

# 9. Multilateral weapon and technology export controls

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## I. Introduction

This chapter describes identified changes in the guidelines and procedures of five multilateral export control regimes. The regimes, which are discussed in sections II and III, are the Zangger Committee, the Nuclear Suppliers Group (NSG), the Australia Group (AG), the Missile Technology Control Regime (MTCR), and the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies (WA). In 2000 Cyprus and Turkey joined the Australia Group, bringing the number of members to 32 states. Cyprus and Turkey also joined the Nuclear Suppliers Group, as did Belarus and Slovenia, bringing the NSG membership to 39 states.<sup>1</sup> Slovenia joined the Zangger Committee, bringing its membership to 35 states. Table 9.1 lists the members of the five regimes.

In June 2000 the European Union (EU) made important changes to its system for controlling the export of dual-use technologies, as described in section IV. In recent years the problem of how to control intangible transfers of technology has come to be perceived as an issue of growing importance in non-proliferation policy. The pattern of trade has often come to include transfers of information and knowledge needed to establish local research, development and production in other countries. These transfers create new challenges for export controls that were largely designed to control the movement of physical items. In 2000 the EU introduced measures that create a legal obligation to control intangible transfers of technology, described in section V.<sup>2</sup>

On 27 July 2000 the ministers of defence of six countries—France, Germany, Italy, Spain, Sweden and the United Kingdom—signed a Framework Agreement.<sup>3</sup> One part of this agreement contained language that will have a direct impact on the export control policies and procedures of these countries, as discussed in section VI.

<sup>1</sup> Turkey attended its first plenary meeting as a member in June 2000. Slovenia was an observer at the plenary meeting in June 2000 and became a member in Oct. 2000.

<sup>2</sup> The measures were contained in Council Regulation (EC) no. 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technology, *Official Journal of the European Communities*, L/159, 30 June 2000, pp 1–215; and Council Joint Action of 22 June 2000 concerning the control of technical assistance related to certain military end-uses, 2000/401/CFSP, *Official Journal of the European Communities*, L/159, 30 June 2000, p. 216.

<sup>3</sup> The Framework Agreement Concerning Measures to Facilitate the Restructuring and Operation of the European Defence Industry, 27 July 2000. It is reproduced at URL <<http://projects.sipri.se/expcon/loi/indrest02.htm>>.

**Table 9.1.** Membership of multilateral weapon and technology export control regimes, as of 1 January 2001

State	Zangger Committee <sup>a</sup> 1974	NSG <sup>b</sup> 1978	Australia Group <sup>a</sup> 1985	MTCR <sup>c</sup> 1987	Wassenaar Arrangement 1996
Argentina	x	x	x	x	x
Australia	x	x	x	x	x
Austria	x	x	x	x	x
Belarus		x <sup>d</sup>			
Belgium	x	x	x	x	x
Brazil		x		x	
Bulgaria	x	x			x
Canada	x	x	x	x	x
China	x				
Cyprus		x <sup>d</sup>	x <sup>d</sup>		
Czech Republic	x	x	x	x	x
Denmark	x	x	x	x	x
Finland	x	x	x	x	x
France	x	x	x	x	x
Germany	x	x	x	x	x
Greece	x	x	x	x	x
Hungary	x	x	x	x	x
Iceland			x	x	
Ireland	x	x	x	x	x
Italy	x	x	x	x	x
Japan	x	x	x	x	x
Korea, South	x	x	x		x
Latvia		x			
Luxembourg	x	x	x	x	x
Netherlands	x	x	x	x	x
New Zealand		x	x	x	x
Norway	x	x	x	x	x
Poland	x	x	x	x	x
Portugal	x	x	x	x	x
Romania	x	x	x		x
Russia	x	x		x	x
Slovakia	x	x	x		x
Slovenia	x <sup>d</sup>	x <sup>d</sup>			
South Africa	x	x		x	
Spain	x	x	x	x	x
Sweden	x	x	x	x	x
Switzerland	x	x	x	x	x
Turkey	x	x <sup>d</sup>	x <sup>d</sup>	x	x
UK	x	x	x	x	x
Ukraine	x	x		x	x
USA	x	x	x	x	x
<b>Total</b>	<b>35</b>	<b>39</b>	<b>32</b>	<b>32</b>	<b>33</b>

*Note:* The years in the column headings indicate when the export control regime was formally established, although the groups may have met on an informal basis before then.

<sup>a</sup> The European Commission is represented in this regime as an observer.

<sup>b</sup> The Nuclear Suppliers Group. The European Commission is represented in this regime as an observer.

<sup>c</sup> The Missile Technology Control Regime.

<sup>d</sup> Became a participating state in 2000.

## II. The Zangger Committee, the Nuclear Suppliers Group, the Australia Group and the Missile Technology Control Regime

### The Zangger Committee

The Zangger Committee was established in 1974 after four years of discussion among a group of states parties about how to interpret their obligations under Article 3.2 of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT).<sup>4</sup> The committee is an informal arrangement that functions outside the framework of the NPT.

Under Article 3.2 of the NPT each party ‘undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes’ unless the source or special fissionable material is subject to safeguards. The NPT does not explicitly control nuclear technology and the committee undertook to define what was meant by ‘especially designed or prepared equipment or material for the processing, use or production of special fissionable material’.

The Zangger Committee agreed a Trigger List that participating states implement through national export control systems. An item on this list must not be exported unless the end-user accepts full-scope International Atomic Energy Agency (IAEA) safeguards.<sup>5</sup> In October 2000 the Zangger Committee formed two informal groups. One group is to investigate making the existing voluntary commitment to apply full-scope safeguards a requirement for committee members. The second group is considering preparations for the 2005 NPT Review Conference.<sup>6</sup>

### The Nuclear Suppliers Group

The Nuclear Suppliers Group was established in 1978 following three years of discussion among seven nuclear supplier countries (Canada, France, the Federal Republic of Germany, Japan, the UK, the USA and the USSR). It is an informal arrangement of nuclear supplier states that seek to prevent the acquisition of nuclear weapons by states other than those recognized as nuclear weapon states in the framework of the NPT.

The NSG has developed Guidelines for Nuclear Transfers and Guidelines for Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology that participating states apply in making national decisions about what kinds of exports to authorize. It has also drawn up lists of items to which

<sup>4</sup> A brief summary of the treaty and a list of the parties are given in annexe A in this volume.

<sup>5</sup> The Trigger List is published by the IAEA in Communications received from members regarding the export of nuclear material and of certain categories of equipment and other material, INFCIRC/209/Rev.2, 9 Mar. 2000, URL <<http://www.iaea.org/worldatom/Documents/Infcircs/2000/inf209r2.html>>.

<sup>6</sup> US Department of State, ‘Zangger Committee’, Fact Sheet released by Bureau of Nonproliferation, 30 Nov. 2000, URL <[http://www.state.gov/www/global/arms/bureau\\_np/fs\\_001130\\_zangger.html](http://www.state.gov/www/global/arms/bureau_np/fs_001130_zangger.html)>.

these guidelines apply. These guidelines and lists are published by the IAEA as INFCIRC/254.<sup>7</sup>

The NSG participating states met informally in Paris in June 2000.<sup>8</sup> As reflected in the press statement from the meeting, the main emphasis of the discussions was on enhanced transparency, the importance of strengthening the nuclear safeguards regime, facilitating peaceful nuclear cooperation and ensuring that nuclear export controls take into account technology change.<sup>9</sup> In addition to the participation of the four new states noted above, the NSG is pursuing contacts with Kazakhstan, which has expressed a wish to participate in the NSG.

