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JOINT STAFF WORKING DOCUMENT

On the implementation of the EU Maritime Security Strategy Action Plan

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Introduction

The EU Maritime Security Strategy (EUMSS) Action Plan (hereafter the EUMSS Action Plan)¹ was developed to deliver cross-sectorial actions in a comprehensive and coordinated manner, mainstreaming maritime security into EU policies, strategies and instruments. Following its adoption in 2014, Member States were asked to report on the implementation process at national level. The majority of Member States have done so, contributing to the assessment of the work developed in the maritime security domain and offering guidance on the way ahead². All in all, national reports provided by the Member States and progress at EU level demonstrates that the implementation of the Action plan is progressing well and that some actions are considered as completed.

Based on an initial assessment of the reports submitted by Member States, a Non-Paper on the implementation progress was presented to the Friends of Presidency meeting of 4 December 2015. At the request of Member States, the Commission services and the EEAS are hereby presenting a formal report with a revised analysis of progress registered on the implementation of the Action Plan. This report is built upon the same contributions received by Member States, i.e. those submitted in 2015 and which have been circulated to Member States by the Council Secretariat. It embraces nonetheless a renewed assessment of these contributions, emphasizing maritime security priorities suggested by Member States while also delivering a comprehensive picture of recent developments and focus areas for EU action. For ease of reference, the present document should be read alongside the EUMSS Action Plan, as reference is made to several actions on the basis of their numbering therein without further elaboration.

The current document follows the same structure of the reporting format used in Member State reports, addressing the following items for all the work strands of the Action Plan: (i) progress made, (ii) actions planned but not started, (iii) finished actions and (iv) comments and suggestions. Latest developments by the European Commission, the European External Action Service (EEAS) and the European Defence Agency (EDA) are also presented (v)³. Finally, it should be noted that the procedure for Member States reporting could benefit from further revision. This procedure does not currently allow for a comprehensive assessment of progress on implementation, something that will be addressed in the next reporting exercise.

1 Council of the European Union, EU maritime Security strategy Action plan (doc 15658/14), Brussels 16 December 2014. Also available at http://ec.europa.eu/maritimeaffairs/policy/maritime-security/index_en.htm

2 A total of 18 Member States have presented implementation reports. 75% of the reports provide a comprehensive picture of specific maritime security actions developed, while 25% of the reports provide a general analysis regarding recent developments at Member State level. Member States have reported with greater detail on actions developed under work strand 1 of the Action Plan, followed by work strands 2, 3, 4 and 5 in decreasing order of detailed contributions. About 30% of the reports contain comments and suggestions on new actions in at least one work strand.

3 Comments were also received from the Maritime Analysis and Operation Centre.

1. BUILDING THE EUROPEAN UNION AS A STRONGER AND LEADING MARITIME SECURITY PROVIDER IN THE GLOBAL MARITIME DOMAIN (WORK STRAND 1)

(i) Progress made as reported by Member States

On international cooperation (action 1.1. and subsequent), Member States have extensively reported on recent developments in international dialogues and cooperation with international partner countries and organizations at the bilateral and multilateral levels. The systematic or targeted insertion of maritime security in political dialogues with third countries was highlighted by some Member States, while others have highlighted the establishment of Maritime Security dialogues in sectoral areas, for instance, counter piracy. Member States participation in a vast and diverse array of international organizations, such as NATO, HELCOM or other structures such as the European Coast Guard Functions Forum is well noted⁴. At the same time, cooperation at the regional level was also well emphasized. For example, Member States have highlighted successful ongoing initiatives in the context of the Baltic Sea Region Border Control cooperation and wider cooperation in the Baltic Sea region, as well as cooperation in the Mediterranean basin and in the Black Sea region.

Cooperation with NATO (action 1.1.3.) remains a priority for Member States, as emphasised throughout the reports.

At the operational level, the deployment of national (defence) forces in different theatres and under different institutional arrangements was extensively reported by Member States (actions 1.1.1 to 1.1.5). Operational activities reported by Member States include national, bilateral, or regional activities (BENELUX, PRUM) national contributions to regulations (Frontex, EUROSUR), national participation in cooperation platforms (AQUAPOL), participation in Frontex coordinated operations such as the Joint Operation EPN Triton 2015, as well as national contributions to EU Naval Operations - Operation EUNAVFOR MED Sophia and Operation EUNAVFOR ATALANTA.

On the improved visibility of the EU in the global maritime domain and EU MSS awareness raising (action 1.2.), Member States have not reported the launch of any fully-fledged communication campaign to raise awareness. However, Member States have reported, under different sub actions, on the organization of maritime security seminars, workshops and other initiatives, including international conferences⁵ and on the advancement of the maritime security curricula at the University Level. At the same time, the Latvian Council Presidency contributed to EU MSS awareness raising, upon the adoption of the Action Plan, by including the EUMSS AP in the agenda of relevant (sectoral) Council Working Parties (WP): Shipping WP, Research WP, and joint Political and Security Committee (PSC) - Committee on Operational Cooperation on Internal Security (COSI) WP.

On the protection of critical maritime infrastructures and support to the capacity building of third countries, two Member States have highlighted their participation in the Critical Maritime Routes programme (CMR) EU CRIMARIO project which aims to enhance the maritime security and safety in the wider Indian Ocean and in the EU CRIMGO Project, which is focused on capacity building of coastal states in the Gulf of Guinea region.

⁴ These include initiatives led by Germany in the framework of the German Presidency of the G7 (G7 Foreign Minister's Declaration on Maritime Security, Lubeck, April 2015) or Latvia's chairmanship of the National Contact Points for the EU Strategy for the Baltic Sea Region (EUSBSR).).

⁵ E.g. Germany, Cyprus, Spain, France, Croatia, Ireland.

The conclusion of agreements is well reflected in Member States reports in relation to several actions (actions 1.1., 1.4., 1.6). Member States have highlighted the conclusion of bilateral technical agreements between the navies of EU Member States (e.g. Italy in the Mediterranean) as well as regional initiatives and arrangements, for instance the Black Sea Regional Cooperation and initiatives in the Baltic region⁶, including in the framework of the EU Strategy for the Baltic Sea Region.

In the global maritime domain, Member States also emphasized the conclusion of bilateral agreements with partner countries (e.g., France, Belgium and Portugal noted the conclusion of agreements and partnerships with African countries, particularly in West Africa⁷). At the same time, coordination activities between the different surveillance initiatives in the global maritime context as upcoming priorities are reported (e.g. France, Spain, Portugal and Denmark are developing a coordinated approach to improve awareness of the maritime domain in the Gulf of Guinea, by creating an exchange mechanism between maritime operational centres).

No actions on the peaceful settlement of disputes (action 1.6.) were reported. However, some activities reported under other actions in Work Strand 1 and Work Strand 5 may be considered relevant for the purpose of promoting international law and the peaceful settlement of disputes⁸.

(ii) Actions planned by member States but not started

Member States plan to further develop coast guard activities in accordance with Regulation (EU) 656/2014 on the surveillance of the external sea borders during sea operations under the coordination of the Frontex.

A technical operating agreement between coastguards and the launching of Quality Assurance audits on the maritime Search and Rescue Coordination system is also foreseen.

(iii) Finished actions as reported by Member States⁹

The following actions have been suggested by some Member States as having been accomplished and thus subject to possible deletion: actions 1.1.1, 1.4.4., 1.4.7., 1.5.2., and 1.7. This is a factual account of suggestions received by Member States, not reflecting different implementation levels for the actions of the Action plan registered among Member States.

(iv) Comments and suggestions by Member States

Member States highlighted the need to take note of best practices in Border Services of the Black Sea countries cooperation and effective control of the region.

Increase cooperation with North African countries, in particular with a view to improve safety of navigation in the Mediterranean is encouraged.

6 E.g. Baltic Sea Region Border Control Cooperation and the Black Sea Cooperation Forum with Russia, Turkey, Ukraine and Georgia.

7 E.g. Seahorse Atlantic Network with Morocco and several Western African countries.

8 For instance, the adoption of the Lubeck Declaration, under Germany's Presidency of the G7, or the organization of seminars dedicated to international law have contributed to the advancement of international and maritime multilateralism.

9 Some Member States reported on actions which, according to their view and due to the fact that developments have been registered in that particular area of reference, had been fulfilled and could thus be deleted. The present section contains these suggestions as presented by Member States, in a factual account.

A suggestion was made towards the inclusion of arctic cooperation in the EU MSS Action Plan.

The need to promote closer cooperation with NATO on standards and procedures is also mentioned. Furthermore, suggestions towards the importance of enhancing the interoperability between participants in CSDP operations and missions and of exploring significant links between EUMSS and the EU Strategy for Baltic Sea Region (EUSBSR) especially in the areas of maritime safety and security (points i) to v) in relation to action 1.1. and subsequent) were included in the reports.

Member States also presented as comments the need to reinforce the internal-external security nexus, pointing out the importance with regard to drug trafficking as well as border control, in particular Frontex taskings (including through action 1.3.2.).

The need to highlight the important role for EFCA for the fight against Illegal, Unregulated and Unreported fishing in Third countries (action 1.4.6) was also mentioned.

Attention was also drawn to the possibility of using a Deconfliction and Coordination mechanism (similar to SHADE as used in Indian Ocean counter piracy) in other regions which should be multiplied to increase coordination and efficiency in Maritime Capacity.

Finally, Member States suggested the need to evaluate the possibility of using the Common Emergency Communication and Information System (CECIS) as a reference/example for similar response mechanisms in the field of Maritime Security (action 1.5).

(v) Latest developments by the EEAS and the Commission Services

During the reporting period, the EEAS and the services of the Commission have strengthened ongoing dialogues and established new partnerships with key international stakeholders in the global maritime domain: i) With ASEAN, a second and third High Level Dialogue (HLD) on Maritime Security were held¹⁰; ii) Under the ASEAN Regional Forum (ARF) format, the EEAS and the services of the Commission participated in the ARF Inter-Sessional Meeting on Maritime Security, and remained engaged in implementing the ARF work plan on maritime security for 2015-2017; iii) With the African Union (AU), the EEAS participated in the AU Meeting on Maritime Safety and Security, held on 8-9 February, in Victoria, Seychelles, and is providing technical support to the envisaged AU Summit on Maritime Security & Development (Togo, last quarter of 2016); iv) bilateral dialogues dedicated to Maritime Security were held with South Africa (EU-South Africa Strategic Partnership) and Angola (Joint Way Forward).

The EEAS handed over the chairmanship of the Contact Group on Piracy off the Coast of Somalia (CGPCS) to the Republic of Seychelles on the 1st January 2016, after successfully accomplishing, with the support of the services of the Commission, its three main priorities¹¹ and paving the way for an industry-led review of the piracy High Risk Area (HRA) declared in the Red Sea and the Indian Ocean

10 The results of the 2nd EU-ASEAN HLD, held on 5-6 May 2015 in Kuala Lumpur, were shared with Member States in December 2015. Member States were then invited to submit comments or express interest in further engaging with ASEAN in the areas reflected in the meeting report.

11 In particular, the reform of the CGPCS, the documentation on the lessons learned from fighting piracy in the Horn of Africa (the website Lessons Learned Consortium was created for that purpose), and the "zero-zero" priority (no merchant vessels has been successfully pirated since May 2012).

in 2010 to protect shipping and seafarers from an ever-increasing number of pirate attacks off the coast of Somalia.

