

"SMART DEFENCE SMART TADIC"

Conference to address

Trans-Atlantic Defence Technological and Industrial Cooperation (TADIC)
Conference of Armaments Directors (CNAD)

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North Atlantic Treaty Organisation
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Background Paper



The NATO Secretary General refers to "Smart Defence" as the way to "ensuring greater security, for less money, by working together more flexibly". One element of promoting this is by ensuring efficient and effective technological and industrial cooperation amongst nations, particularly in the trans-Atlantic domain.

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Introduction

This paper, developed by the NATO Industrial Advisory Group (NIAG) Study Group 154 Trans-Atlantic Defence Technological and Industrial Cooperation (TADIC), provides background material to inform the discussions at the 14 October Conference "Smart Defence - Smart 'TADIC", at NATO Headquarters.¹

The Conference, organized under the direction of the Conference of National Armaments Directors (CNAD) and with the support of the NATO Industrial Advisory Group (NIAG)², addresses Trans-Atlantic Defence Technological and Industrial Cooperation in the context of NATO nations efforts to create multinational approaches for designing, developing, acquiring, sustaining and disposing of defence capabilities for current and future operations.

The aim of the Conference is to find specific and practical ways to strengthen trans-Atlantic defence technological and industrial cooperation within the evolving framework of defence trade developments and to set out what is necessary, on both sides of the Atlantic, to enable successful trans-Atlantic cooperation in defence capability development and delivery.

The Conference, to be based on two Panel-led discussions, will address questions aimed at developing practical recommendations for government officials and industrial experts concerned with enacting Trans-Atlantic defence technological and industrial cooperation.

The material presented is as follows:

- NATO perspectives in the context of NATO's new Strategic Concept
- Setting the scene "Smart Defence – Smart TADIC"
- United States, European and Canadian perspectives, including initiatives to reform the defence procurement export control processes applicable to technological and industrial cooperation
- Practical examples of best practices in Trans-Atlantic Programmes.

The new NATO Perspectives

At a time when the centre of economic and strategic gravity is shifting from the Atlantic to the Pacific and pressures around the world are competing for the attention of NATO member countries, there is a need to review the partnership between North America and Europe. There is a call for a renewed Euro-Atlantic security framework, founded "on a strong U.S. involvement in NATO, NATO-EU relations aimed at promoting and projecting effective civil-military security beyond the Euro-Atlantic area and an EU-U.S. security relationship that assures the protection of the home base."³

1 More detailed papers prepared by NIAG are available on <http://aofs.org/share-to-win/nato-tadic/tadic2011/>. [Password: tadic2011]

2 Study Group leadership and participating members listed at Appendix 2.

3 Larrabee F, Lindley-French J., "Revitalizing the Transatlantic Security Partnership: An Agenda for Action", Venusberg Group and Rand Corporation, 2009, p. 8., 22/4/2010.

A. NATO's New Strategic Concept

Under the title "Active Engagement, Modern Defence", the Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation, agreed by Heads of State and Government at Lisbon in November 2010, affirms that "The citizens of our countries rely on NATO ... to deploy robust military forces"⁴ and provides practical guidance for reforms and capabilities.

The new NATO Strategic Concept calls for members to "cooperate more fully in capability development, to minimize duplication and maximize cost-effectiveness.... so that our taxpayers get the most security for the money they invest in defence".

The new NATO SC provides directions for NATO transformation in various fields:

- optimising decision making;
- improving early warning systems;
- enhancing multinational military formations;
- implementing a comprehensive approach;
- creating new mechanisms of sharing operational costs;
- focusing on deployable conventional forces and commonly funded force enablers;
- and
- promoting defence industrial cooperation (enhanced NATO-EU coordination in the field of defence acquisitions).

