



**COUNCIL OF
THE EUROPEAN UNION**

Brussels, 20 March 2013

**5507/1/13
REV 1**

**ATO 9
CODUN 2
COMER 2
PESC 76
CONOP 9
ECO 7
UD 9
CODEC 116**

COVER NOTE

No Cion doc.:	SWD(2013) 7 final/2
Subject:	Commission Staff Working Document Strategic export controls: ensuring security and competitiveness in a changing world - A report on the public consultation launched under the Green paper (COM(2011) 393

Delegations will find attached a **new version** of Commission document SWD(2013) 7 final.

Encl.: SWD(2013) 7 final/2



Brussels, 15.3.2013
SWD(2013) 7 final/2

CORRIGENDUM:

Annule et remplace le document SWD(2013) 7 final du 17.1.2013. Concerne un oubli au sujet de la Hongrie dans l'annexe I et des petites corrections d'orthographe

COMMISSION STAFF WORKING DOCUMENT

Strategic export controls: ensuring security and competitiveness in a changing world - A report on the public consultation launched under the Green Paper COM(2011) 393.

COMMISSION STAFF WORKING DOCUMENT

Strategic export controls: ensuring security and competitiveness in a changing world - A report on the public consultation launched under the Green Paper COM(2011) 393.

Introduction

The Green Paper "The dual-use export control system of the European Union: ensuring security and competitiveness in a changing world"¹, highlighted the development of the EU export control system over the last decade and launched a broad public debate concerning its functioning and future strategic options.

Member States (including national parliaments and political parties), the European Parliament, industry associations and economic operators (including law firms and consultancies), civil society organisations and academia welcomed the opportunity to exchange ideas on the functioning of the EU export control system and over 100 responses were received from stakeholders (see Annex I). They provided considerable input on the EU export control system and also laid out their views as regards its strengths and weaknesses and its possible strengthening and improvement in a longer-term perspective. This paper reviews the contributions received and identifies the main issues raised by stakeholders during the public consultation.

This paper will open the way to a review of the EU export control system, with the preparation of a Commission Communication in 2013 which should outline a long-term vision for EU strategic export controls and may announce concrete policy initiatives for their adaptation to rapidly changing technological, economic and political circumstances.

PART 1 – EU STRATEGIC CONTROLS IN A CHANGING WORLD

1. Where the EU's future lies. The economic importance of export controls

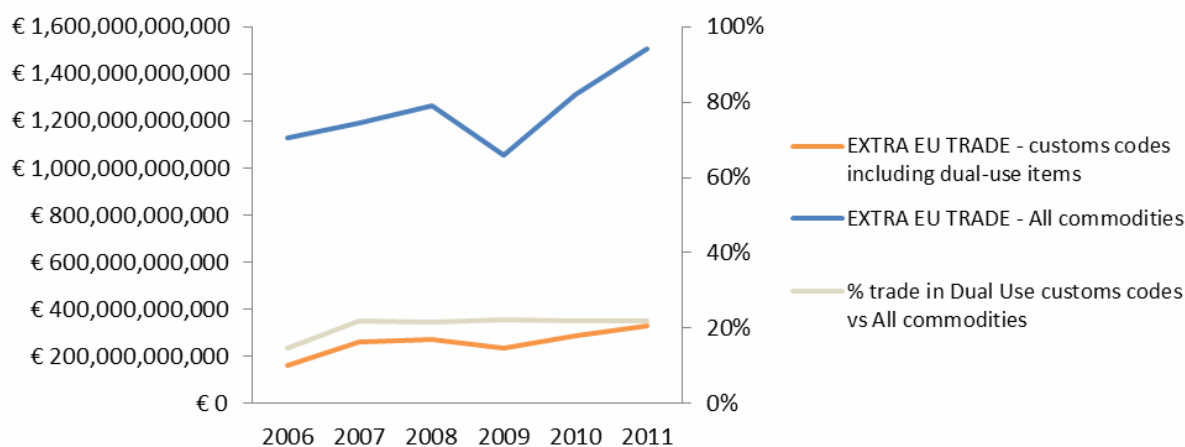
1.1 The elusive 'dual-use sector'. In total, over 2200 dual-use items are listed and controlled under the export control regulation while some non-listed items may also be controlled under the so-called catch-all clause. From a quantitative perspective, however, most Member States and some industry associations caution that it is difficult to get reliable information on the precise overall share of dual-use exports of all exports, especially as there is no uniformly agreed methodology for recording data and calculating statistics specific for dual-use items. According to some industry associations and companies, a relatively low percentage of exports are subject to compulsory formal export authorisation: based on licences granted, it can be roughly estimated that licensed dual-use exports of goods represent approximately 1 to 2 % of exports out of the EU². Remarkably, this figure varies considerably among Member States, with some reporting licensed dual-use exports exceeding 4% of total exports of goods. This reflects the diversity of situations throughout the EU economy, with some Member States being among the primary exporters of dual-use items in the world, and others acting essentially as transit or exit countries. The licensed trade is though just one part of the overall dual-use trade, in particular as it does not take into consideration trade under general authorisations, which covers most items exported to some of the EU's main trade partners.

¹ COM (2011) 393 of 30.6.2011

² This concerns licensed exports out of the EU, but does not cover trade within the internal market, that is not controlled (except for transfers of certain items under Annex IV to Regulation (EC) No 428/2009).

Estimates based on the 'correlation table' identifying customs codes *including* dual-use items thus point to a higher upper limit up to 20% of EU external trade (see table 1)³. Moreover, the associated services and intangible transfers should be taken into consideration.

Table 1: Trade including dual-use items – an estimate based on the 'correlation table'



1.2 A key to European innovation and competitiveness. Industry associations and companies stress that statistics merely cover a fraction of the actual volume of trade affected by export controls. Export controls have a greater importance for the EU economy than the percentage of controlled transactions seems to indicate, as they significantly impact key sectors of the EU economy.

- While a few sectors, such as the nuclear industry, are almost entirely subject to export controls, stakeholders report that export controls have ramifications throughout entire sectors, as dual-use items affect production, research and development (R&D) across a wide-range of civil industries, and controlled products enter into the international value chain on a broad base. Key sectors of the EU economy such as energy, aerospace, defence and security, lasers and navigation, telecommunications, life sciences, chemical and pharmaceutical industries, material-processing equipment and industrial products, electronics, semiconductor and computing industries are directly affected by export controls while other sectors such as medical and automotive appear as users of certain dual-use items.
- Though some companies produce or export mostly dual-use items, many companies are concerned by export controls even where their product portfolio may largely be non-dual use, but merely includes some products classified as dual-use e.g. electricity or software companies. The sale of a licensable product is often intertwined with the sale of other products or technology, making the total value of exports affected by controls higher than just the value of licensed items alone.
- Not only exporters and trading companies, but also importers, manufacturers and even some companies that do not produce or export dual-use items (e.g. electricity generation) and transport companies (e.g. airlines) are concerned by export controls. For some companies exports are rarely sales, but rather technological data or parts that need to be transferred overseas for internal company purposes, i.e. as part of a

³ Trade data available from Eurostat give upper bounds to the real dual-use trade because the data refer to customs categories of commodities (Combined Nomenclature, CN), not directly to the dual-use (DU) ones.

tender process or a repair contract. For these companies, involvement in export controls may be limited, but compliance is of equally critical importance.