The two ongoing Operations, EUNAVFOR MED Sophia and Atalanta, continue their contributions to delivering effective maritime security in their respective areas of operation. The Council has agreed to extend the mandate of Operation Sophia for one more year and two further tasks have been added: (1) training, and information sharing with, the Libyan Coastguard and Navy, based on a request by the legitimate Libyan authorities taking into account the need for Libyan ownership; (2) implementation of the UN arms embargo on the High Seas off the coast of Libya on the basis of a new United Nations Security Council Resolution. Operation Atalanta's mandate has been extended until December 2018.

The EEAS has further cooperated with NATO, producing a Food-for-Thought non-paper on "Enhancing cooperation, coordination and complementarity between the EU and NATO in the area of maritime security" in 2015. During the reporting period, EU-NATO staff to staff talks and briefings at Politico-Military Group (PMG)/Operations Policy Committee (OPC) level were held with the view to exchange updates and further enhance the established cooperation. The organization of a common seminar focused on lessons learnt and a possible invitation to participate in a maritime exercise organized by the respective Organizations has been fostered. Building on well-established cooperation at the operational and tactical level in the Indian Ocean, progress was made in implementing a deconfliction mechanism in the Mediterranean (SHADE) which replicates the success story from the Horn of Africa, a possibility also suggested by one Member State¹². Progress was also made in the area of exchange of information between EU and NATO at the operational and tactical level in order to achieve a Maritime Situational Awareness Picture of the Mediterranean.

In order to raise awareness and increase the visibility of the EU MSS, the EEAS and the Commission drafted a 'Communications Campaign Concept Plan' (presented to the 'Friends of the Presidency' and endorsed by Member States on 19 June 2015). In partnership with the EEAS, the Commission and the European Agency for Small and Medium Enterprises (EASME) tasked a communication company to develop communication materials seeking to explain the EU MSS (booklet, infographics, postcard, video, website content) to the general public as well as to stakeholders at national and EU level. The communication materials were delivered in May 2016. In addition, the EEAS produced an 'EU MSS information toolkit' targeting EEAS Headquarters, EU Delegations, and third parties.

On the promotion of maritime security in different policies (1.3.), the EEAS and the Services of the Commission would like to highlight the following input papers to the forthcoming Global Strategy on Foreign and Security Policy:

i) The input paper on 'maritime multilateralism, reinforcing the EU's multilateral approach to maritime security', jointly elaborated by Germany and the Netherlands; ii) The input paper on 'Advancing Global Ocean Governance as a tool of security', elaborated by Portugal, and co-sponsored by France. Both input papers are fully in line with the EEAS' intention to project the EU in the global maritime domain as a global security provider and are useful tools to reflect upon how to better cooperate with international partners, maintaining a maritime order based upon the principles of

¹² Belgium.

international law; iii) Finally, the input paper on EU-NATO Cooperation presented by Germany, France, Netherlands, Slovakia, UK (and US) as a contribution both to the Global Strategy and NATO's Warsaw Summit, further develops the key tenets put forward in the earlier non paper presented by the EEAS.

In terms of maritime transport security, the Commission has a regular and long lasting dialogue with the United States' Coast Guard. The Commission also promotes ship and port security with the beneficiaries of the SAFEMED and TRACECA MAR programmes.(Action 1.4.7)

From a customs perspective, the EU is pro-active at international level to improve safety and security in international supply chains and to incorporate EU standards in the SAFE Framework of standards from the World Customs Organization (WCO SAFE FoS). This framework is applied by customs authorities around the world. The EU and the People's Republic of China have launched a pilot project on Smart and Secure Trade Lanes (SSTL). The aim of the pilot is to test specific safety and security related recommendations of the WCO SAFE FoS.

2. MARITIME AWARENESS BUILT UPON CLOSE COOPERATION AND INFORMATION SHARING (WORK STRAND 2)

(i) Progress made as reported by Member States

On the implementation of the Common Information Sharing Environment (CISE)¹³ (actions 2.1 and subsequent)¹⁴, Member States have extensively reported on the latest developments, referring in particular to their participation in EU CISE 2020 project¹⁵. The focus has so far been put on actions that strengthen inter-sectoral cooperation and interoperability at national level, including through exchange of information between civil and military forces in real time. Cooperation between Member States on maritime surveillance systems is also reported upon¹⁶. Other initiatives were also mentioned as the Union Maritime Information and Exchange System, including Integrated Maritime services EUROSUR and MARSUR. Reports on participation in a number of regional initiatives, as the Baltic Ordnance Safety Board (BOSB) cooperation, were also presented.

On the strengthening of the cross border cooperation and information exchange towards the optimisation of the surveillance of the EU maritime area and its maritime borders (action 2.2 and following), Member States reported on actions developed and staff deployed under initiatives as EUROSUR and MARSUR, but also on number of cooperation projects on information sharing and exchange, such as the North Sea Cluster in Coast Guard cooperation¹⁷, the European Patrol Network, the Baltic Sea Region Border Control Cooperation (BSRBCC)¹⁸ and the European Coast Guard Function

13 C.f. Communication COM(2014) 451 on Better situational awareness by enhanced cooperation across maritime surveillance authorities. CISE is a voluntary collaborative process in the European Union.

14 Further information available at http://ec.europa.eu/maritimeaffairs/policy/integrated_maritime_surveillance/index_en.htm

15 EUCISE2020 is run by 14 Member States and Norway including 37 partners some of them representing consortia.

16 This is the case, for example, of the development of the interoperability of the exterior maritime surveillance systems of Spain and Portugal in the South, on the basis of the Spanish SIVE system and the Portuguese SIVIC system, including the exchange of information between the respective coordination centres. Also Finland and Estonia are sharing maritime situational picture between the two countries and the Finish Navy is cooperating with the Swedish Navy to exchange maritime target data on the Baltic Sea Region.

17 Involving Belgium, the Netherlands, the UK and France.

18 Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, Poland, Russia and Sweden are participating Member States. Iceland holds an observer status

Forum (ECGFF). Participation in CSDP missions such as ATALANTA / EUNAVFOR MED and Frontex operations (e.g. EPN Triton, Poseidon, Indalo) are also reported upon. Finally, cooperation and information exchange via INTERPOL, Europol and third countries is also mentioned.

On the need to ensure adequate coordination between the various EU surveillance initiatives in the global maritime domain with EU maritime surveillance assets (actions 2.3 and following), Member States referred to synergies with research and innovation companies and institutions. Report on progress registered with the Maritime Analysis and Operation Centre on narcotics was also made, together with references to the work developed on the North Atlantic Coast Guard Forum Working Group on drug trafficking.

Member States further reported on their progress and involvement on initiatives such as the EDA MARSUR Sea Surveillance Cooperation, Sea Surveillance Cooperation Baltic Sea, and the Mediterranean and Black Sea EU Member States. Reference was also made to the MAREΣ system (Mediterranean AIS Regional Exchange System), which was designated as the platform to allow the sharing of the maritime information among the EU participant Member States and third Countries of the Mediterranean basin (Mauritania and Jordan included) involved in the EU project SafeMed III.

Participation to the NATO initiative Maritime Information System for Safety and Security of Shipping was also referred to.

No member States reported on the following actions: 2.3.4 and 2.3.7.

(ii) Actions planned by Member States but not started

On actions planned but not started, Member States presented actions that are high in their agenda for the near future. From capacity building¹⁹, to bilateral cooperation initiatives²⁰ and broader cooperation project' partnerships, to a visible commitment towards the development of research based projects²¹, Member States are visibly progressing in developing maritime awareness, surveillance and information sharing. Upcoming priorities in Member States vary considerably and depend largely on the level of implementation of the Action Plan per Member State.

Contributing and participating to the development of CISE related projects, including by participating in call for proposals for its development at national level, is a priority for the majority of Member States. Inter-department consultations on CISE are also being developed in some Member States, initiatives that are now moving towards wider coordinated national approaches. The improvement of cross-sectorial cooperation and interoperability on integrated maritime surveillance at national level

19 Lithuania is working towards replacing existing software with the one having capability of data sharing via various data formats. Some Member States are also working towards reinforcing and modernizing their technical means for border control. Latvia is focusing on the implementation of EUROSUR, modernization of REIS, development of NSIS II and SIRENE. Croatia is also working towards upgrading VTMS system and buying additional technical means and instruments, plus working towards consolidate and modernize ADRIREP mandatory ships reporting system in the Adriatic Sea.

20 Ireland is expecting further international assistance from the Portuguese Navy to build on the Portuguese Navy's experience in BlueMassMed.

21 The Irish Coast Guard is in dialogue with an Irish University on a feasibility project to improve safety in searching for missing persons in the maritime domain using RPAS (Remotely Piloted Aircraft). Germany is working towards improving the contribution of maritime security assets, inter alia focal subjects training and exercise, within the Multinational Exercise NORTHERN COAST 2017 and in the International Sea Law Seminar "Legal Dimension 2017". An independent study on the establishment of a Belgian Coast Guard Centre ('sponsored' through the EU Internal Security Fund) has recently been finalised.

is also a priority, towards the development of a common maritime awareness picture²². All in all, extensive progress can be noted at national level to improve cross sectorial information exchange.

Member States also emphasized coordination activities between the different surveillance initiatives in the global maritime context as upcoming priorities (e.g. France, Spain, Portugal and Denmark are developing a coordinated approach to improve awareness of the maritime domain in the Gulf of Guinea, by creating an exchange mechanism between maritime operational centres). Other individual initiatives are on-going: France, for instance, is supporting Madagascar, as part of the MASE Program.

Work is also planned on hazardous objects dumped (action 2.1.7), including by Member States cooperation within the framework of the North-East Atlantic Marine Environment Protection Commission (OSPAR) on the HELCOM SUBMERGED project for objects dumped close to the HELCOM area.

(iii) Comments and Suggestions by Member States

On the further development of the CISE process as referred to in action 2.1.1, Member States stressed that in order to guarantee the best situational awareness picture possible and increase the coverage of maritime surveillance, interoperability with third countries should be enabled (not only at regional level but also at global level). The need to prioritize the establishment of the CISE Handbook among the sub-actions is also referred. The purpose of the CISE Handbook would be to describe the process of developing services for CISE and which data entities should be used. The need for further development of the CISE-Joint Operations Reporting Application (JORA) network/capabilities was also mentioned.

The Digital agenda for Europe is also referred to as a possible framework to further develop information exchange between authorities when the technical reference architecture for public services will be defined by end 2017, by the program on "Interoperability Solutions for European public administrations" (ISA programme).

Highlight is made for the need to give increased attention to action 2.1.5, on enhanced cooperation between EU agencies (including EFCA, EMSA, Frontex and Europol) in order to raise the common awareness picture at sea, to strengthen the coordination between new and existing EU programs and agencies and to promote an overarching regulated policy for them.

Member States also suggested that there is a need to continue ensuring funding through various EU financial programs for the further development of EUROSUR.

Suggestions for the continuation of participation in international military exercises of BRAVE BEDUIN BOLD BLAST/NAPLEST BLAST series are also presented as well as the need to improve procedures related to the prediction of possible contamination.