In respect to the last bullet, NATO, as an organisation of member nations, has no position on the international trade and export control regulations of the member nations. However, NATO does promote the provision by nations, through governments and industry, of interoperable defence systems and equipments to be available for NATO operations as required.⁵

B. "Smart Defence" Initiative

On 4 February 2011, NATO Secretary General, Anders Fogh Rasmussen, presented a new approach to defence spending during tight economic times: Smart Defence – "ensuring greater security, for less money, by working together with more flexibility." As part of this approach, he advocated for nations to "pool and share capabilities, to set the right priorities, and to better coordinate our efforts."

4 "Strategic Concept For the Defence and Security of The Members of the North Atlantic Treaty Organisation available at <http://aofs.org/share-to-win/>

5 The Lisbon Capabilities Package. Available at http://www.nato.int/cps/en/natolive/topics_49137.htm?selectedLocale=en (accessed August 31, 2011). . At the Lisbon Summit, for example, NATO Heads of State agreed to give funding priority to a package of capabilities focused on the new Strategic Concept, specifically:

- Missile Defence and ALTBMD
- Counter-IED
- Afghan Mission Network
- Alliance Ground Surveillance
- Cyber Defence
- JISR
- Improving air and sea lift capabilities.

NATO is ideally positioned to coordinate such efforts: "Pooling and sharing are vital if we want to develop our military know-how and capabilities and NATO is best placed to identify and connect nations that have similar needs but not enough money to build a capability on their own." "This is the time to make better use of NATO as an adviser and an honest broker – to ensure a degree of coherence in any cuts which nations may consider, and to minimise their impact on the overall effectiveness of the Alliance."

"Smart Defence is not about NATO imposing anything on nations. It is about enabling them to work better more effectively and efficiently together. NATO's role is to set the strategic direction, to identify possible areas of cooperation, to act as a clearing house, and to share best practices."

The Smart Defence initiative is aimed at encouraging nations to adopt bi-lateral and multinational approaches to the provision of defence capabilities.

TADIC has an important part to play in achieving beneficial "Smart Defence", more particularly if it can be activated as an 'enabler', rather than a 'barrier'. Not least, for industry, trans-Atlantic business has added costs, costs that reappear in contract prices.

Setting the Scene: "Smart Defence – Smart TADIC"

TADIC is relevant to both NATO and NATO member nations:

- For NATO as the trans-Atlantic organisation promoting and facilitating multinational defence and security programmes;
- For nations as the customers of the programmes acting as decision makers and paymasters.

Nations also determine their national defence industrial policy and generally place security of supply and defending national interests by limiting dependency on others as the main priority.

Today financial constraints are requiring nations to rethink how they provide for their defence and security, including the military equipment capabilities needed. One avenue is to review and reform the national regulations and regulatory processes that determine the defence and security industrial bases of nations and nations collectively. The United States has taken up the challenge with its export control reforms and the EU is in the process of structuring its efforts in the area of Security and Defence. Both these efforts would benefit from a visible and pro-active trans-Atlantic support.

The aim has to be to develop trans-Atlantic 'win-win' cases that are not inhibited, or negatively influenced, by regulatory frameworks on either side of the Atlantic. In the language of sound bites, "Smart TADIC to support Smart Defence".

The underlying need is for a sound and vibrant defence and security industrial base to meet the national customers' requirements in the medium and long term. A healthy, advanced and globally competitive Defence Industry to support the collective NATO defence transformation ambitions requires a collective approach to defence industrial policy.

TADIC is critical, not only to solve export issues or to adopt a common set of standards, but to harmonise and synchronise the Nations' industrial interests with their contribution to NATO and the expected return in terms of industrial, technological capabilities, employment, contribution to GDP, global market position. It follows that a Trans-

Atlantic Defence Technological and Industrial Base should be part of an overarching NATO strategy, acknowledging that there is already a considerable degree of cross ownership of industry between the two sides of the Atlantic.

