The EU global Strategy states that “A solid European defence, technological and industrial base needs a fair, functioning and transparent internal market, security of supply, and a structured dialogue with defence relevant industries.” At the last European Defence Agency’s (EDA) Ministerial Steering Board on 18 May 2017, Defence Ministers endorsed EDA’s revised approach towards establishing a structured dialogue and enhanced engagement with industry based on a set of priority actions. Engagement in this context is understood to be outside the procurement phase and is intended to improve interaction and contribute to harmonisation of national and multi-national requirements. The topic to be examined will be Maritime Surveillance – one of the Capability Development Plan (CDP) areas identified as part of the 2014 Priority Action. Taking into account the vital Maritime interests for Europe landscaped in the EU Global Strategy and the EU Maritime Security Strategy, Maritime Awareness is the starting point for Maritime Security to allow a timely response. To get a consolidate and recognized maritime picture including military and civilian networks, connectivity is paramount.

Following this call for papers, the EDA will hold an Industry workshop on the 1st of February 2017. Industry representatives are invited to express interest by submitting answers to the questions below and will be selected to participate by the EDA based on an evaluation of these answers.

**OBJECTIVE OF THE MEETING**

Industry representatives will be asked to present their long-term perspective (20 years out) on the industrial and technological outlook for Maritime Surveillance and discuss connected issues with the audience (Member State defence planners and relevant defence sector experts).

**QUESTIONS**

**Mid Term**

- How could sophisticated technology contribute to enhanced overall maritime awareness including near real time or even real time surveillance pictures?
- How could effective data fusion including “big data”, data analytics and more automation effectively contribute to reduce the operators’ cognitive challenges?
- Maritime surveillance networks can be challenged through its intrinsic cyber vulnerability. How can such risks be managed in the future?
- What forecasts do you make regarding the interoperability of high-ends deployable assets with more basic ones and the robustness versus simplicity/cost?
Long Term

- How could sophisticated and innovative technology support the assessment of strategic threats and challenges?
- What type of decision making systems do you see for Maritime Awareness (big data management, data fusion, Artificial Intelligence support)?
- How to manage information exchange to ensure end-users’ timely access to essential information?
- How can small and fast target detection and recognition be improved?
- What do you see as the most likely technological breakthrough for Maritime Surveillance in a 2035 and beyond perspective?

Industry & Market

- What kind of initiatives and decisions would be required as incentives to promote development of state of the art technology from an economic point of view in the context of maritime awareness/maritime security?
- In which areas of maritime surveillance domain civilian/dual nature industry (including SMEs or start-ups) could be at the forefront of innovation?
- How do you anticipate the evolution of maritime surveillance business models (e.g. traditional national procurement vs pooled acquisition or outsourced services, public private partnerships)? Please outline key benefits and drawback of those business models.
- What are the key obstacles to a cooperative truly European solution and what could be the means to cope with them?

INSTRUCTIONS

Answers should be limited to 1500 words for all questions together, though length will not be used as an exclusionary criteria. They should not contain commercially sensitive information. Answers may be made available as supporting material for the workshop to the Member States’ representatives including those from submitters that were not selected for participation (proper attribution will be observed). Submitters should also specify whether they have any limitation in presenting their views in a panel format.

Please send your paper, clearly linking answers to questions, to the EDA by e-mail to cps@eda.europa.eu with a copy to eric.girard@eda.europa.eu. Please clearly indicate a point of contact to coordinate possible participation in the workshop. Any questions may be addressed to Eric GIRARD by e-mail.

The EDA will assess the papers according to the criteria below while also striving to select a broad spectrum of representatives to ensure as fair, objective and balanced a discussion as possible. Responses from national research centres as well as commercial actors will be considered.

ELIGIBILITY CRITERIA

European- Submitters must represent European defence industry or European defence industrial interests (in the case of research institutes) and be active in the area of Maritime Surveillance.
Credibility - Lack of defence expertise will not be a criterion for exclusion but interested commercial actors must have a demonstrated track record of output and an effective market presence of Maritime Surveillance in civil area.

Versatility – Submitters should be well versed in Maritime Surveillance technology however participation is not limited to systems integrators and submissions from SMEs are encouraged.

**Evaluation criteria**

**Innovation** - The level of innovation and originality demonstrated in the answer. Ability to propose thoughts looking far ahead especially in the domain of global maritime awareness (integration).

**Comprehensiveness** – i.e. how different aspects are articulated with each other. Ability to include answers in the broader context. Answers should address all related capability aspects (e.g. persistent and global tracking, all weather sensors, automation, imaging capacities, dual use, handling)

**Lifecycle approach** - Industry involvement in the process is to be considered throughout the capability lifecycle, from research to decommissioning and therefore answers should span different lifecycle aspects including upgrading.

**Interoperability** - The final end state is global maritime awareness. The level of interoperability with other systems (basic to high end) is to be considered.

1 Sophisticated technology such as Satellite technology requiring immense investments and resources

2 Big data is an evolving term that describes any voluminous amount of structured, semi-structured and unstructured data that has the potential to be mined for information. Big data is often characterized by 3Vs: the extreme volume of data, the wide variety of data types and the velocity at which the data must be processed. Although big data doesn't equate to any specific volume of data, the term is often used to describe terabytes, petabytes and even exabytes of data captured over time