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**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT AND THE COUNCIL**

**Better situational awareness by enhanced cooperation across maritime surveillance  
authorities: next steps within the Common Information Sharing Environment for the  
EU maritime domain**

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# COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

## **Better situational awareness by enhanced cooperation across maritime surveillance authorities: next steps within the Common Information Sharing Environment for the EU maritime domain**

### **1. Introduction**

Enhancing information exchange between maritime surveillance authorities is one of the key strategic objectives of the Union under the Integrated Maritime Policy and an important building block of the Maritime Security Strategy<sup>1</sup>. Strengthening the security of our seas and oceans is also an essential part of the blue growth agenda to create growth and jobs.

The development of the common information sharing environment for the EU maritime domain (Maritime CISE) is an ongoing collaborative process which already has been the subject of two Communications by the Commission in 2009 and 2010<sup>2</sup>. Positive results include enhanced inter EU agency cooperation, initiatives by several maritime sectors at EU level, as well as various initiatives at national level. Maritime CISE is supported by stakeholders in Member States, by Council and by the European Parliament<sup>3</sup>.

Member State authorities carry out many different operational surveillance tasks, many of them to fulfil existing obligations under EU law, to ensure the safety and security of our seas and oceans. Such tasks require specific competences and assets in various fields: defence, customs, border control, general law enforcement, fisheries control, marine environment protection/pollution response, and maritime security and safety.

Maritime risks and threats do not respect national or administrative borders and can therefore take advantage of the open maritime space. In a context where these authorities face increasing maritime risks and have limited operational and financial resources, optimised information exchange can be more effective and cost efficient. The ambition for all involved in operational surveillance activities is to have timely access to the relevant and most accurate information to carry out their activities and to seamlessly exchange information between their systems, co-ordination centres as well as patrolling and surveillance assets (ships, planes and satellites etc.).

The objective of this Communication is to take stock of the current situation and to identify areas of further work on the basis of current achievements.

### **2. What is Maritime CISE and what are the benefits?**

Maritime CISE is a voluntary collaborative process in the European Union seeking to further enhance and promote relevant information sharing between authorities involved in maritime surveillance. It is not replacing or duplicating but building on existing information exchange and sharing systems and platforms. Its ultimate aim is to increase the efficiency, quality, responsiveness and coordination of surveillance operations in the European maritime domain and to promote innovation, for the prosperity and security of the EU and its citizens.

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<sup>1</sup> Joint Communication by the Commission and the EEAS of 6 March 2014. Join (2014) 9 final.

<sup>2</sup> Com (2009) 538 final and Com (2010)584 final.

<sup>3</sup> See for example the so called Limassol declaration adopted in 2013 by European ministers and endorsed by the council of ministers and to council conclusions on maritime surveillance 2009-2013 also referred to in the impact assessment.

Maritime CISE will neither have an impact on the administrative structures of Member States, nor on the existing EU legislation in this field or implementation of ongoing EU level initiatives, in particular not on those based on legal Union requirements. Given that administrative structures in Member States are diverse, administrative efforts to implement this initiative at national level will depend on the situation in each Member State.

The objective is to ensure that maritime surveillance information collected by one maritime authority and considered necessary for the operational activities of others can be shared and be subject to multiuse, rather than collected and produced several times, or collected and kept for a single purpose. Maritime surveillance information could be either raw or unprocessed data which are formatted in a special way, or information deriving from data that has been treated and taken a certain meaning. Information can be either basic or rich. Maritime surveillance information data covers e.g. ship positions and routing, cargo data, sensor data, charts and maps, meteo-oceanic data etc. In cases where such data identifies an individual or makes him identifiable, EU data protection instruments<sup>4</sup> will have to be applied<sup>5</sup>. By moving towards a multipurpose use of data and by making current maritime surveillance systems interoperable<sup>6</sup>, data collection will be a less time and resource intensive exercise and, in the best case scenario, authorities will always have the best available information on the situation at sea at their disposal.

Duplication of data collection efforts can be the indirect result of suboptimal co-operation between authorities. This can also affect the acquisition, maintenance and deployment of surveillance assets such as radars, communication systems, ships, helicopters, planes and satellites. Enhanced information exchange could help avoiding that such resources are acquired in duplication, screen the same sea area twice, or collect the same information several times and carry out overlapping missions at sea.

Paving the way for enhanced information sharing is a pre-requisite for seamless practical cooperation at sea between national authorities involved in maritime surveillance.

