



Maritime

CISE

Common Information Sharing Environment

**Gartner study:
"Benchmarking the
operational added value and
preparing end users' uptake
of the maritime CISE"**



Alexandru CHIRIC
Policy officer
DG MARE

- 
- A world map in a dark teal color is centered on the slide. Overlaid on the map are several light blue circles of varying sizes and a network of thin white lines connecting various points across the globe, suggesting a global network or data flow.
- 1. Background and objectives**
 - 2. CISE stakeholders survey on Information services**
 - 3. Managerial approach to achieve CISE objectives**

Background

CISE strands of work

**Development of technical interoperability solutions
(EUCISE2020, IT interoperability projects)**

**Streamline the operational added-value of information
sharing**

Objectives

Identify the most suitable services supporting an enhanced information exchange and benchmark the CISE interoperability solutions (CISE data and service model)

Emphasize and **explain the added-value of CISE** among operational end-users at national level

Re-assess user needs for information exchange and prioritize information services

Evaluate and specify added value **CISE information services** based on collected data from national authorities

Identify cornerstones to further implement CISE, including insights on governance issues

CISE Stakeholders survey

Overall purpose of the survey

- Simultaneously address maritime authorities from all MS to identify matching interests for information to be exchanged

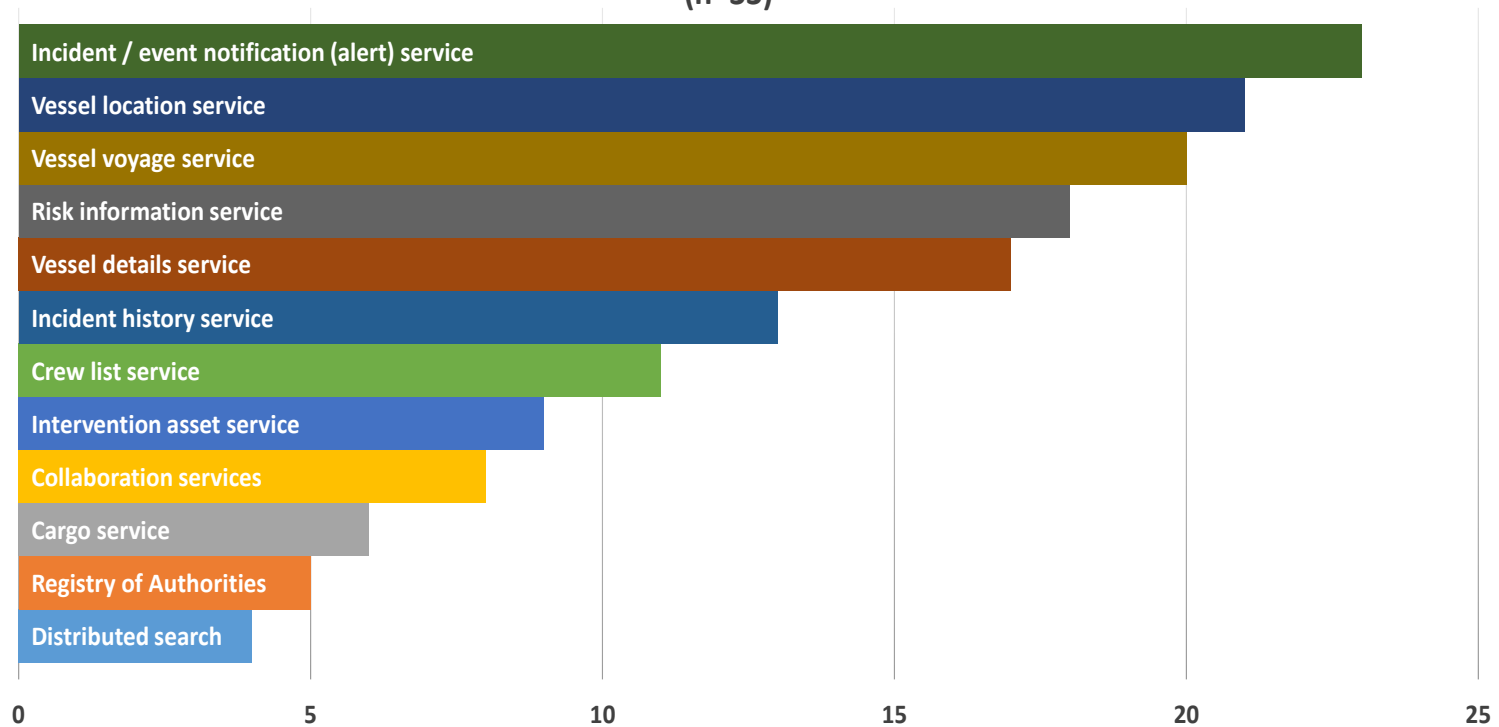
Particular objectives of the survey

- Confirm or comment upon the identified information exchange needs
- Identify any additional data & information needs
- Understand how the information already provided by EU Agencies and other regional cooperation systems contribute to these services
- Understand whether maritime authorities are willing to develop and implement such services

