals, breakwaters, protection facilities and etc.
- Provide vessel traffic management and information services for the shipping
- Provide electronic data exchange in Bulgarian maritime and river ports
- Provide information services for river shipping traffic



# **BULGARIAN PORTS INFRASTRUCTURE COMPANY**

## **PORTS COVERED BY THE ACTIVITIES OF BPI Co**



## MAIN POLITICS OF THE COMPANY IN THE AREA OF BLUE ECONOMY:

- Establishing a climate of safety of maritime navigation and port movements in Bulgarian waters and ports;
- Contribute to maritime environment protection by providing safe navigation and electronic environmental data flow;
- Contribute to efficiency of port operations and ports in general by providing environment for B2G and B2B electronic data exchange and reducing the time of ship calls;
- Digitalization and electronic governance.

## THE MAIN PROJECTS IN THE AREA:

- Development of Vessel Traffic Management Information System – VTMIS;
- Development of River Information System – RIS;
- Development and providing electronic data exchange environment for the governmental bodies and business stakeholders in the area of maritime transport:
  - Developing and providing Maritime Single Windows (MSW) for B2G vessel's electronic documentation;
  - Developing and providing a Port Management System;
  - Developing a Port Community system for B2G and B2B electronic data exchange.



## VTMIS – ACTUAL SITUATION:

AN INTEGRATED SYSTEM WITH  
IMPROVED CAPABILITIES

FOR:

- VESSEL TRAFFIC MONITORING AND ORGANIZATION,
- SHIP TO SHORE COMMUNICATION AND INFORMATION SERVICES,
- ELECTRONIC PROCESSMENT OF SHIP DOCUMENTS,
- AUTOMATIC PROCESSMENT OF SAFETY AND ENVIRONMENTAL DATA TO EUROPEAN STRUCTURES.

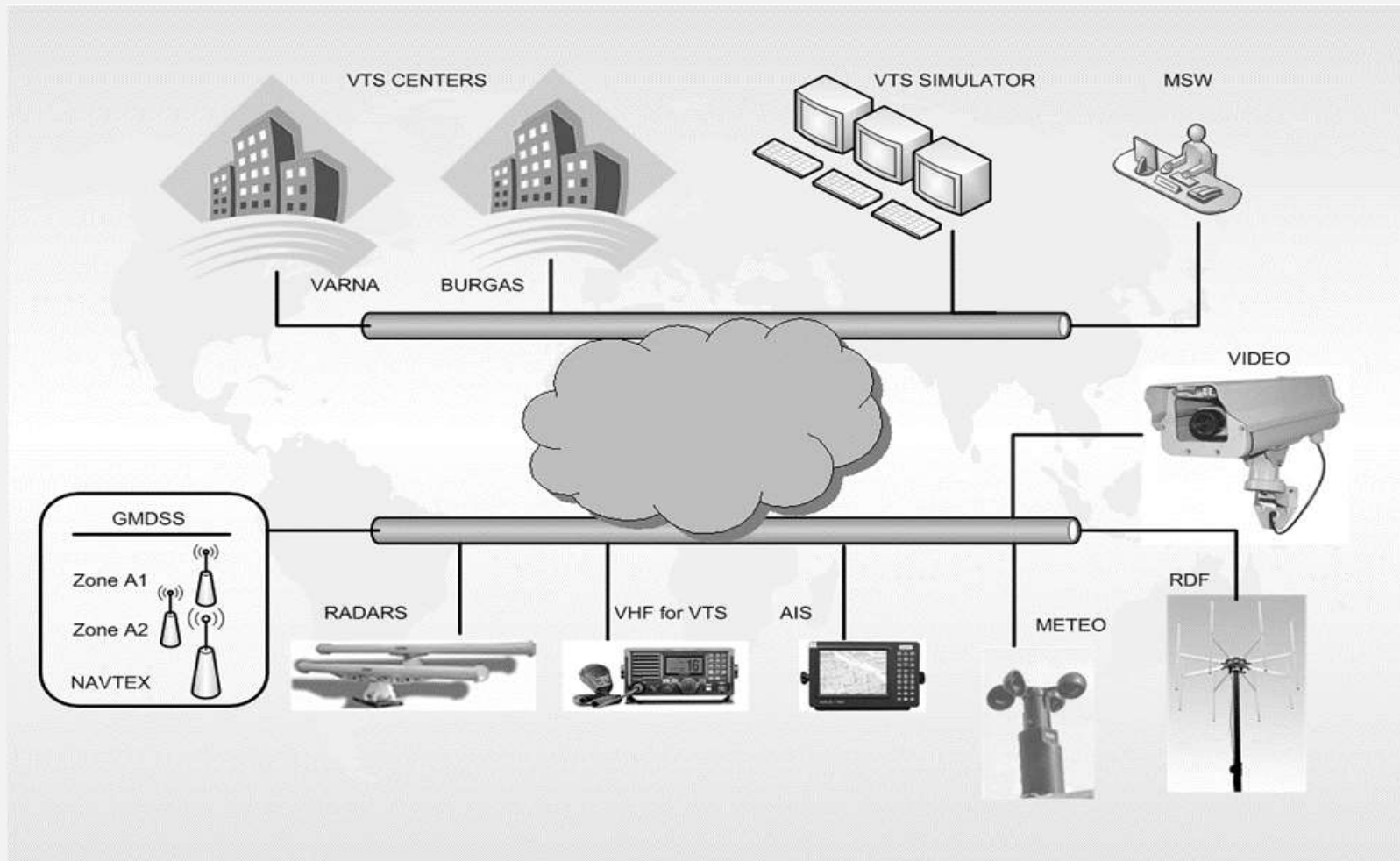


## MAIN SERVICES PROVIDED BY THE VTMIS

- Monitoring of vessel traffic for coordination of the actions of ships,
- Management of ship traffic in the designated areas,
- Enhanced monitoring of vessels which pose a danger to navigation, the protection of human life at sea and the environment,
- Collecting, storing and providing information (navigational, meteorological, legal etc.)
- Dissemination of maritime safety information,
- Provision of communication between ship and shore services,
- Provision of data exchange with European systems for maritime safety and security.

