
Towards a more competitive and efficient defence and security sector

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"The world needs a Europe that is capable of deploying military missions to help stabilise the situation in crisis areas.... We need to reinforce our Common Foreign and Security Policy and a common approach to defence matters because together we have the power, and the scale to shape the world into a fairer, rules based and human rights' abiding place."

President Barroso, State of the Union Speech September 2012

"The Council reiterates its call to retain and further develop military capabilities for sustaining and enhancing the CSDP. They underpin the EU's ability to act as a security provider, in the context of a wider comprehensive approach (and) the need for a strong and less fragmented European defence industry to sustain and enhance Europe's military capabilities and the EU's autonomous action".

Foreign Affairs Council, 19 November 2012, Conclusions

1. EUROPEAN COMMISSION'S CONTRIBUTION TO STRENGTHENING EUROPE'S DEFENCE AND SECURITY SECTOR

This Communication builds on the work of the Commission's Defence Task Force established in 2011 with the objective to strengthen the defence sector by mobilising all relevant EU policies. The EEAS and EDA have been fully associated to the work of the Task Force and in the preparation of this Communication.

1.1. Introduction

The strategic and geopolitical environment is rapidly and constantly evolving. The world’s balance of power is shifting as new centres of gravity are emerging and the US is rebalancing its strategic focus towards Asia. In this situation, Europe has to assume greater responsibilities for its security at home and abroad. To punch its weight, the EU needs to develop a credible CSDP. This evolution must be fully compatible with NATO and its principles.

The security challenges we are facing today are numerous, complex, interrelated and difficult to foresee: regional crises can occur and turn violent, new technologies can emerge and bring new vulnerabilities and threats, environmental changes and scarcity of natural resources can provoke political and military conflicts. At the same time, many threats and risks spread easily across national borders, blurring the traditional dividing line between internal and external security.

These security challenges can only be tackled in a comprehensive approach combining different policies and instruments, short and long-term measures. This approach must be underpinned by a large range of civil and military capabilities. It is increasingly unlikely that Member States can bear this burden in isolation.

This is the case in particular for defence, where new equipment is often technologically complex and expensive. Today, Member States encounter difficulties to equip their armed forces adequately. Recent operations in Libya have highlighted important European shortfalls in key military capabilities.
The crisis in public spending induces cuts in defence budgets which exacerbates the situation, in particular, because they are neither co-ordinated nor implemented with regard to common strategic objectives. From 2001 to 2010 EU defence spending declined from €251 billion to €194 billion. These budget cuts are also having a serious impact on the industries that develop equipment for our armed forces with cutbacks in existing and planned programmes. They affect in particular the investment in defence R&D that is crucial for developing capabilities of the future. Between 2005 and 2010 there was a 14% decrease in European R&D budgets down to €9 billion; and the US alone spends today seven times more on defence R&D than all 27 EU Member States together.

Defence budgets are falling, and the cost of modern capabilities is rising. These cost increases come from the long-term trend of growing technological complexity of defence equipment, but also from the reduction of production volumes which are due to the reorganisation and downsizing of European armed forces since the end of the Cold War. These factors will continue to shape defence markets in Europe regardless of budget levels.

This situation has knock-on effects for an industry that plays a crucial role in the wider European economy. With a turnover of €96 billion in 2012 alone, it is a major industrial sector, generating innovation and centred on high-end engineering and technologies. Its cutting-edge research has created important indirect effects in other sectors, such as electronics, space and civil aviation and provides growth and thousands of highly skilled jobs. Defence industry in Europe directly employs about 400,000 people and generates up to another 960,000 indirect jobs. It is, therefore, a sector that is essential to retain if Europe is to remain a world-leading centre for manufacturing and innovation. This is why action to strengthen the competitiveness of the defence industry is a key part of the Europe 2020 Strategy for smart, sustainable and inclusive growth.

At the same time, the importance of this industry cannot be measured only in jobs and turnover. The European Defence Technological and Industrial Base (EDTIB) constitutes a key element for Europe's capacity to ensure the security of its citizens and to protect its values and interests. Europe must be able to assume its responsibilities for its own security and for international peace and stability in general. This necessitates a certain degree of strategic autonomy: to be a credible and reliable partner, Europe must be able to decide and to act without depending on the capabilities of third parties. Security of supply, access to critical technologies and operational sovereignty are therefore crucial.

Currently defence companies are surviving on the benefits of R&D investment of the past and have been able to successfully replace falling national orders with exports. However, this often comes at the price of transfers of technology, IPRs and production outside the EU. This in turn has serious implications for the long-term competitiveness of the EDTIB.

