



Security & Defence Agenda Report

Safeguarding defence technologies



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How strong a technology spearhead is defence?

Whether it be advanced materials or new generation electronics and communications, defence procurement has become a tried and tested way of stimulating R&D in key industrial sectors. But with the emphasis of economic policymaking now moving away from high-tech breakthroughs to the more efficient and productive harnessing of technologies, what is the defence industry's case for hugely expensive projects, particularly in the aerospace sector? What significant industrial advantages have accrued to Europe as a result of cross-border defence cooperation, and what are the prospects for the coming years? How effective has the European Defence Agency been in stimulating new technologies? Does the EU's much-reduced 2014-2020 budget constitute a death warrant for defence R&D in Europe?

Speakers

Claude-France Arnould, Chief Executive of the European Defence Agency (EDA)

Philippe Brunet, Director for Aerospace, Maritime, Security & Defence Industries, Directorate General for Enterprise and Industry, European Commission

Jelle Keuning, Director for Research and Development, Ministry of Defence, The Netherlands

Moderated by Giles Merritt, Director, Security and Defence Agenda

Should Europe protect its defence technologies?

Taken together, Europe's main defence equipment exporters outstrip even their American rivals by accounting for 36% of the global market, against the US share of some 30%. But fierce national rivalries and EU governments' inability to forge common standards and products means that in reality Europe's defence industry is fragmented, as demonstrated by the failed BAE-EADS merger. How well prepared is the European industry to withstand competition from newcomers, notably in China, Brazil and South Africa? Should greater protection be given to the sector and at what cost to the end customer? Should there be a fresh attempt to create a binding EU-wide arms exports policy?

Speakers

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The perils of failing to safeguard defence technologies

Europe's armies must defend their technology base or risk condemning themselves to irrelevance. But as the economic crisis eats into defence budgets, research and development is an all-too-easy target for spending cuts. Austerity can be an opportunity for both the civilian and defence industries to thrive if nations use their military needs as a driver to develop dual-use technologies. "When it comes to research and technology, it's clear that there is no delineation between defence and civilian research in technology. We need to take maximum benefit from cross-fertilization and the strong spill-over effect of these technologies", said **Claude-France Arnould**, Chief Executive of the European Defence Agency.

As the harsh reality of the economic crisis sinks in, 2013 is shaping up as a pivotal year for the future of the European Union's defence industry. In an age of austerity, it is likely that only three EU member states will spend the widely accepted minimum of two percent of gross domestic product on defence this year. A return to economic growth is not just around the corner. Many nations are heading toward one percent, and some even lower. If the trend continues, according to EU Council estimates, around 12 percent of overall defence spending could be lost by 2017. Not only that, new and cheaper players are entering the industry, undercutting European industry and reducing margins.

"This is a make or break year for the European defence industries", **Giles Merritt**, Director of Security and Defence Agenda, said

"European industrialists remain the biggest exporters but are feeling the effects of competition from Russia, Turkey, China, South Africa, Brazil and others"
Giles Merritt

Spend, invest wisely, or work together

Yet this spending conundrum comes at a time when Europe's defence inadequacies have been laid bare by military operations in Africa. The lessons from the conflicts in Libya and Mali - potential havens for militants who could conceivably export their brand of terror - are that EU nations do not have the strategic lift, air-to-air refueling and unmanned aerial vehicles for reconnaissance, surveillance and information gathering required to successfully carry out sustained missions of that kind. In the past, the United States has been willing to step in and fill those important gaps, but Washington has its own economic problems to deal with and has begun to turn its strategic attention to the Pacific region. US officials, and indeed the US Congress, have made it clear that Europe will have to do more of the heavy lifting. But with what?

"Europe should protect its capacity to defend itself, otherwise it condemns itself to irrelevance in the long run", said **Joaquim Nunes de Almeida**, Director for

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Public Procurement, DG Internal Market and Services at the European Commission. "The greatest obstacle to achieving this goal is money. That is, a lack of money, and the budgetary constraints weighing on our member states. If we fail to spend on defence we call into question our ability to protect ourselves and to rely on our own resources in the long run".

