

## **National Defence Industrial Strategy**

### **Summary**

Threats to Denmark may arise anywhere throughout the world, and they are unpredictable as well as complex.

Denmark's security depends therefore on the sense of community shared by other countries and on Denmark's ability to make high-quality contributions to the response to common, international challenges with a broad array of military and civilian means.

Ultimately, Denmark's sovereignty and security is Denmark's own responsibility.

This does not merely make increasing demands on security policy efforts and the capability of the Danish Armed Forces, but also on the defence industry that is expected to be competitive and supply high-quality equipment that can easily be incorporated in international operations.

As a small country, Denmark is dependent on the procurement of competitive defence equipment on the European and North American markets.

However, it is necessary for Denmark to have at our disposal certain competitive industrial competencies and capabilities in the field of defence in Denmark which are strategically important for the protection of Denmark's essential security interests.

First, this is necessary because Denmark must remain an attractive and credible partner in the international co-operation on the protection of common security interests and the strengthening of the European and North American defence industries. If Denmark continues to be a credible and attractive partner and can establish interdependence in the protection of international security interests, Denmark is more likely to be supported by international partners if the sovereignty and security of Denmark is threatened.

Second, this is necessary because Denmark's sovereignty and security is ultimately Denmark's own responsibility, which requires that we in unforeseen emergencies are able to understand and assess new threats and

to provide the necessary solutions, including the maintenance of essential systems and equipment.

This defence industrial strategy shows how Denmark can maintain and develop competitive industrial competencies and capabilities in the field of defence that can be necessary for the protection of Denmark's essential security. The strategy comprises six action areas:

*1. A Competitive international defence market*

In all relevant international fora, Denmark supports a targeted effort to ensure an international, competitive market for defence equipment that fosters innovation and competitiveness.

*2. Good framework conditions for the defence industry*

The Danish defence industry is supported by competitive framework conditions, including special conditions for the defence industry in terms of licenses for production and exports and security certificates.

*3. Co-operation between the Ministry of Defence and Danish industry*

There is close co-operation between the Danish Armed Forces and Danish industry providing Danish enterprises in the field of defence with the best possible conditions for building international competitiveness.

*4. International co-operation concerning acquisitions and development*

When Denmark takes part in international co-operation concerning the development and/or acquisition of defence equipment and defence services, the possible participation of Danish industry is evaluated in order to maintain and develop industrial competencies and capabilities.

*5. Security of supply*

In relation to invitations to tenders concerning strategically important defence equipment and defence services, the Danish Armed Forces includes relevant requirements for security of supply and security of information. The requirements will be made in accordance with EU law.

*6. Industrial co-operation*

If it is not possible to ensure the maintenance and development of the necessary industrial competencies and capabilities in the field of defence in other ways, obligations for industrial co-operation with companies in Denmark can be imposed on foreign suppliers. Obligations for industrial co-operation will be laid down in accordance with EU law, especially Article 346 of the Treaty of the Functioning of the European Union (hereinafter referred to as Article 346 TFEU).

## **Introduction**

It is an essential security interest for Denmark to have at our disposal a defence industry with competitive competencies and capabilities within areas which are strategically important for the military and our security.

The strategy describes:

- The security interests of Denmark
- The contribution of the Danish defence industry to the security of Denmark
- The means to maintain and develop competitive industrial competencies and capabilities in the field of defence.

### **Denmark's security interests**

*Threats against Denmark are global, unpredictable and complex*

Since the end of the Cold War, Denmark has enjoyed the privileged status of not being confronted with direct, conventional military threats. Instead, Denmark's security, freedom and prosperity depend to a greater extent on global developments.

The defence of the sovereignty and territorial integrity of nations remains the primary focus of the defence and security policy in most states. In many regions, direct conventional military threats are considered to be growing. While Denmark's security policy has continued to become more and more global in perspective, it remains embedded in Europe – in the transatlantic and European security architecture.

During the latest decades, the field of the security policy has been extended, and the traditional focus on the defence against military threats and the security of states is increasingly complemented by a focus on non-governmental actors and a more complex perception of threats.

This development reflects how globalisation results in new transnational security threats like pirating, terrorism and human trafficking. These developments derive from fragile states and regions dominated by conflicts. The Danish security policy is based on an interest in taking co-responsibility for meeting such global challenges to security.

