



**OCTOBER 17<sup>th</sup> - 21<sup>st</sup> 2016**  
PARIS LE BOURGET

# **EURONAVAL 2016**

## **25<sup>th</sup> edition**

**PRESS KIT**

*Latest update: October 6th 2016*

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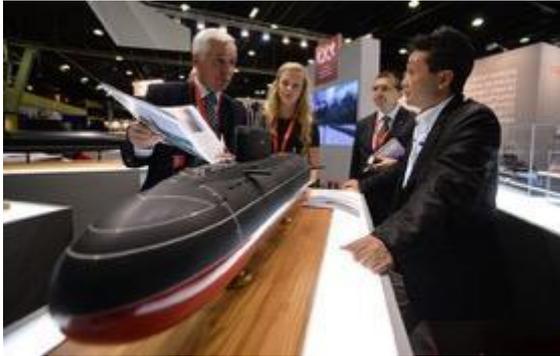


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## EDITORIAL

### 25<sup>th</sup> Edition

Today EURONAVAL is the most important naval defence event in the world. For its 25th edition, EURONAVAL 2016 has attained its objectives with an increase of more than 10% of the number of exhibitors in comparison to 2014.

#### **A positive international context**

Military naval construction is doing quite well. This industrial sector is less sensitive to the global economic crisis than civil construction, which itself needs to be considered sector by sector. Certain sectors such as cruise ship construction are even experiencing a period of increased order demand.

Military naval construction and security is directly dependent on the evolution of international relations and global security levels. At this time when the risk of terrorism is added to regional tensions and territorial and economic revendications at sea, a number of maritime countries are legitimately choosing to strengthen their navy's equipment.

Economic maritimisation and international trade are also accompanied by an increased need for surveillance and protection of exclusive economic zones, of shipping routes and coastal or port zones.

Maritime states are thus confronted with an imperative need to reinforce their assets in terms of naval surveillance. There is also the need to invest funds to equip themselves with blue water navies, with air-sea surveillance and intervention capacities and increasingly often with submarines. It has become clear that the number of submarines has substantially increased across the world in the last few years, as shown by the report in the June 2016 issue of our magazine Naval Defence Link.

#### **A 30 to 40 billion dollar yearly market**

On a global scale, the military naval sector alone represents around 40 billion dollars, corresponding to deliveries of defence vessels. The American market is stable and remains the largest, with approximately 12 billion dollars per year. This is followed by India, Australia and the Far East, all on the rise, with figures close to 12 billion dollars, not including future submarine contracts. The China-Russia block is showing strong growth and represents some 8 billion dollars of investments each year.

#### **Development of export and competition**

Export markets are consequently growing too. From the Asia-Pacific zone, the American continent and the Middle East through to Africa, order prospects are very strong, from large heavily-armed warships to small fast patrol boats, covering the whole range of surface and submarine naval capacities as well as maritime surveillance.

While export has long been the prerogative of European industrialists, today the market is more broadly shared. The United States do not export a great deal, while China and South Korea have become major actors in the sector.

Turkey and Japan are also increasing their share of the export market for naval materials, and the presence of the Japanese industry in contests for submarine force equipment is an important indication of this.

### **EURONAVAL, a major event highly valued for its specialisation**

In the context of global ocean militarisation, industrialists in the naval sector appreciate major strategic events where the presentation of their products and innovations are brought to the attention of decision-makers and purchasers from navies across the globe. EURONAVAL has become an unmissable event for those who design, produce and equip navies of the future.

Since its creation in 1968, EURONAVAL has been exclusively devoted to naval defence and maritime security. This specialisation in the naval sector allows it to attract the most astute industrial and State experts, and to offer a privileged venue for supply and demand of all types of aircraft carriers, equipment, aircraft or drones that meet the wide range of demanding operational needs of those coastal States concerned for their defence and security.

One of the highlights of the Exhibition will be the opening address "Together for Safe and Secure Oceans", co-organised by the GICAN, the EDA (European Defence Agency), the EUISS (European Union Institute for Security Studies) and the IRSEM (Institute for Strategic Research), giving key French and international personalities the opportunity to debate the new challenges faced in defence and security at and from the sea .

EURONAVAL's strength is its specialisation. We deal exclusively with naval, naval aviation and submarine matters. Official delegations are essentially made up of sailors and experts of maritime operations. The whole world knows this, and this is why the whole world will be present at EURONAVAL.

Patrick BOISSIER  
President of EURONAVAL

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## EXHIBITION MANAGEMENT BOARD

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For more information about the exhibition: [www.euronaval.fr](http://www.euronaval.fr)  
For more information about the GICAN and its subsidiary SOGENA/EXHIBITIONS: [www.gican.asso.fr](http://www.gican.asso.fr)

## EURONAVAL PROFILE

Since its creation in 1968, the French naval industry, grouped together under the GICAN (French Marine Industry Group) is at the heart of EURONAVAL organisation, via its subsidiary SOGENA. The GICAN is part of the CIDEF (French Defence Industry Council), with the GIFAS (French Aerospace Industries Association) and the GICAT (French Land Defence Manufactures Association), the three organisations that represent French defence industries as a whole. Find out more about the GICAN at EURONAVAL.

- 1968 : 1<sup>st</sup> edition in 1968
- 1968-1992 : Exhibition limited to the production of French materials intended for national and international armed forces
- 1994 : Open to the production of European materials - the exhibition becomes EURONAVAL
- 1996 : EURONAVAL becomes a global-scale event
- 2002 : Opening of EURONAVAL to maritime Safety and Security activities
- 2004 : Emergence of activities in relation to space
- 2006 : First stand for State Action at Sea, led by the General Secretariat for the Sea, bringing together all the administrations involved
- 2008 : Development of the presence of drones. First participation of the European Union as an exhibitor - Creation of the EURONAVAL Trophies
- 2010 : Emergence of activities in relation to protection of the maritime environment. Creation of the dynamic demonstration area
- 2012 : Creation of technological workshops. First participation of NATO as an exhibitor
- 2014 : Hosting of new nation pavilions with stated ambitions in the naval sector : India and Australia. Belgium, the United Arab Emirates and Turkey also enter the biennial event. exhibition.
  
- 2016 :** **25<sup>th</sup> edition. Exhibitor progression of more than 10% compared to 2014. Danish pavilion and Japanese exhibitor present for the first time. A record number of delegations. Major opening colloquium, themed workshops, TV studio, Innovation area coordinated by the DGA and the GICAN, a more ambitious static zone.**

## MAJOR MARKET TRENDS AND KEY FIGURES

### Main trends in today's market:

- ➔ The desire of a number of countries to develop their submarine fleets, with important acquisition projects underway in Australia, India, Poland, Norway, the Netherlands and Indonesia.\*
- ➔ The high level of interest from maritime nations for the acquisition of coastal surveillance vessels, open sea patrol vessels, intermediate-sized corvettes and frigates.
- ➔ The development of surface and submarine drones, aircraft, AUSV and the importance of cybersecurity
- ➔ New concepts in relation to stealth.

*\* Latest figures from AMI have revised figures of global submarine acquisitions upwards to 51% for their 2010 -2020 forecast. (AMI Hot News May 2016).*

### Order book for new vessels:

*Global market quantitative estimates of the world market - Source GICAN – September 2016:*

- ➔ Worldwide vessel order book = \$150 billion from the military sector, plus \$270 billion from the civil sector.
- ➔ European order book (excluding Russia): \$36 billion from the military sector (24% of global figures), plus \$60 billion from the civil sector (22% of global figures), i.e. \$96 billion in total (23% of global figures). It should be noted that European figures are rising strongly, representing close to one quarter of the order book for global naval activity.
- ➔ French order book: \$12 billion from the military sector (8% of global figures and 33% of European) plus \$10 billion from the civil sector (3% of global figures and 17% of European with letters of intent in progress), i.e. \$22 billion in total (5,2% of global figures and 23% of European).

