



## Conference Sessions

### INAUGURATION

**By the French Defence Minister (by invitation only)**

### CHIEF OF STAFF OF THE FRENCH ARMY CONFERENCE

**(By invitation only)**

### LAND OPERATIONS FORUM

#### Robotics in combat

**By the Technical Section of the Army (Section Technique de l'Armée de Terre or STAT)**

Conference 1: Use of automated systems (control/security/effects).

Conference 2: Reconnaissance and penetration in complex environmental conditions (Urbanised Zone/CBRNe/cave/tunnel).

Conference 3: Parking defence (sensor/sentinel robot/biometrics/automation).

#### Air combat, artillery and UAVs

**By The Light Aviation Command of French Army (Commandement de l'Aviation Légère de l'Armée de Terre or ALAT) and the Artillery College**

Conference 4: Low level air-coordination (firing, airmobile combat, drones du contact) and automatize systems.

With the significant increase in the elongation of artillery fires and the development of aviation, the battlefield entered during the 1st World War in the three-dimensional era. From now on, no more major engagement of troops on the ground can be conceived without recourse to the 3rd dimension.

In addition, the emergence of new weapon systems such as UAVs, the number of contributor in the 3rd dimension (I3D) has not stopped growing, generating de facto permanent interactions and requiring a strong interconnection between the means deployed on the ground and those using 3D. Thus, the need for coordination in the third dimension gradually became apparent.

Conditioning the freedom of action of the joint or joint tactical leader, the ability to coordinate all the stakeholders in the third dimension has become a key factor in the success of modern operational engagements.

Conference 5: Anti-UAV fight.

Reserved only a few years ago to modern armies for use at a strategic or operational level, UAVs have developed at an unprecedented rate due to technological progress and in particular miniaturization, allowing everyone to acquire a low-cost vector.

Confirmed during the over flights of sensitive sites (nuclear power stations, international summits ...) in recent years and especially by the Levant use of "commercial" UAVs by terrorist organizations such as DAESH or HEZBOLLAH, diversion of mini or micro civil UAVs for malicious uses (surveillance, propaganda ...) and aggressive (explosive charge release, IED, ...) is a reality now.

The fight against UAV therefore appears as a priority for the armies, both for the preservation of their units deployed in operations and for the protection of their sensitive facilities (bases, depots, barracks ...) on the national theatre. From the detection to the neutralization, or even the destruction of suspicious UAVs, it is a whole system (environment, procedures, means ...) that should be put in place.

Conference 6: What place for new UAV segments within the Army?

Already equipped with tactical UAVs, intelligence drones in contact, Army will renew in the near future its two fleets. It is also currently equipped with short-range observation UAVs.

In the light of the feedback of the recent commitments in the Sahara/Sahel band and the Middle East, the proliferation of the "off-the-shelf" offer and the ever-increasing perspectives of evolution (endurance, miniaturization ...) and new capabilities (armaments, improved sensors, automation, ...) new needs appear.

Budget constraints on the one hand and the constraints of employment (3D coordination, integration in the battle space ...) and use (airworthiness, maintenance in operational conditions...) on the other hand, invite to wonder about the relevance and place of intermediate segments to respond in a coherent and long-term way to these new requirements.

## **Command and tactical intelligence**

### **By the Intelligence Command (Commandement du Renseignement or COMRENS)**

Conference 7: Tactical means of electronic warfare (EW).

The EW means provide a direct support to the force at the tactical level to monitor the different command and information systems, and to exploit more and more complex data. They have to be fitted to the ENY, its environment, as well as to any heterogeneous, hard and partitioned terrains. Acting in addition to other Intelligence components, they can cope indifferently with military, political, media and cybernetic issues. They have to be technically interoperable with the other weapons systems. They should ensure the monitoring of the adverse navigation and location systems. They have to be complementary to observations led from third dimension (tactical drones, SIGINT, abandoned sensors...). They should as well neutralize or destroy any adversary command system by jamming operations, offensive numeric actions or denial of service attacks.

Conference 8: Artificial intelligence for the benefice of the tactical chief (big data/calculator).