Globalisation has also implied that states are, at the same time, challenged as the primary actors in the international system. In the security policy area, it means that terrorist networks, militias and organised criminals can impact on global developments and the threat picture and, consequently, also impact directly on Danish security interests.

Globalisation also redistributes power among states. In recent years, we have witnessed a shift of power in the international system towards Asia where especially China has drawn attention to itself as a global actor of increasing importance.

Altogether, this development implies that Denmark's security policy is implemented in an international context that is more unpredictable and complex than previously.

*Necessary to participate with a broad array of civil and military means*

This makes new demands on the security policy horizon and measures, and it means that the focus of the Danish security and defence policy is, to an increasing degree, shifting from Denmark's surrounding area towards action targeted at the origin of the new threats and destabilising factors in a globalised world. It is, thus, a characteristic of the present security policy challenges that the response to them, to a considerable extent, takes place far away from Denmark's own borders.

Globalisation has also created new potential threats against the main infrastructure of Denmark. The growing dependence on ICT systems for the main functioning of society means that today cyber security is considered to be of major importance for our security. A number of states, including Denmark and organisations have established special authorities and implemented specific strategies in order to ensure protection against attacks on ICT systems. These attacks can be targeted at intelligence activities, be part of organised crimes, or be related to acts of terrorism.

Altogether the nature of the challenges means that the security policy must have at its disposal a broad array of instruments – civilian as well as military ones.

*Denmark's security depends on the sense of community shared with other states.*

It is, furthermore, a characteristic of the threats and challenges in a globalised world that they are too complex to be handled by any one country on its own. They cut across borders and require, first and foremost, effective international co-operation and multilateral solutions. Denmark's security depends to a high degree on our co-operation with and sense of community shared by other countries.

Denmark must therefore have the capability and the capacity to contribute to the response to these common challenges as a credible, active and loyal partner. In the light of, among other things, the global power shift, this means that Denmark must be able to contribute to ensuring sufficient and relevant capacity in the North American and Western European industrial defence complex with a view to supporting the response to changing security policy challenges.

The changing security challenges imply that, concerning capabilities of major strategic importance, Denmark needs to be closely related to foreign suppliers of defence equipment, as this will urge the foreign

supplier to maintain supplies for Denmark, even if such supplies might be jeopardised in the light of emerging new international threats.

The UN, NATO, the EU and the OSCE constitute in various ways the framework for the pursuit of Denmark's foreign and security policy interests and values. In order to meet the target, also in future, that Denmark must be an active and loyal partner in multilateral co-operation and assume co-responsibility for the handling of global security challenges, we must contribute constructively at various levels - both politically and operationally. Therefore, Denmark must provide credible contributions to international operations. This requires the will and determination as well as the ability to make relevant military and civilian capabilities available to the necessary extent and of the right nature, composition and quality. Such contributions may depend on the ability of the defence industry to supply relevant capacity for the performance of tasks at hand, which underlines the importance of a close connection between Danish, European and North American defence industries.

The enforcement of Denmark's sovereignty, existence and integrity is ultimately a Danish responsibility. In a strategic perspective, Denmark's sovereignty is ensured through Article 5 of the North Atlantic Treaty, the collective defence commitment. However, it is predicted that there will be a need for Denmark, also in future, to maintain selected capabilities to ensure the enforcement of sovereignty. This is increasingly also relevant in the case of the Arctic.

On account of Greenland and the Faroe Islands, the development of the Arctic area is increasingly important to Denmark. The interests of Denmark, Greenland and the Faroe Islands must be protected by physical presence in the area and by active participation in international co-operation within the framework of the Arctic Council and with strategic partners and the other Nordic countries. Because of unsettled disputes concerning borders and raw materials and because of growing maritime transportation in the area, the geopolitical importance of the Arctic is expected to grow in the coming years and, consequently, play an increasing role in the Danish defence and security policy. The development makes new demands on military activities in the area, including surveillance, enforcement of sovereignty, and rescue activities, which are also part of the Danish Defence Agreement for 2013 – 2017.

The trend regarding global threats and risks implies, furthermore, that there will continue to be a need for including military means in societal preparedness, including in connection with extraordinary incidents, such as acts of terrorism and natural disasters. Lastly, there will be a need for Denmark, also in future, to provide contributions to international responses to major incidents, including contributions of military capabilities.