Enhancing transparency in nuclear export controls has two elements: first, informing both non-participating states and the wider interested community about the activities of the NSG; and, second, improving the efficiency of information flow among the participating states. The first element may be accomplished through the establishment of an NSG Internet site that would facilitate the rapid distribution of decisions and other public information to the widest possible audience. In regard to the second element, the NSG has been discussing two different approaches. One is a computer-based NSG Information System (NISS), a wide-area computer network based on a secure server located in Los Alamos in the United States.

The second proposal is based on a Secure Fax System that would allow for an informal but confidential exchange of views between participating states on issues of concern. In 1999 the EU offered to finance the Secure Fax System for all NSG members that are not members of the EU and for the NSG point of contact.<sup>10</sup> The effect of this proposal would be to make the system already in use for exchange of information within the European Community (EC) the standard for the NSG.

These proposals are a response to the growing difficulty of managing the work of the NSG in the face of an increasing number of meetings and an increasing volume of documents and information exchanged among participating states. In particular, the NISS should allow the export control systems of states that have limited human resources to manage their work more efficiently. However, this change does require the participating states to make investments in the technical infrastructure that is needed to implement and run the NISS. In addition to the investment costs, the participating states need to

<sup>7</sup> Communications Received from Certain Member States Regarding Guidelines for the Export of Nuclear Material, Equipment and Technology, INFCIRC/254/Rev.4/Part 1, 15 Mar. 2000; and Communications Received from Certain Member States Regarding Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology, INFCIRC/254/Rev.4/Part 2\*, 9 Mar. 2000.

<sup>8</sup> Nuclear Suppliers Group Plenary Meeting, Press Statement, Paris, 22–23 May 2000, reproduced at URL <[http://projects.sipri.se/expcon/nsg\\_plenary00.htm](http://projects.sipri.se/expcon/nsg_plenary00.htm)>.

<sup>9</sup> In particular, the discussions addressed the need to adapt export controls to the growing tendency for electronic-information exchange across borders and the growing use of international project teams with members from different countries in industry. This is discussed in section V in this chapter.

<sup>10</sup> Council Decision on the implementation of Joint Action 97/288/CFSP concerning the financing of a secure communication system for all members of the Nuclear Suppliers Group (NSG) which are not member states of the European Union, 1999/74/CFSP, 25 Jan. 1999, URL <<http://europa.eu.int/abc/doc/off/bull/en/9901/p104002.htm>>.

decide how many NISS terminals they require and who should have access to them.

### **The Australia Group**

The Australia Group was established in 1985 following international concern regarding the use of chemical weapons (CW) in the 1980–88 Iraq–Iran War. The participating states in this informal grouping cooperate to maintain and develop their national export controls to prevent the further spread of chemical exports that may be used for, or diverted to, CW programmes.

The AG has agreed a series of lists that define dual-use precursor chemicals, biological agents, chemical and biological equipment and related technology. The participating states are politically bound to ensure that these items are subject to national export controls.

Australia Group participants held informal consultations in October 2000 on the proliferation of CW and biological weapons (BW). Participants exchanged information about national export licensing measures and procedures and about chemical and biological programmes of concern. The AG also recognized the importance of transparency in its operations. A decision was taken to establish an Internet site. In addition, the AG intends to publish a brochure and a detailed paper outlining its role in opposing BW and CW proliferation.<sup>11</sup>

### **The Missile Technology Control Regime**

The MTCR is an informal, voluntary association of countries which share the goals of non-proliferation of unmanned delivery systems for weapons of mass destruction and seek to coordinate national export licensing efforts aimed at preventing their proliferation.<sup>12</sup> Initially established by seven states in 1987, MTCR membership had increased to 32 states by 2000.

In November 2000 the Chinese Foreign Ministry issued a statement that China would shortly introduce into its export licensing system a comprehensive list of missile-related items and dual-use items that could contribute to missile development and production. While not mentioning the MTCR by

<sup>11</sup> The Australia Group Internet site is located at URL <[www.australiagroup.net](http://www.australiagroup.net)>. Australia Group, Media Release, Australia Group Meeting, Paris, 2–5 Oct. 2000, URL <<http://projects.sipri.se/cbw/research/AG-press-Oct00.html>>. The Australia Group, an informal body with no legal personality and no secretariat, was reluctant to select the domain names [australiagroup.org](http://australiagroup.org), [australiagroup.gov](http://australiagroup.gov) or a country of registration suffix (such as [australiagroup.au](http://australiagroup.au) signifying Australia). Consequently, clarifying issues of the responsibility for the maintenance and content of the Internet site was resolved by registering the domain name without using a country suffix for the domain name.

<sup>12</sup> In 1993 the MTCR established Guidelines for Sensitive Missile-Relevant Transfers and an Equipment and Technology Annex (replacing the 1987 Guidelines). It is a restricted document but is known to be divided into 2 categories of items. Category I, considered most sensitive and to which the greatest restrictions apply, consists of complete systems and specially designed production facilities for these systems along with complete subsystems usable in these systems, and production facilities and production equipment for the subsystems. Category II consists of a range of materials, components and equipment which can be of use in missile programmes. MTCR documents are available at URL <[http://projects.sipri.se/expcon/mtrc\\_documents.html](http://projects.sipri.se/expcon/mtrc_documents.html)>.

name, the statement reiterated China's commitment not to assist states to develop ballistic missiles that can be used to deliver nuclear weapons.<sup>13</sup>

In 2000 the United States continued to identify China, North Korea and Russia as states from which missile programmes of concern obtained goods and technologies. In January 2001 the US Department of Defense released a report that stated:

during the last two years, Russian entities supplied a large quantity and variety of ballistic missile-related goods and technical know-how to countries such as Iran and India. For example, Iran's earlier success in gaining technology and materials from Russian and North Korean companies accelerated Iranian development of the Shahab-3 MRBM, which was flight tested in July 1998 and again in July and September 2000. Russian entities provided substantial missile-related technology, training, and expertise to Iran, which has helped to accelerate Iranian efforts to build new indigenous ballistic missile systems.<sup>14</sup>

Testifying before the Senate Intelligence Committee, Director of the Central Intelligence Agency George Tenet stated that 'the transfer of ballistic missile technology from Russia to Iran was substantial [in 2000] and . . . will continue to accelerate Iranian efforts to develop new missiles and to become self-sufficient in production'.<sup>15</sup>

The USA has raised issues related to Russian support for missile programmes in Iran at bilateral meetings for several years. Russian officials have denied that the state has supported transfers of missile technology to programmes of concern. The possibility of evasions of existing export control laws and regulations has been recognized by Russian officials, who also acknowledge the need for enhanced enforcement of existing controls and continued discussion of how export controls might be further improved.<sup>16</sup>

The Chinese Foreign Ministry reiterated that China was still studying the implications of participation in the MTCR.<sup>17</sup> South Korea is expected to make a request that it be allowed to participate in MTCR plenary meetings in 2001.<sup>18</sup>

The efforts of the MTCR notwithstanding, in the 1990s a number of countries continued with programmes to acquire ballistic and cruise missiles. These programmes evolved in two ways. First, the missiles under development have been of increasingly long range. Second, the programmes have become

<sup>13</sup> Scoblic, J. P., 'China issues missile export pledge', *Arms Control Today*, Dec. 2000.

<sup>14</sup> US Department of Defense, *Proliferation: Threat and Response*, Jan. 2001, p. 69, URL <<http://www.defenselink.mil/pubs/ptr20010110.pdf>>.