Findings concerning CISE operational information services

➤ Prioritization of services

Number of times the CISE service has been prioritised by the responding Authorities
(n=33)



Findings concerning CISE operational information services

CISE should focus on the most value added Services and take a balanced approach to overcoming technical, operational and legal barriers

Coordination at EU, regional and national level is required to implement CISE Services

Findings concerning CISE operational information services

CISE service	Description	Possible scenario	Examples of exchanged information
Collaboration services	These services are composed of a chat and videoconferencing tools.	These tools could be used to improve coordination between Authorities, by means of direct human contact, in case of exceptional events or when conducting joint operations. (e.g. management of SAR operation generated by the sinking of a merchant vessel in an area at the junction between several MS territorial waters/EEZ)	Real-time dialogue between operators across sectors and borders enabling coordination in concrete operational situations.
Vessel details service	This service enables the exchange of information (identification and main features) on any type of vessel (commercial, fishing, governmental, leisure...).	This service can be used each time the identity and other essential features of a vessel are required. For instance, when the vessel is implied in smuggling or in an accident/incident.	Identification and relevant features of: <ul style="list-style-type: none"> ▪ Commercial vessels transiting the European waters ▪ Fishing vessels from European flag and vessels related to fisheries ▪ Commercial vessels not travelling in European waters ▪ Governmental vessels ▪ Leisure boats registers ▪ Other information like the vessel safety plan, etc.
Vessel voyage service	This service enables the exchange of information related to the voyage of a vessel, like the port of departure, arrival, the route, etc.	This services could be used to collect these specific information each time a vessel is involved in an incident, or to assess the risks associated to this vessel, or to identify anomalies in its behaviour.	Voyage details of: <ul style="list-style-type: none"> ▪ Commercial vessels with a port of departure or arrival in the EU ▪ Fishing vessels from European flags ▪ Commercial vessels of fishing vessels without a port of departure or arrival in the EU ▪ Governmental vessels ▪ Etc.

Findings concerning CISE operational information services

CISE service	Description	Possible scenario	Examples of exchanged information
Crew list service	This service enables the exchange of information concerning the crew and/or passengers on board of a vessel.	This information can be used for SAR but also when searching for person of interest on board of the vessel (for law enforcement, for instance) This information could also be collected usually e.g. to check if the crew complies with the minimum safety requirements; for tax or pension calculation; etc.	Concrete information concerning: <ul style="list-style-type: none"> Number of persons on board Crew list details (name and function of the persons) Ship owner Etc.
Intervention asset service	This service allows to exchange information about the availability, the characteristics and (when possible) the position of the intervention assets managed by the different Authorities.	This service is important for better cooperation during interventions at sea. It can be used, for instance, to facilitate the rapid identification of unknown vessels or during a SAR operation to better plan/perform joint search etc. It can be used also when the intervention requires an asset with specific characteristics (e.g., capable of flying at night, medical assistance on board, etc.)	Availability, characteristics (and position - AIS and radar) of: <ul style="list-style-type: none"> Pollution response assets SAR assets Unmanned capabilities Intervention assets capabilities Surveillance capabilities Etc.
Incident / event notification (alert) service	This service can be used to exchange automatic notifications/alerts, between Authorities across sectors and borders, on incidents or events occurring at sea, in your area of responsibility.	Information on incidents and interventions is useful for each authority to be received in real time directly on its systems. E.g. When an inspection is carried on board of a vessel, to know beforehand that the vessel is suspected of trafficking (for instance) by another authority is of paramount importance.	Notification / alerts on: <ul style="list-style-type: none"> SAR incident MAS incident Infringements to traffic rules Insurance default Incidents related to illegal fishing Incidents related to border control Past incidents important to understand the history of a vessel Vessels suspected of terrorism, piracy, etc...)