- Crucially, companies emphasise that dual-use items often represent high-tech, advanced products in which EU companies have established themselves as leaders so that many leading edge technologies are affected in whole or in part by dual-use export controls.

*Industry associations report that the **aeronautics, space, defence and security industries** in Europe represent over 2000 companies with a further 80 000 suppliers, many of which are SMEs, and employ around 696,000 people, with a turnover of EUR 154.7 billion. Much of its activity is affected by strategic export controls.*

*The **chemicals industry** produces many chemicals that are subject to control in consideration of their multiple uses and are widely supplied to non-EU companies, research bodies, universities and laboratories. Customers often order a number of different substances at once and the entire delivery may hinge on an export authorisation for a single export-controlled substance. Overall, industry associations estimate that dual-use exports represent between 5 and 10% of the turnover of the sector.*

*Encryption is an increasingly pervasive technology, present in almost all information and communication technology products and services, and controls of encryption impact much of the **telecommunications** industry.*

*Industry associations report that, in the **semi-conductors industry**, a significant portion of products and technologies are classified as dual-use. The semi-conductor industry represents around 110,000 jobs directly and up to 500,000 induced jobs in Europe, operating in a worldwide market valued at over USD 298 billion in 2010.*

Most stakeholders conclude that the EU's extensive dual-use industry brings together thousands of small, medium and large companies providing high value-added jobs and know-how - including significant R&D work - across a wide range of key sectors of the EU economy. It supports a large portion of EU trade with strategic partners and is crucial to the EU's drive towards innovation and competitiveness.

2. Export controls in the 21st century: risks and opportunities

2.1 New challenges in a globalised multipolar world. Most Member States underline that strategic export controls are at the forefront of international non-proliferation efforts, and emphasise that the primary challenge for the EU export control system, as a security-related trade instrument, is to strike the right balance between the EU's overarching foreign and security policy objectives and its economic and commercial interests. Some Member States recognise that the EU export control system strives to reconcile the security objectives with the requirements of the internal market, and underline that the desire to liberalise dual-use trade should not take precedence over the need to maintain effective control over the movement of strategically sensitive items.

Some Member States, industry associations and companies identify a variety of challenges for export control policy. These concern the growing importance of emerging economies, multinational companies and industrial processes within worldwide production networks and supply chains, and the globalisation and increasing volumes of trade.

The rapid spread of technological and scientific developments and the mobility of knowledge, the emergence of new and advanced technologies – such as transformational technologies, cloud computing, cyber-tools, dual-use research in life sciences – also add to the complexity of strategic controls and the need to keep up with technology.

Moreover, Member States identify challenges relating to the evolution of security risks and threats – including the various forms of terrorism and the efforts by some States and non-state actors to acquire weapons of mass destruction and corresponding carrier technology and armaments. Some Member States and a Member of the European Parliament (MEP) also point to political challenges, e.g. in relation to the Arab spring and a rapidly changing geopolitical landscape, or in terms of protecting human rights. The MEP, some civil society organisations and researchers call on EU strategic controls to address shifting EU foreign policy objectives e.g. in so far as it concerns the supply of telecommunications surveillance and internet monitoring systems that could be used to facilitate human rights abuses.

These political, economic, technological and scientific developments in turn create operational challenges for strategic controls and may call for new approaches to strike the right balance between prosperity and security. Furthermore, with the advent of a politically, economically and technologically multipolar world, more and more countries and companies have the knowledge and technology needed to supply sensitive items at a time when more countries – and possibly non-state actors – have a capacity to develop weapons of mass destruction. The issue of the foreign availability of controlled items has thus become a key element of export control considerations, affecting both the effectiveness of export controls and the competitiveness of exporters.

2.2 Foreign availability, effectiveness of controls and competitiveness. Some Member States, industry associations and companies note that the most technologically advanced items are essentially available from a limited number of supplying countries and companies, mostly participating in multilateral export control regimes. In this sense, some Member States recognise that foreign availability has modified the approach to export controls but consider that it has limited effect on their effectiveness. They also underline that export controls are only one of many factors impacting the competitiveness of EU companies, and stress that customers value reliable suppliers and high-quality products which are not easily substituted. They conclude that the foreign availability of goods subject to effective controls in third countries also has limited adverse effect on the competitiveness of EU exporters, at least as far as technologically sophisticated customised products involving long-term business relations are concerned.

However, other Member States, industry associations and most companies report that foreign availability of dual-use goods and technology becomes a significant competitive factor, and deplore that distortions of competition due to higher compliance costs and delivery delays put EU operators at a disadvantage vis-à-vis foreign competitors. The competitiveness of EU companies may be particularly affected in certain sectors, e.g. telecommunications or equipment for the chemical, pharmaceutical and food industries, where most of the high-tech components come from competitors located in third countries that do not belong to the corresponding multilateral export control regime. Companies also complain that certain products e.g. some 'commercial off the shelf' (COTS), are subject to licensing in the EU but freely available in other jurisdictions, which significantly impacts the competitiveness of the corresponding EU-made dual-use items. They report that the foreign availability of certain items may, in some cases, critically affect the position of companies – especially small and medium companies - and that EU operators may lose commercial orders to competitors with more permissive and faster control, or may be pushed to shift production abroad.

2.3 The control of dual-use research and innovation. Member States and companies note that globalisation has increased the relevance of intangible technology transfers and the need for well-adapted control policies to apply to international cooperation in research and innovation and to multinational companies working on R&D at global level.

Some Member States and some companies take the view that export controls only have a limited impact on international collaboration in research and innovation, especially as basic scientific research and technology 'in the public domain' is exempted from controls, while global licences and inter-governmental or inter-agency agreements can address the needs of international research cooperation. Furthermore, some researchers express scepticism as regards the effectiveness of export controls when attempting to limit the spread of critical knowledge. They report that many academic researchers are not aware of export controls and that governments do not routinely have an overview of collaborations of potential concern.

However, some Member States and companies consider that export controls can have a 'dampening effect' on international collaboration in research and innovation, since nearly every transfer of dual-use technology, for example via download or e-mail, could be subject to authorisation. Moreover, some companies denounce the fact that dual-use export controls not only restrict technology transfers to third parties, but also intra-company technology transfers, including the movement of intangible data via electronic means. Export controls may thus discourage small enterprises and laboratories to participate in international cooperation and may result in 'technological isolationism'.

