



Council of the
European Union

Brussels, 3 October 2016
(OR. en)

12829/16

MAR 249

COVER NOTE

From:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	30 September 2016
To:	Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of the European Union

No. Cion doc.:	SWD(2016) 326 final
Subject:	COMMISSION STAFF WORKING DOCUMENT on the implementation of the EU Maritime Transport Strategy 2009-2018

Delegations will find attached document SWD(2016) 326 final.

Encl.: SWD(2016) 326 final



Brussels, 30.9.2016
SWD(2016) 326 final

COMMISSION STAFF WORKING DOCUMENT

on the implementation of the EU Maritime Transport Strategy 2009-2018

1. INTRODUCTION

1. The European Commission presented in January 2009 a Communication on the strategic goals and recommendations for the EU's maritime transport policy until 2018¹ ("2009 Communication"). Set in the broader context of the EU Transport Policy² and the EU Integrated Maritime Policy³, it defined the main strategic objectives of the European maritime transport policy until 2018 and recommended actions in several areas⁴ pertaining to maritime transport.
2. Since then, several developments have affected the maritime sector. The decade that preceded the 2009 Communication saw a rapid growth of the world economy, a rapid development of globalisation and widespread outsourcing of production. As 80% of global trade in terms of tonnage is transported by sea, the demand for maritime transport services expanded beyond any expectation, placing huge pressure on available capacities: in 2008, freight rates reached historical peaks and world shipyards received record orders. Only one year later, however, the market outlook was very different.
3. The crisis that hit the economy in 2009 brought about a drastic reduction of transport volumes⁵ at a time when a wave of newly built vessels was beginning to enter the market. In just a few years, a large overcapacity built up, intensifying the already strong competition in the market and triggering a process of concentration and vertical integration of operators. Nowadays, ports and the maritime industry compete as part of entire supply chains. To strengthen their position, a great number of top container shipping companies are integrating vertically with port terminals, hinterland logistic operators, and shipping agencies⁶.
4. Larger vessels are being built to reap economies of scale and profit for technological advances⁷; horizontal alliances and agreements are being formed to better exploit them. The handling of bigger ships, together with other trends such

¹ COM(2009) 8 final, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0008&from=EN>

² COM(2006) 314, 22.6.2006.

³ COM(2007) 575, 10.10.2007.

⁴ The areas under 2009 Communication: (i) European shipping in globalized markets (ii) Human resources; (iii) Quality shipping; (iv) international scene; (v) short sea shipping; (vi) research and innovation.

⁵ World trade had declined by more than 11% in 2009 – Source: UN/DESA and Project Link.

⁶ Study on the Analysis and Evolution of International and EU Shipping – Source: Panteia/PWC/TPR – Sep. 2015. <http://ec.europa.eu/transport/modes/maritime/studies/doc/2015-sept-study-internat-eu-shipping-final.pdf>.

⁷ The average size of newly built container vessels had been oscillating around approximately 3,400 TEU between 2001 and 2008, but increased significantly since then reaching a mean of 5,800 between 2009 and 2013. The average size of a newly built containership has soared to approximately 8,000 TEUs in 2015 – Source: The impact of mega-ships OECD/ITF 2015.

as the need for 'greener operations leads to new investments in port infrastructure, which, in turn, calls for a regulatory framework that guarantees legal certainty for investors, transparency of public funding to ensure fair competition and efficient use, and non-discriminatory access to services.

5. More concentrated volumes of cargo, as well as the need to remain competitive vis à vis other modes of transport, also necessitate speedier execution of formalities and better coordination of logistic operations⁸. Digitalisation is considered by the majority of respondents to the consultation on a Mid-Term Review of the EU Maritime Transport Strategy⁹ (“the public consultation”) to be crucial in simplifying administrative processes, enabling efficient management of freight flows through exchange of information on cargo, infrastructure and equipment.
6. The economic crisis has also reduced the resources of public administrations with responsibilities in the field of maritime safety and security. Modernisation of procedures and sharing of assets and information can help all actors involved in gaining efficiency while maintaining high standards.
7. Increased pressure on environmental resources has already required corrective action to contribute to the “greening” of shipping. By way of example, reference may be made to recent legislation on sulphur emissions. Such measures have to be seen against the background of current low oil prices, which lower the incentives for industry to invest into alternative energies and new technologies.
8. The patterns of global trade are changing, with larger volumes being transported between emerging economies. New intercontinental routes influence the competitive position of ports and carriers. A 2015 Study on the Analysis and Evolution of International and EU Shipping¹⁰ underlines that the presence of the EU shipping industries in new markets must be encouraged and supported.
9. As a result of new vessel technology, crews are becoming smaller and must acquire new skills. Social partners¹¹ have emphasised the need to attract and train a sufficient number of EU seafarers to avoid the EU maritime cluster being deprived of staff with the right mix of skills and competences.

⁸ Administrative procedures and integration in the logistic chain are among the main factors that influence the competitiveness of intra-EU maritime transport. See, for example, study on “Analysis of recent trends in EU shipping and analysis and policy support to improve the competitiveness of short sea shipping in the EU” – Source: COWI – June 2015. <http://ec.europa.eu/transport/modes/maritime/studies/doc/2015-june-study-sss-final.pdf>.

⁹ Public consultation on a Mid Term Review of the EU Maritime Transport Strategy (Consultation period: 28/01/2015 – 22/04/2015), http://ec.europa.eu/transport/modes/maritime/consultations/2015-mts-review_en.htm.

¹⁰ Cf. footnote 6.

¹¹ Joint ECSA/ETF position on EU maritime strategy mid-term review, <http://www.etf-europe.org/files/extranet/-75/44919/Maritime%20Strategy%20Mid.pdf>.

10. All these developments are relatively new, and may represent challenges for policy makers and market operators. In the public consultation, recurrent themes raised by stakeholders and national maritime administrations are: ensuring effective competition and choice for shippers, while avoiding that the search for efficiency and fewer resources are to the detriment of safety, quality shipping and working conditions for the crew; directing infrastructure investments where they add most value for the EU transport system; boosting efficiency through digitalisation and administrative simplification; promoting green technologies and decarbonisation of EU shipping; retaining and creating new jobs, decent working conditions and skills in the EU; and gaining better access to third countries' markets.
11. Since 2009, a number of legislative and non-legislative initiatives have been adopted with a number of ongoing actions. Others may be needed to address current challenges. However, the intention of this staff working document is to set out and report on developments in the EU's Maritime Transport Strategy of 2009, following a number of preparatory studies and consultations¹².