Despite the continuously changing threats and the changes in the security policy, military equipment like fighter aircraft, armoured vehicles and ships are in use for many years. Therefore, a long-term perspective is necessary for assessing which military capabilities are necessary for the protection of essential national security interests.

### **Strategic areas for the protection of Denmark's security interests**

For the protection of Denmark's essential security interests, industrial competencies and capabilities are of great strategic importance to the performance of tasks by the Danish Armed Forces and the costs related to procurement, operation and phase-out can be considerable.

The strategically most important areas of technology are:

- Advanced software, including cyber security
- Communications and command control systems
- Surveillance and radar technology
- Operational protection of personnel and military capabilities, e.g. equipment and communication
- Parts of the vehicle area critical for military operations
- Parts of the maritime area critical for military operations
- Advanced materials technology and processing
- Optimising of energy and environment in military operations

Being a small state, it is not possible for Denmark to have all, but only to have some of the important industrial competencies and capabilities within the strategically important areas.

To ensure that these competencies and capabilities remain competitive, it is the intention to ensure the highest degree possible of competition between the companies within the strategically important areas in order to be awarded contracts with the foreign suppliers or Ministries of Defence.

In the coming years, it is expected to be increasingly important for the defence industry – nationally as well as internationally to support the Ministry of Defence with competitive and up-to-date solutions concerning the maintenance of defence equipment.

### **The importance of the international defence industry to Denmark's security**

Danish, European and North American defence industries are of great importance to the protection of Denmark's security interests as the competencies and capabilities of the defence industry are crucial for

- whether Denmark can procure equipment that is necessary in order to achieve relevant strength and operational advantages
- whether Denmark in international operations can supply flexible, swift and effective quality response
- whether Denmark has the necessary technological insight to understand and assess new threats, develop the necessary counter-measures, and plan for the future pursuit of Denmark's security

Since 1949, NATO has constituted the cornerstone of Denmark's security policy and has developed standards for military systems and methods. Today, NATO interoperability (the ability to operate together) is a minimum requirement in international operations, and Danish efforts are based on international military standards enabling Denmark to be directly incorporated in international operations.

In connection with acquisitions of defence equipment, Denmark has clear advantages in procuring equipment and systems that are as identical as possible with those of our close allies. First, it opens up for co-operation with allies on acquisitions, operation, maintenance, training and education. Second, it makes it possible to draw on allies' maintenance capacity and equipment reserves in connection with international operations. Third, it becomes profitable for the defence industry to develop and improve materials and systems. Lastly, it makes it possible for Denmark to achieve a military capability that Denmark itself does not have. This applies for example to safe and secure operational satellite communications.

The vast majority of the Ministry of Defence's acquisitions are made on the international market, which in practice means the European and North American markets.

With respect to the individual acquisition, it is of no consequence whether the supplier is Danish or foreign. The decisive criteria are quality, technology, security of supply, international military standards as well as price.

Therefore, Denmark makes a targeted effort in all relevant international fora to ensure an open, competitive international market for defence equipment that can provide the best possible basis for developing

competitive, high-technology and innovative products and services at the lowest possible price.

### **The importance of the Danish defence industry to Denmark's security**

Denmark is a small country with a relatively small defence industry.

In Denmark, there are approx. 450 enterprises which on the basis of their competencies and products on the civil market are expected to have a potential in the field of defence. For approx. 50 of these enterprises, the defence field accounts for a significant share of their sales. A total of 80 per cent of the companies in the field of defence have an annual turnover below DKK 50 million.

These enterprises cover several sectors and are comprised of a few systems suppliers, a number of specialised sub suppliers and niche producers with technologically advanced products as well as component suppliers of simple components.

Total annual sales in the field of defence are estimated to amount to between DKK two and three billion, of which exports account for more than 75 per cent.

Certain Danish systems suppliers and sub suppliers are capable of delivering advanced, high-technology and internationally competitive products and services in the field of defence. This applies in particular to the strategically important areas defined above.