*In the chemical industry, many companies specialise in the global supply of small quantities of **research chemicals** on an on-demand basis. This type of business is most susceptible to disruption through export control procedures.*

Some Member States, industry associations and companies therefore argue that strategic export controls should be more conducive to international collaboration in research and innovation and demand specific provisions e.g. to allow for *intra-company transfers*, to introduce a *de-minimis* rule that would be appropriate in areas of research & development where typically small samples are shipped for specific testing purposes, and to allow for the supply of items within the framework of international collaboration or *large scale projects*.

2.4 The globalisation of export controls: opportunities for a global level-playing field?

Some Member States, companies and academia underline that UN Security Council Resolution 1540 requires all countries to have effective export controls and emphasise that multilateral export control regimes conduct significant outreach to emerging suppliers of sensitive items. They recognise that third countries outside the multilateral regimes are increasingly developing domestic export control systems in all regions of the world. They note that the EU's enlargement policy and cooperation programmes are useful tools to strengthen export controls in third countries and recognise that EU export control legislation has a multiplier effect, as a number of countries have decided to base their system on the EU model.

Some Member States, most industry associations, companies and academia nonetheless consider that export controls have become a significant competitive factor as a result of the increasing availability of controlled items, interconnected supply chains and international collaboration in research and innovation. They suggest that distortions of competition may result from differences in laws and regulations, including different exclusions and exemptions and other facilitation arrangements, from an outdated EU control list, from delays to delivery caused by licence application regimes that certain competitors do not have to contend. They

recognise that export control reforms in third countries may affect EU exporters, and some companies also deplore that extra-territorial controls of third countries need to be taken into consideration in supplier strategies and may result in a redundant licensing process.

*Export of **cryptography items** may be covered by EU or national general authorisations, but the coverage of European licences is not comparable to that of US licences that cover most exports of hardware and software products containing cryptography falling under certain export control classifications. US regulations are thus more 'competitive', so that there is a disadvantage for European exporters compared to US competitors.*

*The US allows the **export of nuclear reactor components** under general licences to EU destinations and others, while suppliers based in the EU are generally restricted to individual licences – even for transfers between company subsidiaries - because the items in question are listed in Annex IV Part II of the EU regulation. EU economic operators face more administrative hurdles and licensing delays so that it is easier for companies in the US to bid for civil nuclear work in the EU.*

*According to some companies, licensing and delivery delays are particularly problematic in certain situations, e.g. where **spare parts** are concerned, since a whole manufacturing plant can grind to a halt until they arrive, and in some sectors such as the **chemical industry**, as companies operate in integrated global markets in which continuity of supply is crucial.*

They conclude that the combination of foreign availability of certain items with the asymmetric implementation of international obligations through differentiated export control policies – including less stringent or simpler export control in third countries – affect the competitiveness of EU operators. Companies operating on the global market demand a more level-playing field for EU industries to compete on equal terms and encourage more exchange of information and regulatory collaboration between major trade partners.

PART 2 – THE EU EXPORT CONTROL SYSTEM: GREATER THAN THE SUM OF ITS PARTS?

3. EU export control policy: "tough where necessary, flexible wherever possible"

3.1 Strengths and benefits of EU regulation. Most Member States, companies and consultancies are satisfied that the current EU system provides a robust yet flexible framework and note that the construction of the EU export control regime is unique, in that it combines EU-wide principles and regulations with national rules and decisions. Some Member States recall that the primary benefit of EU regulation derives from the free movement of dual-use items within the internal market, and underline that implementation is enhanced by harmonisation and coordination in the field of enforcement and border controls. Some companies also appreciate the relative simplicity of the EU system (e.g. one single control list). Furthermore, many Member States emphasise the considerable development of EU export controls over the last few years, thanks to important initiatives such as the adoption of Regulation (EC) No 428/2009, the introduction of new EU General Export Authorisations, the setting up of the EU Denials Database (DUeS), as well as proposals to ensure that the EU control list is regularly updated.

Some industry associations, companies and academia however consider that the EU system is too restrictive and impedes competitiveness. They complain about licensing delays that conflict with the requirements of the export industry, deplore the lack of transparency of some regulations and the lack of predictability of decisions – especially as they may diverge across

the EU - and consider that EU controls are overly encompassing and do not sufficiently address differentiated levels of risk. Certain companies also deplore its inflexibility to react to market trends and technological evolutions, and call for some principled thinking about export controls in an online age and 'digital economy'.

3.2 Compliance risks and costs. Member States, industry associations, companies, consultancies and academia underline that sound export controls are key to industry's reputation. They emphasise the high compliance risks associated with the management of sometimes non-transparent, complicated, multiple and diverging export control procedures and note that violations of export control rules may be subject to civil or criminal penalties. They stress that operating in a highly regulated environment brings significant compliance costs that represent an administrative burden for certain industries.

Industry associations and companies indicate that export management and compliance programmes (EMCPs) can be extremely complex and resource-intensive, e.g. as regards product classification, the licence application process, validation of destinations, end-uses and end users. They report that EMCPs require specific business processes and internal control procedures, dedicated infrastructure e.g. software and screening tools, specialised staffing, awareness-raising and training of non-export control specialists (e.g. product/sales) throughout the company as well as support from external lawyers and consultancies. They note that compliance costs are exacerbated for small and medium companies and multinational companies, especially where they operate in countries with different export control rules. Furthermore, even where dual-use exports represent a limited share of a company's exports, they require complex export control management systems to be set up and managed.

A leading telecommunication company indicates that they have approx. 150 persons working with export compliance, especially as product classification represents a huge administrative process. This includes a Central Licence Management Team, Regional Trade Compliance Directors and teams, Business Unit Trade Compliance Advisors, Product Area Trade Compliance Advisors in various locations, and dedicated staff in IT departments.

A leading IT company employs around 40 personnel globally working full time on export controls and has additional personnel involved, part time, in export compliance matters and concludes that annual payroll and system development costs running in millions of dollars directly related to export compliance are incurred each year.

Although some Member States and industry associations observe that many European companies are used to operating with export controls and often have streamlined procedures, industry associations and companies generally consider that compliance costs may undermine the competitiveness of EU companies with a highly compliant culture that will spend a great deal of time and resources evaluating their technology against the relevant regulations.

Export controls also represent an administrative burden for public administrations, with some Member States affecting several dozens and even hundreds of employees to export controls (without counting other officials e.g. in customs, indirectly involved in export controls).

