

# The European Security and Defence Union

**“Where does Europe  
go from here,  
President Juncker?”**

For the EU 2015 could  
be a major turning point,  
but there is no time to lose:  
it is now or never.



## SMART ENERGY

Thinking through the energy change:  
smart energy becomes a reality in security and defence

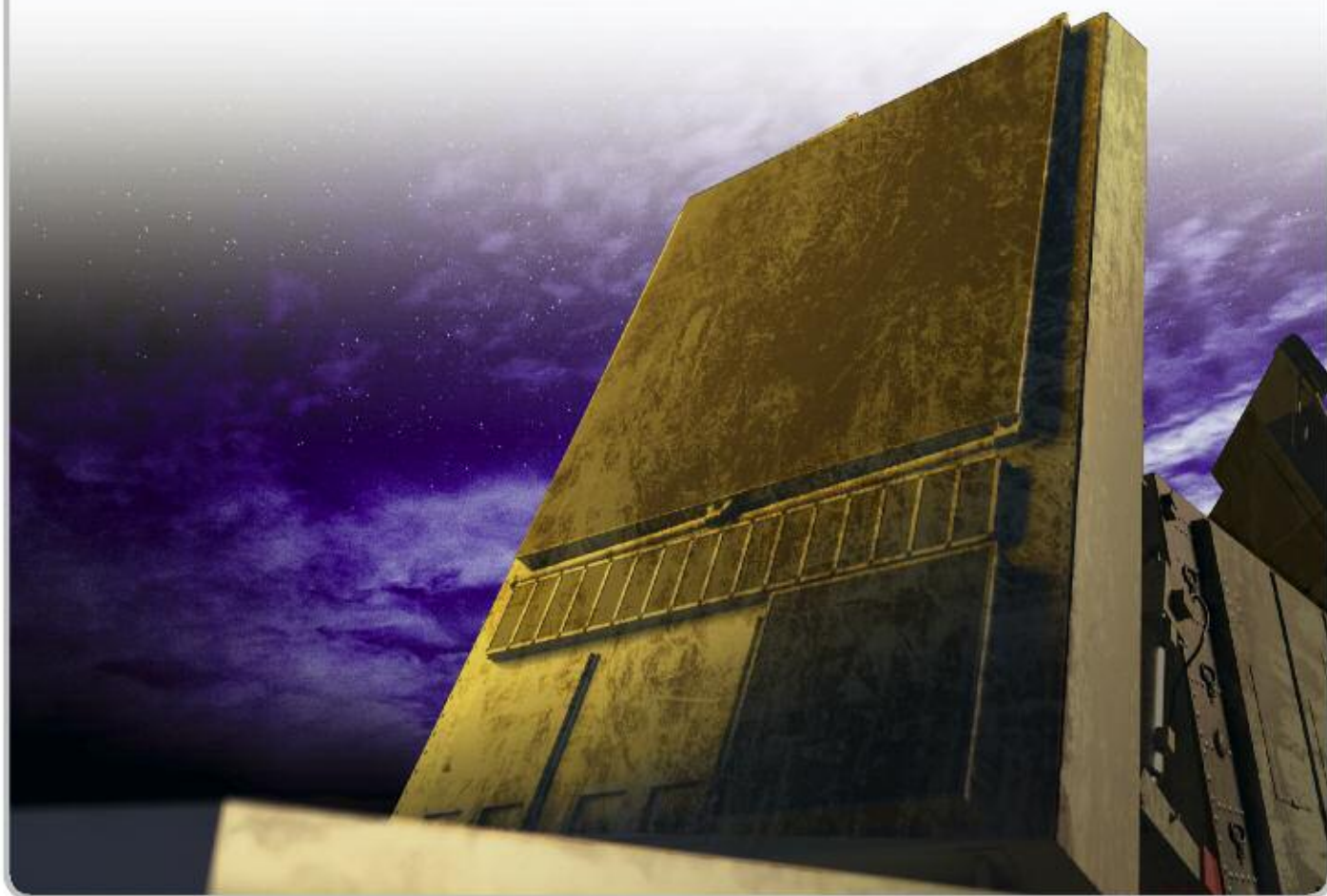
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# PATRIOT

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# After the terror shock – what lessons have we learned?

At the start of the year terrorists committed an act of unspeakable brutality. The murder of the *Charlie Hebdo* team and the shooting of Jewish fellow citizens and a policewoman in Paris have left Europe reeling from the shock. For anyone who values the freedom of the press these acts are an attack on freedom itself. Citizens of Paris and other European cities took to the streets on 11 January 2014 in a demonstration of solidarity and sympathy with France and the victims, and in defence of freedom.

Weeks later France is still struggling to come to terms with these events, and in particular with the fact that the terrorists, self-proclaimed activists on behalf of al-Qaeda Yemen and the extremist group Islamic State, were French citizens who had grown up in France.

Notwithstanding the French State's fundamental attachment to the principle of secularism, it can no longer put off engaging with the issues of racism and religion, immigration and integration, the French suburbs and the radicalisation of young people, and prisons and the resocialisation of inmates. This will leave painful rifts in the population.

France is beginning to realise how hard it is to transmit its "Republican" values to citizens who feel abandoned by the Republic. It came as a surprise to the French to see its problematic suburbs so under-represented in demonstrations that rallied several millions of people all over the country and the refusal of some students from schools in those areas to respect a minute's silence to honour the victims.

But this has been a wake-up call for other European nations too. It has brought home to them that conflicts outside Europe are a threat to them as well. While much that is true for France doubtless applies to other European countries too, there are also differences that make it difficult to define common rules and measures at European level.



Photo: © Hofmann, Adelsheim

Hartmut Bühl

Terrorism in Europe is where geopolitical circumstances combine with societal issues such as failed integration and the radicalisation that this often trails in its wake.

Nevertheless the European Union must try to make rapid progress towards a common approach against radicalisation and terrorism, paying close attention to the issues of immigration and above all the integration of foreign citizens.

An approach based on the strong arm of the state alone cannot give lasting results: only one that treats the issue as a problem of civil society has any chance of success. And only if citizens are prepared to integrate "foreigners" can radicalisation be prevented and a breeding ground for terrorism eradicated. This must be the first step in a long-term effort. In the meantime the state institutions must not let themselves be impeded in their daily work by overzealous efforts to prevent terrorist attacks.

Hartmut Bühl, Editor-in-Chief

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The European – Security and Defence Union  
ProPress Publishing Group Bonn/Berlin

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**Publishing House:** ProPress Verlagsgesellschaft mbH

**President ProPress Publishing Group:** R. Uwe Proll

**Layout:** SpreeService- und Beratungsgesellschaft mbH, Berlin

**Print:** Heider Druck GmbH, Bergisch Gladbach

The European – Security and Defence Union Magazine is published by the ProPress Publishing Group. The ProPress Publishing Group is the organizer of the congress on European Security and Defence (Berlin Security Conference), the European Police Congress and the European Congress on Disaster Management.

For further information about the magazine and the congresses please visit  
[www.magazine-the-european.com](http://www.magazine-the-european.com)

**Subscription:** This magazine is published in Brussels and Berlin.

The copy price is 16 Euro: 3 copies for one year: 42 Euro (EU subscription)  
3 copies for one year: 66 Euro (International subscription)  
including postage and dispatch (3 issues)

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A magazine of the Behörden Spiegel Group





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Defence Industries, Ministry  
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- 3 Editorial
- 6 News

## The European Union

- 8 *Jean-Claude Juncker, Brussels*  
**My vision of Europe**
- 10 *Jean-Dominique Giuliani, Paris*  
**The horizon for the European Union**  
The Juncker Commission has a real chance
- 32 *Infographic*  
**The Juncker Commission 2014–2019**

## Security and Defence

- 11 *Jiří Šedivý, Brussels*  
**New unrest and instability on Europe's periphery**  
Russia is no direct military threat
- 13 *Alexa Keinert, Berlin*  
**The Minsk Agreement**  
Documentation
- 14 *Barbara Lochbihler MEP, Brussels/Strasbourg*  
**Armed drones – high time for an ethical and legal discussion**  
A critical review of Europe's intentions
- 15 *Thomas Homberg, Schrobenuhausen*  
**MEADS – a unique opportunity for Germany, the EU and NATO**  
There is need for a rapid political decision
- 16 *Lt General Wolfgang Wosolsobe, Brussels*  
**Military-civil synergies in CSDP – examples and opportunities**  
In line with the comprehensive approach

## Armaments Cooperation

- 18 *Dr Christina Balis / Lars Miethke, Paris/Washington*  
**German defence deserves a 21<sup>st</sup> century industrial strategy**  
A coherent defence industrial strategy is lacking
- 20 *Dr Markus A. Zoller, Bern*  
**Compatible systems for cooperation**  
Identifying and investing in synergies
- 21 *Sedat Güldogan, Ankara*  
**Turkey's Defence Industry – a reliable partner for cooperation**  
Striving for cooperation

## Interviews with leading Turkish Defence Industries General Managers/Board Members

- 24 *Muharrem Dörtkaşı, Ankara*  
**There is room for expanding cooperation between the EU and Turkey**  
Investment in new technologies
- 26 *Dr Eyüp Kaptan / Selçuk Yaşar, Ankara*  
**ROKETSAN – a global defence industry player for indigenous missile systems**  
Fostering cooperation and partnership
- 27 *Documentation*  
**Speech of Dr İsmet Yılmaz, Minister of National Defence, at the BSC 2014**
- 28 *Ahmet Hamdi Atalay, Ankara*  
**A broad spectrum of capabilities is opened up to global cooperation**  
The national contribution is the basis
- 30 *Alexa Keinert, Berlin*  
**EU-Turkey relations**  
Documentation



- 38** *Hartmut Bühl, Brussels*  
**Some thoughts on the trends in smart energy**  
 The keyword is energy efficiency
- 39** *Sorin Ducaru, Brussels*  
**Smart Energy for Military Forces is becoming a reality**  
 Reversing the trend of energy waste
- 40** *Simone Weber, Bonn*  
**Mobile Solar Energy Systems presented at the NSPA Green Day 2014**  
 Mobility and comfort
- 41** *Samuel Ansorge/Martin Schuster, Winterbach*  
**Mobile Power Supply Management Systems for permanent and temporary use**  
 Hybrid and scalable
- 44** *Alexander Zotos, Greece*  
**Hybrid Smart Energy Systems**  
 The hybrid generator makes the difference
- 45** *André Håvre, Paris*  
**Smart energy for secure communications**  
 Autonomous capabilities
- 46** *Nannette Cazaubon, Paris*  
**Photovoltaic power available in a flash**  
 Innovative stand-alone or go-with products
- 48** *Karl Peter Klostermann, Duisburg*  
**Alternative methods for the production of energy using mobile systems**  
 The smart development of photovoltaic systems
- 49** *Dr Susanne Michaelis, Brussels*  
**NATO continues making Smart Energy smarter**  
 Reducing fuel consumption in camps



39

**Sorin Ducaru,**  
 Assistant Secretary General,  
 Emerging Security Challenges  
 Division, NATO, Brussels

## NATO

- 52** *Harald Kujat, Berlin*  
**The end of the ISAF mission and Afghanistan's future**  
 Doubts about the success of the undertaking
- 54** *Dr Klaus Wittmann, Berlin*  
**NATO – new look, original tasks, and reflections about the future**  
 New thinking in Security and Defence Policy
- 56** *Documentation*  
**Framework for NATO-Industry Engagement**

## Conference Reports

- 35** *Mandy Rizzo, Brussels*  
**TechNet Europe Paris 2014**
- 43** *Nannette Cazaubon, Paris*  
**IESMA 2014 Vilnius**
- 51** *Emmanuella da Sylva, Paris*  
**CATO Final Conference Brussels**
- 59** *Andy Francis Stirnal, Berlin*  
**13<sup>th</sup> Berlin Security Conference (BSC)**
- 61** **List of Authors 2014**

*"The European – Security and Defence Union" is the winner of the 2011 European Award for Citizenship, Security and Defence*



## EUROPEAN DEFENCE AGENCY

## A change at the top of EDA

(ed/hb, Brussels) On 31 January 2015 Claude-France Arnould left the European Defence Agency (EDA), on which she left her mark like no other CEO before her.

Her main message to the nations was that they must invest in capabilities and technologies in order to shape a credible European defence, using the EDA as a coordination tool.

She succeeded in turning the EDA into an intergovernmental instrument capable of generating the necessary synergies for Europe from the defence requirements of 28 nations. With her structural reform she endeavoured to turn the Agency into a powerful body capable in the future of merging a top-down approach with bottom-up initiatives.

It is to Ms Arnould that the EDA owes its cooperation agreement with OCCAR, a pragmatic arrangement negotiated halfway through her term of office in order to ensure better management of programmes from the moment of their creation.

*The European – Security and Defence Union* wishes Ms Arnould every success in her future endeavours and all the best to her successor Jorge Domecq.



Claude-France Arnould

Photo: © EDA

## New CEO Jorge Domecq

(ed/nc, Paris) After taking up his duties as new Chief Executive on 2 February 2015, Mr Jorge Domecq, a senior Spanish diplomat, said:

*“It is an honour and privilege for me to take over the position of Chief Executive of the European Defence Agency as we enter into its second decade. European defence cooperation gained momentum in recent years but there is still a lot to be done. I will continue establishing EDA as a reliable agency at the service of Member States and will further foster cooperation with other EU institutions and external partners, notably NATO.”*



CEO Jorge Domecq with High Representative Federica Mogherini, Brussels, 4 February 2015

Photo: © Council of the European Union

Up until his appointment as the new CEO of the EDA, Jorge Domecq was Ambassador/Permanent Representative of Spain to the Organisation for Security and Cooperation in Europe (OSCE) and prior to that, the Ambassador of Spain to the Republic of the Philippines. Since the start of his diplomatic career in 1985, Jorge Domecq has held several positions within the Spanish Ministry of Foreign Affairs, including that of Director General for the United Nations, Global Affairs and Human Rights and Director General for Multilateral Affairs.

## Publication of Annual Report

The latest EDA Annual Report was published on 9 February 2015.

web: <http://tinyurl.com/pccvfc>

## EUROPEAN COUNCIL

## European Council statement on counterterrorism

At the informal meeting of the Heads of State and Government on 12 February 2015 in Brussels, EU leaders issued the following statement on counterterrorism (excerpts):

“Europeans have reacted with deep sorrow and strong unity to the recent terrorist attacks in Paris. These attacks targeted the fundamental values and human rights that are at the heart of the European Union – solidarity, freedom, including freedom of expression, pluralism, democracy, tolerance and human dignity. All citizens have the right to live free from fear, whatever their opinions or beliefs. We will safeguard our common values and protect all from violence based on ethnic or religious motivations and racism.

This also means fighting the enemies of our values. We will further reinforce action against terrorist threats, in full compliance with human rights and the rule of law. (...) Over recent weeks the Council has stepped up its work in the fight against terrorism. The European Union will take this work forward promptly (...). In April the Commission will present a proposal for a comprehensive European Agenda on Security. The Council will report on the detailed implementation of these orientations by the June European Council.”



Demonstration in Paris a few days after the terrorist attacks, 11 January 2015

Photo: O. Ortelpa, CC BY 2.0, flickr.com

web: <http://tinyurl.com/oefnnjw>

## EU PRESIDENCY

## Latvia's Presidency Programme

(ed/nc, Paris) On 1 January 2015, Latvia took over from Italy as the President of the Council of the European Union for the next six months. The Latvian Presidency will focus on three overarching priorities: Competitive Europe, Digital Europe and Engaged Europe. As regards the Common Security and Defence Policy (CSDP), the Programme states:

## Capabilities

"Latvia will contribute to the preparations for the European Council of June 2015 and will underline the importance of continued progress on security and defence issues. In this regard, Latvia deems it important to move forward the work towards better, more efficient civilian and military capabilities, including the EU Battlegroups, and better civil-military cooperation in addressing the Union's maritime security risks and threats, and will also support enhanced civil-military cooperation when it comes to improving cyber defence awareness and protection. Latvia will also draw attention to the challenges faced by and opportunities that are open to the European defence industry."

## Partnerships

"Latvia will highlight the crucial nature of cooperation with partners and organisations, particularly the North Atlantic Treaty Organisation (NATO), the United Nations and the United States (US). Close cooperation with NATO in areas such as capability development, military rapid response, and training and exercises in a way that is both coordinated and complementary requires particular attention. Latvia will emphasise the strengthening of the partnership and promote cooperation on emerging security challenges between the EU and the US. Latvia will also call attention to the dialogue and cooperation with the Eastern Partners in the context of the CSDP."

## Counterterrorism

"Regarding external aspects of counterterrorism, the Presidency will particularly engage in addressing the issues of foreign fighters, the financing of terrorism, radicalisation, and recruitment for terrorism."



Inauguration of the Latvian EU Presidency, 12 January 2015

Photo: © Council of the European Union

**web:** The programme is available on the Latvian Presidency website: [www.eu2015.lv](http://www.eu2015.lv)

## EUROPEAN COMMISSION

## Michel Barnier becomes Special Adviser

(ed/nc, Paris) On 17 February 2015, Jean-Claude Juncker appointed France's Michel Barnier as Special Adviser on European Defence and Security Policy. In his new role, Mr Barnier will help prepare the contribution of the President of the European Commission to the European Council's work on European defence policy. President Juncker said: "Michel Barnier has vast experience in the field of defence and security and is the right man to advise me and also the High Representative/Vice-President Federica Mogherini on these important matters for the future of Europe." Mr Barnier served as European Commissioner in the Prodi (1999–2004) and Barroso II (2010–2014) Commissions. From 2004–2005 he was Minister of Foreign Affairs in the French Government. In the Barroso II Commission, he was one of those leading the "Defence Task Force" and oversaw the European Commission's Communication on European defence markets presented to the European Council in December 2013.



Newly appointed Special Adviser Michel Barnier

Photo: © European Union

## INDUSTRIES

## 24 Rafale aircraft for Egypt

(ed/hb, Brussels) The signing on 16 February 2015 by French Defence Minister Jean-Yves le Drian, after only five months of negotiations, of a € 5.2 billion contract initiated by François Hollande for the supply of 24 Rafale fighter jets to Egypt has been hailed by the French press. It is the first export contract for this aircraft after more than a quarter of a century of lobbying by all French Presidents, governments and industry. The press reports were almost unanimous in attributing this triumph to the Rafale's technological superiority and to France's political solidarity with the North African states. There was even speculation as to whether it was the deployment of French Rafale in Libya that tipped the scales.

Aircraft manufacturer Dassault, which has only just managed to keep the Rafale production line going thanks to its 11 annual deliveries to the French Ministry of Defence, is now seeing light at the end of a long tunnel. Following the contract with Cairo it has hopes of a deal with India (126 aircraft) and it is also looking to the United Arab Emirates for possible future orders. A simultaneous deal for frigates is the icing on the cake. The delivery to Egypt is being funded exclusively through the French banking system. Amidst all the euphoria a few critical voices can be heard. The *Le Monde* newspaper, for example, felt impelled to draw attention to President Sisi's poor human rights record, while the Green Party and far left warned against an over-armed Middle East. But for President Hollande the deal is a godsend and for Dassault it gives some breathing space.





# My vision of Europe

by Jean-Claude Juncker, President of the European Commission, Brussels

Wars and walls, never again. This is what building Europe is fundamentally about.

The European project has rallied former enemies behind shared economic and political interests, thereby turning a continent of wars into a haven of peace delivering prosperity to all. After the fall of the Berlin Wall, it has been a common beacon for all Central and Eastern European nations, reconciling European history with European geography.

Our Union is founded on our willingness to come together in a spirit of openness and cooperation. We share a common destiny. And we have responsibilities towards each other. In a Union of 28 Member States, differences of view and of emphasis are inevitable. They will always persist. What deter-

mines our success is how we manage our differences. It is how we demonstrate the vision and determination to pursue our common interests, how we organise our individual actions for the collective good and how we choose to meet the challenges that confront us all, both separately and together.

*“We share a common destiny. And we have responsibilities towards each other”.*

*Jean-Claude Juncker*

The stronger our Union becomes, the more important its impact on future developments in international affairs. Europe is small in territory and in population

compared to other “global giants”. But in a globalised world, where connectedness is a measure of power, Europe’s manifold links to the rest of the world are major assets.

Our Union is made of multicultural societies and 24 official languages, many of which are spoken across the world. It is the world’s largest trading bloc and it has the largest share in global foreign direct investment. It is the world leader in development





Photos: © European Union

*“Europe does not exist only for itself. Europe has global obligations: we must have the courage and determination to fulfil them. This is one of my political priorities. My Commission will be working on it over the next five years.”*

*Jean-Claude Juncker*

*Group photo, from left to right, in the 1<sup>st</sup> row: Cecilia Malmström, Jyrki Katainen, Marianne Thyssen, Federica Mogherini, Jean-Claude Juncker, Kristalina Georgieva, Frans Timmermans and Věra Jourová; in the 2<sup>nd</sup> row: Neven Mimica, Violeta Bulc, Jonathan Hill, Elżbieta Bieńkowska and Margrethe Vestager; in the 3<sup>rd</sup> row: Tibor Navracsics, Pierre Moscovici, Valdis Dombrovskis, Andrus Ansip, Corina Crețu, Dimitris Avramopoulos and Vytenis Andriukaitis; in the 4<sup>th</sup> row: Phil Hogan, Günther Oettinger, Johannes Hahn and Christos Stylianides; in the 5<sup>th</sup> row: Maroš Šefčovič, Miguel Arias Cañete, Karmenu Vella and Carlos Moedas*

*More information about the Commissioners and their area of responsibility can be found on page 32/33*

aid. And it is at the forefront of global action on climate change. Yet, Europe has to take on geopolitical challenges of a kind we have never faced before. From the Middle East to Asia and Africa, from our Southern neighbourhood to our Eastern neighbourhood, international tensions are rising, geopolitical hotspots are multiplying prompting record numbers of refugees, and a growing world population has to cope with scarce resources and increased inequality.

In such a complex geopolitical environment, we have to do more to get our act together; to overcome our energy dependence, to better manage migration and to enhance our foreign and security policy.

Our Union's ability to tap its full potential for global influence depends on our capacity to think more strategically; to better combine our external action tools, from trade and development aid, to participation in international financial institutions, to

neighbourhood policy; and to ensure our citizens' security while upholding our values. And because normative power needs both soft and hard power, this also depends on our countries' readiness to work in a collaborative and cost-effective way to overcome fragmentation and duplication, the structural deficiencies of Europe's defence sector.