2. SAFETY & SECURITY: A PRIORITY CONCERN

2.1. Objectives & Accomplishments

12. The 2009 Communication highlighted the need to give priority to the enforcement of existing EU and international rules and to speedy implementation of measures introduced with the 3rd Maritime Safety Package. It also aimed at the revision of the mandate and functioning of the European Maritime Safety Agency (EMSA) to further enhance its technical and scientific assistance capability.
13. The mandate of **EMSA** was revised in 2013¹³ enhancing existing tasks and adding new ones. In particular, EMSA was mandated to assist countries applying for accession to the Union and neighbourhood states as well as to extend the coverage of its anti-pollution means from shipping activities to oil and gas installations. A new multi-annual envelope of €160.5 million was decided in 2014 for the response to pollution caused by ships and offshore oil and gas installations.
14. With the 3rd Maritime Safety Package adopted in 2009, the EU now has one of the world's most stringent legislative frameworks covering the entire chain of responsibility in the maritime sector. One of the pillars of this framework is the reinforcement of **flag State compliance** to ensure that Member States effectively

¹² Preparatory work for the Mid-Term Review included: i) A public consultation (launched from 28 January until 22 April 2015); ii) The collection of the views of the Member States' maritime administrations through a questionnaire, later discussed at a meeting of the EU Maritime Directors; and iii) two external studies on international maritime transport and on Short Sea Shipping (cf. footnote 6 and 8).

¹³ OJ L 39 15.01.2013 p.30-40, Regulation (EU) No 100/2013 of the European Parliament and of the Council amending Regulation (EC) No 1406/2002 establishing a European Maritime Safety Agency.

and consistently discharge their obligations as flag States, making the voluntary IMO flag State audit scheme mandatory for all EU Member States since 2009, and requiring all flag administrations to implement and maintain a quality management system, certified in accordance with international standards. In situations where Member States delegate work to **recognised organisations (classification societies)**, this includes the key aspect of monitoring the performance of their work. The Commission, through the inspection programme carried out by EMSA, periodically assesses the major existing classification societies, which classify and control safety of more than 90% of the world's cargo carrying tonnage and are recognised at EU level against the stringent safety-oriented quality criteria provided in EU legislation.

15. Another pillar of the EU framework for maritime safety is **Port State Control**. Since 2009, the Commission has assisted the Member States in the implementation of a new risk-based approach to inspections. Persistently substandard vessels can be banned from European waters¹⁴. EMSA provides all Member States (as well as Norway, Russia and Canada as members of the Paris Memorandum of Understanding on Port State Control) with technical support on the new inspection regime and operates the system for targeting vessels and reporting of results (THETIS database).
16. As for the responsibilities of coastal states, the **Union Maritime Information and Exchange System (SafeSeaNet)** is today fully operational and covers all European coastal waters, tracks 12,000 ships/day and receives and records 100,000,000 ship (AIS) positions per month. This enables early identification of high-risk vessels, earlier precautionary actions, and improved emergency response to incidents or pollution, including search and rescue operations and places of refuges for ships in need of assistance. Following the changes brought in 2014¹⁵, there is today an operational integrated information management system in place operated by EMSA – the Integrated Maritime System and Services (based on SafeSeaNet, LRIT, AIS and SAT-AIS and CleanSeaNet)¹⁶ which is also used by other EU Agencies.
17. Following the accident of the MSC Flaminia container vessel in 2012, the Commission, with the assistance of EMSA, has been particularly active in facilitating a constructive dialogue, including table top exercises, with national authorities and industry stakeholders, this led to the adoption by the relevant expert group of the “EU Guidelines on **Places of Refuge**”, in November 2015¹⁷

¹⁴ A list of ships currently banned can be found at the following link: <https://www.parismou.org/detentions-banning/current-bannings>.

¹⁵ Commission Directive 2014/100/EU of 28 October 2014 amending Directive 2002/59/EC of the European Parliament and of the Council establishing a Community vessel traffic monitoring and information system.

¹⁶ <http://www.emsa.europa.eu/operations/maritime-monitoring.html>

¹⁷ <http://ec.europa.eu/transport/modes/maritime/digital-services/doc/por-operational-guidelines.pdf>.

This process has also been met with considerable interest at international level with a view to improving the respective IMO Guidelines¹⁸ following the EU model of cooperation.

18. For **accidents investigations**, the focus has been on making sure that EU legislation has been properly implemented, checking whether Member States have established an independent investigative body; provided for a system of safety-focused investigation systems; drawn up commonly structured investigation reports; and encode the necessary information in the **European Marine Casualty Information Database** hosted in EMSA. This database is a powerful instrument to draw lessons from maritime accidents and to derive policy proposals based on empirical evidence.
19. On **passenger ship safety**, the focus has been on improving the effectiveness, efficiency and proportionality of some of the regulatory requirements. In this respect, the Commission adopted on 6 June 2016 a number of legislative proposals¹⁹ to simplify and improve the common rules on safety of ships carrying passengers in EU waters. The review is a response to lessons learnt, including from accidents, and technological developments. It aims, inter-alia, at allowing immediate access of competent authorities to relevant data in case of emergency, ensuring that search and rescue operations are performed more effectively.
20. Regarding **liability and compensation for damages by shipping activities**, the Commission has published in March 2016 a report²⁰ on the application of Directive 2009/20/EC²¹ on the insurance of ship-owners for maritime claims, which makes it mandatory for any ship registered in an EU Member State or ships entering EU ports to have adequate insurance. In addition, the Commission is presently evaluating²² the application of Regulation (EC) No 392/2009 on the liability of carriers of passengers by sea in the event of accidents. In the international context, since 2009, the Commission has continuously promoted the ratification of all IMO Conventions on liability and compensation for damages related to shipping activities. There has been important progress, in particular with the entry into force of the 2002 Protocol to the Athens Convention on the liability of carriers of passengers by sea²³, and the 2007 Nairobi Wreck Removal

¹⁸ Resolution A.949(23), 'Guidelines on places of refuge for ships in need of assistance', of November 2003.