²² France has been developing efforts in this regard including by deploying a customs air-sea integration system enabling interoperability between customs surveillance resources and the SPATIONAV surveillance system of the national navy.. Also, the "Exchange of situational picture for neighbouring zones from the external border between Romanian and Bulgarian National Coordination Centers' Project is in preparation. It envisages a network which will enable information exchange, including through a video conference platform in real time, between Border Coordination Centers in Bulgaria and the ones in Romania. The EUROSUR platform and Frontex software development will be used.

The need for the preservation of the acquis of the Maritime Security Centre – Horn of Africa (MSCHOA) is also referred to, together with the need to assess and investigate possible extension of this instrument for Maritime Security related EU activities to West-African waters and global use.

Finally, several Member States would like to further develop action 2.3.8 on "identify areas of further engagement under Suppression of Unlawful Acts (SUA) Convention". Appeals for coordinated efforts to interdict WMDs (Weapons of Mass Destruction), in coherence with the SUA protocol (Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation), towards the expansion of the container control program of the UNODC (United Nations Office on Drugs and Crime)/WCOOMD (World Customs Organization) were made. At EU and national level, customs authorities actively contribute to improving supply chain security and support risk-based surveillance of goods movements in the maritime domain to fight against terrorist and organised crime activities such as the smuggling of goods and the trafficking of arms and narcotics, along with cross-border movements of cash as proceeds of this illegal trade.

(iv) Finished actions as reported by Member States

The following actions have been suggested by some Member States as having been accomplished and of possible deletion: actions 2.1.1, 2.1.2, 2.1.4, 2.1.5, 2.2.1., 2.1.7, 2.1.3., 2.3, 2.3.1, 2.3.2.

(v) Latest developments by the EEAS, the EDA and the Commission services

Progress is ongoing to implement the CISE process (action 2.1.1), inter alia through the EUCISE 2020 project financed under the last FP7 security call, which is working on testing CISE on a larger scale and to ensure progress and EU wide coherence. Member States have so far through this project developed different levels of IT interoperability and need to reach a minimum level playing field in terms of interoperability in order to interact through CISE. To support IT interoperability between Member States, the Commission already adopted two Grant schemes, one in 2014 and one in 2015. It was foreseen under the EUMFF that such funding would be increased until 2020 so as to progressively help Member States implementing CISE, in particular as from 2018.

Work is ongoing on ensuring Industry participation to the CISE development to facilitate building-up various IT applications and information services of the future as well as for the CISE standardisation process.

A number of Member States have been building national nodes to interact with other Member States through CISE. Some others are waiting for the architecture developed by the EUCISE 2020 project, the data and service model to be consolidated and tested before using CISE to interact with other Member States cross-sectorally.

Considerable progress was made by Frontex and in the EU Member States in establishing and further developing the European Border Surveillance System (EUROSUR)²³:

23 Regulation (EU) No 1052/2013 of 22.10.2013.

- A growing number of national authorities with interests in the maritime domain, ranging from border and coast guards to police, customs, navies, coastal and maritime administrations and fishery control authorities, cooperate with the EUROSUR national coordination centres for border surveillance which have become operational in 2013-2014.
- All national coordination centres closely cooperate with their Maritime Search and Rescue Coordination Centres (MRCC) – in some Member States they are even co-located. The information exchange and cooperation between the national coordination centres and MRCCs has been further specified in the EUROSUR Handbook, which has been adopted by the Commission in December 2015.²⁴
- Via the EUROSUR communication network, the national coordination centres and Frontex exchanged with each other more than 120 000 incident reports (until end 2015) on irregular migration and cross-border crime (e.g. smuggling of drugs, arms, cigarettes etc) as well as more than 1 000 analytical reports.
- During 2015, Frontex continuously enhanced the EUROSUR Fusion Services together with the support of the European Maritime Safety Agency (EMSA), the European Fisheries Control Agency (EFCA) and the EU Satellite Centre, providing now 13 services, ranging from vessel detection, monitoring and tracking to anomaly detection, coastal and pre-frontier monitoring, sea weather conditions and nautical charts to different software applications, allowing for instance to calculate the positions of drifting migrant vessels taking into account the type of vessel, sea currents and weather conditions. Additional funding provided by the Commission under the Copernicus programme as of the end of 2015 allowed increasing considerably the use of the EUROSUR Fusions Services by the Member States.

Furthermore, Frontex has established a close cooperation with EUNAVFOR MED Sophia in the Central Mediterranean Sea and with NATO in the Aegean Sea:

In the Aegean Sea, thanks to rapid border intervention Poseidon and by using the EUROSUR Fusion Services, Frontex detects currently 80-90% of the migrant vessels leaving the Turkish coasts. The role of NATO is to facilitate the information exchange on such departures from Frontex and the Greek authorities to the Turkish authorities. For this reason, NATO and Frontex:

- 1) exchanged liaison officers and established communication channels,
- 2) coordinate their surveillance and patrolling activities and
- 3) share information directly between Frontex and NATO, with the latter passing it on to all relevant Turkish authorities.

Ensuring the close coordination between Sophia and Frontex operation Triton has been a priority for the Commission and EEAS since the launch of Sophia in 2015. Sophia and Frontex regularly exchange information with each other, ranging from the exchange of patrolling schedules to intelligence products and information on any migrant vessels detected.

²⁴ Commission Recommendation C(2015) 9206 final of 15.12.2015.

Example of a success story: On 6 October 2015 Frontex detected several migrant vessels by using the EUROSUR Fusion Services – a combined service of ship reporting systems and satellite imagery, which is provided by Frontex to Member States in cooperation with EMSA, EFCA and the EU Satellite Centre. The information about the detections and their exact positions were immediately forwarded by Frontex to the EUNAVFORMED Guardia di Finanza Liaison Officer on board the Italian navy vessel CAVOUR and to the Navy Liaison Officer in the Triton ICC. On 7 October 2015 various targets were spotted by EUNAVFOR MED assets in the position given and 350 migrants on board of 4 rubber boats were rescued.

With the purpose of extending the already close cooperation of Frontex, EMSA and EFCA established under the EUROSUR framework to all Member States' authorities carrying out coast guard functions, such as maritime safety, security, search and rescue, border control, fisheries control, customs control, general law enforcement and environmental protection the Commission presented legislative proposals as part of the "borders' package" of December 2015. With a view to increase overall maritime situational awareness as well as to support coherent and cost-efficient action, the three EU Agencies should support national authorities carrying out coast guard functions by:

- a) sharing, fusing and analysing information available in ship reporting systems and other information systems hosted by or accessible to the Agencies;
- b) providing surveillance and communication services based on state-of-the-art technology, including space-based and ground infrastructure and sensors mounted on any kind of platform;
- c) providing training and support the exchange of staff;
- d) planning and implementing multipurpose operations.

Important next steps will be how to interlink EUROSUR as well as the European cooperation on coastguard functions with military capabilities, such as MARSUR

The MARSUR Networking capability created with the help of the European Defence Agency has been adapted to provide valuable data and information in support of the EU Operation SOPHIA in the Mediterranean Sea. MARSUR participating Member States are about to advance the level of information exchange thus increasing their maritime situational awareness. EU Operation SOPHIA has once brought to the fore the necessity to integrate civilian surveillance information into military networks. Operation SOPHIA also requires navies to take on certain civil functions, something which has become the rule rather than the exception for all issues relating to piracy or terrorism. Consequently, the ongoing enhancement and further integration of the MARSUR capability into national systems is being pursued by the MARSUR community.

In addition, the MARSUR Networking community is preparing to expand to additional Member States and entities such as the EU Satellite Centre and is exploring options to integrate valuable surveillance information from different Maritime Security Regimes reaching beyond the boundaries of the European Union.

With regard to MARSUR's international extension of connectivity, EDA launched a study in 2015 assessing the degree of interdependence that exists between networks of various Maritime Security regimes and exploring ways to unlock the processes of the regional maritime access development challenges. Following the conclusions of this study, and considering that MARSUR is the defence layer of CISE, it is expected to build on a joint approach to exhort a collaborative mind set by involving both the MARSUR community, the Commission and the EEAS in an initial technical step in order to commonly list and evaluate all the technical requirements and operational agreements to be developed. This approach is coherent with the current CISE 2020 technical recommendations.

The European Commission is currently consulting with Member States to collect national inputs on necessary information flows/services that should be enabled through CISE. This exercise is being carried out in 2016 and may continue to a certain extent in 2017.

The Commission has also initiated work on developing the first draft on CISE Handbook in accordance with action 2.1.1.

Concerning Action 2.1.5, the European border and coastguard package²⁵ is currently being discussed by co-legislators and foresees enhanced interagency co-operation on a range of areas, including information exchange. This information exchange is foreseen in the proposed Article 52 of the founding Regulation for the new European Border and Coast Guard Agency (EBCGA), mirrored in identical amendments of the founding Regulations of the European Maritime Safety Agency (EMSA) and the European Fisheries control agency (EFCA) (see further under 3.1.1).

Finally, a contribution was also received from the Maritime Analysis and operations centre Narcotics (MAOC (N)), on action 2.3.6, where continued maritime surveillance efforts of its partner countries²⁶ in the fight against drug trafficking are reported upon. The utilisation of intelligence flows available to the Centre, primarily the integrated maritime Awareness picture provided by EMSA, resulted in the seizure of 23.4 tonnes of cocaine and 143 tonnes of cannabis from 29 inspection cases, which took place during the period of reporting (June 2014 – August 2015), representing a loss of 3.1 billion euros to organised crime.

Similarly, the Commissions Anti-Fraud Office (OLAF) and Member States involved in law enforcement and antifraud, has gained access to the same integrated maritime surveillance picture provided by EMSA, supporting their activities combatting smuggling and customs fraud.

As one of the action leaders for EMPACT²⁷ actions 6.3 and 6.4 under EU Crime Priority F, MAOC (N) will look to further identify key areas of focus for combating illicit trafficking and look to focus operational activity on these regions. MAOC (N) suggests that activity could also be drafted into the EUMSS Action Plan, drawing on the capabilities of EU members in areas which are key for combating illicit trafficking by sea.

25 See COM(2015) 671 final, COM(2015) 667 final, and COM(2015) 669 final

26 Spain, France, Ireland, Italy, Netherlands, Portugal, UK; the EU finances most of the MAOC N activities via its internal Security fund.

27 EMPACT is a coordination platform for the EU Member States and institutions to implement operational law enforcement actions, supporting defined EU-level crime priorities from the policy cycle.

3. CAPABILITY DEVELOPMENT (WORK STRAND 3)

(i) Progress made as reported by Member States

Developments on capability development, harmonization for better interoperability and standardization in the maritime domain have been registered by Member States (actions 3.1 and following).

Member States referred to progresses under CISE and MARSUR as its military layer, as an important contribution to the fulfilment of action 3.1.4 on best use of synergies between information, capabilities and systems managed by civilian and military authorities. Other collaborations mentioned included the EDA programmes and those of the EU Civil Research. . Also at European level, the EU Risk Management strategy and the Commission/MARSEC Committee are mentioned as relevant for achieving the purposes of workstrand 3. On Energy Efficiency in Ships, reference is made to participation to the European Sustainable Shipping Forum (ESSF). At international level, relevance is given to the work developed under NATO and to its High Level Committee of Emergency Civil Planning, to the NATO Civil/Military Transport Working Groups and to the Energy Security Centre of Excellence. The International Maritime Organization (IMO), including the Global Integrated Shipping Information System (GISIS) databases, is also pointed out as relevant. Cooperation with the Maritime Analysis and Operation Centre is also referred to.