From a steadfast political and economic support to Ukraine, to the restart of the Kosovo-Serbia dialogue, and efforts to reinvigorate the Middle East Peace talks; from the fight against terrorism to the fight to end poverty and achieve sustainable development as we are preparing a 'post-2015 development agenda', this Commission has hit the ground running, fully committed to address the many challenges we face.

Europe does not exist only for itself. Europe has global obligations: we must have the courage and determination to fulfil them. This is one of my political priorities. My Commission will be working on it over the next five years.

## New policies to shape a new strategic context

# The horizon for the European Union

by Jean-Dominique Giuliani, President, Robert Schuman Foundation, Paris

Europeans find themselves at the start of 2015 in a situation that has changed considerably. The beginning of the year was marked by a shock and a new demonstration of European solidarity. The mass mobilisation of the French nation in the wake of the Paris terror attacks was followed closely everywhere in the world where the word freedom has the same significance. If any proof were needed that we share the same values, it was this spontaneous outpouring of support from within Europe in particular.

### Is Europe back?

Will this be the year of recovery? Jean-Claude Juncker's work programme heralds a real break with the past, with less regulation and the focus on that which is vital: reviving the economy. For the first time, the EU's budget will be managed by the European Investment Bank, far beyond the reach of national political clientelism. The € 315 billion provided for might possibly be doubled, if the Member States deign to participate in the newly created Investment Fund.

### Institutions

The European Parliament, whose strength lies in the fact that it is the only institution to be elected by direct suffrage, now seems to be reaching maturity; it should be able to restrain its legislative zeal in order to create a true area for political debate and expressing the voice of the people. The hype generated by extremists might help unmask them and reveal their true colours.

Donald Tusk's first steps as President of the European Council seem to have been the right ones. Heads of state and government must set the general direction and no longer lose themselves in negotiations over turgid communications and impossible arbitration.

### Financial recovery

After vital fiscal consolidation but debt-financed advantages, the time has now come for investment-financed recovery. Yes, austerity for everyone at the same time has affected growth negatively! But as long as the Member States' budgets and economic policies are not integrated, no other policy is possible. The Latvians, Irish, Greeks, Spanish, Portuguese and Cypriots know that recovery as suggested by the European Commission is perspicacious and well adapted because it privileges the future. Investment means preparing Europe's return. But all States must play ball, including Greece.

### Russia as a partner

No one knows – himself included – whether Vladimir Putin will finally be one of the new Fathers of Europe! He has done everything possible to get the Europeans to stand together against the first challenge made to the continent's borders since the fall of the Wall. Europe has given the Russian leaders a chance not to flee their responsibilities again via the simplistic solution of the wildest form of nationalism. We must now bring the Russian war in Ukraine to an end and make room for the expression of reason and common interests.

The defence of Europe is still a problem for a continent that believed in eternal peace, having in fact achieved it in one of the most unlikely places: at home. Several Member States demonstrated their determination in 2014 and many became aware of the topicality of the *adage si vis pacem para bellum* as they announced the end of demilitarisation.

Wars of religion, in which some would like to involve the whole world, are just as dangerous. The EU has been called upon and it must respond. Its values of freedom and democracy attract populations because they are respectful of the individual more than any other political system.

### Forging Europe's future

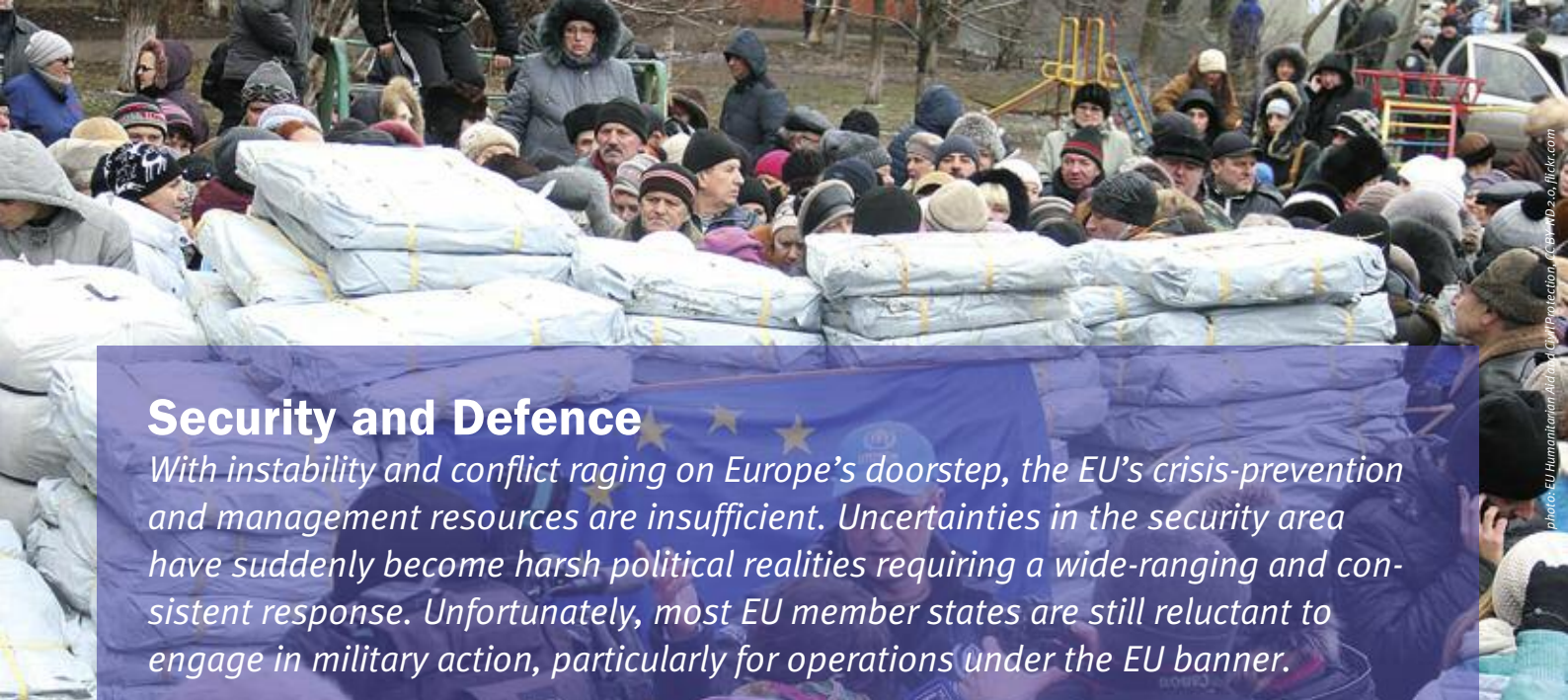
The future is being shaped now, as the major world issues – immigration, trade, cross-border crime and the environment – all too often remind us. Europe has to be able to decide what can be. It has to continue economic integration, which will always be a guarantee of its resistance to the storm and its passport for the future. It must be able to set major, common, strategic goals that protect its world interests. Promoting the democratic, representative model is part and parcel of this.

If we look carefully, Europe's successes are real. Let us hope that our leaders will be able to move on to a higher level and contribute to writing some more pages of history.

The new Juncker Commission has a real chance!



Jean-Dominique Giuliani, President, Robert Schuman Foundation, Paris



## Security and Defence

*With instability and conflict raging on Europe's doorstep, the EU's crisis-prevention and management resources are insufficient. Uncertainties in the security area have suddenly become harsh political realities requiring a wide-ranging and consistent response. Unfortunately, most EU member states are still reluctant to engage in military action, particularly for operations under the EU banner.*

The Alliance sees no country as its adversary, nor Russia as a direct military threat

## New unrest and instability on Europe's periphery

by Ambassador Jiří Šedivý, Permanent Representative of the Czech Republic to NATO, Brussels

The year 2014 may well be seen by future historians as the most important (re)defining moment for European security since the end of the cold war. The strategic landscape of Europe's neighbourhood seems to be radically different today from the situation only a year ago. Two moments – or strategic surprises perhaps – have dominated the past twelve months. Just several hundred kilometres to the east of the EU's and NATO's borders Russia has launched a hybrid campaign against its neighbour. Moscow's revisionism is challenging the very principles of the post-cold war European security architecture, such as the commitment to refrain from the threat or use of force and respect for the sovereignty and territorial integrity of all states and for their inherent right to choose their institutional future to ensure their security and prosperity. In the south, from the Middle East to North Africa (MENA), the accelerated rise of militant extremist groups is destabilising the region with detrimental consequences for the security of the whole Euro-Atlantic area. We have even seen an unprecedented transformation of a terrorist movement into a quasi-state, threatening to bring jihad to Europe.

### No de-escalation in Ukraine

As to the crisis in and around Ukraine, after a calmer "Christmas break", there came a new escalation of fighting. During that pause Russia has supplied hundreds of pieces of advanced

equipment, including rocket systems, heavy artillery, tanks, armoured vehicles and electronic warfare systems to the separatists and helped to consolidate their C2. Moscow – in utter disregard of the Minsk agreements – is close to achieving her main objective: to limit Ukraine's sovereignty through establishing a frozen conflict in its eastern regions. The country is at the same time getting to the verge of economic collapse. Kyiv's European aspirations are now drastically complicated. The so-called Minsk 2.0 agreement of 12 February offers, as German Chancellor Angela Merkel put it, a "glimmer of hope" for an end to conflict in eastern Ukraine. Yet the Ukrainian side signed the comprehensive ceasefire agreement from a position of sheer weakness in view of the separatists' recent military achievements. Thus for example the deal's provisions for constitutional reform to give eastern Ukraine more self-governance would in fact limit the country's political sovereignty, effectively giving to Moscow leverage to interfere in Ukrainian internal affairs; the illegally annexed Crimea is not mentioned at all. President Putin's speech at the Valdai International Discussion Club in October 2014 spelled out the essence of his anti-Western sentiments whilst amounting almost to a new political doctrine for Russia. This, combined with such concrete military steps as large-scale exercises with aggressive scenarios (including a nuclear attack against NATO Allies), huge investments in strategic capabilities, a growing number of provocative flight activities



(including by strategic bombers) and an upgrading of nuclear forces, indicates that Moscow has opted in favour of digging the country down into deeper isolation and more force posturing in the long term.

NATO and the EU have demonstrated remarkable unity and a natural complementarity in this crisis so far. We must continue to stand together within both organisations in order to counter any Russian efforts to divide us. At the same time we have not panicked; Russia is not assessed as a direct military threat and the basic planning assumption of the 2010 Strategic Concept – that the “Alliance does not consider any country to be its adversary” (para 16.) – remains unchanged.

### Three major threats to European security

The challenge in the MENA region is completely different from the one in the east. While Russia is a relatively strong nuclear nation state whose grave dissatisfaction with its geopolitical status fuels its revisionist policy, the problem in the south is more complex. It is framed by long-term social and political grievances of the local populations stemming from the oppressive, inefficient and corrupt regimes that often degenerate or collapse outright into failed states. This breeds ethnic tensions, sectarian violence and civil wars.

This situation poses three major threats to European security: first, foreign fighters originally from Europe, battle-hardened, religiously radicalised and ready to come back in order to wage jihad against us. The killings in Paris fulfilled this worst-case scenario. I am afraid we will be seeing more of these kinds of attacks. Second, the existence of a large area near European borders serving as a breeding ground for regional instability, terrorism and organised crime. Third, even larger numbers of displaced people seeking refuge in Europe.



Photo: private

#### Ambassador Jiří Šedivý

has been Permanent Representative of the Czech Republic to NATO in Brussels since 2011. He is a graduate of Charles University, Prague and of King's College, London.

From 1999 to 2004 he was Director of the Institute of International Relations in Prague and Assistant Professor of International Relations

at Charles University in Prague. He played an important role in the Czech Republic's accession to NATO and served as an external adviser to President Vaclav Havel. In 2004 he became Professor at the Marshall European Centre Garmisch-Patenkirchen and in 2006 Minister of Defence. He was tasked in 2007, as Deputy Minister for Foreign Affairs, with the preparation of the Czech EU Presidency and he joined the NATO International Staff as Assistant Secretary General (ASG) for Defence Policy and Planning the same year. Jiří Šedivý is the President of the Berlin Security Conference (BSC).

### How to combat Islamic State

The main reason for the initial “lightning” success of so-called Islamic State (IS) lies in the preceding almost ten years of ethnically and religiously exclusive rule by the Nouri al-Maliki regime which alienated a large part of the Sunni and Kurdish populations from the Iraqi state. Hence the very first pre-condition for defeating the Islamic radicals would be to establish support and loyalty to the Iraqi state across all the country's religious and ethnic groups. A comprehensive approach involving military and non-military tools is therefore needed. The US-led coalition of some 50 nations follows five lines of action: first, supporting forces fighting against the radicals (air campaign, planning, logistics, training, equipment). Second, cutting off the flow of foreign fighters (justice and law domain in the home states, intelligence concerning recruitment and radicalisation, interrupting lines of transport to the theatre, border security, returnee checks). Third, eliminating financial sources (denying oil exports, disrupting money generation, laundering and transfers). Fourth, humanitarian assistance to the local population, internally displaced persons and refugees. Fifth, de-legitimising the IS ideology in the public and social media space.

Neither the EU nor NATO is directly involved in the military fight against the Islamist militants. Yet the role of both in the wider sense – supporting regional stability, humanitarian assistance and post-conflict reconstruction – is indispensable. But unless there is persistent and systematic resistance against the radical and militant Islamists by the majority of moderate Muslims within their own communities – both in the region and in Europe – the problem cannot be rooted out. Long-term support for moderate regional partners such as Jordan is another crucial task.

### We must continue to communicate with Russia

It is most unfortunate that in times marked by serious challenges to the basic principles of our civilisation, deep friction between Russia and the West is preventing any meaningful cooperation. Despite this and in view of our common challenges we must keep the lines of communication open, thus encouraging Russia to come to terms with its legal obligations. Without that we cannot consider any return to normality and to cooperation.

Both challenges in Europe's neighbourhood are urgent and pressing; yet their character differs fundamentally – as do the ways and means of coping with them. The West must be able to deal with both theatres in parallel, approaching them in a balanced manner. In so doing the diverse priorities of individual nations, usually defined by their proximity to the respective problems and historical experience, must be taken into account. That is why western unity and solidarity are indispensable. Both EU and NATO states seem to understand this. The Wales Summit and the EU Council have given the right political guidance and signalled the strong spiritual cohesion of the West. It is this cohesion that provides the most efficient assurance and constitutes a solid basis for decisive actions, through which the real difference on the ground can be achieved.

## documentation

## Declaration in support of the “Package of Measures for the Implementation of the Minsk Agreements” adopted on 12 February 2015 in Minsk

(ed/ak, Berlin) After marathon negotiations, the President of Russia, Ukraine and France as well as the Chancellor of Germany agreed on a Package of Measures and decided on an unconditional ceasefire in Ukraine from 15 February 2015 onwards. In a common declaration, the leaders stressed their belief in the chances of a peaceful settlement of the conflict in Ukraine (excerpts):

“The President of the Russian Federation, Vladimir Putin, the President of Ukraine, Petro Poroshenko, the President of the French Republic, François Hollande, and the Chancellor of the Federal Republic of Germany, Dr Angela Merkel, reaffirm their full respect for the sovereignty and territorial integrity of Ukraine. They firmly believe that there is no alternative to an exclusively peaceful settlement. They are fully committed to undertake all possible individual and joint measures to this end. (...)”

*“Ukraine has always treated its international commitments with great responsibility. We are willing to prove that once again.”*

*President Petro Poroshenko*

Against this background, leaders endorse the Package of Measures for the Implementation of the Minsk Agreements adopted and signed on February 12, 2015

**web:** <http://tinyurl.com/ln9fjwv>. (...)

*The package of measures is “a ray of hope”*

*Chancellor Angela Merkel*

Germany and France will provide technical expertise for the restoration of the segment of the banking system in the conflict affected areas, possibly through the establishment of an international mechanism to facilitate social transfers.

*“It provides serious hope for Ukraine, even though not everything has been accomplished yet. It’s also a relief for Europe. It’s a fine example of what Germany and France are capable of doing for peace.”*

*President François Hollande*



*From left to right: President of Belarus Alexander Lukashenko, President of Russia Vladimir Putin, Federal Chancellor of Germany Angela Merkel, President of France François Hollande, President of Ukraine Petro Poroshenko before the beginning of talks in the Normandy format on 11 February 2015 in Minsk*

*Photo: The Presidential Press and Information Office, Russia*

Leaders share the conviction that improved cooperation between the EU, Ukraine and Russia will be conducive to the crisis settlement. To this end, they endorse the continuation of trilateral talks between the EU, Ukraine and Russia on energy issues in order to achieve follow-up stages to the gas winter package. They also support trilateral talks between the EU, Ukraine and Russia in order to achieve practical solutions to concerns raised by Russia with regards to the implementation of the Deep and Comprehensive Free Trade Agreement between Ukraine and the EU.

*“I would like to call on both conflicting parties once again to stop the bloodshed as soon as possible and proceed to a truly political process of a long-term settlement.”*

*President Vladimir Putin*

Leaders remain committed to the vision of a joint humanitarian and economic space from the Atlantic to the Pacific based upon full respect for international law and the OSCE principles. Leaders will remain committed to the implementation of the Minsk Agreements. (...)”

**For the complete declaration visit:** <http://tinyurl.com/lj8g3sn>

A critical look at the objective of a European armed drone by 2020

# Armed drones – high time for an ethical and legal discussion

by Barbara Lochbihler MEP, European Parliament, Brussels/Strasbourg

A European armed drone by 2020: that is the common objective of seven EU countries, including Germany and France. Since this decision became public in 2013 I have voiced criticism, among other things by initiating a resolution in the European Parliament on the use of armed drones, adopted almost exactly one year ago. So, why am I so sceptical about a technology that at first glance seems to offer so many advantages?

## The American experience

First of all, there is the American experience. Indeed, even if we accept the assumption put forward by Washington that the US is part of a global and borderless armed conflict against terrorist forces – which I explicitly reject as a serious danger to international legal standards – numerous questions remain unanswered. Indeed, the laws of war allow targeted killings only against “combatants” directly participating in hostilities. The attacks must be militarily necessary and proportionate. Everything must be done to avoid harm to civilians. And at the slightest sign of unlawfulness, victims need to be given access to investigation, prosecution and compensation mechanisms.

## Practice is quite different from theory

Available data suggests that none of this is put into practice. Human rights organisations have found evidence of thousands of civilian casualties. According to Reprieve, for instance, 41 drone strikes in Pakistan and Yemen – two countries that the US is not at war with – led to the execution of 34 intended targets, killing 1 146 civilians. There are reports about so-called signature strikes and double taps. And most information continues to be hidden from the public, which in turn makes legal action almost impossible. Under these circumstances, the US drone programme, far from making the world a safer place, creates a situation in which extrajudicial killings can happen anywhere, at



REAPER combat drone used by the US Air Force in Afghanistan

Photo: U.S. Air Force/Barclay



Photo: Olaf Köster

## Barbara Lochbihler MEP

is Vice-Chair of the European Parliament (EP) Subcommittee on Human Rights and foreign affairs and human rights spokesperson for the Greens/EFA group. Born in 1959, she holds a diploma in social work studies and a master's degree in political science, international law and economics. From 1992 to 1999 she was Secretary General of the Women's International League for Peace and Freedom in Geneva. Prior to joining the EP Ms Lochbihler was Secretary General of the German section of Amnesty International.

any time, for secret reasons based on classified information, performed by unknown CIA agents – nothing I would describe as desirable for European countries.

## More risks than advantages

On the other hand, could these European countries not develop their own armed drones and, contrary to the US, use them in accordance with international law? They could – if it were not for a number of system-inherent elements. What about the fundamental decision to engage in military conflict, for instance? According to experts, the prospect of allegedly surgical drone strikes might very well lower the threshold for approving military rather than diplomatic action. What about precision? To say the least, the number of civilian casualties suggests anything but extraordinary accuracy. What about the terrorising effect on the local population? Only recently I heard a Pakistani boy report that he had come to prefer clouds over a sunny blue sky, since bad weather lowers the likelihood of drone activity. What about the argument that, with each new drone strike, we draw a step closer to the development of fully automated weapons, designed to apply lethal force based on algorithms alone? Finally, what about the very acute risk of proliferation? Personally, I believe that these and other questions weigh much heavier than the comparatively few advantages of armed drones, above all the undeniable plus in terms of ground troops protection. I therefore call on all European governments to support a ban on fully automated weapons, and to engage in a thorough and open-ended ethical and legal debate about the development and use of armed drones. To date, the governments' reaction has been as inaudible as a US drone hovering 10 kilometres above Karachi.



Germany facing landmark decision – the window of opportunity is open

# MEADS – a unique opportunity for Germany, the EU and NATO

by Thomas Homberg, CEO, MBDA Germany, Schrobenuhausen

In 2015, Germany is facing a decision with far-reaching ramifications. The Tactical Air Defence System (TVLS) initiative aims to secure, for the long term, ground-based air and missile defence capabilities sufficient to meet current and future threats by replacing the increasingly obsolete legacy system.

## Of interest for Europe

The German way forward is of interest in a European perspective, since other European nations are currently preparing their own decisions for setting up their future air and missile defence. Simultaneous selection processes in various European countries to determine their future air and missile capabilities open an opportunity for a stepped cooperative approach based on the latest available technology from the tri-national, transatlantic MEADS programme.

In December 2014, the Medium Extended Air Defence System (MEADS) development programme was completed successfully after a decade of intensive work: an investment of € 4 billion overall. The requested development results were delivered with the desired quality on time and on budget. The full-coverage, 360-degree defence capability was demonstrated in several live firing trials, as were the system's full compatibility with NATO systems and the significant advantages of its open architecture, enabling unrivalled interoperability, efficiency and flexibility during deployment. Experts also verified the significantly lower life cycle costs of MEADS, in line with the initial system specifications.

## Unprecedented system sovereignty

The conclusion of the tri-national development now enables a MEADS-based system in Germany, which, with a decision in principle on the system scheduled for the second quarter of 2015, will likely be the first European country to take that step. The US and Italy – its partners in the development – have pledged further support. The development results are available for national efforts in full and without restriction. The participating companies (MBDA, Lockheed Martin Corporation and Airbus Group) have reaffirmed their readiness and high motivation to use all their groups' joint capabilities and expertise, including that drawn from ten years of efficient MEADS cooperation, to make any MEADS-based follow-on programme a success. For Germany, a positive MEADS decision would also represent, in addition to substantial performance and capability gains, unprecedented system sovereignty over TVLS, particularly



Photo: MBDA

*“The window of opportunity is open.”*

Thomas Homberg, CEO, MBDA Germany

important with a view to the aim of creating a common and unique system backbone for all German air and missile defence applications, making full use of the open system architecture.