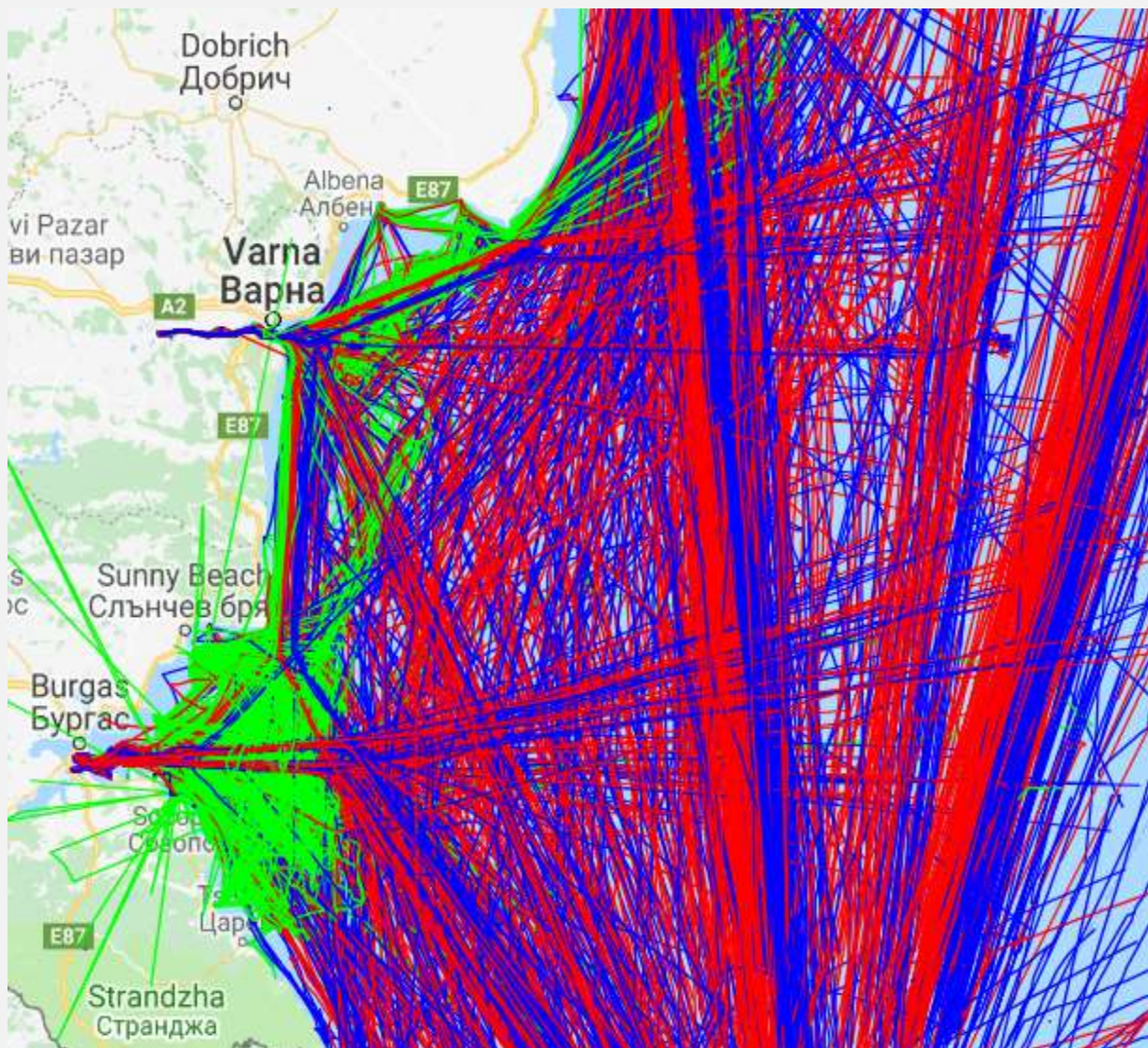
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## STRUCTURE OF THE VTMIS