### Estimates of annual activity values for new defence constructions undertaken by the peincipal manufacturers:

- > American market, stable and remains world leader, with approx; \$12 billion per year
- > The group "India, Australia and the Far East excluding China" also with approx. \$12 billion, on the rise with several ongoing negotiations for submarines.
- > The European market (excluding Russia) is relatively stable, between 10 and 11 billion dollars.
- > And finally, China and Russia each represent 3 to 4 billion dollars of investments per year.

## EURONAVAL 2016 PROFILE

Edition n°	25 <sup>th</sup>
Status	International professional exhibition
Periodicity	Every other year - even years
Date	17th to 21st October 2016
Place	Parc des Expositions in Paris Le Bourget

	Exhibitors	Visitors	Press
Monday 17th October 2016	8.00am - 5.30pm	12h00 - 5.30pm	12.00pm - 5.30pm
Tuesday 18th October 2016	8.00am - 5.30pm	9.00am - 5.30pm	9.00am - 5.30pm
Wednesday 19th October 2016	8.00am - 5.30pm	9.00am - 5.30pm	9.00am - 5.30pm
Thursday 20th October 2016	8.00am - 5.30pm	9.00am - 5.30pm	9.00am - 5.30pm
Friday 21st October 2016	8.00am - 4.00pm	9.00am - 4.00pm	9.00am - 4.00pm

### EURONAVAL 2016 key figures

- 400 exhibitors
- 56% of exhibitors from abroad
- 34 nationalities including France including 1 new nation: Japan
- 10 national pavilions including one new country: Denmark
- During one week Euronaval will bring together delegations and industrialists from close to 100 countries
- 25,000 professional visitors expected
- 600 business meetings (expected)
- 15,000 sqm of exhibition space
- 80 media partners
- 400 accredited journalists
- 

*Figures as of 05/10/2016*

### Exhibitors:

Among the newcomers: ASELSAN (Turkey), AUSTAL (Australia), ELBIT SYSTEMS LT (Israel), EDEN (France), FERRETTI SECURITY & DEFENCE (Italy), ISRAËLSHIPYARDS (Israel), LIBERVIT (France), PALFINGER MARINE (Austria), SHOX (Canada), TOKYO KEIKI (Japan).

Among the 33 foreign countries, list of the 7 main representations by number of exhibitors Parmi les 33 pays étrangers, liste des 7 principales représentations par nombre d'exposants :

Australia	37	United Kingdom	21	Brazil	13
Italy	32	USA	20		
Germany	26	Netherlands	16		

**10 national pavilions:**

Germany	Denmark *	Russia
Australia	Italy	USA
Brazil	Netherlands	
Chile	United Kingdom	

\* *new*

**4 regional pavilions:**

Brittany International Commerce	EDEN Cluster
CCI Paris Île de France	Pole Mer Méditerranée

More information at: [www.euronaval.fr](http://www.euronaval.fr)

Updated version of the exhibitor list available at:

<http://www.euronaval.fr/7-exposants>

## SECTORS AND ACTIVITIES REPRESENTED AT EURONAVAL 2016

Over the course of its 24 previous editions, EURONAVAL has become the largest platform for international exchange on naval and maritime issues (besides yachting). This 5-day international exhibition organised by the GICAN via its subsidiary SOGENA is the naval equivalent to the Paris Air Show (SIAE) organised by the GIFAS for aeronautics and EUROSATORY, organised by the GICAT for land.

**Euronaval addresses the naval and maritime issues facing maritime States in their entirety, divided into 6 main themes, all present at the exhibition.**

### **1 –NAVALE DEFENCE**

Territorial defence  
Force projection  
Prevention  
Mine warfare

MCO (Operational Conditions Maintenance)  
Logistics support  
Training

### **2 - MARITIME SAFETY AND SECURITY**

Sea rescue  
Safety of men and vessels at sea  
Fight against piracy and illegal trafficking

Safety of infrastructures  
Maritime and coastal surveillance  
Cybersecurity

### **3 – MARITIME ENVIRONMENT**

Pollution prevention  
Fight against pollution  
Ship dismantling

Hydrography  
Oceanography

### **4 - TRANSPORT AND INFRASTRUCTURES**

Fret and passenger transport  
Propulsion  
Marine energy

Port and maritime infrastructures  
Telecommunications

### **5 - SERVICES**

Quality control  
Standardisation, classification  
Vessel delivery and reception

Training, employment  
Advice, technical assistance  
Insurance

### **6 - RESEARCH AND ENGINEERING**

Design offices  
Laboratories

Test centres

**CLOSE TO 100 COUNTRIES REPRESENTED 2016**  
**(exhibitors and official delegations)**  
 and 4 international authorities (\*)

**This figure covers exhibitors and invited delegations**

Albania	Germany	Pakistan
Algeria	Ghana	Panama
Angola	Greece	Paraguay
Argentina	Guatemala	Peru
Australia	Guinea-Conakry	Philippines
Austria	India	Poland
Azerbaijan	Indonesia	Portugal
Bahrain	Iraq	Qatar
Bangladesh	Ireland	Romania
Belgium	Israel	Russia
Benin	Italy	Saudi Arabia
Bolivia	Ivory Coast	Senegal
Brazil	Japan	Singapore
Brunei	Jordan	Slovenia
Bulgaria	Kazakhstan	South Africa
Cameroon	Kuwait	South Korea
Canada	Latvia	Spain
Chile	Lebanon	Sri Lanka
China	Luxembourg	Sweden
Colombia	Madagascar	Tanzania
Croatia	Malaysia	Thailand
Cyprus	Mauritania	Togo
Denmark	Mexico	Tunisia
Ecuador	Montenegro	Turkey
Egypt	Morocco	Turkmenistan
Equatorial Guinea	Mozambique	UAE
Estonia	Myanmar	Ukraine
<i>European Union*</i>	<i>NATO*</i>	United Kingdom
Finland	Netherlands	<i>UNO*</i>
France	New Zealand	Uruguay
Gabon	Nigeria	USA
<i>GCC (Gulf Cooperation Council)*</i>	Norway	Vietnam
Georgia	Oman	

## OFFICIAL PROGRAMME EURONAVAL 2016

*NB Programme dated 5th October 2016*

### MONDAY 17TH OCTOBER

- 12.00pm Opening of EURONAVAL / Welcome for Official Delegations
- 5.30pm End of 1st day

### TUESDAY 18TH OCTOBER

- 9.00am Exhibition opens / Welcome for Official Delegations
- 9.15am Exhibition inauguration / **Award of the 3 EURONAVAL and GICAN Trophies**
- 2.00pm **OPENING ADDRESS: "TOGETHER FOR SAFE AND SECURE OCEANS"**
- 5.30pm End of the Opening address / End of 2nd day
- 7.00pm EURONAVAL evening event (by invitation only)

### WEDNESDAY 19TH OCTOBER

- 9.00am Exhibition opens
- 10.00am Workshops - **Protection of Ministry of Defence naval rights of way as part of the new threat paradigm**  
Opening of the BtoB meetings (private area)
- 10.45am Workshop - **Satellite surveillance, a strategic asset for maritime safety**
- 2.00pm Workshop - **Speech by the French Navy on "Underwater combat"**
- 2.00pm Meeting - **Cyber security in the maritime sector** (Lagoon room)
- 2.45pm Workshop - **From PAP40 to drone systems: towards a new concept of mine warfare?**
- 3.30pm Workshop - **Development of underwater acoustics and new opportunities for passive defence**
- 4.15pm Workshop - **Innovative technologies of the SeaExplorer glider in underwater combat**
- 5.00pm BtoB meetings close
- 5.30pm End of 3rd day

### THURSDAY 20TH OCTOBER

- 9.00am Exhibition opens
- 10.00am BtoB meetings (private area)  
Workshop - **Speech by the French Navy on "Special Naval Operations"**
- 10.45am Workshop - **Innovative solutions for SAR operations**
- 2.00pm Workshop - **Speech by the French Navy on "Naval defence"**
- 2.45pm Workshop - **The UAV, an essential tool for all vessels**
- 3.30pm Workshop - **The future of amphibious operations**
- 5.00pm BtoB meetings close
- 5.30pm End of 4th day

**FRIDAY 21ST OCTOBER**

- 9.00am Exhibition opens
- 10.00am BtoB meetings (private area)  
Workshop – **Speech by the French Navy on “The naval sector in the digital age”**
- 10.45am Workshop - **Partnering to drive digital transformation**
- 12.00pm BtoB meetings and workshops close
- 4.00pm Exhibition closes

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## 25<sup>TH</sup> EDITION: EXHIBITION DEVELOPMENTS

### **1 – MAJOR OPENING COLLOQUIUM**

Tuesday 18th October 2016 – 2.00pm – 5.30pm

**Theme : Together for Safe and Secure Oceans**

Co-organised by:



The freedom to navigate safely on the oceans is vital if we want to safeguard prosperity and development for everyone. The modern world is experiencing unprecedented globalisation. Markets are increasingly interdependent, while challenges posed by security issues go beyond national borders and transcend traditional analysis grids. The emergence of new players, the use of new means of action and the appearance of new stages have increased militarisation in international waters and exacerbate pre-existing geopolitical rivalries. More importantly, maritime security must now cope with new non-traditional threats like mass migration, marine pollution, declining resources, and increasingly frequent natural disasters, all added to other more established threats like piracy, terrorism, illegal fishing and other criminal activities. All these threats substantially increase the challenges faced by maritime security.