## The opportunity for deepened cooperation

The forthcoming German decision is relevant for other nations as well. For instance, Italy, Poland and several eastern European countries, such as Romania, are currently in the process of laying the groundwork for their future ground-based air defence and anti-missile capability. They too could benefit from the MEADS capabilities, particularly its open system architecture, which permits the use of existing sensors and effectors while ensuring NATO and regional interoperability. The capability gains for a European air defence architecture based on the new MEADS technologies would be considerable. At the same time, the forthcoming multiple European decisions could form a substantial show-case in the air defence sector for NATO's “framework nation concept”, as well as for European and transatlantic industrial collaboration at eye level. The window of opportunity is open.

Finding synergies between the different strands of CSDP for the benefit of deployed missions

# Military-civil synergies in CSDP – examples and opportunities

by Lieutenant General Wolfgang Wosolsobe, Director General, EU Military Staff, Brussels

The rapid increase in the number of parallel deployments, with several new civilian and military missions in the Horn of Africa and the Sahel region, has given new impetus to the objective of further developing military-civilian synergies. Further exploring the synergies between the two kinds of deployment potentially offers significant cost savings, greater efficiency in the use of resources and a more unified EU presence on the ground.

## Synergies – a must in times of austerity

In the short term, the most obvious target for potential synergies is the area of administrative and logistical support. Civilian and military CSDP missions draw on different resource bases: while civilian missions must generate these capabilities from scratch through procurement processes for each mission, military deployments benefit from the expertise and prepared capabilities of the Member States' national armed forces, made available through force generation. Therefore, finding ways for civilian missions to draw on these resources might offer cost savings and a potential reduction in their initial deployment time.

## EUMS: a history of support for civilian missions

In practice, the EU Military Staff (EUMS) has for some years now been providing comprehensive support to civilian structures throughout the planning and conduct of civilian missions, particularly in the area of logistics. This support has varied according to requirements, ranging from relatively

limited contributions to medical and logistics planning to the extensive contribution made by EUMS to the initial planning and deployment phase for EUMM Georgia in 2008, with the provision of expertise in the areas of movement and transport, logistics, security, CIS, medical and general planning. This ongoing support of EUMS for civilian structures already demonstrates the value of cooperation and coordination and the benefits of finding synergies between the different strands of CSDP.

## Creating synergies on the ground

The search for synergies goes beyond such headquarters support. While EUMS continues to support from Brussels the conduct of ongoing civilian missions in various locations, the deployment of both civilian and military missions in Mali and the Horn of Africa has led to an increased desire to identify synergies in the mission areas. Domains initially identified for potential synergies include medical support, CIS, logistics and force protection, offering the prospect of avoiding expensive duplication of such essential life-support functions. In reality, while the concept of synergies is straightforward, its practical implementation is less so.

## Obstacles to merging missions

Civilian and military CSDP missions are deployed with very different command and control arrangements as well as differing timeframes: military missions are often deployed more quickly but for shorter periods, while civilian missions might be expected to remain in theatre for longer. This poses a challenge for merging life-support functions or making one mission dependent on the capabilities of another. Location is another challenge: for example, in Mali the EU's Military Training Mission works primarily from the Koulikoro training camp, 60 kilometres from the capital Bamako, where the civilian mission, working with the national administration, is based. Co-location of headquarters to minimise such difficulties could be an option in some circumstances where the mission mandates make it appropriate, but this would need to be determined in the early planning stages and a shared risk assessment would be a prerequisite. The different sources of finance for civilian and military missions also add an additional layer of complexity to the search for synergies. Nevertheless, there is a determination to continue to develop a better understanding of how synergies can be implemented in practice.



Photo: EUMS

### Wolfgang Wosolsobe (Lt Gen)

has been Director General of the EU Military Staff since 2013. Born in 1955 in Austria, he started his military career in 1974. In 1987 and 1988 he studied at France's École Supérieure de Guerre Interarmées and Cours Supérieur Interarmées. In 1991 he joined the Austrian Diplomatic Mission in Geneva. His international career continued with his assignment from 1992 to 1997 as Defence Attaché to France. Back in Austria, he took over the command of the Austrian Special Forces. He was appointed Director for Military Policy in 1999, a post which he occupied until 2005. From 2007 until

taking up his current post he was Military Representative in Brussels.



*Horn of Africa: stabilising the area through combined operations*

*Photo: based on UN map*

In the medium term, the search for synergies aims to identify other areas, above and beyond the support functions, in which the activities of civilian and military missions could be mutually reinforcing. In the area of security sector reform added benefits could be gained from exploring the coordination of training and mentoring activities from both the civilian and military perspectives. There have already been some steps in this direction in the Horn of Africa, where Operation Atalanta has supported several Key Leader Engagements organised by EUTM Somalia and EUCAP Nestor. EUCAP Nestor has also been able to make use of Operation Atalanta's facilities in carrying out some of its activities. The quality of the network binding together the missions and operations deployed in the same area is constantly improving.

In the longer term, but with the ambition to start soon, the development of mandates that are complementary from the outset is in line with the aspirations of the EU's Comprehensive Approach (CA). The CA aims to embed CSDP into a broader strategic understanding, within which the EU's different instruments can be brought to bear in a mutually reinforcing manner. The search for synergies is a first very important step in this direction.



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## Armaments Cooperation

*European armaments policy is crucial for achieving the aim of a more autonomous EU with a greater say in international political decision-making. If member states could agree on common investments to plug capability gaps and drive major programmes forward, the ambition of a strategically autonomous Europe could become a reality: but they must show vision and determination.*

Without a coherent defence industrial strategy Germany risks putting its own industry out of business

# German defence deserves a 21<sup>st</sup> century industrial strategy

by Dr Christina Balis and Lars Miethke, Avascent, Paris/Washington

Long before the current debate over export policy, Germany's defence industry occupied a delicate position reflecting the country's uneasy relationship with it. The € 20 billion sector is usually seen as part of the country's success as an *Industrie-nation*. Yet, unlike in other countries, it is not perceived as a core element of Germany's national security effort. The result is disjointed and contradictory policies unfit for today's global defence realities.

While the defence and security sector's combined output is outstripped by that of leading German manufacturing industries, its historical export success is undeniable. Until recently, the country ranked among the world's top five arms exporters, often outperforming France and Britain. With such economic success, combined with historical sensitivities, Germany has not felt compelled to articulate a coherent defence industrial strategy. In the absence of change, however, Germany risks putting its own industry out of business and missing an opportunity to invigorate Europe's defence debate.

### Why a broader strategy is needed

As German defence industry faces a declining home market, a fragmented European market and a hyper-competitive international market, a coherent and supportive defence industrial strategy is needed more than ever. The government's recent initiative to define critical defence technologies for the future is commendable, but in itself insufficient. This is not merely a

question of whether tanks, submarines and small arms deserve to be considered alongside electronic warfare and C4ISR.

Equally important is the question of how these technologies can be realistically preserved.

Germany's annual defence budget hovers at below € 33 billion (half of which covers personnel costs), with little chance of near-term increases in light of a rigid balanced-budget target. Several defence programmes are under scrutiny, while large current inventories remain confined to bases. More alarmingly, no major new programmes exist on the horizon, and future ones will almost certainly require European or international cooperation.

Against this bleak picture, it is unclear how to develop and sustain vital defence technologies. Even if a less restrictive export policy offers a short-term solution, it just risks transferring the very domestic know-how the government wants to preserve. The notion that home-grown industries can continue to thrive on a purely export-led model is misguided. Without a meaningful defence industrial strategy, the long-cherished "made in Germany" label truly risks getting replaced by "German-free" content.

### Germany's *Sonderweg* in defence

Germany's unstated defence industrial strategy rests on a unique paradox: support for open-market procurement procedures often favouring foreign suppliers (similar to the UK and

contrary to France) and an almost distrustful attitude toward its own industry that denies it political support overseas (contrary to both the UK and France).

Control within the defence industry also assumes a rare German combination of family business ownership and indirect government influence (through its legal veto powers in relation to strategic corporate transactions). This combination tends to drive conservatism in decision-making. Airbus Group is the exception, being truly multinational and under partial German government control, albeit at a significantly reduced stake of 11%. This explains in part the transformation launched by CEO Tom Enders – a mix of strategic refocusing, portfolio rationalisation, acquisition of controlling interests with parallel shedding of non-core partial holdings – and its disruptive potential, setting a potential model to follow in Germany and broader Europe.

These shortcomings are not Germany's alone. Most European countries, even those with updated strategies, still reflect obsolete national models. Yet Germany could be an effective advocate for a market-leading European defence industry. Besides its current economic and political clout, Germany benefits from a neutral position between a pro-European France often mistrusted for its motives and an economically liberal UK flirting with a possible EU exit. Framing a domestic debate in the European context would be not only in Germany's interest, but also the much-needed impetus to a moribund EU defence debate.

The upcoming German White Paper on National Security – the first in nearly a decade – offers an ideal platform to articulate a



Photo: Avascent

### Dr Christina Balis

is director of European operations at Avascent, the leading global defence and security management consulting firm, where she works with corporate leaders and financial investors operating out of or looking to expand to Europe and adjacent geographies. She holds joint business degrees from German and UK universities, and graduate/postgraduate degrees in international relations from the Johns Hopkins School of Advanced International Studies in Bologna, Italy, and Washington, DC.



Photo: Avascent

### Lars Miethke

is a senior analyst at Avascent, supporting clients in the areas of strategic growth, value capture and M&A in the aerospace and defence industries. He is a graduate of the Humboldt-University in Berlin and the School of Foreign Service at Georgetown University, Washington, DC.

defence industrial vision. Moreover, the political timing seems right given the rare alignment of domestic and European debates. Germany has a unique opportunity to update its defence industrial strategy for the 21<sup>st</sup> century, but the very real question remains whether it will seize it.

## ► NEWS:

### Angela Merkel opts for human rights – no tanks for Riyadh

(ed/hb, Brussels) While the world's great and mighty – democrats, oligarchs, dictators and monarchs – gathered in Riyadh for King Abdullah's funeral, Germany's Federal Security Council, at its 20 January meeting chaired by Angela Merkel, dealt a severe blow to the German defence industry, with as yet unforeseeable consequences, according to German press reports.

The *Bild am Sonntag* tabloid newspaper reported that the Council, whose meetings are secret, had refused certain arms ex-

ports to Saudi Arabia and postponed decisions on others due to instability in the region and the human rights situation in the country itself.

This is a deathblow for a multi-million euro contract for deliveries of Leopard II, the world's most modern tank. According to the German magazine *Der Spiegel*, Germany delivered since October 2014 about € 332 Million worth of defence equipment to Saudi Arabia.

The country is constantly being hauled over the coals for its human rights abuses.

The sentencing of blogger Raif Badawi to 1000 lashes and 10 years imprisonment seems to have been the last straw for Germany's decision-makers.

German radio reported on 4 February that the Federal Government in the person of Economic Affairs Minister Sigmar Gabriel had prepared a statement to the effect that Germany would continue delivering defence equipment intended for the protection of Saudi Arabia's borders: this would exclude large equipment like the Leopard tank.

Successful cooperation between allied forces calls for compatible technologies

# Compatible systems for cooperation

by Dr Markus A. Zoller, CEO, RUAG Defence, Bern

In modern warfare states cannot consider themselves properly prepared for conflict if they are isolated, either by alliances or technology. In response, there is a growing shift towards joint defence agreements, covering areas ranging from coordination to equipment sharing and even capability specialisation. An effective collaboration requires not just mutual understandings but also the ability to train together and share resources, which in turn calls for compatible technology.

## How industry can support forces cooperation

Industry needs to respond to this market requirement. RUAG has a long history of bringing together multiple subsystems and technologies – new and legacy – and finding ways for them to successfully interact. These include developing networking technologies to link together previously dispersed areas of the battlefield and training theatre and the incorporation of the C4ISTAR and cyber domains. Standardising and harmonising systems across alliances is a positive idea, but such ventures often fail due to conflicting interests of nations and their industries. The response is to call on fully independent players, like RUAG, whose strength in integrating system landscapes through dedicated components enables non-compatible systems to be linked seamlessly together, thereby resolving the contradiction.

## Interoperability in Simulation & Training

Applying the above to the issue of Simulation & Training (S&T), the interoperability of systems is crucial for forces to train together and to turn their cooperation into an effective capability. As a centre of excellence RUAG continually invests in laser technology in order to maintain compatibility with multiple codes, and plays an active role in international groups like UCATT. As designers and operators of world-class MOUT (mo-



*VERO System integrated in an EAGLE IV*

*Photo: © RUAG*

bile operations in urban terrain) facilities we bring together the necessary technology and infrastructure so that soldiers, weapons and vehicles from multiple forces can train together in a high-fidelity environment.

## The “openness” of vehicles

As with interoperability in S&T, universal interfaces and open architecture are increasingly important in vehicle design. As an upgrading and tuning specialist it is our daily work to increase the “openness” of vehicles. We have fully digitised the Leopard 2A4 turret to establish open interfaces for this platform. At RUAG we support compatibility by implementing standardised subsystems across multi-vehicle fleets. One such subsystem is the VERO robotics system, which turns any vehicle into a semi-autonomous robot, removing users from danger and providing a standardised robotic platform compatible with an entire vehicle portfolio. Other subsystems, like our TANS, enable seamless communication across multiple networks, bringing customers practical standards and compatibility within their own C4ISTAR operations.

## Synergies and compatibility

As forces and industry we often strive to be compatible with allies. However, we must not forget to develop and utilise technologies that make us more compatible with ourselves. At RUAG we are investing in technologies and ways for forces to identify opportunities for synergies and improved compatibility within their own needs and systems as well those of their allies.




*Photo: RUAG*

### Dr Markus A. Zoller

has been CEO of RUAG Defence and a member of the RUAG Group Executive Board since 2013. He holds both a PhD in business administration and marketing and a Masters in Engineering. He has been project director, head of operations, board member and CEO of large international business units within such companies as

ABB, Alstom, Continental and Siemens. More recently, as an independent consultant, he successfully developed a number of SMEs.





*“The EU’s neighbourhood policies have an added value in building mutual trust and understanding among the states and institutions. Turkey is also pleased to see the intensification of our regular political dialogue on regional and international developments with the EU at all levels. Not only in the Middle East and North Africa, but also in the Western Balkans and South Caucasus, Turkey gives a significant added value to the EU’s neighbourhood policies.”*

H.E. Hüseyin Avni Karşlıoğlu, Ambassador of the Republic of Turkey to the Federal Republic of Germany

Photo: bartholo, CC BY-SA 3.0, flickr.com

Cooperation with the Turkish Defence Industries is in the common interest

## Turkey’s Defence Industry – a reliable partner for cooperation

Interview with Sedat Güldogan, Deputy Undersecretary for Defence Industries, Ministry of National Defence, Ankara

**The European:** Mr Deputy Undersecretary, thank you for talking to us on behalf of the Undersecretariat for Defence Industries of Turkey, which is part of the Ministry of National Defence in Ankara. Could you elaborate briefly on the tasks of SSM?

**Sedat Güldogan:** Established in 1985, SSM is the procurement authority under the Ministry of National Defence. Its main task is to constitute a modern defence industry in Turkey and to achieve a modernisation of the Turkish Armed Forces. SSM is a separate legal entity with its own extra-budgetary funds providing permanent and stable financial resources to perform its procurement and industry roles.

The Defence Industry Executive Committee is the main decision-making body; it makes critical decisions relating to the defence industry, including major procurement projects.

**The European:** What is the relationship between SSM and Turkey’s national security and defence industries?

**Sedat Güldogan:** With the help of the national, multinational and joint defence industry projects undertaken by the Undersecretariat, Turkey’s defence industry has become a highly capable community comprising large-scale main contractors, numerous sub-system manufacturers, SMEs and R&D companies involved in high-tech niche areas, as well as research institutes and universities. Thus, we can proudly say that we have a constantly growing, ambitious and forward-looking defence sector. In recent years, the defence industry has

reached the stage of indigenous product development. Many platform projects have been successfully launched. SSM’s functions also include reorganising the existing Turkish Defence Industry in order to comply with international defence industry standards and strategic planning for the production of defence products in the private and public sectors. SSM aims to build a defence industry that welcomes private entrepreneurship and engages in balanced collaboration with international partners.



Photo: private

### Sedat Güldogan

is the Deputy Undersecretary for Defence Industries of the Turkish Ministry of Defence, responsible for Industrialisation, R&D, International Cooperation and Quality & Certification. He graduated from Istanbul Technical University with a Bachelor’s degree in Aeronautical Engineering and completed the Harvard University Kennedy School of Government “Senior Executive Fellows” programme in 2007. Mr Güldogan’s background is mainly in aviation programmes. Before being appointed Deputy Undersecretary, he was Head of the Industrialisation and Offset Department tasked with improving the country’s defence industry capabilities. He has been a board member of Turkish Aerospace Industries (TAI) since 2007.



*“With Turkey on board, the EU will be better equipped to confidently face any internal and external challenges that may arise and have the necessary vigour to effectively meet expectations of it in times of need. Turkey’s accession will undoubtedly enhance not only the economic but also political competitiveness and ‘puissance’ of the EU.”*

*Dr Ahmet Davutoglu, Prime Minister of the Republic of Turkey*

*in: The European-Security and Defence Union, N° 3/2011, Brussels/Berlin, page 15 f (Photo:© European Commission)*

**The European:** *Is SSM in charge of companies’ international relations and cooperation programmes?*

**Sedat Güldogan:** I cannot say that SSM is in charge; that is a role for the companies themselves. However SSM has been trying to play the role of facilitator to help the development of our Defence Industry’s international relations and cooperation programmes. Within this context, we organise activities such as “Mutual Industry Days” with other countries, encouraging and supporting our companies’ participation in international events, fairs etc. SSM’s International Offices in Brussels, Washington DC, Riyadh and Astana also play a coordinating role to support the international cooperation activities of the Turkish Defence Industry.

**The European:** *The Turkish Defence Minister has launched a major R&T programme. What role does industry play in R&T matters within the framework of this programme?*

**Sedat Güldogan:** Strategic partnerships have been established, in particular in the framework of multinational programmes. In accordance with our current defence industrial strategy we have been investing in progressive technologies and R&D, so as to create an indigenous capability in nanotechnology, MEMS, acoustic sensors, etc. In this framework, Turkish defence companies are also seeking strategic partnerships with companies from both sides of the Atlantic.

**The European:** *In 2014 the Turkish Security and Defence Industries participated under SSM’s lead in two major events in Germany: the ILA-Berlin Air Show in May and more recently the Berlin Security Conference. This is highly significant from the political point of view, but what are your concrete industrial interests?*

**Sedat Güldogan:** We as SSM believe that the Turkish Defence Industry has reached its maturity in many capability areas and



*The CEO of the European Defence Agency, Claude-France Arnould, discussing with Sedat Güldogan and Lt General Alpaslan Erdogan, MoD Ankara, at the Berlin Security Conference in Berlin, December 2014*

*Photo: Klaus Dombrowsky, Behörden Spiegel Group*



we wish to promote our industrial capabilities on the international market. We seek areas of cooperation with international industry in order to do business together, as well as investment opportunities in third countries. It is important for us to have long-term cooperation with German and European companies. In this regard, we believe that these events and meetings increase mutual awareness.

**The European:** *Let us turn now to Turkey and the European Union. In 1995 Turkey signed the Customs Union Agreement and EU accession negotiations have been ongoing since then. Could you describe Turkey's relations with the EU in the areas of armaments cooperation and the European Defence Market?*

**Sedat Güldogan:** As a good example of interaction between the two pillars, namely NATO and Europe, NATO's new Strategic Concept adopted at the Lisbon Summit deserves particular attention. This document underlines the need for strong cooperation between the Alliance and the EU. Of particular relevance for Turkey is the document promoting the involvement of non-EU Allies in common security and defence activities with a view to a stronger NATO-EU relationship. As underlined previously by former NATO Secretary General Rasmussen, the EU should sign a security agreement with Turkey, including administrative arrangements with EDA, granting it the same status as that enjoyed by another non-EU country, Norway.

*“We seek areas of cooperation with international industry in order to do business together, as well as investment opportunities in third countries.”*

*Sedat Güldogan*

**The European:** *Isn't there a Joint Action Document within EDA?*

**Sedat Güldogan:** Although we knew that it was not possible for a non-EU member to join EDA with full membership rights, the decision to terminate WEAG/WEAO was approved in the framework of EU promises on the enactment of the cooperation arrangements between our country and NATO. These EU promises are also mentioned in general terms in the EDA's Joint Action Document. Approval of the implementation document establishing relations between Turkey and EDA would contribute to the development of European defence capabilities. The EU has yet to honour its commitments. This is not only about complying with the basic principle of *pacta sunt servanda* but is also a necessity for fruitful cooperation between NATO and the EU in the field of capacity building.

**The European:** *Next year Turkey will be heading the G20. What are Turkey's security objectives in a world that is in turmoil, especially in the region on Turkey's borders?*



*Turkish KFOR Contingent welcomed in Kosovo*

*Photo: MOD, Ankara*

**Sedat Güldogan:** Turkey attaches the greatest importance to this task. We will mobilise all our resources and institutions to make our Presidency a success. We believe that our global and regional connections and dynamic economy and, as a rising donor, our expanding aid and assistance programmes, together with our extensive experience in hosting high-profile international events provide us with the necessary tools to steer and advance the G-20 agenda in 2015 in a useful and result-oriented way. Ensuring global economic and financial stability as well as reforming the global economic system in accordance with the realities of today in a way that reflects the increasing weight of emerging economies in the system and promotes development are important issues for Turkey. In 2015 we will strive to focus the G-20's work on these issues and to produce tangible results. Turkey will also aim to further develop the relations and cooperation between the G-20 and the countries and organisations in its region.

**The European:** *One last question on economic policy. Turkey is closely following the negotiations on the Trade and Investment Partnership (TTIP) between the EU and the United States. Where is Turkey's place in this future economic cooperation treaty and what role would it like to play?*

**Sedat Güldogan:** Regarding the ongoing US-EU negotiations on the TTIP, I should stress that for Turkey its relations with the US and EU are not just a matter of security-based strategic cooperation but also cooperation on democracy and economic prosperity for the benefit of the countries concerned and global society. Turkey has made it clear how much importance it attaches to these negotiations and stressed that it is not possible for our country, which has a Customs Union with the EU, to be left outside the TTIP process.

