

EU Coast Guard: a Governance Framework Based On the Principles of Sustainable Development.

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Abstract

In recent years, Europe is facing an unprecedented wave of migration via sea routes. Gaps and weaknesses of the EU sea borders system are used by thousands of migrants to enter EU territories. More than 1.5 million persons have crossed the EU borders illegally during 2015. So far, the EU reaction was marked by divergent policies and positions between EU Member States, either in terms of responsibilities (National vs. European) or in respect of required actions and resources (border control means, asylum and return policies, large scale search and rescue cooperation). This paper explores the viability of a new governance approach for managing EU maritime challenges based on the principles of sustainable development and the concept of the European Union Coast Guard. The outcome is based on the results of using the Framework for Strategic Sustainable Development as an investigation and analysis tool. This is an attempt to test the applicability of this framework methodology outside of the traditional ecological aspects of the marine environment into the socio-technical area of maritime domain awareness. The conclusions support the establishment of the EU Coast Guard and outline guidelines for a potential governance model.

Keywords: Sustainable Development, Maritime Domain Awareness, Governance, EU Coast Guard, Framework for Strategic Sustainable Development,

1. Introduction

From maritime accidents to security and illicit activities, the problems faced by the European Union (EU) maritime borders and its surveillance and control systems have increased a lot in the recent years. This is particularly true as far as concerns the massive illegal migration (1.5 million people only in 2015), coming mainly from troubled neighbouring areas of the North of Africa and Middle East, with a focus on countries like Libya and Syria. This has put the EU border system under strain as the existing arrangements seem not to be fully equipped to deal with these new challenges. Despite the need of urgent solutions, the response should follow as much as possible the principles of sustainable development for providing a long term solution. This paper analyses EU maritime border problems through a methodology taken from the field of sustainable development, and proposes a governance framework model in accordance with the principles of sustainability.

After this introduction, the article is structured as follows: first, we set up the concept of the EU Coast Guard (CG), explaining how it has been developed to its present form;

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second, we detail the methodology that was adopted in our research work under the denomination of Framework for Strategic Sustainable Development (FSSD), and apply it, particularly through its levels, to the case of EU CG, in order to establish a strategy for responding to the new challenges; third, we report the outcomes of using the FSSD methodology to our core issues taking into account the principles of sustainable development. Lastly, we draw the main conclusions stemming from the research, and put forward ideas for further developments.

2. The European Union Coast Guard concept

The first study assessing the opportunity and possibility of establishing the EU CG goes back to 1994 and recommends creating a centralised coordination body with regional enforcement centres (Wadden, 1994). Initially, the concept was rejected by most of the MSs, mainly because of the potential interferences on their national maritime sovereignty and the fear of losing privileges over enforcement of their own national policies and regulations. However, the continual EU development and strengthening of regional cooperation initiatives has made its way in the maritime domain as well, and centralised coordination of maritime activities was lately accepted through the establishment of the European Maritime Safety Agency (EMSA)¹(EC 1406, 2002) as a technical body on maritime safety, security and pollution prevention issues and the European Agency for the Management of Operational Cooperation at the External Borders (FRONTEX)²(EC 2007, 2004) as the coordinating body for EU borders management.

The specific topic of the EU CG was formally re-opened in 2005 through the EUROPEAN PARLIAMENT and COUNCIL “*Directive on ship-source pollution*” which requested the European Commission (EC) to undertake a feasibility study on the European Coastguard (EC 35, 2005) followed if appropriate, by a proposal on its establishment. The EC has initiated discussions with MSs on their requirements related to the study and the outcome indicates their preference for enhancing the cooperation between the national coast guard organisations within the existing distribution of competencies as an intermediate step before the study. This approach resulted in the establishment of the European Coast Guard Functions Forum (ECGFF)³, an informal cooperation arrangement aiming to achieve better coordination between relevant authorities and EU agencies active in the maritime domain. The forum has established an annual plenary meeting supported by a coordinating secretariat, has initiated the EU CG Functions Academy Network project for European Sectorial Qualification's Framework for Coast Guard personnel and has opened a Brussels based office. Using a practical approach aimed at addressing stringent common needs of the CG authorities, the ECGFF has emerged as a convenient cooperation vehicle supported by the EC which has also become a member of the network. Within the framework of ECGFF activities, the EC has finally launched the study on the feasibility of improved co-operation