¹⁹ COM(2016) 369, COM(2016) 370, COM(2016) 371.

²⁰ COM(2016) 167 final, 29.3.2016.

²¹ OJ L 131, 28.5.2009, p. 128.

²² http://ec.europa.eu/smart-regulation/roadmaps/docs/2015_move_048_evaluation_liability_of_passenger_carriers_by_sea.pdf.

²³ Protocol of 2002 to the Athens Convention Relating to the Carriage of Passengers and their Luggage by Sea, 1974.

Convention²⁴. However, there are still steps for Member States to take to complete ratification of all relevant instruments²⁵.

21. Regarding **marine equipment**, EU legislation was revised in 2014²⁶ by replacing the annual amendments to the Directive containing the list of the applicable performance and testing standards, which have to be transposed by each of the EU Member States into their national legislation, with directly applicable implementing regulations. The revision also strengthens the requirements for the notification and control of conformity assessment bodies and enhances market surveillance.
22. As regards **security**, SOLAS Chapter XI-2 and part A as well as certain parts of part B of the International Ship and Port Facility Security (ISPS) Code were added to the ‘acquis communautaire’ by means of Regulation (EC) No 725/2004 on enhancing ship and port facility security²⁷. The regime is complemented by Directive 2005/65/EC on enhancing port security²⁸ that addresses elements of port security not covered by the Regulation. The Commission was given powers to perform inspections to verify the effectiveness of national quality control systems and maritime security measures, procedures and structures. More than 870 maritime security inspections have been conducted by the European Commission since 2005, with the technical assistance of EMSA, in order to ensure a harmonised implementation throughout the EU of the maritime security provisions, whilst also contributing to keeping high the level of vigilance in this domain. The procedures for conducting Commission inspections are provided by a relevant Commission Regulation²⁹.
23. **Piracy and armed robbery at sea** remains an endemic problem in South East Asia and also in the Gulf of Guinea. And while piracy off the coast of Somalia

²⁴ Nairobi International Convention on the Removal of Wrecks, 2007.

²⁵ In the case of the “Protocol of 2010 to Amend the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances (HNS) by Sea, 1996”, there is presently an inter-institutional procedure pending, on the basis of the Commission’s proposals for two Council Decisions authorising Member States to ratify the 2010 Protocol on behalf of the Union (COM(2015) 304 final and COM(2015) 305 final, of 22.6.2015). The two Council Decisions are a prerequisite before Member States can ratify the Protocol on account of the affectation of Union rules, in particular those emanating from Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage (OJ L 143, 30.4.2004, p. 56).

²⁶ Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 on marine equipment and repealing Council Directive 96/98/EC – OJ L 257, 28.8.2014, p. 146–185

²⁷ Regulation (EC) No 725/2004 of the European Parliament and of the Council of 31 March 2004 on enhancing ship and port facility security – OJ L 129, 29.4.2004.

²⁸ Directive 2005/65/EC of the European Parliament and of the Council of 26 October 2005 on enhancing port security – OJ L 310, 25.11.2005.

²⁹ Commission Regulation (EC) No 324/2008 (EC) No 324/2008 of 9 April 2008 laying down procedures for conducting Commission inspections in the field of maritime security – OJ L 98, 10.4.2008 amended by Commission Implementing Regulation (EU) 2016/462 of 30 March 2016 – OJ L 80, 31.3.2016.

has declined, the fears of resurgence are very real. In combating piracy and armed robbery, collaboration of the Navies³⁰ and use of armed guards has proved to be effective as has been repeatedly underlined by the Contact Group on Piracy off the Coast of Somalia³¹. The Commission also adopted a Recommendation on Best Management Practices³², to make ships harder to hijack.

2.2. Outlook

24. Efforts will be pursued so that the EU retains one of the world's most stringent legislative frameworks to prevent and respond adequately to maritime accidents. Experience has shown that even if they are parties to the same IMO conventions, differences between Member States in terms of safety legislation and implementation of international rules can be significant.
25. On **passenger ship safety**, the focus is on further enhancing the level of safety and facilitating the internal market. The Union has submitted proposals to the IMO³³ for the upgrade of international damage stability standards for passenger ships. The results of the international debate in the course of 2016 will form the background of any further EU action in this respect. The Commission, supported by EMSA and in cooperation with Member States and stakeholders, will also follow-up on the remaining recommendations of the REFIT fitness check on EU passenger ship safety legislation³⁴. Further actions could include the development of guidelines or a code for small vessels built in non-steel or equivalent materials, based on functional requirements³⁵.
26. The constant evolution of the sector poses new challenges (e.g. ultra large container vessels, mega-cruise ships, safety concerns in relation to LNG bunkering, etc.) and offers opportunities for innovative technological solutions. Thus, although the Union's maritime safety and environment protection *acquis* has largely been developed in the past fifteen years, existing rules and systems need to be regularly reviewed to ensure they continue to meet their objectives effectively, are adapted to new circumstances and international developments, while not imposing a greater burden than necessary on the industry. A significant fraction of the EU legislation in the area of maritime safety will thus be evaluated

³⁰ EU NAVFOR operations assisted by EMSA digital maritime surveillance services.

³¹ The Contact Group on Piracy off the Coast of Somalia was created in January 2009 pursuant to UN Security Council Resolution 1851.

³² Commission Recommendation of 11 March 2010 on measures of self-protection and the prevention of piracy and armed robbery against ships – OJ L 67, 17.3.2010.

³³ SDC2/3/6, SDC3/3/7 and MSC95/6/2.

³⁴ COM(2015) 508 – REFIT Adjusting Course: EU Passenger Ship Safety legislation Fitness Check.

³⁵ COM(2015) 508 – REFIT Adjusting Course: EU Passenger Ship Safety legislation Fitness Check, page 11.

in order to verify if it continues to be **fit for purpose**³⁶. This will concern, inter alia, the areas of vessel traffic monitoring, port State control, flag State responsibilities and accident investigation.