Interconnected by its very nature, the maritime domain as a whole can only be secured by concerted efforts from all parties involved - both public and private, civil and military. It is thus essential to ensure efficient coordination and cooperation, not only at an interstate level, but also between all those individuals or agencies involved in action at sea - including navies, coastguards and customs, as well as private or non-governmental organisations, in a global approach. Maritime crises are derived from land rivalries. They are inevitably linked to problems on dry land and this is why they need to be apprehended in a comprehensive manner. This is achieved by the document "European Union maritime security strategy" (EUMSS, 2014), a reference for understanding and dealing with the challenges of maritime security in the 21st century.

The EURONAVAL 2016 opening colloquium will provide the setting for leading personalities from all fields of maritime security to discuss these new challenges and ways to deal with them as efficiently and sustainably as possible.

### **PROGRAMME**

- 2.00-2.05pm Welcome speech  
**Patrick BOISSIER - President**, GICAN (French Marine Industry Group)
- 2:05-2.20pm Opening speech - **IGA Laurent COLLET-BILLON (TBC)**
- 2.20-2.30pm Discussion for thought - Antonio MISSIROLI - Director of EUISS (European Union Institute for Security Studies)
- 2.30-3.50pm Session 1: **"The future of maritime security: low intensity operations"**  
 The maritime environment has become more agitated, more fragile, more intensely fought over and more complex - a tendency that is unlikely to change in the coming years. From the reinforcement of sea surveillance and information sharing, to research and rescue operations and the fight against criminal actions, the missions and needs of those who intervene at sea have never been more varied. How can the naval industry meet these fluctuating needs, in a flexible and proactive manner?  
 Which innovative technologies and approaches can help bring security to the seas, and ensure us that the oceans remain safe and freely accessible to all?  
 Moderator: **VAdm (Rtd) Peter HUDSON** - (U.K.)  
 Military/Navy/ Maritime: **RAdm Waldemar GLUSZKO** - Deputy Director General of European Union Military Staff - EEAS  
 Defence/Policy/ Strategy: **Vincent BOUVIER**- Prefet, General Secretary for the Sea (FR)  
 Industry: **Guénaél GUILLERME**, General Director of the Group ECA and Egil **HAUGSDAL**, President of KONGSBERG Maritime /TBC
- 3.50-4.00pm Coffee break
- 4.00-5.20pm Session 2: **The future of naval warfare: high intensity operations**  
 Our strategic environment is constantly changing. The emergence of new maritime powers, new technical capacities and hybrid naval tactics must prompt us to rethink our traditional approach to security and to operational capacities. While individual interests and geopolitics determine the dynamics of global security, crisis prevention calls for greater communication between the different spheres of politics, defence and industry. How can the naval industry anticipate the needs of governments when diplomacy has been defeated? Which future technologies are likely to change the rules of the game?  
 Moderator: **Jean-Dominique GIULIANI** - President of the Robert Schuman Foundation  
 Military/Marine/Maritime: VAdm **Clive JOHNSTONE** - Commander of the Maritime Command of NATO (MARCOM)  
 Defence/Politicity/Strategy: **Jorge DOMECCO** - Executive director of the European Defence Agency (EDA)  
 Industry: **Andréas LOEWENSTEIN**, Senior executive VP for Strategy, Partnership and Innovation at DCNS (FR) and **José Manuel REVUELTA LAPIQUE** - President & Executive Chairman at NAVANTIA (SP)
- 5.20-5.30pm Conclusion  
**Admiral Christophe PRAZUCK** - Chief of Staff of the French Navy (France)

<p><i>Seating capacity in the Conference Hall: 900 seats</i>  <i>Entrance is free and open to all subject to availability</i></p>
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## **2 - THEMED WORKSHOPS and CYBERSECURITY MEETINGS (details)**

### **Wednesday 19 th OCTOBER**

- 10.00am - 10.45am **Protection of Ministry of Defence naval rights of way as part of the new threat paradigm**  
Speaker: Directorate for Defence Facilities, Means and Activities Protection - Counter-Admiral Frédéric RENAUDEAU - DPID (Directorate for Defence Facilities, Means and Activities Protection)
- 10.45am - 11.30pm **Satellite surveillance, a strategic asset for maritime safety**  
Speakers: TELESPAZIO - Henri de FOUCAULD, Director of Strategy and Defence and Bruno BENDER
- 2.00pm - 4.30pm **Cyber security in the maritime sector** - Salle Lagoon  
2.00pm - 2.45pm **Speech by the French Navy on "Underwater combat"**  
2.45pm - 3.30pm **From PAP40 to drone systems: towards a new concept of mine warfare?**  
Speaker: ECA - Vice-admiral squadron (2S) Christian CANOVA – Defence and Operations Consultant
- 3.30pm - 4.15pm **Development of underwater acoustics and new opportunities for passive defence**  
Speaker: RTSYS - Luc SIMON
- 4.15pm - 5.00pm **Innovative technologies of the SeaExplorer glider in underwater combat**  
Speakers: ALSEAMAR - Yann LEPAGE - Technical Director and François-Xavier de COINTET- Director

### **Thursday 20th OCTOBER**

- 10.00am - 10.45am **Speech by the French Navy on "Special Naval Operations"**  
10.45am - 11.30am **Innovative solutions for SAR operations**  
Speakers: A.ST.I.M
- 2.00pm - 2.45pm **Speech by the French Navy on "Naval defence"**  
2.45pm - 3.30pm **UAV, essential tool for all vessels outils**  
Speaker: ECA - Bernard PONSOT – Director of Robotic Activity
- 3.30pm- 4 .15pm **The future of amphibious operations**  
Speakers: CNIM - Philippe NERI - Benoist BIHAN - Colonel John ELLIS - Lieutenant-Colonel DEVEAUD

### **Friday 21st OCTOBER**

- 10.00am **Speech by the French Navy on "The naval sector in the digital age"**  
10.45am - 11.30am **Partnering to drive digital transformation**  
Speakers: Bureau Veritas and Dassault Systèmes

### **3 - THE INNOVATION AREA, by DGA & GICAN**

#### **SMEs SHAPING THE FUTURE OF THE NAVAL INDUSTRY**

**Stand: L92**



This exhibition area displays innovative SME projects that will shape the future of naval capabilities. All projects were supported by the French armament procurement agency (DGA), which invests over 730 million Euros yearly in innovation. This investment covers a wide range of projects, from laboratory studies to prototype trials in operational environment.

As an extension to this Innovation Area, the GICAN and the DGA are also organising an "Innovation" Itinerary linked to RAPID (SME Support Regime for Dual Innovation), implemented by the DGA and the DGE (Directorate General for Enterprise). RAPID is an aid that subsidizes interesting industrial research or experimental development projects in the defence sector.

This innovation itinerary puts the spotlight on approximately thirty companies present at Euronaval, both exhibitors from the innovation area (stand L92) and those with individual stands.