The problem of shrinking defence budgets is aggravated by the persisting fragmentation of European markets which leads to unnecessary duplication of capabilities, organisations and expenditures. Cooperation and EU-wide competition still remains the exception, with more than 80% of investment in defence equipment being spent nationally. As a result, Europe risks losing critical expertise and autonomy in key capability areas.

This situation necessitates a reorientation of priorities. If spending more is difficult spending better is a necessity. There is significant scope to do so. In spite of cuts, in 2011 EU Member States together still spent more on defence than China, Russia and Japan together¹. Budgetary constraints must therefore be compensated by greater cooperation and more efficient use of resources. This can be done via supporting clusters, role specialisation, joint research and

¹ SIPRI data
procurement, a new, more dynamic approach to civil-military synergies and more market integration.

1.2. The Commission's strategy

Defence is still at the heart of national sovereignty and decisions on military capabilities remain with Member States. However, the EU does have a significant contribution to make. It has policies and instruments to implement structural change and it is the best framework for Member States to maintain collectively an appropriate level of strategic autonomy. With Member States having amongst themselves around 1.6 million soldiers and annual defence budgets of €194 billion the EU has the capacity to be a strategic actor on the international stage, in line with its values.

The European Council, in its Conclusions of 14 December 2012, therefore called upon "… the High Representative, notably through the European External Action Service and the European Defence Agency, as well as the Commission, (...) to develop further proposals and actions to strengthen CSDP and improve the availability of the required civilian and military capabilities...".

The ultimate objective is to strengthen European defence to meet the challenges of the 21st century. Member States will be in lead on many of the necessary reforms. The European Defence Agency (EDA) has as its mission to support them in their effort to improve the Union's defence capabilities for the CSDP. The Commission can also make an important contribution, and it has already started to do so. As President Barroso has stressed: "The Commission is playing its part: we are working towards a single defence market. We are using our competences provided under the Treaty with a view to developing a European defence industrial base."

With these objectives in mind, the Commission has put forward the two Directives on defence and sensitive security procurement (2009/81) and transfers (2009/43), which constitute today the cornerstone of the European defence market. Moreover, it has developed industrial policies and specific research and innovation programmes for security and space. The Commission has also developed policies and instruments supporting both internal and external security in areas such as protection of external borders, maritime surveillance, civil protection, or crisis management, which have numerous technological, industrial, conceptual and operational similarities and links with defence.

The present Communication consolidates this acquis and develops it further within the scope of its competencies as defined in the Treaty of Lisbon. It tries, in particular, to exploit possible synergies and cross-fertilisation which come from the blurring of the dividing line between defence and security and between civil and military.

To achieve these objectives, the Commission intents to take action in the following strands:

- Further deepen the internal market for defence and security. This means first of all to ensure the full application of the two existing Directives. Based on this acquis, the Commission will also tackle market distortions and contribute to improving security of supply between Member States;
- Strengthen the competitiveness of the EDTIB. To this end, the Commission will develop a defence industrial policy based on two key strands:
  - Support for competitiveness – including developing 'hybrid standards' to benefit security and defence markets and examining the ways to develop a European certification system for military airworthiness.
– Support for SMEs – including development of a European Strategic Cluster Partnership to provide links with other clusters and support defence-related SMEs in global competition.

• Exploit civilian military synergies to the maximum extent possible in order to ensure the most efficient use of European taxpayers’ resources. In particular by:
  – concentrating its efforts on possible cross-fertilisation between civil and military research and the dual-use potential of space;
  – helping armed forces reduce their energy consumption and thereby contribute to the Union’s 20/20/20 targets.

• In addition, the Commission suggests actions which aim at exploring new avenues, driving the strategic debate in Europe forward and preparing the ground for more and deeper European cooperation. In particular by:
  • Assessing the possibility of EU-owned dual-use capabilities, which may in certain security areas complement national capabilities and become effective and cost-efficient force multipliers;
  • Considering launching a preparatory action for CSDP-related research focusing on those areas where EU defence capabilities are most needed.

The Commission invites Heads of State and Government to discuss this Communication at the European Council in December 2013, together with the report prepared by the High Representative of the Union for Foreign Affairs and Security Policy.

Action Plan²

2. STRENGTHENING THE INTERNAL MARKET FOR DEFENCE

2.1. Ensure market efficiency

• With the Defence and Security Procurement Directive 2009/81 being fully transposed in all Member States, the regulatory backbone of a European Defence Market is in place. For the first time specific Internal Market rules are applicable in this sector to enhance fair and EU-wide competition. However, defence remains a specific market with a longstanding tradition of national fragmentation. The Commission will therefore take specific measures to ensure that the Directive is correctly applied and fulfils its objective.