3.3 Unity in diversity: finding the right balance between uniformity and fragmentation. Some Member States and industry associations consider that the EU export control system provides a uniform legal basis, with common rules, definitions, criteria for authorisations and a common control list, but all stakeholders agree that it also incorporates factors of differentiation:

- Some Member States observe that the political approach that forms the basis for export controls varies, as the EU Regulation leaves scope for competent authorities to take into account national foreign policy and security considerations in the authorisation process. Some industry associations perceive this lack of political foundation as a major hurdle for further harmonisation, especially due to the resulting lack of a common approach to risk assessment.
- Some Member States, industry associations and companies point to numerous regulatory differences due to additional or specific national rules and controls. They point in particular to the different types of licences used by Member States, and the different terms and conditions attached to licences (e.g. duration, reporting or auditing obligations, frequency of end user certificates etc.).
- Industry associations and companies also observe that national authorities' administrative capacity, procedures and resources, the availability of expertise, of online application systems and online classification query facilities also come into play and reinforce differences.
- They report that political, regulatory and operational differences result in significant variations in terms of processing time for export licences and, at times, diverging interpretations of EU rules e.g. as concerns authorisation criteria, basic notions or end-use requirements, contradictory classification rulings and licensing decisions. One Member State also notes that enforcement remains sometimes fragmented for lack of systemic cooperation between relevant national authorities.

*Some Member States impose **additional national controls** for export of certain items to certain destinations or end users while others do not. In the field of **encryption**, some Member States have introduced additional regulations that require advance declaration or authorisation for imports, intra-EU transfers and in-country supply, while the same items would not require any authorisation in other Member States.*

*As regards **intangible technology transfers**, some Member States consider that a natural person carrying nuclear technology on electronic devices for exclusive personal use across the border of another (EU) country requires an authorisation, even if the technology is not to be passed to a third party, while others consider that this does not qualify as 'transfer'.*

Basic notions such as 'specially designed' and the 'principal element note' (concerning export of non-controlled goods containing controlled components as their principal element) also appear to be subject to varying interpretations by national authorities.

Some Member States, most industry associations, companies and academia conclude that the 'asymmetrical implementation' of EU export controls creates distortions of trade and sometimes results in a fragmented market affecting the equal treatment of European companies. From a security perspective, some Member States, industry associations, companies and academia deplore that regulatory and operational differences and varying levels of control create a confusing situation and make compliance challenging, and point to the risk of exposing 'weak links' in the chain of European export controls that might compromise the overall effectiveness of EU export controls.

4. Elements of the export control system: the parameters of the equation

4.1 The licensing system(s).

4.1.1. *The 'authorisation architecture'.* Most Member States, some industry associations and companies are satisfied that the existing types of export authorisations⁴ - allow that exports can flow and provide for a level playing field while security is ensured. They confirm the use of all - individual, global and general - categories of licences.

Some Member States, industry associations, companies and consultancies however, report that equal treatment of exporters may be affected by different uses of the authorisations, including different conditions and procedures for their use, even for EU general export authorisations (EUGEAs). They also regret that there are still too many restrictions on items and countries covered by EUGEAs.

Furthermore, some Member States, industry associations, companies and consultancies take the view that different types of national general export authorisations (NGEAs) distort competition as they give advantages to companies from a certain Member States. However, other Member States, some industry associations and companies highlight the benefits of national general authorisations that represent a flexible additional instrument tailored to the national economy and national security interests. They warn that NGEAs usefully complement EU licences and should not be phased out, and note that other Member States are entitled to issue similar NGEAs if needed. Some Member States also point out that it is easier to develop or revoke national general authorisations than EU general licences so that they allow the authorities to respond to changing circumstances more efficiently. Some companies however complain that national authorisations may not be fully recognised by other Member States.

*Most Member States have no **national general export authorisations**, while some have up to 14 such authorisations covering different products, activities and destinations.*

*The validity of **global licences** ranges from six months to five years. Some Member States essentially rely on periodic audits to monitor compliance, while in others global licences are subject to strict conditions of use including periodic reporting of shipments.*

*Customs in certain Member States request special registration for use of **EU general export authorisations**, but do not accept EORI⁵ numbers from other Member States. As a result, companies are not able to export under EU authorisations.*

4.1.2. *Licence processing times.* Member States, industry associations and companies estimate that on average a few weeks are required for processing licence applications, but all stakeholders stress that the overall figures mask large variations in processing times - from a few days to several months, exceptionally shorter (e.g. general authorisations for registered exporters with well-established compliance) or even longer (e.g. when the country of destination is required to provide guarantees regarding end-use). In certain cases, law firms have instituted non-activity claims against licensing agencies. Stakeholders indicate that processing times depend on a range of factors, such as the type of licence, the sensitivity of the goods and end user/destination, the applicant's compliance history and the complexity of the export project, as well as the need for inter-agency consultations and verifications. In addition to the inherent complexity of the risk assessment, some organisational factors and administrative constraints may also come into play and delay the process, e.g. lack of specific expertise or availability of e-licensing *in lieu of* a paper-based process.

⁴ Four types of authorisations are currently available under Regulation (EC) No 428/2009: individual, global and national general export licences (issued by national competent authorities) and EU General Export Authorisation issued at EU level.

⁵ EORI is an Economic Operator Registration and Identification (EORI) number for customs purposes.

*Some Member States have deadlines in their legislation or have set **licensing deadline** goals (e.g. 20 working days for the issue of a specific licence) and publish processing times, as part of their commitment to transparency.*

4.2 Catch-all controls. Most Member States, civil society and academia consider that the catch-all clause, which permits the control items not listed on the EU Control List, acts as an 'emergency brake' and is a valuable tool providing the authorities with ability to respond swiftly to the evolution of proliferation risks by applying greater scrutiny and, where necessary, preventing transactions of concern. Some Member States note that the development of the Dual-Use electronic System (DUeS) marks a significant improvement as it makes it possible for licensing and enforcement officers to use catchall data for risk analysis.

Some Member States, industry associations, companies and academia however consider that a certain lack of transparency of decisions, different legal requirements and divergent application of catch all controls across the EU act as a barrier to trade for companies and may in some cases have adverse security effects, especially as a catch-all is only valid in the issuing Member State and therefore proliferators may have access to prohibited items by one or more Member State. Industry associations and companies report situations where a specific export is prohibited in one Member State but authorised by another. Consultancies also deplore the legal uncertainty created by notions such as 'the exporter is aware' and the costly risk minimisation strategies that companies have to follow to guard against potential risk.

Some exporters and consultancies report cases where, notwithstanding the imposition of a catch-all clause by the national authority of a Member State, competitors from another Member State continue to trade the same items to the same end user or destination.

4.3 Brokering controls. Member States underline that brokering controls are mandated by UN Security Council Resolution 1540 and are a valuable additional tool to prevent WMD proliferation. Some Member States however remark that only few cases have been encountered, while industry associations and companies report no experience with these provisions. Some Member States and industry associations observe that the difficulty to ensure the detection of brokers and brokering transactions may constrain the effectiveness of controls.

