



## **G7 HIGH LEVEL MEETING ON MARITIME SECURITY**

**ROME, 20 NOVEMBER 2017**

### **Chair's summary**

Oceans are depositories of invaluable natural resources. From fisheries to hydrocarbons they generate revenues and are source of food and employment for millions of people worldwide. They are the avenues for trade and they connect nations and cultures.

However, threats of a multiple nature can jeopardize the security of maritime routes, disrupt the sustainable development of maritime resources, put at risk international stability and, in the end, fuel insecurity with long term consequences on health, wealth, job creation, migration flows.

The third G7 High Level Meeting on Maritime Security held in Rome on November 20, 2017 gathered participants from the G7 member states, outreach states from Africa, international organizations and NGOs. The aim of the meeting was to follow up on the G7 Ministers of Foreign Affairs Joint Communiqué of Lucca, to identify common challenges in the maritime domain and to examine how combined effort of all States and international and regional organizations can allow for a comprehensive response to threats to maritime security and ocean and seas conditions.

The meeting reaffirmed the strong belief of participants that tackling insecurity on seas and oceans is a matter of international and regional cooperation that must be reflected as well on collective efforts to increase the capacities and capabilities of the states currently unable to effectively participate in the global endeavor to reinforce maritime security.

Some participants expressed their hope that the discussion on maritime security will be continued during Canada's presidency in 2018.

Four roundtables examined the traditional and the newest threats to maritime security and provided the following key messages which the Chair believes are crucial for improving maritime security as a whole.

## Roundtable 1

### *Countering illegal activities at sea*

#### Key messages:

- Threats are dynamic and they evolve in a power vacuum where criminal organizations profit of the lack of coordination among states.
- Plans and strategies have been set in all the regions where maritime insecurity is a problem. However, there is still a pressing need to actually implement concerted actions and make cooperation effective.
- Technology transfers and capacity building are crucial, especially as far as MDA is concerned, but additional investments from donor Countries will be difficult until those currently ongoing will be completed.

#### Summary:

A free and open maritime order based on the rule of law is a cornerstone for stability and prosperity of the international community. It is therefore crucially important to guarantee freedom of navigation, promote connectivity among regions and cooperate on capacity building. The different nature of criminal activities at sea calls for a diversified response and a comprehensive analysis of all its aspects. In the central Mediterranean sea, strategies are focused on the destruction of smugglers business model, the enforcement of the arms embargo and the capacity building of Libyan Naval components. In the Western Indian Ocean, the creation of harmonized legislations among coastal states, in particular on the transfer of prisoners, is crucial for effective law enforcement and prosecution. At the same time, the presence of international naval forces is crucial and any reduction of its level could feed misperceptions. A link between unemployment, IUU fishing, coastal violence, human trafficking and crime at sea exists and should be tackled (See "[Stable Seas: Somali waters](#)" by Oceans Beyond Piracy). In South-Eastern Asia, especially in the Sulu-Celebes sea, countering armed robbery is the main concern and the most recent efforts are focused on engaging the maritime industry and shipping associations with the law enforcement agencies. Such experience could be shared to coastal states in other regions. In the Gulf of Guinea, piracy and armed robbery, militant attacks on oil infrastructures, pollution, incomplete and diverging legal frameworks, the lack of coordination among coastal states have put the region at the core of current maritime security concerns. Enactment of appropriate national legislations fighting criminal activities at sea as well as regional ownership and responsibility, in cooperation where needed with relevant international organizations as UNODC, is crucial. Also, implementation of regional coordination frameworks is urgently needed as threats are transnationals and cross-borders. Unemployment of youth is a factor of the insecurity at sea and economic development of coastal areas should become a priority of states in the region.

## Roundtable 2

### *Improving safety and security of maritime environment through research and development of best standard and practices*

#### Key messages:

- Increased efficiency, reduced costs and enhanced safety are the stable and unavoidable drivers of technological progress in high seas shipping, coastal waters management and ports infrastructures.
- ICT, unmanned and autonomous ships, satellite imagery and monitoring are the key technologies that will impact maritime security in the medium and long term.