At national level, the strengthening of cooperation between authorities carrying out coast guard functions in order to enhance cross-sectoral approaches to maritime security related surveillance is also being ensured by, for instance, the sharing of Vessel Traffic Service (VTS) and Vessel Monitoring Systems (VMS) data between such national authorities. Engagement in the EDA Collaborative Database with information relating to the recent procurement of vessels provided in this format is being promoted as well. Reference to cooperation with research centres is also made²⁸.

Several Member States referred to cooperation in the area of maritime polar capabilities (action 3.1.12), including by mentioning the Project Team European Maritime Capabilities in the Arctic. Research projects are also on-going in this regard²⁹.

Participation in other projects and exercises such as the Obangame Express and Saharan Express, which contribute to capacity building in countries of Africa's Atlantic coast and to the development of interoperability of capabilities, is listed among the activities developed during the reporting period.

Of relevance is the need, in line with 2030 targets, to develop an international solution within the IMO for energy efficiency in the maritime sector.

Developments are also registered with regard the exploration of possibilities to develop and use dual-use and multipurpose capabilities (actions 3.2 and following). Work towards the strengthening of the cyber security on important platforms, through new technology, education and training is on-going, including by implementing the EU Cyber Security Strategies in order to make IT systems

28 The Irish Maritime and Energy Resource Cluster (IMERC) is an alliance between the Naval Service, Cork Institute of Technology (CIT) and University College Cork (UCC) which brings together expertise in the fields of energy engineering, maritime operations, maritime technology and ecosystem governance.

29 The Irish Naval Service is engaged with cold water immersion project work that may assist capability development considerations for cold water maritime operations

interoperable and serve as guidelines for future capability development. This is promoted inter alia through the MARSEC Committee, the IMO and national initiatives (including the establishment of security operations centres at national level to monitor IT-systems and provide instantaneous responses to cyber incidents, also on board of naval units). The importance of this subject was also underlined at the 40th session of the IMO FAL Committee in April 2016, where the shipping industry presented Cybersecurity guidelines for ships and shipping companies.

Upgrading and standardization of air, naval and other maritime assets optimized for patrol mission on the global maritime domain are also underway. Furthermore, Member States expressed interest in participating in the research and development of sea-based modular systems to increase flexibility and affordability for deployed forces.

Developments under the CDP priority action "Naval Surveillance systems" are also registered, including through the standardization, improvement and growth of operational capabilities in the field of Unmanned Aerial Systems.

In line with the CPD priority action "Naval Surveillance systems", research projects are on-going³⁰, as well as progress in capability development³¹. The EDA project on next generation Mine Counter Measures (MCM) Ships is also highlighted.

On greater sharing of best practices, risk analysis and threat information amongst all relevant fora (actions 3.3 and subsequent), reference is made to the work developed under the Coast Guard Functions Forum. Participation in the meetings of the Chiefs of European Navies which promote and support sharing of best practice is also reported.

Cooperation between authorities performing coast guard functions in order to promote the cross-sectoral approach to maritime security is being fostered in Member States. Bilateral contacts on port security and the security of RoPax shipping are taking place (e.g. Ireland and UK). Joint national exercises on security of offshore installations and interdiction of ships in national waters are being promoted in Ireland. General cooperation is also promoted between Member States³².

(ii) Actions planned by Member States but not started

Member States are working towards capability development through the acquisition of means³³. Best use of national means is also a priority, and the combination of available means is proposed,

30 E.g. Project AEOLUS which seeks to integrate airborne sensors with kite technology to create a new concept in airborne sensor platforms.

31 The Bulgarian Navy envisages the acquisition of an underwater unmanned vehicle by 2021 in order to be capable of countering all types of sea mines at wide range of depths. The Bulgarian Ministry of Defence has approved the initiation of national investment project "Multipurpose Modular Patrol Vessels", aimed at the acquisition of new patrol vessels equipped with organic helicopter in order to provide enhanced maritime recognized picture.

32 Finland, Estonia and Sweden have a bilateral operational cooperation in the field of surveillance flights, exchange of information, environmental surveillance, common risk analysis and information exchange, exchange of best practice, joint training and courses, officer exchange, SAR and Law enforcement exercises.

33 In Bulgaria, the project for the acquisition of 2 Multipurpose Modular Patrol Vessels is planned. Project documentation is in place, but political decision is pending. Furthermore, and in the context of the Coastal Short Wave Centre within Regional Directorate Border Police – Burgas, the development of short wave radio connection "shore – vessel" is envisaged by establishing a system for automatic connection and data exchange. The Croatian Navy development plan also foresees that two mine hunters class ships will be procured until 2020. Belgium is planning to upgrade Maritime Security Centre to cross-departmental and EU standards (CISE, EUROSUR, MARSUR). Acquisition by BE Navy of two Coastal patrol Vessels (CPVs) for EEZ protection and use by Belgium Coast Guard (having been fitted for cross-departmental operations) is also envisaged. The German Federal Police plans the procurement of modern offshore patrol vessels. The development of these ships includes modern and environmentally friendly engines. In Finland, a Squadron 2020 Development project is foreseen, comprising 4 corvette sized vessels that

including, for example, by developing a collective calendar planning for sailing and flying units as a way to guarantee the shared deployment of these units (Belgium) and by promoting the real-time data exchange between Maritime Patrol Aircraft and fleet (Ireland).

Work towards information sharing through the development of interoperable networks between entities is also a priority.

Links of cooperation between EU agencies, research centres and centres of excellence of Member States in the areas of capability development have been reported as established, but suggestions for improvement are made.

Member States also acknowledged the need to further strengthen cyber security plans and policies in order to guarantee for instances Port Facility Security Plans (e.g. Netherlands). The development of bilateral contacts in this regard is also referred to.

Support to the EDA in the Arctic region, by fostering cooperation in the area of maritime polar capabilities is also foreseen by Member States.

(iii) Finished actions as reported by Member States

No actions have been suggested by Member States as finished and thus subject to possible deletion.

(iv) Comments and suggestions by Member States

Member States commented on the need to design and implement a coherent statistical system to measure the maritime economy and to assess CISE benefits.

The importance of taking into account NATO when determining the development of capacities is also suggested, as a way of enhancing complementarity of efforts while benefiting from the work already developed, in particular in the areas of normalization and standardization.

A remark is also made with regards to actions relating to interoperability, standardisation and certification, which should not affect Member States' competitiveness on a global level.

With regard to dual-use and multipurpose capabilities, actions should be adopted within a framework of existing initiatives in order to ensure effectiveness and efficiency.

Existing fora, such as the European Coast Guard Functions Forum, are considered instrumental in reaching objectives in terms of sharing best practices, risk analysis and information sharing on threats.

(v) Latest developments by the Commission Services, the EEAS and the EDA

On maritime data

should enter the service by 2025. Lithuania reported on the deployment of a LNG bunker supply vessel to provide bunkering services in the Baltic and North Sea, to be operational in 2017.

The Commission has launched a study on the 'Establishment of a Framework for Processing and Analysing Maritime Economic Data in Europe' and results should be available by the end of 2016. This study aims at creating a common process and methodology for the collection and processing of data on the maritime economy across the European Union. Security and surveillance are one of the sectors of the maritime economy analysed in this study, which will address themes such as traceability and security of goods supply chains; prevention against illegal movement of people and goods; environment monitoring, etc..

On capacity development

In terms of capacity development related to Coastguard Functions and in particular in what relates to the European co-operation in this area, various actions to enhance European and inter agency co-operation on coastguard issues and to enhance co-operation between civilian authorities carrying out coastguard functions and the navies have been developed. It can be further reported that the Commission, within the framework of the border and coastguard package, has proposed enhanced inter-agency co-operation at EU level to enhance support to national authorities carrying out coastguard functions.

The main idea of this interagency co-operation is to streamline the activities of Frontex, EMSA and EFCA to avoid duplication, and that the three agencies provide joint services to national authorities in the areas of information exchange, provision of information services, capacity building and capacity sharing.

These legislative proposals are currently under discussion by co-legislators and final adoption is envisaged during the Dutch presidency.

This interagency co-operation mechanism will be tested in 2016 through a joint pilot project of the three agencies. The preliminary intent will be to focus this pilot project on multipurpose co-operation in the Central Mediterranean Sea, an area with significant problems related to IUU fishing, general law enforcement and security issues and migrant smuggling.

Once this initiative is in place, a number of Actions of the action plan will be completed.

In the context of discussions on these legislative proposals, several Member States have indicated that similar inter-agency cooperation mechanisms are being created at national level between authorities carrying out coastguard functions.

The Commission will also further explore the possibility to use the European Coastguard Functions Forum (ECGFF) and similar intergovernmental coastguard initiatives as one possible interlocutor between this interagency framework at EU level and authorities carrying out coastguard functions at national level. In April 2016, representatives from ECGFF were accordingly invited to attend a joint EFCA, EMSA and Frontex workshop on capability development.

Extensive on the ground co-operation has also started and developed between civil and military actors involved in dealing with the current refugee crisis in the Mediterranean Sea (between Frontex operations Triton and Poseidon on the one hand and EUNAVFOR MED Sophia and the NATO activity

in the Aegean Sea on the other hand). This includes also co-operation with NATO operations in the same area.

On maritime transport security (actions 3.3.1, 3.3.2 and 3.3.3)

In 2015, Commission conducted 56 maritime transport security inspections in the EU Member States and with their operators. Equally in 2015 the Commission organised 5 meetings of the Maritime Security Committee and of the Stakeholders' advisory Group on Maritime Security where exchange of information and best practices among public and private partners take place. The same number of meetings of this committee and a similar number of maritime security inspections are planned for 2016.

In the area of customs, the EU Risk Management Strategy and Action Plan³⁴ covers various actions to achieve objective 5 of the Strategy intending to promote interagency cooperation and improve information sharing between customs and other authorities at national and EU level and to guarantee effective risk management. Ensuring secure but smooth and fast border-crossing for persons and goods while applying the rules on border checks and customs control has become a challenge at many border-crossing points since the overall flow of goods and persons increases. Interagency cooperation between the authorities in charge of checks on persons and control of goods could facilitate this mission. For effective risk assessment, customs also depend on information and intelligence received from other relevant agencies.

On the Implementation of the Capability Development Plan

Following the launch in 2015 of two EDA Workshops with Member States addressing Support Ship, Air support and Next generation of blue water patrol vessel, for which Member States have demonstrated interest, a dedicated workshop was held on 12 January 2016 to address the whole topic of air support (at sea) to promote the development of a simple surveillance aircraft based on existing models to be adapted to be employed in the framework of CSDP missions (typically EUNAVFORMED Sophia). The topics of maritime RAPS³⁵ and VTOLS³⁶ were also addressed thanks to informative presentations made by the Industry. Member States have attended the three workshops focussing on CDP maritime implementation (securing sea lines of communication): Support Ship, Air support, and next generation of blue patrol vessel. At these meetings Member States agreed on the analysis proposed by EDA and potential opportunities of cooperation. But the working groups were unable to agree on any particular way of tangible synergies arguing that these approaches were not in line with their national processes. Regarding the EDA Steering Board decision process, no Member States has encouraged this potential way of cooperation. No recommendations have been made. At this stage, it is an issue to be further processed with the Member States in order to identify opportunities for cooperation.