Action:

• The Commission will monitor the openness of Member States’ defence markets and regularly assess via the EU’s Tenders Electronic Daily (TED) and other specialised sources how the new procurement rules are applied. It will coordinate its market monitoring activities with those of the EDA in order to exploit potential synergies and avoid unnecessary duplication of efforts.

² Any envisaged action in this Action Plan is coherent and compatible with the relevant financial instruments established under the Multi-annual Financial Framework.
In times of budget constraints, it is particularly important to spend financial resources efficiently. Pooling of demand is an effective way of achieving this objective. The Directive contains specific provisions on central purchasing bodies which enable Member States to use the new rules also for joint procurement, for example via the EDA. Member States should use this tool as much as possible to maximise economies of scale and take full benefit of EU-wide co-operation.

Certain contracts are excluded from the scope of the Directive, since the application of its rules would not be appropriate. This is particularly the case for cooperative programmes, which are an effective means to foster market consolidation and competitiveness.

However, other specific exclusions, namely those of government to government sales and of contract awards governed by international rules, might be interpreted in a way undermining the correct use of the Directive. This could jeopardize the level playing field in the internal market. The Commission will therefore ensure that these exclusions are interpreted strictly and that they are not abused to circumvent the Directive.

**Action:**

- *The Commission will clarify the limits of certain exclusions. To that end, it will provide, in consultation with Member States, specific guidance, notably on government to government sales and international agreements.*

### 2.2. Tackle market distortions

In order to further develop the Internal Market for defence and work towards a level playing field for all European suppliers, the Commission will tackle persisting unfair and discriminatory practices and market distortions. It will in particular mobilise its policies against offsets, i.e. economic compensations required for defence purchases from non-national suppliers. Offset requirements are discriminatory measures which stand in contrast to both EU Treaty principles and effective procurement methods. They can therefore not be part of the internal market for defence.

**Action:**

- *The Commission will ensure the rapid phasing out of offsets. Since the adoption of the defence procurement directive, all Member States have withdrawn or revised their national offset legislation. The Commission will verify that these revisions comply with EU law. It will also ensure that these changes in the legal framework lead to an effective change in Member States’ procurement practice.*

The Commission has extensively applied the merger control rules to the defence sector. Those cases allowed the Commission to guarantee effective competition control, contributing to an improved functioning of the market for defence. Concerning state aid, and in line with the Communication on the Modernisation of State Aid policy, public spending should become more efficient and better targeted. In that respect, state aid control has a fundamental role to play in defending and strengthening the internal market, also in the defence sector.

Member States have an obligation, under the Treaty, to notify to the Commission all state aid measures, including aid in the pure military sector. They may only derogate from that obligation if they can prove that non-notification is necessary for reasons of essential security interests under Article 346 TFEU. Therefore, if a Member State intends to rely on Article 346, it must be able to demonstrate that the concrete measures in the military sector are necessary and proportionate for the protection of their essential security interests and that they do not go
beyond what is strictly necessary for that purpose. The burden of proof that these conditions are fulfilled lies upon Member States.

**Action:**

- The Commission will ensure that all necessary conditions are fulfilled when Article 346 TFEU is invoked to justify state aid measures.

### 2.3. Improve Security of Supply

Security of supply is crucial to ensure the functioning of the internal market for defence and the Europeanisation of industrial supply chains. Most security of supply problems are the responsibility of Member States. However, the Commission can develop instruments which enable Member States to improve the security of supply between them. Directive 2009/43 on intra-EU transfers is such an instrument, since it introduces a new licencing system which facilitates the movement of defence items within the internal market. Member States should now fully exploit the possibilities of this Directive to enhance security of supply within the Union.

**Actions:**

- The Commission, together with the EDA, will launch a consultative process aimed at bringing about a political commitment by Member States to mutually assure the contracted or agreed supply of defence goods, materials or services for the end-use by Member States' armed forces.

- The Commission will optimise the defence transfer regime by: a) supporting national authorities in their efforts to raise awareness of it with industry; b) establishing a central register on general licences and promote their use; and c) promoting best practices in managing intra-EU transfers.

Security of supply depends also on the control and ownership of critical industrial and technological assets. Several Member States have national legislation for the control of foreign investment in defence industries. However, the more international industrial supply chains become, the more can a change of ownership of one company (also at lower tiers) have an impact on the security of supply of other Member States' armed forces and industries. It is also an issue affecting the extent of the autonomy Europe has, and wishes to retain, in the field of military capacity, as well as the general question of control of incoming foreign investment in that sector. A European approach may be needed to cope with this challenge.