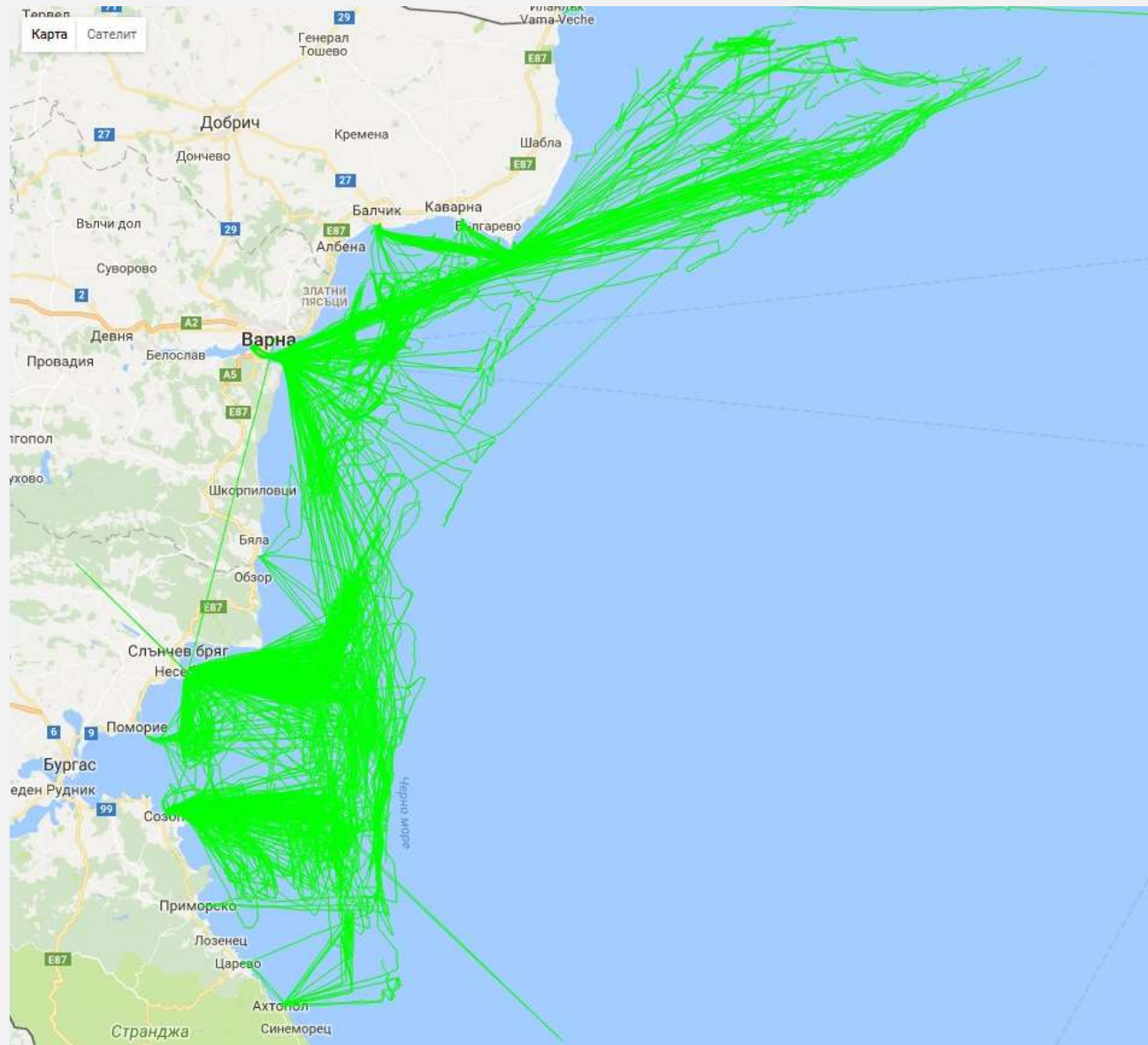




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# DEVELOPMENT OF MARITIME SINGLE WINDOW (MSW)

According to the regulations of European Directive 2010/65/EU MSW serves as a "single point of contact" for information sharing. Individual data elements should only be submitted once. Data transmission in the MSW can be performed directly by businesses, government agencies or trusted third parties (eg. ship agents) by user interface.

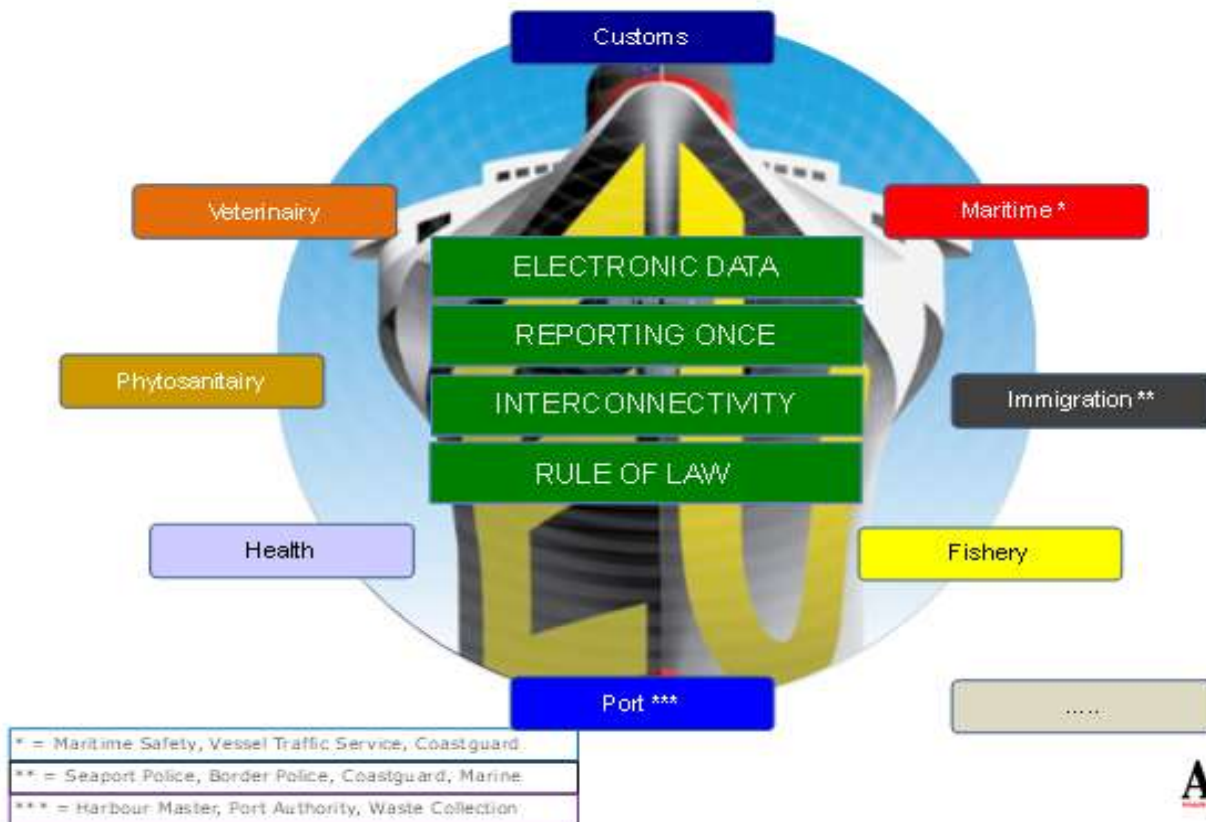
MSW Bulgaria consists of two port office with operator workstations respectively in Burgas and Varna

Both port offices will carry out administrative services for information and have redundant functions relative to one another.