"We are trying to implement policies for mitigating negative effects of austerity. It means that we have to spend money more effectively and more efficiently", said **Jelle Keuning**, Director for Research and Development at the Dutch Ministry of Defence.

For **Daniel Fiott**, Researcher, at the Institute for European Studies, of the Vrije Universiteit Brussel (VUB), "the rules of strategy and warfare are such that you need to keep your technological base in place or you fall by the wayside".

"If Europe pulls up the drawbridge, where does that lead us, what does it mean for Europe and the whole international community?" asked **Ernest J. Herold**, Deputy Assistant Secretary General for Defence Investment, NATO. "Given today's global organisation of defence companies and defence programmes, can defence markets be defined by geographical boundaries? Do companies that most may consider "European" actually think of themselves as European, or is a European defence market enveloped in a globalised one? Furthermore, he emphasised the importance of understanding and analysing the consumer/supplier relation-

ship in the defence area. What nations want as consumers on the one hand and as suppliers on the other does not always go hand in hand."

For all the impact of the economic crisis and stiffer competition, many in the defence industry maintain that only lip service has been paid to the need for EU nations to pool and share their capabilities, equipment and know-how. Many of the hard decisions, they say, have been avoided so far. Yet closer cooperation is the one opportunity for smaller European nations - and

"In our business of war, coming a good second is not an option. that means we are very much motivated to have the best capabilities available"

Jelle Keuning

those on tight budgets - to acquire key military enablers that they could never afford alone in prosperous times, let alone in the current economic climate. "It is a sort of paradox that although the budgets are declining, the defence markets in the EU

continue to be characterised by an excess of duplication and multiplication", said **Philippe Brunet**, from the Aerospace, Maritime, Security and Defence Industries of the European Commission's DG Enterprise and Industry. European armed forces still have around seven different types of combat helicopters, three kinds of fighter aircraft, and five makes of main battle tanks. "I'm not sure this situation will be sustainable for the coming decades", he said. Herold, from NATO, agreed. "Smart defence at NATO, pooling and sharing in the European Union, those are all efforts to promote these industries and technologies but are we doing enough? NATO and the EU are two very different organizations. We need both to look at the what, the why and the how of defence technologies, that way we can keep our approaches mutually reinforcing", he said.

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Awaiting EU leadership

In this context of austerity and multiplicity, the defence industry, European nations and EU partners alike are looking to the European Council summit in December, where defence will be at the top of the political agenda. It's the first time in four years that EU leaders will discuss defence in such a forum, and experts are wondering whether heads of state and government will make the tough choices, and provide the right kind of guidance to give impetus to efforts for tighter cooperation and put the emphasis back on research and development. According to President of the European Council Herman Van Rompuy, the December summit should focus on three main pillars: future investment and equipment procurement; strengthening the industrial base to keep it innovative and competitive; and the preparation and availability of forces. "One hopes that this will lead to a European Council at the end of this year, that will not be like so many others, where you have to read the communique carefully for signs of hope. It will be a strong test of political will", Merritt said.

The head of the EDA believes that it is, in part, up to the industry itself to set the tone. "If we are concrete enough in the contribution that we prepare for the European Council, if we are at the right level of ambition, the leaders will come back to it", she said. "We must convince them that defence is very much a part of their agenda, and particularly in growth, jobs and innovation,

that we really need defence for this spearhead role for technology at large." With some 700,000 people employed, defence is a sector that clearly feeds back into economies.

In preparation for the summit, the European Commission is preparing a 'communication' document that it expects to adopt before the summer break. Brunet said it would cover internal market considerations, industrial policy and research - notably new technologies - and key sectors like space and technology where the

"Cooperation between Europe's armed forces is absolutely crucial. This comes back to one issue, compatibility, or the same standards."

Philippe Brunet

EU can bring a particular added value. Part of its plan is to encourage interoperability and common standards, because while the need to pool and share seems obvious, the wide range of equipment and procedures make it a tricky enterprise. This has to change, according to Brunet. The Commission hopes to be given a mandate by the leaders to move forward on several parts of its communication.