This area will be accessible to meet SMEs and DGA experts. Five SMEs will present their project during a short conference each day. Short tutorials on defence related subjects such as export, innovation or regulations will also take place daily, led by DGA officials.

The conference agenda will be specified on the website and in the exhibition newsletter. Moreover, this area will be accessible for all SMEs to meet with representatives of the DGA, a B2B meeting area being made available to that end. Representatives from the French Navy will be present on Wednesday 19<sup>th</sup> October.

The GICAN is particularly involved in innovation and technologies of the future. It cofacilitates the Naval Solutions - "Tomorrow's transportation" programme with the State and the CORICAN (Orientation Council for Research and Innovation in Building and Naval Activities). These programmes and tools make it possible to focus research and innovation in line with the public policy strategy adapted by the industry's strategic committee and to contribute to development in French businesses, particularly SMEs.

The GICAN leads technological roadmaps that group businesses together, including a number of innovative SMEs, focusing on issues that promote "Vessel for the future" and "Safe, smart, clean and economic vessels".

#### **Innovative projects present in this Innovation Area 2016:**



### **ALYXAN**

AlyXan is a French instrumentation company that designs and manufactures solutions for analysing chemical compounds in trace concentrations. We manufacture and market three instruments: the BTrap, a real-time, on-site analyzer of Volatile Organic Compounds (VOC); the TDflash, thermal desorption system for Gas Chromatography and the SOLYZE, a continuous online analyzer of process gases. The BTrap analyser analyses air inside submarines, thanks to its dedicated SMHR version, adapted to space constraints of submarines.



### **AERO-NAUTIC SERVICES & ENGINEERING (A-NSE)**

The SAS Aero-Nautic Services & Engineering (A-NSE) is the European leader in the design, production and operation of aerostats (tethered balloons and airships). These aerostats can be used as air platforms for a number of civil and military applications: intelligence, surveillance, reconnaissance, communication and observation.



### **AP2E**

Since 2006, AP2E develops, manufactures, assembles and commissions highly innovative online gas analysis systems for industrial, scientific and military applications (process and environment).

The association of two patented innovations: the OFCEAS technology and the Low Pressure Sampling system allow AP2E to provide its customers with multi-gas analyzers with unparalleled performances: very high accuracy (ppb), excellent measurement stability, ability to measure aggressive substances, extremely short response time and a low maintenance.



### **ARISTÈ**

Aristè is a VSME created in 1990 whose main activities cover the domain of submarine acoustics, signal processing and operational security. Aristè's in-depth knowledge of the theoretical aspects of physical systems allows it to propose original solutions and create models adapted to each system under study thanks to their degree of precision. Aristè is involved in the design and development of the software.



### **AUTOMATIC SEA VISION**

AUTOMATIC SEA VISION is a video analytics software editor dedicated to waterborne object detection for security and safety.



### **BF SYSTEMES**

BF SYSTEMES is the first private company exclusively specialising in diving security. It has developed MyDivingCoach: a connected object linked to an individual coaching application to optimise diver security.



### **CAPSIM**

CAPSIM is an independent electrical technology design office. Specializing in providing assistance to those carrying out major and minor work on electricity grids and energy systems, CAPSIM operates in a large number of fields of activity, from the transport industry to defence and research. Its skills run from the complete performance of static sizing studies to expertise in transient phenomena.



### **CIRTEM**

The Centre of Engineering and Research for Modern Electrotechnical Technologies, today has a staff of around 35 employees and a turnover of 4M Euros. It specialises in in electric energy conversion techniques known as 'switch mode' and is based in the Toulouse area. Included in its references are the DGA, major corporations Schneider Electric, Thalès, Sclé Sfe, and mid-tiers businesses such as Actia.



### **FLOWGENE**

Flowgene is present on the life science markets with a propriety detection technology based on native laser-induced fluorescence that emits at 224 nm. The principle applications concern proteomics and odour detection.



### LEMMA

LEMMA is a French R&D and software Editor Company specialized in fluids, structures and fluid-structure applications (FSI). We developed our own solution based on the very last results obtained by academics in applied mathematics, with the aim to transfer this know-how in both industrial projects and in unique and disruptive commercial software.



### MICRO

**DB**

MicrodB is a member of the acoustics and vibrations expert Vibratec group. It offers its skills in identifying acoustic sources through the development of signal processing tools and methods and services.



### OSEAN

OSEAN is an engineering company with expertise in marine and submarine environments that designs, develops, manufactures and maintains dedicated electronic systems in a spirit of global service. Based in Toulon in the south of France, the OSEAN team is made up of multidisciplinary, experienced collaborators in modern facilities with high-performance technical means. OSEAN possesses a genuine capacity for innovation, thanks to its partnerships with a number of research institutes.



### OXXIUS

Oxxius designs, produces and markets a new generation of solid-state visible and ultraviolet lasers. These lasers are compact and insensitive to vibrations with high electric efficiency and spatial and spectral qualities that make them ideal candidates for applications in biological, chemical and physical metrology, particularly in embedded conditions.



### PREDICT

PREDICT is a company specialising in the design and development of solutions for Surveillance, Diagnostics, Prognosis and Maintenance at Distance of Industrial Facilities. Its activity consists of studying the facilities, analysing important malfunctions that can lead to loss of availability, performance and of course costs, then to design, install and operate turnkey solutions.



### **SBG SYSTEMS**

This is a dynamic, innovative SME working in the sector of high-precision inertial navigation. We design electronic sensors using "MEMS" technology. Winner of the Deloitte Technology Fast 50 and Fast 500 award, our company is growing at a strong rate in France and on the international scene. We are located in Rueil-Malmaison (France) and in Los Angeles (USA), and we cover a large number of markets including marine, aeronautics, autonomous cars and drones.



### **SEMANTIC TS**

SEMANTIC TS is a design office specialising in Acoustic Oceanography, Mapping & Monitoring of underwater bottoms. Signal processing, Submarine acoustics and embedded computing since 1993. Based in Sanary s/Mer (France), SEMANTIC TS specialises in marine surveillance.



### **SIVIENN**

Sivienn offers original imaging techniques using crossed correlations of noise signals recorded by receptor networks. Sivienn applies these techniques to non-destructive tests, to structural health monitoring and now also to submarine acoustics.



### **SOFRESUD**

SOFRESUD is high-tech company ISO 9001 certified that designs, develops, installs and maintains innovative systems for Naval Defence as well as Maritime Self-Protection & Security. SOFRESUD relies on its multidisciplinary skills to develop a very dynamic R&D policy, steadily investing about 25% of its turnover in R&D activities.



### **SYRLINK**

Syrlinks manufactures radio communication equipment and geolocation systems adapted to severe environments, for the aerospace, defence and safety markets. Our range of geolocation products includes beacons on ruggedized GPS & GNSS, designed in France (algorithms and material platforms), and reconfigurable in terms of client applications, both in terms of performance and robustness.



## SYT TECHNOLOGIES

SYT Technologies designs and manufactures innovative vision systems using passive and active imaging technologies. These systems are portable or on-board on vehicle, for ground, sea and undersea applications (short or long range).



## YLEC CONSULTANTS FLUID MECHANICS

### YLEC

Engineering company specialized in Fluid Mechanics and Multiphase Flows. Our main mission: to provide our clients with our wide experience and technical support all along the development of their innovative projects. We have also developed and several patented technologies for water treatment.