The growing information flows and the induced data wall constitute a strong challenge for command regarding its future ability to better understand the tactical situation and to predict the next fights. Then, it is necessary to take benefit from progresses regarding nano and biotechnologies, artificial intelligence and cognitive sciences in order to dominate the adversary. Artificial intelligence allows the analytic treatment of information to fit it understandable despite its size and technical characteristics. We must reflect on automatic and accelerated processes of collection, crosscheck and redistribution of information. A process which has to be schemed with analysis and operational research layouts, as well as with modelling-simulation means with a powerful calculation ability available on the ground. A just balance has to be found between the indispensable contribution of technology and the ineluctable need of human analysis.

## **CBRN (Chemical, Biological, Radiological, and Nuclear)**

### **By the French High Committee for the Civilian Defence (Haut Comité Français pour la Défense Civile or HCFDC)**

What could be future CBRNe Threat over the next 10 years?

The French national response: strategic, operational, tactical and industrial (SGDSN - General Secretariat for Defence and National Security, CEA - French Alternative Energies and Atomic Energy Commission, Paris Fire Brigade, GIE Defence NBC/NBC Industry group)

The medical countermeasures challenge

New CBRNe Challenges

### **By IB Consultancy**

Three conferences.

### **By OUVRY**

ENCIRCLE – Improving European CBRNe resilience and capability to CBRNe.

To improve its resilience to new CBRN attacks and threats, the EU needs a specialized, efficient and sustainable industry, competitive on a less fragmented EU market and globally. Capitalizing on their experience in the CBRNe research and development and market and supply chain. The ENCIRCLE consortium is developing an innovative approach to reach this goal in a short to long term perspective so that SMEs and large industries can propose and invest in the best innovations on the CBRNe market.

## ECCO SYMPOSIUM

### By ECCO OFFSET

ECCO holds symposiums to bring together international trade experts. Attendees can catch up on the latest geopolitical issues as well as talk over topics of general interest relating to offsets, such as transfer of technology, compliance, insurance etc. We invite prestigious speakers from all over the world for them to share their thoughts and views about the present and the future of industrial participation.

Conference 1: Offsets for dummies.

Offsets are a growing phenomenon in international trade. As a way to develop national industry, it consists in forcing foreign companies to invest in the buyer's country in order to be allowed to sign a public procurement contract. About 130 countries require offsets when a foreign company wins a public tender. In 2016, more than 500 billion dollars in offsets were promised. In 2014, the top 7 offset markets, which include Saudi Arabia, UAE and India, are expected to generate over 60 % of obligations. These figures only concern aeronautics and defence but this phenomenon has widely spread to all sectors, including energy, transport, telecommunications and health. With this conference, ECCO would like to show you how these mechanisms can and will help you win public tenders abroad.

Conference 2: The evolution of the offset market and what the situation is today (charge for entry, registration by ECCO).

Conference 3: A success story of an offset project in the Middle East (charge for entry, registration by ECCO).

Workshops on the following topics:

- Transfer of technology,
- Compliance,
- Valuation of technology,
- Direct offsets vs. Indirect.

(charge for entry, registration by ECCO).

## SYMPOSIUM RELATED TO OVERALL OPERATIONS FUEL SUPPORT, FUTURE AND SUSTAINABLE SOLUTIONS FOR ENERGY TRANSITION PERSPECTIVES

By the Interprofessional Grouping of Logistics and Petroleum Equipment (Groupement interprofessionnel de logistique et d'équipements pétroliers (GILEP) and the French Army Fuel Service (Service des Essences des armées or SEA)

Round table 1

Operations fuel support: new needs in equipment in the field of mobility, protection and command and control (C2) in order to meet ever higher operations demands.

Round table 2

What innovations are needed to meet the challenge of the energy transition in the field of energy support for mobility of military equipment and theatres infrastructure.

## THINK TANK

### By the Foundation for Strategic Research

Conference 1: Hybrid Land Forces by 2035: Human, Machines and Proxies.

Actors and related capabilities for land warfare for 2035.