**The European:** *Mr Güldogan, many thanks for this exchange of views.*

*The discussion was led by Hartmut Bühl*



We aim to increase our collaboration in the joint development of aerospace platforms

# There is room for expanding cooperation between the EU and Turkey

Interview with Muharrem Dörtkaşlı, President & CEO of TAI and Chairman of the Board of Directors of SASAD, Ankara

**The European:** *Mr Dörtkaşlı, your country is surrounded by instability and conflict. As the Chairman of the Board of Directors of SASAD, the Turkish Association of Defence Manufacturers, and President & CEO of TAI, Turkey's leading aerospace company, how do you think this unrest and instability is affecting the Turkish defence industry?*

**Muharrem Dörtkaşlı:** Indeed, Turkey is the country that has been hardest hit by this instability in recent years. With the countries around it in turmoil, Turkey is trying to manage risks at all levels, both from the humanitarian and security perspectives. Unrest and instability are two basic factors that directly affect a country's procurement policies and national priorities. This instability places a burden on the national budget, making it necessary on the one hand to respond to the humanitarian crisis, and on the other hand to invest in defence and security in order to ensure that our country is prepared to deal with external threats. As the Turkish Association of Defence Manufacturers we therefore make sure that these priorities are communicated within the defence sector to enable it to better respond to these unexpected requirements.

**The European:** *Could you elaborate a little more on this question of priorities?*

**Muharrem Dörtkaşlı:** We believe that a strong defence and aerospace industry is required in order to face the challenges arising at home and on Europe's borders. The crises in recent years have not been classical defence crises. During the cold war, defence investments were made on

the assumption that facing us on the other side would be a country or countries. The situation of unrest today includes both classical threats and threats that could happen in peacetime scenarios. Thus today cyber security is one of the top national defence priorities, but it calls for a considerable amount of investment in technology, including high-tech engineering infrastructure. Fusion of information is another priority. Network Centric Warfare (NCW) systems, involving a networking of all information in order to increase situational awareness and command/control capability, is also an investment area. More efficient reconnaissance and surveillance capabilities, information technologies and sensor technologies are now also emerging priorities for nations.

**The European:** *Is this the reason why the Turkish defence and aerospace industry has made such enormous progress?*

**Muharrem Dörtkaşlı:** Turkey's defence and aerospace industry has achieved extensive improvements over the last decade. Today Turkish companies are strategic partners for defence and aerospace companies worldwide. The total turnover of the Turkish defence and aerospace industry is around 5 billion USD, and exports account for 1.5 billion USD.

Investment in advanced technologies is supported by the Turkish Government: the main driver behind the strengthening of the national defence industry is the strategic roadmap of the SSM (Undersecretariat for Defence Industries) aimed at making Turkey a stronger ally for NATO and the allied countries. We believe the strategy implemented at the beginning of the 2000s has now started to bear fruit. Today we can talk about Turkish armed carriers, ships, guns, missile systems, UAVs, trainer aircraft and even helicopters. With the capabilities developed over the years, we take part in international projects such as the A400M and JSF as a member of the international community.

**The European:** *As regards the products of your own company (TAI), do you see any possibilities for enhancing cooperation with the European countries?*

**Muharrem Dörtkaşlı:** Turkish Aerospace Industries, Inc. (TAI) has developed a strong partnership with the European Aerospace Industry for both military and commercial programmes. As you know, TAI is an industrial partner responsible for the design and production of major components for the A400M



Photo: TAI

## Muharrem Dörtkaşlı

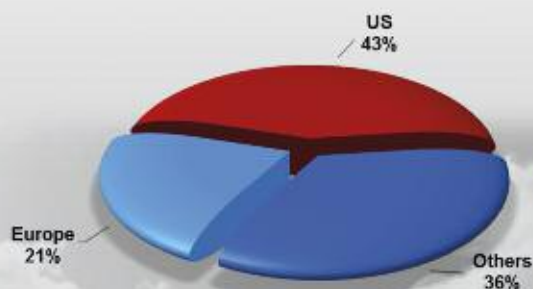
is President and CEO of Turkish Aerospace Industries, Inc. (TAI). Born in Çankırı in 1961, he graduated from the Mechanical Engineering Department of the Middle East Technical University in 1983. Mr Dörtkaşlı, who started working at Turkish Aircraft Industries, Inc. in

1991, was appointed President and CEO of the company in 2005. He also chairs the Board of Directors of both the Defence Industry Manufacturers Organisation and TUSAŞ Engine Industries, Inc. and is Vice Chairman of the Turkish-US Business Council of DEİK and Head of the Defence-Security Commission.

## Aerospace & Defence Sector Breakdown of Exports

**64% of Turkey's Aerospace and Defence Sales go to Europe and the US**

Year	Europe	US	Others
<b>2013</b>	336 \$	680 \$	554 \$
(Millions)	253 €	512 €	417 €



\* ref: study of SASAD (Turkish Defence Industry Manufacturers Association)

*"I believe that there is still room for further improving cooperation with the EU. Turkish industry is doing its utmost to foster this cooperation."*

Muharrem Dörtkaşlı

Photo: SASAD

Military Transport Aircraft as well as a risk-sharing partner for the A350 XWB. We have a number of European partners for SSM programmes, such as AgustaWestland, Alenia and Telespazio.

Of course we do not intend to stop there: we aim to increase our collaboration in the joint development of aerospace platforms such as strategic UAVs, satellites and similar expected investments. One particular remark here is that these collaboration opportunities should aim at the international market, not at Turkey's domestic market.

**The European:** *You are the prime contractor for the Turkish Air Force with your nationally produced state-of-the-art equipment. In line with the future requirements of the Turkish Armed Forces, is TAI working on any new projects?*

**Muharrem Dörtkaşlı:** Our major customer, Turkish Armed Forces (TAF), as the second largest army in NATO and the sixth largest in the world, gives priority to generating multi-functional and flexible forces to conduct various missions. This can only be done by possessing advanced technological systems. Thus we serve not only the Turkish Air Force but also the other Forces within TAF. In line with the future requirements of TAF, we are working on the new generation of advanced Trainer/Fighter Aircraft (FTX) and Light Utility Helicopter Development Programmes as well as UAV Systems, Trainer/Light Attack Aircraft and Modification & Modernisation Solutions. Our joint development with AgustaWestland, the T129 ATAK, is another major development programme aimed at meeting the requirements of TAF as well as allied nations.

**The European:** *Europe and the US currently account for 64% of Turkish Aerospace and Defence sales and Turkish industry complies with all US and EU trade regulations in aerospace matters. Is there still room for further improving cooperation with the European Union?*

**Muharrem Dörtkaşlı:** The EU is Turkey's main trading partner and the biggest foreign direct investor in Turkey. The EU countries account for nearly 35% of our total foreign trade and 70% of the foreign direct investment in Turkey.

I believe that there is still room for further improving cooperation with the EU. Turkish industry is doing its utmost to foster this cooperation. Turkey is a member of JAA (Joint Aviation Authorities) and a candidate member of EASA (European Aviation and Safety Agency). Our new aerospace products like the HURKUS primary trainer aircraft and indigenous light utility helicopter are subject to EASA certification.

Turkey has been investing in enhancing aerospace industry and trade relations with the EU and US since the 1950s. The Turkish aerospace and defence industry is ready to further improve the partnership opportunities with the EU's aerospace and defence industry.

We also look forward to EU and US support for making Turkey a partner within the TTIP, which would also be a concrete demonstration of the importance that the EU and the US attach to the role of Turkey.

**The European:** *Mr President, many thanks for this interview.*

*The discussion was led by Hartmut Bühl*

From sub-system supplier to much needed systems manufacturer

# ROKETSAN – a global defence industry player for indigenous missile systems

Interview with Dr Eyüp Kaptan, Chairman of the Board and Selçuk Yaşar, President & CEO, ROKETSAN, Ankara

**The European:** *ROKETSAN Missiles Inc. was established in 1988 by a decision of the Turkish Defence Industry Executive Committee to lead Turkey's rocket and missile programmes. Dr Kaptan, you are the Chairman of the Board and Mr Yaşar, you are President & CEO. Could you tell our readers more about your company?*

**Eyüp Kaptan:** Since its creation, ROKETSAN has improved its infrastructure and product range extending from under the seas to the depths of space. It has expanded upon the experience gained from programmes to develop indigenous missile systems. Thanks to its strong and steady growth ROKETSAN has become a global player in the defence industry, employing more than 1800 highly skilled personnel.

**The European:** *You are an important national player and are now going global. How would you describe ROKETSAN's industrial position, nationally and internationally?*

**Selçuk Yaşar:** ROKETSAN has carried out various programmes not only for the Turkish Armed Forces but also for allied and friendly nations. Today ROKETSAN is a systems company that designs, develops, tests and manufactures indigenous products.

**The European:** *What competencies has your company developed over the years and where do you see your prime role?*

**Selçuk Yaşar:** With our products and systems we will continue

to pursue our vision of designing new, evolved systems with state-of-the-art technologies, placing our infrastructure and our talented and dedicated human resources at the service of our customers worldwide.

In the early 1990s, following its success in the European Stinger Coproduction Programme, ROKETSAN fully satisfied the requirements set forth by the Turkish Armed Forces with the development of Multiple Rocket Launching Systems and rockets with ranges up to 100+ km. In early 2000, we launched the first national missile programme, the CIRIT Laser Guided Missile.

**The European:** *CIRIT was a clear breakthrough, allowing ROKETSAN to develop medium and long-range anti-tank and anti-aircraft systems.*

**Eyüp Kaptan:** Indeed, since 2005, with the support of the Turkish MoD, ROKETSAN has carried out a number of design and development programmes such as the Long Range Antitank Missile (MIZRAK-U) and the Medium Range Antitank Missile (MIZRAK-O) and is currently working on the Low & Medium Altitude Air Defence Missile using CIRIT technology.

**The European:** *You have your own Ballistic Protection Centre for developing high-end armour solutions for platforms.*

**Eyüp Kaptan:** Yes, that has been a great success. We have designed, developed, produced and tested the armour for our ALTAY Main Battle Tank as well as various land and aerial platforms in the inventory of the Turkish Armed Forces.

**The European:** *Turning to ROKETSAN's international role, what is your status as regards integration in European armaments cooperation?*

**Eyüp Kaptan:** We are now a global player on the defence market and are willing to contribute to international co-development and co-production consortia. Projects within the framework of joint production programmes occupy a significant position within ROKETSAN's project portfolio. Thus we can be a valued partner within OCCAR.

**The European:** *What is ROKETSAN's role within NSPA and in which projects is it involved?*

**Selçuk Yaşar:** Under the contract with NSPA, ROKETSAN has established the Ammunition Surveillance Facility for the surveillance and life-extension of shelf life-expired munitions and the Munition Disposal Facility for their safe demilitarisation without



Mr Yaşar (right) and Mr Kaptan talking to Hartmut Bühl at the Berlin Security Conference 2014

Photo: Klaus Dombrowsky



harm to the environment. These facilities are now operated by the Turkish Armed Forces.

**The European:** *Could you briefly explain the contribution your programmes make to the European defence market? We were talking about the Stinger programme.*

**Selçuk Yaşar:** ROKETSAN is recognised as a reliable global partner for international defence companies thanks to its technological prowess, competitiveness, liability and ability to meet customer requirements on schedule. Let me give some examples:

- In addition to the final integration and testing of the Rapier MK2 missiles on behalf of MBDA-UK, ROKETSAN was also the sole source of Rapier MK2 actuator production worldwide.
- ROKETSAN took responsibility for the design, testing and production of the flight termination unit in the ESSM Programme and also for the production of thrust vector control parts, guidance and control sections.
- Similarly, ROKETSAN was in charge of the production of the Naval Strike Missile Launcher for Kongsberg Defence & Aerospace to meet the requirements of the Norwegian Navy.
- In addition to its production programmes, ROKETSAN has designed and developed new rocket motors for the Advanced ASPIDE Air Defence and OTOMAT Missiles, on behalf of MBDA Italy S.p.A.

**The European:** *What about the part you play in Ballistic Missile Defence?*

**Selçuk Yaşar:** ROKETSAN is a major contributor to the PATRIOT GEM-T and ESSM Block II programmes; furthermore we have established our infrastructure to develop Air Defence Missiles to protect all tiers for the requirements of the Turkish Armed Forces.

**The European:** *Mr Kaptan, what is your vision for the future?*

**Eyüp Kaptan:** ROKETSAN gives great importance to the industrial cooperation agreements signed recently with European companies for building confident partnerships and creating future opportunities. In this manner, we have established cooperation with AIRBUS and MBDA for the marketing and integration of newly developed missiles such as CIRIT and SOM-J on platforms worldwide. As a major contributor to European defence programmes and the backbone of the Turkish Armed Forces, ROKETSAN would like to play the role of solution provider for European armaments requirements. With our young and growing staff and the dynamism, still, of an entrepreneur, we are ready to share our competencies and infrastructure capabilities with our partners in the European defence industry.

**The European:** *Gentlemen, it was a pleasure talking to you.*

*The discussion was led by Hartmut Bühl*

## documentation

### Speech of Dr İsmet Yılmaz, Minister of National Defence of Turkey at the Berlin Security Conference, 2 December 2014

(Excerpts)



Photo: Behörden Spiegel/Dombrowsky

"In the first decade of the 21<sup>st</sup> Century, the world has faced a dynamic and somewhat uncertain security environment. The threat of a global war has considerably receded and the core values of western societies such as representative democracy and market economy are embraced in many parts of the world.

Nevertheless, the world faces a complex and fragile security environment. Conventional threats are now accompanied with new risks such as terrorism, fundamentalism, proliferation of weapons of mass destruction, illegal immigration, climate change, water and energy shortages.

Turkey has been closely affected by all these developments due to her geographical location connecting three continents, three seas and different cultures. (...)

Today Europe is facing a new set of increasing threats in its neighborhood. These threats necessitate to respond in a collective way and to cooperate with its neighbors and NATO Allies. As a dynamic and responsible member of today's world, Turkey is doing her best to reconcile the West with the East and the North with the South.

#### Turkey's national security policy

is designed to preserve and protect the independence, sovereignty, territorial integrity and other vital interests of the country, as well as to contribute to the regional and global peace and security. Turkey advocates peaceful resolution of conflicts by dialogue and cooperation and in accordance with international law.

Taking full account of her international security responsibilities, currently, Turkey is participating in peace support operations in Bosnia-Herzegovina (EU Ops EUFOR ALTHEA) and Kosovo (NATO KFOR, EULEX and UNMIK), Afghanistan (NATO ISAF, UNAMA), Lebanon (UNIFIL), NATO Operation Active Endeavour, NATO Operation Ocean Shield and Combined Task Force – CTF 151.

Our history, as well as regional realities, obliges Turkey to assume a realistic approach to defense and security matters, which in-

see next page →

clude the preservation of efficient and adequate deterrence capabilities. (...)

NATO is one of the main pillars for Turkey's security and foreign policy. Having located at NATO's southeastern flank, Turkey has honored her commitments to her Allies for more than six decades.

#### Turkey-EU relations in the field of defence cooperation

Turkey has actively supported the development of the CSDP (Common Security and Defense Policy) from the outset, both as a candidate country and as a NATO ally. In this context, Turkey has taken part in all the European Union operations to which it has been invited.

Turkey has also shown her willingness and determination to support the EU's initiatives in developing its defense capabilities, including Headline Goal 2010, European Defence Agency and the Battle Groups.

However, the EU has not been equally willing to foster closer cooperation with Turkey. The provisions of the Nice (Nis) Implementation Document have not been fully implemented. Turkey has not been invited to involve in the preparation and planning of the EU Operations to which Turkey has contributed.

Other points of frustration are Turkey's exclusion from the European Defence Agency and the failure in signing the Security Agreement on exchanging classified information due only to 'political considerations'.

We strongly believe that, the non-EU European Allies should be involved in the EU's Defense Initiatives and the planning and 'decision making' process of the CSDP commensurate with their commitments and contributions.

#### Defence Industries

We are faced with increasingly complex global security challenges and shrinking defense budgets in many of the countries. These two factors combined mean that effective security today requires a new level of multinational cooperation.

I believe that, especially for the defence industry, we need to work together to deliver important capabilities that would be too expensive for any of us to deliver individually. I am also certain that if we are to have a secure world, we, all allied countries, need to gather for a common, integrated and shared defense capability. (...)

Turkish defense industry is a proven partner for the European Defense Industry and European projects will be more effective with Turkish participation.

#### Common responsibility and historic duty

We can indeed make the 21<sup>st</sup> century an era which is ruled by peace instead of wars; trust instead of fear; justice instead of injustice; and prosperity instead of hunger and poverty. It is our common responsibility and historic duty to participate in the construction of such a world, regardless of our language, religion and nationality differences."

"Aiming to provide a maximum national contribution to m

## A broad spectrum of capa

Interview with Ahmet Hamdi Atalay, Member of the Board, HAVELSAN

**The European:** *Mr Atalay, you are a Member of the Board of HAVELSAN, a globally renowned defence software and system integrator. Where does your company stand today and what are your objectives?*

**Ahmet Hamdi Atalay:** HAVELSAN was established in 1982 as a subsidiary of the Turkish Armed Forces Foundation; since then it has served defence and IT markets worldwide, focusing on the analysis, design, development and integration of large complex systems. Using its expertise and skill sets HAVELSAN has adopted a systematic approach based on synergy and teamwork in order to meet the growing customer requirements for smart technologies and integrated solutions.

**The European:** *How would you describe your portfolio in a few words?*

**Ahmet Hamdi Atalay:** HAVELSAN has improved its expertise in the fields of C4ISR, Naval Combat, Air Defence, Management Information, Simulation and Training, Homeland Security, Energy Management and e-Government Systems, and offers state-of-the art solutions in all sectors worldwide. And of course we are one of the pillars for equipment supplies to the Turkish Armed Forces.

**The European:** *Could you please tell us about your subsidiaries and affiliates?*

**Ahmet Hamdi Atalay:** In accordance with new requirements, we have opened a number of offices in Turkey and abroad. We are the owner of HAVELSAN-USA Inc., which works in the field of C4ISR integration, as well as being a shareholder in HAVELSAN Technology Radar (HTR), which is active in the fields of radar maintenance, security and cabling. We also have a strong position in what we call EHSiM, which stands for electronic warfare, tactical command and control systems and sensor integration. The company also plays an important role as an advisor to the Undersecretary for Defence Industries of the Turkish Ministry of Defence.

**The European:** *You referred just now to providing solutions for global customers.*

**Ahmet Hamdi Atalay:** Over the last decade HAVELSAN has bolstered its competitive strength on markets abroad by engaging in strategic cooperation projects, protecting its strong position on those markets and exporting high-tech solutions. In line with its strategy of focusing on international markets, the company is particularly active in the Middle East and North Africa as well as in the Central and South-East Asian

meeting defence, security and IT requirements”

# Capabilities is opened up to global cooperation

AN, Ankara

countries, where we are also strengthening our existing relations.

**The European:** *Could you give our readers a few more details about your markets?*

**Ahmet Hamdi Atalay:** Certainly: currently our export countries are Azerbaijan, Georgia, Turkmenistan, Qatar, Saudi Arabia, the United States, Canada, Pakistan, Iraq and the Republic of Korea.

**The European:** *What is your business concept with regard to those countries?*

**Ahmet Hamdi Atalay:** HAVELSAN is ready to share its experience in order to draw up the operational concept together with the customer. In addition to meeting the customer's basic requirements, we also take an analytical approach, providing turn-key solutions in order to take account of potential future requirements. Each product developed and every capability provided is aimed at improving the processes and increasing the operational capability of the customer and/or solution partner.

**The European:** *2014 was a very successful year for HAVELSAN, which received both national and international awards. Could you please give us a few more details about your success in 2014?*

**Ahmet Hamdi Atalay:** I am particularly proud of the great success that HAVELSAN achieved in 2014. HAVELSAN received

## ► Further information:

### Havelsan awards in 2014

- 26<sup>th</sup> of Top 500 ICT Companies;
- ranked second among the Best- Performing 20 ICT Companies in Turkey in the last 3 years;
- first in the Software Exporter, Sectorial Implication and Training Service categories (Interpromedya Publication);
- ranked 144th in “Turkey’s 500 Biggest Industrial Company” list in 2014, rising by 79 compared to 2013;
- awarded with the Best Strategic Partnership in 2014 by SAP; with the Special Jury Award in Leadership, Strategic Planning, Information, R&D Personnel, Innovation Process, Outcomes of Work Categories by the Istanbul Chamber of Industry; and
- Special Jury Award in the Large Scale Company Automation and Technological Innovation categories in 2014.

several national and international awards (see box). In addition to these achievements HAVELSAN was one of the very limited number of domestic companies to receive the CMMI Level 3 certificate which is the most widely accepted process improvement model, with a very wide scope in comparison to its number of projects.

**The European:** *In 2023, the Turkish Republic will be celebrating its 100th anniversary. Is HAVELSAN preparing something special for that event?*

**Ahmet Hamdi Atalay:** Turkey’s Vision for 2023 sets out a number of goals for the centennial of the Republic. You can imagine that we are very excited about this and fully aware of our economic and societal responsibilities, first and foremost in the areas of industry and technology.

**The European:** *This year you have been a particularly active participant in the 13th Berlin Security Conference. What is your aim in being here?*

**Ahmet Hamdi Atalay:** That is easy to answer: over the years HAVELSAN has enjoyed highly fruitful cooperation with its European partners in the areas of design, development and production. Our presence here in Berlin shows how much importance we attach to this relationship and our solidarity.