Some Member States, industry associations, companies and academia consider that the current scope of brokering controls is adequate and that extending these controls to transactions from the EU would lead to a duplication of procedures and would only increase administrative costs and confusion. Other Member States and consultancies however fear that the consequence of this location-related definition of 'brokering services' is that some forms of brokering that contribute to proliferation might not come within the scope of controls.

4.4 Transit controls. Some Member States are satisfied that transit controls provide an additional tool in global export control, but others concede that the transit control system is relatively new, making it difficult to offer a robust assessment of its functioning. Industry associations also report little experience with transit controls. Academia emphasise the nature of the provisions, which open a *possibility* to apply controls and thus do not provide a basis for compulsory harmonised transit controls.

Some Member States and academia report operational challenges involved in the implementation of transit controls, especially with respect to the detection and physical inspection of goods in transit (amount of cargo trading every day, limited time for the

inspection, need for timely access to information and efficient inter-agency co-operation, associated transaction costs or legal risks). They remark that the application of controls relies mainly on customs authorities and that the specific definition of transit contained in the Regulation is wider than the definition of a customs transit procedure, giving rise to different interpretation, especially with regard to its application in case of change of means of transport (trans-shipment) or of destination (need for re-export). Moreover, academia highlight the limited application of transit controls to WMD end-uses, leaving aside military end-uses. Some Member States and companies recognise the operational difficulties associated with transit controls, but consider that these are due more to the very nature of transit movements than to deficiencies in law.

Most Member States, companies and academia recognise the issues associated with the limited territorial validity, e.g. as prohibitions can undermine the 'no-undercut principle' since a transit cargo may be allowed to be exported from one Member State while a similar case has already been prohibited by another Member State. They also point to the lack of clarity for exporters, who do not know what they may expect during transit through the EU territory, and to a risk of circumvention.

4.5. Additional controls imposed by Member States. Some Member States have legislation in place to apply additional controls e.g. catch-all controls, brokering, transit and intra-EU transfer controls and underline that the ability to impose national controls is necessary with respect to items of specific national security concern (including items only available from that country) and to respond rapidly to particular circumstances. However, Member States report only few cases of additional controls introduced for reasons of security policy or human rights considerations. Though these Member States and some companies recognise that these national controls might theoretically distort competition, they consider that there is little significant impact. By contrast, other Member States, industry associations, most companies and consultancies complain that national rules create legal uncertainty and cause confusion among exporters, place national exporters at a disadvantage, add to the complexity of managing an export control programme within a group of companies, and ultimately increase proliferation risks.

4.6. Criteria for export control. Most Member States, some industry associations and companies are satisfied that the current harmonised criteria are sufficiently clear and reflect international commitments, while reference to 'national foreign and security policy considerations' maintains the flexibility to react to rapidly changing circumstances. Some Member States and industry associations recognise that the Regulation sets out a non-exhaustive list of considerations that national authorities shall "take into account" in assessing licence applications, suggesting that they may apply additional/different criteria, but observe that in practice, there are no significant differences between the criteria actually applied by licensing authorities. However, some Member States, industry associations, companies, consultancies, academia and civil society consider that their formulation makes them very general, thereby leaving room for diverging interpretations and creating legal insecurity.

4.7. Denials. Most Member States are satisfied that the denial consultation mechanism as provided for in the Regulation and the introduction of an electronic system for notification of denials (DUeS) provide useful support to export control processes and help licensing authorities in assessing authorisation applications. Some Member States however consider that the review and validity of denials may not be fully satisfactory and some companies regret the lack of transparency of denials decision-making.

4.8. Intra-EU transfer controls. A few Member States are satisfied with the current system of controls on intra-EU transfers, including the possibility to impose additional national controls when the end use is outside of the EU. They stress that transfer controls normally only apply to the most sensitive items. In practice, few Member States report frequent use of transfer controls, e.g. for technical documentation or nuclear engineering equipment.

By contrast, some Member States, industry associations, companies and consultancies consider it inappropriate to apply the same level of scrutiny to such transfers as that which is applied to exports to third countries. They take the view that intra-EU-controls constitute an unnecessary barrier to trade and an impediment to the completion of the single market, causing significant competitive disadvantage for EU companies (especially as not only physical items are subject to controls, but also technology). For example, they deplore that the blanket imposition of transfer controls on nuclear items – sensitive and non-sensitive alike – results in duplicative licensing requirements and unduly hinders cooperation between European companies, since intra-EU-operations are in principle of little risk. They note that the IAEA's Additional Protocol⁶ has been applied across the EU since 2004 and all nuclear activities are subject to the same supervision under Euratom. Some industry associations add that controls apply even where companies do not ultimately export any item. Furthermore, some Member States, industry associations and companies point to different requirements concerning the form of inter-governmental assurances and regret that some Member States require government-to-government assurances even in intra-EU trade. They also report differences as regards the application of transfer controls to certain items and in terms of licence processing times.

*One unintended consequence of the current regime for licensing transfers is that in some circumstances it may be easier for non-EU competitors to **supply large projects** in the EU than it would be for an EU company. For example, US export law on nuclear technology provides for wide-ranging general authorisations e.g. for large plants like power reactors, so that US suppliers have a significant advantage over EU firms, which may require a number of authorisations to supply similar goods within the European Union.*

*Companies report differences of interpretation regarding the need for an authorisation when exchanging controlled information by **electronic means** or when employees travel within the EU for business purposes.*

*Some Member States control **intra-EU transfers of non-Annex IV items** involving an end user outside the EU, while other Member States rely on the controls of the Member State from which the EU export occurs.*

4.9 The EU Control List. Member States, industry associations, companies and consultancies generally consider the EU control list to be of high quality, and note that it is used as a reference by many countries around the world. They point out that it combines the lists of the multilateral export control regimes in a way that makes it simpler for business, while ensuring that key manufacturing countries apply the same controls and that any competitive disadvantage is thus minimised. However, some Member States and industry associations report significant differences with regard to certain third countries which are not

⁶ The Additional Protocol is a legal document granting the IAEA complementary inspection authority to that provided in underlying safeguards agreements so as to enable the IAEA inspectorate to provide assurance about both declared and possible undeclared nuclear activities.

members to all regimes and do not have a comprehensive dual-use list in force. Some Member States also observe that different control lists may cause problems in specific situations, e.g. for transshipment.

Some Member States, industry associations and companies nevertheless observe that the complexity of the list can be a challenge for business, especially SMEs sporadically affected by export controls, and consider that layout and clarity, as well as technical specifications, could be improved in order to make it easier for business and authorities to apply. Some companies add that the list contains certain misleading definitions, and point to certain inconsistent technical criteria, control parameters and obsolete technologies, as well as items easily available outside the EU or presenting no real danger. They report occasional differences in interpretation of control list entries and the classification of items between the export control authorities.