27. **Effective enforcement** is also vital: support can be given to Member States' maritime administrations through EMSA as a competence centre on which national administrations can draw, for example in using the EMSA hosted systems and applications³⁷. This can support them in their roles as port state or coastal state. EMSA's visits and inspections programme of the EU maritime safety *acquis* helps in identifying shortcomings and improvement opportunities³⁸. EMSA's role could evolve to provide further support to national authorities responsible for **Coast Guard functions** for safety, security, environmental protection, law enforcement and maritime border and fisheries control³⁹, as agreed by the co-legislators within the European Border and Coast Guard package.
28. Establishing a comprehensive framework of **security measures** based on prevention, reaction capacity and resilience is a continuing objective. As specified in the 2009 Communication⁴⁰, such a framework should lead to a genuine 'security culture' becoming an integral part of quality shipping and port operations, while not compromising unnecessarily the performance of shipping and the quality of life of seafarers and passengers.
29. **Terrorist threats** need continued careful consideration. The 2009 Communication states that the Commission and Member States should continue supporting the implementation of international security measures commensurate with the prevailing security threat and based on appropriate risk analysis methodologies. Flag states and ship owners need to cooperate closely and seafarers need to receive the appropriate basic and continuous training.

³⁶ COM(2015) 610 final – Commission Work Programme 2016 – REFIT Initiatives – Maritime Legislation Fitness Check. See also REFIT Evaluation Roadmap of Directive 2009/21/EC on compliance with flag State requirements (FS Directive) and Directive 2009/18/EC establishing the fundamental principles governing the investigation of accidents in the maritime transport sector (AI Directive), http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_move_059_ev_accident_investigation_en.pdf.

³⁷ SafeSeaNet, CleanSeaNet, LRIT and Thetis and integrated maritime services based on combining information – see point 16.

³⁸ COM(2016) 3171 – Commission Opinion on the draft Single Programming Document for 2017-2019 of the European Maritime Safety Agency

³⁹ COM(2015) 667 final – Proposal for a Regulation of the EP and Council amending Regulation (EC) No 1406/2002 establishing a European Maritime Safety Agency.

⁴⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Strategic goals and recommendations for the EU's maritime transport policy until 2018 COM/2009/0008 final.

30. As specified in the proposal for a Directive on Network and Information Security (NIS)⁴¹, cyber **security** needs to be extended to a number of sectors not yet covered by appropriate rules, among which transport, including maritime transport.

3. DIGITALISATION AND SIMPLIFICATION FOR MORE EFFICIENT WATERBORNE TRANSPORT

3.1. Objectives & Accomplishments

31. One of the goals of the 2009 Communication was to establish a true ‘European maritime transport space without barriers’, removing unnecessary **administrative obstacles** to maritime transport within the Internal Market. The associated action plan⁴² proposed to simplify customs formalities and administrative procedures, improve electronic transmission by creating “e-maritime” systems and rationalise relevant EU regulations.
32. **SafeSeaNet** has been a useful tool which has developed into the Union Maritime Information and Exchange system. Apart from enhancing maritime safety, port and maritime security, environmental protection and pollution preparedness, this allows for the exchange, in accordance with Union legislation, of additional information aiming at facilitating efficient maritime traffic and maritime transport⁴³.
33. Since 2009, initiatives were undertaken to streamline information requests by authorities, facilitate data exchange between administrations (‘reporting once principle’), and achieve more efficient monitoring of maritime traffic. The **Reporting Formalities Directive**⁴⁴ required that by 1 June 2015, a selected list of documents – that ships have to present to port and other authorities – are reported only once in electronic format to harmonised National Single Windows (NSW). Harmonised guidelines⁴⁵ were developed in consultation with experts from the national administrations and the industry.

⁴¹ Proposal for a Directive of the European Parliament and of the Council concerning measures to ensure a high common level of network and information security across the Union – COM/2013/048 final – 2013/0027 (COD). On 7th December 2015, the European Parliament and the Council reached an agreement on the Commission’s proposed measures to increase online security in the EU. The NIS Directive is expected to enter into force in August 2016.

⁴² COM(2009) 10 final – Communication and action plan with a view to establishing a European maritime transport space without barriers.

⁴³ Cf. footnote 16.

⁴⁴ Directive 2010/65/EU of the European Parliament and of the Council on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC.

⁴⁵ National Single Window Guidelines – 17.042015 – <http://ec.europa.eu/transport/modes/maritime/doc/2015-06-11-nswguidelines-final.pdf>

34. A **Blue Belt initiative**⁴⁶ was also launched in 2013 to relieve EU goods transported between EU seaports from the administrative and customs formalities that apply to goods arriving from overseas. Simplified formalities for regular shipping services have been in place since 1st March 2014⁴⁷. In addition, transportation of Union goods which have been brought from one point to another within the customs territory of the Union and temporarily leave that territory by sea will be facilitated by customs legislation on the “Customs Goods Manifest”, a simplified data set which will permit the identification of EU goods and exempt them from custom formalities⁴⁸.
35. Along with administrative simplification, the 2009 Communication called for framework conditions that are more attractive for **investment** in the port sector and in the connection between ports and hinterland. The use of funding programmes such as the **Trans-European Network Transport projects** was advocated to assist in those developments and promote the use of waterborne transport.
36. In 2013, the Commission adopted the Communication “**Ports: an engine for growth**”⁴⁹ envisaging legislative and non-legislative measures to improve the competitiveness of the TEN-T ports and their environmental performance. As follow up, the Commission presented in 2013 a proposal for a Regulation establishing a framework on market access to port services and financial transparency of ports⁵⁰. The European Parliament and the Council reached an agreement on 27 June 2016, and plan to adopt it by the end of the year. It would contribute to high quality port services, notably by facilitating access to the market of port services and improving the training of personnel. It will also provide transparency in public funding and port charging and improve the governance of ports so as to make the other rules of the scheme more effective.
37. In the field of the Trans-European Networks (TEN-T), the Commission has appointed ‘European coordinators’ with, inter alia, the task of better integrating ports in the TEN-T Corridors and the Motorways of the Sea. Furthermore, the Commission has undertaken actions to promote a good social climate in ports and improve the health, safety and training of port workers and support the work of

⁴⁶ COM(2013) 510 final – Communication from the Commission Blue Belt, a Single Transport Area for shipping.