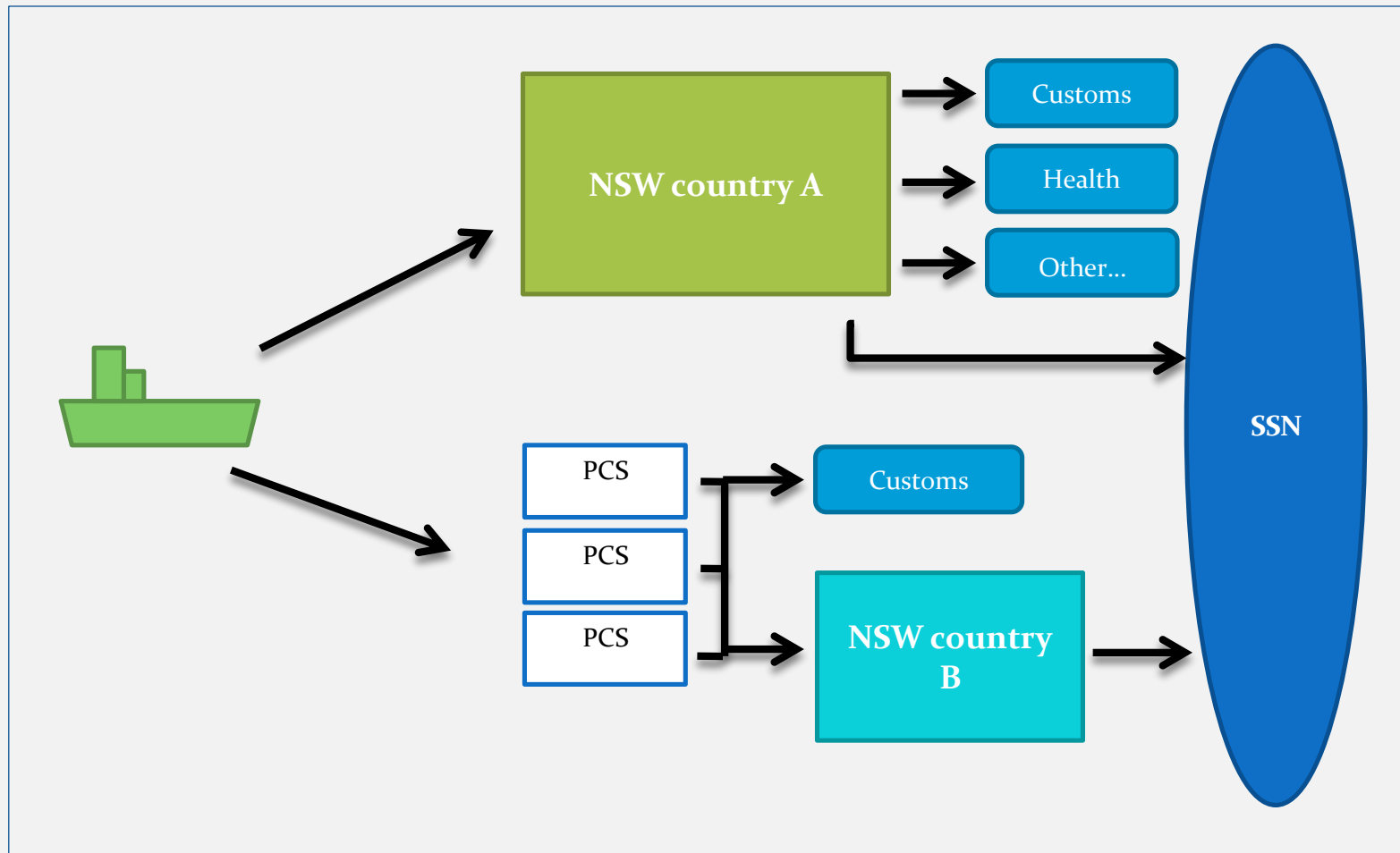
International data exchange according to Directive 2010/65/EU will be carried out.