Most Member States, industry associations, companies and consultancies, as well as academia agree that the long updating process is a fundamental shortcoming of the EU control list that is lagging behind the international export control regimes and partly outdated commercially and technologically. This makes it difficult to fulfil international commitments under the export control regimes, does not cover the actual technical situation of products, and gives rise to competitive disadvantages. Some companies however advise that the frequency of updates should be proportionate to the additional burden placed on exporters, so as to allow both large corporations and SMEs time to digest its contents and relevance to their products.

*Stakeholders report significant **delays in the update of the EU list** e.g. the 2009 Wassenaar recommendations decontrolling certain encryption included in medical devices have been implemented by the EU only in 2012.*

*Stakeholders point out that certain controlled items e.g. induction furnaces are **freely available on world markets** without authorisation.*

*Stakeholders report occasional cases of **diverging goods classification**, e.g. as regards the definition of technical categories like maraging steel, nuclear graphite and pressure sensors, and some chemical detectors, night cameras, deconversion technology, certain valves as well as encryption/cryptology, while spectrometers and diffractometers that are not treated as dual-use items in all Member States.*

PART 3 – PROSPECTS FOR AN EVOLUTION OF EU EXPORT CONTROL POLICY

5. Towards a more integrated EU Export Control System?

5.1 Infrastructure commonalities and networking of export control authorities. Some Member States, industry associations and companies consider that the existing framework and infrastructure for exchange of information and decision-making is satisfactory and note that licensing authorities already work closely together. They also stress the importance of consultations and exchange of information organised in the context of multilateral export control regimes. Although an industry association and a few companies advocate the establishment of a centralised EU export control agency, they mostly confirm that the administrative application of the Regulation and the actual control of sensitive export transactions should remain the primary responsibility of national licensing authorities,

considering their thorough understanding of and close relationship with relevant industries, as well as other considerations e.g. language. They observe that common EU positions on policy issues would be required as a basis for further harmonisation of export controls, while others fear that centralisation of functions would risk causing additional steps and delays. Member States, industry associations and companies generally stress the need for a responsive system and warn that reforms should not create additional administrative burdens that would risk slowing down the authorisation process and affect the competitiveness of operators as well as the security of the EU. They underline that only actions that increase the efficiency and effectiveness of export controls should be envisaged.

Nevertheless, many Member States, industry associations and companies, as well as academia, civil society and an MEP recognise that effective export controls require strong and close cooperation between relevant authorities and support further coordination and harmonisation to enhance the functioning of the existing system in order to align the rules under which export controls are administered, minimise differences in interpretation and application and ultimately improve response time as well as the substantive assessment of export applications. They consider that efforts should focus on a common understanding of proliferation risks and the use of common criteria, tools and procedures, the development of guidelines, the facilitation of systematic consultation and information exchange within the existing network of control authorities, as well as common EU training and exchange of expertise with a view to enhance the administrative capacity of individual export control authorities and "lift the lowest common denominator". One Member State suggests developing an EU data-based classification tool that could be used by both authorities and exporters, and calls for harmonisation in the treatment of 'end user certificates'.

5.2 Towards a common approach to risk assessment? Some Member States, industry associations and companies underline the limitations to the harmonisation of licensing decisions due to national foreign and security agendas and different industrialisation levels. However, other Member States, most industry associations and companies, as well as an MEP, academia and consultancies support the development of a common approach to risk assessment as a basis for more consistent decisions across the EU. Convergence of risk assessment approaches would require a common concept of 'risk' ("27 interpretations should be replaced by a common understanding of security threat"), common criteria and guidelines, associated with more extensive exchange of information. This could save time for both authorities and exporters and enable a more cost-effective security risk management in a decentralised system retaining some capacity for national export control authorities to take national security risks into account while improving the level-playing field.

5.3 Export controls in the 'information age'. A few Member States and industry associations consider that EU-wide information exchange is currently sufficient and warn against "information overload" overstressing limited administrative capacities. Many Member States, industry associations and companies point to the sensitivity of some personal, industrial or commercial information and related legal restrictions. Most Member States, industry associations, companies, academia and consultancies nevertheless consider that enhanced exchanged of information would contribute to a more risk-based, effective export control system, allowing legitimate trade to flow more freely and avoiding 'weak links' in the export control chain. Exchange of information could concern various issues such as suspicious transactions and denied parties/entities/end users, catch-all controls, reasons for denials, technical evaluation of products. Diverging views exist concerning the introduction of a proactive component on ex-ante information sharing and as regards information about exporters or issued licences, with some Member States and companies noting that this would

allow transactions to be crosschecked against lists of valid licences and exporters and could thus enhance uniform application of controls across the EU and reduce delays for exporters while allowing for more efficient enforcement at borders.

Many companies, some industry associations as well as academia, civil society and an MEP call for more transparency and more information to be exchanged with operators. They note that information about e.g. catch-all controls, suspicious destinations and end users would enable business operators to improve their own risk assessment and avoid risky procedures from the very beginning. Some call for a publicly accessible online database of decisions.

6. Adjusting the control parameters: elements for an enhanced export control system

6.1 Common control criteria. Many Member States, industry associations and academia consider that coordination and exchange of information as well as guidelines could enhance the consistent application of existing harmonised criteria. By contrast, some Member States, industry associations and companies call for more precise criteria to form a basis for the development of a common risk assessment approach to bring EU Member States in closer alignment, while recognising that decisions will always depend on a case-by-case assessment.

6.2 A conducive licensing framework. Some Member States, most industry associations, companies, and consultancies support further development of the framework of licences, and point to the following options for harmonisation:

- Some Member States, industry associations and exporters recommend the setting of indicative or binding *timelines* to help exporters plan their business transactions, as well as the harmonisation of *general validity periods and criteria* for issuing global licences.
- Some Member States, industry associations and exporters make the case for an extension of the *scope and destinations of existing EU authorisations* and demand greater consistency as regards the conditions and requirements for their use.
- Some Member States, industry associations and exporters call for the *introduction of new EU general authorisations* applying uniformly to EU companies, and that could be derived from national general authorisations. They call for new EUGEAs to become the rule rather than the exception and to cover the following:
 - *Low-value shipments and low-risk transactions* to facilitate trade in lower -risk goods to countries which are of little proliferation concern;
 - *Intra- Company Transfers* of goods and technology – e.g. via electronic means - including transfer of controlled technology within company R&D sites in the EU, as the products remain under the same ultimate ownership and are governed by the same global compliance policies;
 - *Intra-EU transfer of non-critical goods* allowing transfer of certain nuclear goods and technology;
 - *Large-scale project* e.g. construction of a nuclear power plant, in order to avoid delays in the licensing process that can impact the construction;
 - “*Computers / information security*” to resolve the difficulties surrounding export of encryption technology.