<sup>15</sup> Statement by Director of Central Intelligence George J. Tenet before the Senate Select Committee on Intelligence on the Worldwide Threat 2001: National Security in a Changing World, 7 Feb. 2001, URL <[http://www.cia.gov/cia/public\\_affairs/speeches/UNCLASWWT\\_02072001.html](http://www.cia.gov/cia/public_affairs/speeches/UNCLASWWT_02072001.html)>.

<sup>16</sup> E.g., Statement by Secretary of the Russian Security Council Sergey Ivanov outlining progress in Russian investigations of suspected or alleged cases of missile technology export, ITAR-TASS, 'Russia to curb missile technology "leakage"', 25 Feb. 2000, in World News Connection (WNC), WNC Fedworld, 25 Feb. 2000 (in Russian). All WNC documents can be accessed at URL <<http://wnc.fedworld.gov/>>.

<sup>17</sup> In 1998 President Jiang Zemin stated that China was actively considering participation.

<sup>18</sup> Seoul Yonhap, 'ROK's MTCR subscription shelved until Sep. 2001', 19 Feb. 2001, in WNC Fedworld, 19 Feb. 2001.

increasingly indigenous in nature. Several countries with long-range missile development programmes also have nuclear weapon programmes of concern.

In 2000 the MTCR participating states decided to develop ‘a set of principles, commitments, confidence-building measures and incentives that could constitute a code of conduct against missile proliferation’.<sup>19</sup> The main programmes of concern are indigenous or depend on technology transfers between states that are not members of the MTCR. The decision was taken to approach countries that do not participate in the MTCR during the development of this code of conduct with a view to agreeing a multilateral instrument that would be open to all states.

### III. The Wassenaar Arrangement

The Wassenaar Arrangement began operation in September 1996. Its objectives are to promote transparency and exchange of information and views on transfers of an agreed range of items with the aim of promoting responsibility in transfers of conventional arms and dual-use goods and technologies.<sup>20</sup>

In addition to amending their agreed control lists, the participating states agreed on elements of export controls to be applied in considering exports of Man-Portable Air Defence Systems (MANPADS) at its annual plenary meeting.<sup>21</sup> Concerned about the threat posed by the illicit possession and use of such weapons, the WA has for several years discussed the issue of how to control MANPADS. These elements will be applied by all the participating states through their national export control systems.

In 2000 the WA states continued to discuss expanding the scope of the general information exchange to include additional items. A questionnaire related to national practices for collecting information related to exports of small arms was circulated among them. A decision on whether or not to modify the general information exchange to include data related to small arms is anticipated in 2001.

The participating states also agreed on non-binding best practices regarding the effective enforcement of national export controls, the disposal of surplus military equipment and the control of exports of items designated as very sensitive.<sup>22</sup>

Based on a collation of information gathered from the participating states, four practices are considered to be particularly important in contributing to effective export control enforcement. The use of these practices by national authorities would be beneficial across the spectrum of controlled items, including both conventional arms and dual-use items.

<sup>19</sup> Plenary Meeting of the Missile Technology Control Regime 2000, Press Release, Helsinki, Finland, 10–13 Oct. 2000. It is reproduced at URL <<http://projects.sipri.se/expcon/mtrc00.htm>>.

<sup>20</sup> Information about the WA is available at URL <<http://www.wassenaar.org>>.

<sup>21</sup> Elements for Export Control of Man-Portable Air Defense Systems (MANPADS) agreed by WA participating states on 1 Dec. 2000 is reproduced in appendix 9A.

<sup>22</sup> Best Practices for Effective Enforcement; Best Practices for Disposal of Surplus/Demilitarised Military Equipment; and Extreme Vigilance: Sub-set of Tier 2 (VSL) Items, ‘Best Practices’ are reproduced in appendix 9A.



*Preventive enforcement* functions through a range of pre-shipment checks carried out both by export control authorities and by exporters themselves. Close cooperation between authorities and exporters plays a critical role in this respect. The capacity to carry out *effective investigations* of alleged or suspected breaches of export control laws helps to deter violations both by increasing the probability of detection and by increasing the probability of successful prosecution. When prosecutions succeed, *effective penalties* are considered to be a third critical enforcement practice. *International cooperation and international information exchange* are a fourth practice highlighted by the WA states as central to effective enforcement.

In cases where military equipment is taken out of service by the armed forces of participating states, it is not necessarily disposed of through destruction. In some cases it may be either sold to domestic end-users or exported. The participating states identified five practices that may assist in reducing the risk of such surplus equipment contributing to undesirable proliferation after disposal by sale:

1. Items of surplus military equipment should remain subject to the same export controls as new equipment.
2. Safeguards should be in place to prevent the illicit resale and export of surplus items that have been sold or transferred domestically.
3. The physical security measures and inventory controls should be sufficient to prevent theft or diversion of items in storage.
4. Equipment capable of being re-militarized should remain subject to stringent export controls.
5. The best practices for effective enforcement (described above) should apply to surplus and demilitarized military equipment.<sup>23</sup>

The Wassenaar Arrangement maintains two agreed control lists of items—a Munitions List and a List of Dual-Use Goods and Technologies. The List of Dual-Use Goods and Technologies has two annexes: on sensitive items and on a limited number of very sensitive items. In cases where an exporter seeks permission to export very sensitive items, export control authorities have agreed to exercise extreme vigilance in processing the request. In December 2000 the WA participating states agreed a document illustrating the kinds of practices that might contribute to a definition of extreme vigilance.<sup>24</sup>

The illustrative list suggested that licences for this type of item should be granted on a case-by-case basis and described a minimum level of documentation that should always accompany a licence application. The list suggested that export control authorities consult with other government agencies that could provide relevant information and expertise. In order to determine *inter alia* the risk of diversion or unauthorized use, export control authorities should consider gathering additional information on end-users. Finally, the illustrative

<sup>23</sup> Best Practices for Disposal of Surplus/Demilitarised Military Equipment, reproduced in appendix 9A.

<sup>24</sup> Extreme Vigilance: Sub-set of Tier 2 (VSL) Items: 'Best Practices', reproduced in appendix 9A.



list suggested that certain types of end-user documentation could be a requirement for approving an export and that authorities should consider carrying out post-shipment verification.

These changes represent a further step forward in creating an agreed normative base and set of standards for national export control systems in a significant number of states, including many of the states where the most important exporters of conventional arms and dual-use goods and technologies are located. However, there have also been criticisms of the pace and scope of development within the WA. The two main criticisms raised are the following.

First, there is criticism that the participating states are reluctant to use the Wassenaar Arrangement as a forum in which to conclude binding agreements. Voluntary agreements are less likely to lead to uniform adoption and implementation by participating states. If it were believed that participating states were gaining commercial advantages through non-implementation of voluntary agreements, this would undermine the solidarity and cooperation on which the WA is based.

A second criticism is that the WA has not paid sufficient attention to the way in which the norms established through general agreements are interpreted and applied in particular regions and countries. In past years this criticism has been offset somewhat by the discussion within the WA of, for example, arms supply to Afghanistan and countries in West Africa.

In 2000 the difficulties created for the Wassenaar Arrangement in these areas were highlighted after public statements by Russian officials about the future conduct of Russian military–technical cooperation, including that with Iran.