⁴⁷ Commission Implementing Regulation (EU) No 1099/2013 of 5 November 2013, amending Regulation (EEC) No 2454/93 laying down provisions for the implementation of Council Regulation (EEC) No 2913/92 establishing the Community Customs Code (enhancement of regular shipping services).

⁴⁸ Commission Delegated Regulation (EU) 2015/2446 of 28 July 2015 supplementing Regulation (EU) No 952/2013 of the European Parliament and of the Council as regards detailed rules concerning certain provisions of the Union Customs Code – OJ L 343, 29.12.2015. Commission Implementing Regulation (EU) 2015/2447 of 24 November 2015 laying down detailed rules for implementing certain provisions of Regulation (EU) No 952/2013 of the European Parliament and of the Council laying down the Union Customs Code – OJ L 343, 29.12.2015.

⁴⁹ COM(2013) 295.

⁵⁰ COM(2013) 296.

the Committee for European Social Dialogue established by the port social partners in June 2013. Finally, the Commission has investigated ports practices in the EU on the basis of Article 49 TFEU (freedom of establishment), as interpreted by the Court of Justice. Reference is made in particular to the Court's judgment of 11 December 2014, which clarified that requirements concerning the mandatory employment of identified staff may infringe Art 49 TFEU (Case C-576/13).

38. A comprehensive approach towards investments in the maritime transport was also developed. Besides the funding available under the framework of regional and cohesion policy, the new **TEN-T guidelines and the Connecting Europe Facility** instrument (CEF)⁵¹ boost the creation of a network of multimodal transport corridors featuring modern trans-shipment facilities and advanced technologies. In this context, between 2009 and 2014, around EUR 660 million was allocated to Motorways of the Sea, which form the maritime pillar of TEN-T/CEF and aim at supporting sustainable short-sea routes, maritime corridors, infrastructure development in ports, and sea-based transport services integrated in logistics chains. A Programme Support Action aiming to support the implementation of the TEN-T network relating to maritime ports and inland waterways was launched in 2016 to examine ways to further improve their integration in the network.
39. In the field of **Research and Innovation**, the 2009 Communication stressed the influence of RTD initiatives on the competitiveness of Europe's maritime industry, and on its ability to meet the environmental, energy and safety challenges. In this context, EUR 353 million was allocated for Research and Innovation in the area of maritime transport during the period 2009-2015 under the framework of Horizon 2020 as well as in EU's previous R&I Framework Programme 7 (FP7).

3.2. Outlook

40. The simplification of administrative formalities for shipping and maritime carriage of goods, as well as the need for a comprehensive electronic document, was the number one concern of the respondents to the public consultation. In particular, with reference to the Reporting Formalities Directive, the shipping industry urges further progress towards full EU harmonisation of reporting requirements and wider coverage of formalities through a **harmonised electronic cargo manifest (e-Manifest)**, which could be implemented through a European maritime single window, ensuring an EU-wide 'reporting-once' principle as specified in the relevant EU legislation⁵². The legislative framework will be

⁵¹ OJ L 348, 20.12.2013, p. 129–171.

⁵² Articles 3 and 5 of Directive 2010/65/EU of the European Parliament and of the Council of 20 October 2010 on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC – OJ L 283, 29.10.2010, and Annex III of Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC – OJ L 208, 5.8.2002.

evaluated in 2016⁵³ to identify possible shortcomings and possible ways of further reducing administrative burden, including in respect of the central role of the Union Maritime Information and Exchange system hosted by EMSA.

41. Additional aspects of administrative simplification, optimisation of cargo flows, and better use of existing infrastructure through the use of digital technologies, will be addressed in the recently established **Digital Transport & Logistics Forum**⁵⁴. The forum gathers representatives of national administrations and transport operators to promote use of electronic documents and information exchange. Sharing of data on traffic conditions, cargo positioning, and availability of infrastructure and equipment will be explored with a view to optimising corridor logistics. Synergies with TEN-T policy will be sought in this context. Better coordination of maritime and inland waterways operations with ports and hinterland connections can be pursued, inter alia, through the integration of ICT tools (Union Maritime Information and Exchange system SafeSeaNet, River Information Service).
42. On the EU ports policy, the Commission has initiated work to modernise the application of the **State Aid rules to the public financing of port infrastructures**. In the context of the review of the General Block Exemption Regulation, it envisages the possibility to exempt certain port investments from the requirement of notification under state aid rules⁵⁵.

4. ENVIRONMENTAL SUSTAINABILITY & DECARBONISATION

4.1. Objectives and Accomplishments

43. Improving the environmental record of maritime transport was among the prime aims of the 2009 Communication which invited the Commission, the Member States and the European maritime industry to work together towards the long-term objective of ‘zero-waste, zero emission’ maritime transport.
44. Maritime transport is widely recognised as the most environmentally sustainable and energy efficient way of moving large quantities of cargo. Even so, the volume of the shipping activity is so large that it produces a substantial amount of emissions that are harmful for human health and the environment. The need for cleaner shipping has thus come into focus in relation to both emissions having a global impact – namely greenhouse gas (GHG) (2.5% of global CO₂ emissions) –

⁵³ REFIT Evaluation Roadmap of Directives 2002/59/EC on Vessel Traffic Monitoring and Information System (VTMIS) and Directive 2010/65/EU on Reporting Formalities for ships arriving in and/or departing from ports of the Member States (RFD), http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_move_044_rfd_vtmis_en.pdf

⁵⁴ C(2015) 2259 final – Commission Decision of 9.4.2015 in setting- up an expert group on Digital Transport and Logistics (‘the Digital Transport and Logistics Forum’), <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3280>.

⁵⁵ For details, cf. the draft amending Regulation published for consultation: http://ec.europa.eu/competition/consultations/2016_gber_review/draft_regulation_en.pdf.

and emissions of substances that are particularly harmful at regional level and notably close to coastal areas and port cities (for example, sulphur, particulate matter and nitrogen-oxides).