# MSW - PRINCIPALS AND PARTICIPANTS

## MSW - 2010/65/EU - REQUIREMENTS



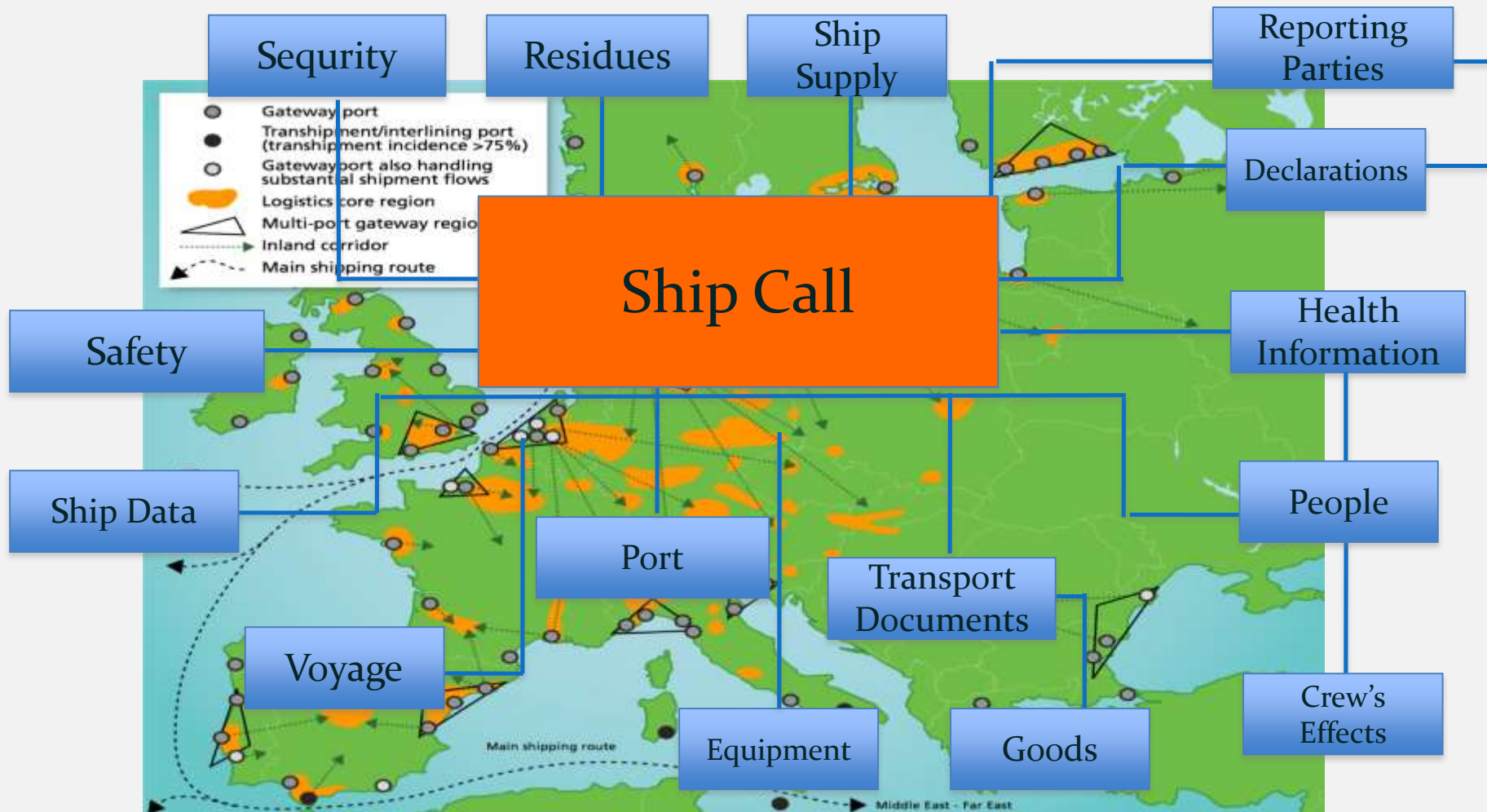
# PRESENT SITUATION OF THE MSW IN THE EU





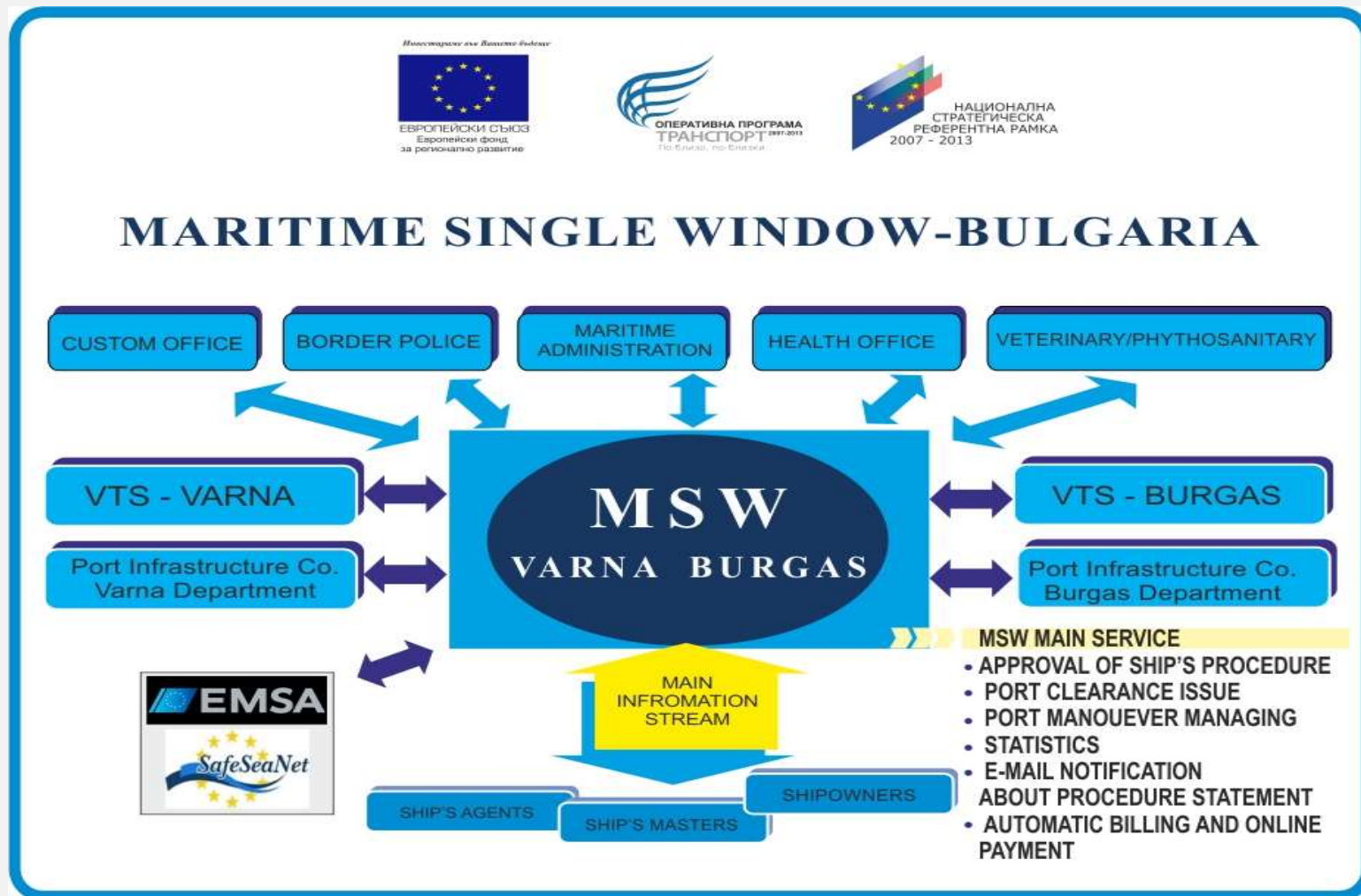
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## MSW - INFORMATION EXCHANGE