Achievements so far have demonstrated that Maritime CISE would have a number of clear advantages. In particular, enhanced information exchange is an important condition for:

- Enhancing knowledge and improving maritime situational awareness. Both can enhance prevention, preparedness and response to maritime security incidents related to cross border and organised crime (e.g. trafficking, illegal fishing, piracy, armed robbery, terrorism) maritime safety and illegal discharges or accidental marine pollution. Assessments involving Member State experts<sup>7</sup> have clearly demonstrated that authorities manage maritime surveillance activities more effectively if all relevant information would be at their disposal during the planning and execution of operational activities. This could potentially lead to the reduction of such threats and risks by 30% on average. Pertinent examples would be information sharing between civilian and military authorities on the influx of migrants to the Schengen Area through the Mediterranean sea; or that common routine surveillance and emergency

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<sup>4</sup> Directive (EC) No 46/1995, Council Framework Decision 2008/977/JHA and Regulation (EC) No 45/2001.

<sup>5</sup> Maritime surveillance information which is subject to data protection rules is for example information of captain and other crew members on a vessel. In such cases, data can only be exchanged for very specific purposes and should be limited, in accordance with the principle of data minimisation, to situations where there is a defined operational need.

<sup>6</sup> Interoperable means that information can be sent automatically from the system of one maritime surveillance authority to another.

<sup>7</sup> Reports of preparatory actions and projects referred to in section 3.

management tools around a sea basin could be connected in one ‘click’ in case of emergency.

- Substantial reductions in data collection efforts. Stakeholders have indicated that there is a large demand for additional data exchange in particular between civilian and military authorities and that over 40 % of the data collected in the EU is collected by several authorities at the same time, such as non-co-operative targets and ship identification information.
- Reductions of administrative and operational costs of maritime surveillance activities. Calculations by Member State experts have shown that potential cost savings for enhanced information exchange could yield an overall benefit to the European economy of around 400 million EUR per year and direct savings for public authorities of at least 40 million EUR per year. The corresponding investment costs would amount to around 10 million EUR per year for the first ten years.

### **3. Progress towards enhanced maritime surveillance – What has happened so far?**

Initiatives to improve information exchange for the maritime domain have already been ongoing for some time. Since 2002, important steps have been taken both at national and Union level, in particular on the civilian side. Progress has already been made through a number of legislative instruments at EU level that put in place systems serving different policy areas and in some cases going beyond one sector.

These systems include: the Union maritime information and exchange system, SafeSeaNet, providing integrated maritime services<sup>8</sup> inter alia for traffic monitoring (situational awareness) and to ensure the implementation of EU legislation, hosted by the European Maritime Safety Agency (EMSA) and managed by the Commission’s Directorate-General for Mobility and Transport (MOVE) together with EU/EEA Member States in the High Level Steering Group<sup>9</sup>; the Common Emergency Communication and Information System (CECIS) facilitating communication during maritime incidents and disasters managed by the Commission’s Directorate-General for Humanitarian Aid and Civil Protection (ECHO); the Vessel Monitoring System managed by Member States, the Data Exchange Highway (DEH) and the Fisheries Language for Universal eXchange (FLUX), managed by the Commission’s Directorate-General for Maritime Affairs (MARE), supporting the Common Fisheries Policy; the Maritime Surveillance network (MARSUR) managed by the European Defence Agency (EDA) supporting the Common Foreign and Security Policy; the European Border Surveillance System (EUROSUR) improving the situational awareness and reaction capability of Member States and of the EU Border Agency (FRONTEX) at the external borders as well as the Secure Information Exchange Network Application (SIENA), the information exchange system of EUROPOL, and the Joint Research Centre’s Blue Hub platform supporting EU R&D in maritime surveillance and situational awareness and experimenting with new data sources previously untapped.

Of particular interest at EU level is the Reporting Formalities Directive<sup>10</sup>, which sets up National Single Windows. Those windows will, when fully operational in June 2015, provide central national information exchange platforms for reporting and sharing of ship related information between all competent authorities and will be linked to the Union maritime information and exchange system, and other systems, therefore, providing relevant cross-

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<sup>8</sup> SafeSeaNet, CleanseaNet, EU LRIT Data Centre and, THETIS

<sup>9</sup> Commission Decision 2009/584/EC

<sup>10</sup> Directive (EU) No 65/2010.

sectorial and cross-national information in the maritime domain for all authorities, in particular on the civilian side. Further initiatives improving information sharing are the upcoming Strategy on customs risk management and security of the supply chain in relation to the Union customs code amongst others<sup>11</sup>, the provisions foreseen in the new Common Fisheries Regulation<sup>12</sup>, and the European Marine Observation and Data Network (EMODNET)<sup>13</sup>.