During the discussions that led to the creation of the WA, the USA secured a political commitment from all countries that joined not to supply arms and related technologies to ‘countries of concern’. These countries are not listed in any WA document, and the initial elements of the WA specifically state that it ‘will not be directed against any state or group of states’. However, although this commitment was not part of the documents that established the Wassenaar Arrangement, the list of countries of concern was understood to include Iran, Iraq, North Korea and Libya.<sup>25</sup> Initially, Russia was reluctant to accept this commitment and the issue was raised at the highest level during the summit meetings of presidents Boris Yeltsin and Bill Clinton in September 1994 and again in May 1995. The WA was established with Russia as a founding participant after Russia and the USA reached a bilateral understanding on the issue of Russian arms transfers to Iran.<sup>26</sup>

<sup>25</sup> The US Administration undertook this initiative partly in response to the 1992 Iran–Iraq Arms Nonproliferation Act in which Congress urged the president to ‘urgently seek the agreement of other nations’ to constrain arms sales to Iran and Iraq. Statement of John P. Barker, Deputy Assistant Secretary of State For Nonproliferation Controls, Before the Senate Foreign Relations Committee Washington, DC, 25 Oct. 2000, URL <<http://usinfo.state.gov/topical/pol/arms/stories/00103011.htm>>.

<sup>26</sup> Anthony, I. and Stock, T., ‘Multilateral military-related export control measures’, *SIPRI Yearbook 1996: Armaments, Disarmament and International Security* (Oxford University Press: Oxford 1996), pp. 542–45.

According to this bilateral understanding, Russia would not sign new agreements with countries of concern for the transfer of new advanced conventional weapon systems. Russia also agreed to complete deliveries to Iran by the end of calendar year 1999 under existing agreements signed in 1991 with the Soviet Union. Subsequently, Russia has been consistent in underlining its view that the Wassenaar Arrangement is a transparency mechanism and not a body where export control policies can or should be coordinated.

In 2000 Russia made important revisions to its arms export control system and to its system for managing the conduct of military–technical cooperation. These changes reflected a wider discussion during the first year of the administration of President Vladimir Putin about Russian foreign and security policy as well as the path of Russian military reform.

The discussion of foreign and security policy included the nature of Russian relations with the United States and countries such as Iran as well as issues of arms control and non-proliferation. The discussion of military reform included the question of how to finance the modernization of the equipment inventory of the Russian armed forces while continuing to pursue an economic policy based on budgetary and fiscal restraint.

The new Russian Government, like its predecessor, faced a series of extremely difficult and interrelated problems. However, the new government appears to take a different approach to managing these problems. The changes in military–technical cooperation policy and export control policy are a manifestation of this difference in approach.

In 2000 the new government sought a more integrated approach to military–technical cooperation. This greater integration has two aspects. First, it assigns a more important role to central institutions and scales back the discretion gained by enterprises and regional authorities under the previous administration. Second, within the central authorities a greater weight has been assigned to the military establishment, including the military intelligence community, in decision making.

As part of a wider package of military reform measures, President Putin announced a 10-point programme of military industrial measures in March 2000 that included the creation of a single state customer for defence equipment.<sup>27</sup> The programme included a comprehensive inventory of the defence enterprises that would assist in identifying core elements required for Russian needs as well as a revision of bankruptcy procedures and the repayment of state debts to enterprises. Indications of a more prominent role for central state institutions included the exchange of debt for equity in some important but highly indebted enterprises.<sup>28</sup> The State Investment Corporation (*Gosudarstvennaya Investitsionnaya Korporatsiya*, *Gosincor*) assumed the debts of these enterprises but also assumed a more direct role in shaping the strategies to be pursued by the enterprise management.

<sup>27</sup> Interfax (Moscow), 'Putin program for developing military–industrial complex', 21 Mar. 2000, in *WNC Fedworld*, 21 Mar. 2000 (in Russian).

<sup>28</sup> These include the Mil helicopter production and the Perm Motors aircraft engine enterprises.

If implemented (the programme follows a large number of unimplemented plans and programmes to reform the defence sector) the programme would lead to a rationalization of the defence industry, leaving a core of enterprises whose economic activity would be channelled through a state customer placing orders for both domestic and foreign customers.

A second important change came with the decision to consolidate the state arms export corporations Rosvooruzheniye and Promeksport into one state company, Rosoboroneksport, in November 2000.<sup>29</sup> The details of how the new agency will be organized and staffed were finalized in January 2001.<sup>30</sup>

How durable this new arrangement (the 12th reorganization since 1986 and the third major restructuring) will be remains an open question. However, its creation was supported by both Deputy Prime Minister Ilya Klebanov (responsible for overall coordination of arms export policy within the government) and Minister of Defence General Igor Sergeev.<sup>31</sup>

The Ministry of Defence has long advocated the consolidation of arms export policy in a single state organization integrated into defence industrial policy making with the equipment needs of the Russian military uppermost. Design and production enterprises on the other hand have favoured a model that provides export revenues (in particular hard currency revenues) directly to industry rather than to industry via the government.

At the time of the reorganization the government decided that currency revenue from exports should be used to support the defence needs of Russia, in particular modernization of the conventional equipment of the armed forces.<sup>32</sup>

In December 2000 Russia published a series of statutes that revised the system for authorizing arms exports and military–technical cooperation with foreign states. Licences will be issued by a Committee for Military–Technical Cooperation with Foreign States (Komitet voyenno-tekhnicheskogo sotrudnichestva) that will be subordinate to the Ministry of Defence and chaired by Deputy Minister of Defence Mikhail Dmitrev.<sup>33</sup> President Putin maintains direct supervision of arms export policy through regular meetings of a working group that includes the head of Rosoboroneksport and his deputy (responsible for export policy) along with the chairman of the Committee for Military–Technical Cooperation with Foreign States (responsible for export control).

The changes in the domestic Russian approach to the management of arms exports had an immediate and direct impact on Russian external relations in this area. In 1999 individual Russian experts stated that Russia might continue military–technical cooperation with Iran in the area of conventional weapons

<sup>29</sup> Presidential Decree No. 1834, 4 Nov. 2000. See also appendix 4E in this volume.

<sup>30</sup> Makienko, K., 'November 2000–January 2001 reform of Russian defense export system', Centre for Analysis of Strategies and Technologies, *Ekspert Vooruzheniy Journal*, no. 1 (Jan./Feb. 2001).

<sup>31</sup> Interfax (Moscow), 9 Nov. 2000, in 'Interfax commentary on merger of Russian arms agencies', Foreign Broadcast Information Service, *Daily Report–Central Eurasia (FBIS-SOV)*, FBIS-SOV-2000-1109, 9 Nov. 2000.

<sup>32</sup> ITAR-TASS, 8 Nov. 2000, in 'Russian PM wants currency revenue from arms exports to go toward defense', *Daily Report–Central Eurasia (FBIS-SOV)*, FBIS-SOV-2000-1108, 8 Nov. 2000.

<sup>33</sup> The documents establishing the new system can be accessed at URL <<http://projects.sipri.se/expcon/natexpcon/Russia/russia.htm>>.

beyond 1999.<sup>34</sup> However, in 2000 Iran and Russia upgraded the level of their contacts and changed the character of their public statements on this issue.

In January 2000 Secretary of the Iranian Supreme National Defence Council Hassan Rouhani visited Moscow for discussions with Klebanov and Sergeyev about the future of military cooperation between Iran and Russia. In June 2000 Colonel-General Leonid Ivashov, Head of the Main Department for International Military Cooperation of the Ministry of Defence, visited Tehran.<sup>35</sup>

In November 2000 Deputy Prime Minister Klebanov announced that Russia no longer considered itself bound by the bilateral political understanding with the USA on arms exports to Iran.<sup>36</sup> At the beginning of December Russian officials met with US counterparts to discuss issues of mutual concern, including the status of the 1995 bilateral agreement and arms exports to Iran.<sup>37</sup> In December the Russian Minister of Defence visited Tehran, where an agreement was announced to start a new stage of military cooperation between Iran and Russia.<sup>38</sup> Iran and Russia agreed to hold consultations on a range of security issues including military doctrine, organizational development, threat analysis and threat perception, and the expansion of military-to-military ties.