¹<http://emsa.europa.eu/>

²<http://frontex.europa.eu/>

³<http://www.ecgff.eu/>

between bodies carrying out European Coast Guard functions. The study identified 316 public EU authorities carrying out coast guard functions and indicates that “*current structures create barriers to collaboration*” (ICF, 2014) mainly due to the complexity, diversity and fragmentation of institutional arrangements. Acknowledging the case for enhanced collaboration, the study⁴ proposes a number of actions in the following fields:

- Capacity building – for developing a vision and strategy for collaboration between EU coast guard authorities and EU agencies (FRONTEX, EMSA, EFCA);
- Joint operations and asset sharing – for search and rescue and border control operations;
- Data sharing – to promote harmonisation and interoperability of systems, use of common standards for collecting, disseminating and benchmarking of data;
- Research and innovation.

The increasing migration from the troubled EU neighbouring countries, and the problems encountered in providing effective response solutions under the existing arrangements have made the maritime border control an actual and main topic for discussion and decision. Politicians from EU organisations and MSs have expressed their support for the establishment of the EU CG as a framework to manage the common problem of migration. France’s president stated that “*Europe needs to put in place European coast guard and European border guard service*” (Hollande, 2015) and has submitted a proposal for discussion. The High Representative of the European Union for Foreign Affairs and Security Policy has urged the EU leaders to tackle these tragedies without delay – “We need to save human lives all together, as all together we need to protect our borders and to fight the trafficking of human beings.” (Mogherini, 2015). Under the increasing operational and political pressure for immediate actions, the EC has announced that a proposal for establishing the EU CG will be submitted to the EU Parliament and the Council by December 2015 (EC 490, 2015). The proposal was released in December 2015 (EC/671, 2015) laying down the general principles of European integrated border management and the expansion of the present EU border control coordination body (Frontex⁵) into the European Border and Coast Guard Agency (EBCGA). The main task of the European Border and Coast Guard is to implement the European integrated border management in accordance with the principle of shared responsibility. The national border and coast guards that carry out border control tasks are active members of the European Border and Coast Guard Agency at the same time as they are national border and coast guards.

This research paper analyses the EUCG proposal by providing a perspective based on the principles of sustainable development. As referred to before, the perspective was developed under the Framework for Strategic Sustainable Development (FSSD) as the main tool for investigation and analysis.

3. Framework for Strategic Sustainable Development

⁴<http://ec.europa.eu/transport/modes/maritime/studies/doc/2014-06-icf-coastguard-exec-summary.pdf>

⁵<http://frontex.europa.eu/>

FSSD is a back-casting methodology that starts from imagining the targeted outcome and then seeking: “*what do we need to do today to reach that vision of success*” (Natural Step, 2015). The core principle of the framework is to have a vision since its inception and build the way towards that vision, rather than starting from the status quo and trying to find solutions to adjust or compromise the present towards the vision. This approach is suitable in the case of EU maritime border control as the new vision is to move from the nation-based territorial control towards a common regional-based (EU) system. The FSSD uses a four steps approach called ABCD, as detailed in Table 1.

Table 1 – FSSD ABCD approach (self-authored)

A Awareness	B Baseline Mapping	C Creative Solutions	D Decide Priorities
Identifies the context of the analysed system (in our case the EU CG) from the perspective of sustainability and creates a vision of how the system should look like for a sustainable future.	Analyse the current status of the system today by listing the current practices, flows and conditions that violate the prerequisites for sustainability (gap analysis).	Using brainstorming for finding potential solutions to the issues highlighted in the baseline analysis without any constraints imposed by the existing situation. Define processes and changes needed to reach the vision.	Prioritise measures that will move the system (EU CG) toward the chosen vision, optimise flexibility and maximise economic, social and ecological returns. This phase supports effective planning, step-wise implementation and identification of tools supporting the plan.