34 COM(2014)527

35 Recognised Air Picture.

36 Vertical take off and landing (from and to the ship deck).

4. RISK MANAGEMENT, PROTECTION OF CRITICAL MARITIME INFRASTRUCTURE AND CRISIS RESPONSE (WORK STRAND 4)

(i) Progress made as reported by Member States

On the development of common risk analysis in order to establish a shared maritime security risk management (actions 4.1 and following), reference was made to the work developed under the framework of several projects and initiatives, including CISE, MARSUR, cooperation on SafeSeaNet and CleanSeaNet with Frontex in the field of Risk Analysis (Risk Analysis Network (FRAN) and Common Integrated Risk Analysis Model (CIRAM), and to the Cooperation Agreement for the Protection of the Coasts and Waters of the North-East Atlantic against Pollution, and the International Action Centre for Pollution Incidents Response in the north-east Atlantic (CILPAN). Risk analysis seminars were also organized under the framework of the European Coast Guard Functions Forum (ECGFF). References to initiatives on risk assessment for dealing with emerging situations are also made³⁷. Initiatives like the Baltic Sea Region Border Control Cooperation Conference also devote part of its work to the development of a common risk analysis³⁸.

The sharing of maritime security related intelligence information on a voluntary basis is also made within the framework of SUCBAS cooperation (Sea Surveillance Co-operation Baltic Sea) and through projects such as the BALANCE Flagship project.

On cyber security in the maritime sector, Member States reported on their work towards implementing the directives required to fulfil a high level of cyber resilience. Some Member States are establishing national cybersecurity centres³⁹. Support for the EU's Network and Information Security Directive was expressed. Cyber security on board of vessels is also being promoted⁴⁰.

Work towards the protection of critical infrastructure is in progress⁴¹. A request for a comprehensive risk and safety assessment on the movement of nuclear waste via Baltic Sea that would ensure secure maritime transportation is put forward in the reports.

Research projects on enhanced protection of borders, especially with regard to chemical, biological, radiological and nuclear threats, advanced sealing technologies (contributing to container security) and trade analysis for strategic goods in support of non-proliferation are also reported upon⁴².

37 Portugal has also developed, on the framework of the EU Directive 2002/59/CE, a tool to support the decision regarding ships in distress (currently Places of Refuge) which is based on a risk analysis methodology to assess how to deal with an emerging situation.

38 Annual Threat Assessment made under Baltic Sea Region Border Control Cooperation (BSRBCC) is to generate a broader understanding of the current situation in the Baltic Sea area, to create and share a situation picture of threats identified within the area and to draw up and elaborate conclusions regarding the current and anticipated situation.

39 E.g. Lithuania.

40 France reported on an action conducted jointly by the Directorate for Maritime Affairs and the National Agency for the Security of Information Systems aimed at promoting cyber security on board French vessels, involving awareness raising, good practice guide, assessment questionnaire, cyber audit of certain vessels and integration of cyber security measures in vessels' security plans.

41 Portugal is currently developing Operator security plans for the VTS Center and related infrastructures on the framework of the Council Directive 2008/114/EC.

42 Italy referred to its experience during the operations associated with the phenomenon of illegal migration, in particular in the containment of biological and chemical risks through an appropriate advanced medical filter at sea capable to isolate and deal with critical pathological cases before their arrival on national territory. The Irish Air Corps participated in an international pollution exercise in 2015. Their Naval Service is also engaged with the EU funded ARCOPOL (Pollution Control – HNS) and PERSEUS (Maritime Border Control) projects.

Research projects in market research in the domain of (semi)automated risk analysis tools⁴³ are also on-going.

Investments on new IT hardware and software for shared information, logging and analysis systems are also being promoted, towards the improvement of national capacities to capture and analyse Maritime safety and environmental security data.

On initiatives taken to enhance cross-sectorial and cross-border cooperation for maritime crisis response and contingency planning in relation to defined security threats (actions 4.2 and following), mention was made to the International Action Centre for Pollution Incident Response in NE Atlantic (CILPAN), to the Common Emergency Communication and Information System (CECIS) and to common procedures developed for Crisis Communication and Maritime Assistance Request also to the third countries. According to a contribution received, CIRAM provides for a clear and transparent methodology which should serve as a benchmark for the analytical activities of Frontex and Member States.

Strategies and cooperation projects on adaptation measures to address climate change are also being developed⁴⁴ by Member States, following the EU strategy on Adaptation to Climate Change.. Member States are also supporting the development of EU maritime exercises to enhance readiness and preparedness of Member States and EU capacities to respond to security threats as defined in the EUMSS, including consequences of climate change⁴⁵.

National initiatives in terms of readiness to deal with security threats have also been developed at national level.

Support to research and protection of underwater archaeological sites is also underway, in line with action 4.2.6⁴⁶. A suggestion for the drafting of a best practices document aimed at optimizing the assets of employment, increasing coordination among border-states and improving research in areas of common interest was made.

Member States also reported on their participation in humanitarian operations, namely in the setting of the Mediterranean Sea.

A Member State also reported on sending reminders for ships to comply with the protection measures set out in the UK Maritime Trade Operations' (UKMTO) anti-piracy guidelines, entitled "Best Management Practices 4" (BMP 4).

Developments are also registered on ways to make best use of existing information-sharing tools, also building on cooperation with the EU agencies, through a European cross-sectoral maritime situational awareness outlook at EU strategic level. Member States are cooperating towards the

43 Belgium reported on Commercial On The Shelf – COTS project and on the development of new products within the IMDatE initiative (EMSA).

44 An Agreement on the Sub-Regional Contingency Plan for Prevention of, Preparedness for and Response to Major Maritime Pollution Incident in the Adriatic Sea was signed between the Republic of Croatia, Republic of Italy and Republic of Slovenia. Spain is currently drafting an Adaptation to Climate Change Strategy in the Spanish Coast at national and regional Level.

45 This action point is a part of the Exercise Program of the EU under the CFSP (2015-2019), e.g. the Dutch navy participates in the 'Northern Coast' exercise. Furthermore, it intends to participate in 'Emerald Move', an exercise planned in the framework of the European Amphibious Initiative.

46 Spain, Italy and Ireland referred to actions in this regard.

launching of a Mediterranean quarterly bulletin publishing the most important information from public sources, covering spheres of action in the domain of internal and external security. A bulletin for the Atlantic is also foreseen.

On the need to assess the resilience of maritime transport infrastructure to man-made and natural disasters and climate change (actions 4.3 and subsequent), reference to climate change response instruments⁴⁷ is made. Furthermore, projects on resilient supply chains for maritime transports logistics to withstand shocks from terrorist attacks or other equivalent acts to critical infrastructures are also on-going⁴⁸.

On the promotion of a mutual understanding to increase interoperability amongst security actors (actions 4.4 and following), reference to the development of actions on the implementation of the Maritime Spatial Planning Directive⁴⁹ is made in the reports.

(ii) Actions planned by Member States but not started

Member States shared their commitment to a number of planned actions devoted to issues such as maritime risk assessment, including by developing a national safety profile on maritime security risks⁵⁰, adaptation to climate change⁵¹.

Member States also expect to work on the development of processes to share, where appropriate, Member States' civil-military contingency and response plans in areas of interest (action 4.2.1).

Collaboration towards the identification of critical energy transit routes, in particular with regards increases in LNG shipments and nuclear/MOX shipments, is also referred to.

On the sharing of maritime security related intelligence information based on a joined-up threat and risk assessment, seminars are taking place⁵² in the international sphere.

Actions towards the protection and promotion of underwater cultural heritage⁵³ are also mentioned.

47 Spain reported on the adaptation platform Adaptecca, launched in 2014 and which is a tool for the exchange of information and the enhancement of coordination among administrations and key stakeholders on impacts, vulnerability and adaptation to climate change.

48 Netherlands' maritime infrastructure has been bolstered by using R&D and risk managements against climate change and terrorist attacks. Consequently, the Netherlands recalled in their report the importance of these issues to other member states, in an effort to create freer and safer transit routes and expressed its readiness to share best practices in this regard. The Irish Naval Service through the Irish Maritime and Energy Resource Cluster (IMERC) is engaged with EU funded Research Projects in this area. Reference is also made to the project Slandail, which focused on the use of social media in crisis response with another project aimed at developing security systems for islands, is mentioned.

49 Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning.

50 An analyst network on strategic national security will compose a national safety profile for the Netherlands on maritime security risks, continuing the methodological framework for exploring new risk analysis opportunities.

51 The Spanish Climate Change group is to collaborate with the Spanish Association for Standardization and Certification in the CEN-CENELEC Coordination Group on Adaptation to Climate Change in the identification and prioritization of all standards relevant for climate change adaptation in infrastructures including maritime transport, energy and construction. The Latvian National Research Program "The value and dynamic of Latvia's ecosystems under the changing climate – EVIDEnt" (2014- 2017) includes a project which aims at developing climate scenarios, inter alia, for extreme events taking place also in Latvian territorial waters.

52 France initiated a seminar on surveillance of maritime areas in the South Pacific which will take place in September in Nouméa, New Caledonia. Bringing together all the Australian, French and New Zealand stakeholders in maritime surveillance, the seminar is intended to identify projects that could interest a very broad community of public and private stakeholders. It will also enable development of relations between these partners, who include military personnel, customs officers and police, to exchange information and intercept targets likely to be used for all kinds of illegal trafficking.

(iii) Finished actions as reported by Member States

Achievements have been reported on inter-departmental work for the protection of underwater archaeological heritage, including by using surveillance radars and information⁵⁴.

Work developed on the assessment of the impacts of climate change and the identification of adaptation measures in coastal areas, including coastal infrastructure, is also mentioned⁵⁵.

A number of fulfilled activities were also reported in terms of search and assessment of chemical munitions⁵⁶. A new program on reinforcing chemical, biological, radiological/nuclear threats response was recently implemented by the Netherlands. Work was also developed towards reinforcing the lines of communication at sea and the defence against cyber threats by an updating of policies on maritime crisis management and maritime telecom, together with the development of a Counter IED/MCM capability to enhance protection of sea lines of communications and broader maritime security roles.

A reference to the Maritime Incident Response Groups (MIRG), consisting of fire brigades from four EU-member states (France, Belgium, Netherlands and England) is also made. The application has been submitted to register MIRG in the EU Emergency Response Capacity (also known as the voluntary pool) to optimise disaster relief and risk management practices.

(iv) Comments and suggestions by Member States

The introduction of a sub-action in the Action Plan encouraging the development of a network of contact points for underwater heritage in the EU is suggested.

The development of EU exercises with the scope to improve maritime crises response and contingency planning is encouraged by Member States.

The need for an EU level response to third parties interference into EU member states' exclusive economic zone was raised, in particular by identifying appropriate instruments and prevention measures.

A greater role for the EEAS and the European Commission in developing dialogues with third countries to ensure better cooperation and information exchange with regard to nuclear waste transportation via sea was also suggested.