**The European:** *Mr Atalay, many thanks for the interview!*

*The discussion was led by Hartmut Bühl*



Mr Atalay and Mr Bühl at HAVELSAN's stand during the Berlin Security Conference 2014

*Photo: Klaus Dombrowsky, Behörden Spiegel group*

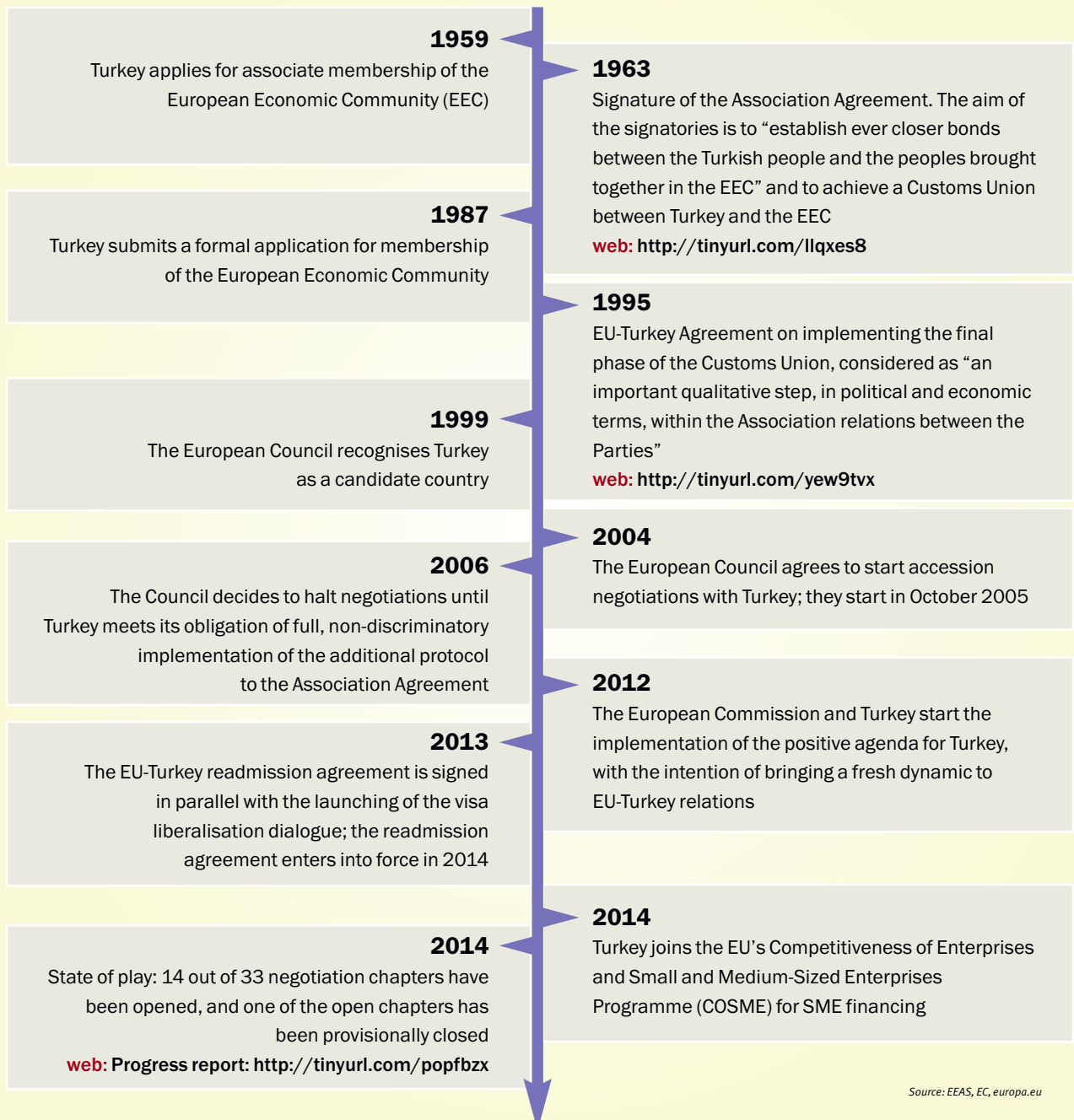


## documentation

## EU-Turkey Relations

(ed/ak, Berlin) The Republic of Turkey is a key partner for the European Union due to its strategic location and emerging economy. On a visit to Turkey in December 2014, HR/VP Federica Mogherini once again stressed “the strategic importance of the EU-Turkey relationship and our desire to step up engagement in view of shared interests and common challenges”. In light of the recent very serious developments in the region, cooperation with Turkey is becoming even more crucial for the EU. However, the accession process has been ongoing for 55 years and further reforms are needed. These can only be achieved by “an even closer and deeper relationship with Turkey”, according to Johannes Hahn, the Commissioner for European Neighbourhood Policy and Enlargement Policy.

### Looking back on 56 years of EU-Turkey relations



# 11<sup>th</sup> European Congress on Disaster Management



MON/TUE  
28<sup>th</sup> – 29<sup>th</sup> Sep 2015

ANDEL'S  
HOTEL  
IN BERLIN

## SAVE THE DATE

### *The European Congress on Disaster Management:*

*This international conference of experts keeps the different decision-makers and players in the field of disaster control informed of the latest developments.*

*The Congress promotes an active dialogue among authorities, universities and experts in the area of disaster control and civil protection. Each year participants from more than 20 countries come together to discuss developments, deepen their cooperation and engage in networking.*

### *The themes of this year's conference include:*

- » Cross-border cooperation;
- » Epidemics and pandemics;
- » Applied security research;
- » Humanitarian disasters.

Photo: Roby Ferrari, cc by sa 2.0, [www.flickr.com](http://www.flickr.com)

[www.civil-protection.com](http://www.civil-protection.com)





# The Juncker Comm

## First Vice-President

responsible for better regulation, inter-institutional relations, the Rule of Law and the Charter of Fundamental Rights



**Frans Timmermans**



... is in charge of ensuring better regulation within the European Commission with regard to the principles of subsidiarity and proportionality and overseeing compliance of all EU regulations with the Charter of Fundamental Rights as well as of inter-institutional relations and transparency.



**Jean-Claude**

President

... as the head of the European Commission deciding the general European interest, and represents meetings, international summits and major

## Vice-President for the Digital Single Market



**Andrus Ansip**



... has the task of creating a connected digital single market and making Europe a world leader in ICT. He aims to break down national silos in the respective legislations and to help build the framework conditions for protecting citizens online.

DG for Communications Networks, Content and Technology

## Vice-President for the Euro and Social Dialogue



**Valdis Dombrovskis**



...works to deepen the Economic and Monetary Union, ensuring that decisions made about support for struggling eurozone countries are more democratically legitimate and that better account is taken of their possible social impact.

DG for Economic and Financial Affairs

## Vice-President for Budget and



**Kristalina Georgieva**

... negotiates and manages the budget. She reports to the European institution and is responsible for the fight against fraud and corruption. She aims to ensure that 40% of the Commission's senior and middle management

DG for Budget/DG for Translation/DG for Security/DG for International Cooperation

## Commissioner for Health and Food Safety



**Vytenis Andriukaitis**

... is responsible for modernising and simplifying EU food safety policy and ensuring readiness in food safety crises or pandemics. His remit includes reviewing the laws on authorising GMOs and addressing the challenge posed by increased demands on national health services at a time of austerity.

DG for Health and Food Safety

## Commissioner for Climate Action and Energy



**Miguel Arias Cañete**

... works to increase Europe's energy security by diversifying sources of energy imports and uniting Europe's voice in talks with non-EU countries. He proposes new EU laws and rules for the climate and energy framework and has the task of further developing an EU policy for renewable energy.

DG for Energy/DG for Climate Action

## Commissioner for Migration, Home Affairs and Citizenship



**Dimitris Avramopoulos**

... focuses on the improvement of border controls while facilitating access for those who have a legitimate interest in entering the EU, on the full implementation of the common European asylum system and a better emergency response, as well as on the fight against crime.

DG for Home Affairs

## Commissioner for European Neighbourhood Policy and Enlargement Negotiations



**Johannes Hahn**

... is in charge of deepening relations with neighbours of the EU to the south and east, promoting stability at Europe's borders and helping neighbouring countries to develop stable democratic institutions and to become more prosperous.

DG for European Neighbourhood Policy and Enlargement Negotiations

## Commissioner for Financial Stability, Financial Services and Capital Markets Union



**Jonathan Hill**

... is responsible for the regulation and supervision of financial markets. He is tasked with establishing a Capital Markets Union and maximising the benefits of capital markets and non-bank financial institutions for the rest of the economy, and in particular SMEs.

DG for Financial Stability, Financial Services and Capital Markets Union

## Commissioner for Agriculture and Rural Development



**Phil Hogan**

... handles the EU's agricultural and rural development policies, ensuring that they promote growth, investment and new jobs. He seeks ways of making European agriculture more energy efficient and of lowering its carbon dioxide emissions.

DG for Agriculture and Rural Development

## Commissioner for Research, Science and Innovation



**Carlos Moedas**

... makes sure that research funding programmes contribute to the Commission's jobs, growth and investment package. He promotes the international excellence of the EU's research and science and strengthens research capacities and innovation across all Member States.

DG for Research and Innovation

## Commissioner for Economic and Financial Affairs, Taxation and Customs



**Pierre Moscovici**

... works for an efficient EU customs union and to deepen the Economic and Monetary Union. His task is to encourage further structural reforms in eurozone countries while making decisions about support for struggling countries more democratically legitimate.

DG for Economic and Financial Affairs/DG for Taxation and Customs Union

## Commissioner for Humanitarian Aid and Crisis Management



**Christos Stylianides**

... is responsible for the readiness of the Emergency Response Coordination Centre and for improving authorities' ability to fight disasters, by promoting cooperation and joint action. Joint humanitarian work will be made more effective through close relationships with the relevant actors.

DG Humanitarian Aid and Civil Protection

## Commissioner for Employment, Social Affairs, Skills and Labour Mobility



**Marianne Thyssen**

... seeks to modernise labour markets and social protection systems as well as to promote the free movement of workers. She strives to combat inequality and poverty by ensuring that the impact of all Commission proposals and activities on employment and social issues is taken fully into account.

DG for Employment, Social Affairs and Inclusion / DG Eurostat



# Commission 2014–2019

**Jean-Claude Juncker**



...focuses on its organisation and policy agenda, defends the European Commission in European Council and debates in the Parliament and Council.

**Human Resources**

**Ylva Johansen**



...manages the EU budget. She negotiates with institutions on how the budget is spent, is responsible for protecting it from fraud and ensures that women represent half of the management.

**Director-General for Human Resources and Institutional Management**

**Vice-President for Jobs, Growth, Investment and Competitiveness**



**Jyrki Katainen**



...leads the new jobs, growth and investment programme, mobilising up to €300 billion in additional investment in the real economy over the next 3 years. He is responsible for pursuing structural reforms in EU countries and improving the business environment of Europe.

**DG for Jobs, Growth, Investment and Competitiveness**

**High Representative of the Union for Foreign Affairs and Security Policy and Vice-President of the Commission**



**Federica Mogherini**



...strives to unify the external voice of the EU by increasing consensus on CFSP and to deliver a common approach for EU action on the world stage. She represents the EU in the UN and other international fora and is head of the EEAS.

**Vice-President for Energy Union**



**Maroš Šefčovič**



...is working to establish a European Energy Union by connecting infrastructures, enforcing legislation and increasing competition. He has the task of ensuring a united European voice in negotiations on improving energy security and that the EU reaches its climate and energy targets.

**DG for Energy**



**Commissioner for Internal Market, Industry, Entrepreneurship and SMEs**  
**Elżbieta Bieńkowska**

...is in charge of completing the single market for goods and services. Her task is to stimulate investment in new technologies, improve the business environment and encourage EU countries to make defence markets more efficient and open to EU-wide competition.

**DG for Internal Market, Industry, Entrepreneurship and SMEs**



**Commissioner for Transport**  
**Violeta Bulc**



...pushes forward work on trans-European transport networks and promotes cross-border transport connections. She is pursuing the Single European Sky policy and the development of common EU standards for transport safety and security in order to improve the international environment for transport.

**DG for Mobility and Transport**



**Commissioner for Regional Policy**  
**Corina Crețu**



...is tasked with identifying how EU structural and investment funds can be better geared towards the creation of jobs, growth, the establishment of a European Energy Union and the completion of the digital single market.

**DG for Regional and Urban Policy**



**Commissioner for Justice, Consumers and Gender Equality**  
**Věra Jourová**



...focuses on the fight against discrimination and the promotion of gender equality. She is responsible for the adoption of the data protection reform and the modernisation of consumer rules. She will conclude the EU's accession to the Convention for the Protection of Human Rights and Fundamental Freedoms of the CoE.

**DG for Justice**



**Commissioner for Trade**  
**Cecilia Malmström**



...pursues a trade agenda that benefits European citizens, SMEs and the broader economy. She is responsible for negotiating bilateral trade agreements with key countries and enhancing the inclusion of developing countries, as well as for evaluating the use of Europe's trade defence instruments.

**DG for Trade**



**Commissioner for International Cooperation and Development**  
**Neven Mimica**



...has the job of ensuring that the EU delivers on its commitments to the Millennium Development Goals to reduce poverty as well as of negotiating the EU's positions on the United Nations Millennium Development Goal agenda after 2015 and a revised Cotonou agreement.

**DG for Development and Cooperation – EuropeAid**



**Commissioner for Education, Culture, Youth and Sport**  
**Tibor Navracsics**



...is tasked with identifying how to invest in and modernise Europe's education systems, strengthening partnerships between universities and the world of work and expanding international student exchanges through Erasmus+.

**DG for Education and Culture/Joint Research Centre**



**Commissioner for Digital Economy and Society**  
**Günther Oettinger**



...prepares legislative steps towards a connected Digital Single Market. His remit includes reforming the EU's telecom rules and modernising its copyright rules, as well as developing measures to make online communications and data more secure.

**DG for Communications Networks, Content and Technology/DG for Informatics**



**Commissioner for Environment, Maritime Affairs and Fisheries**  
**Karmenu Vella**



...seeks to protect our environment while maintaining Europe's competitiveness. He is in charge of implementing the new Common Fisheries Policy, and, together with our global partners, of defining the management and governance of our planet's oceans.

**DG for Environment/  
DG for Maritime Affairs and Fisheries**



**Commissioner for Competition**  
**Margrethe Vestager**



...will mobilise competition policy tools and market expertise to contribute to creating jobs and promoting growth. She is responsible for developing the economic and legal approach to assessing competition issues and monitoring the market.

**DG for Competition**



# NITEC:IS

NCI Agency Industry Conference and AFCEA TechNet International

**5 – 7 May 2015**

Hotel Meliá Castilla, Madrid, Spain

## **Enabling C4ISR: Applications, Education & Training**

NITEC is a collaborative venture between the NATO Communications & Information (NCI) Agency and AFCEA Europe, organised with the support of the Ministry of Defence, Spain.



Sponsorship and exhibition packages are available.  
More information can be found at: [www.nitec.international](http://www.nitec.international)



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Tel: +31 (0) 70 374 3040  
[events@ncia.nato.int](mailto:events@ncia.nato.int)

POC:

Tel: +32 2 705 2731  
[europe@afcea.org](mailto:europe@afcea.org)





## TechNet Europe Paris 2014

# High-tech presentations featuring insights from the EDA

by Mandy Rizzo, Event Manager, AFCEA Europe, Brussels

AFCEA Europe's second largest flagship event, *TechNet Europe*, took place on 9-10 October 2014 at the Hotel du Collectionneur in Paris, France. All major events of AFCEA Europe are held in a European capital city under the patronage of the Ministry of Defence and feature the latest topics in the field of C4ISR. What makes TechNet Europe unique is that it is always organised in cooperation with an EU body. This year's partner was the European Defence Agency (EDA).



Claude-France Arnould during her opening speech

Photos: AFCEA

## EU-NATO cooperation on technical solutions

The General Manager Europe, Major General (ret) Klaus Peter Treche, welcomed the opening keynote speaker, EDA Chief Executive Claude-France Arnould. Of particular importance in the current political climate was her discussion of the Agency's role in the context of the European Common Security and Defence Policy (CSDP) and options for cooperation with NATO bodies on technical solutions of common interest. The next keynote speaker was Lieutenant General Wolfgang Wosolsobe, Director General of the EU Military Staff, who expressed some particularly interesting thoughts on identifying synergies between the different strands of the CSDP for the benefit of deployed missions.

The EDA as the event co-organiser gave its perspective on each of the topics of the three main conference sessions:

- Modern Cyber Defence requires "Built-in Security",
- Mission-Oriented Analysis, Simulation and Training and
- RPAS – Remotely Piloted Aircraft Systems and Mission Payloads.

The participants in this year's *TechNet Europe* were delighted with the high calibre of the speakers, among them keynote speaker Bruce Schneier, the renowned American cryptographer, computer security & privacy specialist and writer. Giving their perspective in the main panel session on *The Role of Military Power in International Relations* were Lieutenant General Markus J. Bentler, German Military Representative to NATO and the EU Military Committee, Professor Rob de Wijk, Director at The Hague Centre for Strategic Studies, General Stéphane Abrial, FRA AF (ret), Deputy CEO at SAFRAN Aerospace

see next page →





The traditional networking during the Conference (left). Major General (ret) Klaus P. Treche, General Manager AFCEA Europe, during his closing remarks

Photos: AFCEA

Defence Security France and Professor Holger H. Mey, Head of Advanced Concepts at Airbus Defence and Space. The discussion by this panel session of a topic that is rarely addressed, particularly by speakers with such a broad range of different viewpoints, was refreshingly welcome. There was a common understanding of what is and shall remain the role of military power in politics, but it was interesting to detect fine nuances, for example between the French and German speakers, in the way in which the national understanding of power was engraved in their minds.

In his closing remarks, AFCEA International's new President and CEO, Lieutenant General Robert Shea USMC (ret), expressed admiration for the density of the programme and its broad approach embracing both political and technological aspects.

### Industrial Exhibition

In addition to the conference programme, *TechNet Europe* featured an exhibition with 25 sponsors and exhibitors from all over Europe and the US. The industry partners showcased their latest military technology, participated in the conference sessions with new themes in their various specialty areas and met with high-level attendees. Indeed, the networking opportu-

nities are yet another highlight of AFCEA Europe events.

Another unique social event offered by the organisers was the pre-conference networking dinner bringing together VIPs, the AFCEA leadership and industry for an evening at the famous Boeuf sur le Toit Restaurant in Paris, which started out in the 1920s as the cabaret for high society Parisians, patrons and artists.

### Participants and further conferences

*TechNet Europe 2014* welcomed some 200 attendees from 17 countries: 9% from academia, 29% military and government representatives and 62% from industry. *TechNet Europe* will from now on be held in the autumn, while *TechNet International* will take place in spring of each year.

January 2015 has already seen a major event, *The European Cloud* in Brussels, to be followed by the *NATO C4ISR Industry Conference and TechNet International (NITEC)* being co-organised by AFCEA Europe and the NCI Agency from 5–7 May in Madrid. The last major event of the year will be *TechNet Europe 2015* co-organised with the Bundeswehr Geoinformation Service & AFCEA Bonn, scheduled to take place on 20–22 October in Berlin.

### ► NEWS:

## Eurocorps to be part of EUTM Mali

(ed/nc, Paris) In the second half of 2015, Eurocorps will form the nucleus of the command of the European Training Mission in Mali (EUTM Mali).

This will be the first time that the multinational force is being deployed under the European flag since it was declared opera-

tional in November 1995. After France, the French-German Brigade and Spain, which successively took the command of EUTM Mali, Eurocorps will support Germany in order to fulfil this mission.

Some 50 personnel from its contributing nations will be present for six months in the

Malian capital Bamako, alongside soldiers from other European nations. Through this commitment Eurocorps is displaying its operational readiness for the European Union as well as its capability to fulfil a mission requiring flexibility and modularity.



# PFISTERER MEMS

## Mobile Energy Management Systems

### Efficient Energy Supply in Areas of Disaster and Conflict

Quickly constructed, reliable energy supply is the prerequisite for crisis management.

PFISTERER energy distribution systems with integrated energy management provide guaranteed and cost-effective electrical energy for accommodation facilities and operating equipment for up to 500 people.

- Central energy distribution allows for optimized operation of conventional generators.
- Alternatively, existing energy networks can be connected or renewable energy sources can be used. This eliminates the transport costs for bringing fossil fuels to the site of operation.
- Storage units ensure uninterrupted power supply during disruptions.
- The standardized models have uniform and non-mistakable connectors for quick construction in the field of use.
- Highly flexible cables and continuous touch-safe components allow the temporary energy network to be laid out flexibly and in a way that saves space.

## Some thoughts on the trends in smart energy

(ed/hb, Brussels) In January 2014, the European Commission proposed energy and climate objectives for the EU to be met by 2030, including a binding EU-wide renewable energy target of at least 27% as well as several measures to increase energy efficiency at all stages in the chain: generation, transformation, distribution and final consumption.

### Energy efficiency is the keyword

This future deployment of renewable energies is highly dependent on establishing long-term, stable and transparent energy policies inviting the private sector to invest.

The EU's sustainable energy policy, built traditionally on the three pillars of

- mitigation of climate change,
- industrial competitiveness and
- security of energy supply

has only recently reacted to the fact that increased uncertainty about fossil energy supplies will influence future energy policies and the overall security of European society. A crucial part of a new energy security will therefore be the use of renewables as well as better management of the energy produced, for which there is no shortage of technologies. The objective is to arrive at greater energy efficiency.

Imported energy supplies need to be partially replaced throughout the EU by affordable, home-grown energy sources. The future will most likely be characterised by increased competition for scarce energy resources and adaptation to the effects of climate change, not only in civil society but also in the security and defence sector.

### US forces at the forefront

During the last century reducing the fossil fuel footprint was never a real issue for the armed forces. But with the US Army's growing awareness of the wastage in the supply of energy to its forces in Afghanistan came a change of mentality.

The US Army concept of "operational energy" led to new efforts to reduce armed forces' reliance on fossil fuels. Similar developments were taking place in Europe.

When the EU started giving thought to the implementation of its Lisbon Comprehensive Approach aimed at common civil and military planning and engagements, the European Defence Agency also began a process of reflection under the heading "Army go green". But the real motivating factor was the tragic loss of life during transport missions in Afghanistan and the high cost of bringing fuel on site, leading the armed forces to consider the ways and means of making more efficient use of energy in order to reduce the logistical burden and protect the lives of the people serving in civil and military crisis-management operations.

### How to make progress

Significant progress will result from the widespread use of high-tech energy supply management systems based on sustainable energy production in combination with storage systems in order to cover the operational requirement of wide-ranging, scalable and unrestricted mobility. Reliable temporary and mobile energy management systems are essential for the functioning of deployed military and civilian camps, headquarters, small units dispatched from the main force in disaster zones or military commandos. It would be greatly to their advantage to be able to be connected quickly and safely to all kinds of local energy sources, such as existing overhead lines, photovoltaic panels and power generators via cables and units capable of transforming high into low voltage energy.

### Requirements

It is necessary to meet both civil and defence needs in a complementary fashion using the same interfaces and standards, thus allowing the deployment of equipment on an interchangeable basis.

In essence, a veritable mobile smart energy power supply management system should be simple to install, easy to run and maintain.

Any system, to be considered 'plug & play', should be:

- a modular, scalable base power solution, compatible with security and defence and commercial generators
- a "Plug and Play" solution with multiple distribution systems, that can simply retrofit into existing power architectures and is capable of integrating components as needed and available.