**Action:**

- The Commission will issue a Green Paper on the control of defence and sensitive security industrial capabilities. It will consult stakeholders on possible shortfalls of the current system, including the possible identification of European capacities, and explore options for the establishment of an EU-wide monitoring system, including mechanisms of notification and consultation between Member States.

### 3. Promoting a More Competitive Defence Industry

The creation of a genuine internal market for defence requires not only a robust legal framework but also a tailored European industrial policy. The future of the EDTIB lies in more co-operation and regional specialisation around and between networks of excellence. A further reinforcement of their civil-military dimension, can foster more competition and contribute to economic growth and regional development. Moreover, in an increasingly
globalised defence market it is essential that European defence companies have a sound business environment in Europe to enhance their competitiveness worldwide.

3.1. Standardisation – developing the foundations for defence co-operation and competitiveness

Most standards used in EU defence are civilian. Where specific defence standards are required they are developed nationally, hindering co-operation and increasing costs for the industry. Therefore, the use of common defence standards would greatly enhance co-operation and interoperability between European armies and improve the competitiveness of Europe's industry in emerging technologies.

This highlights the need for creating incentives for the Member States to develop European civil-military standards. Clearly, these should remain voluntary and there must be no duplication with the standards-related work of NATO and other relevant bodies. However, much more could be done to develop standards where gaps and common needs are identified. This concerns particularly standards in emerging technologies, such as in Remotely Piloted Aircraft Systems (RPAS) and in established areas, such as in camp protection, where markets are underdeveloped and there is a potential to enhance the industry's competitiveness.

Actions:

- The Commission will promote the development of 'Hybrid Standards', for products which can have both military and civilian applications. It has already issued a standardisation request for such a “hybrid standard” in 2012 for Software Defined Radio. The next candidates for standardisation requests could deal with Chemical Biological Radiological Nuclear & Explosives (CBRNE) detection and sampling standards, RPAS, airworthiness requirements, data sharing standards, encryption and other critical information communication technologies.

- The Commission will explore options with the EDA and European Standardisation Organisations for establishing a mechanism to draft specific European standards for military products and applications after agreement with Member States. The main purpose of this mechanism will be to develop standards to meet identified needs while handling sensitive information in an appropriate way.

- The Commission will explore with the EDA new ways of promoting existing tools for selecting best practice standards in defence procurement.

3.2. Promoting a Common Approach to Certification – reducing costs and speeding up development

Certification, as with standards, is a key enabler for industrial competitiveness and European defence co-operation. The lack of a pan-European system of certification of defence products acts as a major bottleneck delaying the placing of products on the market and adds substantially to costs throughout the life-cycle of the product. There is a need for better arrangements in the field of the certification so that certain tasks currently performed at national level should be carried out in common.

In particular, in military airworthiness, according to the EDA, this is adding 50% to the development time and 20% to the costs of development. Moreover, having a set of common and harmonised requirements reduces costs by enabling cross-national aircraft maintenance or training of maintenance personnel.
Ammunition is another example. The lack of a common certification for ground launched ammunition is estimated to cost Europe €1.5 billion each year (out of a total of €7.5 billion spent on ammunition each year).

**Action:**

- **Building on the civil experience of EASA, its experience gained by certifying the Airbus A-400M (in its civil configuration) and the work of the EDA in this area, the Commission will assess the different options for carrying out, on behalf of the Member States, the tasks related to the initial airworthiness of military products in the areas specified by the EDA.**

3.3. Raw Materials – tackling supply risks for Europe’s defence industry

Various raw materials, such as rare earths elements, are indispensable in many defence applications, ranging from RPAS to precision guided munitions, from laser targeting to satellite communications. A number of these materials are subject to increased supply risks, which hamper the competitiveness of the defence sector. A key element of the EU overall raw materials strategy consists of a list of raw materials that are considered to be of critical importance to the EU economy. The current list of critical raw materials at EU level is expected to be revised by end 2013. Although these are often the same materials that are important for civil and defence purposes, there would be a clear value-added if this work would take into account the specific importance of raw materials to Europe’s defence sector.

**Action:**

- **The Commission will screen raw materials that are critical for the defence sector within the context of the EU’s overall raw materials strategy and prepare, if necessary, targeted policy actions.**

3.4. SMEs – securing the heart of Europe’s defence innovation

The defence directives on procurement and transfers offer new opportunities for SMEs to participate in the establishment of a European defence market. This is the case in particular for the subcontracting provisions of the procurement directive which improves access to supply chains of non-national prime contractors. Member States should therefore actively use these provisions to foster opportunities for SMEs.