- Some Member States, industry associations and exporters suggest the introduction of a "Single Market clause" extending the legal validity of national authorisations to exporters in the entire EU, though they recognise that this may raise issues in terms of enforcement.

6.3 Optimisation of the 'catch-all mechanism'. Some Member States, most industry associations and companies, as well as academia and consultancies call for a more coordinated and harmonised application of the catch-all clause. They call for decisions to be made transparently and in consultation with other authorities so as to ensure greater clarity and legal certainty and a more level playing field for EU exporters, while maintaining the flexibility of the instrument. They stress that enhanced exchange of information is crucial to avoid severe distortions to the internal market and support introduction of a mandatory exchange of information on catch-all controls. However, some Member States and a few companies consider that the current voluntary exchange of information has proved to be sufficient, and fear that the introduction of a legal obligation to share information regarding catch-all controls would be disproportionate and might result in additional administrative burden and delayed applications. They support the development of guidelines e.g. on assessment criteria that trigger the application of catch-all controls.

In the interest of consistency and transparency, some Member States and industry association express readiness to consider the introduction of a 'European catch-all' applying throughout the EU in relation to certain stated items and destinations and to promote EU cooperation regarding end user controls in third countries. They hope that this would contribute to establishing equal conditions for EU exporters and for companies having sites in several EU Member States. An MEP calls for a European catch-all in cases where dual-use items become instrumental in human rights violations. Other Member States and some companies doubt that this could be effective, especially considering the sensitivity of the information required. Alternatively, some companies and academia consider that the validity of catch-all controls should be extended to the whole EU, as part of a procedure to solve possible differences between Member States within a limited timeframe.

Some Member States, industry associations and companies underline that the creation of lists would mark a fundamental departure from the existing system of catch-all controls, which is focused on individual cases, towards a general goods-related approach. They fear that a "proliferation of lists" (in addition to sanctions lists) might increase confusion for exporters and bring a disproportionate administrative burden, requiring the mobilisation of considerable resources and expertise, and creating implementation challenges both for customs and for companies. Other Member States, industry associations and companies, as well as academia and consultancies express readiness to examine the introduction of temporary lists of additional specific items and destinations, possibly derived from catch-all controls, as an addition to the lists agreed upon in international export control regimes. This would require authorities to assess relevant export transactions based on a set of common indicators. They recognise that the mechanism would need to be deployed flexibly, allowing for regular review and rapid reaction where risks evolve. One MEP calls for the introduction of lists of monitoring and surveillance equipment that could be used in connection with human rights violations. Lists could also be made available to exporters in order to provide transparency.

6.4 Enhancing brokering controls. Some industry associations and academia consider that key definitions should be clarified, in order to avoid different interpretations of these concepts by competent authorities. As regards the scope of controls, some Member States and consultancies recognise the necessity to control brokering activities from the EU to third

countries, as well as the activities of EU brokers out of the EU. Conversely, some industry associations and consultancies consider that rules on brokering should be clarified so as to explicitly exclude intra-company transactions and reduce compliance burdens for companies operating globally. One Member State advocates additional provisions in order to prevent other forms of brokering services e.g. the introduction of compulsory registration for brokers, so that the enforcement authorities can have a better overview of which brokers are active in the EU. Some Member States and academia underline the need to share information on the granting of licences to brokers.

6.5 Enhancing transit controls. Some Member States and academia recommend reviewing the experience of various Member States so as to encompass the most common transit scenarios and bring them in line with corresponding customs provisions, and consider that the definition of transit should be revised in light of the provisions of the Community Customs Code. They recommend extending the validity of transit denials to the EU territory, call for the development of common guidelines and underline the importance of prompt notification of decisions to improve risk analysis and avoid that transits be diverted through a different Member State. They support enhanced consultation and information exchange procedures in order to support more effective and homogeneous transit controls. Consultancies also demand that the threshold for authorities be elevated above the mere suspicion of sensitive use.

6.6 Review of additional national controls. Some industry associations, many companies and consultancies ask that these controls be reduced to the minimum. Some Member States and industry associations call for discussions as regards their extension to the whole EU.

6.7 Strengthening the denials mechanism. Some Member States welcome further development of the DUEs as a secure platform for the exchange of denials information and call for notifications to provide more detailed information, which would avoid unnecessary further consultations (e.g. on reason for denial, information on product, on exporter). They support the development of guidelines to improve consistency of implementation and some call for a strengthening of the denial mechanism binding other competent authorities. Some companies demand that information or guidance on denials be made available to exporters.

Some Member States, industry associations and companies welcome a discussion exploring the introduction of a validity or review period for denials, and a few even plead for an automatic revocation of 'old' denials.

6.8 Critical re-evaluation of intra-EU transfers. A few Member States and companies point to the sensitivity of certain dual-use transfers and security concerns regarding risks of diversion as the main rationale for maintaining exceptional intra-EU restrictions, and consider that the current system needs to be maintained in light of international commitments. Many Member States, industry associations, companies, academia and consultancies however underline that items will be controlled in case of export and call for a critical re-evaluation of the system in order to better leverage the benefits of the single market, while some companies simply call for the suppression of transfer controls - at least with regard to less-sensitive items, equipment and technology. Stakeholders envisage the following options:

- a review of Annex IV, in order to focus transfer controls on the most sensitive items and technologies;
- a simplified regime for the transfer of non-critical items, possibly through the introduction of *general authorisations* or *notification mechanism*, e.g. for large-scale projects or for technology transfers within the same group in the EU. Such

arrangements would maintain scrutiny and ensure that national authorities are aware of transfers while improving the flow of goods;

- the introduction of a system of *certified end users*. Some Member States, industry associations, companies and academia express readiness to consider certification or granting of 'trusted exporter' privileges, as a complement to licensing, in particular in order to offer favourable conditions for firms which continuously require the same type of transfer of goods (for ex., from one subsidiary of the company to another). Some suggest that this could be combined with existing certification mechanisms such as the Authorised Economic Operators (AEO) status. However, other Member States, industry associations, companies and academia fear that any additional system might create a higher administrative burden than the licensing procedure;
- the introduction of a *post-shipment verification mechanism* is envisaged by some stakeholders as an alternative option, although some Member States and companies point to diversion risks and operational challenges, and express doubts that this would reduce the administrative burden for either authorities or exporters.

6.9 An updated EU Control List with accurate control parameters. Member States, industry associations and companies stress that, at a time when worldwide availability is an important factor, the control lists should be reviewed and regularly updated in order to remove non-sensitive widely available items and prevent any competitive disadvantage for EU companies. They support the introduction of a simplified procedure to update the EU control list regularly. A Member State raises the possibility for the EU to make its own additions in respect of items on which negotiation in the regimes are delayed. One company suggests introduction of a review process for moving items from the military list to the dual-use list, so as to avoid competitive disadvantage in relation to other jurisdictions. A company suggests that the EU should negotiate directly in the multilateral regimes.