Such a system should be designed to:

- Integrate any renewable source, such as photovoltaic or wind, allowing renewables to be placed anywhere on the power network
- Offer flexibility for siting renewable equipment in challenging locations

### System management

Integrated in a system management, this one should be automated, ensuring the most efficient use of resources and transparent operation with as few user interfaces as possible.

The demand management of the system should enable real-time load monitoring and the prioritising of power to critical systems. It must also ensure load shedding based upon timers which are able to react automatically to different load demands and availability of energy.





## Smart Energy

*The crucial need to develop energy technologies that make it possible to maximise efficiency or even to exploit new, environmentally-friendly resources is now generally recognised, including in the field of civil and military operations. Efforts are under way to provide military and civilian camps, e.g. for disaster-relief and border-protection operations in remote areas, with a reliable and independent power supply.*

Campaigns and even wars have been won or lost primarily because of logistics.\*

# Smart Energy for Military Forces is becoming a reality

by Sorin Ducaru, Assistant Secretary General, Emerging Security Challenges Division, NATO, Brussels

The amount of money we spend on energy for our armed forces is staggering. For one gallon of fuel to be safely transported to an operational theatre like Afghanistan we spend the equivalent of five gallons. Our energy posture is also limiting the effectiveness of our operations. Since our operations involve long distances and often a sustained presence, we need an ever-larger support structure. And since our resources are limited, this growing support structure risks eating away at our fighting forces.

### How to reverse the trend of energy waste?

Can we reverse these unfavourable trends? Can we find ways to reduce our dependence on traditional fuels, shrink our logistics footprint, enhance the security of our troops and even increase our fighting power?

The answer to all of these questions is a resounding “yes”. New technologies will allow us to change the way we plan our missions, procure equipment and conduct operations. And the good news: many of these technologies already exist.

For example, some NATO Allies have been working on Forward Operating Bases that require much less fuel. Through better insulation, the use of smart grids and many other energy-efficiency measures, these military bases would produce most of the energy they consume. Far fewer soldiers would have to put their lives on the line to transport fuel to these bases. And no expensive airdrop of fuel would be required.

Another example is energy-efficient equipment for the individ-



Photo: NATO

### Sorin Ducaru

has been Assistant Secretary General for Emerging Security Challenges since 2013. He studied at the Polytechnic Institute of Bucharest and the Romanian National School of Political and Public Administration. Mr Ducaru holds a MPhil Degree in International Relations and a PhD degree in International Economics. He

joined the Romanian Ministry of Foreign Affairs in 1993, assuming various posts. In 2000–2001 he was the Permanent Representative of Romania to the UN and from 2001 to 2006 the Romanian Ambassador to the US. Prior to his appointment as Assistant Secretary General, Ambassador Ducaru served as Romania’s Perm Rep to the North Atlantic Council.

ual soldier. Today our soldiers carry many pounds of sophisticated electrical devices. This equipment is essential, but it limits their freedom of movement. The batteries that power their GPS, night vision goggles and radios are heavy, and they do not last as long as one would like.

### A combination of existing technologies can help

Again, a combination of existing technologies can change this: small, portable fuel cells, nanotechnology and new textiles can provide our soldiers with equipment that is smaller and lighter,

and ensures a longer lasting energy supply. The fighting power of our soldiers will increase, as they can operate for a longer period of time. At the same time they will be more agile, and this means that they will be safer: another “win-win” solution. There are many more examples. Replacing traditional light bulbs with LEDs will pay off after just a few months. Coating the hull of a ship with special paint can significantly reduce its fuel consumption. Lightweight containers for military equipment can help reduce our logistics effort without sacrificing sturdiness. Individually, these steps may seem small. Together, they can fundamentally change the way we conduct future military operations.

### Need for a change of habits

Clearly, technology alone will not do the trick. Like in our daily lives, saving energy also requires a change of behaviour. We need to train our soldiers in how to best save and conserve energy. We need to adapt our operational procedures accordingly. And we need to integrate energy considerations into our defence planning process. NATO can help us achieve this goal. The Alliance has over half a century of experience in standardisation – more than any other institution. NATO also enjoys strong

links with our defence industries. And with the NATO Energy Security Centre of Excellence in Lithuania, Allies and partner countries have a hub for exploring energy-efficient technologies and procedures together. The next step will be to demonstrate the operational relevance of energy-efficient equipment. At the major NATO exercise “Capable Logistician 2015” (CL-15) due to take place in Hungary next June, the private and public sectors of several nations will showcase energy-efficient solutions, ranging from soldier power management to low-energy water purification. Such demonstrations will raise awareness across the entire Alliance.

### NATO will develop standards for energy sufficiency

At NATO, we already have agreed standards for fuel. Now is the time to start thinking about developing standards for energy efficiency and ensuring the interoperability of energy-saving equipment. In short, now is the time to start thinking about multinational cooperation: by setting clear priorities; by bringing together groups of interested nations; and by achieving economies of scale. This is why we call it “Smart Energy”.

\* General Dwight D. Eisenhower

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## Mobility and comfort as a matter of course

# Mobile Solar Energy System presented at the NSPA Green Day 2014

by Simone Weber, Marketing Manager, steep GmbH, Bonn

The steep GmbH presented its “steep Mobile Solar Energy System” on the NSPA Green Day 2014 in Capellen, Luxembourg. Among 12 other “smart energy producers” steep attracted the greatest interest for its innovative, easy-to-handle energy system.

### Mobile and easy to handle

The solution consists of a fully mobile and quickly operational container with a solar panel and a tent to form a soldiers’ working or sleeping area. The system serves both the provision of hot water and solar temperature conditioning of working and sleeping areas, at significantly reduced costs compared with the use of fossil fuels.

### Looking after soldiers’ health

Fresh water is used for showering and washing facilities at all times, preventing the spread of legionella and other bacteria. The system cools or

heats the tent via a capillary mat installation. Draughts and noise are excluded, creating a very comfortable indoor climate. Green Day visitors were able to test this effect first-hand sitting under the capillary mats in the tent.



*The steep smart energy solution at the NSPA Green Day exhibition in Luxembourg*

Photo: steep

Intelligently managed, mobile hybrid energy generation in crisis and development areas

# Mobile Power Supply Management Systems for permanent and temporary use

Interview with Samuel Ansorge, Technology Director, and Martin Schuster, Senior Adviser to the Board, PFISTERER Holding AG, Winterbach

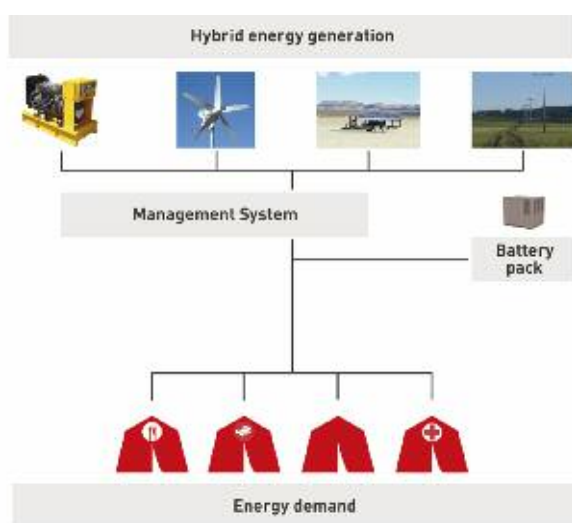
**The European:** Mr Ansorge, you are the Technology Director of PFISTERER Holding in Winterbach, Germany, while you, Mr Schuster, are Senior Adviser to the Board of Directors. Could you tell us a bit more about your company?

**Samuel Ansorge:** PFISTERER is an independent and leading manufacturer of cable accessories and overhead line equipment for sensitive interfaces in energy networks.

We develop and produce solutions all over the world for voltage levels ranging from 110 V to 850 kV. Our know-how is based on nearly 100 years' experience of handling electrical energy.

**The European:** This is what you are best known for, but last year you created a new business branch, developing mobile and scalable Power Supply Management Systems for the efficient supply of smart energy to sensitive regions such as disaster and crisis zones.

**Samuel Ansorge:** The time has come to "go smart", which means quite simply to reduce fossil fuel consumption. But in our case we analysed the political situation around Europe and identified a need for mostly mobile and scalable energy management systems for the supply of power to refugee camps, mobile hospitals, military camps and large construction sites, and we looked around to see what was needed in underdeveloped regions.



The structure of PFISTERER Mobile Power Supply (PMPS)

Photo: PFISTERER



Photo: PFISTERER

## Samuel Ansorge

was born in Switzerland in 1970. He received an M.Sc. degree in electrical engineering from the Swiss Federal Institute of Technology in 1994. After that he worked in the field of cable engineering and overhead lines. Since 2012 he has been a member of the Board of Directors of PFISTERER Holding AG.



Photo: PFISTERER

## Martin Schuster

born in 1951, is now Senior Adviser of PFISTERER Holding AG following ten years as Managing Director of PFISTERER Kontakt-systeme. Since 1980 he has participated both as a member and as a leader in several national and international standardisation working groups.

**The European:** And the first result is your PMPS, the PFISTERER Mobile Power Supply for civil and military use focusing on humanitarian aid/development as well as crisis and disaster management that you presented for the first time in Vilnius in November 2014.

**Martin Schuster:** Exactly. A quickly installed and reliable energy supply is the prerequisite for all disaster and crisis-management situations. Our aim is to be present on the spot at short notice with air-transportable equipment producing energy from alternative sources.

**The European:** The production of energy is one thing, but its distribution quite another. What is the way to avoid losses and how do you guarantee a continuous supply that is tailored to requirements without wasting electricity?

**Samuel Ansorge:** You have hit the nail on the head. That is why we have developed a state-of-the-art energy management system capable of supplying the requested energy while at the same time storing energy that is not needed for the time being. In this way we can provide a secure and cost-effective supply of electrical energy with minimised fuel consumption.





*Virtual refugee camp with PFISTERER PMPS installed, with: cable connection to existing electric power line, generators, battery storage, management system, wind turbines and photovoltaic panels*

*Photo: PFISTERER*

**The European:** *As I understand it, your approach is to have a central energy distribution to do away with the need for each camp, installation, tent, medical service etc. to have its own generator, for example.*

**Martin Schuster:** Central energy distribution enables an optimised operation of conventional generators, or, alternatively, to make use of existing power lines or to connect up renewable energy sources.

**The European:** *What role does the storage unit play?*

**Samuel Ansorge:** With our storage unit we meet the need expressed by civil and military crisis-management leaders for an uninterrupted power supply without disruptions and peaks, thus allowing the continuous operation of all types of electronic devices.

**The European:** *Doesn't it take specialists to set up such a system in the field?*

**Martin Schuster:** Our standardised modules have, on the one hand, uniform, non-mistakable and maintenance-free connectors for quick installation in the field, while on the other hand our cables are highly flexible with continuous touch-safe components enabling them to be laid out in a versatile and space-saving manner, which can be done without specialists.

**The European:** *I very much like your idea of linking up, where possible, with existing power lines in order to considerably reduce energy consumption on the spot.*

**Martin Schuster:** Me too, because existing energy networks facilitate the production of energy on site and enable savings to be made on fuel.

**The European:** *But up to what distances are such connections possible?*

**Samuel Ansorge:** From experience we would draw a distinction between three different voltages:

- Low voltage networks up to 1 km
- Medium voltage networks up to 20 km
- High voltage networks up to 50 km

**The European:** *Mr Ansorge, allow me to turn to economic aspects, to your business model, from system integration to the end user on site. Which solution do you advocate – leasing or sale of the PMPS?*

**Samuel Ansorge:** We are open to and prepared for all eventualities. Additionally the PMPS System is very flexible and can be adapted to any customer requirements. By replacing fuel through renewables huge cost savings can be made. If we also consider the logistic savings a ROI (Return On Investment) of 3 years is realistic for this system.

**The European:** *One last question for Mr Ansorge. How is the demand situation, and what are the advantages of the current system for which Mr Schuster was the inventive spirit?*

**Samuel Ansorge:** The reduction of fuel consumption during electrical energy generation is currently a worldwide requirement. In both crisis zones and undeveloped areas the decentralised generation of power using renewables and operated by a management system is an upcoming trend.

**The European:** *I wish you every success and thank you for the interview.*

*The interview was led by Nannette Cazaubon.*

Transfer of innovative energy technologies from the civilian to the military sector

# IESMA 2014 – how the armed forces can improve their energy efficiency more quickly

by Nannette Cazaubon, Journalist, Paris

IESMA 2014 (Innovative Energy Solutions for Military Applications) took place from 12–14 November 2014 in Vilnius, Lithuania. The event was organised by the NATO Energy Security Centre of Excellence (ENSEC COE)<sup>1</sup> and the DELTA State Military Scientific Technical Centre of the Ministry of Economy and Sustainable Development of Georgia with the support of the Ministry of Defence of the United Kingdom (Technology Delivery) and of the NATO Emerging Security Challenges Division, NATO Science for Peace and Security Programme and NATO Support Agency.

## The experts' conference

The main objective of this high-level international event, which hosted a conference and an industry exhibition, was to support and accelerate the transfer of innovative energy technologies from the civilian to the military sector and to advance the adaptation of cutting-edge technologies for practical use in the military. It brought together representatives of the military, industry and academia to discuss lessons learned and possible innovative solutions. The conference was followed by a (non-public) governmental workshop dedicated specifically to NATO's Smart Energy strategy and the opportunities for accelerating the transfer of Smart Energy technologies and solutions.

## The industry exhibition

The exhibition gave energy technology and solution providers the opportunity to demonstrate their innovative products in such areas as energy generation, storage and distribution, as well as water and waste management, among others. Mobile systems



and solutions for intelligent energy management were of particular interest to the military. Using innovative mobile components (such as transportable and lightweight photovoltaic systems or wind turbines) to generate energy from alternative sources, these systems make for greater energy-independence of deployed camps (until now dependent on diesel generators) and can be used in remote areas without infrastructure.

At the end of the event, LtC Luca Dottarelli, Head of the Doctrine and Concept Development Division of the NATO Energy Security Centre of Excellence took the opportunity to announce to industry a call for tenders for an "Innovative power generation deployable modular system for military exercises and operations in the near future" (for more details, please see: News page 47). IESMA 2014 was a valuable opportunity to raise awareness within the industrial and scientific communities about the military applications of advanced energy technologies and to inform the military about available solutions and innovative projects.

*Nannette Cazaubon is Deputy Editor-in-Chief of this magazine*

<sup>1</sup> The NATO Energy Security Centre of Excellence, created in 2012, is a widely recognised international military organisation providing qualified and appropriate expert advice on questions relating to operational energy security.



Ambassador Sorin Ducaru, ASG/ESC, (third from the right) and NATO Chief Scientist, MajGen Albert Husniaux, (first from the left) discussing with IESMA exhibitors

Photo kindly provided by NATO/SMI



Dr Billur Sakintuna (NSPA) at the conference

Photo: © NATO ENSEC COE

Reviewing the use of generators in military operations through the prism of the new technologies

# Hybrid Smart Energy Systems

by Alexander Zotos, Product Manager, Hybrid Systems, IDE Intracom Defence Electronics, Greece

Quenching the fuel thirst of electricity generators during military forward operations has always been a major logistics challenge, but with the 1980s rise in oil prices and the ever growing demand for electrical energy in the field it also became an urgent priority. Is it time to switch to renewable energy sources?

Renewable sources produce clean and cost-effective energy, but they are bulky and expensive. Combusting fuel to produce electricity is an inherently inefficient and polluting process, even using a modern, efficient engine, but it enables electricity to be supplied on demand, even under a dark sky or in still air. Generators, in addition to being compact and easily transportable, use diesel, the densest and logistically most well-established energy source that we have. Thus the advantages of generators appear to outweigh those of renewables for military operations, but these need to be reviewed through the prism of developments in the area of the new technologies.

## A new concept on industry's test bench

Industry studies of the inefficiency mechanisms associated with fuel-generated electricity have unveiled certain addressable causes of fuel waste that reside more in the capacity-to-demand mismatch of generators than in their – already mature – technology. A US survey has shown that tens of thousands of generators sized for expected peak demand plus a margin operate most of the time below 20% of their capacity, far from their optimum operating point, wasting fuel and causing them to wear out earlier than normal. In order to address this mismatch, a whole new concept is now on industry's test bench. Industry has the challenge of bringing together new engine control systems, power electronics, energy storage, renewables and control methods in a single yet simple configuration that is of value to the user.



*A hybridisation kit can find immediate application on existing generators. Shown here a 3kW generator hybridisation system by IDE*

Photo: IDE



Photo: private

## Alexander Zotos

has been Hybrid Systems Product Manager for IDE Intracom Defence Electronics in Greece since 2012. Born in 1962, he graduated with an electronics engineering diploma from the National Technical University of Athens in 1988. He joined the Intracom group in 1990 as a power supply engineer. Prior to his current position and from 2000 onwards Mr Zotos served as Power Systems gr. manager for IDE.

The challenge on the other side of the table is that the user can no longer request “a 20 kW generator” to acquire the proper hybrid and so needs to measure and predict the power demands of the intended application. (The issue of standardisation is being intentionally left aside). The new concept will take advantage of the boom in the renewable energy market of the last two decades as well as of the latest automotive technology that goes by the same name: hybrid.

## Hybrid generators can make all the difference

Hybrid systems offer a lot more than the simple elimination of fuel waste. Just like a hybrid car, they can supply electricity with the engine off during light loads, operate the engine always close to the optimum while recharging the batteries during normal loads and boost power by making the most of engine battery synergy during load peaks. Unlike a hybrid car, they can use solar energy to drive the load and charge the batteries, or they can be combined with other hybrid generators and renewables to form micro-grids that can support large camps and military bases.

Thanks to their “no idling” feature, hybrid generators are suitable for energy-independent military camps, long-lasting missions of dismounted forces as well as for the unattended operation of equipment. They allow true silent-watch operations (no aural, thermal or radio trace). With their power-boost capability they can be smaller than oversized conventional generators for applications requiring short-duration, very high power peaks. Thanks to their use of renewable energy sources and their capacity to form micro-grids, hybrid systems offer reduced fuel-dependency, redundant operations and an affordable logistics burden.



Reducing fuel reliance for more autonomous and cost-effective deployable communications systems

# Smart energy for secure communications

by André Hâvre, Marketing Director, Security Information and Communications Systems Division, Thales France, Paris

**Thales has developed an integrated smart energy solution that improves the autonomy, resilience and cost-effectiveness of deployable communications systems by reducing their reliance on fuel.**

Military vehicles run on fuel. But so does the auxiliary equipment needed to power and cool switches, routers and other IT and communications equipment deployed with expeditionary forces. As well as burning fuel, power generators are noisy and need regular maintenance, potentially compromising discretion, reducing the availability of critical communications services and pushing up the logistics footprint and the cost of deployment.

## Autonomous communications capabilities

Developed by Thales and tested with the French armed forces for military vehicles, the DYON hybrid energy and smart energy management solution automatically switches between a vehicle's alternator and long-life lithium-ion batteries to power on-board electronic systems. Thales has now incorporated its DYON technology into a deployable – fixed or tactical – smart-energy communications container for in-theatre operations. Thales has provided communications and IT services to the NATO force in Afghanistan (ISAF) for the last eight years, to UN Multidimensional Integrated Stabilization Mission (MINUSMA) in Mali and EUFOR in Central African Republic, operating over 60 containerised satcom systems at points of presence throughout the country. DYON technology improves the autonomy and



Photo: private

## André Hâvre

is head of business development for the customer support and services activities of Thales. He is an aeronautics and space engineer and holds an MPhil from the University of Cambridge. He has been involved in some of France's major military programmes, including the Mirage 2000 and Rafale aircraft, the

Dupuy de Lôme electronic intelligence vessel, the Laser MegaJoule nuclear simulation facility and the Syracuse satellite communications programme.

resilience of this containerised communications capability, optimising energy consumption and using renewable energy sources to further reduce costs.

## Optimised energy production, storage and use

Contracted as a service, the containerised communications capability combines low-energy generators with high-efficiency lithium-ion batteries. LED lighting and optimised cooling system design help to reduce energy requirements. Solar panels as well as other renewable energy sources can be used to top up the batteries. Generators only run at their optimum efficiency and can be turned off for several hours when the

combination of battery power and solar panels provide sufficient energy.

The smart energy management system automatically optimises energy production, storage and consumption. Communication operators with no additional training can control and monitor the system from a small, dedicated console inside the container and track energy status from their own consoles as required. DYON technology has the potential to provide deployed forces with a highly autonomous and resilient communications capability, and is also suitable for decentralised energy nodes connected across smart grids for forward operating bases and command posts.



Smart energy containerised communication system

Photo: Thales

Installing reliable electrical infrastructure quickly in any location

# Photovoltaic power available in a flash

by Nannette Cazaubon, Journalist, Paris

The priority in the event of any disaster is to act fast to provide assistance and save lives: essential for that are not only trained civilian or military personnel and motivated aid organisation staff but also food and medicine and – above all – electricity. Whether in the wake of an earthquake, a nuclear power plant incident or a conflict, a secure power supply is a prerequisite for a range of functions that are vital for the work of civilian and military personnel, from keeping communication channels open to operating medical facilities such as field hospitals.

## Stand-alone energy systems

How electricity is produced for a given site will depend not least of all on the location and type of terrain to which personnel are deployed. In remote areas with no infrastructure, or where the infrastructure has been destroyed by an earthquake or fighting, installing the usual diesel generator-based mobile power supply systems poses a problem if the transport routes



*The mobile photovoltaic system REMULES requires no external power input*

Photo: © smartflower energy technology GmbH



Photo: private

## Nannette Cazaubon

is Deputy Editor-in-Chief of the Magazine “The European – Security and Defence Union”. She was born in 1968 in Germany, studied literature at the University of Bonn, and political sciences at the Institut d’Etudes Politiques (IEP) in Paris. She works in Paris as independent journalist specialised in European Security and Defence.

for bringing in fuel no longer exist or need to be built from scratch, which is time-consuming.

Mobile photovoltaic systems can fill a gap here. They are constantly being developed and adapted for use by civilian and military personnel in crisis zones. To meet the challenge of setting up reliable electrical infrastructure as quickly as possible wherever it is needed, mobile photovoltaic systems need to be easily transportable (including by airdrop) and able to function in extreme conditions such as mountainous terrain (snow and ice), desert regions (sand, dust) and coastal areas (salt in the air). To fulfil those requirements concepts making use of new materials and processes need to be developed.