On enhanced cross-sectoral and cross-border cooperation for maritime crisis response and contingency planning in relation to defined security threats (action 4.2), it is proposed to facilitate

53 The Spanish Institute of Oceanography participated in a mission organized in 2015 to analyse the damages done to the underwater archaeological site of "Nuestra Señora de las Mercedes" while plundering by Odyssey Marine Exploration.

54 Information received from Spain.

55 Project on Climate Change in the Spanish Coast (C3E)(2009-2012). Also in Spain, a report entitled "Climate Change Adaptation Needs of the Core Network of Transport Infrastructure in Spain" was adopted. Latvia has also mentioned its participation in several EU financed projects aimed at climate risk and vulnerability assessments and establishment of adaptation and risk management measures, e.g., BALTADAPT - Baltic Sea Region Climate Change Adaptation Strategy (2007-2013); the European Economic Area Financial Mechanism 2009-2014 program "National Climate Policy" and the project "Development of Proposal for National Adaptation Strategy, Including Identification of Scientific Data, Measures for Adapting to Changing Climate, Impact and Cost Evaluation".

56 Reference to the project "Chemical munitions search and assessment" (CHEMSEA), by Lithuania, in relation to which all objectives have been fulfilled.

the information exchange on maritime security and the development of a joint contingency plan in response to emergency situations.

The development of surveillance on and protection of gas terminals and vessels in ports is also recommended, taking into account the significant growth in energy derived sources from LNG and LPG. A suggestion for the development of a seminar on risk analysis cooperation in the ambit of the European Coastguard Functions Forum (ECGFF) was presented. This was effectively carried out as described under section (v) below.

(v) Latest developments by the Commission Services and the EEAS

On Risk Management

At Community level, risk information is shared amongst customs authorities via the Community Customs Risk Management System (CRMS) and implemented in the national customs systems and databases on top of existing common risk criteria. Through projects initiated by Member States (as the maritime ENS pilot project), gaps and variances in national systems and applications have been identified.

Within these projects, possible solutions to overcome weaknesses and non-equivalence in protecting the borders of the EU customs union are looked at. Also, the Customs 2020 Contraffice-ENS Pilot Project Group has tested the application of data analytics techniques by combining container status movement data (Contraffice) primarily with data of Entry Summary Declarations (ENS) as well as pre-arrival datasets.

In 2015 the pilot provided information on containers coming from Tianjin port in China where huge chemical explosions had taken place. As an example of crisis response, Contraffice data were used to identify containers from Tianjin enabling customs to stop these containers at arrival in EU ports for further control of contamination.

The Commission has in February 2016 launched a one year project with a contractor aiming at mapping and measure the ability to conduct risk management of coastguard functions with Member States and EU institutions. The results will be available first half of 2017, and will provide users with best practices for risk management, but also for developing coastguard functions in general in procedural terms.

The ECGFF has conducted a Risk Analysis Seminar where different sectors presented challenges, best practises and conclusions on how to proceed with risk management procedures.

On EMODNET

Collaboration between the Commission and the European Marine Observation and Data Network (EMODnet) is ongoing, also in the context of an initiative to streamline European marine information systems and to make those available to maritime security authorities. Furthermore, ways to bring ship traffic density maps into EMODnet are being explored. To improve ocean observation capacities, the Commission's Joint Research Centre (JRC) has been supporting remote sensing ocean colour calibration and validation activities through the provision of highly accurate in situ measurements for the (indirect) calibration of satellite optical sensors and the validation of satellite derived data

products. Activities embrace all European marine regions and make use of a series of networks considered a reference for future Copernicus satellite ocean colour missions devoted to climate change investigations. In the context of educational and training programmes, the European Atlas of the Seas – a crosscutting, user-friendly web-based repository of maps with sea and coast related information – is publicly available and under constant development. (http://ec.europa.eu/maritimeaffairs/atlas/index_en.htm).

On Other Initiatives:

Cyber Security

A Commission Staff working document on Cyber Security is currently being drafted.

Civil Protection

Risk Management Capability Assessment Guidelines were agreed with the Member States and the Commission. The Guidelines are to support Member States' authorities to build up awareness about the strengths and potential weaknesses of their disaster management system and, to contribute to the development and sharing of disaster management policies and practices. The calls for Civil Protection Exercises and for disaster prevention and preparedness under the Union Civil Protection Mechanism are also open to the maritime incident related cross-border exercise and project proposals. Eligible countries are the Participating States⁵⁷ to the Union Civil Protection Mechanism and the European Neighbourhood countries. In recent years the Commission selected for co-financing Maritime Incident Response Group Exercise (MIRG-EX) and the variety of maritime related prevention and preparedness projects listed at: .

<http://ec.europa.eu/echo/en/funding-evaluations/financing-civil-protection-europe/selected-projects>

Although not directly related to maritime security, the Commission together with all EU Member States and concerned Industry Stakeholders agreed, in November 2015, on EU operational Guidelines for dealing with a ship in need of assistance seeking a place of refuge, particularly addressing situations involving more than one jurisdiction.

5. RESEARCH, EDUCATION AND TRAINING FOR MARITIME SECURITY, PILLARS OF A STRONG AND SAFER EUROPE (WORK STRAND 5)

(i) Progress made as reported to Member States

Work strand 5 calls for bringing together the available training courses on maritime security in common training modules and for the need to establish and develop existing networks for knowledge and competence development (actions 5.1 and following).

⁵⁷ The Union Civil Protection Mechanism currently includes all 28 EU Member States, Iceland, Montenegro, Norway, Serbia, the former Yugoslav Republic of Macedonia and Turkey.

In this regard, Member States reported on projects and programs conducted under the auspices of ECGFF⁵⁸, EDA⁵⁹, Frontex⁶⁰ and other organizations and programs⁶¹. In relation with the inventory of existing maritime training modules, reference was made to the European Security and Defence College (ESDC). This institution has developed a pilot course on maritime security, which can be considered as a contribution to development of the inventory. National administrations are also working towards curricula development⁶². Support to universities and educational programs are also reported⁶³, including to partner nations⁶⁴.

Participation in seminars with a European maritime security focus⁶⁵ is referred to by Member States. Training for military exercises is also mentioned, as for example by Croatia, where in preparation for the participation of members of the Coast Guard in the joint operation “TRITON 1015”, a seminar was held in the field of fundamental human rights and the rights of refugees for maritime police officers.

Inter-departmental participation in trainings and exercises on security is also reported by several Member States. Bilateral exchanges between Member States have also been promoted in terms of naval training. Furthermore, naval academies are actively participating in Erasmus + program and in exchanges of experience with other marine educational institutions from the EU.

On the need to enhance oceanographic knowledge and information, data sharing and cooperation, activities developed under the framework of research and innovation are underway. This is exemplified by the COPERNICUS satellite Marine Observing System and the Ocean Colour Thematic Assembling Centre and its related training courses. Maritime security is also addressed under the key challenges group ‘Enabling technology and capacity creation’ identified by the Strategic Research and Innovation Agenda of the BLUEMED Research and Innovation Initiative (BLUEMED SRIA) developed by 9 EU Member States with the support of the European Commission. Support to underwater research is also underway⁶⁶.

Training activities have also been organized on maritime safety (e.g. oil spills) within the MEDESS4MS project (Mediterranean Decision Support System for Marine Safety) targeting environmental agencies and port authorities. Research in the context of energy security through the diversification

58 Participation in the EU funded project entitled “European Coast Guard Functions Academy Network for European Sectorial Qualification’s Framework for Coast Guarding – ECGFA NET” (ECGFA NET) is reported by several Member States.

59 Team Naval Training project was also referred to. The Irish Naval Service hosted an EDA run Naval Operations Course in 2015 open to Member States. The EDA Naval Training Pooling and Sharing Initiative with current work focused on the hosting of a Naval Operations Course is also mentioned.

60 Spain referred to students attending the Master for External Borders of the EU, which is coordinated by Frontex and organized by different Border Guards’ Services and universities of several European countries. Belgium also mentioned Frontex courses.

61 CEPOL (European Network for Police Training and Education), the IMO (International maritime Organization) and projects under the program Science for a better future of the Baltic Sea region (BONUS), are referred to.

62 Portugal, inter-institutional cooperation is guaranteed for the development of curricula and manuals for fishing surveillance. The Polish Border Guard is involved in developing the questionnaire on national training institutions responsible for organizing and conducting courses on Coastguards functions in EU Member States (ECGF NET project). In Ireland, all Naval Service qualifications are now recognized under the EU Credit Transfer System through the national qualifications authority. Aviation training incorporates NATO standards in some Member States.

63 Support to the World Maritime University is mentioned by Sweden.

64 Belgium reported on education and training of naval officers from partner nations (such as Benin) at national education and training centres.

65 The Netherlands participated in the ‘Challenges of Maritime Security for EU and CSDP’ course promoted by the institute for Higher Defence Studies in France (IHEDN).

66 The Irish Naval Service assists underwater research through its partnership with Ireland’s Coastal Marine Research Centre.

of use of fuels for naval units has also been developed⁶⁷. Several Member States are also working hard in fostering cooperation between meteorological and oceanographic institutes in particular in what refers to ocean forecast⁶⁸.

Reference to the work developed under the Baltic Sea Strategy, which includes maritime safety and security as one of its priority areas, is also made.

On the need to establish a civil military agenda for research and innovation in support of maritime security including the development of dual-use and multipurpose capabilities (actions 5.2 and following), reference is made to the work developed under national⁶⁹, European⁷⁰ and international⁷¹ projects. Reference is also made to the Joint Programming Initiative JPI-Healthy and Productive Seas and Oceans, and to the COST Action MARESAFENET – the Network of experts on the legal aspects of Maritime Safety and Security.

Interest in participating in funding scheme projects related to Maritime Security through Horizon 2020 is expressed by several Member States. Participation at calls issued by the EDA⁷² regarding the ESIF-funding (European Structural & Investment) is also made to, showing the interest by Member States in combining EU funding instruments, such as the ESIF and Horizon 2020, to improve maritime security, in line with action 5.2.5. Interest on research on CSDP priorities of ‘maritime patrolling and escorting’ and ‘naval surveillance systems’ are expressed areas of interest.

Research projects towards the development of innovative sensors applications to improve the early detection and continuous tracking of small vessels have also been reported upon⁷³.

On the need to address research and innovation challenges related to maritime cyber security in Horizon 2020, reference is made to the WG3 on Secure ICT research and innovation of the European Platform on Network and Information Security (NIS), composed of over 200 members. NIS WG3 produced a cyber-security strategic research agenda where port, transport and maritime security are mentioned.

The promotion of public-private partnerships on Maritime Surveillance is also underway, as shown by the initiative “Vessel for the Future” which involves about 60 European maritime stakeholders. Member States are likewise encouraging cooperation among end-users, industry, academia and research and technology centres by means of Public Procurement of Innovation and Pre-Commercial Procurement, to boost the market acceptance by overcoming the fragmented demand. Furthermore,

67 An ongoing project in Italy involved testing on-board front-line naval units in the year 2015 and foresees to reach, in year 2030 and through successive steps, a reduced dependence on oil by up to 40%. Also, in 2014, NATO Energy Security Centre of Excellence together with the Lithuanian Ministry of Foreign Affairs organized a Workshop on ensuring the safety and protection of energy infrastructure related to the offshore LNG terminals.