Against this background, Danish enterprises that are internationally competitive concerning competencies and capabilities within strategically important technology areas can be of importance to the protection of Denmark's security interests as they

- contribute to making Denmark a credible and attractive partner for international co-operation on security and peace
- can contribute to increasing innovation, sharpening competition, raising quality and reducing prices in the European and North American markets for defence equipment
- can cooperate with the Ministry of Defence on the supply, operation and development of certain strategically important technologies
- have at their disposal human resources and competencies of relevance to Danish society in relation to the procurement, maintenance and development of strategically important technologies



- together with foreign suppliers as well as educational and research institutions contribute technological insight of relevance to the ability to understand and assess new threats and develop solutions to counter these, especially regarding the advanced technological development taking place under the auspices of the private sector
- can meet the need for ongoing adjustment and development with new functionality in software-based command control systems operating round the clock and requiring rapid updating and correct service
- can contribute relevant competencies and capabilities in selected areas if, as a consequence of unpredictable events, it proves necessary in order to supply the solutions needed
- contribute to developing essential operational capability of the Ministry of Defence in politically prioritised areas, e.g. optimisation of energy and environment in relation to operations in the Arctic or other remote areas
- strengthen the interdependence between foreign suppliers and Denmark and thereby the interest of the foreign supplier in maintaining the co-operation and supply to Denmark in emerging crises.

Altogether, it is the presence of internationally competitive competencies and capabilities that constitutes the basis for Denmark being perceived as a credible ally in the industrial area and for Denmark to be able to supply the solutions needed during potential, unforeseen emergencies.

### **Strategic acquisitions**

Certain acquisitions of defence equipment and defence services are of particular strategic importance to Denmark, and they must be at the disposal of the Danish Armed Forces at any point of time.

In these cases it is often necessary to secure the supply in a way which exceeds the usual contractual requirements. Therefore, obligations for industrial co-operation between the foreign supplier and companies in Denmark can be appropriate to ensure security of supply, including time of delivery of defence equipment and defence services,

The background is that the result of broader trade activity between the Danish defence industry, etc. and the foreign supplier is assessed to imply that the foreign supplier will, to a greater extent, be forced to meet his performance commitments regarding capacity and associated supplies because the foreign supplier's production depends on supplies from Denmark. Insufficient performance on the part of the foreign supplier –

irrespective of whether this is due to instructions from the home state of the foreign supplier as a consequence of local crises or merely insufficient focus on a minor customer – may therefore lead to the withholding of sub suppliers pursuant to the provisions on export licenses, etc. laid down in the Danish Act on War Material.

### **Strategic action areas**

Recognising the importance of the defence industry's importance to the protection of Denmark's security interests, this strategy presents the framework for how Denmark can ensure that the industrial competencies and capabilities needed within strategic areas are available in Denmark and that Denmark contributes to competitive, innovative and high-technology European and North American defence industries.

The six action areas of the strategy to maintain and develop the defence industry are set out below.

#### **Action area 1: A competitive international defence market**

In international contexts, Denmark makes a targeted effort to ensure an open, competitive international market for defence equipment which enhances the innovation and competitiveness of companies, and to be able to procure the best possible equipment at the lowest possible price in the international market for defence equipment.

As a consequence of this, Denmark's procurement of defence equipment and services in the area of defence is as a general rule based on EU Directive 2009/81/EC on defence and sensitive security procurement.

Denmark supports the Commission's efforts to develop a competitive European defence industry, emphasising that these efforts must respect the close relation to NATO and the right for small Member States to protect their essential security interests in accordance with Article 346 TFEU.

#### **Action area 2: Good framework conditions for the defence industry**

The most important means to ensure a competitive defence industry is to ensure good and competitive general framework conditions for the industry to innovate and develop competitive products and services.

In certain areas with special conditions for the defence industry, e.g. concerning licenses for production and exports and security certificates, Denmark makes a targeted effort to have a clear, transparent and efficient administration in line with the Danish foreign and security policy.

### **Action area 3: Close co-operation between the Danish Armed Forces and the defence industry**

Denmark makes a targeted effort to develop the defence industry through co-operation with the Danish Armed Forces in the form of advisory services, dialogue and development activities that benefit both parties. Through co-operation with the defence industry, the Danish Armed Forces can, among other things, gain access to better products and innovative solutions, greater action flexibility and access to civil technological competencies. The defence industry, on its part, can gain access to developing new products and solutions, obtain knowledge about future needs, and establish contact with foreign suppliers and customers.