Further steps are necessary, in particular in the area of clusters. These are often driven by a prime company that works with smaller companies in a supply chain. Moreover, clusters are often part of networks of excellence bringing together prime contractors, SMEs, research institutes and other academic sectors.

Clusters are therefore particularly important for SMEs, as they offer them access to shared facilities, niches in which they can specialise, and opportunities to cooperate with other SMEs. In such clusters, companies can combine strengths and resources in order to diversify into, and create new markets and knowledge institutions. They can also develop new civilian products and applications based on technologies and materials initially developed for defence purposes (e.g. Internet, GPS) or vice versa, which is an increasingly important trend.

**Actions:**

- **The Commission will explore with industry – taking a bottom-up approach - how to establish a European Strategic Cluster Partnership designed to support the emergence of new value chains and to tackle obstacles faced by defence-related SMEs in global competition. In this context, the Commission will use tools designed to support SMEs,**
including COSME, for the needs of defence-related SMEs. To this end the use of European Structural and Investment Funds may also be considered. This work will include clarifying eligibility rules for dual use projects.

- The Commission will also use the Enterprise Europe Network (EEN) to guide defence-related SMEs towards networking and partnerships, internationalisation of their activities, technology transfers and funding business opportunities.

- The Commission will promote regional networking with the objective of integrating defence industrial and research assets into regional smart specialisation strategies particularly through a European network of defence-related regions.

3.5. Skills – managing change and securing the future

The defence industry is experiencing profound change to which Member States and industry must adapt. As the European Council in December 2008 stated: "restructuring of the European defence technological and industrial base, in particular around centres of European excellence, avoiding duplication, in order to ensure its soundness and its competitiveness, is a strategic and economic necessity".

The restructuring process is mainly the responsibility of industry but there is a complementary role for the Commission, national governments and local authorities. The Commission and Member States have a range of European tools available that foster new skills and tackle the impacts of restructuring. These should be deployed with a clear understanding of the capabilities and technologies critical to the industry. The Commission will encourage Member States to make use of labour flexibility schemes to support enterprises, including suppliers, that suffer from temporary slump in demand for their products and to promote an anticipative approach to restructuring. In this context, Member States can use the support that can be provided by the European Social Fund (ESF) and in certain cases of mass redundancies also by the European Globalisation Adjustment Fund. An important foundation of this work will be to map existing skills and identify skills needed for the future, possibly on the basis of a European Sector Skills Council for Defence under the leadership of the sectors' representatives.

Actions:
- The Commission will promote skills identified as essential to the future of the industry including through the "Sector Skills Alliances" and "Knowledge Alliances" programmes currently being trialled.

- The Commission will encourage the use of the ESF for workers' retraining and re-skilling, in particular for projects addressing skills needs, skills matching and anticipation of change.

- The Commission will take into account the potential of the European Structural and Investment Funds to support regions adversely affected by defence industry restructuring, especially to help workers to adapt to the new situation and to promote economic reconversion.
4. Exploiting Dual-Use Potential of Research and Reinforcing Innovation

Since a range of technologies can be dual in nature, there is growing potential for synergies between civil and military research. In this context, there is an on-going coordination between the Security Theme of the 7th Framework Programme for Research and Technological Development and European defence research activities. Work has so far concentrated on CBRNE and has recently also addressed cyber defence in the context of CSDP and its synergies with cyber security. A number of activities in this regard are announced in the EU's Cyber Security Strategy, designed to make the EU’s online environment the safest in the world. Furthermore, the SESAR Joint Undertaking has launched research activities on cyber security in the field of Air Traffic Management.

Within Horizon 2020, the areas of "Leadership in Enabling and Industrial Technologies" including the "Key Enabling Technologies" (KETs) and "Secure Societies" (Societal Challenge), offer prospects of technological advances that can trigger innovation not only for civil applications, but also have a dual-use potential. While the research and innovation activities carried out under Horizon 2020 will have an exclusive focus on civil applications, the Commission will evaluate how the results in these areas could benefit also defence and security industrial capabilities. The Commission also intends to explore synergies in the development of dual-use applications with a clear security dimension or other dual-use technologies like, for example, those supporting the insertion of civil RPAS into the European aviation system to be carried out within the framework of the SESAR Joint Undertaking.