Experiences made have shown that there is an added value for further cooperation. One example is the operational use of the integrated maritime services (enhanced maritime awareness picture) provided by EMSA to FRONTEX and EFCA. These could serve as inspiration for how cooperation at national level could be further pursued.

At national level, several Member States have already put in place mechanisms such as national coordination centres involving all relevant authorities (civilian and military) in order to improve co-ordination. Such centres could work as inspiration for others.

Since the 2010 Communication on CISE, progress has been made towards the implementation of the roadmap on CISE. Member States have worked closely together in the ‘BlueMassMed’, ‘MARSUNO’ and ‘Cooperation’ projects.<sup>14</sup>

Member States<sup>15</sup> involved in *BlueMassMed* developed the concept of national ‘IT nodes’ that may in future act as national information hubs.

Member States<sup>16</sup> involved in *MARSUNO* in particular made progress in reviewing the legal situation and made suggestions for a possible governance structure.

Member States<sup>17</sup> involved in the *Cooperation* project calculated the potential economic added value of a Maritime CISE in real life maritime surveillance scenarios. They also conducted a study into authorities’ access rights to information exchange, and developed a concept for a flexible ‘computer common language’ (common data model) that can be used, where needed, to ensure the interoperability of surveillance information systems.

These initiatives have confirmed and helped refining the operational need for cross sectorial information exchange and have regularly been discussed in a Member State Expert Group on Maritime surveillance and in the CISE Technical Advisory Group (TAG), composed of representatives of different maritime public authorities and EU agencies, in order to ensure its coherent development.

#### **4. Next steps for a Maritime CISE**

The progress made to date provides a basis for further work and in particular to focus on the remaining challenges, showing that the vision of Maritime CISE is being pursued both at national and EU level. One of the most important needs is to improve information exchange between military and civilian authorities. Including the defence community and identifying information that could be exchanged between civilian and military authorities in a Maritime CISE will be important since military authorities are one of the main holders of maritime surveillance data.

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<sup>11</sup> Regulation (EU) No 952/2013.

<sup>12</sup> Regulation (EU) No 1380/2013

<sup>13</sup> [www.emodnet.eu](http://www.emodnet.eu)

<sup>14</sup> [www.bluemassmed.net](http://www.bluemassmed.net), [www.marsuno.eu](http://www.marsuno.eu), <http://www.coopp.eu/>

<sup>15</sup> France, Greece, Italy, Malta, Portugal and Spain.

<sup>16</sup> Sweden, Belgium, Estonia, Finland, France, Germany, Latvia, Lithuania, Norway and Poland with Russia as observer

<sup>17</sup> Finland, Bulgaria, Estonia, France, Germany, Ireland, Norway, Portugal, Romania, Sweden and Spain.

Priority areas for further cross-border and cross-sectoral cooperation have been identified by the *MARSUNO*, *BlueMassMed* and *Cooperation project* mentioned above. These areas cover, inter alia:

- Real-time sharing of positions of patrol vessels and aircrafts and functional specifications to ensure the fastest possible response to mass rescue operations and/or other events at sea,
- Collaborative tools for cross-border crisis management,
- Data consolidation and exchange of information on suspicious vessels navigating in EU waters, and
- National registries of recreational boats: computerised processing of information requests between Member States.

It will be essential to continue building on existing tools and achievements in order to avoid duplication of efforts.

Further actions seek to facilitate information exchange and should therefore neither create any new data collection obligations, nor be prescriptive on the information to be exchanged. This will be for the data owner to determine.

The Commission intends to take the following further actions:

- The Commission plans to launch a project in 2014 under the EU's Seventh Framework Programme for Research (FP7) in order to test a Maritime CISE on a large scale, in particular between civilian and military authorities. In addition, the Commission will foster the uptake of innovations funded by the European Union framework programmes for research and innovation.
- The Commission will, in close co-ordination with Member States, develop a non-binding Maritime CISE handbook by end 2016 with best-practice recommendations and useful information on how to apply Maritime CISE. Recommendations are amongst other things intended to promote a "care to share to be aware" culture across and between different sectors among national authorities involved in maritime surveillance. The handbook will also provide guidance on the recommended handling of personal or commercially sensitive information by the relevant authorities. The handbook should take into account the results of various preparatory actions such as the FP7 project, the Cooperation Project, and pilot projects such as Marsuno, Bluemassmed and a project funded under the Integrated Maritime Policy Programme (IMP) 'Evolution of SafeSeaNet to support CISE and other communities', among others.
- The Commission will support measures to develop, maintain, and disseminate standards allowing maritime surveillance systems to be interoperable. Such standards will facilitate maritime information exchange between surveillance authorities and the development of IT solutions, which is major challenge for co-operation between Member States, industry development and competitiveness. They would include pursuing a common data model<sup>18</sup>, built on technological solutions already established and required by Union Law, to serve as a translation tool between maritime surveillance information systems, in particular between civilian and military systems. A technical reference architecture for public services will be defined by end 2017, in line with the European Interoperability Reference Architecture developed by the