As part of this wider cooperation Russia will also resume military-technical cooperation. Initially, this is not expected to lead to new orders for equipment but will focus on the maintenance of Russian equipment in Iranian inventories. However, over time Colonel-General Ivashov anticipated more extensive programmes.

#### IV. Adaptation of the EU dual-use export control system

In 1994 the European Union established an export control system for dual-use goods that divided responsibility for different aspects of export control between the intergovernmental EU and the European Community, which was created through several treaties.<sup>39</sup>

<sup>34</sup> Interfax (Moscow), 25 Jan. 1999, in FBIS-SOV-99-025, 25 Jan. 1999. Russian officials consistently state that Russia has no cooperation with and authorizes no exports to Iran in the area of nuclear, biological or chemical weapons or missile delivery systems for such weapons.

<sup>35</sup> ITAR-TASS, 'Russia, Iran to develop military-technical ties', 26 June 2000, URL <<http://cnn.com>>.

<sup>36</sup> ITAR-TASS, 24 Nov. 2000, in 'Klebanov: Russia withdraws from agreement banning arms trade with Iran', FBIS-SOV-2000-1124, 24 Nov. 2000.

<sup>37</sup> Interfax Diplomatic Panorama (Moscow), 28 Dec. 2000, in 'Moscow, Teheran begin new phase in military cooperation: Russian Defense Minister', WNC Fedworld, 3 Jan. 2000.

<sup>38</sup> Interfax Daily Financial Report (Moscow), 27 Dec. 2000, in 'Volume of military-technical cooperation with Iran may reach \$4 billion', WNC Fedworld, 2 Jan. 2000.

<sup>39</sup> The treaty establishing the European Coal and Steel Community was signed in Paris in 1951. The treaties establishing the European Community and the European Atomic Energy Community were signed in Rome in March 1957. The European Community is a supranational arrangement. Community law is directly applicable in each of the member states and the Commission of the European Communities (hereafter the Commission) has the right to enforce this body of law, including through prosecutions of member states before the European Court of Justice. All EU documentation can be found at the EU Internet site, URL <<http://europa.eu.int/>>.

In 1991 the states that formed the European Community signed the Treaty on European Union at Maastricht.<sup>40</sup> The European Union not only extended the scope of activities of the European Community within existing policy areas but also extended the activities of the EU into new policy areas. The implementation of a common foreign and security policy (CFSP) forms one new policy area; development in the area of justice and home affairs forms another. In these new areas EU cooperation has a more intergovernmental character. The Commission does not have the same enforcement rights with regard to either the CFSP or justice and home affairs that it exercises in the area of commercial and trade policy.

In setting up the dual-use export control system in 1995 this complex internal arrangement was reflected in the decisions taken. Responsibility for aspects considered strategic in nature was deemed to fall under the CFSP and was reserved to the legal competence of the intergovernmental EU. These aspects were identified in the Council of the European Union (hereafter the Council) adopting both texts on 19 December 1994: Council Decision 94/942/CFSP and Council Regulation (EC) no. 3381/94 of 19 December 1994 setting up a Community regime for the control of exports of dual-use goods.<sup>41</sup>

When the export control system entered into force on 1 July 1995 it was recognized to be a first step that would lead to future adaptation. The Commission monitored the implementation of the dual-use export control system during its initial period of operation and drafted a proposal for a new European Community regulation that would, if adopted, replace the existing system.<sup>42</sup>

After discussion among themselves, the EU member states accepted almost all the modifications proposed by the Commission and drew up a new regulation that was agreed on 22 June 2000 as Council Regulation (EC) no. 1334/2000, setting up a Community regime for the control of exports of dual-use items and technology.<sup>43</sup> This regulation changed the legal framework, operational aspects and scope of application of the dual-use export control system.<sup>44</sup> Regulation 1334/2000 repealed Council Regulation (EC) no. 3381/94. On the

<sup>40</sup> Excerpts of the treaty are reproduced in *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 251–57.

<sup>41</sup> The Council of the European Union is composed of 1 representative at ministerial level from each member state, who is empowered to commit his government. Council members are politically accountable to their national parliaments. The EU dual-use export control system is described in Anthony, I., Eckstein, S. and Zanders, J. P., 'Multilateral military-related export control measures', *SIPRI Yearbook 1997: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 1997), pp. 345–63. The initial stimulus for the creation of the system was a complaint by the Commission that existing national export controls prevented the completion of the European single market by introducing restrictions on the movement of goods and technology between EU countries.

<sup>42</sup> European Commission, Proposal for a Council Regulation (EC) Setting up a Community Regime for the Control of Exports of Dual-Use Goods and Technologies, COM(1998)257 final, Brussels, Aug. 1998. The basic elements of the review are described in Anthony, I., 'Multilateral weapon and technology export controls', *SIPRI Yearbook 2000: Armaments, Disarmament and International Security* (Oxford University Press: Oxford 2000, pp. 667–87.

<sup>43</sup> Council Regulation (EC) no. 1334/2000 (note 2). The regulation (which, as Community law, is directly applicable in all member states) entered into force on 28 Sep. 2000.

<sup>44</sup> Directorate General I External Relations: Commercial policy and Relations with North America, the Far East, Australia and New Zealand, 'Proposal for a new regulation regarding the export of dual-use goods: main issues', Press Release, Mar. 1999.

same day the Council also took a new decision that repealed Council Decision 94/942/CFSP.<sup>45</sup> This brought the system entirely within supranational Community law rather than dividing legal competence between the European Community and the EU. The dual-use export control system is now accepted to be an element of the European Community common commercial policy established under Article 133 of the Treaty of Rome and not an element of the CFSP.

At the same time, EU member states are still sensitive about policy areas that directly affect their security and still remain bound by treaty-based non-proliferation and disarmament commitments. These factors led to the inclusion of an article in the new regulation clarifying responsibility for authorization of dual-use exports.<sup>46</sup> Under Article 6 of the regulation, the competent authorities of the member state where the exporter is established grant authorization for all exports for which authorization is required except those that are authorized by a Community General Export Authorisation.<sup>47</sup>

The Community General Export Authorisation is a licence created by Regulation 1334/2000 and available for exports of specified items and exports to specified destinations. The specified items are all of the items on the dual-use control list that forms Annex I to Regulation 1334/2000 except for subsets of items listed in Annex II, part 2 to the regulation (made up of Annex IV together with some additional items). The specified destinations (a so-called 'white list') are listed in Annex II, part 3, and consist of 10 countries that are legally bound by all relevant non-proliferation treaties, cooperate in informal multilateral export control via participation in the various regimes and are considered to have national export control systems of a high standard.<sup>48</sup>

The implication of this arrangement is that most trade in dual-use items with the 'white-list' countries can be controlled using a general authorization with no risk of contributing to prohibited nuclear, biological or chemical weapon (NBC) programmes or missile programmes of concern.

Items listed in Annex II, part 2, may not be exported to white-list countries or to any country outside the European Community under a general authorization. As for intra-community trade, items listed in Annex IV remain subject to controls.<sup>49</sup> However, Annex IV is divided into two parts. For items listed in part 1 of Annex IV, member states may use a national general authorization to control the movement of items to other member states. For items listed in part 2 of Annex IV (items that could be considered the most sensitive for non-proliferation purposes) member states may not grant national general authorizations for intra-Community trade.