Defence research has created important knock-on effects in other sectors, such as electronics, space, civil aviation and deep sea exploitation. It is important to maintain such spill-over effects from defence to the civil world and to help defence research to continue feeding civilian innovation.

The Commission also sees the potential benefits of additional possibilities for CSDP-related research outside the scope of Horizon 2020. This could take the form of a Preparatory Action on defence capabilities critical for CSDP operations seeking synergies with national research programmes. The Commission will define content and modalities together with Member States, EEAS and the EDA. In parallel Member States should maintain an appropriate level of funding for defence research and do more of it co-operatively.

Actions:

- The Commission intends to support a pre-commercial procurement scheme to procure prototypes. The first candidates for these could be: CBRNE detection, RPAS and communication equipment based on software defined radio technology.
- The Commission will consider the possibility to support CSDP-related Research, such as through a Preparatory Action. The focus would be on those areas where EU defence capabilities would be most needed, seeking synergies with national research programmes where possible.

5. Development of Capabilities

The Commission is already working on non-military capability needs supporting both internal and external security policies, such as civil protection, crisis management, cyber security,
protection of external borders and maritime surveillance. Up until now, these activities have been limited to co-funding and coordination of Member States’ capabilities. The Commission intends to go one step further in order to ensure that Europe disposes of the full range of security capabilities it needs; that they are operated in the most cost-efficient way; and that interoperability between non-military and military capabilities is ensured in relevant areas.

**Actions:**

- The Commission will continue to enhance interoperability of information service sharing between civilian and defence users as piloted by the Common Information Sharing Environment for Maritime Surveillance;

- Building on existing EU networks, the Commission will explore together with Member States the establishment of a civil-military cooperation group in the areas of a) detection technologies, and b) methods to counter improvised explosive devices, man-portable air defence systems (MANPADs) and other relevant threats, such as CBRNE threats;

- The Commission will work with the EEAS on a joint assessment of dual-use capability needs for EU security and defence policies. On the basis of this assessment, it will come up with a proposal for which capability needs, if any, could best be fulfilled by assets directly purchased, owned and operated by the Union.

6. SPACE AND DEFENCE

Most space technologies, space infrastructures and space services can serve both civilian and defence objectives. However, contrary to all space-faring nations, in the EU there is no structural link between civil and military space activities. This divide has an economic and political cost that Europe can no longer afford. It is further exacerbated by European dependence on third country suppliers of certain critical technologies that are often subject to export restrictions.

Although some space capabilities have to remain under exclusive national and/or military control, a number of areas exist where increased synergies between civilian and defence activities will reduce costs and improve efficiency.

6.1. Protecting space infrastructures

Galileo and Copernicus are major European space infrastructures. Galileo belongs to the EU, and both Galileo and Copernicus will support key EU policies. These infrastructures are critical as they form the backbone for applications and services that are essential for our economy, our citizens' well-being and security. These infrastructures need to be protected.

Space debris has become the most serious threat to the sustainability of our space activities. In order to mitigate the risk of collision it is necessary to identify and monitor satellites and space debris. This activity is known as space surveillance and tracking (SST), and is today mostly based on ground-based sensors such as telescopes and radars. At present there is no SST capability at European level; satellite and launch operators are dependent on US data for anti-collision alerts.

The EU is ready to support the emergence of a European SST service built on a network of existing SST assets owned by Member States, possibly within a trans-Atlantic perspective. These services should be available to public, commercial, civilian, military operators and authorities. This will require the commitment of Member States owning relevant assets to cooperate and provide an anti-collision service at European level. The ultimate objective is to ensure the protection of European space infrastructures with a European capability.
Action:

- The Commission has put forward a proposal for EU SST support programme in 2013. Building on this proposal, the Commission will assess how to ensure, in the long-term, a high level of efficiency of the SST service.

6.2. Satellite Communications

There is a growing dependence of military and civilian security actors on satellite communications (SATCOM). It is a unique capability which can ensure long-distance communications and broadcasting. It facilitates the use of mobile or deployable platforms as a substitute for ground-based communication infrastructures and to cater for the exchange of large quantities of data.

Commercial SATCOM is the most affordable and flexible solution to meet this growing need. Since the demand for security SATCOM is too fragmented pooling and sharing SATCOM acquisition could generate significant cost savings due to economies of scale and improved resilience.

Commercial SATCOMs cannot fully substitute core governmental/military satellite communications (MILSATCOM) which are developed individually by some EU Member States. However, these communications lack capacity to cater for the needs of smaller entities, most notably military aircraft or Special Forces in operation.

Furthermore, by the end of this decade, current Member States' MILSATCOM will come to the end their operational life. This key capability must be preserved.