45. With regard to **GHG emissions**, progress has been made since 2009. The Commission and the EU Member States actively supported the adoption by the IMO, in July 2011, of a mandatory limit on the Energy Efficiency Design Index (EEDI) for ships built as of 2013. A Ship Energy Efficiency Management Plan was also made compulsory for all ships.
46. In June 2013, the Commission set out a strategy to integrate maritime emissions into the EU's policy for reducing domestic greenhouse gas emissions⁵⁶. The strategy consists of three consecutive steps: **Monitoring, reporting and verification** (MRV) of CO₂ emissions from large ships using EU ports; setting up GHG reduction targets for the maritime transport sector; and further measures, including market based measures, in the medium to long term. The first step has been achieved with the adoption of the Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport (MRV Regulation) that applies to ships above 5000 gross tonnage, regardless of their flag, calling at EU ports, as of 1st of January 2018.
47. With regard to the EU legislation on **port reception facilities** for ship generated waste and cargo residues⁵⁷, the Commission has undertaken several actions. It has incorporated changes from the related international provisions in the MARPOL Convention⁵⁸. With the assistance of EMSA it has facilitated and streamlined the electronic reporting and works on the implementation of an information and monitoring system set up under Directive 2000/59/EC which is expected to expedite port handling and facilitate enforcement by competent authorities. Finally, it has adopted interpretative Guidelines⁵⁹ which should result in a more harmonised application and a level playing field for port users. A thorough REFIT Evaluation was also finalised in May⁶⁰.

⁵⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Integrating maritime transport emissions in the EU's greenhouse gas reduction policies', COM(2013) 479 final.

⁵⁷ Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues.

⁵⁸ Commission Directive (EU) 2015/2087 of 18 November 2015 amending Annex II to Directive 2000/59/EC of the European Parliament and the Council on port reception facilities for ship-generated waste and cargo residues OJ L 302, 19.11.2015, p. 99–102.

⁵⁹ 2016/C 115/05 Commission Notice — Guidelines for the interpretation of Directive 2000/59/EC on port reception facilities for ship generated waste and cargo residues.

⁶⁰ COM(2016) 168 final, 31.03.2016 Report from the Commission to the European Parliament and the Council - REFIT Evaluation of Directive 2000/59/EC on port reception facilities for ship generated waste and cargo residues.

48. Global shipping mostly uses heavy fuel oil with high sulphur content of up to 3.5%. New **sulphur emission limits** were globally adopted in IMO in 2008 and included in Directive 2012/33/EU of the European Parliament and of the Council of 21 November 2012 amending Council Directive 1999/32/EC as regards the sulphur content of marine fuels: they impose 0.1% sulphur fuels as of 1 January 2015 in Sulphur Emission Control Areas (SECA), down from 1.0%. The Directive also reduces sulphur content to 0.5%, as of 2020, in all other EU waters (currently 3.5%).
49. In order to comply with these new limits, operators may use low sulphur fuel; install on-board filters (scrubbers); or adopt alternative fuel technologies. The latter solution is mainly contemplated for new ships as it would require major modifications.
50. In 2013, the European Commission set up the **European Sustainable Shipping Forum** (ESSF) – gathering representatives of national administrations and of the shipping industry – to facilitate implementation of and compliance with environmental legislation in the maritime sector. The ESSF provides advice and technical expertise to the Commission on the development and implementation of legislation, policies, projects and programmes in the field of maritime transport sustainability and facilitates exchanges of information on initiatives, projects and partnerships dealing with maritime transport sustainability. It has coordinated input into international discussions at IMO and at the International Standardization Organization (ISO).
51. Clean and sustainable shipping will be further promoted with the effective implementation of Directive 2014/94/EU on the **deployment of alternative fuels** infrastructure (especially with the promotion and use of LNG as marine fuel), ensuring the necessary standardization and set up of a basic fuel supply infrastructure before 2025 with EU financial support.
52. The new TEN-T guidelines and their main financing instrument, the Connecting Europe Facility (CEF), support the **promotion of green shipping**. In this context over EUR 185 million (including Motorway of the Sea projects) were allocated in 2014 and 2015 for studies, pilot actions and infrastructure projects to support new technologies and innovation in processes. Furthermore, with a view to mobilize investments from the private and public sectors, a dedicated tool for the shipping sector is being prepared together with the European Investment Bank to reduce the risk of investing in clean maritime technologies.
53. The environmental performance of shipping can also be improved through the promotion of voluntary **‘green charging’** schemes by EU ports. In this respect a study on environmental port charging that has been launched by the Commission in December 2014 and is now in the concluding stages will provide input for further reflection.

4.2. Outlook

54. The Paris Agreement is intended to limit global warming well below 2°C, which also implies an adequate contribution of the transport sector.
55. For the shipping sector, the EU has a strong preference for a global approach led by the IMO⁶¹. The EU and its Member States strongly support the adoption by the IMO, in 2016, of a mandatory and robust system to collect and report fuel consumption of ships on a global scale, accompanied by a viable verification mechanism to ensure data quality⁶². Together with a specific emission reduction objective this would support the development of further measures to reduce CO₂ emissions from international shipping. In the event that such a global MRV system is finalised and adopted, the EU scheme will be reviewed and if appropriate, revised in order to align it with the international scheme⁶³.
56. Greater use of Short Sea Shipping also depends on a reduction of maritime air pollution. The studies and stakeholders strongly advocate the removal of obstacles to the adoption of cleaner fuels, and, in particular, favour the development of EU-wide guidance for LNG bunkering procedures, harmonization of standards and increased knowledge and exchange of experience amongst permitting authorities. CEF funding for TEN-T priorities and Motorways of the Sea can be used to support the development of ‘green’ infrastructure, whereas Horizon 2020 co-funds R&I into alternative propulsion systems, including for the gradual electrification of shipping.
57. The process of review⁶⁴ of Directive 2000/59/EC on port reception facilities for ship generated waste and cargo residues, provides an opportunity for further alignment with the MARPOL Convention, by ensuring consistency between definitions of ship generated waste and cargo residues, as well as data provided for waste notification and reporting. The Common Information and Monitoring system based on existing systems developed and operated by EMSA may be further developed in parallel.

⁶¹ As stated in the Communication “Integrating maritime transport emissions in the EU’s greenhouse gas reduction policies”, COM(2013) 479 final, cited above.

⁶² As indicated in the Communication “A European Strategy for Low-Emission Mobility”, COM(2016)501 final, which is in accordance with the EU Member States’ position as presented in IMO (MEPC 69 – April 2016).