<sup>45</sup> Council Decision repealing Decision 94/942/CFSP on the joint action concerning the control of exports of dual-use goods, 00/402/CFSP, 22 June 2000.

<sup>46</sup> Article 6 of Council Regulation (EC) no. 1334/2000 (note 2).

<sup>47</sup> Article 6.2 of Council Regulation (EC) no. 1334/2000 (note 2).

<sup>48</sup> The 10 countries are Australia, Canada, the Czech Republic, Hungary, Japan, New Zealand, Norway, Poland, Switzerland and the USA.

<sup>49</sup> Article 21 of Council Regulation (EC) no. 1334/2000 (note 2) established conditions under which authorization could be required for intra-Community trade to ensure that these controls were consistent with the obligations of member states under the legislation establishing the European single market.



Two effects flow from these measures. First, the regulation underlines the fact that export of dual-use items is seen as a privilege (that could be withdrawn if necessary through a new decision by EU member states) rather than a right exporters enjoy under Community law (which the member states could not withdraw). Second, trade with the white-list countries—which include many of the most important EU trading partners—should be simplified for exporters. Exporters have to keep records of all such transactions according to specifications laid out in the regulation. However, exporters do not have to apply for individual authorizations prior to export. Therefore, while licensing procedures are not simple (the regulation itself is a complex document), they have been simplified.

The 1994 European Community regulation introduced an end-use or ‘catch-all’ principle into the national export control laws of many EU member states for the first time. The catch-all principle provides a legal basis for controlling items that are not on control lists. The 2000 regulation extended its scope.

Export control systems have generally been based on lists of items subject to control. However, on occasion, governments have considered it desirable to be able to control the export of items that do not appear on existing control lists. Export control authorities occasionally become aware of an item that is not currently controlled but that is or could be used in a way that would be inconsistent with the objectives of export control policy. The inconsistency may reflect the fact that an existing but uncontrolled item is being used in a particular way or it may reflect the development of a new item that was not previously available. Rather than waiting for a review of the control list, it may be useful to have a legal instrument subjecting this item to control with immediate effect. The principle creates an obligation on an exporter to seek the permission of the responsible authorities before exporting any item to a particular end-user or for a specified end-use whether or not the item appears on a control list.

The 1994 EU catch-all obligation related to exports to destinations or end-users known to be associated with NBC weapon programmes or associated missile delivery system programmes of concern. The 2000 regulation extended the obligation to two additional types of export: cases related to the implementation of arms embargoes, and cases related to exports that support or are associated with illegal or illicit exports.

Under Article 4.2 of the 2000 regulation, authorization is required for any item (whether or not included on the dual-use control list) exported to a destination subject to an arms embargo decided by the EU, the Organization for Security and Co-operation in Europe (OSCE) or the UN Security Council if the exporter has been informed by the competent authorities in the member state where he is established that the items are intended for military end-use.

Military end-use is defined in the regulation as: (a) incorporation into military items listed in the national military equipment or munitions list of member states (military list); (b) use of production, test or analytical equipment and components therefore, for the development, production or maintenance of



military items in the military list of member states; and (c) use of any unfinished products in a plant for the production of military items in the military list of member states.

Under Article 4.3, authorization is required for the export of any item (whether or not included on the dual-use control list) if the exporter has been informed by the competent authorities in the member state where he is established that the items 'are or may be intended, in their entirety or in part, for use as parts or components of military items listed in the national military list that have been exported from the territory of that Member State without authorisation or in violation of an authorisation prescribed by national legislation of that Member State'.<sup>50</sup>

Article 5 gives member states legal discretion to introduce a national requirement to introduce export controls on items that are not designed or adapted for military use for reasons of public security or on the basis of human rights considerations. This allows the use of restrictive trade measures on non-military items to be applied according to a new set of criteria, namely in support of human rights policy.

The new regulation also modifies the customs powers of member states. The previous export control system allowed an individual member state that considered a particular export to be contrary to its essential foreign policy or security interests to prevent those items from leaving the European Community through its customs space, even if the export had been authorized by another member state. In the new regulation this right is taken away and a member state concerned about a particular export is instead required to halt the export temporarily while consultations take place with the state that authorized it. If this original authorization is confirmed, the export takes place. In essence, the member states now agree to recognize one another's export licensing decisions without exceptions.

In another modification to administrative cooperation, the new regulation makes clear that, when authorization for an export has been denied, member states are obliged to share that information with the Commission as well as with one another. Previously, whether to share this information with the Commission was at the discretion of member states. The Commission complained that this made it impossible for it to make a comprehensive evaluation of the dual-use control system—a task that it is obliged to undertake.

Under the 1994 regulation a member state was obliged to consult bilaterally with a member state that had previously denied authorization for an essentially identical export before authorizing that export (the so-called 'no-undercut' principle). Under the new regulation this obligation is retained and supplemented with a requirement that, if an export is authorized in spite of a previous denial, the member state that makes the authorization must inform all other member states and the Commission, providing 'all relevant information to explain the decision'.<sup>51</sup>

<sup>50</sup> Article 4.3 of Council Regulation (EC) no. 1334/2000 (note 2).

<sup>51</sup> Article 9.3 of Council Regulation (EC) no. 1334/2000 (note 2).

The new regulation introduced changes in the approach towards updating the control lists that form a key element of the dual-use export control system. Before June 2000 these lists were of three kinds: a list of items subject to control, a list of destinations and a list of guidelines. With the decision to move the export control system fully into the European Community domain it was not possible to maintain these lists as Council decisions to be taken in the framework of the CFSP.

The new regulation establishes that the control lists will be updated ‘in conformity with the relevant obligations and commitments, and any modification thereof, that each Member State has accepted as a member of the international non-proliferation regimes and export control arrangements, or by ratification of relevant international treaties’.<sup>52</sup> Amendments agreed in the various treaties, regimes and arrangements will now be translated into European Community law through usual EC procedures.

The list of guidelines that were published as Annex III to the Council Decision concerning the control of exports of dual-use goods (94/942/CFSP) of 19 December 1994 contained factors to be taken into account by member states in deciding whether or not to grant an export authorization. These guidelines are incorporated into Article 8 of Council Regulation 1334/2000.

A final modification to the dual-use control system is the inclusion of an obligation to control exports of so-called transfers of technology. For the first time, Council Regulation 1334/2000 includes as part of the definition of an export ‘transmission of software or technology by electronic media, fax or telephone to a destination outside the Community’. Authorization is now a legal requirement for exports of dual-use items using intangible means. This issue, which has become a matter of concern across all the export control regimes and arrangements, is discussed in section V.

## V. EU efforts to control intangible transfers of technology

Changes in the nature of international trade have created new challenges for export control. In the past, international trade mainly involved cross-border movements of physical items—including finished goods as well as semi-finished goods and components. Over time, the pattern of trade has more and more often come to include transfers of information and knowledge needed to establish local research, development and production.

One consequence of this trend towards international arrangements for research, development and production is that effective controls over the physical movement of goods may not be sufficient to achieve the broad objectives of preventing the proliferation of NBC weapons and associated missile delivery systems. However, although controlling intangible transfers of technology is considered important, there is no common approach to implementing such controls. In addition, some of the instruments that play an important part in

<sup>52</sup> Article 11 of Council Regulation (EC) no. 1334/2000 (note 2).

controlling the movement of physical items—notably border controls—cannot be applied to intangible transfers of technology.

Export controls over intangible technology transfers must permit contact between partners in different countries engaged in legitimate cooperation. For example, colleagues of different nationalities working in multinational projects may engage in intangible technology transfer, as may the technical experts working in the multilateral export control regimes—for example, expert groups working on adapting control lists.