68 Ireland, Italy and Finland.

69 E.g. the Ritmare project (Italy).

70 FP7 projects (e.g. CLOSEYE Project Marinnet, Eurofleets, SAGRES, SONIC, etc.) and Horizon 2020 projects (e.g. Eurofleets2). Reference is also made to the BONUS project “Geopositional early warning system integration for disaster prevention in the Baltic Sea – Geoilwatch”.

71 Examples of projects include the AMOS-NTNU and the US-Navy-ONR NICOP projects.

72 ETLAT project, the Flow in Service project, among other.

73 The Netherlands has reported on this. The Irish Defence Forces conducted JTF exercises with An Garda Síochána C&E on vessels of interest entering Irish waters. The Irish Naval Service also conducts an annual joint maritime interdiction exercise on a compliant merchant vessels and a joint exercise with SOF on non-compliant merchant vessels. The Italian National Research Council has explored the capability of each observational platform to detect small vessels in any atmospheric and weather conditions with a high degree of operational flexibility.

the promotion of relations with the industry and the encouragement of synergies between different KETs are at the core of multi-disciplinary and inter-disciplinary researches currently on-going in Europe⁷⁴.

Reference to the network of R&D experts (action 5.2.4 – more details below under point v) is also included in the reporting instruments, with some Member States given note on relevant stakeholders to be involved. Best-practice examples are also brought to attention, as the ‘knowledge network’ established in the Netherlands⁷⁵, in which experts on maritime security from the Ministry of Defence, academic world and industry are represented in the ‘Maritime operations and systems’ network. This network exchanges information and attempts to define and prioritise the required knowledge and technology for a successful defence strategy.

On the promotion of inter-agency, joined-up exercises (actions 5.3 and following), Member States reported on annual training exercises, both at national⁷⁶ and multilateral⁷⁷ level. In what concerns exercises and training programmes for the disposal of sea-dumped chemical munitions and unexploded ordnance, reports from Member States included reference to participation in a number of initiatives such as the JPI-Oceans “Munitions at sea”, a pioneer initiative at EU level on the subject.

Work towards Civil Emergency Planning is also underway in Member States, with annual inter agency exercises addressing issues such as mass casualty scenarios⁷⁸ or "return plans" envisaging the massive rescue of national citizens residents in foreign countries overseas, including due to emergent crises⁷⁹.

Several Member States are moreover working towards the development of possible joint civil protection modules with the aim of including the aggregated capacities in the EU's Voluntary Pool of national capacities under the Union's Civil Protection Mechanism.

74 Italy, through its involvement in research projects along with Fincantieri and other Italian and European industries, the Italian research system and the National Research Council, explores the development of systems based on new materials, advanced simulation capabilities, improved manufacturing and processing, and on biotechnology. In Finland, the Maritime Warfare Center in the Naval Academy contributes for instance to ship design taking into consideration also safety issues.

75 The Netherlands suggests that such a network could also be set up on an EU level.

76 In Romania, annual training exercises involving oil companies using maritime oil platforms are taking place. In Lithuania, in 2014, maritime exercises were organized to test capabilities of civil and maritime institutions to react to unsanctioned vessel departure from the port of Klaipėda.

77 The following exercises were reported upon: TRIDENT POSEIDON 2015, Phoenix Express, ATLAS, and Sea Border (5+5 Defence Initiative). In the framework of the bilateral cooperation between Bulgaria and the Republic of Turkey exercises with patrol ships of Chief Directorate “Border Police” and the Turkish Coast Guard Command in Istanbul and Burgas took place in 2015. The exercise “Black Sea Hawk 2015” hosted by Turkey also took place. Finland organized maritime security exercise with Swedish (2012) and Estonia police (2014) and is planning similar exercises with Estonia (2016). The Northern Coasts Exercise (NOCO) is also referred to. The Balex Delta 2015 international HELCOM Baltic Sea oil spill response exercise also took place in 2015 and involved Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Sweden and Poland. Regular multinational coast guard exercises between Belgium, the Netherlands and the French Coast Guards (exercises which will include the UK in the future) were reported.

78 In Ireland, the Defence Forces participate in annual inter agency exercises with the IRCG and the Health Service Executive in a mass casualty scenario. A bi-annual national maritime subsurface emergency exercise is also conducted with the Marine Institute, Commissioner of Irish Lights and the IRCG.

79 Portugal. This plan involves several institutional entities with responsibilities on the area of rescue and assistance. At present exercises are only planned at national level. If necessary, the plan is not limited to rescue Portuguese nationals and other nationalities can be considered.

(ii) Actions planned but not started, as reported to Member States

Member States are conducting⁸⁰ and programming⁸¹ training exercises while considering a possible increase in the number of interagency maritime security exercises to be organized.

Establishing new and develop further existing networks as well as maritime clusters⁸² in the field of maritime security is in Member States plans. The promotion of public-private partnerships to accelerate technology development in the area of dual-use and multipurpose capabilities are another item in Member States agendas. Development of educational platforms for maritime related courses is also being promoted⁸³.

Capability development is also a priority, with reports on plans to improve and upgrade real-time surveillance solutions, including satellite systems, along with situational and analytical technology. In this regard Research projects are in the pipeline in Member States⁸⁴. Within the framework of the ECGFA NET, actions to be developed include, for example, the development of a training and information portal, while the procurement of essential external expertise for setting up the Sectorial Qualifications Framework is also under discussion.

Identifying the most appropriate civil network of experts to act as the civil interlocutor of EDA's Naval CapTech is a priority for one Member State.

(iii) Finished actions as reported to Member States

Two Member States reported on actions completed, including the verification of compliance of national training programs with the latest IMO model courses, the mapping of Coast Guard Functions academies, institutes and training centres as well as the listing of Coast Guard activities. Participation in FP-7 PERSEUS projects is also mentioned. No suggestions for deletion of actions were presented.

(iv) Comments and suggestions by Member States

Increased cooperation between EU and NATO actions on critical infrastructure protection was suggested by a Member State.

The promotion of public-private partnerships to accelerate research and technology development in the area of dual-use and multipurpose capabilities in support of Member State capabilities is also encouraged in the reporting exercise. A suggestion was made towards the reinforcement of the use of defence technologies in the maritime security field that can be applied for a civil purpose (radar systems, satellite imagery, etc.), in order to improve the awareness in maritime security. Frontex

80 Participation of German Navy in the exercise Obangame Express 2015 (offshore Cote d' Ivoire) und Good Hope VI (offshore South Africa) in 2015. Also mentioned are the TRIDENT/ TRIDENT POSEIDON 2016 exercise and the SEA SHIELD exercise where Romania, Bulgarian, Greek, Ukrainian, Turkish and U.S. Navies and NATO MARCOM attendance was foreseen.

81 The Finnish Border Guard together with all other relevant maritime SAR organizations are planning to host multi sectorial wide scale maritime (Mass Rescue Operation) exercise in 2019. The focus of the exercise will be on evacuation from ship to shore and all support services at an evacuation centre.

82 E.g. Malta.

83 Malta.

84 Croatian Navy collaborates with the University of Split in development of an internet application in support of the decision-making process in case of incidents at the Adriatic sea (IPO-ISJM).

working groups and the discussions currently on-going regarding the preparation of the Preparatory action for R&D in Defence are pointed out as possible players in identifying the main points to address in this regards.

The creation of a network of global research and development partners, in line with action 5.2, is also suggested.

The need for the promotion of synergies between the secure societies' programme in Horizon 2020 and the ongoing work on the EUMSS Action Plan is also referred to. Nonetheless, and with regard to the Action Item 5.2.4, reference is made to the need to respect the exclusively civil character of Horizon 2020.

A proposal for the development of a process of Knowledge Management (KM) was also made. This process would help achieve and consolidate the CISE benefits, by organizing and benchmarking the user communities, identifying best practices and promoting the transfer of knowledge.

The development of a follow-up project to ensure the further development of the ECGFA NET project by ECGFF is supported. The proposal suggests that a follow up project could conclude the development of the Sectoral Qualification Framework (SQF) for Coastguard functions, launch a Coastguard Function Student and Experts Exchange Programme, launch and support the use of an online training portal and, finally, support the coordination of the new European Coast Guard Functions Academy Network.

(v) Latest developments by the Commission Services, the EEAS and the EDA

On the Naval Training Network

The Project Team Naval Training successfully designed and conducted an Operations Room Train the Trainers Course in September 2015 in Ireland to provide Operations Room Personnel with the conceptual background to set up and operate maritime security networks that aggregate information from military and civilian systems. The PT Naval Training decided to extend a study to harmonize diving standards in Member States. The aim is to establish common standards for different types of divers, to certify and mutually recognise Member States training and equipment.

EDA have through a contractor conducted a Naval Training Support Study (NTSS) to look at training for navigation, mine warfare and diving. The NTSS project falls under the European Union's "pooling and sharing" process which has been put into place to enable member states to reduce costs and optimise the efficiency of European defence capabilities through the sharing and pooling of military capacities. This includes aligning military requirements where possible, working in close cooperation for research, training courses and exercises, and sharing the same procedures and command structures. The NTSS study has been conducted during 2015. The fields of navigation, mine warfare and diving will be covered with the aim of providing a landscape of existing capabilities; proposing possible common requirements; deriving shortfalls based on the gap analysis; and proposing recommendations to solve them.

On the Maritime Academy Training Network

During the 12th FEMIP Conference "Mediterranean blue economy: enhancing marine and maritime cooperation" organised by EC, EIB and IMP in Athens on 17-18 April 2013 was agreed that there is a need for more targeted work on the promotion of a network of maritime training institutes and centres in the region. A reference to a network of maritime training academies and institutes in the Mediterranean sea-basin has been added to the Union for the Mediterranean (UfM) Ministerial Declaration on Blue economy adopted on 17 November 2015.

The Networking maritime academies project was launched in 2015 (end July 2016) funded within IMP MED Project and aims to explore the added value in networking the different Administration and institutes providing VET and training in marine and maritime matters⁸⁵.

At this stage of the Study five Focus Groups have been organized to discuss the main topics related to Skills definition, Certificate recognizing, International Cooperation, Role of Public Administration, training providers and private sector. A coordinated approach with the European Coast Guard Training Recommendation project was encouraged.

The result of the study will be one of the starting points for the forthcoming actions and follow up initiatives related to UfM Declaration on Blue Economy by the Union for the Mediterranean (UFM).

In addition, the European Maritime Safety Agency organises specific training to SAFEMED beneficiaries in the field of maritime transport security related matters (Action 5.1.5).

On Research and Innovation

With reference to Action 5.2.4 striving to enhance co-ordination between civilian and military research agendas, a joint workshop was organized on 6 April 2016 by the Commission in Ispra in cooperation with the EDA and with representation from Member States. The main purpose of the workshop was to look for synergies mainly between the strategic research agenda of the Capability Technology group (CapTech) of EDA on Maritime, addressing also relevant areas of the Captech Sensors and Technologies, and civilian research initiatives mainly under the H2020 programme. The workshop contributed to the establishment of a network of R&D experts to create a clear vision and propose a cross-sectoral agenda for maritime security research. Initial domains of focus have been identified. A working methodology was agreed, as was a skeleton structure for the cross-sectoral research agenda. The workshop was attended by experts selected by the Member States, but the network will also open up to experts from academia and industry. The core Network has been established in the form of a web platform (CIRCABC) for discussion and development and dissemination of documents. JRC, the rest of the Commission and EDA will continue close cooperation with a view to present a cross-sectoral agenda for maritime security research by the summer 2017. More details on the outcome of this workshop will be reported to the Friends of the presidency meeting in June 2016.