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## MSW BULGARIA - STRUCTURE:





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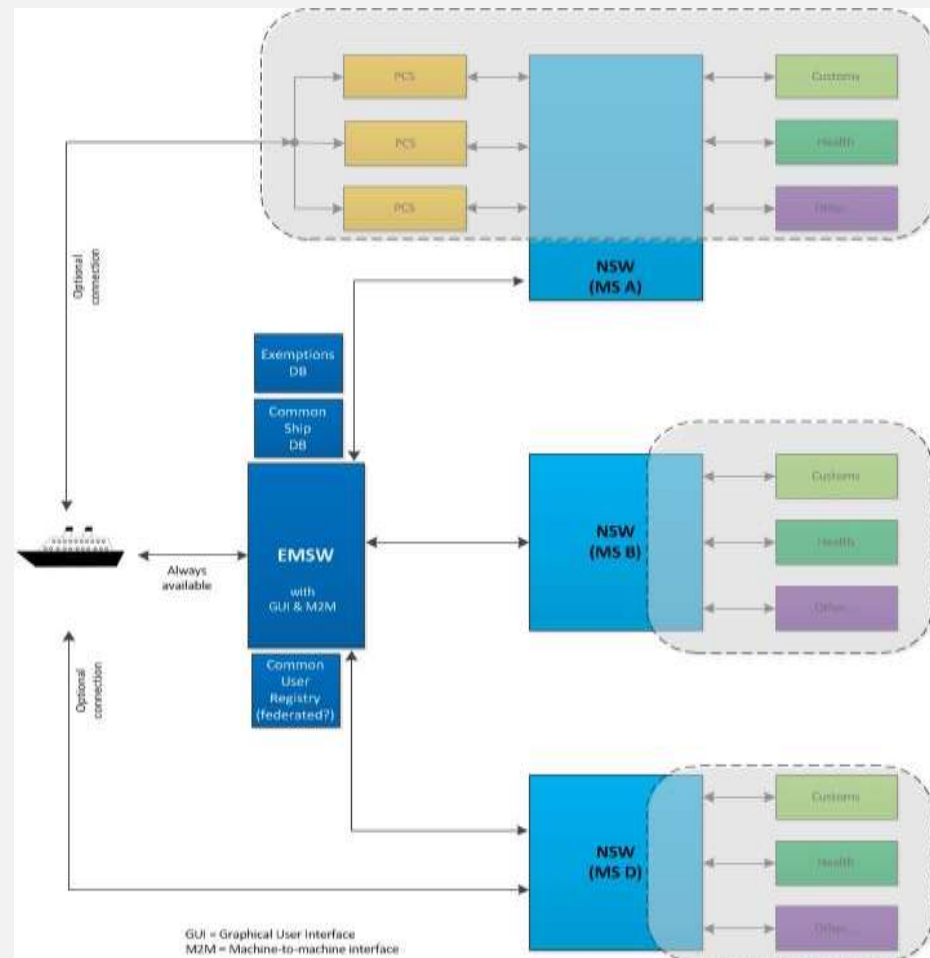
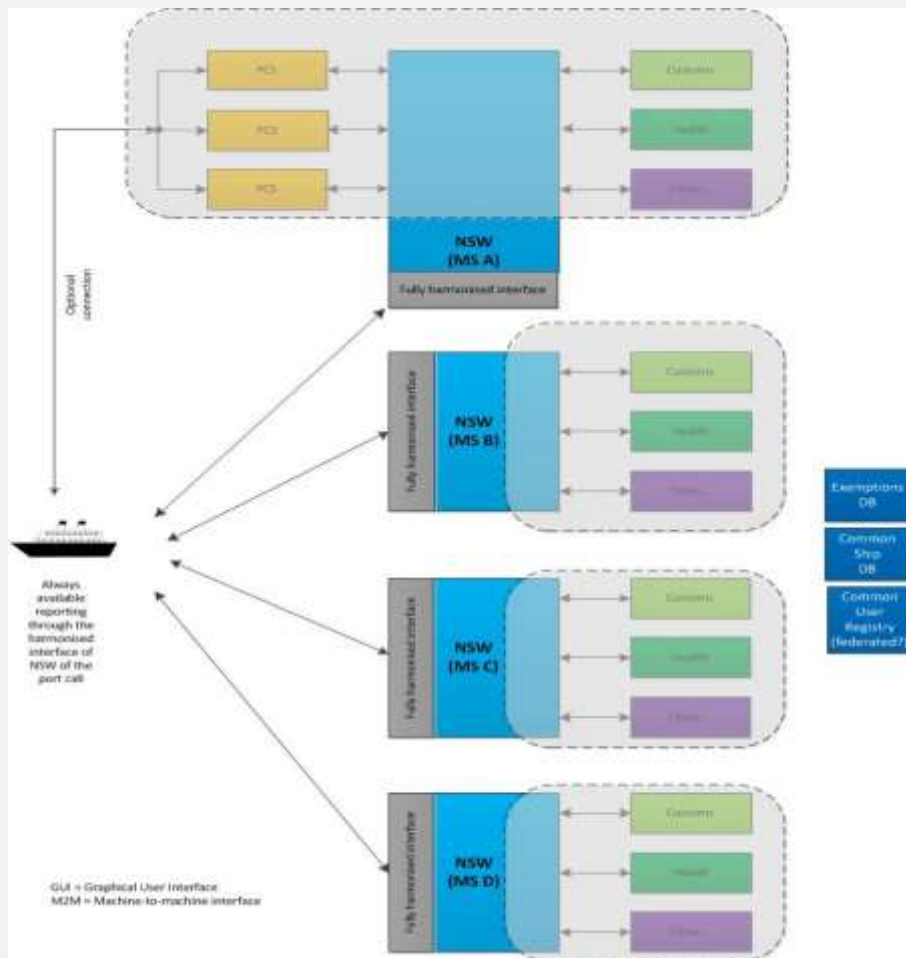
WAITING FOR THE MARITIME SINGLE WINDOW