The co-operation between the Danish Armed Forces and the defence industry comprises e.g. knowledge of the long-term procurement needs of the Danish Armed Forces, which gives the defence industry the opportunity to develop co-operation relations and products that can contribute to meeting the needs of the Ministry of Defence.

Advisory services to Danish industry are provided, among other things, through Danish defence attachés abroad who can assist Danish enterprises in establishing contact with foreign suppliers or defence authorities.

The dialogue between the Danish Armed Forces and the defence industry takes place, among other things, within the framework of Forsvarets Materielnævn (Advisory Board for Defence Procurement), which is a formal forum for co-operation between the Danish Armed Forces and the defence industry, as well as in the Danish Defence Acquisition and Logistics Organization's ongoing dialogue with Danish trade and interest organisations and co-operation with the defence industry on professional events concerning development opportunities in the field of defence equipment.

The development activities can in principle comprise the Danish Armed Forces' co-operation with the defence industry on development, sales and marketing. The co-operation usually takes the form of the Danish Armed Forces lending personnel and equipment or providing support for the testing and presentation of products against full payment of the Danish Armed Forces' expenses related to the co-operation.

Furthermore, the development activities include the Danish Defence Acquisition and Logistics Organization's co-financing projects which expand the research capacity in areas where the Danish Defence Acquisition and Logistics Organization does not have at its own disposal the competencies needed. The selection of co-financing projects takes place on the basis of the value to both the Danish Armed Forces and the defence industry. To obtain co-financing, a project must be relevant to the

Danish Armed Forces, benefit the defence industry, be of interest from a research and development perspective, imply international co-operation, and the defence industry must contribute a minimum of 50 per cent. Projects are discussed with the Confederation of Danish Industry and the trade association FAD (Defence & Aerospace Industries Association in Denmark), for example under the auspices of Forsvarets Materielnævn.

#### **Action area 4: International co-operation concerning acquisitions and development**

It is an important part of Denmark's protection of essential security interests to participate in certain international co-operation concerning the acquisition or development of defence equipment, bilaterally, multilaterally or in the context of alliances. Often the contractual foundation for the international co-operation will include possibilities for the national defence industries of the participating states to take part in the project.

Entering into such international co-operation, the Danish Armed Forces will ensure the participation of the Danish defence industry in accordance with the principles of this strategy, including the participation of the Ministry for Business and Growth.

#### **Action area 5: Security of supply**

If it is relevant in connection with strategically important acquisitions of defence equipment and defence services, the Ministry of Defence will include relevant requirements for the security of supply and security of information in invitations to tenders. The requirements will be made in accordance with EU law

#### **Action area 6: Industrial co-operation**

Co-operation between foreign suppliers and Danish enterprises on defence equipment is important with a view to maintaining and developing competencies and capabilities that can be necessary for the protection of Denmark's essential security interests. For the Danish sub suppliers, co-operation with major foreign suppliers is crucial for their access to the international defence equipment market and new technology in the field of defence. For the foreign suppliers, co-operation with innovative, competitive Danish sub suppliers can enhance their competitiveness.

However, there is no guarantee that increased openness and competition in the defence equipment market will in itself ensure the maintenance and development of competitive, industrial competencies and capabilities in the field of defence that are necessary for the protection of Denmark's essential security interests.

Although efforts are being made to increase competition on the international defence market, it is still characterised by extensive

protection of national defence industries in order to protect essential national security interests. In this context, it is especially difficult for small companies from small states to gain access to the major suppliers of defence equipment and the acquiring authorities of other states. It is expected to take many years before considerable changes are enforced to increase the market access of small companies from small states.

It can, therefore, if other means prove not to be sufficient, be necessary in connection with acquisitions of defence equipment and defence services to impose obligations for industrial co-operation within the field of defence in Denmark. Possible obligations for industrial co-operation are decided on the basis of a specific assessment of each individual acquisition based on Article 346 of the TFEU on the protection of Member States' essential security interests. In this context it will be assessed within which of the eight strategy areas there is a need for maintaining and developing industrial competencies and capabilities in connection with the specific acquisition. Possible obligations for industrial co-operation are decided on as part of the general procurement procedures of the Ministry of Defence and are set out in relevant documents, procurement material and contracts.