The FSSD/ABCD framework is based on systems thinking, setting ambitious goals and developing realistic strategies to achieve them. Using this approach to analyse the potential model of the EU CG concept is innovative as the method was used so far mainly for socio-environmental systems focusing on the sustainable use of natural resources. However, the FSSD methodology is designed as a supporting conceptual model that can be used for planning sustainability in any complex system where there is an intended success outcome. The system approach of the FSSD offers a model to see relationships and underlying circumstances for system behaviour, rather than focusing on individual events and actions (Montouri, 2000). Taking a whole-system perspective on EU CG avoid the focus on sectorial sub-set of issues and provides a broader approach which facilitates intellectual analysis of the interrelated elements and how they influence one another within the relationship between the System, Success and Governance levels. The FSSD uses a generic five levels framework (5LF) that helps to identify, understand and evaluate what is really happening within a system – what is the intent, what it cover, the specific definition of success and whether or not the actions are executed in a strategic manner. This approach combines a rigorous, science-based understanding of sustainability with a tested planning approach to create real and transformative change. Sustainable development concept requires a new way of thinking and innovative solutions when reconsidering the old problems (Spangenberg J., 2010). The EU CG use-case starts from this postulate and proposes the new FSSD narrative to identify actions

that could support the set-up of the EU Coast Guard in a sustainable manner. In our analysis of the FSSD five levels application we tried to synthesize the main topics by using figures and tables. Figure 1 illustrates how the 5LF is applied in this case.



Figure 1 – FSSD 5LF framework for EU Coast Guard case (self-authored)

3.1 1st Level - System analysis

The system level analysis aims to determine the functions, boundaries, features, and mechanisms associated with the EU CG concept. The main functions of a coast guard organization and their scopes, as defined by the ECGFF, are presented in Table 2.

Table 2 – Main functions of Coast Guard organisations (adapted from ECGFF)

Function	Scope
Maritime Safety	Compliance with regulations, ship traffic control, Flag and Port State enforcement.
Maritime Security	Prevention, deterrence of and response to criminal activities, anti-piracy, ISPS Code, intelligence at sea, law enforcement.
Maritime Custom	Prevention, deterrence of and response to illegal and fraudulent activities, customs regulations, law enforcement.
Maritime Border Control	Operational response in compliance with regulations on immigration and border crossings.
Maritime Surveillance	Maritime domain awareness services using identification systems, tracking devices, satellite imagery, etc. Information and intelligence gathering, joint surveillance operations.
Maritime Environmental Protection	Identification and response to environmental pollution, environmental compliance.
Search and Rescue	Provision of search and rescue services, monitoring and response to emergency calls.
Ship Casualty and Disaster Response	Maritime crisis management, on-scene operations, accident and disaster response
Fishery Control	Surveillance to detect illegal, unreported or unregulated fishing.

Presently, these functions are performed at national level by one or more organisations, as decided by each MS.⁶ At EU level, the coordination is distributed between various agencies and DGs as shown in Figure 2.

Maritime Safety	• DG MOVE / EMSA
Maritime Security	• DG MOVE / EMSA • FRONTEX
Maritime Customs	• DG TAXUD
Border Control	• FRONTEX
Maritime Surveillance	• EMSA • FRONTEX
Maritime Environment	• DG ENV / EEA • DG MOVE / EMSA
Search and Rescue	• EMSA • FRONTEX
Casualty and disaster response	• ERCC • EMSA
Fishery Control	• DG MARE / EFCA
Maritime Research	• JRC

Figure 2 – Coordination of Coast Guard functions at EU level (self-authored)

This sector-based arrangement has managed to ensure certain level of coordination at user community level, including development of common information systems (SafeSeaNet, CleanSeaNet, EU LRIT DC, EUROSUR, EU VMS, Customs services), harmonisation of working procedures and joint operations at sea. Setting-up the EU Coast Guard aims to further improve cooperation and coordination between Member States' authorities and EU Agencies performing coastguard functions for achieving better efficiency and effectiveness when responding to common maritime challenges. For