Findings concerning CISE operational information services

CISE service	Description	Possible scenario	Examples of exchanged information
Risk information service	<p>This information is usually not public and consequently not properly distributed to competent Authorities. This service enables to share in a trusted manner information on vessels of interest, or persons of interest.</p> <p>This service also enables the exchange of the results of risk analysis carried out by different Authorities.</p>	<p>These information can be used by an authority or a community involved in SAR or in countering illegal immigration, etc.</p> <p>The risk-related information will help different Authorities to improve their own maritime awareness on, for instance, risk zones or risk vessel profiles.</p> <p>Additional risk information related to a vessel could also allow different Authorities to improve their own risk assessment on vessels of interest.</p>	<p>Information on:</p> <ul style="list-style-type: none"> ▪ Single hull tankers list ▪ Paris MoU lists ▪ IUU vessel lists ▪ Vessel of interest ▪ Person of interest ▪ Etc.
Cargo service	<p>This service enables sharing the broad description of the cargo for vessels involved in an incident/accident and/or coming from ports outside the EU.</p>	<p>This service could be of interest for different Authorities and mainly for those involved in SAR and pollution interventions as well as in emergency operations on board a vessel.</p>	<p>Information on:</p> <ul style="list-style-type: none"> ▪ Dangerous Cargo list ▪ Customs declaration ▪ Fish catch ▪ Additional Cargo details ▪ Etc.
Vessel location service	<p>This service allows to receive additional useful information on the position of a vessel.</p>	<p>A Member State authority is looking for the real location of a suspect ship. This service can be used in an iterative way, polling several potential suppliers of this information.</p>	<p>The following information if available could be used for cross reference:</p> <ul style="list-style-type: none"> ▪ AIS and LRIT positions of commercial vessels ▪ VMS position of fishing vessels ▪ Leisure boats location from AIS ▪ Radars location, passive sensors (on shore or on board of assets) ▪ Location information from patrolling boats/planes ▪ Etc.

Findings concerning CISE operational information services

CISE service	Description	Possible scenario	Examples of exchanged information
Incident history service	The service facilitates the exchange of information regarding the history of incidents, accidents and inspections related to a specific vessel.	This information could be useful for different Authorities involved in investigating a specific vessel or in assessing the risk associated to a vessel.	Information on: <ul style="list-style-type: none"> ▪ Vessels involved in smuggling or trafficking in the past ▪ Vessels involved in safety incident or accident ▪ Vessels involved in pollution incident ▪ Exchange of specific investigation and intervention reports ▪ Etc.
Registry of Authorities (Query)	This service allows participants to easily find the operational contacts of any other authority performing maritime surveillance sectors either for computer-to-computer connection or for operators' direct contact	This service could allow immediate contact between operational Authorities in case of an emergency situation or when a direct inquiry is necessary.	It might include: <ul style="list-style-type: none"> ▪ Functions of the authority ▪ Email, telephone ▪ Condition under which the contact can be reached ▪ Area of responsibility ▪ Etc.
Distributed search	This is a function that could allow any of the above services to push and retrieve information in a suitable way in terms of speed, reliability and quality	N/A	N/A

Findings concerning CISE operational information services

➤ Key barriers to implementation

Overcoming the technical complexity and diversity of platforms and devices

Sensitivity of the information exchanged

Operational processes and a complex coordination at national level

Political decision making processes and internal resources

Findings concerning operational information services

➤ Confidentiality

45% of the identified CISE Services imply exchanging information that could be classified as personal or sensitive data

The number of classified information exchange is minimal in collaboration services, vessel voyage and search solutions

Recommendations concerning the managerial approach

Consolidate the CISE Strategic/policy oversight (including all relevant services/stakeholders)

Provide targeted operational and technical advisory & support to CISE implementation (involving EU agencies)

Enable multi-stakeholder management across the wide range of maritime surveillance actors

Feedback from the TAG

- The services identified in the study are **relevant** for maritime operations
 - The description of the services necessitates further refinement
 - The implementation of the services is feasible
 - Prioritization is needed
- Other possible services:
 - Connection and access right management
 - Regional emergency plan sharing
 - Automated abnormal behaviour monitoring
 - Incident information/history (complementary to Incident Notification)
 - Intervention Asset service

Feedback from the TAG

- Recommendations for the implementation:
 - Pilot-projects with interested authorities
 - Regional approach to be favored
 - Reuse the outputs of the EUCISE2020 project
 - Interoperability tools
 - Information services
- Low participation in the survey
 - A larger participation in the survey would have been beneficial (to better reflecte the reality and authorities' needs)

Ongoing work

- Study on Risk Assessment capacity of Maritime coastguard authorities
- <https://bookshop.europa.eu/en/evaluation-of-risk-assessment-capacity-at-the-level-of-member-states-authorities-performing-coast-guard-functions-in-order-to-identify-commonalities-and-ways-to-enhance-interopability-and-cooperation-in-this-field-across-eu-pbEA0417344/?CatalogCategoryID=JRWep2OwmH0AAAFEQf8mwjCM>
- Study on US Maritime Information Sharing Environment (MISE) and similar developments
- Framework Contract on the implementation of the EUMSS and WS 2 (CISE)

Thank you for your attention

