





Unmanned Maritime Systems Conference

(29th October 2015, Representation of Schleswig-Holstein, Berlin)

Unmanned Maritime Systems – A Key Enabling Technology for the 21st Century Navy

The conference is co-organised by the European Defence Agency & EuroDefense – Deutschland

AGENDA

Thursday, 29 October

- 0830-0900 Registration
- 0900-0930 Welcome & Introduction
 - State Secretary Ralph Müller-Beck, Representation of Schleswig-Holstein in Berlin
 - Vice Admiral (rtd) Lutz Feldt, President EuroDefense Deutschland
 - *Rini Goos, Deputy Chief Executive of the European Defence Agency*
- 0930-1000 Key Note Speech

"European Naval Defence Cooperation" (tbc)

1000-1030 Coffee Break

1030-1230 **Panel 1**:

The changing nature of Naval Operations with the introduction of Autonomous Systems.

In this first panel the broad strategic context within which the emerging and developing technologies of Unmanned Maritime Systems (UMS) operate will be explored. Specifically, the panel will investigate the concept of operations for UMS and whether the conventional operational risk assessments are suitable for UMS. Unmanned Systems are more likely to be utilised than Manned Systems due to the reduced risk of loss of life. However, what are the additional consequences of a loss of Unmanned Systems? Will the more ready use of naval assets for reconnaissance and surveillance result in an escalation of actions if they are attacked or discovered?

• <u>Chair:</u> Mr. Heinz Schulte, Editor griephan

<u>Speakers:</u>

- Capt. (N) Sakari Martimo, Fi Navy
- Dr. Heiko Borchert, Consultant, Lucerne (CH)
- Rear Admiral Jürgen Ehle, Head of Military Advisory Branch, Senior Military Political Advisor, Permanent Representation of the Federal Republic of German to the European Union (tbc)
- VAdm. Sir Anthony Dymock, UK

1230-1330 Lunch

1330-1515 <u>Panel 2</u>:

Unmanned Maritime Systems Cooperation – Overcoming Complexity

Operating in challenging maritime environments has consistently created a drive for innovation and change. The reduction in defence budgets has ensured that economical technical solutions must be sought to meet the requirements for the complex environments in which Navies operate. The EDA Unmanned Maritime Systems Research and Technology program has provided an effective vehicle for European Cooperation and for the successful delivery of projects. The panel will focus on the broad scope of areas addressed in the Program and will reflect upon the next steps and potential technological developments that can be expected in the near future and how these can be maximised.

<u>Chair:</u> Paul O'Brien EDA, Project Officer Naval Systems

<u>Speakers:</u>

- Rune Fardal, Principal Scientist Norwegian Defence Research Establishment
- Professor Victor Sousa Lobo, Portuguese Navy Research Centre
- Commander Piotr Szymak , Polish Naval Academy
- Professor Jean Guy Fontaine, Centre for Maritime Research and Experimentation (CMRE), La Spezia

1515-1545 Break

1545-1730 **Panel 3**:

Challenges facing the wider adoption of Unmanned Maritime Systems.

Panel three will consider the obstacles that will be encountered in the development and further adoption of UMS. Areas of concern relate to Energy, Reliability, Mission Planning, Autonomy, Affordability and Launch and Recovery Systems. A final consideration relates to the legislative arrangements and specifically the Colregs. A key concern is where liability will rest in the event of a collision and central to this will be the classification of UMS, be it ships or otherwise. There exists a risk whereby the technological developments have outpaced the legislative framework. Finally the panel will consider what advances commercial entities have made in the area of UMS and what lessons can be learned.

<u>Chair:</u> Peter Round, Director Capabilities, Armaments and Technology EDA

Speakers:

- Professor Mikis Tsimplis, University of Southampton
- Ralf Schnurr, Head of the Armaments Policy Division, DE MoD
- Magnus Örnfelt, Swedish Defence Materiel Administration
- Peter Hauschildt, ThyssenKrupp Marine Systems GmbH
- Tim Kraemer, Head of Business Line, Atlas Elektronik

End of UMS-Conference

1745-1845	Key Note Speech
	Christoforos Fokaides, Minister of Defence, Cyprus
1930-2130	Dinner (Hosted)