⁸⁵ The study should identify maritime economic sectors or activities in which networking of such education and training entities could be beneficial in terms of boosting skills and employability and supporting the competitiveness of blue economy in the Mediterranean sea basin (for instance in marine/ maritime sectors/ activities for which comparative advantage exists in the region). The study should highlight the challenges and opportunities for creating and/or reinforcing such network or networks and also provide recommendations on the most appropriate support actions and initiatives to do so. The project is also analysing the role and the advantages in involving private sector in the training process, mainly in the definition of skills.

The Commission also seeks to ensure that all EU customs authorities have access to adequate resources, bearing in mind the responsibilities customs share with other law-enforcement agencies at external borders. Customs officers operate radiation and nuclear detection portals in the main European ports. This requires specific knowledge and skills; an intensive training programme has therefore been developed between the Commission and EU SECTRA in Karlsruhe and ISPRA. Customs experts from all EU Member States are trained to detect radioactive and other nuclear materials at border-crossing points.

On access to national/transnational use of European Structural and Investment Funds

Related to the sub action 5.2.5, on 20 January 2016, EDA held an inception meeting with the participation of Member States, the Commission and pertinent Managing Authorities. This meeting confirmed the potential for dual-use projects in maritime security to access specific Interreg V-B Cooperation Programmes. The meeting triggered the process aimed at exploring access to funding opportunities in the maritime security area from ESIF Interreg Transnational Cooperation Programmes. During the inception meeting, Member States representatives were made aware about the relevant funding sources and their priorities.

As a follow up, EDA launched a process by providing to the Ministries of Defence with guidelines on how to submit to EDA pilot cooperative projects on maritime security (deadline set 31 October 2016). The idea behind is EDA to support with appropriate expertise the development of a pilot case in order to maximize its chance to access transnational use of European Structural and Investment Funds, on the basis of existing Regulations, so as to promote innovation and dual-use R&T and R&D across the maritime technological and industrial base and particularly SMEs.

Other developments by Member States: on training partnerships of maritime authorities in Europe

The ECGF Training Portal for the European coast guard functions has been opened. This portal disseminates information on available courses, training opportunities, student and expert exchange, and on various events and news on coast guard functions-related training. The portal is also an important information channel for the European Coast Guard Functions Training Network, which was founded in early 2016.

The Training Network is intended to increase the visibility of the training initiatives carried out by the various coast guard functions related agencies and educational institutions, contributing positively to the exchange of information and best practices via networking. The Network will create a solid foundation for maritime collaboration in the sphere of European training and security.

The Training Network and Portal were founded as a result of a year-long EU-funded project (European Coast Guard Functions Academy Network project, ECGFA NET), which was completed in February of 2016. A total of fourteen CGF authorities, representing eleven EU member states, participated in the project. The project included also seven observers, including a number of EU agencies⁸⁶.

⁸⁶ Collaboration was founded on the work conducted by the ECGFF. The development of training will strengthen operative functions and contribute to the creation of common standards. The Coast Guard Functions include the following responsibilities that require special expertise: maritime safety; maritime search and rescue; maritime monitoring and surveillance; maritime border control; maritime environmental protection and response (including oil spill clean-up); maritime custom activities; fisheries inspection and control; the prevention and suppression of trafficking and smuggling and connected maritime law enforcement.

6. CONCLUSIONS

It is clear from Member States reports and from other services contributing to this document that a large number of issues identified in the EU maritime security strategy and its action plan are being followed both at EU and national level and that the implementation of the EU maritime security action plan is progressing well. It is thus encouraging to note that cross sector co-operation is taking place in a large number of Member States and at EU level in order to fulfil the objectives of the EUMSS.

At the same time, it is clear that the large number of actions identified in the Action Plan poses significant challenges for national and EU authorities. Actions by implementing authorities of this action plan have in general focused on the following areas:

- multilateral and bilateral cooperation initiatives (internal and external)
- implementing and developing information sharing projects
- promotion and participation in exchange programs for capability development

For the future, the following focus areas have been identified by the Commission services, the EEAS and the EDA as of specific interest and could, thus, be given special attention by Member States:

- Maritime security information sharing initiatives and collaboration in information dissemination that supports better decision-making.
- Actions and sub-actions supporting maritime capacity building and capability development where current capacities are not sufficient and/ or gaps have been identified, e.g. through the European cooperation on coastguard functions and the EU Emergency Response Capacity (voluntary pool) or the established arrangements between the Commission and the EU Military Staff, as well as EDA's activities.
- Actions supporting other EU regional or sectoral strategies development concerning the maritime dimension.
- Continued work with research and innovation of dual- (multi-) use capabilities for maritime operations.
- Actions aiming at achieving more efficient and effective maritime security operations by co-ordinating planning and utilisation of maritime resources.

The Commission services and the EEAS further note that the challenging security situation facing the EU has generated a number of EU level strategies or policies with a security focus or dimension i.e. EU Global Strategy, European agenda on security, European migration agenda, customs risk management strategy, hybrid threats strategy, cyber defence policy framework, joint communication for an integrated European Union policy for the Arctic.

The role of the EUMSS in this context will be to support other security related strategies or policies for the maritime domain. Indeed, over the recent period progress was made to ensure greater policy coherence and to promote a maritime security dimension in other sectoral and/or regional policies in line with the cross sectoral approach in which the EU MSS is anchored.

Specifically, references to the EU Maritime Security Strategy were included in the European Agenda on Security (adopted on 28 April 2015), thus reinforcing the internal-external security policy nexus.

A similar approach was pursued in relation to the EU Action Plan to prevent and counter migrant smuggling and the EU Agenda on Migration (cf. Roadmap on smuggling of migrants in the Mediterranean), the EU Action Plan on the Gulf of Guinea, adopted in March 2015 (following the adoption of the EU Strategy for the Gulf of Guinea in 2014), the EU Communication on Hybrid Threats, adopted in April 2016, and the EU Joint Communication on the Arctic, adopted in April 2016.

While noting that the EU MSS is and should remain a cross-sectoral document with a global scope, the EEAS and the Commission services propose that taking into account the challenging security environment, certain hotspots, such as the Mediterranean, should be given special attention by Member States.

Constructive cooperation among all arctic states is of key importance. Other partners in such constructive cooperation on arctic matters must include the EU as well as other international organisations (UN, IMO, etc.) and other states following arctic matters closely. In line with the recently published Joint Communication on “An *integrated European Union policy for the Arctic*” (JOIN(2016) 21 final), the EU will step up its existing action and engagement in the region on climate change, environmental protection, sustainable development and international cooperation. Research, science and innovation have importance across these priority areas. Collectively, this increased engagement will contribute to the volume of activity under strand 5 of the EU Action plan of the EU Maritime Security Strategy over the coming years. In view of the coming challenges around the strategic importance of the Arctic region, not only at the European but also at a global level, capability and dual use assets development are also steps that are considered worth being taken by EU Member States. The EU is thus encouraging further cooperative actions between Member States and other organisations such as NATO, on the Arctic maritime domain.

EU action will focus on the EU's role as a security provider, with particular emphasis on support to operational cooperation, information and situational awareness, pooling and sharing of capacities and capabilities.

In this regard, it should be noted that a key feature of the EU's Maritime Security Strategy with its Action Plan is the focus on civil-military cooperation, which cannot be dealt with through EU legislation under the ordinary legislative framework. Member States should be driven by this focus on greater civil cooperation and coordination between different authorities.

A good example of where the EU MSS could be further used as a tool for enhanced policy coherence, more significant civil-military coordination between EU authorities and cooperation with international partner countries is the Mediterranean.

In April 2015, Member States agreed on the launch of EUNAVFOR MED operation Sophia to contribute to the «disruption of the business model of human smuggling and trafficking networks in the Southern Central Mediterranean achieved by undertaking systematic efforts to identify, capture and dispose of vessels and assets used or suspected of being used by smugglers or traffickers, in accordance with applicable international law, including UNCLOS and any UN Security Council Resolution». The operation, which is being conducted in sequential phases (3 in total), entered the first step of the second phase of its mandate on 7 October 2015, thereby allowing, in the Southern Central Mediterranean, diversion on the high seas of vessels suspected of being used for human smuggling or trafficking. The Council has recently agreed to extend the mandate of the Operation for a further one year. Two further tasks will be added to the original mandate: (1) Training, and information sharing with, the Libyan Coastguard and Navy, based on a request by the legitimate Libyan authorities taking into account the need for Libyan ownership; (2) implementation of the UN arms embargo on the High Seas off the coast of Libya on the basis of a new UNSC Resolution.

EU EUNAVFOR Operation ATALANTA continues to deliver effective maritime security off the coast of Somalia and it is part of a wider set of actions conducted by the EU applying a comprehensive approach in the area to help solving the Somali crisis which has political, security and humanitarian aspects. The Council has confirmed its intention to extend the mandate of the operation until December 2018, with a view to further enhancing the EU's Comprehensive Approach in Somalia and the Horn of Africa, in particular the security-development nexus

These efforts should also be read in conjunction with other EU initiatives included in recent border packages and EU agenda on migration, i.e., the EU Action Plan against migrant smuggling in coherence with other related strategies at EU level, namely the EU Strategy towards the Eradication of Trafficking in Human Beings 2012-2016.

While noting the positive developments in the promoting and raising awareness on the EU MSS Communication and Action Plan, as reported by Member States, the Commission services and the EEAS invite Member States to pursue, at the national level, a communication campaign, in line with the Communication Campaign concept plan drafted by the Commission and the Member States and endorsed by Member States at the Friends of the Presidency.

The Way ahead for the Action Plan:

The Action Plan is now at different levels of implementation by Member States, as clearly evidenced by the section "actions planned by Member States but not started. Some actions are by some Member States considered as "finished actions" although it is not clear if they have been fully completed or accomplished by all implementing parties. More time for further developments in terms of implementation should be allowed and the next assessment of developments could be carried out in 2017. Some suggestions for 'new' actions have been put forward for consideration, showing the evolving nature of the actions in the EUMSS. For future work, actions should gradually become more focussed on remaining gaps in the field of maritime security.

Some actions are also regarded as completed (see Chapter 2, paragraph (iv)), as they are implemented and monitored within the framework of other policy strategies such as maritime safety and pollution prevention policy, the EU Strategy and Action for customs risk management, among other. Objective 5 of this Strategy stipulates several actions to enhance multi-agency cooperation

and ensuring complementarity of roles from customs and other authorities in supply chain risk management.

The Commission services and the EEAS hereby suggest the development of an enhanced questionnaire with a simplified procedure as reporting instrument which would also contain a table for completed actions and prioritization of remaining actions of the action plan and for the suggestion of new actions to be included. This questionnaire would be launched through an online consultation to Member States in December 2016, in time for the next reporting exercise to the Friends of the Presidency, expected to take place in June 2017.

Member States will also be invited to provide suggestions for new actions which they consider of high importance for the pursuance of European maritime security.