Actions:

- The Commission will act to overcome the fragmentation of demand for security SATCOM. In particular, building on the EDA's experience, the Commission will encourage the pooling of European military and security commercial SATCOM demand;

- The Commission will explore the possibilities to facilitate, through existing programmes and facilities, Member States efforts to deploy government-owned telecommunications payloads on board satellites (including commercial) and develop the next generation of government-owned MILSATCOM capability at European level.

6.3. Building an EU satellite high resolution capability

Satellite high resolution imagery is increasingly important to support security policies including CSDP and CFSP. EU access to these capacities is crucial to perform early warning, timely decision making, advanced planning and improved conduct of EU crisis response actions both in the civilian and military domains.

In this field several national defence programmes are being developed. Some Member States have also developed high resolution dual systems to complement defence-only national programmes. These dual systems have allowed new forms of collaboration among Member States to emerge for the exploitation of satellite imagery whereby the acquisition takes place either on the market or through bilateral agreements. This successful approach, combining civil and defence user requirements, should be pursued.

As the need for high resolution imagery continues to grow, in order to prepare the next generation of high resolution imagery satellites which should be deployed around 2025, a number of technologies must be explored and developed such as hyper-spectral, high-
resolution satellites in geostationary orbit or advanced ultra-high resolution satellites in combination with new sensor platforms such as RPAS.

**Action:**
- The European Commission together with EEAS and EDA will explore the possibility to develop progressively new imaging capabilities to support CFSP and CSDP missions and operations. Also the European Commission will contribute to developing the necessary technologies for the future generations of high resolution imagery satellites.

7. **APPLICATION OF EU ENERGY POLICIES AND SUPPORT INSTRUMENTS IN THE DEFENCE SECTOR**

Armed forces are the biggest public consumers of energy in the EU. According to the EDA, their combined annual expenditures for electricity alone sum up to an estimated total of more than one billion euros. Moreover, fossil fuels remain the most important source to meet these energy needs. This implies sensitive dependencies and exposes defence budgets to risks of price increases. Therefore, to improve security of supply and reduce operational expenditures, armed forces have a strong interest in reducing their energy footprint.

At the same time, armed forces are also the largest public owner of free land and infrastructures, with an estimated total of 200 million square meters of buildings and 1 % of Europe's total land surface. Exploiting this potential would enable armed forces to reduce their energy needs and cover a considerable part of these needs from their own low-emission and autonomous sources. This would reduce costs and dependences and contribute at the same time to accomplishing the Union's energy objectives.

In the research field, the Commission has developed the Strategic Energy Technology (SET) Plan to promote innovative and low-carbon energy technologies which have better efficiencies and are more sustainable than existing energy technologies. Given its important energy needs, the defence sector could be a frontrunner in the deployment of the emerging energy technologies of the SET-Plan.

**Actions:**
- The Commission will set up a specific consultation mechanism with Member States experts from the defence sector by mid-2014, based on the model of the existing Concerted Actions on renewables and energy efficiency. This mechanism will focus on a) energy efficiency, particularly in building sector; b) renewable energy and alternative fuels; c) energy infrastructure, including the use of smart grid technologies and will:
  - Examine the applicability of the existing EU energy concepts, legislation and support tools to the defence sector.
  - Identify possible objectives and focus areas of action at EU level for a comprehensive energy concept for armed forces.
  - Develop recommendations for a guidebook on renewable energies and energy efficiency in the defence sector with a focus on the implementation of the existing EU legislation, innovative technologies’ deployment and the use of innovative financial instruments.
  - Exchange information with the SET-Plan Steering Group on a regularly basis.
- The Commission will also consider developing a guidance document on implementation of Directive 2012/27/EU in the defence sector.
• The Commission will support the European armed forces GO GREEN demonstration project on photovoltaic energy. Following its successful demonstration, the Commission will also help to develop GO GREEN further, involving more Member States and possibly expanding it to other renewable energy sources such as wind, biomass and hydro.

8. STRENGTHENING THE INTERNATIONAL DIMENSION

With defence budgets shrinking in Europe, exports to third countries have become increasingly important for European industries to compensate for reduced demand on their home markets. Such exports should be authorised in accordance with the political principles laid down in Common Position 2008/944/CFSP, adopted on 8 December 2008, and in accordance with the Arms Trade Treaty adopted on 2 April 2013 by the General Assembly of the United Nations Organisation. At the same time, Europe has an economic and political interest to support its industries on world markets. Lastly Europe needs to ensure a coherent approach to the monitoring of incoming foreign investment (as set out in section 2.3 on ownership and security of supply).