⁶³ Article 22 of Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport.

⁶⁴ COM(2015) 610 final 27.10.2015 – Commission Work Programme 2016 – Annex II REFIT Initiatives.

5. A STRONGER GLOBAL PLAYER

5.1. Objectives and Accomplishments

58. The 2009 Communication calls for the achievement of a comprehensive international regulatory framework for shipping, suited for the challenges of the 21st century. Cooperation and **active presence from both Member States and the Commission in IMO and in the International Labour Organisation (ILO)** has allowed achieving significant results both on safety and environmental issues.
59. The shipping sector is confronted with **obstacles to international trade** such as discriminatory or over-demanding administrative procedures; restrictions to feederage, international relay of cargo and cabotage; and restrictions on the movement of empty containers⁶⁵.
60. **Bilateral and multilateral agreements** on international maritime transport are important to ensure a global level playing field, market access for EU companies and overall predictability. Existing bilateral dialogues and annual meetings with China, Japan, Norway, Brazil and the US have proven very useful in identifying areas for cooperation, seeking improved market conditions for industry and building alliances on issues of common interest at international level. These dialogues also allow the clarification of the permitted scope of operations in third countries, the correct application of national rules and requirements, the finding of the cooperative solutions to minor controversies, and better understanding of private sector needs.
61. The **EU-China maritime transport agreement** is considered as a "best practice" example, as it not only provides a legal framework to operate in, but also foresees a mechanism of regular dialogue and exchange between the parties, as well as with the industry. In that way, it offers an official platform to address any restrictions and obstacles met in practice and a mechanism to further improve market access conditions for EU companies.
62. **Free Trade Agreements (FTAs)** that have strong commitments on international maritime transport are also a very important tool as they provide legal certainty, predictability and clarity and in most cases valuable additional market access. Over the reporting period, this has already been achieved through the FTAs concluded with Colombia, Peru, Korea, Ukraine, Moldova, Georgia whereas FTAs with Singapore, Ecuador, Vietnam and Canada were concluded but not yet published in the Official Journal. Other FTAs are currently being negotiated (e.g. US, Japan). Where appropriate, market access restrictions with third countries on

⁶⁵ Cf. footnote 6.

matters related to maritime services are discussed by the Market Access Advisory Committee⁶⁶, and followed up via the appropriate diplomatic channels.

63. In the last 15 years, the number of vessels registered in EU Member States has significantly increased, mainly due to the introduction of favourable taxation regimes, in line with the **Community Guidelines for State aids for maritime transport**⁶⁷. According to the majority of the respondents to the public consultation and to the above mentioned Study on the Analysis and Evolution of International and EU Shipping⁶⁸, these regimes are very important to maintain a global level playing field for EU shipping, avoid de-flagging of vessels away from the EU, and create the conditions in which shipping can effectively contribute to the EU economy.

5.2. Outlook

64. In view of the experiences gathered, maritime transport continues to form part of the EU's ongoing (e.g. Japan, U.S.A.) negotiations on FTAs. Moreover the EU supports the inclusion of an annex on the liberalisation of maritime transport services as well as ambitious market access commitments in the ongoing negotiation of a plurilateral agreement on Trade in Services (TiSA) which the EU is currently negotiating with 22 other WTO members⁶⁹.
65. Active participation in the work of the international organisations will continue, in particular in the field of international standards.
66. Bilateral regulatory cooperation underpins mutual understanding and helps build trust with third countries. Technical dialogue can be particularly useful, in particular when drawing on the expertise of EMSA.

6. RAISING THE PROFILE & QUALIFICATIONS OF THE SEAFARERS & MARITIME PROFESSIONS

6.1. Objectives and Accomplishments

67. Maintaining high **qualification standards** and decent **working and living conditions** for seafarers on board of ships is important for safety, security and for the protection of the environment in order to maintain a quality EU shipping sector. The 2009 Communication focuses mainly on upgrading and enforcing international standards in the field of working conditions, increasing the

⁶⁶ The Committee is formed by the Commission, the Member States and the relevant industry representatives (e.g. shipowners, shipbuilders). Market access issues may be raised there by the industry, the Member States or the Commission and possible actions are discussed.

⁶⁷ COM(2009) 8 final, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0008&from=EN>

⁶⁸ Cf. footnote 6.

⁶⁹ Point 7 of Council's Negotiating Directives for a plurilateral Trade in Services Agreement or TiSA <http://trade.ec.europa.eu/doclib/press/index.cfm?id=1273>.

attractiveness of the profession and on training, which are all essential to ensure the level playing field at global level.

68. With regards to **seafarers' working conditions**, the Union has been very proactive and achieved significant results since 2009. The ILO Maritime Labour Convention, 2006 (MLC, 2006) has been incorporated in EU legislation⁷⁰ based on the agreement between the EU social partners in the maritime sector. The EU social partners are currently negotiating an agreement on the 2014 amendments to the MLC, 2006 addressing, among others, the issue of abandonment of seafarers. The MLC 2006 is enforced by means of two other Directives, which ensure that the Member States concerned effectively discharge their obligations under this Convention, as flag States (with respect to the ships flying their flag), and verify the compliance with these requirements through port State control inspections (irrespective of the flag of the ship)⁷¹.
69. In addition, since 2015 EU seafarers have been included in the scope of five EU labour law Directives⁷², therefore improving the working conditions of seafarers and ensuring that seafarers working on-board EU flagged vessels are now provided with the same **information and consultation rights** as on-shore workers in all 28 EU countries in cases of collective redundancies, transfers of undertakings and employer insolvency.
70. On **maritime employment** and competitiveness, the vast majority of the relevant recommendations made in 2011 by the Task force on Maritime Employment and Competitiveness⁷³ have been implemented regarding the regulatory framework, the legal and administrative treatment of seafarers, working and living conditions and actions to promote the attractiveness of seafarers' professions. Many social partners' projects have been supported by the EU with a view to effectively address important issues such as seafarers' fatigue⁷⁴ and the guidelines to eliminate workplace bullying and harassment⁷⁵.