As noted above, Council Regulation 1334/2000 addressed some aspects of intangible transfers of technology—notably the question of controlling transfers of technology (knowledge and information) via fax, telephone or email. The Council also adopted a Joint Action that addressed the question of how to control intangible technology when the medium of transfer was through human contact.<sup>53</sup> This Joint Action and the new Council regulation will be the starting point for further discussions on intangible transfers of technology within the EU. Discussions about this issue will also continue within the other multilateral export control regimes.

### **Defining intangible transfers of technology**

The definition of an intangible transfer of technology presupposes a common definition of technology and a common approach to applying this definition in national licensing decisions. Applying export controls to tangible transfers of technology is itself complicated. The way in which responsible authorities interpret their obligations under cooperative arrangements when taking specific national decisions to approve or deny particular technology exports forms a central part of regime discussions.

Within the multilateral export control regimes a common general definition of technology is ‘specific information required for the development, production or use of goods’. This specific information may take the form of technical assistance or transfers of technical data. Technical assistance may include instruction, training, transmission of working knowledge or skills or other consulting services. Technical data may take the form of blueprints, plans, diagrams, models, formulae, engineering designs and specifications, manuals or instructions that may be written or recorded on other media or devices such as disk, tape or read-only memories.

This has led some knowledgeable commentators to argue that certain intangible transfers of technology may already have been covered by obligations under existing regime commitments. Carl Thorne, former Chairman of the Nuclear Suppliers Group Dual-Use Working Group, has observed that ‘it is important to note that the technology controls of the NSG cover both tangible

<sup>53</sup> Council Joint Action of 22 June 2000 concerning the control of technical assistance related to certain military end-uses (note 2), p. 216. Also available at URL <<http://projects.sipri.se/expcon/eudu/eutecass.htm>>.

and intangible technologies'.<sup>54</sup> However, whether EU states were obliged to control intangible transfers of technology before June 2000 is unclear.

While EU states were politically bound to translate NSG decisions into their national export control systems, the previous EU dual-use control list (i.e., prior to the changes introduced through Regulation 1334/2000) stated explicitly that the control of technology 'is limited to tangible forms'. For the NSG (which is an informal grouping) obligations of EU member states to be translated into a legal obligation to control intangible transfers of technology would have required adaptation of national export control laws and regulations.

A 1998 survey carried out in the framework of the MTCR suggested that in reality EU member states had different national approaches to intangible technology transfer controls.<sup>55</sup> In Germany, the Foreign Trade Law (Aussenwirtschaftsgesetz, AWG) and the Foreign Trade Regulation (Aussenwirtschaftsverordnung AWV) make clear that the export list annexed to the AWV 'controls production documents, physical models, production data etc. *only if these documents and models will be exported in physical or tangible form* (as movable objects)'.<sup>56</sup> Similarly, in the UK the export control authorities have interpreted existing legislation to mean that the legal powers of the government are limited to controlling physical exports.<sup>57</sup> In other EU countries—for example, Finland and Sweden—laws introduced in the late 1990s made exports of intangible technology subject to a legal requirement for authorization.<sup>58</sup> However, in both countries the difficulty of enforcing these laws is acknowledged. The inconsistencies in national approaches within the EU may in future be reduced as a result of the decision to address the issue of intangible transfers of technology more directly in the framework of the European Union.

As noted above, Regulation 1334/2000 defined an export to include transmission of software or technology by electronic media, fax or telephone to a destination outside the Community. This will include oral transmission by telephone 'where the technology is contained in a document the relevant part of which is read out over the telephone, or is described over the telephone in such a way as to achieve substantially the same result'.<sup>59</sup>

The Council Joint Action 2000/401, on the other hand, applies to technical assistance provided outside the European Community by a legal or natural person under specified circumstances. Technical assistance is subject to

<sup>54</sup> Nuclear Suppliers Group, *A Guide to Nuclear Export Controls*, 1997 edn, Part 1, p. 9. The most recent version of the NSG Dual-Use Guidelines was transmitted to the IAEA as INFCIRC/254/Rev.2/Part2 (Guidelines for Transfers of Nuclear-related Dual-use Equipment, Materials, Software and Related Technology), 9 Mar. 2000.

<sup>55</sup> The contents of the information exchange are summarized in 'Globalization and control of intangible technology transfers: a major challenge to export controls in the 21st century', CITS Working Paper, May 2000, reproduced in *The Monitor: Nonproliferation, Demilitarization and Arms Control*, vol. 6, no. 3 (summer 2000), pp. 20–26.

<sup>56</sup> Kleine, A., 'Controls on intangible technology transfer: German national legislation', *The Monitor* (note 55), p. 18, emphasis added.

<sup>57</sup> Butt, B., 'Controlling the transfer of technology by intangible means in the UK', *The Monitor* (note 55), p. 10.

<sup>58</sup> English translations of relevant Finnish and Swedish legislation are found at URL <<http://projects.sipri.se/expcon/dualuse/fin.htm>> and <<http://projects.sipri.se/expcon/dualuse/swe.htm>>, respectively.

<sup>59</sup> Article 2.b.iii of Council Regulation (EC) no. 1334/2000 (note 2).

authorization ‘where it is intended, or the provider is aware that it is intended, for use in connection with the development, production, handling, operation, maintenance, storage, detection, identification or dissemination of chemical, biological or nuclear weapons or other nuclear explosive devices or the development, production, maintenance or storage of missiles capable of delivering such weapons’.<sup>60</sup>

Technical assistance is defined as ‘any technical support related to repairs, development, manufacture, assembly, testing, maintenance, or any other technical service, and may take forms such as instruction, training, transmission of working knowledge or skills, or consulting services’. Technical assistance ‘may also include oral forms of assistance’. The Joint Action also specifies conditions when the requirement to authorize technical assistance does not apply. It does not apply when technical assistance is provided to one of the 10 countries on the white list established under Council Regulation 1334/2000 nor to cases when technical assistance leads to the transfer of information that is in the public domain or basic scientific research.

The Joint Action also requires member states to consider controlling technical assistance when it relates to other military end-uses in countries subject to an arms embargo established by the European Union, by a decision of the OSCE or by a binding resolution of the UN Security Council.<sup>61</sup>

### **Implications of the new decisions**

Taken together the two decisions—Council Regulation (EC) no. 1334/2000 and Council Joint Action no. 2000/401/CFSP—create a broad legal obligation. It will be necessary to control transfers when the technology itself is intangible and also to control transfers when the medium of transfer is intangible if such transfers could contribute to an illegal weapon programme or a missile programme of concern.

Intangible technology would consist of a relevant piece of knowledge—for example, the solution to a particular problem within an illegal programme or a missile programme of concern—regardless of whether this knowledge was in a physical form or not. The transfer of technology by intangible means would consist of the use of an electronic medium (such as email or the Internet) or verbal communication between people at a meeting. The transfer may include not only active transmission of information to a user in another country, but also uploading information to an Internet server if it is known that the information will then be downloaded by a person in another country. Meetings may include a scientific conference, a visit to a facility in another country (or a so-called ‘deemed export’, when a foreign national visits a facility in the exporting country and then returns home) or the employment of a foreign national by a domestic company. Intangible technology in tangible form is controlled by

<sup>60</sup> Article 2 of Council Joint Action of 22 June 2000 concerning the control of technical assistance related to certain military end-uses (note 2), p. 216.

<sup>61</sup> Article 3 of Council Joint Action of 22 June 2000 concerning the control of technical assistance related to certain military end-uses (note 2), p. 216.