## INNOVATION STAND AGENDA

	Monday 17th October		Tuesday 18th October		Wednesday 19th October		Thursday 20th October	
Time	Companies	RAPID project/ DGA theme	Companies	RAPID project/ DGA theme	Companies	RAPID project/ DGA theme	Companies	RAPID project/ DGA theme
10.00-10.15am	Exhibition closed to the public		MICRO DB	ARMADA	TV STUDIO		SIVIENN	ICCAO
10.20-10.35am			BF SYSTEMES	SAFE DIVE			SEMANTIC TS	CLASS COMM
10.40-10.55am			LEMMA	CFS-MAFS			CIRTEM	INSERE HT
11.00-11.15am			OSEAN	GREENAR			SYT TECHNOLOGIES	SYMAGEX
11.20-11.35am			A-NSE	T-C HAP			OXXIUS	SEAFLOW
11.40-11.55am			DGA/S2A	Defence markets (acquisitions)			DGA TN/TH	Test facilities
					During the day presence of EMM: OCEM Vincent Bureau			
2.00-2.15pm	SBG SYSTEMS	GEMSYS	MICRO DB	ARMADA	YLEC	MULTYLEC	SIVIENN	ICCAO
2.20-2.35pm 2.40-2.55pm	ASV	AUTOPROTECT	BF SYSTEMES	SAFE DIVE	AP2E	LIP3+	SEMANTIC TS	CLASS COMM
2.40-2.55pm	ALYXAN	AQUAREM	LEMMA	CFS-MAFS	SYRLINKS	NASCO	CIRTEM	INSERE HT
3.00-3.15pm	SOFRESUD	BIMAC	OSEAN	GREENAR	CAPSIM	EXPERRE	SYT TECHNOLOGIES	SYMAGEX
3.20-3.35pm	ARISTE	STRIDENT	A-NSE	T-C HAP	FLOWGENE	FOG-FLOW	OXXIUS	SEAFLOW
3.40-3.55pm	DGA/SSDI	Accreditation	DGA/SDPME	RAPID	DGA/DI	Export control	DGA/DI	Article go (advances)

## 4 - INNOVATION ITINERARY

30 companies selected as part of RAPID are presented at EURONAVAL 2016, either in the Innovation Area or on their own stands:

A-NSE	T-C HAP	Permanent High Altitude Tethered Platform	Innovation Area
ALYOTECH	SIMSON	Sonar simulator	B8-C9
ALYXAN	AQUAREM	Resolved Quantitative Analysis of Marine Waters	Innovation Area
AP2E	LIP3+	Lambda Innovation Proceas 3+	Innovation Area
ARISTÈ	STRIDENT	Three-dimensional simulation	Innovation Area
ASV	AUTOPROTECT	Close self-protection of a capital ship	Innovation Area
BF SYSTEMES	SAFE DIVE	Safe dive	Innovation Area
CAPSIM	EXPERRE	High Performance Operation of Electricity Networks	Innovation Area
CIRTEM	INSERE HT	Innovation in the security of high voltage naval networks	Innovation Area
CMN	METACOMS	Development of compact, metamaterial-based antennas for radiocommunications	K84-L85
COMEX	LORI	Localisation and Recognition of Immersed Objects	D4-E5
CS SI	FLOAT	Feasibility of an Optical Link in a Turbulent Atmosphere	E10
ECA	PRIOVIS	Positioning of a hull inspection ROV using underwater visual odometry	F70-H73
FLOWGENE	FOG-FLOW	Detection of oil mists	Innovation Area
HGH	PANORAMIR	Very high definition panoramic infrared surveillance system	D14
IXBLUE	FOG THP	Ultra-high performance fibre-optic gyroscope	F64-H65
LEMMA	CFS-MAFS	Application for damage and cracking	Innovation Area
MAREE	MICAS	Modelling and Instrumentation for Acoustic Characterisation of Sediments	D4-E5
MICRO DB	ARMADA	Reduced size Multi-Analysis Antenna for Acoustic Discretion	Innovation Area
NEXEYA	MIRHY-AC	Active hybrid mirror	D11
OSEAN	GREENAR	Optimal energy balancing navigation and ranging	Innovation Area
OXXIUS	SEA-FLOW	Underwater recognition of dissolved components	Innovation Area
PREDICT		Surveillance solutions	Innovation Area
RTSYS	BODAMM	Buried Objects Detection by Acoustics and Magnetics Methods	F65
SBG SYSTEMS	GEMSYS	Generic Multi Sensors system	Innovation Area
SEMANTIC TS	CLASS COMM	Multi-Mode Classification of very shallow coastal zones	Innovation Area
SIVIENN	ICCAO	Imaging in Ocean Acoustics	Innovation Area
SOFRESUD	BIMAC	Barrier by Acoustic Imaging	Innovation Area
SUBSEA TECH	SURFBOT	Automatic recognition and mapping technique	B26-C35
SYRLINKS	NASCO	Collaborative Submetric Navigation	Innovation Area
SYT TECHNOLOGIES	SYMAGEX	System of Recognition of an object in murky waters	Innovation Area
YLEC	MULTYLEC	Injection of micro-bubbles for test facilities	Innovation Area

### For more information:

Eugénie CAMPEIS - DGA

Strategy Department / Department of industrial affairs SME subdivision

SME project manager

New phone number: 09 88 67 26 76 / [eugenie.campeis@intradef.gouv.fr](mailto:eugenie.campeis@intradef.gouv.fr)

## **5 - STATIC ZONE 2016**

### **Stand: C1**

Barring operational restrictions, the French Ministry for Defence will organise a certain number of equipment items in the exhibition's 465 sqm static zone:

#### **NH90 – CAIMAN**



The NH90 NFH (for NATO Frigate Helicopter) is a French twin-engine helicopter used by the French Navy. Developed by NHIndustries, it has

been the replacement for the Super Frelon and the Lynx since 2015. It is versatile and flexible, and carries out a number of different missions: anti submarine, anti-surface, counterterrorism, and government action at sea. It is designed to equip French frigates and when needed, can also be deployed on projection and command ships (BPC) or aircraft carriers. Twenty-seven Caiman helicopters will be used to equip the French Navy and will be divided into two fleets. The NH90 also exists in a land version, implemented by the French Army Light Aviation (ALAT). The NH90 is the result of a six-country European programme. As a result of its success, more than two hundred units have been exported. It is an essential aircraft in the aeronautical sector.

#### **ECUME**



The ECUME, or loadable multipurpose commando boat, is a semi-rigid multipurpose vessel. It has been used to equip the Ponchardier

commando (operational support) since January 2016. Designed by the company Zodiac Milpro International, it is the replacement for the ETRACO (rapid transport and commando action boat). Thanks to its modular structure, the ECUME carries out a number of roles in different situations (command, fire support, assault etc.): hostage release, counter piracy operations, drug traffic interception are all missions it is entrusted with. Its development is particularly focused on interoperability, allowing the ECUME to be used on the principal vessels of the French Navy.

## ATL2



The Atlantique 2 is a maritime patrol aircraft developed by Bréguet – Dassault Aviation. Currently, the ATL2 is deployed in Africa where it serves as backup to ground forces. The ATL2 has

been in service for twenty or so years, and has undergone several retrofits. Integration of the MUgo torpedo was completed in July 2014. A renovation operation is currently in progress, notably in order to install the Searchmaster radar. The ATL2 ensures the safety and support of the Strategic Oceanic Forces and nuclear deterrent submarines in the near Atlantic. It carries out electronic warfare and intelligence missions, takes part in force projection in support of deployed naval air groups, and also carries out public service missions. It is also involved in the fight against piracy and drug trafficking.

## F21

The F21 torpedo is intended to equip French Navy submarines. This heavy system can destroy or neutralise surface ships or submarines. Designed for offshore and coastal operations, it can manoeuvre just as easily in shallow or deep waters. Its high degree of autonomy allows it to cover long distances. The first torpedoes are set to be delivered in 2017.

## Beach access mat



MUSTHANE presents the new generation of landing mats, the Mustmove® Beach Access, with rollable, connectable plates that prevent vehicles getting stuck during landing. This offer, designed and produced in France, is the result of several years' research and development, and a number of international patents. It is effective for all wheeled vehicles used by the French army and has been successfully evaluated by the STAT (Technical Section of the Land Army). This mat is part of the Mustmove® range developed by Musthane, providing mobility solutions in fields of operation.

### **VBCI (armoured infantry combat vehicle): The perfect balance between protection, mobility and fire power**

A mature, combat-proven system, the VBCI has been in service in the French army since 2008 (630 units delivered) and has been successfully deployed in Afghanistan, Lebanon, Mali and Central African Republic.

The use of the VBCI in exterior operations has demonstrated its deployment capacity over long distances (more than 2500 km in 5 days in Mali) and its trustworthiness in extreme conditions (more than 55°C). The standard 32 tonne unit in service in the French army ensures a maximum future development potential.