## REMULES: ultra light and highly mobile

This is why the innovative system REMULES (REnewable Mobile Ultra Light Energy System) has been designed. This ultra-light, highly mobile photovoltaic system requires no external power input, since it operates self-sufficiently, is quick and easy to transport and functions in a range of operational scenarios.

The system was developed by the Austrian company smartflower energy technology GmbH<sup>1</sup>, developer a few years ago of the world’s first all-in-one photovoltaic system that is delivered directly to the client and can be set up and running within the hour.

The REMULES system combines aeronautical techniques with photovoltaics using a novel PV technology, modules without any glass sheets and extremely lightweight semi-flexible foil laminates. With a net system weight of 190 kg, the plug-and-play system can be set up in just 10 minutes. It includes all the necessary components and has separate battery units to ensure the direct availability of electrical power. It can operate 100% stand-alone or in co-generation with other generators. In view of these characteristics REMULES will be playing an

important role in the NATO Capable Logistician 2015 (CL 15) exercise being organised in June 2015 in Hungary as part of the “Smart Energy Camp” where, among other things, it will supply electricity to the PFISTERER Mobile Power Supply System (PMPS).

<sup>1</sup> Supported by the Austrian Ministry of National Defence and Sport, the Red Cross, the Johanniter organization, and the Austrian Institute of Technology, as part of KIRAS, a national security programme, owned by the Austrian Ministry for Transport, Innovation and Technology and the Austrian Research Promotion Agency.

## Technical Specifications:

### Composition

- Constructed entirely from carbon fiber
- Combines aeronautic and photovoltaic technologies
- Highest efficient PV technology
- Modules without glass sheets
- Extremely light, semi-flexible foil laminates
- All modules work independently (bypass technology)
- Fully automated bi-axial tracking
- Easy to exchange in the event of damage
- Ultra-robust packaging (PELI box)
- System setup via hydraulic pump
- Separate battery unit
- All necessary components included
- 100 % stand-alone operation
- Co-generation with other generators

### Power Output

Nominal power output:	2 kWp
Energy yield due to tracking:	equivalent to 2.7 kWp
Power output:	AC or DC

### System

Module type:	Foil technology, without glass sheets
Cell type:	Monocrystalline
Inverter module:	Single-phase, optional

### Measurement and Weight

Net system weight:	190 kg
Weight of transport box:	100 kg
Box footprint:	1.2 m x 2.4 m
Hub height:	2.3 m
Max. system height:	4.2 m
PV diameter:	3.8 m

## ► NEWS:

### “Smart Energy” call for tenders

(ed/nc, Paris) The Vilnius-based NATO Energy Security Centre of Excellence (ENSEC COE) issued a call for tenders for the provision of a *Deployable Hybrid Modular Power Generation & Management System*. The submission deadline is **24 March 2015**.

The ENSEC COE project places a special focus on energy security and efficiency; indeed, given their increasing dependence on Command and Control (C2) and the improvements in their networked communications, NATO's connected forces rely heavily on an assured and uninterrupted energy supply. Any potential disruption of the supply of energy to NATO's operational and deployed forces reduces their operational advantage and capabilities, jeopardising mission completion and effectiveness. The purchased system should consist of conventional diesel generators, renewable source power generators (e.g. wind, solar) and a battery storage system. These should all be linked into a Smart Energy Management System enabling the use of renewables and batteries to offset the use of diesel. The system must be interoperable with NATO/national standard equipment and be transportable in a standard ISO 20ft container or suitable for wheeling and towing via the current vehicle fleet used by the Lithuanian Armed Forces.



Vilnius  
(Lithuania)  
where ENSEC  
COE is located

Photo: Mantas Volungevicius, CC BY 2.0, flickr.com

### Key aspects of the system

**Reducing potential disruptions** through the use of an effective energy management system built around the smart grid technology, allowing electricity to be distributed wherever and whenever needed, in the cheapest and most efficient way.

**Energy storage capacities:** a robust system would make the armed forces more flexible and the generation of electricity from renewables more reliable by reducing energy waste; this would also benefit the environment by using only the energy that is required and storing any surplus.

Use of **innovative energy generators** based on sustainable sources (e.g. solar, wind) in the operational environment to improve energy efficiency and reduce the energy supply chains at least for the sustainment of the units, leaving traditional energy sources and fuel for operational tasks/missions.

The use of a **full and simple metering system** to provide information about the system and enable the optimal method of energy use to be identified.

Source: ENSEC COE



New photovoltaic systems: an innovative, user-friendly alternative to diesel generators

# Alternative methods for the production of energy using mobile systems

by Karl Peter Klostermann, Project Developer and Manager, Multicon Solar AG, Duisburg

In all areas of our lives the demand for electrical power is growing at an incredible pace. There are few sectors in which we can do without it: whether for our food preparation, bodily hygiene, production processes, data communications or contacts with other people we rely on devices powered by electricity. Not even in areas where it makes no economic sense to build a central power supply system or where there is only sporadic demand are we willing to do without the ease and comfort of electrical appliances. Up until now the solution has been to use a technology that has scarcely evolved over the years: the diesel generator. Its drawbacks are well known: the cost of fuel, transport problems, pollution from noise and exhaust gases and the vulnerability of the power units to breakdowns.

## Innovative mobile photovoltaic systems

The smart development of photovoltaic systems now offers an alternative, as demonstrated by the Multicontainer produced by German company Multicon Solar. The cost adjustment resulting from the large demand for battery storage systems has made it possible to design autonomous, stand-alone systems with sufficiently large storage units and tailored to requirements: photovoltaic systems with an output of up to 30 kW and built into containers together with state-of-the-art lithium storage units offer a wide range of different applications.

## Possible uses and advantages

A standard container can be transported anywhere in a simple and cost-effective manner. Its well thought-out design ensures that it can be quickly and safely set up and operated even by non-specialised personnel. The supply of power to small settlements in areas off the grid or to remote industrial installations and the short or medium-term supply of energy to construction and similar sites are some good examples of ways in which it can be used. Due to its ease of transport, simple and quick installation and almost maintenance-free operation this system



Photo: private

### Karl Peter Klostermann

is Project Developer and Manager at Multicon Solar GmbH & Co. KG. Born in 1952 in Duisburg, Germany, he studied physics at the University of Bochum and passed his Master Craftsman's diploma in 1985. In the meantime he worked as a supervisor in a construction company.

When the company became Multicon Solar he started working in the photovoltaic sector where, in his capacity as Project Developer, Manager and Supervisor, he was involved in developing photovoltaic mounting systems and special solar solutions.

also offers a rapid and safe power supply in emergency situations, for example in the wake of a natural disaster. With no fuel needing to be brought in to operate the system there is no need for regular and potentially dangerous fuel transports and a stable power supply becomes possible even in the remotest of areas. Last but not least, a photovoltaic system combined with lithium iron phosphate batteries is environmentally safe and does not pollute the surrounding area with noise and exhaust gases. Given all these advantages, in particular the possibility it offers of a completely self-sufficient electricity supply even over long periods of time, this system is also ideal for use by the military in field camps or during operations.

Given the low cost of stand-alone units resulting from price developments in the field of photovoltaic systems and storage batteries, after five years at the most this new technology becomes cheaper to use than a diesel generator, thereby freeing up funds that can be meaningfully invested in other areas. Thus the Multicontainer marks the start of a development that will doubtless open up additional new possibilities for the environmentally friendly and cost-effective generation of electricity using mobile units.



The mobile Multicontainer solar system designed by Multicon Solar AG

Photo: Multicon Solar AG

NATO's forerunner role in reducing fuel consumption in camps

# NATO continues making Smart Energy smarter

by Dr Susanne Michaelis, Emerging Security Challenges Division, NATO, Brussels

How do you make Smart Energy smarter? Well, to be honest, you can't. Like a computer, energy is not smart. It all depends on the people who are planning, programming and using energy. But we can make them – in fact all of us – smarter. And this is exactly what NATO is aiming to do.

## NATO makes 2015 the year of Smart Energy

NATO, through the Emerging Security Challenges Division, is in the lead of both private companies and the public (agencies of the ministries of defence) sectors to build up Smart Energy in the exercise "Capable Logistician 2015" (CL15) taking place in Hungary on 8–19 June this year. Smart energy in CL15 is geared to the request by nations to transpose the public-private dialogue into action.

This exercise is organised fully in the spirit of the NATO-Industry Engagement Framework (see pages 56/57 of this magazine and the complete text under [www.natolibguides.info/smartenergy](http://www.natolibguides.info/smartenergy))

## The organisation on the ground

Smart Energy in CL15 will install two multinational camps, Smart Energy Camp East and Smart Energy Camp West, both made of fully functional microgrids.

The Smart Energy camps will also include modern, highly insulated tents, low-energy water purification units, LED lights and an efficient heat exchanger for cooling tents, as well as meters and dashboards.

Several companies will bring soldier power and universal charges allowing troops to reduce their battery burden significantly, thus making them more agile and autonomous when on expeditionary missions.

The Host Nation's medical unit will be provided with a modern insulated Smart Energy First Aid tent with energy-efficient LED lights and a capillary cooling system. This innovative cooling system eliminates the uncomfortable blowing of cold air, a feature especially important when treating victims with a contagious illness.

All equipment will be tested for interoperability among companies, other logistical units and nations – a very ambitious goal. It is clear that not all equipment will be plug-and-play and everything will work out as expected. It should be understood that CL15 is all about identifying gaps and deficiencies. The goal is to come to conclusions and recommend standards to make Smart Energy solutions a truly integrated enabler for capabilities.

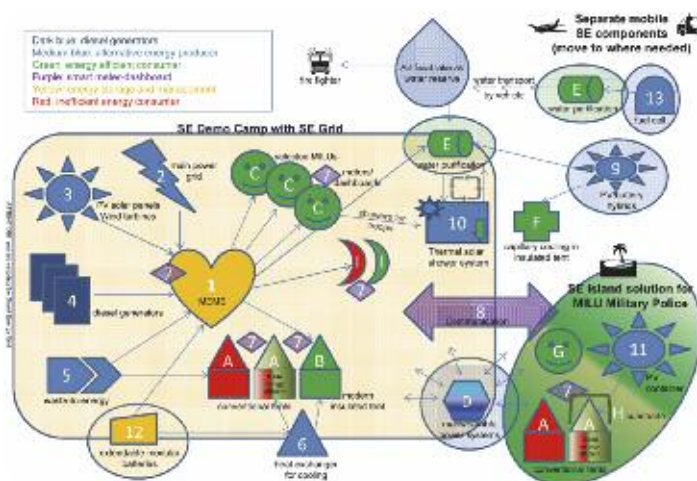


Figure: The multinational Smart Energy concept for the exercise CL 15, north of the Balaton in Hungary.

Image: Dr Susanne Michaelis

## Industries are engaging for NATO

CL15 will be the first time that Smart Energy is being provided for an exercise. It is also the first time that companies will install and run their equipment as fully integrated players, interacting with other logistics units. For example Movement & Transport, Maintenance & Recovery and the Military Police will receive electricity, cooling, mobile and island solutions while they are playing scenario events such as power cut or diesel contamination. Troops will be introduced to microgrids and soldier power while participating in a quiz and competition on making a tent energy-efficient.

2015 has already been declared by experts from the private sector as "the Smart Energy Year". Together we will reach out for a mind-set change among all military ranks and decision-makers (see box on next page for Smart Energy Players in CL15).

## Observations

1. Interviews and articles by some of the companies that have sent their expressions of intent to NATO are included in this issue of *The European – Security and Defence Union (ESDU)*.



Photo: private

### Dr Susanne Michaelis

born in Germany, studied molecular biology and obtained her PhD in human genetics. Following completion of her research she joined the European Commission in 1995, as manager of one of the life science topics.

In 1996, Ms Michaelis took up a position at NATO Headquarters in Brussels, where she has

worked for NATO's Science for Peace and Security (SPS) Programme, Public Diplomacy and Emerging Security Challenges.

In her current role, Ms Michaelis has been instrumental in bringing together an extensive stakeholder network to advance energy efficiency in the military. The initiative combines research & development, awareness raising and policy making and became known as the 'Smart Energy Initiative'.

2. All Smart Energy players will be included in a special print of *ESDU* to be issued for CL15. (This special print is of course open to other companies not participating in CL 15).
3. Observations and recommendations will be included in an official CL15 evaluation report that will be presented to the Allied nations for follow-up and eventual standardisation under NATO's Smart Defence initiative.

Decision-makers who are interested in visiting Smart Energy in CL15 should contact the Multinational Logistics Coordination Centre in Prague.

Homepage: [www.mlcc-home.cz](http://www.mlcc-home.cz)

Contact: [mlcc.exercises@email.cz](mailto:mlcc.exercises@email.cz)

## What is a microgrid?

The heart of a microgrid is a computer-controlled energy management system that sits on top of an energy storage device, usually a rack or container with rechargeable batteries. The batteries are charged by various energy sources, for example diesel generators, photovoltaic solar panels, wind turbines and waste-to-energy devices. The energy management system also measures the demand, sets priorities for power delivery and automatically powers up and shuts down diesel generators as needed. This ensures that all devices are running at their optimum working pace, which reduces fuel consumption and maintenance.

Please see the diagram "The structure of the PFISTERER Mobile Power Supply (PMPS)" on page 41 of this issue for an illustration of the principle.

## Smart Energy Players in CL15

As at 25 February 2015

Expression of Intent to NATO	Equipment in CL15	CL15 location*	
PUBLIC SECTOR			
Bundeswehr, DEU	Thermal solar showers	West	
DoD, USA	Soldier power	West	mobile
PRIVATE SECTOR			
BAE-Systems, GBR	Microgrid	East	
Blücher, DEU	Water purification	East West	mobile
Bredenoord, NLD	Hybrid power Water purification	East	
Bren-Tronics, FRA	Soldier power	West	mobile
EST, NLD	Microgrid	East	
G&G Partners, ITA	Insulated tent	East	
Geoter, ESP	Heat exchanger	East	
IDE, GRE	Hybrid power Solar power	East	mobile
MulticonSolar, DEU	Solar power	East	
Pfisterer, DEU	Microgrid	West	
Renovagen, GBR	Solar power	East West	mobile
ROLD Gruppo, ITA	Meters LEDs	East First Aid	mobile
SAFT Batteries, GBR	Battery solutions	East West	mobile
Schall, DEU	Insulated tents	West	
Setolite, DEU	LEDs	West	mobile
SmartFlower, AUT	Solar power	East West	mobile
Steep, DEU	Solar power Capillary cooling	East West First Aid	mobile
Thales C&S, FRA	Solar powered communication	East West	mobile
Thales DSI, USA	Universal chargers	East West	mobile
Tiegel, DEU	Heat exchanger	West	
UltraElectronics, GBR	Soldier power	East	mobile
UnatSolar, DNK	SolarShade Wind turbine	East West	mobile
Waste4Me, NLD	Waste-to-energy	East	

\* Camp East, Camp West, First Aid; mobile devices will be moved around.

\* Camp East, Camp West, First Aid; mobile devices will be moved around.



# CBRN Research and Innovation

The 1<sup>st</sup> international Conference “CBRN Research and Innovation” will be held in Antibes from 16 to 18 March 2015. It is being co-organised by the French Alternative Energies and Atomic Energy Commission (CEA), the Army (DGA), the Armed Forces Biomedical Research Institute (IRBA), the Alpes-Maritimes Fire and Rescue Services (SDIS06) and the University of Nice Sophia Antipolis (UNS).

This conference ([www.cbrn-conference.com](http://www.cbrn-conference.com)) will bring together some 250 scientists from 18 countries, representing both academic and military research, more specifically in the fields of protection, decontamination, detection and medical counter-measures. First responders and CBRN equipment suppliers will present their requirements and innovations.

## The objectives of the Conference

The main objective of this Conference is to create or strengthen cooperation:

- between “C, B & RN specialised researchers” having common problems to solve and seeking a CBRN global approach;

- between researchers, industrialists & research support agencies, in order to speed up the transition between research and development;
- between responders, industrialists & researchers, in order to develop tools adapted to responders’ needs.

## The programme

The programme comprises 160 communications and includes presentations from OPCW, EC-DG Enterprise & Industry, coordinators of EU-supported research projects, industry representatives and responders. There is still time to join us in order to share CBRN knowledge in Antibes next March!



*The CBRN conference is taking place in Antibes on the French Riviera*

*Photo: IRBA*

## Key results of the CATO project

# The CATO final conference

by Emmanuelle da Silva, Project Manager, ARTTIC, Paris

**The CATO-CBRN project was concluded successfully on 26–27 November 2014 in Brussels. During the two-day conference and interactive workshop programme, internationally acclaimed keynote speakers shared their CBRN knowledge and experiences, while senior CATO partners presented the key results of the project and demonstrated the impact and benefits of everything achieved during the three years of its duration.**

In his closing speech the President of the German BBK, Christoph Unger, explained how CBRN incidents are coordinated and managed in Germany, in particular through the German Joint Information and Situation Centre.

The programme was completed by a series of interactive workshops focusing on the outcomes of CATO applicable to the Preparedness and Response stages of the CBRN incident lifecycle – during both the crucial Golden Hour and the initial hours following an incident. This was supported by an audio/visual demonstration of an incident with a radiological bomb. Some of the comments underlining the success of the conference:

*“An excellent conference - a massive breadth of topics all of great interest. I really started to understand the scale of development of CBRNe issues in the EU”.* Tony Hallet – UK NHS



*Senior members of the European Commission (Philippe Quevauviller and Eva Engdahl from DG HOME, Yves Dussart from DG ECHO) discussing the CATO Lab*

*Photo: ARTTIC*

*“Thank you for all the work and excellent keynotes! This was one of the most insightful conferences I have attended this year! I hope to see CATO being implemented soon at all levels”.* Hugo Marynissen – PM Belgium

## Foundation Trust

CATO partners are now working to adapt the solutions to meet the specific needs of interested emergency services and first responder organisations so as to enable them to improve their capacity to plan for and manage CBRN incidents.

→ Further information is available at [www.cato-project.eu](http://www.cato-project.eu)

## NATO

*The Alliance did an honourable job in Afghanistan even in the absence of an overall strategy, but was unable to achieve any conclusive results. With Russia's annexation of the Crimea and the civil war in Donbass, NATO is in danger of losing its Russian "partner". Firmness and sound judgement are called for in order to develop jointly with Russia a common security strategy in the Euro-Atlantic area.*

Photo: The U.S. Army, CC BY 2.0, flickr.com

### Guest Commentary

## The end of the ISAF mission and Afghanistan's future

by Harald Kujat, General (ret), Berlin

At the end of 2014, the ISAF mission in Afghanistan came to a close after 13 years. However, NATO's link with the country remains: 13 500 soldiers – 11 000 from the US alone – will be staying on as advisers and trainers for the NATO Resolute Support follow-on mission.

Up to 140 000 Alliance soldiers were deployed in Afghanistan at any given time and 3 500 lost their lives there. But the Taliban have not been defeated and some 350 000 members

of the Afghan security forces must continue the fight on their own; if necessary they can rely on support from US troops for at least another two years.

As is so often the case for this type of operation, ISAF had to adapt to changing circumstances and enemy strategy. Initially limited to Kabul and to providing direct support for the new Afghan Government's efforts to build national security structures, its mandate very soon had to be extended to the whole of Afghanistan and its focus shifted from securing the reconstruction process to conducting a combat operation, at times in very war-like conditions.



Photo: private

### General (ret) Harald Kujat

was born in 1942 in Mielke. He joined the German Armed Forces on 1 July 1959 and completed the 20<sup>th</sup> General Staff Course (Air Force), at the Command and Staff College, Hamburg. His career: 1992–1995 Chief of Staff and Deputy German MilRep to the NATO Military Committee and Western European Union, Brussels. 1996–1998 Director, IFOR Coordination Centre (ICC), SHAPE, Belgium and later Assistant Director, International Military Staff (Plans & Policy) and Deputy Director, IMS, NATO Headquarters, Brussels. 1998–2000 Director of Policy and Advisory Staff to the German MOD, Berlin. 2000–2002, Chief of Defence (CHOD), Federal Armed Forces, Berlin. 2002–2005, Chairman of the NATO Military Committee, Brussels.

### The absence of an overall strategy

At the end of this long engagement one must ask whether and to what extent NATO succeeded in this undertaking.

The interdependence between economic and national reconstruction, on the one hand, and the creation of a secure environment, on the other, posed a particular challenge for NATO. Cultural specificities and the early creation of government structures made the situation difficult from the outset. What was sorely lacking was an overall concept bringing civil and military measures together in a complementary fashion within a functional whole to generate the synergies so vital for success. Endemic widespread corruption and the volatile security situation considerably hindered the country's economic recovery. The lead nation principle did not work. On the other hand, NATO



## documentation

**The Secretary General's Annual Report 2014** (Excerpts from the foreword)

*"2014 was the final year of our combat operation in Afghanistan, the largest in Alliance history. We did what we set out to do: to deny safe haven to international terrorists, to make Afghanistan stronger, and to make our own nations safer."*

*"Today, the security of Afghanistan is fully in Afghan hands. While many challenges remain, we are determined to support Afghanistan to build on the gains that we have made with great effort and sacrifice. That is why we have launched a new mission, Resolute Support, to train, advise and assist the Afghan National Defence and Security Forces. We will also continue to provide financial assistance for those forces, and intensify our political dialogue and our practical cooperation with Afghanistan."* NATO Secretary General Jens Stoltenberg

web: <http://tinyurl.com/lp3mmz7>

itself cannot assume responsibility for rebuilding the country's economic and state structures. This was the reason for adopting the so-called Comprehensive Approach aimed at more closely coordinating the efforts of various organisations.

**No conclusive result**

What made the situation particularly difficult from the military standpoint was the existence of a safe haven in the area around Pakistan's border with Afghanistan to which the Taliban could retreat to rebuild their forces.

Even though NATO was unable to completely overwhelm the Taliban, much was achieved; without a doubt a good basis was created on which to continue the reconstruction effort. NATO forces will remain in place during the transition phase in a demonstration of the Organisation's continued responsibility. Finally, Afghanistan's neighbour, nuclear power Pakistan, continues to wage a fierce battle against terrorists. Given the overlapping geostrategic interests of China, India, Russia, Iran and the US in Afghanistan, the country's stability remains of the utmost importance for the future.