⁶<http://www.ecgff.eu/members>

example, the reality of the last two years (2014-2015) has demonstrated that the on-going unprecedented wave of migration at sea cannot be managed by one country alone and a new (cooperative) approach is needed to address the new challenges facing the EU maritime borders. In addition, it is expected that EU CG might also improve operational synergies in terms of resources as demonstrated by Frontex Joint Operations and by the projects performed within the Common Sharing Information Environment (CISE)⁷ initiative (BlueMassMed, Marsuno, Cooperation). Key improvement indicators of an integrated maritime surveillance approach include for example 30% reduction of threats and risks, 40% reduction in duplication of data collection and around 400 million EUR overall financial benefits at EU level (EC, 2014/451).

3.2 FSSD 2nd Level – Success principles

Interventions at sea are usually technically difficult, expensive and often risky. Beyond surveillance and intelligence systems, operations at sea involve the use of boats and ships, airplanes or helicopters, which are very costly and must be operated by specialised people. Efficient coordination of these operations requires consistent systems (no redundancy, no gaps, interoperability and accurate information) and coordinated implementation. Presently, the maritime operations are usually conducted based on sectorial approach even when the resources used during an operation could be used also for other purposes and there are very few coordination mechanisms to make multi-missions and multidepartment operations possible. Setting up the EU CG might address this gap and allow coordinated operations using resources from different administrations or agencies. In order to be able to execute and coordinate the coast guard functions, the EU CG shall: be able to know what is happening in EU waters (Maritime Domain Awareness); have the authority to intervene as needed; and have the capacity to act across all of the necessary functional activities. As noted above, achieving this capability requires political agreement on new principles supporting centralised coordination, such as:

- **Cross-sectoral and multi-stakeholders cooperation:** all partners from civilian and military authorities to industry and professional organisations need to agree on better cooperation through a common coordination mechanism, focusing on which specific functions can better be achieved by working together.
- **Maritime multilateralism:** a key principle when dealing with complex issues requiring an international response. The EU should speak with one voice to international maritime partners (UN, IMO, ILO, NATO, African Union, ASEAN).
- **Transparency and Trust:** are critical elements for a cooperative and collaborative governance framework relying on coordinated action and devolving responsibility. The EU's maritime domain will be fundamentally strengthened if the duty of sincere cooperation is taken as a guiding principle (EC 9, 2014) and is supported by transparency, trust and accountability.
- **Cooperative governance:** the traditional governance model based on sectorial pillars does not match the horizontal approach proposed by integrated policies and

⁷http://ec.europa.eu/maritimeaffairs/documentation/publications/documents/ims-leaflet-05-2012_en.pdf

sustainable development principles. This is also outlined by the International Maritime Organisation (IMO) within the context of their Sustainable Maritime Transport System (SMTS) initiative, stating that SMTS requires “*well-organized Administrations that co-operate internationally*” (IMO, 2013). The example of the EU Integrated Maritime Policy (IMP) making process has shown that a multi-DG governance body was able to build the necessary trust at policy-making level and to successfully steer the process towards the expected deliverables. Similar cooperative governance set-up for the EU CG may achieve effective results at operational level as well.

- **Cooperative operational culture** based on networks of relationships that are interdependent (Harder et al, 2004). A consistent approach should be ensured between EU and national agencies in support of building the EU Integrated Maritime Domain Awareness system, assets sharing for operations at sea and a network of common knowledge and competences.
- **Information sharing:** data exchange and sharing is presently limited by confidentiality, personal data and legal restrictions. A new legal and operational framework shall be created supporting cross-border data exchange, defining what data can be exchanged, the purpose, the methods of the exchange, and the potential recipients of the data. Necessary safeguards with regard to the confidentiality and security of (certain) data and the protection of personal data shall be addressed where this may be relevant (EC, 2009).
- The **new legal framework** supporting cooperation, sharing of information and resources shall also detail the organisation, structures, responsibilities and tasks of stakeholders within the common EU CG. The institutional and legal structures should no longer be heterogeneous but rather homogeneous using cooperative and sustainability principles as the driving force.