While industries' motives are commercially driven, its ability to operate is strongly influenced by national government regulations. The different defence procurement and export control policies, regulations and processes on both sides of the Atlantic and in each nation lead to fragmentation of NATO defence markets, undermining commercial benefits for industry, cost benefit for the nations and best value for the war fighters.

This NATO market fragmentation leads to companies seeking better returns in the more stable markets in other regions of the globe.

Time is not on the side of nations' decision makers. Financial imperatives and, with these, industrial market imperatives are today's issues. The ability to fulfil NATO's transformation ambitions, as set out in the 2010 Strategic Concept, depends on the decisions made in the "now", not in the "tomorrow".

Achieving "Smart TADIC" is a key enabler for NATO's "Smart Defence".

The United States Perspective

A measure of the United States Defence spending is given in the President's 2012 Defense Department Base budget request of \$553 billion. This is part of the total defence spending request of \$881 billion, which included Homeland Security and a range of other government department programmes. It should be borne in mind that this takes into account the 31st July 2011 agreement under which the U.S. Congress increased the ceiling for national debt cuts defence spending by \$350 billion over the next ten years, and there are indications these cuts could rise to more than \$600 billion

In terms of industrial expenditure, U.S. Defence Industry contract revenue for the top 20 U.S. defence companies in 2009 amounted to \$69 billion, with Lockheed Martin, Northrop Grumman, Boeing, Raytheon and General Dynamics, the top five. BAE Systems, the UK-owned company, comes 12th in the list with a 2009 defence contracts revenue of \$1,659 million.⁶

A. Export Control Reform Initiatives

Following a Presidentially-directed review of the United States export control system, a draft new framework for the U.S. export control system was announced by President Obama on 30th August 2010 based on "Four Singularities":

- Single Control List (for defence and commercial dual-use items),
- Single Primary Enforcement Coordination Agency,
- Single Information Technology (IT) System, and
- Single Licensing Agency

6 Defence Systems publication – 27/05/2010.

Single Control List

- Common criteria and definitions for items on the United States Munitions List (USML) and the Commerce Control List (CCL) have now been developed and are being applied across both the USML and the CCL.
- Aim is for USML to be a "positive list" of controlled defence items that describes controlled items using objective criteria and distinguishes the types of items that should be subject to stricter or more permissive levels of control for different destinations, end-uses, and end users.
- The U.S. has sought input from U.S. industry as well as European and other governments and companies on its ongoing review on the Categories of the USML with the goal of completing this review by the end of 2011.

Single Primary Enforcement Coordination Agency

- Executive Order signed by the President on 9th November 2010 to create an Export Enforcement Coordination Center to coordinate and de-conflict U.S. criminal and administrative enforcement operations. Implementation of this Executive Order is now underway.

Single IT System

- Funding has been identified and transitional activities are underway across the relevant U.S. Government agencies.

Single Licensing Agency

- Requires legislative action and while there are discussions underway between Administration and Congressional committees, no legislative action is expected in 2011.

B. Other related U.S. Initiatives

- The National Export Initiative – Streamlining of U.S. Government regulations and the promotion of commercial U.S. exports with a goal of doubling U.S. export sales in five years.
- ITAR Amendment on Dual and Third-Country Nationals – Final rule took effect on 15th August 2011
- Defence Services proposed rule to amend the ITAR policy to update the policy regarding defence services – aim to reduce the number of Technical Assistance Agreements (TAA) required for the transfer of defence services. Proposed rule issued in April 2011.
- U.S.-UK and U.S.-Australia Defence Trade Cooperation Treaties – ratified by the U.S. Senate in late 2010 and implementation is currently underway.
- Reciprocal Defence Procurement Memorandum of Understanding (RDP MOU) established between the U.S. and 14 EU Member States – provides a platform for ongoing communication regarding market access and procurement matters that affect effective defence cooperation.
- U.S. DoD technology security and foreign disclosure (TS&FD) process reform; concerning the release of high-end technology to U.S. allies and partners – TS&FD office established in the Office of the Secretary of Defence to serve as focal point for TS&FD issues in early 2011.