NATO in Afghanistan – it was about more than just the war against the Taliban

Photo: The U.S. Army, CC BY 2.0, flickr.com



NATO-Russia: future relations should take account of both sides' legitimate security interests

# NATO – new look, original tasks, and reflections about the future

by Brigadier General (ret) Dr Klaus Wittmann, Berlin

It is cynical to state that, “Putin has saved NATO”. But certainly his aggression against Ukraine has reminded the Alliance of its original task - and exposed one insight: the habitual three-phase periodization of NATO's history – Cold War with deterrence and linear defense; then assistance for Central and Eastern Europe's democratization and stabilization; after “9/11” the fight against terrorism and foreign peace missions – is often misunderstood: as if the new phase with its tasks had *replaced* the previous one. No, collective defense will rest a permanent task; for a “Europe whole and free” much remains to be done; and foreign missions, preferably under UN mandate, will be asked of NATO again. Therefore, tags such as “NATO 3.0” are pointless.

## Paradigm change

Russia's course means a paradigm change for the European security system. The rules laid down in the 1975 Helsinki Final Act and confirmed in the 1990 Paris Charter – sovereignty, territorial integrity, inviolability of borders, free choice of security arrangements –, long regarded as indisputable, are fundamentally questioned. Basic confidence is destroyed. Putin is not merely “reacting” to Western or US policy. NATO enlargement, certainly unwelcome to Russia, never was a threat, not even an active expansion, but the rush to join the West of the liberated CEE countries and former Soviet republics such as the Baltic states. The Kremlin never seems to ponder the reasons for this.

## Recent NATO Summit decisions

NATO's original task – protection and defense of all its members – has become more relevant again than expected even a year ago.<sup>1</sup> Eastern NATO members, particularly the Baltic countries, perceive vulnerability and need reassurance. The NATO Summit in Wales last September took concrete decisions for

visibly enhancing the credibility of the Alliance's defense preparations. The “Readiness Action Plan” underlines NATO's resolve. It includes enlarging the NATO Response Force to 30 000 and enhancing its responsiveness, the formation of a new Very High Readiness Joint Task Force (about 4000) deployable within a few days, the establishment of an appropriate command and control presence and in-place force enablers on the territories of Eastern Allies. There will be planning and exercises as well as facilitation of reinforcement through preparation of infrastructure, prepositioning of equipment and supplies and designation of specific bases. Readiness and capabilities of the Headquarters Multinational Corps Northeast will be raised, making it the hub of operational command. In light of the nature of Russia's intervention in Ukraine, NATO pays particular attention to the integrated spectrum of open and covert military, paramilitary, civilian and propaganda measures, called “hybrid warfare” (or “strategic subversion”).

All these measures are “scalable”; according to the development of the situation they can be intensified or reduced. Also, they are strictly defensive, although they are called “provocative” by Moscow. Yet, it launched its military action in Ukraine without any military “provocation”.

## Failure to integrate Russia

Resolve and unity against aggression are required. But the Harmel formula – defense *and* détente, firmness *and* dialogue – remains valid. The present tensions notwithstanding, NATO members should think about the future. Russia will continue to be a neighbor (albeit not Germany's direct neighbor: 190 million people in the CEE countries do not like Russo-German agreements over their heads).

NATO's policy of democratization and Western integration of the



Heads of state and government at the last NATO Summit in Wales, 4–5 September 2014

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CEE countries in step with NATO-Russia partnership has increasingly failed. In Moscow, the perception grew that during the Yeltsin era the West took advantage of Russia in a phase of weakness. Since his speech at the Munich Security Conference in February 2007, President Putin has been complaining about Russia not being treated on an equal footing internationally. He underrates, though, how much this reflects his own policies. Russia can only isolate itself, which the Kremlin is doing with its present course – the opposite of Gorbachev's "Perestroika", "Glasnost" and "New Thinking".

### Russia needs "new thinking"

That, however, is exactly what Russia needs: "new thinking" in foreign and security policy, as part of its necessary modernization. In turn, the West, and particularly NATO, should make this easier by self-critically recognizing its share of the responsibility for the worsening of the relationship over the last 20 years.<sup>2</sup> Farsighted Western policy should elaborate long-term offers and hold them out "for better times", regarding the future of the NATO-Russia Council, contact with the Eastern CSTO, NATO's policy of the Open Door, the stalled Medvedev proposal, a new departure in conventional arms control and confidence building. This would complement ideas of a "free-trade zone" including the EU and the "Eurasian Union". And it would mean the serious

encouragement of cooperative as opposed to confrontational security, taking into account both Russian and Western legitimate security interests.

One day the "new thinking" will prevail in Russia, albeit perhaps not with Putin. But his time at the helm may be more limited than he and his presently enthusiastic supporters imagine. So let us not just contain Putin, but "think beyond Putin"!



*Brigadier General (ret) Dr Klaus Wittmann is Senior Fellow of Aspen Institute Germany and teaches Contemporary History at Potsdam University.*

<sup>1</sup> Five years ago this author, together with the late Ron Asmus and others, published a brief study titled "NATO, new Allies and Reassurance", which contributed to rebalancing collective defence and out-of-area missions in NATO's new Strategic Concept – on paper. How our thesis has become eerily topical again! Cf. Ronald Asmus, Stefan Czmur, Chris Donnelly, Aivis Ronis, Tomas Valasek, Klaus Wittmann, NATO, new allies and reassurance. Policy Brief. London: Centre for European Reform, May 2010.

<sup>2</sup> This line of thought is elaborated in: Klaus Wittmann, The West is not Russia's enemy. Atlantic Times September/October 2014, p. 5.

## TAILORED SOLUTIONS FOR NETWORKED COMMUNICATION



## documentation

# 2013 Framework for NATO-Industry Engagement (Excerpts)

## Introduction

1. At the Chicago Summit, Heads of State and Government stressed that “Maintaining a strong defence industry in Europe and making fullest possible use of the potential of defence industrial cooperation across the Alliance remain an essential condition for delivering the capabilities needed for 2020 and beyond”.<sup>1</sup> Consequently, NATO, nations and industry<sup>2</sup> have been considering how to improve the NATO-Industry relationship.

## Aim

3. The aim of this “Framework” is to improve the way NATO engages with industry in a mutually beneficial, coherent and transparent relationship for harmonization of capability requirements and solutions (....).

## Background

5. (...) This Framework is not intended to be an effort on the part of NATO to develop a NATO defence industrial policy, nor is it intended to affect national or other defence industry policies. Instead, this approach supports the implementation of the NATO Strategic Concept (...).
6. This industry involvement in the process is to be considered throughout the capability lifecycle, from research to retirement.
7. The approach for improving NATO-Industry engagement builds upon three pillars:
  - a. Structure:** A framework that describes NATO and Industry roles in both non-procurement, procurement phases, on the basis of existing arrangements and NATO bodies.
  - b. Rules:** A set of principles that clarify the NATO-Industry relationship and modalities for engagement, allowing for enhanced visibility of NATO needs, increasing transparency of NATO processes, improving ways to identify opportunities for industry and identifying methods for industry to demonstrate how to apply their contributions to NATO capabilities.
  - c. Delivery:** An implementation plan that describes actions required, sets out a timetable and assigns responsibilities for execution and for reviewing the results, bearing in mind that NATO has no direct leverage on industry and market regulation.

## The Framework in Context

### 8. NATO-industry relationship areas

- 8.1. NATO is engaged in non-procurement and procurement relations with industry. This framework aims at improving interaction between NATO and industry, while fostering a more coherent relationship providing rele-



*More than 30 years between the development and fielding of equipment is too much*

Photo: Sven Lindner, CC BY 2.0, flickr.com

- 8.2. Prior to the procurement of capabilities NATO can act, if agreed by the nations, as a forum for discussion and information exchange allowing NATO, nations and industry to communicate on capability requirements and potential solutions, including on standards for interoperability. (...)
- 8.3. Clearly, NATO and industry also interact in procurement activities when NATO procures capabilities and/or services from industry through NATO common-funded programmes. (...)
- 8.4. This framework will cover the entire spectrum of relationships between NATO and industry for capability development, through the interaction with the Science and Technology Organisation, NATO Agencies, the NATO Industrial Advisory Group (NIAG), the NATO Command Structure (Allied Command Transformation (ACT) and Allied Command Operations (ACO)), International Staff and International Military Staff, and any other existing format or arrangement in which industry interacts with the Alliance.
9. **NATO in context**
  - 9.1. NATO is a facilitator of capability development and delivery, an enabler of interoperability, and a forum for multinational cooperation, for all required Alliance capabilities. (...)
  - 9.2. NATO has announced two initiatives aimed at generating and highlighting opportunities for multinational cooperation where industry can play a major role:



• **Smart Defence:** Working with NATO nations on multi-national solutions, industry can highlight opportunities for cooperation; can advise on the harmonization of requirements, and can contribute to national solutions and decisions (...)

• **Connected Forces Initiative (CFI):** Interoperability is the backbone of success in operations, to this end all three CFI pillars represent areas where industry can contribute. Industry can be involved in the development of training solutions and can contribute to exercises, experimentation, demonstrations and trials, allowing troops to maintain and enhance their capabilities through interaction and experience in respect of principles of transparency and equality of opportunity.

## 10. Industry in context

- 10.1. Over the years industry has expressed a desire to gain greater insight into Alliance capability requirements, including their priorities, to allow them to anticipate potential opportunities, invest and develop ideas, ultimately offering innovative solutions for future NATO needs. (...)
- 10.2. Industry should be seen as a partner in innovation and strategic thinking and, if required by nations, as a possible source of advice on business models and potential solutions during pre-procurement activities in respect of principles of transparency and equality of opportunity. (...)

## 11. Industry and NATO defence planning

- 11.1. Ongoing work on "Enhancing the NATO Defence Planning Process" is expected to make the capability development process "more relevant and responsive", enhancing the opportunities to identify where industry may become a valuable contributor. (...)
- 11.2. This could encompass inputs across the full-spectrum of the DOTMLPFI4 lines of NATO capability development, not just the materiel solutions. (...)

## Principles

12. NATO-industry relations should be governed by universal and specific principles. (...)

### 12.1. Universal principles

- 12.1.1. NATO-Industry engagement is under control by the nations. (...)
- 12.1.2. This Framework is offered to industry and nations on a voluntary basis. It has no funding implications or legal impact. (...)
- 12.1.3. Trust and an open flow of information are critical for building a productive relationship (...)
- 12.1.4. NATO shall ensure that any information is offered even-

handedly to industry in all NATO nations and the information provided by NATO to industry will not privilege individual companies. Industry must be willing to contribute to this information exchange whether individually or in a joint forum (...);

- 12.1.5. NATO-industry engagement must benefit both the organisation and industry.

### 12.2. Specific principles

- 12.2.1 NATO, as an organisation that aspires to harmonise requirements, has an important role to play in communicating clear and detailed requirements to industry. (...)
- 12.2.2. Cooperation can be considered as a possible option for capability development before pursuing unilateral programs. Making the fullest possible use of the potential of industrial cooperation across the Alliance is to be promoted.

### 12.3. Involvement of Small and Medium sized Enterprises (SME)

SMEs are often the birthplace of innovation but competing for attention and contract awards in the NATO environment may seem daunting. Therefore specific efforts must be developed and maintained to ensure that SME have access to information allowing them to engage in the NATO capability development process. (...)

## Implementation Plan

13. (...) The elaboration of such a plan is the next step in this process, and will include:
  - Detailed description of the existing arrangements and NATO bodies, for Alliance interaction with industry (...);
  - Considerations on the definition of a coordination mechanism for NATO-Industry engagement through existing bodies and their possible improvements;
  - Timelines for implementation.

## Validity and Revisions

(...)

## Arrangements for NATO-Industry Engagement

(...)

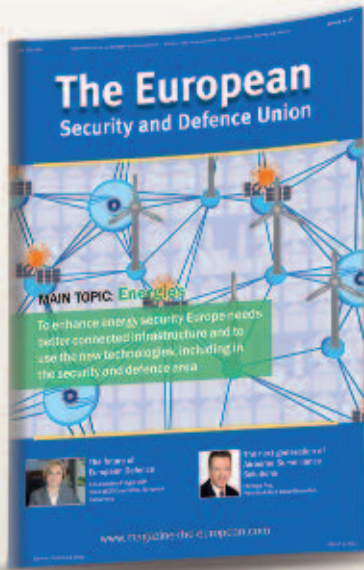
<sup>1)</sup> Chicago Summit Declaration on Defence Capabilities, para 6.  
[http://www.nato.int/cps/en/natolive/official\\_texts\\_87594.htm?mode=pressrelease](http://www.nato.int/cps/en/natolive/official_texts_87594.htm?mode=pressrelease)

<sup>2)</sup> The term industry used throughout this document refers to national industries of Allies either in individual or collective sense, depending on the context

**web:** For the complete text: <http://tinyurl.com/pzubnrg>

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Reflection on the current and future threats to Europe's security

# Berlin Security Conference (BSC)

by Andy Francis Stirnal, independent journalist, Berlin



Thomas Homberg, CEO MBDA Germany, takes the floor during the panel discussion on defence industrial cooperation in the EU

Photo: Klaus Dombrowsky, Behörden Spiegel-Group

**High-ranking politicians, military representatives and academics met in Berlin on 2<sup>nd</sup> and 3<sup>rd</sup> December 2014 to discuss challenges to Europe's security and the means of tackling them.**

The 2014 edition of the Berlin Security Conference took place under particularly challenging circumstances, with the burning issues in Europe's neighbourhood vying with topics of technological and industrial policy, policy implementation and institutional cooperation, as well as the need for strategic reflection: a clear demonstration of the vital relevance of each and every subject on the agenda of this high-level conference.

## More EU cooperation in Security and Defence

Dr von Geyr, Director General for Security and Defence Policy in the German MOD, rightly noted that there are no longer any white areas on the European security map, since all conflicts wherever they may arise affect Europe at least indirectly, when not directly. The logical conclusion was neatly summed up by the title of EDA Chief Executive Claude-France Arnould's speech, "Cooperation has become a necessity, no longer a luxury". It was also an apt reminder of the need for the recurrent theme of pooling and sharing to be resuscitated once and for all.

## Turkish industry – striving for loyal cooperation

In a similar vein, Dr Ismet Yilmaz, Minister of National Defence of the Republic of Turkey, representing the official partner country of the BSC2014, called for the possibility of closer military-industrial cooperation between his country and the EU. The choice of partner country was a farsighted one, given Turkey's status as a NATO member and major security pillar for the region, and the importance of its defence industry. Indeed, the unprecedented threats to regional stability that pose a massive challenge to Turkey's external and internal security also make it more necessary than ever for the EU to reaffirm its partnership with Turkey.

## Andy Francis Stirnal

studied political science and communications in Strasbourg and Paris and at the Freie Universität in Berlin. He was a political consultant at Berlin's Business Representation in Brussels then worked for a Brussels-based political consultancy, initiating debates in the field of European foreign and security policy. He is currently an independent journalist, conference manager and EU project and grants advisor at EuroConsults in Berlin.

see next page →





Turkish Minister of National Defence İsmet Yılmaz with journalists

Photo: Klaus Dombrowsky, Behörden Spiegel-Group

In keeping with the common interests and threats, Turkey's military-technical priorities were in principle identical to those of the EU, said Dep. Undersecretary of State, Sedat Güldogan, from the Turkish MOD, during the forum on industrial cooperation. It was underlined that the breadth and depth of cooperation in this key area were insufficient. In order to make multinational projects more successful and sustainable than in the past, the principle "one specification, one product, one design – but no variations" could offer significant improvements. Monopolies, it was agreed, were unavoidable and competition policy would need to cope with that fact. The interests of a common EDTIB (European Defence Technological and Industrial Base) should be put before national egoism, said Thomas Holmberg, CEO of MBDA, Germany. Since SMEs were recognised as the backbone of the European defence industry, cooperation should bring together in a strategic way players of different sizes.

### From asymmetric to hybrid warfare

BSC2014 was also the occasion for some interesting reflection on the current and future threats to Europe's security. With regard to the crises in Ukraine and the Middle East and to international terrorism, it is first of all the concept of hybrid warfare that provides a framework in which to analyse those threats and scenarios: non-identifiable attackers, unconventional attacks on civilian infrastructure, information warfare and propaganda in western media. Close cooperation in the military and intelligence fields is an obligation, forging new alliances and strengthening international institutions such as the OSCE are the challenges ahead. The discussion will certainly continue during BSC2015.

#### ► NEWS:

## Berlin Security Conference 2015

**BSC** Berlin Security Conference  
14<sup>th</sup> Congress on European Security and Defence

The 14<sup>th</sup> Congress on European Security and Defence (BSC 2015) will take place from 17 to 18 November 2015 at the andel's Hotel and Convention Center in Berlin.

This year's partner nation is the United States and the Congress motto: **Euro-Atlantic Partnership – firm anchor in a turbulent world.**

The Congress President is Ambassador Jiří Šedivý, Permanent Representative of the Czech Republic to NATO in Brussels.

In addition to individual presentations by high-ranking political, military and industry representatives and discussions in a total of ten panels, the main themes of the Congress will be tackled in three plenary forums:

- Forum 1:** Euro-Atlantic Security: Washington-Brussels-Moscow – how to meet the new challenges;
- Forum 2:** TTIP and the implications for transatlantic defence and armaments cooperation;
- Forum 3:** Hybrid Warfare – the new challenges – creating the right capabilities.

This year again up to 1000 participants are expected.

# List of authors and articles in 2014

Author/Titel.....	ESDU N° .....	Page
<b>Ahlers, Rolf-Jürgen</b>		
The role of SMEs in security and defence.....	19.....	22
<b>Bağcı, Hüseyin and Çağlar Kurç</b>		
Turkey's role in Mediterranean security .....	18.....	26
<b>Bennington, Thomas</b>		
Armed forces going green – only a vision? .....	19.....	46
<b>Broemme, Albrecht</b>		
Energy supply in disaster management .....	19.....	48
<b>Brok, Elmar</b>		
Towards creating a new spirit for the CSDP .....	18.....	12
<b>Bühl, Hartmut</b>		
What Europe's Air & Missile Defence capabilities are all about .....	18.....	55
100th anniversary of the First World War.....	19.....	60
<b>Cazaubon, Nannette</b>		
Plug-and-Play solutions for standard and smart energy supply.....	18.....	48
The Italian EU Presidency .....	19.....	8
<b>Dörre, Oliver</b>		
Latest proven National Air Policing Centre Solution.....	18.....	53
<b>Favin-Lévêque, Jacques</b>		
The EU and Russia – an impossible dialogue? .....	18.....	28
A Franco-German alliance in the land systems sector? .....	19.....	24
<b>Fotyga, Anna Elżbieta</b>		
The future of European defence.....	19.....	9
<b>Gahler, Michael</b>		
The EU's contribution to better and more tangible capabilities for EU missions.....	18.....	36
<b>Gijbers, Koen</b>		
Winning the cyber battle through reform .....	19.....	31
<b>Gillett, William</b>		
Energy security – new opportunities for renewable energies in the EU.....	19.....	42
<b>Giuliani, Jean-Dominique</b>		
Russian lessons for the European Union .....	18.....	7
<b>Hende, Csaba</b>		
Making better use of existing capabilities.....	18.....	35
<b>Hennis-Plasschaert, Jeanine</b>		
Commitment and unity .....	18.....	19
<b>Hesse, Johan</b>		
New crypto client approaches for future mission networks.....	18.....	44
<b>Homberg, Thomas</b>		
Europe needs a strong defence technology base .....	18.....	40
<b>Kafurke, Markus</b>		
Maritime Security Policy: Safety in the Arctic .....	19.....	57
<b>Kiesewetter, Roderich</b>		
Challenges for the European security order .....	19.....	12
<b>Klug, Gerald</b>		
The Summit and the role of smaller countries in defence .....	18.....	30
<b>Krieger, Kristian and Brooke Rogers</b>		
Improving public resilience to CBRN incidents .....	19.....	53
<b>Kurç, Çağlar and Hüseyin Bağcı</b>		
Turkey's role in Mediterranean security .....	18.....	26
<b>Lajčák, Miroslav</b>		
NATO and the EU: what you get for paying two membership fees .....	18.....	20
<b>Linkevičius, Linas Antanas</b>		
The Eastern Partnership: common challenges, a common response.....	18.....	22
<b>Lugan, Bernard</b>		
Africa in crisis.....	18.....	24
<b>Lyden, Mike</b>		
NSPA – An agency tailored to its mission .....	19.....	29

Author/Titel .....ESDU N° Page

**Mey, Holger**

European defence industries – which future? .....19.....20

**Nerlich, Uwe**

An EU global strategy and requirements for European defence and industry .....18.....38

**Paşcu, Ioan Mircea**

The real symbolism of the occupation of Crimea .....18.....16

Black Sea security – pondering the next steps .....19.....14

**Perruche, Jean Paul**

NATO: The laborious process of putting complementarity into practice .....19.....15

**Popp, Thomas and Volker Welzenbach**

Water-Food-Camps .....19.....54

**Raab, Christoph**

The European Parliament in security and defence – how functional will it be? .....19.....18

**Remez, Victor**

CATO – CBRN crisis management .....19.....50

**Rinkēvičs, Edgars**

Harmonising the security and defence interests of the EU and NATO .....18.....10

**Rogers, Brooke and Kristian Krieger**

Improving public resilience to CBRN incidents .....19.....53

**Rost, Peter**

Innovation in encryption technology .....19.....36

**de Rousiers, Patrick**

A clear roadmap to strengthen our solidarity .....18.....14

**Roy, Philippe**

Next generation of Airborne Surveillance Solutions .....19.....26

**Rühle, Michael**

NATO and the challenge of energy security .....19.....45

**Schwab, Andreas**

Winning the cyber battle through reform .....19.....34

**Segers, Nico**

2014 BS Secure Forum – a conference report .....19.....62

**Souren, Joseph**

Why Layered Security is the best approach to preventing insider threats .....18.....47

**Stirnal, Andy Francis**

The reorganisation of the European Defence Agency (EDA) .....18.....57

Learning from physics: the principle of energy conservation .....19.....40

**Van Orden, Graham**

Putting the brakes on the EU's misplaced military ambitions .....18.....21

**Veit, Klaus**

From sensor to shooters – new approaches for interoperability in C5ISR .....19.....39

**Vella, George W.**

The EU's Mediterranean Policy as reflected in the December 2013 Council Conclusions .....18.....32

**Watson, Graham**

The EP's influence is limited in defence, but decisive in other important areas of the CSDP .....18.....17

**Welzenbach, Volker and Thomas Popp**

Water-Food-Camps .....19.....54

**Willmott, Graham**

Countering the CBRN-E threat .....18.....50

**Wosolsobe, Wolfgang**

The consequences of the Summit decisions for the implementation of capabilities .....18.....34





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