3.3 FSSD 3rd Level – Implementation Strategy

The FSSD strategy towards success should start from an agreed definition of what to be achieved – in our case the European Coast Guard: a new comprehensive, cross-border inter-agencies framework for better coordination of coast guard functions and activities at EU regional level, based on the success principles described above. To ensure ownership and commitment, the EU CG establishment process shall involve all stakeholders performing coast guard functions at national and EU level. Generating commitment to change requires that each participant can clearly see the necessity to do so or otherwise the system will maintain its current status quo. The EU CG should add value to the existing user communities by adding more information than what is now available within their sectorial systems and should also facilitate the development of new user communities interested in the holistic maritime picture (policy makers, emergency coordinators, search and rescue activities, law enforcement, maritime intelligence).

The use of Directives and regulations is the effective method for the development and implementation of EU legislation and so far was successfully used in the maritime domain, as proved by the existing EU agencies and associated cooperative maritime systems (EMSA and its operational systems SSN, EU LRIT DC, CSN, IMDatE;

FRONTEX and the EUROSUR system, EFCA and the VMS system) all developed based on clear legal framework. As all sectorial policies and systems are based on EU legal requirements, the same approach should be followed for the EU CG as well. This will provide a clear vision of the goals to be achieved, the role and responsibility of each stakeholder and the means to monitor the implementation progress and collect feedback. Organisations do not act randomly. They have rules that define how parts interact, what are their roles and the boundaries of decentralised power versus the responsibility to act towards the collective vision. A EU CG Directive will provide all actors with a clear legal foundation that removes any barrier of cooperation and data/resource sharing and establish the required collaborative environment.

This seems to be the chosen way forward as declared by its political leaders who have provided a legislative proposal towards the end of 2015 (Junkers, 2015). Now it is the turn of the MSs to demonstrate their commitment towards improved common maritime governance by supporting the EC proposal towards the final stages of approval by the European Parliament and the Council.

3.4 FSSD 4th level – Actions for EU CG implementation

The 4th level is used to define and prioritise concrete actions in support of effective implementation of the strategy. This step is important as will provide the structure of an action plan, deadlines and deliverables, roles and responsibilities. In our EU CG use-case the recommended actions towards implementation of the FSSD strategy include:

- Allocation of proper resources (financial, human, assets, information). Without adequate and accessible funding and resources any project will remain at the level of intention and therefore these aspects should not be overlooked or underestimated. This aspect is well described in the EC proposal which foresees important resources in support of the new tasks, including: annual operational budget of 238 686 000 Euro additional 10 000 000 Euro for purchasing of equipment complementing that provided by MSs, additional budget supporting cooperation with other EU agencies and with neighbouring third countries (5 000 000 Euro) and 602 new staff members (EC/671, 2015).
- Sustainable development principles⁸ should be at the core of the EU CG framework, which should be developed as a tool to achieve the long-term stability and security of the EU maritime economy and environment. These principles are based on integrated decision making (Dernbach, 2003) meaning that the EU CG governance model shall ensure that all aspects (economic, environmental, social) are incorporated into the decision-making process and not treated separately. One principle of Rio Declaration states that peace, development and environmental protection are interdependent and indivisible and the governmental decisions concerning security should be protective of the environment, economic development, and social

⁸http://www.unep.org/training/programmes/Instructor%20Version/Part_1/readings/Principles%20of_Sustainable_Development.pdf

development.