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## FUTURE OF THE MSW CONCEPT IN THE EU – HARMONIZATION VARIANTS



# DEVELOPMENT OF PORT MANAGEMENT SYSTEM (PMS)

The electronic data exchange environment for port movements planning, called “MOVER” was developed as a national pilot project under the AnNa activities. It’s main purpose is to provide an information environment for all participants in the process of planning and performance of vessels. The system represents a module of the MSW and provides a reuse of the main volume of necessary data. It was put into operation on November 25, 2015.

## **MOVER Functionalities**

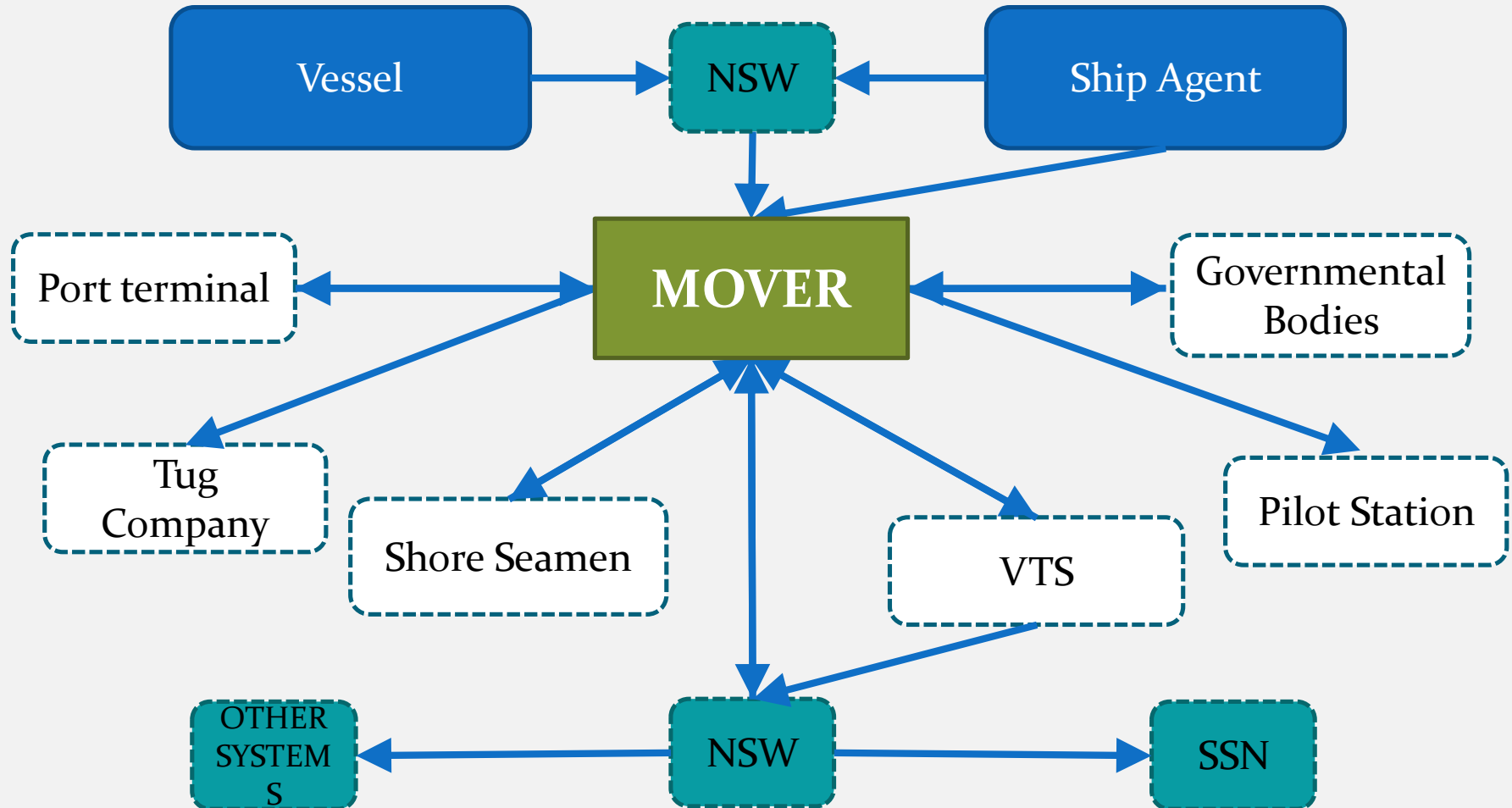
- ❖ Vessel port movement management
- ❖ Generating reports on port movements, terminals status, administrative permissions etc.
- ❖ Provision /reuse of data for MSW, SSN and other information systems