Some Member States and companies call for the development of synergies and common guidelines, as well as the pooling of resources at EU level, to promote a uniform interpretation of the list and help customs and licensing authorities implement it in a consistent manner throughout the EU. Some companies suggest concrete steps to enhance business use of the EU control list, e.g. systematic cross reference with technical and customs codes, and recommend that the list should be accessible on internet with improved functionalities.

6.10 Improved enforcement of export controls. Member States recognise that close interaction and *exchange of information between customs and licensing authorities* is essential to properly enforce export controls at EU borders, especially where customs handle licences issued in another Member State. Some companies observe that the lack of detailed export control-related information in the EU Customs Systems (e.g. on licences) may affect customs' capacity to administer export controls effectively. Some Member States, industry associations, companies and consultancies recognise that, in addition to denied exports already available under DUEs, access to specific information on valid licences and controlled items (e.g. licence information, consistency of customs and dual-use classifications etc.) could bring additional value to customs risk analysis and help customs to effectively enforce export controls, but a few Member States and companies note that this information concerns legal activities of little interest for enforcement purposes, and point to legal restrictions on information sharing, e.g. as regards data protection and commercial confidentiality.

Some Member States have set up export licensing systems linked to customs systems, which

allows for close monitoring of export controls and operators.

As regards the use of the AEO status for export control purposes, some Member States and industry associations fear that additional costs could be generated for companies should the AEO certificate meet additional security criteria, and warn that AEO status should not become a pre-requisite for export authorisation. Other Member States, industry associations, companies and consultancies consider that the use of AEO status in the export control process should be further examined, so that companies that have obtained AEO status could benefit from an expedited export control procedure or trade facilitation measures. They underline that AEO status requires an assessment of a company's regulatory compliance, and might thus be useful to enable a simplification of licensing procedures. An industry association and a company also suggest that the AEO status could support an export control certification as already introduced for military export controls, and could then be recognised by customs authorities in their AEO audits.

Some academia observe that export control rules were designed for large companies with substantial compliance teams in touch with ministries but can hardly cope with high numbers of SMEs, universities or individuals, that may not always be aware that their products are subject to controls. They stress the need for *engagement with the private sector* and call for more outreach efforts to raise-awareness – e.g. a help-desk for exporters, guidance for business - and for a consistent monitoring and more pervasive enforcement of compliance.

ANNEX I - LIST OF STAKEHOLDERS

A.	Member States
1	Austria
2	Belgium
3	Bulgaria
4	Czech Republic
5	Denmark
6	Estonia
7	Finland
8	France
9	Germany
10	Hungary
11	Ireland
12	Italy
13	Lithuania
14	Malta
15	Netherlands (Government)
16	Netherlands (People's Party for Freedom and Democracy - Volkspartij voor Vrijheid en Democratie)
17	Portugal (Parliament)
18	Poland
19	Romania
20	Sweden (Government)
21	Sweden (Parliament)
22	Slovenia
23	Slovakia
24	United Kingdom
B.	Industry Associations
1	Agoria
2	American Chamber of Commerce to the EU
3	AeroSpace and Defence Industries Association of Europe (ASD)
4	Austrian Federal Economic Chamber (WKÖ)
5	Federation of German Industry (BDI)
6	Federation of German Wholesale, Foreign Trade and Services (BGA)
7	Business Europe
8	European Chemical Industry Council (Cefic)
9	Confederation of Netherlands Industry and Employers
10	Export Group for Aerospace & Defence (EGAD)
11	European Semiconductor Industry Association (ESIA)
12	European Atomic Forum (Foratom)
13	Handelskammer Hamburg
14	Chamber of Industry and Commerce of the Stuttgart region (IHK Region Stuttgart)
15	Swedish export control society

16	Swedish security and defence industry
17	Syndicat des Industries Exportatrices (SIEPS)
18	German Chemical Industry Association (VCI)
19	VGB Power Tech (Association of industrial boiler owners)
20	Association for Nuclear Fuel Cycle Technology (WKK)
C. Economic operators	
1	ABB AB
2	Ankol Sp.
3	Arkada M
4	AstraZeneca
5	Avaya International Sales
6	AVNET Logistics GmbH
7	Benchmark Electronics
8	Boeing
9	Bruel & Kjaer Sound & Vibration Measurement
10	Baltic Scientific Instruments (BSI)
11	Cassidian Finland Oy
12	EADS SODERN
13	Electricité de France (EDF)
14	EDF Energy
15	Electrabel & Tractebel Eng.
16	Ericsson
17	Flextronics
18	F. Hoffmann - La Roche AG
19	General Electric
20	Heraeus Precious Metals
21	Intel
22	LSI Logic GmbH
23	Javys
24	Jess
25	Lufthansa
26	Mirion Technologies
27	NA Enginnering sro
28	Nokia
29	Northrop Grumman Sperry Marine BV
30	NXP Semiconductors
31	Plansee Group Service
32	Premier Farnell Ltd
33	Rolls Royce
34	Seko S.P.A
35	Shields environmental
36	Siemens
37	Smiths Detection
38	STMicroelectronics

39	Sulzer Turbo Services Venlo
40	Symantec Corporation
41	Synopsys International Limited
42	Tyco International Ltd
43	Urenco
44	Vacon Plc
45	Xilinx
D. Civil Society and academia, consultants and other stakeholders	
1	Barry Holmes (National Collection of Type Cultures -NCTC)
2	Campagne tegen Wapenhandel
3	Deloitte
4	European Nuclear Energy Forum
5	Hohmann and Partner
6	Ian J. Stewart (Kings College)
7	Institute for Reference Materials and Measurements (EC Joint Research Centre)
8	Keith Fletcher (Customs Specialist at Nokia Siemens Networks)
9	Klaas Van der Meer (Belgian Nuclear Research Center - SCK CEN)
10	Marietje Schaaake (Member of European Parliament)
11	Privacy International
12	Ross Anderson (University of Cambridge)
13	Sameer Padania (Author Human Rights)
14	The Chaudfontaine Group

ANNEX II - LIST OF ACRONYMS

AEO	Authorised Economic Operator
CN	Combined Nomenclature
COTS	Commercial Off The Shelf
DU	Dual-Use
DUEs	Dual-Use Electronic System
EMCP	Export Management and Compliance Programme
EORI	Economic Operator Registration and Identification
EU	European Union
EUGEA	European Union General Export Authorisation
EURATOM	European Atomic Energy Community
IAEA	International Atomic Energy Agency
IT	Information Technology
MEP	Member of European Parliament
NGEA	National General Export Authorisation
NGO	Non-governmental Organisation
R&D	Research and Development
SMEs	Small and Medium Enterprises
UNSCR 1540	United Nations Security Council Resolution 1540
US	United States
WMD	Weapons of Mass Destruction