- The EC proposal is focusing on border control and illegal immigration aspects as it was mainly developed as a reactive solution to an urgent border security problem rather than a long-term initiative for sustainable development of the EU maritime domain. However, all aspects are mentioned in the proposal, albeit in general terms, therefore there is room to develop the governance mechanism towards effective framework for sustainable development. This will certainly be one of the main challenges of the new EU CG organisation.
- The EU CG shall be supported by a cooperative governance mechanism based on the notion of common but differentiated responsibilities, which recognizes that each stakeholder must play their part within the agreed framework and be accountable for their contribution. This approach is outlined in *Article 5* of the proposal stating that “*European integrated border management is a shared responsibility of the European Border and Coast Guard Agency and the national authorities responsible for border management*”(EC/671, 2015). Furthermore, *Articles 51, 52 and 53* provide a wide framework for cooperation both within EU (agencies and organisations) and internationally, therefore the EU CG proposal creates a favourable environment for cooperative governance. The challenge will be to translate the available political framework into effective operational mechanisms.
- Existing restricting data policies and regulations shall be adjusted to support cooperation and information exchange. This should include not only governmental data but also the information collected by and available within industry and private organizations (SAT-AIS, classification societies, Lloyds List Intelligence, etc.). Final aim should be to achieve an inter-connected shared maritime domain awareness capability that links all relevant sources of information. This has to be supported by standardised data format and interoperability standards. Whilst this aspect is covered in general terms in Section 2 of the proposal “*Information exchange and data protection*”, the participation of private sector is not explicit, creating the risk to leave outside one of the important stakeholders.
- Achieving sustainability is not a trivial process that can be completed overnight. The recommended approach is for progressive integration from the present point toward sustainability in each of its facets. Starting from the procedural integration addressing the maritime border security problem, the EU CG can develop towards more substantive integration of all elements of sustainable maritime development.
- Dedicated communication and awareness campaign is needed to help stakeholders understanding the concept of EU CG, setting-up, requirements and expectations, roles and responsibilities.

Although the EC proposal include some of the above mentioned actions, if adopted it

has to be complemented by a detailed action plan supported by all stakeholders. Lessons learned during the first phase of the Common Information Sharing Environment initiative should be used to improve the planning and implementation approach.

3.5 FSSD 5th level – Supporting tools

Sustainable development, cooperative governance and decision making process, integrated systems, data sharing, joint operations within international environment are all well-established concepts and activities addressed and managed throughout the world in the last 30 years. There is a wealth of information, studies and tools available for each, providing effective support to any initiative towards sustainability.

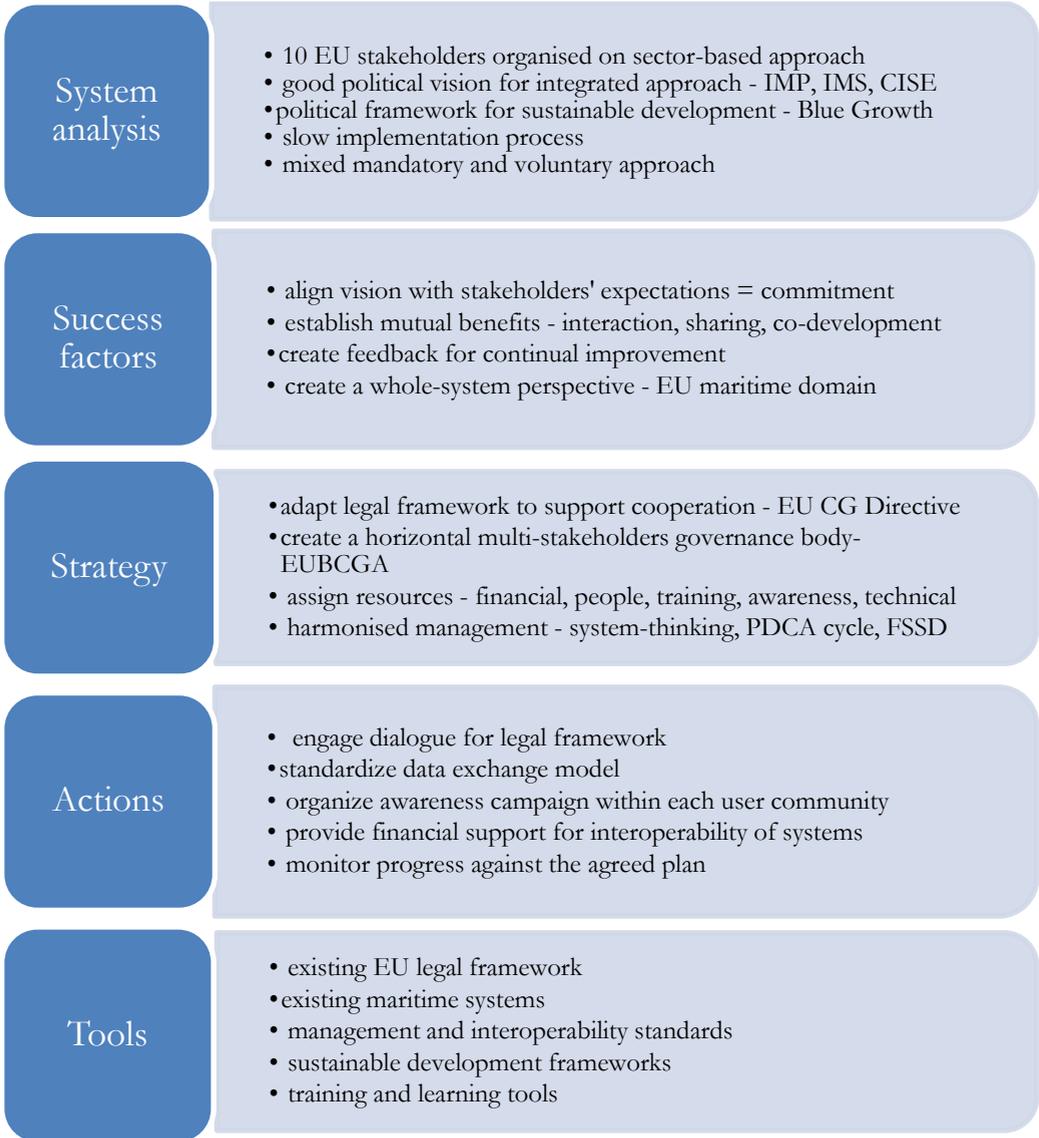
In our particular case of the EU CG the following categories of means and tools have been identified:

- Existing EU regulatory framework supporting sustainable development, integrated policy, data sharing and standardisation (i.e. EU Integrated Maritime Policy, Blue Growth Policy);
- Previous work done by the EU CG Forum paving the cooperation of EU and national organisation with coast guard functions;
- Good number of projects and studies performed under the EU Common Information Sharing Environment initiative demonstrating solutions for cooperation and integration;
- Existing EU maritime surveillance systems (SSN, LRIT, SAT-AIS, EUROSUR, VMS) providing information and technical support ;
- National and regional coast guards (like USCG) and other maritime cooperation arrangements (NATO, Global Maritime Partnership) which provide models and lessons learned during large scale cooperation projects;
- Sustainable development tools and guidelines (UN sustainable development policy and programme, EU sustainable development network, FSSD, Integrated Sustainable Assessment);

The EC proposal for the European Border and Coast Guard Agency provides a good starting framework for using these tools when developing the future implementation strategies for improved EU maritime domain.

4. Outcome of the FSSD methodology

The main findings as detailed in the previous section are summarised in the governance framework illustrated in Figure 3, which shows the levels of the FSSD methodology, and the associated principles and actions to achieve a sustainable vision of the EU CG concept. This framework can be used to support the finalisation and the implementation of the EC proposal.



*Figure 1 - EU CG FSSD framework
(Source: - self-authored during research)*

Using the FSSD methodology to assess the viability of the EU CG concept provides a potential model of vision for introducing the principles of sustainable development in the socio-technical environment of maritime domain awareness. If the reference values are changed from the sectorial individualistic approach towards common contribution for sustainable development, organizations might change as well towards a more responsible and cooperative behaviour based on trust, transparency, democratic stability and common economic goals. The above FSSD model is complemented by a set of

guidelines (Table 3) to support the creation of comprehensive strategies for the implementation of integrated maritime frameworks at any level.