8.1. Competitiveness on third markets

Whereas defence expenditure has decreased in Europe, it continues to increase in many other parts of the world. Access to these markets is often difficult, depending on political considerations, market access barriers, etc. The world's biggest defence market, the United States, is basically closed for imports from Europe. Other third countries are more open, but often require offsets which put a heavy burden on EU companies. Finally, on many third markets, several European suppliers compete with each other, which makes it difficult from a European perspective to support a specific EU supplier.

Action:
• The Commission will establish a dialogue with stakeholders on how to support the European defence industry on third markets. With respect to offsets on third markets, this dialogue will explore ways of mitigating possible negative impacts of such offsets on the internal market and the European defence industrial base. It will also examine how EU institutions could promote European suppliers in situations where only one company from Europe is competing with suppliers from other parts of the world.

8.2. Dual Use Export Controls

Dual-use export controls closely complement arms trade controls and are key for EU security as well as for the competitiveness of many companies in the aerospace, defence and security sectors. The Commission has initiated a review of the EU export control policy and has conducted a broad public consultation, which conclusions are presented in a Commission Staff Working Document issued in January 2013. The reform process will be further advanced with the preparation of a Communication which will address remaining trade barriers that prevent EU companies to reap the full benefits of the internal market.

Action:
• As part of the ongoing export control policy review, the Commission will present an impact assessment report on the implementation of Regulation (EC) 428/2009 and will follow up with a Communication outlining a long-term vision for EU strategic export controls and concrete policy initiatives to adapt export controls to rapidly changing technological, economic and political conditions. This may include proposals for legislative amendments to the EU export control system.
9. **Conclusions**

Maintaining and developing defence capabilities to meet current and future challenges in spite of severe budget constraints will only be possible if far-reaching political and structural reforms are made. Time has come to take ambitious action.

9.1. **A new framework for developing civil / military co-operation**

Civil / military co-operation is a complex challenge with numerous operational, political, technological and industrial facets. This is particularly true in Europe, where distribution of competences and division of work adds another layer of complexity. This Communication provides a package of measures that can help to overcome these challenges and incentivise co-operation between Member States. In this context, our objective is to develop an integrated approach across the civ-mil dividing line, with a seamless transition throughout all phases of the capability life cycle i.e. from the definition of capability needs to their actual use on the ground.

As a first step towards this objective, the Commission will review its own internal way of dealing with security and defence matters. Based on the experience of the Defence Task Force, it will optimise its mechanisms for cooperation and coordination between its own services and with stakeholders.

9.2. **A call to Member States**

This Communication sets out an Action Plan for the Commission’s contribution to strengthening the CSDP. The Commission invites the European Council to discuss this Action Plan in December 2013 together with the report prepared by the High Representative of the Union for Foreign Affairs and Security Policy on the basis of the following considerations:

- Decisions on investments and capabilities for security and defence should be based on a common understanding of threats and interests. Europe therefore needs to develop, in due course, a strategic approach covering all aspects of military and non-military security. In this context, a wider political debate on the implementation of relevant provisions of the Lisbon Treaty should be held;

- The Common Security and Defence Policy is a necessity. To become effective, it should be underpinned by a fully-fledged Common European Capabilities and Armaments Policy as mentioned in Article 42 of the TEU;

- To ensure coherence of efforts, CSDP must be closely coordinated with other relevant EU policies. This is particularly important in order to generate and exploit synergies between the development and use of defence and civil security capabilities;

- For CSDP to be credible, Europe needs a strong defence industrial and technological base. To achieve this objective, it is crucial to develop a European Defence Industrial Strategy based on a common understanding of the degree of autonomy Europe wants to maintain in critical technology areas;

- To maintain a competitive industry capable of producing at affordable prices the capabilities we need, it is essential to strengthen the internal market for defence and security and to create conditions which enable European companies to operate freely in all Member States;

- Facing severe budget constraints, it is particularly important to allocate and spend financial resources efficiently. This implies inter alia to cut back operational costs, pool demand and harmonise military requirements;
To show real added value of the EU framework, what is needed is to identify a joint project in the area of key defence capabilities, where EU policies could fully be mobilized.

9.3. Next Steps

On the basis of the discussions with Heads of State and Government, the Commission will develop for the areas defined in this Communication a detailed roadmap with concrete actions and timelines.

For the preparation and implementation of this roadmap, the Commission will set up a specific consultation mechanism with national authorities. The mechanism can take different forms, depending on the policy area under discussion. The EDA and the External Action Service will be associated to this consultation mechanism.