⁷⁰ Council Directive 2009/13/EC of 16 February 2009 implementing the Agreement concluded by the European Community Shipowners' Associations (ECSA) and the European Transport Workers' Federation (ETF) on the Maritime Labour Convention, 2006, and amending Directive 1999/63/EC, OJ L 124, 20.5.2009, p. 30–50

⁷¹ Directive 2013/54/EU, Directive 2013/38/EU (amending Directive 2009/16/EC on port State control).

⁷² Directive (EU) 2015/1794 of the European Parliament and of the Council of 6 October 2015 amending Directives 2008/94/EC, 2009/38/EC and 2002/14/EC of the European Parliament and of the Council, and Council Directives 98/59/EC and 2001/23/EC, as regards seafarers, OJ L 263, 8.10.2015, p. 1–5 This directive also promotes the use of IT systems to facilitate the participation of seafarers in European Works Councils.

⁷³ <http://ec.europa.eu/transport/modes/maritime/seafarers/doc/2011-06-09-tfmec.pdf>

⁷⁴ Namely with the "HORIZON" project (<http://www.warsashacademy.co.uk/about/our-expertise/maritime-research-centre/horizon-project/horizon-project.aspx>) funded under FP7 that lead to the development of the "MARTHA" prototype maritime fatigue prediction tool.

⁷⁵ <http://www.etf-europe.org/files/seealsodocs/41923/Guidelines%20to%20shipping%20companies%20EN.pdf>

71. Regarding **training standards**, the Manila Amendments to the International Convention on Standards of Training, Certification and Watchkeeping (STCW Convention) were incorporated into EU law by Directive 2012/35/EU of the European Parliament and of the Council amending Directive 2008/106/EC on the minimum level of training of seafarers. Directive 2008/106/EC includes also a common system of recognition of seafarers' certificates issued by non EU countries. The decision on the EU recognition of a third country is based on an assessment of its maritime education, training and certification system for seafarers undertaken by the Commission, assisted by EMSA. Currently there are more than 40 third countries recognised at EU level for this purpose.
72. The current 220.000 EU seafarers represent 18% of the total number of seafarers globally. By allowing reduced rates of contributions for the social protection and reduced rates on income tax for EU seafarers, the Community guidelines on State aid to maritime transport⁷⁶ have created more favourable conditions for **employment of EU personnel**, especially on board passenger ferries operating intra-Union routes.
73. However, despite the increase of the EU fleet between 2004 and 2012, EU seafarers' employment did not increase in proportion, but lagged behind⁷⁷. The fact that many modern ships need smaller crews owing to technological advances and automated systems is one of the reasons of the decline of EU seafarers. Nevertheless, modern technologies require more complex and **advanced skills** by maritime professionals. Strengthening the cooperation between the education side and the employment side is crucial in order to fill skills gaps⁷⁸. In this perspective, the Union has funded various studies and research projects to promote career management and development, e-training, e-education, as well as the image of the seafaring profession, with a view to create develop high professional skills specialised in greener and safer shipping operations.

6.2. Outlook

74. As mentioned above, the skills required from maritime professionals have become more complex – also due to increasing emphasis on multi-model supply chains. This might contribute to a shortage of skilled EU seafarers.
75. The Commission has launched the evaluations of Directive 2008/106/EC and Directive 2005/45/EC⁷⁹ to verify whether that legislative framework for training

⁷⁶ Commission Communication C(2004) 43.

⁷⁷ Oxford Economics: The economic value of the EU shipping industry – update <http://www.ecsa.eu/images/Studies/150220%20European%20Shipping%20Update.pdf>

⁷⁸ Cf. footnote 6.

⁷⁹ Directive 2005/45/EC of the European Parliament and of the Council on the mutual recognition of seafarers' certificates issued by the Member States and amending Directive 2001/25/EC.

and certification is fit for purpose⁸⁰. In parallel, the Commission will evaluate existing reporting formalities⁸¹, which add to the administrative responsibilities of Masters and Senior Officers.

76. The European shipping industry points out that it is important to strengthen cooperation between the education and the employment sides in order to fill skills gaps. A number of EU funding schemes are available for that purpose, and there is scope for a greater use of such schemes.
77. The Commission encourages and promotes social dialogue which has delivered good results for the maritime sector. The Commission notably supports the work of the relevant European social dialogue committee for maritime transport that is promoting action intended to develop career opportunities and ensure that training, working and safety arrangements are adapted to the new types of jobs in ports. This will help to gain insights into future potentially relevant initiatives.

7. CONCLUDING REMARKS

78. The implementation of the 2009 EU Maritime Transport Strategy has been marked by a rapid evolution of the challenges and by evidence that interaction and cross-dependencies between the different areas of work become ever more relevant. Of particular importance has been the enhanced use of mechanisms and fora to bring stakeholders and national administrations together and facilitate mutual consultation and operational cooperation.
79. The substantial evaluation described in the preceding sections will further investigate the aspects of EU maritime policy that consultations and studies have identified as more critical for the success of EU shipping and more exposed to recent trends. The REFIT exercise and individual evaluations will help assessing whether the current EU maritime transport legislation remains fit for purpose or adjustments have to be made within any of the five focus areas described in this staff working document⁸².
80. The public consultation has confirmed the relevance of the overall goals for EU Maritime Transport specified in the 2009 Communication: the Union and its Member States continue to have a strong common interest in promoting safe, secure and efficient intra-European and international shipping on clean oceans

⁸⁰ COM (2015) 610 final – Annex to Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Commission Work Programme 2016 – Annex II: REFIT Initiatives.

⁸¹ REFIT Evaluation Roadmap of Directives 2002/59/EC on Vessel Traffic Monitoring and Information System (VTMIS) and Directive 2010/65/EU on Reporting Formalities for ships arriving in and/or departing from ports of the Member States (RFD) http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_move_044_rfd_vtmis_en.pdf

⁸² (i) Safety & Security: a priority concern; (ii) Digitalisation and simplification for more efficient maritime transport; (iii) Environmental sustainability and decarbonisation; (iv) A stronger global player; (v) Raising the profile and qualifications of the seafarers and maritime professions.

and seas, safeguarding the long-term competitiveness of European shipping and related maritime industries in world markets, and adapting of the entire seaborne transport system and logistic chain to the challenges of the 21st century.