From the start, the VBCI was designed as a flexible solution for:

- Taking part in a whole range of operations, from low-intensity peacekeeping missions to counter-insurgency and high intensity combat,
- Manœuvring alongside combat tanks and armoured forces on all types of complex terrains,
- Offering several multirole options from one single platform base, from armoured troop

transportation vehicle to armoured combat vehicle,

- Can be equipped with the most advanced weapon systems to ensure substantial firepower. Protection, mobility and firepower at optimised maintenance costs are the main advantages of the VBCI, which is the benchmark in today's market of new-generation 8x8.



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### **AND ALSO:**

#### **A TV STUDIO FOR THE EXHIBITION WEB'S TV - Stand: L87**

For its 25<sup>th</sup> edition, Euronaval is setting up a TV studio, to be used alongside the exhibition's Daily newsletter, as the main information medium for events at this year's Euronaval 2016. Editorial production of the content has been entrusted to Stéphane Dugast who will receive industrialists, institutions and VIPs for live interviews from Monday 17th to Friday 21st October. Apart from the live interviews, the studio will be used under the name AGORA, to receive certain exhibitor workshops. Reports produced in the TV studio will be broadcast live at the exhibition and recorded on YouTube and VIMEO...

## **“CYBERSECURITY IN THE MARITIME ENVIRONMENT” MEETINGS**

The “Cybersecurity in the maritime environment” meetings are one of the highlights of Euronaval. Scheduled on Wednesday 19th October from 2.00pm - 4.30pm in the LAGOON room, these meetings are the opportunity to focus on the cyber-resilience of major complex naval systems. Demonstrations will illustrate the participants’ discussions.

## **NAVAL DEFENCE LINK**

Launched by EURONAVAL in 2016 for the 25<sup>th</sup> edition of the exhibition, Naval Defence Link is a large format publication on high quality paper, devoted to the international naval defence industry and maritime safety and security. This quarterly magazine covers naval technology news, market developments and navy modernisation all over the world. For the special September 2016 issue, it presents news from the exhibition.

Naval Defence Link is produced by the Defence pole of the Air&Cosmos editorial team.

## **A NEW TEAM FOR THE EXHIBITION DAILY**

For 2016, the exhibition Daily has been entrusted to a team from the Ouest-France Infomer group. This 16-page bilingual French/English newspaper is printed every day at a run of 5,000 copies. It is offered free of charge by the organiser to all those involved in the exhibition (visitors, exhibitors, press) from Tuesday 18th October, EURONAVAL’s opening day, until Friday 21st October.

This Daily is also available online at [www.euronaval.fr](http://www.euronaval.fr) for the duration of the exhibition.

## **A NEW MOBILE APP**



The new EURONAVAL mobile app will be available on October 7th 2016 on APP Store, Google Play and the EURONAVAL.mobi website

## **CSR PROGRAMME**

Being fully aware of the current environmental, societal and economic issues at stake, in 2015 SOGENA committed to a Corporate Social Responsibility policy, aiming to obtain the ISO 26100 standard. The ISO 26100 is the standard for sustainable development in the event industry.

Sogena is structuring its commitments around 3 complementary objectives, to be used as the foundations of its CSR policy for future years.

*Objective 1:* To mobilise suppliers and service providers via a responsible purchasing policy.

*Objective 2:* To accompany and promote CSR processes implemented by exhibitors for setting up and working their stands.

*Objective 3:* To implicate collaborators and raise their awareness of the CSR policy.

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## INNOVATIONS PRESENTED BY EXHIBITORS

### **Company: RTSYS – stand : F 65 –GICAN member**

Contact : Vidal TEXEIRA – 00 33 2 97 89 87 20 - [vteixeira@rtsys.fr](mailto:vteixeira@rtsys.fr)

#### **SONADIVE Sonar**

Launched by French firm RTsys, this new non-magnetic sonar device, equipped with innovative navigation and communication systems and featuring a large screen, is a valuable tool for divers searching for underwater objects. To assist divers in detecting and locating targets on the seabed in inshore and port areas (underwater munitions, wrecks, bodies, etc.), the French company RTsys, specialist in underwater acoustic systems, has designed an innovative, non-magnetic portable sonar, dubbed SonaDive. SonaDive is able to programme and memorise missions. Its advanced navigation system comprises a surface-deployed GPS and a Doppler Velocity Log. During tests carried out with bomb disposal divers, SonaDive proved to be easy to use, in particular thanks to its large 12-inch screen and its communication system between two devices or with a touchscreen tablet for a user at the surface. Following its release just a few months ago, the first SonaDive devices have been delivered to the French Navy, who are convinced of this new system's potential.

#### **COMET Drone**

Developed by RTsys company based in Caudan, the COMET drone is the result of a four-year development combining acoustics and underwater robotics. AUVs (Autonomous Underwater Vehicles) proved their efficiency for various applications such as Research, Defence or in the Oil&Gas field. The COMET drone meets the current demand of a market facing issues in terms of weight and size, speed and autonomy, positioning, recovery and re-deployment. Indeed the drone can speed up to 10 knots and weighs less than 35 kg. It can cover a 200 km distance on a single deployment at 3 knots thanks to its rechargeable batteries. Moreover COMET has a 20 hours autonomy that makes it a hardy and efficiency tool. The COMET drone can also operate in swarm mode in order to achieve collaborative missions with other drones. These AUVs are able to communicate at a 1500 distance from each other improving the covering field. A wide range of sensors can be embedded on COMET AUV whose cutting edge capabilities can be used for many applications. The swarm mode has been approved by Pôle Mer and benefited from FUI funds. The ENSTA Bretagne, Bretagne Telecom and Williamson were our partners for this project.

### **KERSHIP – stand D15 –GICAN member**

Contact: Anne VERCHERE – 00 33 2 98 97 09 47 - [a.verchere@piriou.fr](mailto:a.verchere@piriou.fr)

#### **OPV 45**

Compact, robust and with a high operational potential the OPV 45 is KERSHIP's response to law enforcement operations at sea thanks to its increased flexibility, remarkable performances, good sea keeping qualities and a reduced overall ownership cost. It is the ideal solution for ensuring surveillance and strategic presence in coastal zones and EEZ. .

**EXAVISION – stand B15**

Contact: Eric NASCIMBEN – 00 33 4 66 74 66 00 - [nascimben@exavision.com](mailto:nascimben@exavision.com)

**OMNICAM LONG RANGE**

The OMNICAM LONG RANGE offers day and night thermal imaging surveillance and protection systems: the modular solutions range is dedicated to long-range day / night surveillance for borders, coastlines, harbours and maritime areas. The solution combines high level optronic motorized sensors linked to a radar detection system and managed by image digital processing software. A combination of the latest innovations have been used to position OMNICAM LONG RANGE at the leading edge of technology: - Visible and near infrared spectrum; - High-sensitivity sensors; - Extra-lighting thanks to near infrared spectrum; - Cooled and uncooled high resolution thermal imager.

**MOS 400- FHD /Z3-SB**

MOS 400- FHD /Z3-SB assembly is a smart surveillance sensor featuring within the same product: the advantage of complementary solutions of high resolution CMOS and uncooled thermal sensors, associated with smart projector, fitted on a Pan & Tilt. This gives the user the guarantee of performing reliable day and night surveillance with the capacity to recognize and identify a human target at around 400m. Thanks to the latest full HD sensor, the camera delivers more accurate videos with embedded digital image stabilization. The operator can also use the thermal camera with its continuous optical zoom at the same time as the day and night camera its precise zoom for identification.

**A.ST.I.M. SRL - stand K 94**

Contact: Elisabetta MINGHELLI - 00 39 (0) 54 44 71 645 - [eminghelli@astim.it](mailto:eminghelli@astim.it)

**THERMONAV® DEVS MK3 SAR**

THERMONAV® DEVS MK3 SAR is an advanced naval mission system for emergency management and search and rescue operations in quick and reliable time, increasing the overall operational capability of the ship. An ideal choice for special forces (SOF), landing forces, SAR and patrol boats.