C. Implications for "TADIC"

National security requirements are certainly a predominant factor for national governments, but employment and technology need to be considered. Too much regulation will restrict the development of transatlantic technological and industrial base and a sensible compromise should be found.

- Any easing of government controls and regulations will facilitate industrial cooperation.
- Bilateral approaches can create effective models for cooperation that can be expanded over time, but they may have an unintended effect of making multinational trans-Atlantic cooperation more difficult.

The European Perspective

The European Defence equipment market, worth 41 billion euro in 2009, is technology-intensive with cutting-edge research and development in fields such as electronics, ICT, transport, biotechnology and nano-technology.

The European Defence Industry is mostly concentrated in six EU member states – France, Germany, Italy, Spain, Sweden and the UK, although companies producing ancillary systems and equipment are found all over Europe.

The European defence market is highly regulated at a national level and fragmented. In the European Union (EU), Member States have the possibility of control over defence equipment markets and related industries applying Article 346 of the Treaty on the Functioning of the EU, which permits the suspension of the application of the Treaty with regard to defence products to protect "...essential interests of its security....".

European Governments have a clear preference for their own national defence industries, not only to protect jobs and boost investment, but also to ensure security of supply and of information.

A. European Perspective

In December 2007, the European Commission (EC), on behalf of the European Union Member States, launched a "Defence Package" designed to set out a European policy and legislative framework to improve the competitiveness of the European defence sector. Following this, two Directives were published in 2009:

- Directive 2009/43/EC on intra-EU transfers of Defence products simplifying terms and conditions of transfers of defence-related products within the Community. This Directive also addresses EU-wide security of supply.
- Directive 2009/81/EC on the coordination of Defence and Procurement procedures for the award of certain work contracts, supply contracts and service contracts awarded by contracting authorities, or entities, in the fields of defence and security. While not mentioning offsets specifically, this Directive indirectly inhibits the application of offsets.

The "EU Defence Package" also provides a Communications Strategy for a stronger and more competitive European defence industry.

The EU export control regime for dual-use goods and technologies requires that controlled items may not leave the EU customs territory without an export authorisation. The EU list of controlled items is based on control lists adopted by international export control regimes including the Wassenaar Arrangement and the Missile Technology Control Regime (MTCR). Candidate countries for EU membership are required to apply the EU regime.

B. Implications for "TADIC"

Legal: The EU Defence and Security Procurement Directive considerably improves the current fragmented regulatory framework for defence procurement. It also improves legal clarity. Awarding authorities will be able to address which legislation to apply and justify their decision if necessary.

Administrative: In the medium to long term, greater transparency will reduce administrative costs for companies, in particular Small and Medium-sized Enterprises (SME).

Economic: These implications depend on the EU Defence and Security Procurement Directive's acceptance by awarding authorities. Initially the Directive may impact mainly on the off-the-shelf procurement and technologically less sophisticated equipment. Greater openness of markets should enhance companies' chances of winning cross-border contracts, thereby allowing the most competitive European companies to achieve economies of scale. The reduction of unit costs will then make their products more competitive on the global market. In addition, contracting authorities will obtain better value for money.

Operational. Added to the European contracting authorities' award criteria, will also be "security of supply" and "interoperability". After national certification in the scope of the ICT Directive, companies dealing in Europe with non-ITAR/EAR-controlled goods and technology can obtain general and global licenses instead of individual licenses and become part of a trusted community within the EU. However, companies, transferring ITAR/EAR-controlled items might lose the benefits of this ICT Directive because they still have to comply with U.S. Government export regulations.