During the last two decades, the evolution of the strategic landscape has been characterized, on one hand by the rising of a post-westphalian world featuring a redistribution of power and a diversification of violent actors, on the other hand, by the rapid dissemination of technologies critical for the battlefield, particularly information technologies. Land domain is the primary warfighting domain materialising such evolutions. The brief will elaborate on these tendencies regarding land warfare and their likely evolutions over the next two decades.

Anti-Robotics Warfare: What Perspective?

After two decades of a large use of drones for military purposes, anti-drones fight is now becoming a reality. Do we have to follow the same path with the rise of robotics in the two coming decades? What anti-robot warfare would look like by 2035?

### By Synopia

Conference 2: The future of security cooperation in Europe.

The evolution of threats, Migratory flows, cyber defence, Brexit, EU cohesion.

Europe has been facing many threats that have made security a priority for its populations. Yet, the international organisations in charge of it seem to have failed in providing consistent answers to these threats, leading to a greater mistrust towards such entities. This situation is the result of a variety of factors, among which the absence of a common migratory policy, the slowness at which terrorism and transnational crime have been taking into account, and the lack of a strategic ambition at the EU level play a great role. Therefore, the relationship between national security and European cooperation has to be redesigned over the question of the accurate level of subsidiarity. This might be the condition to a modern and efficient security cooperation in Europe.

### By The Institute for International and Strategic Affairs

Conference 3: European defence fund and land defence industries: which possibilities?

The European Commission's proposal to launch a European Defence Fund (EDF) is a significant game-changer for the Common Security and Defence Policy (CSDP), and particularly for the European armament policy. On the one hand, the EDF will finance directly research in innovative defence products and technologies ("research window"), and on the other hand the Fund will finance European development and defence capabilities acquisition. The European Defence Industrial Development programme must be adopted in 2018 while obligations from Members States within PeSCo (Permanent Structured Cooperation) will be revealed this year. Moreover, the European Commission is going to start its work on the future 2021-2027 Multiannual Financial Framework (MFF). Faced with this situation, the purpose of the conference is to discuss about possibilities which could emerge with regards to the European Defence Technological and Industrial Base (EDTIB) in the land armament sector.

### By The French Institute of International Relations

Conference 4: Strategic Landpower in the 21st Century.

Although the first and foremost domain in the history of warfare, Landpower has long been dissociated from "strategic forces", as these generally refer to long-range and/or high-yield strike capabilities. This notion however, is now being challenged in the light of recent military engagements and the future operational environment. From the growing contest in air, sea and cyber commons to the renewed need for land-based reassurance and deterrence-related missions, not forgetting the persistent problem of stabilization and unconventional warfare, as well as the integrating challenge of multi-domain operations, time has come, to reassert the strategic value of land forces.

## AIR-LAND CONVERGENCE

### By Air&Comos

Conference 1: Helicopters

Conference 2: UAVs

## EUROPEAN DEFENCE AFFAIRS

By Air&Comos

Delivering consistency to the European capability development

2016 and 2017 saw a number of bold new initiatives in European defence cooperation, including the EU's Global Strategy, the European Defence Action Plan, the EU-NATO Joint Declaration, the Coordinated Annual Review on Defence, Permanent Structured Cooperation and the European Defence Fund. 2018 will be the year of implementation, with the European Defence Agency plays a central role in delivering on these initiatives and ensuring consistency among them for the benefits of Member States.

In an extensive interview, European Defence Agency Chief Executive Jorge Domecq will look at the updated priorities from the review of the Capability Development Plan (CDP) and the trial run of the Coordinated Annual Review on Defence (CARD), with a first report due in November 2018 which will give a snapshot of the European capability landscape and identify cooperation opportunities. He will discuss the progress made on Permanent Structured Cooperation (PESCO) and on the setting up of the European Defence Fund (EDF).

To illustrate the work of the European Defence Agency and its added value for Member States and the European defence industry, the EDA Chief Executive will look at the Agency's activities in the field of helicopters, which play an integral part in the sea, land and air operations of modern militaries. More specifically, he will highlight the EDA's work on Research & Technology in the field, including in unmanned systems, on improving common education, training and exercises, on standardisation and airworthiness, on operational support, and on security of supply.

## SECURITY FORUM

By S&D Magazine

Conference 1: Private security: towards an enhanced public-private cooperation.