**CNIM – stand D12 – GICAN member**

Contact: Juliette DUAULT - 00 33 1 44 31 11 00 - [juliette.duault@cnim.com](mailto:juliette.duault@cnim.com)

**CNIM L-CAT SHORE-TO-SHORE**

Its trademark shape-shifting architecture has met with full operational success since its inception in the French Navy in 2011 for ship-to-shore applications. The only amphibious craft combining load capacity, speed, and extended beaching capabilities at an affordable user cost, CNIM's L-CAT is now available in a dedicated Shore-to-Shore variant tailor-made for regional theatre applications.

**VOITH TURBO France - stand C 11 –GICAN member**

Contact : Christophe BRUON - 00 33 1 48 15 69 00 - [christophe.bruon@voith.com](mailto:christophe.bruon@voith.com)

**VOITH LINEAR JET VLJ**

The VLJ combines the best elements of two existing technologies – conventional screw propellers and water jets. Low installation complexity, low sensitivity to marine growth, sustained high efficiency across the vessels' speed range and high bollard pull are benefits in common with conventional screw propellers.

Reduced vessel draft, the ability to reach high speeds with high efficiency and low noise and vibration levels are benefits in common with water jets. Navy and coastguard operations require flexibility. The VLJ delivers this with continued high efficiencies at loitering speeds and at top speeds up to 40+ knots. The enhanced sailing range and mission capabilities will serve the vessel's versatility and usability. Low marine growth sensitivity maintains performance at a continued high level. The VLJ discharge under the waterline reduces the acoustic signature. Innovation award VESSEL OF THE FUTURE 2016.

**HULL VANE BV - stand C 40**

Contact: Bruno BOUCKAERT - + 31 317 425 818 - [b.bouckaert@hullvane.com](mailto:b.bouckaert@hullvane.com)

**HULL VANE**

The Hull Vane is an energy saving & (passive) seakeeping device for fast displacement ships, such as OPVs, Corvettes and Frigates. Its effectiveness has been proven during back-to-back sea trials and ranges from 10 to 15% for this type of ship. When sailing in waves, the pitching and yawing motions are reduced by 10 to 20%, improving the comfort on-board and the safety of helicopter landing operations. The Hull Vane is the most effective way to reduce a navy's dependency of fossil fuels and its emissions of CO<sub>2</sub>. The payback period for naval ships is often less than one year. The Hull Vane was invented by Dr. Ir. Pieter van Oossanen (NL) and it is patented worldwide.

**BARILLEC SAS – stand D22**

Contact : Maurice BUTTET : + 33 2 98 50 12 12 – [marine@barillec.fr](mailto:marine@barillec.fr)

Energy efficiency of vessels: Barillec unveils its marine application SmartShaft® at Euronaval. Barillec marine is currently developing an innovative concept for optimising propulsion systems and energy production, for all types of vessel function. This new concept, specifically studied for patrol boats, will be presented at the occasion of Barillec marine's first participation in Euronaval.

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## GICAN ITINERARY

Exhibitors and members of the GICAN (French Marine Industry Group) are also taking centre stage at the exhibition:

ADES TECHNOLOGIES	B8-C9
Advanced Aerodynamic Vessels (A2V)	B8-C9
ALYOTECH	B8-C9
AMERIS	C15
AREVA TA	F16
AUTOMATIC SEA VISION	L92
AVON COMMUNICATIONS	E65
BRETAGNE POLE NAVAL	B22-C25
BUREAU VERITAS	E60
COUACH	E17
CHANTIER NAVAL DE MARSEILLE	B26-C35
CHANTIERS PIRIOU	D15
CILAS	B27
CNIM	D12
CMN - CONSTRUCTIONS MECANIQUES DE NORMANDIE	K84-L85
CNM-MCO	E67
CS SYSTEMES D'INFORMATION	E10
DASSAULT SYSTEMES	E58
DCI - DEFENSE CONSEIL INTERNATIONAL	E4 -F5
DCNS	F74-H85
DIGINEXT	E10
ECA GROUP	F70 - H73
EDEN	B11
EFINOR	C1
ENSIVAL MORET FAPMO	H74
FACTEM	E19
FCE	B8 -C9
FIVA - GROUPE FIVA	C3
FOURE LAGADEC MARINE	B7
MINERVA GROUPE	B8-C9
HGH SYSTEMES INFRAROUGES	D14
HUTCHINSON	H76
IRTS	B11
IXBLUE	F64-H65
JEUMONT ELECTRIC	E8
JOHNSON CONTROLS INDUSTRIES	F23
LACROIX	F81
MAN Diesel & Turbo	F90
MARINELEC TECHNOLOGIES	B22-C25
MBDA	F86-H89
MOBILIS	B26-C35
MUSTHANE	E54
NEREIDES	H72
NEXEYA	D11

NEXTER SYSTEMS	F7
OCEA	E14
ODAS	B3
POLE MER MEDITERRANEE	B26-C35
PROLARGE	B8-C9
RAIDCO MARINE	D7
RELLUMIX	B8-C9
RTSYS MARINE SYSTEMS	F65
SAFRAN ELECTRONICS & DEFENSE	E26 -F35
SBS INTERACTIVE	E69
SCHNEIDER ELECTRIC	F25
SEGULA TECHNOLOGIES & CONSULTING	B14
SIGNALIS	B8-C9
SILLINGER	C13
SIREHNA	B26-C35
SNEF	H97
SOCARENAM	G5
SOCITEC Vibrations	D66
SOFRESUD	H94
SOPHIA CONSEIL	B8-C9
S.R.I.G.	B8 -C9
THALES	H84-J85
THEMYS	H94
UFAST	E22
VOITH TURBO	C11
ZODIAC MILPRO	C4-D5

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## **EURONAVAL TROPHIES** **5<sup>th</sup> edition**

The EURONAVAL 2016 Trophies are designed to promote innovative products and services presented by exhibitors in sectors covering naval defence and maritime safety and security. These Trophies will be awarded during the exhibition inauguration at 10.00am on Tuesday October 18th 2016 in the conference hall.

### **The three Trophies for 2016: two EURONAVAL awards and one GICAN award**

#### **Extract from the regulations:**

- 1- The two "EURONAVAL awards"** are open to all EURONAVAL exhibitors, both direct and indirect (via a collective stand).
- 2 - The "GICAN award"** is open only to French direct and indirect exhibitors, SMEs/ mid-tier companies (less than 500 employees - no more than 25% of capital owned by a large industrial group) and GICAN members.
- 3 -** In these three categories, exhibitors may submit materials as well as services or software.

#### **2016 themes for each award:**

- 1 - EURONAVAL award:** Drone – robotics – autonomous systems
- 2 - EURONAVAL award:** Conceptships - Vessel for the future – Biomimicry
- 3 - GICAN award:** Digital– virtual & augmented reality & simulation

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## EURONAVAL BtoB MEETINGS

**Coorganised by:**



**Location: Stand F117**

**Dates and times:**

19th and 20th October 2016: from 10.00am to 5.00pm  
 21st October 2016: from 10.00am to 12.00pm

More information: [www.euronaval2016businessmeetings.com](http://www.euronaval2016businessmeetings.com)

A member of the Enterprise Europe Network (EEN), the Paris Ile-de-France CCI organises business meetings in partnership with Euronaval. These are customised, targeted, one-to-one meetings lasting 35 minutes.

Enterprise Europe Network was established by the European Commission and is the first ever European network of information and support for businesses, to accompany them in their international development and innovation strategy.

Promotion of the Business Meetings is ensured by appeals to the 53 partner countries of Enterprise Europe Network. A partnership that will help identify key accounts, contractors and potential partners for your company in the respective countries.

This service is entirely free of charge for exhibitors and will allow them improve their, to identify targeted interlocutors according to the skills, know-how and/or new commercial and technical partners they seek.

In 2014, more than 600 business meetings were organised.