- Challenges in laboratory need to be confronted also at the policy level with a collaborative approach addressed to adopting interoperable solutions, promote economies of scale and encourage operational experimentation.

Summary:

Today, security at sea needs to respond to technological challenges that mainly target the areas of marine surveillance, recognition of small objects at sea and their classification between potential threats or legitimate objects, secure data sharing and communications, messaging real-time alarm. Most if not all such technologies have no intrinsic security features and are subject to cyber-attacks. Solutions are available, in particular using the VLC (Visible Light Communication) protocol and should be further developed.

Autonomous and unmanned vessel are inherently subject to security threats, both cyber and physical, which require appropriate remedies for detection, avoidance and elimination. Shore-based or mother-ship-based control and communications also require secure protocols for data transmission. Finally, autonomous/unmanned vessel must be able to autonomously solve onboard problems and can be equipped with additive manufacturing systems (e.g. 3D printing), for ship repair during navigation. All solutions need tailor-made technologies to fit the sources and areas of threat.

### **Roundtable 3**

#### ***Enhancing Awareness in the Maritime Domain***

Key messages:

- Any functioning Maritime Domain Awareness system should be based on voluntary contributions provided within flexible and inclusive institutionalized structures.
- Partnership at international and regional level is crucial. Access to information and interoperability in data sharing and management are essential, also in view of creating a “network of networks” at global level.
- Appropriate investments, homogeneous legislation and capacity building, together with a sound sense of ownership, are fundamental to ensure full participation from all stakeholders.

Summary:

Effective Maritime Domain Awareness needs a strategic institutionalized framework. So far, success cases concern sectoral partnerships, but the next step in MDA is a cross-sector and cross-border approach, based on the principle of "need to know - responsibility to share" applied on a voluntary basis in the context of regional and international partnerships.

To ensure an effective MDA, a set of technologies and systems is needed, including satellite systems, unmanned technologies and management tools. The network architecture must be independent of the stakeholders' operating systems and provide an information layer of interoperable nodes that flexibly manage the information exchange. The technology platform for information exchange shall be based on the interoperability of maritime administrations systems, as only a system-to-system exchange in real time can provide timely data and information needed. In addition, technological solutions need to be internationally standardized.

Partnership at international and regional level is crucial. Appropriate investments, homogeneous legislation and capacity building, together with a sound sense of ownership, are fundamental to ensure full participation from all stakeholders.

## Roundtable 4

### *Safeguarding the marine environment as a prerequisite for maritime security*

#### Key messages:

- By directly affecting the livelihood and sustainable development of coastal communities, the degradation of the marine environment presents crucial security challenges in terms of disruption of national economies, displacement of people, degeneration of national identities, loss of lives.
- Reduction of economic opportunities for coastal communities creates the feeding grounds for the development of criminal activities and increases maritime insecurity.
- Research and technology, including hydrography and satellite imagery and monitoring, are crucial to make seas and oceans better known and therefore more secure.

#### Summary:

Tailored strategies and tools to achieve a cleaner, safer, more productive marine environment should be focused on: a) monitoring and assessing the environmental status of marine ecosystems (in particular through hydrography and earth observation, space and geo spatial related services); b) preventing illegal, unreported, and unregulated fishing and exploitation of marine biological resources, illegal releases of oil, chemicals and plastics; and c) gradually facing sea-level rise, sea water acidification, global warming. This requires scientific research and capacity building, effective and robust regulations/legislation, tailored incentives, R&I actions, education and communication plans as well as the creation of local robust partnerships between academia, industry, public institutions and regulatory bodies. In this framework, IUU fishing presents one of the most serious challenges to marine environment and maritime security and calls for states to share relevant information, exchange intelligence and harmonize regulations.

Advanced monitoring systems are also crucial to understand the dynamic of the planet and the changes in place. In order to contribute to this challenging task we need a plurality of sensors in space and on Earth, each of them delivering specific features and capabilities. To this purpose, Cosmo Skymed and Copernicus programs as well as the partnership model between institutions and industry (the Italian Space Agency, Telespazio and E-Geos) were specifically mentioned.