International. The introduction of EC procurement rules for defence will not change the situation regarding arms trade with third countries. Awarding authorities will continue to be able to invite to tender only EU companies or non-EU firms as well. The UK-U.S. Defence Trade Cooperation Treaty offers privileges to British entities only. The danger is that such a restriction could lead to a two-tier European defence market with non-British companies lagging behind. The Directive 2009/43/EC ensures an EU-wide security of supply.

The Canadian Perspective

The Canada First Defence Strategy announced in June, 2006 laid out a \$240 Cdn. billion capital acquisition plan to refurbish the Canadian Forces over twenty years. Once fully implemented, the plan will enable Canada to make a meaningful contribution to international efforts in failed and failing states. It will also serve to support the security interests of Canada on the North American continent.

The Canadian defence market is open to international competition and its offset program, the Industrial and Regional Benefits program, is designed to secure meaningful work packages to qualified and competitive Canadian industry. Its export control regime, based on international regimes including the Wassenaar Arrangement, is among the most stringent in the world. Canada operates a national defence and security industrial base, which is recognized in U.S. law as part of their National Technology and Industrial Base. Its industrial base is comprised largely of smaller niche market players (by global standards) providing world class products, technologies and services to defence and security customers in North America and around the world – including but not limited to systems integration, C4ISR, simulation and training, maritime domain awareness, cyber security, armoured land vehicle systems, MRO. It is also home to a number of large global defence contractors, the majority of which are of U.S. parentage. Fifty percent of the domestic industry's annual revenues are earned internationally, of which 80% are through trade with the United States.

Like its industrial base, Canada's export control regime is harmonized with the U.S., particularly when it comes to the sphere of controlled goods. Since 2009, Canada's Controlled Goods Program has been implementing

the Enhanced Security Strategy, which aims to streamline business processes, strengthen security, while also assisting registrants to be compliant with ITAR, specifically with respect to the recent rule change to Part 126.18.

Implications of TADIC

Canada's technology intensive labour market and relatively small industrial base makes it a valuable industrial collaborator to partners on both sides of the Atlantic. The Canada First Defence Strategy ensures a steady flow of capital programs for the foreseeable future, and common public safety and national security challenges provide the possibility for greater co-developed and co-marketed industrial capability that can be delivered in a timely and cost-effective manner to customers on both sides of the Atlantic.

Achieving Trans-Atlantic Programmes

For the purposes of TADIC and "Smart Defence", programmes should be viewed across the spectrum of technology development, acquiring capability, sustaining capability.

Technology development, by both industry and government, requires significant investment and the resulting technology is an important asset. Government seeks to control new technology as a national asset and industry seeks to protect new technology as a competitive asset. However, as the ability of the single nations and individual industries to afford technology research and development (R&D) on their own, collaborative R&D becomes more necessary.

In the civil sector, for example in the space domain, the real benefits of multinational collaboration under the right conditions can be demonstrated. These conditions include the formulation of political initiatives that can overcome different national approaches to industry policy, enabling industry to propose cooperative solutions based on commercial drivers, rather than cooperation based on political drivers. This applies to trans-Atlantic and to intra-European projects.

In the area of acquiring capability, a review of the current programmes listed in the Lisbon Capabilities Package that involve trans-Atlantic cooperation shows that different methodologies are being employed to enable the required cooperation (more information in Appendix 1):

- Negotiation of ITAR exemption for NATO programmes – (e.g. ALTBMD)
- Dividing a programme into ITAR-applicable and ITAR-free parts.
- Connectivity between the parts requires use of pre-agreed common standards and architectures – (e.g. AGS)
- Agreed prime contractor will full overall programme responsibility - (e.g. AGS)
- Use of a third party agency to act as a broker/facilitator to ensure that cooperation issues (including ITAR) are less intrusive and cause minimal delays – (e.g. NC3A support to Afghan Mission Network (AMN))
- Establishing TAA (Technical Assistance Agreement) coordinated management between key 'players' - ...