Table 3 – Guidelines for EU CG governance model
(Source: - self-authored during research)

EU modelling guidelines	CG	Social Reasoning	Economic Reasoning	Environmental Reasoning	Governance Reasoning
Adopt global system and sustainable development thinking		Remove barriers between sectors and nation-state centric approach	Replace duplication by integration, achieve synergies	Limits impact on resources and environment	Elevate EU CG as main component of maritime safety and security
Align EU CG vision with stakeholders' needs		Ensure responsible participation, understanding and commitment,	Ensure support and resources from each participant	Efficient use of available resources	Ownership and accountability for participation
Transparent engagement of all stakeholders		Supporting all communities, creating trust	Sharing resources and benefits, increased efficiency	Awareness of interdependencies and cross-sector impact	Create identity, clarify role and responsibilities
Create supporting legal framework		Remove data sharing barriers	Provide legal justification for resource allocation	Ensure enforcement and compliance	Create legitimacy & implementation mechanisms
Allocate resources		Supports social needs and personal development	Ensure efficiency and effectiveness	Support ecological actions and developments	Ensure equality and ownership
Create integrated EU CG culture		Supports learning and understanding of new concepts	Support improved performance by creating know-how	Create awareness of environmental aspects	Create identity, knowledge and adaptability
Create technical framework		Provide clarity and understanding	Support efficiency through standardization	Integration of standards and requirements	Acceptance and harmonized implementation
Create dialogue, communication and feedback		Participation, contribution, learning and understanding	Supports efficiency, timeliness, productivity, improvement	Ensure awareness, reactivity, reporting Remove boundaries	Create common knowledge, trust, interaction, progress

The table indicate the reasoning of recommended actions using as reference the main pillars of the sustainable development principles – the social, economic and environmental aspects – and as well their influence on the governance aspect. Used together, the framework model (figure 3) and the guidelines (table 3) can provide a new tool supporting the development and implementation of a new vision for the EU maritime border control.

Conclusions

The post-2015 Sustainable Development Goals calls for global partnership to build peace through effective, open and accountable public institutions using a science-based and action-oriented approach for integrating the interdependent dimensions of sustainable development: economic, social, environmental and governance (UN SG, 2015).

Since its initiation in 2009, the EU Integrated Maritime Policy (IMP) and the associated Common Information Sharing Environment (CISE) project have achieved important steps towards improving the EU Maritime Domain Awareness (MDA) in line with the UN goals. Building blocks have been identified, user communities were brought together to discuss the cooperation framework, operational culture was changed towards data sharing and integrated technical systems. Several large scale cooperative maritime systems are operated at EU level and they have evolved from sector-oriented systems towards inter-operable platforms able to exchange data with any other external system. However, the EU experience shows that it is not easy to establish new practices even through common agreement, and conflicts and different interpretations tend to appear. It is therefore necessary to steer the implementation of new visions and strategies in order to guarantee their viability and the sustainable development principles can provide effective support in this respect.

The unprecedented dimensions of migration to Europe via sea routes are posing new challenges which cannot be tackled by the traditional sector-national-based approach. New governance and operational models are required to ensure safety, security and sustainability of the EU maritime domain. Cooperation is necessary because complex crises are characterized by multidimensionality and diversity of many actors involved both at local and international level. This complexity cannot be handled by a single state and it requires a multi-layered response which combines various components pertaining to the political, security, and humanitarian environment and which furthermore adapts to the different stages of the crisis (Tardy, 2013). In addition, cooperation has proved to optimize the available resources and prevent duplication, increase the reactivity to the crisis and the general effectiveness and impact.

Changing towards a sustainable way forward in the maritime domain is possible if political will, good governance and the necessary resources are mobilised to strengthen the common goals and if decision is taken for working together. All stakeholders will benefit from a cooperative approach by having access to enriched layers of information especially when risks or threats are trans-boundary and exceeds the individual capability for efficient management. Certainly, hurdles will appear, but the establishment of the

European Border and Coast Guard Agency might be an important step forward towards achieving these goals if implemented on sustainable development principles.

Disclaimer: - The content of this article does not reflect the official opinion of the European Maritime Safety Agency. Responsibility for the information and views expressed in the article lies entirely with the authors.

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