State of play and reinforcement of public-private cooperation in matters of private security in France. What place and what role for private security in a changing world? What about equipment and arming of agents? What about our European and international friends? What about the European field?

Conference 2: Towards enhanced security and defence development and cooperation between the African continent and France?

What about the current cooperation between the African continent and France in matters of security and defence? What are the needs? What measures must be put in place, and at what level? What considerations on peace and security issues, faced with the challenges of stability and security in Africa? What role and utility for actions conducted in the Sahel? Situation and opportunities in the African market? What place for French economic players, and what strategy to be adopted to succeed on this continent?

Conference 3: Developing international cooperation in Cyberdefence and Cybersecurity.

Growing cyber threats are forcing states and international institutions to rethink their strategies and approaches. What reinforcement of international cooperation? What strategy for France? What cyber challenges for NATO, one month from the annual summit? What technological approaches and responses to cyber challenges?

Conference 4: Major risks and crisis management: Anticipation and cooperation in the face of increased natural and industrial risks.

Major risks are increasing, and no continent appears to be spared. France and its territories, the United States, South America and Asia are all confronted by the onslaught of natural elements. How to better anticipate and prepare for these devastating phenomena? What are the lessons learned, and what actions have been implemented in Japan? What feedback from the experience of the United States? What vision of the challenges in France? What cooperation, and what division of roles for the different players?

## ARTIFICIAL INTELLIGENCE

By Agueris

Artificial intelligence (AI) is an overall discipline which brings together information technology, mathematics, psychology, logic, and also often philosophy and belief. AI has developed in numerous sub-branches: games, robotics, language, technical-operational simulation... The Security and Defence fields are affected by this revolution, but beyond the fashion effect, what are the real stakes and effects produced by the AI in these domains? Several references personalities will come to expose their vision and will give to the audience a statement about it. Such topics as AI myths, security and defence applications, cyberwar and AI,... will be addressed. Some start-ups will present their AI developments.

## HOMELAND SECURITY

### By the Homeland Security Ministry

Conference 1: Security equipments and technologies for the 2024 Olympic and Paralympic Games

Plenary conference presenting the general organisation for the 2024 Olympic and Paralympic Games, the security needs for France, the Organising Committee for the 2024 Olympic and Paralympic Games (COJO in French) and the communities, the private sector expectations, and the opportunities for the security sector industries.

Conference 2: Population resilience in civil security crisis management in France

Conference 3: Artificial Intelligence and the inputs of data valorization in the public policies management

Conference 4: In contact with the population, cross-view between the homeland security forces and the armies

## DEFENCE ECOSYSTEM

### By Fabrice Wolf

Conference 1: The Defence with Positive promotion - a strategical stake for the defence industry

The Defence with Positive promotion is a pillar of the "Defence Socle project" demonstration. It shows that, for many European countries including France, the fiscal return on investment for defence equipment and R&D produced by the national industry is higher than 1. Unfortunately, this fact is often ignored by the defence planning, and there have been no deep studies for the long terms effects about the defence equipment investments. During the conference, we will demonstrate the core concept, and propose trails and hints to study and integrate this notion in the national and European defence projects.

Conference 2: The European Defence Socle - a new self-financed model for the European defense initiative

The European Defence Socle is a macro-economic model aiming to finance and organise the long term defence industrial activity with a public budgetary print equal to 0.

Once raised at the European level, it would allow financing the European defence project meanwhile enhancing the national BITD and leading to a progressive and mastered consolidation of the European defence industry. During the conference, we will expose the different items of the model (call for savings, leasing, defence cycle, obsolescence management plan, defence with positive valorization), study the possible amounts to finance, and how to integrate it in the existing European institutions.

## THE SECURITY-DEVELOPMENT CONTINUUM AND THE RESILIENCE

### By Expertise France

Conference 1: European Union & CBSD

Conference 2: Technical opportunities for peacekeeping operations

Conference 3: Three borders Liptako Gourma Zone - Introduction to ShieldAfrica

## EXHIBITORS CONFERENCES

**Exhibitors will promote their company, their products and/or their technologies on a topic of their choice (presentation of products or systems, launch of new products in pre-view...).**

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