However, additional issues impact on achieving TADIC:

- National funding issues – both approval of funding and delaying issues to achieving approvals (e.g. MEADS)
- Disclosure of national information. (a) ALTBMD Programme Management Office has adopted the solution of sending data and tasking to national systems and allowing them to accept or refuse based on their own assessment of the task and their capability. (b) F-35 Joint Strike Fighter has adopted the “black box” approach.
- Lack of a trans-Atlantic approved community. The UK-U.S. Treaty creates a useful model that could, in time, be enlarged to all EU Governments. At least the EU-based companies, “certified” according to Directive 2009/43/EC, could become part of a trans-Atlantic “approved” community.
- Definition of the scope of an “essential security interest” in Article 346 TFEU. The legally acceptable interpretations of an “essential security interest” should be defined in Article 346 TFEU in order to avoid that EU Member States consider Article 346 as an automatic exemption. A progressive opening of the market with improved security of supply between EU Member States and suitable procurement rules applicable throughout the EU might increase transparency and could also reduce the need to use these exemptions to the rules.
- Lack of mutual transparency on defence planning. EU Member States should provide each other more mutual transparency on their medium to long-term defence planning, which would allow opportunities to be identified for harmonised military requirements, joint investment projects, pooled acquisitions and coherent role specialisation.
- Adverse impact, if any, of the new EU ICT and Defence Procurement directives on the North American Industry. According to the EC’s DG Enterprise and Industry, Aerospace Industries, GMES, Security & Defence’s Report on “The Nature and Impacts of Barriers to Trade with the United States for European Defence Industries”, the new ICT Directive provides Europe with a real leverage towards the U.S. The advantages offered by the new ICT Directive coupled with the EU Defence Procurement Directive provisions on security of supply are worrying to US industry, which fears it may be used to exclude it from European RFPs. This American concern provides important leverage for trans-Atlantic negotiation, which is all the more important now, as ICT implementation details are being put in place. As a consequence the main recommendation of the study would be to move towards the establishment of trans-Atlantic general licences for transfers to certified companies with the objective of promoting a greater predictability, transparency and efficiency of a trans-Atlantic defence trade control regulatory framework. Those trans-Atlantic general licenses would target specific European end-users approved by the USG. With regard to offsets, being considered by some as “economically inefficient and trade distorting,” the European Commission, the European Defence Agency, the European Member States, the U.S. Government and the Canadian Government could consult regularly on a bilateral and multilateral basis in order to limit the adverse effects of offsets in defence procurement. Both sides of the Atlantic could benefit from a level playing field and maximum flexibility in competing for new security and defence procurements by shifting the paradigm from a national / European ... defence industrial policy toward a trans-Atlantic defence industrial policy among a community of trusted friends and allies.
- Adverse impact of technology control policy. The technology control policy’s abusive restrictions are being considered by some industries on both sides of the Atlantic as the main inhibitor to trans-Atlantic defence industrial cooperation.
- Foreign investment in the defence and security industrial base. In order to allow European and North American companies to “buy” into each other’s foreign security and defence markets through mergers, acquisitions and joint ventures, restrictions on foreign investment in these markets should be avoided on both sides of the Atlantic.

Appendix 1

Involvement Trans-Atlantic Cooperation in the Lisbon Capabilities Package

NATO Strategic Concept	Functional Category	Industrial relevance	TADIC relevance	New Element in NATO?
Collective Defence	TBMD	H	H	Y
	CBRN WMD	H	H	N
	Cyber	H	H	Y
	Anti-Terrorism	H	H	N
	Energy security	H	L	Y
	Emerging technology assessment	H	H	N
Crisis management	Civil-military approach	M	L	Y
	Monitor and analyse the international environment	H	H	N
	Enhance intelligence sharing	H	H	N
Cooperative Security	EU	H	H	Y
	Russia	H	M	Y
Reform and transformation	Reorganisation of NATO – Agencies	H	H	Y

Appendix 2: NIAG SG 154 TADIC - Study Group

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