Pressures on research and development

But while hopes for December are reasonably high, research and development still look like victims of the austerity measures that have cut the EU's next long-term budget. However, by sucking the wind out of the sails of research, Europe risks losing the technologies that could prove essential in its defence in years to come. Any competitive edge that the EU military industrial complex has in cutting-edge technologies could be

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lost, and for decades. "The big loser of budget cuts is research and development, of course it is an easy candidate. Other cuts are more difficult", said Arnould. "This has long-term consequences - we will not be prepared for the future - but there are also short-term consequences like the eroding of competitiveness in our defence technologies, which is happening even now."

The figures are it. "Between 2005-2010 we have reduced our R & D effort in Europe by 14 percent, while in the US has increased by a factor of seven", said Brunet. "Currently the viability of our European defence technological and industrial base is in danger. I'm not just referring to the big players, but also to the hundreds of small and medium-sized enterprises who are highly dependent on this sector." The industry is surviving on research and development efforts that were undertaken at least a decade, and in some cases 20 years, ago. This has not gone unnoticed in Spanish defence circles, even as Spain labours more than most under the effects of recession.

"The defence industry is a gazelle that grows on grass, and that grass is technology. Without it the defence industry cannot meet its requirements", said **Admiral Juan Francisco Martínez Núñez**, Director for Defence Policy, at the Ministry of Defence in Madrid. "This grass is delicate to grow. You have to respect nature. That grass needs more water and fertilizers", he said.

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Admiral Juan Francisco Martínez Núñez

Those in the industry couldn't agree more. "To protect technology you have to look after your industry, and to maintain an industry in Europe - if you wish to have security of supply in Europe - then you have to invest in research and development here", said **Bill Giles**, Director General Europe at BAE Systems. But the big industrial players are likely to look abroad if investment wanes further, or if their work is hindered further by red tape from Brussels. "My company sees itself as global, and Europe is part of that, but it's only a bit, and frankly not a hugely important bit", Giles said. "There is a general view in the industry that the control of assets

and regulation at EU level is unnecessary and undesirable". Beyond the internal issues, competition from outside is on the rise. Fiott warned that nations such as China and obscure investment funds are interested in little-noticed armament factories and naval dockyards in places such as Greece. The aim is not just to stay and earn, but to take the know-how from Europe back home, whether it be human or armament skills. Fiott said that France is increasingly concerned about being able to export to the global market, particularly as the United States begins cutting defence spending, sending US manufacturers onto the global market looking for a greater market share. Small and medium-sized enterprises also need help, particularly with financing and the simplification of supply chains. SMEs are significant players and for most EU nations they represent the only defence sector, participants noted.

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Possible solutions

Yet all is not lost, and some room for optimism remains. **Peter Scaruppe**, Director for Industry and Market at the EDA expressed confidence that "industry will adapt to market challenges through further consolidation". Arnould also underlined that opportunities lie in the EU's governing Lisbon Treaty, notably Articles 185 and 187, on joint funding for specific programmes and the establishment of joint undertakings which could allow partners to leverage more private funds. Some suggested that the EU's Horizon 2020 scheme - a seven-year future civilian research programme - could be an occasion to explore the potential for development of dual use technologies, relying for example on synergies between the security and defence sectors. Many technological innovations have both civil and military applications, whether it be space, the cyber-sphere security,

"The situation is not yet too bad in Europe, the question is whether it can be maintained or improved even."

Peter Scaruppe

maritime surveillance, or unmanned aerial vehicles.

What remains to be done is to convince governments and indeed the European public of the need for strong defences, and the dangers of losing military technologies which could mean the difference between life and death in combat. "We can see that there are two or three time bombs ticking. It is likely that a conflict could arise in Africa or the Middle East. A strong European defence presence could help to defuse tensions and to bring about a peaceful outcome", said Martínez Núñez from the Spanish defence ministry. Merritt said: "It's very difficult to sell this in an age of austerity, yet convincing governments to invest is extremely important. Austerity isn't all that bad. Perhaps the stresses of austerity will unblock the inertia that seems to have been a part of the defence industry in Europe for some years now".



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