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I.e. a list of terms, meanings, naming conventions, formats of data and relationships between data

programme on "Interoperability Solutions for European public administrations" (ISA programme), within the framework of the Digital agenda for Europe. Specifications to support virtual collaboration from existing IT systems<sup>19</sup> will also be needed.

- Member States should in parallel be encouraged to continue to work on modernising their maritime surveillance IT set up, where there is a need, and further enhance information sharing between authorities involved in maritime surveillance. Some funding is available at EU level to support small improvements.
- Member States should also involve the competent national data protection authorities as early as possible to ensure that the operational means and objectives comply with national data protection requirements. Prior impact assessments could be one way of support for national initiatives in order to ensure that the most effective and cost efficient measures are put in place.
- The Commission will continue to review existing sectorial legislation at EU level in order to remove possible remaining legal barriers to cross-sectorial information sharing while ensuring compliance with relevant data protection requirements. Although the Commission believes that most of these have been addressed, they may still exist at national level. These may persist due to the organisational structures of Member State authorities.<sup>20</sup>
- Further reflection is required on the administrative structures needed to manage a Maritime CISE, in particular the need for service level agreements between national authorities.

The Commission will also, by 2018, launch a review process to assess the implementation of a Maritime CISE and the need for further action.

The Commission emphasises that it is the responsibility of Member States to ensure the effective surveillance of waters under its sovereignty and jurisdiction, and on the high seas, if relevant. Ensuring the operational exchange of maritime surveillance information services between these authorities is the responsibility of Member States, in some instances EU agencies can facilitate and support this process. Therefore, the operational aspects of such information exchange needs to be decentralised to a large extent to national authorities in line with the principle of subsidiarity.

At the same time, action is also necessary at EU level since information exchange also has a transnational component which normally entails co-operation at regional or sea basin level. Moreover, rules and conditions for sharing of some information are already regulated at EU level. The role of the Commission should therefore be, in addition to its role of ensuring the implementation and functioning of the Union legislation already in place, to continue to act as facilitator and co-ordinator of the Maritime CISE process to further enhance and promote relevant information exchange in particular between civil and military authorities involved in maritime surveillance and to ensure interoperability of maritime surveillance systems at EU level, building on existing systems and solutions, without creating a new system.

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<sup>19</sup> Instant messaging, video streaming, video and audio-conferencing.

<sup>20</sup> A common hurdle identified through preparatory actions is that the mandate of Maritime surveillance officials in Member States is limited to one sectorial function, thereby preventing them co-operating and exchanging information with other authorities. The Commission will therefore promote the removal of these legal limitations at national level.

## **5. Conclusion**

Maritime CISE is an important building block of the envisaged EU Maritime Security Strategy and fulfils its principles and objectives as a cross sectorial, coherent and cost efficient initiative. It is essential to support maritime surveillance activities in the EU maritime domain. Further work will continue to adhere to the overriding principles of avoiding duplication and using efficient and cost-effective solutions, be based on the actions outlined in this Communication and on the significant experience of all the authorities and functions in the Member States and relevant Agencies. At this stage, the Commission does not see a need to put in place a cross-sector legislative initiative.

The implementation of Maritime CISE will continue to require work both at EU and national level.

Action will have to be taken at national level to ensure that such information exchange can take place between the relevant authorities, in particular between civilian and military authorities. The Commission therefore encourages Member States to learn from each other and to draw inspiration from the experiences made in putting in place national co-ordination mechanisms already introduced in several countries, and to implement a common information sharing environment in the maritime domain at national level in line with the approach developed at EU level in the framework of Maritime CISE and by drawing the full benefits from the existing information exchange mechanisms.

The Commission invites the European Parliament and the Council to provide political guidance and confirm their willingness to support the proposals set out in this Communication.