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## STRUCTURE OF THE PMS IN BULGARIAN PORTS





# **DEVELOPMENT OF PORT COMMUNITY SYSTEM (PCS) FOR B2G AND B2B INFORMATION EXCHANGE**

An undergoing feasibility study project aims the development and deploying of electronic data exchange environment for the port community

- Since in Bulgaria there was no initiative of the business community in the field of port activities to create PCS and;
- Such systems represent a practice-proven solution for great improvement of the effectiveness of ports through intelligent methods:

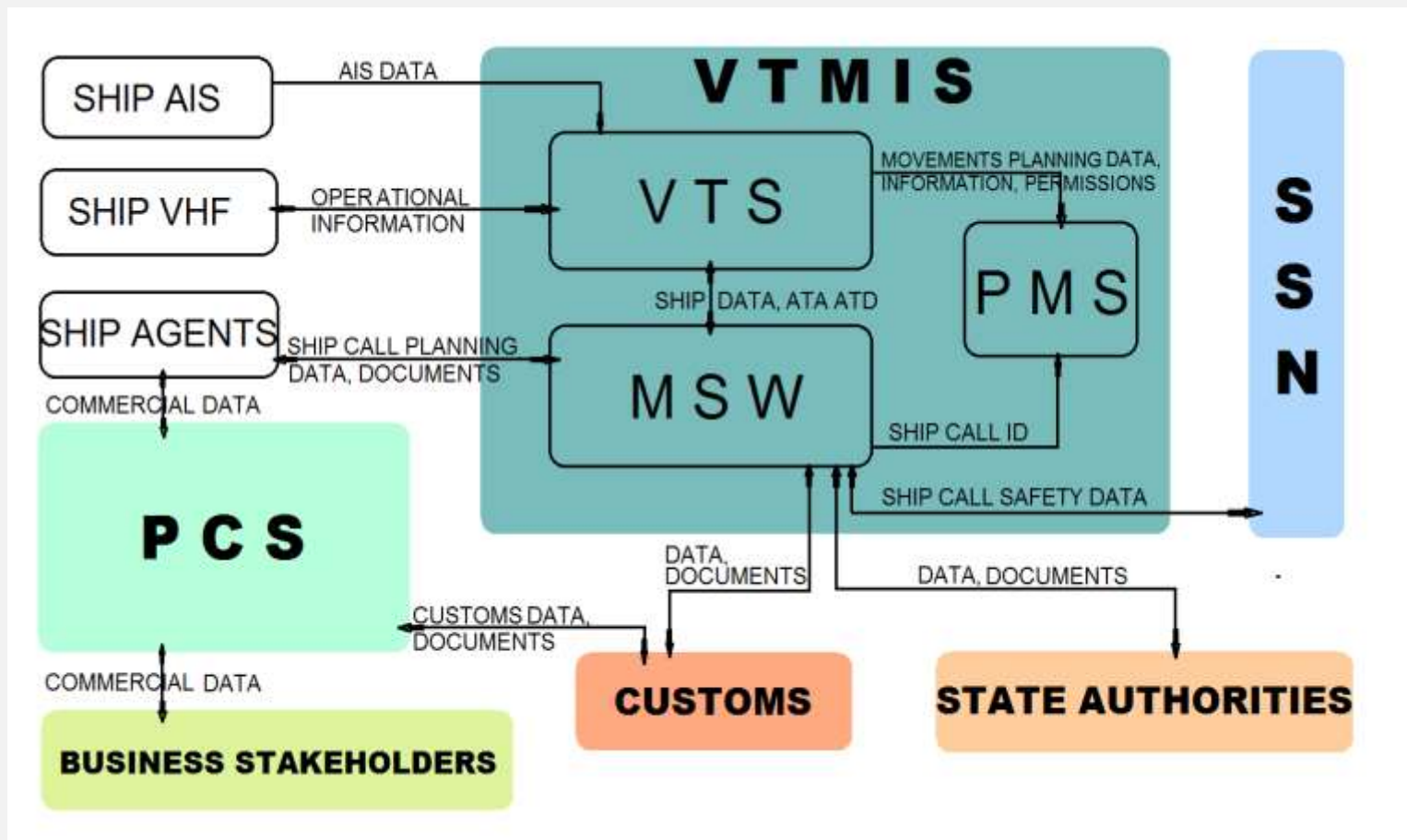
BPI Co has committed in developing and provision of such an information environment for the purposes of maritime business environment.

The company recognized the need for far-reaching studies to make the future system an useful facilitating tool for improving the efficiency of Bulgarian ports.



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## STRUCTURE OF THE AUTOMATIC INFORMATION FLOW IN BULGARIAN PORTS



## EXPECTED RESULTS OF THE SAFETY, ENVIRONMENTAL AND ELECTRONIC GOVERNANCE POLITICS OF BPI Co

- IMPROVED SAFETY OF NAVIGATION AND IMPROVED PROTECTION OF HUMAN LIFE AT SEA
- IMPROVED ENVIRONMENTAL PROTECTION AND IMPROVED CONDITIONS FOR TOURISM
- IMPROVED B2G DIALOGUE AND IMPROVED SAFETY AND SECURITY OF THE PORTS
- IMPROVED EFFICIENCY AND IMPROVED COMPETITIVENESS OF BULGARIAN PORTS



A large cargo ship with a black hull and red bottom is being towed by a tugboat. The tugboat is orange and white, with a prominent mast and various equipment. The scene is set on a body of water under a clear sky. The text "THANK YOU FOR YOUR ATTENTION" is overlaid in a large, dark blue, serif font.

**THANK YOU  
FOR YOUR  
ATTENTION**