## 8o MEDIA PARTNERS

More details at <http://www.EURONAVAL.fr/fr/presse/partenaires-medias>

<b>AFRICA</b>
<b>West Africa</b>
West African Security
<b>NORTH AMERICA</b>
<b>Canada</b>
CDR Canadian Defence Review
<b>USA</b>
Defence News International
Ocean News & Technology
Sea Technology
Defence Technology International
<b>ASIA</b>
<b>Australie</b>
Defence Connect
Defence Review Asia
<b>Chine</b>
Armada International
Asian Military Review
<b>Inde</b>
Asian Defence Technology
Chanakya Aerospace, Defence & Maritime Review
Chanakya Show Daily
DSI India
Force
Geopolitics
Indian Defence Review
Indian Defence Yearbook (2014)
Indian Military Review
Indian Military Review
South Asia Defence & Strategic Review
VAYU Aerospace and Defence Review
India Strategic
<b>Malaisie</b>
Asian Defence Journal
<b>Singapour</b>
Asia Pacific Defence Reporter
<b>EUROPE</b>
<b>Belgique</b>
Navy Recognition
<b>France</b>
Aeromorning
Air & Cosmos
Commando Magazine
Defense Leaders
European Defence Review
le marin
M.I.F.A.
Magazine des ingénieurs de l'armement
Marine & Oceans
Opérationnels SLDS
Opérationnels SLDS
S&D Mag Sécurité & Défense Magazine
Submarine Magazine
www.operationnels.com
www.sldmag.com
DSI
<b>Allemagne</b>
Al Defaiya
Europäische Sicherheit & Technik

European Security and Defence
Marineforum
Military Technology
Naval Forces
PLUS Blog
<b>Grèce</b>
Euroatlantic Defence
Greek Defence News
<b>Italie</b>
Ship2Shore
<b>Espagne</b>
FAM Fuerzas Militares del Mundo
Fuerzas de Defensa y Seguridad
Infodefensa
World Naval Forces
<b>Pays bas</b>
ASD News
<b>Royaume-Uni</b>
Defence Global Publication
Defence Helicopter
DPI Defence Procurement International
Jane's
Jane's Defence Weekly
Jane's Navy International
Maritime Security International
MSR Maritime Security Review
Warship Technology
IHS Jane's
International Maritime & Port Security
<b>MIDDLE-EAST</b>
<b>Israël</b>
Defence Update
Israel Defence
<b>Liban</b>
ADJ Arab Defence Journal
Defence21
Tactical Report Weekly
<b>Lybie</b>
Al Mussalh
Middle East and North Africa
SD Arabia Weekly
Sea News Turkey
<b>Turquie</b>
Defence Turkey
MSI Turkish Defence Review
<b>Emirats Arabes Unis</b>
Nation Shield
<b>OCEANIA</b>
<b>Australie</b>
Australian Defense Business Review
<b>RUSSIA</b>
Natsionalnaya Oborona
<b>SOUTH AMERICA</b>
Argentina
El Snorkel
Brazil
Folha Militar
Segurança & Defesa
Tecnodefesa

## ORGANISERS AND PARTNERS

### EURONAVAL is a GICAN event:

Under the patronage of	Ministry of Defence
With the support of	DGA French Navy General Secretariat of the Sea
Organised by	SOGENA
With official partners	CMN DCNS iXblue LOCKHEED MARTIN

### THE GICAN:

The GICAN (French Marine Industry Group) is the long-time organiser of EURONAVAL, via its subsidiary SOGENA. The GICAN groups together shipyards, systems providers, equipment manufacturers, subcontractors, engineering companies, naval architects and all those companies that contribute to civil naval construction, naval defence construction, safety and security, marine renewable energies, promotion and protection of oceans and coastal and port infrastructures.

The GICAN today federates more than 160 French companies, and represents a naval industry with a turnover worth 8,5 billion euros and 40,000 direct jobs. It contributes to the French trade balance sheet, with 45% of its activity devoted to export.

**President:** Patrick Boissier  
**Delegate General:** Hugues du Plessis d'Argentré

## PRESS SERVICE

### Opening dates and hours:

Welcome coffee for the Press: Monday 17th October at 2.00pm at the Press service

	Press
Monday 17th October 2016	12.00pm - 5.30pm
Tuesday 18th October 2016	9.00am - 5.30pm
Wednesday 19th October 2016	9.00am - 5.30pm
Thursday 20th October 2016	9.00am - 5.30pm
Friday 21st October 2016	9.00am - 4.00pm

### Your Press Contact for EURONAVAL:

Anne Massot – + 33 6 16 19 12 20 – [amassot@EURONAVAL.fr](mailto:amassot@EURONAVAL.fr)

### 1. Registration procedure: Online pre-registration is obligatory.

Link: <http://www.mybadgeonline.com/euronaval/defaultPresse.aspx>

Accreditation can be requested online on the website by communicating your press card number. Journalists without a press card are asked to send an accreditation request on headed company paper to Anne Massot.

Journalists who have registered online can obtain their press badge at the exhibition entrance on presentation of ID and their E-Badge.

**Due to security constraints, all visitors, exhibitors, media and service providers must be preregistered in order to access the exhibition.**

**If you are not preregistered 48 hours at the latest prior to the date of your visit, it will not be possible to access Euronaval.**

### **3. Services for journalists at the press Service:**

#### **Documents available:**

EURONAVAL exhibition press kit and catalogue  
Documentation about the exhibitors - press files, catalogues...  
Exhibition agenda and specific Events  
Exhibition photos on request

#### **Work area reserved for journalists with their press accreditation:**

More than 25 work stations  
High speed internet connection, printer, WiFi  
Lockers  
Cloakroom available during exhibition opening hours  
Recreation room with refreshments

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## PRACTICAL INFORMATION

Access to EURONAVAL is free of charge but badges must be worn (visitors and press)

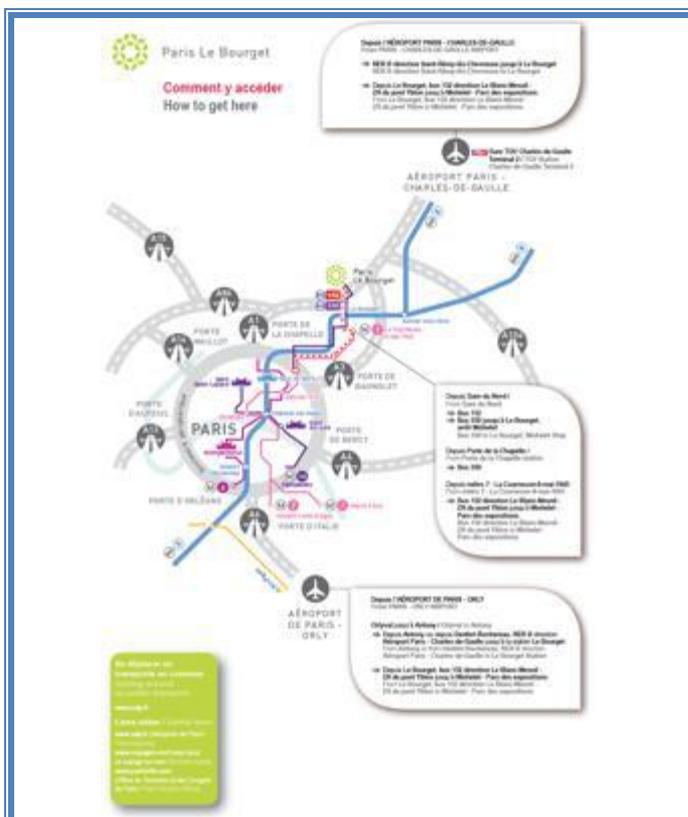
### How to get there:

#### By public transport

- RER (B line) from "Châtelet", "Gare du Nord", "Aéroport Charles de Gaulle" take the RER B and get out at "Le Bourget". Then take the exhibition's free RATP shuttle or the RATP bus n° 152 and get out at "Michelet - Parc des Expositions".

- Metro Take line 7 to "La Courneuve 8 Mai 1945", then take the RATP bus n°152 and get out at station "Michelet - Parc des Expositions". Or take line 12 to "Porte de la Chapelle", then RATP bus n°350 and get out at "Michelet - Parc des Expositions".

- By road: Access via the A1, then take exit 4 bis or 5 "Le Bourget". To leave the exhibition, there is a taxi rank available at the exhibition.



NOTES