Council Regulation 1334/2000 while technology transferred by intangible means is controlled by Council Joint Action 2000/401.

The need for a separate Council decision to control certain types of technical assistance showed the need to balance consistency in controls over intangible transfers of technology with the rights of legal and natural persons to privacy, freedom of movement and freedom of association. These rights are established by national laws and constitutions, as well as by Article 6 of the Treaty on European Union. These laws cannot be overridden. The Council Joint Action no. 2000/401/CFSP can be seen as providing a platform for discussion about how a common approach to this question could be developed. Depending on the outcome of these discussions and the pattern of legal and institutional development in the wider European Union a further evolution in the dual-use export control system could occur.

Although these decisions create legal obligations for EU member states, the commitment to control intangible technology transfer will need to be translated into practical measures that define what exporters need to do (or avoid doing) under specific conditions to comply with the general obligation. In this area there seem certain to be many ambiguities that will need to be clarified for the benefit of both enforcement agencies and exporters. In addition, it will be necessary for national authorities responsible for authorizing exports to consider the implications of the new decisions for licensing processes. It may also be necessary for national authorities to supplement export licensing with additional measures—such as a system of classification for intangible technology or industry self-regulation.

## VI. Restructuring and operation of the European defence industry: implications for export control

On 27 July 2000 the ministers of defence of six countries—France, Germany, Italy, Spain, Sweden and the UK—signed the Framework Agreement.<sup>62</sup> In recent years the absence of a common understanding about a range of strategic, legal and technical issues has been cited by industrialists as a barrier to the internationalization of the European defence industry.

The main benefit of internationalization has been seen as the possibility to reduce the price of defence equipment through greater efficiency in production. Increased efficiency is expected to result from the creation of transnational companies that combine their industrial assets and organize their production without having to maintain duplicate capacities in different countries. However, ministries of defence have sought assurances that company decisions will not put at risk their ability to maintain their existing equipment and that the armed forces will have guaranteed access to future products even if these are developed and produced outside national boundaries.

Industrialists argued that under existing export control laws and regulations they could not give such assurances since access would be dependent on deci-

<sup>62</sup> Framework Agreement (note 3).



sions taken by other governments and not by industry. Under those conditions defence ministries were reluctant to support the restructuring of defence industries.

Modification of existing export control practices and procedures has therefore come to be seen as an important precondition for further internationalization of European defence industries. In a Joint Statement of 20 April 1998 the defence ministers of the six signatory states announced their intention to 'seek to harmonise the requirements of their armed forces, their procurement, research and technological development policies and defence-related aspects of their export procedures'.<sup>63</sup> To that end the ministers subsequently signed a Letter of Intent that specified five areas in which they would work to reach a common agreement: security of supply, export procedures, research and technology funding, security of information and personnel clearances, and intellectual property rights.<sup>64</sup> The initial discussions that preceded the letter of intent focussed on cooperation and restructuring within the European Union aerospace industry. As a result, the parties to the discussion were those countries within the European Union with significant aerospace industries. Although the scope of discussions widened to cover defence as well as aerospace industries, participation in the talks was not increased.

By July 2000 the discussion had led to the Framework Agreement, which is regarded by all six signatories as an international legal agreement requiring ratification prior to entry into force. The following section describes and assesses the impact of the agreement on the export procedures of the parties.

### **The impact of the Framework Agreement on transfer and export procedures**

According to the Framework Agreement, transfers of defence items between cooperation partners located in the six signatory states will be authorized by a Global Project Licence when the particular transfer 'is needed to achieve the programme or when it is intended for national military use by one of the Parties'.<sup>65</sup> This removes the need for industrial cooperation partners to acquire individual licences for transfers within any project designated as a cooperative armament programme (CAP) as defined in the agreement.

The Framework Agreement offers some assurance to the procurement agencies of the six parties that they will not be denied access to any defence articles or services resulting from cooperative armament programmes. However, the assurance is not unconditional. According to the agreement 'conditions for granting, withdrawing and cancelling the Global Project Licence are determined by each Party, taking into consideration their obligations under the present Agreement'. Denial of access is unlikely but not impossible.

<sup>63</sup> The Joint Statement by 6 ministers of defence of 20 Apr. 1998 is reproduced at URL <<http://projects.sipri.se/expcon/loi/loianna.htm>>.

<sup>64</sup> The Letter of Intent between 6 Defence Ministers on Measures to Facilitate the Restructuring of the European Defence Industry, 6 July 1998 is reproduced at URL <<http://projects.sipri.se/expcon/loi/loisign.htm>>.

<sup>65</sup> Article 12 of the Framework Agreement (note 3).



When either a defence article that was developed or produced in the context of a CAP or a defence service related to such an article is exported to a non-party to the Framework Agreement, the Global Project Licence is not granted. In these cases, the national authority of the country within whose jurisdiction the export contract falls issues an export authorization. When issuing this authorization the national authorities of the six parties have agreed on certain basic principles that they will apply when making their determination.

A set of basic principles is to be established separately for each CAP but will always include the identification of permitted export destinations and the characteristics of the equipment concerned. The principles are to be established between the countries participating in the specific CAP under discussion and are to be established by consensus. The list of permitted destinations may be modified under specified conditions. The conditions are 'significant changes in its internal situation, for example full scale civil war or a serious deterioration of the human rights situation, or if its behaviour became a threat to regional or international peace, security and stability, for example, as a result of aggression or the threat of aggression against other nations'.<sup>66</sup> If a permitted party requests a change in the permitted destinations list it may also request a moratorium on exports to the country under consideration while consultations take place. These consultations should not exceed three months in duration and if, at the end of that period, there is no consensus to keep the country in question as a permitted destination it is removed from the list.

When defence articles or services are exported to end-users located in non-participating states the Framework Agreement places certain demands on the end-user. The recipient must provide both an end-user assurance and a statement that the particular article or service will not be re-exported without prior consultation with all parties that participated in the cooperative armament programme from which the article or service originated.

In addition to these elements of the Framework Agreement other elements are intended to simplify licensing procedures for transfers of components and subsystems produced under subcontracting arrangements between manufacturers located in the territories of the participating states. At the same time, and perhaps in contradiction to the overall aim of facilitating industrial cooperation, the agreement states that a Global Project Licence does not exempt transfers of defence articles from other regulations—such as transit requirements or customs documentation requirements. It is therefore probable that manufacturers cooperating in the framework of cooperative armaments programmes will still need to obtain certain documents for each transfer between facilities located in different countries.

Further evolution can be expected in the Framework Agreement in at least two respects. First, the agreement envisages further adaptations in arrangements between participating states. In the context of the agreement that the parties 'shall not hinder the supply of defence articles and defence services produced, assembled or supported in their territory, to the other parties' the six

<sup>66</sup> Article 13.2(b) of the Framework Agreement (note 3).

parties will 'seek to further simplify and harmonize their existing rules and procedures'.<sup>67</sup> In the light of their experience with operating the agreement the six parties therefore may well consider modifying the procedures adopted.

Second, it is likely that the Framework Agreement will both affect and be affected by discussions in the EU and within NATO and by bilateral discussions with the USA about defence industrial cooperation. The six parties to the Framework Agreement are all members of the EU. The dialogue within the EU about arms export control issues and, in particular, the development of the 1998 Code of Conduct for Arms Exports has played a key role in developing a level of trust among the six parties.<sup>68</sup> Without the agreed norms developed through the Code of Conduct dialogue it is unlikely that the Framework Agreement would have been possible. It may be that in time EU member states other than the six parties will sign and ratify the Framework Agreement.

Five of the six parties are members of NATO and all six states have been involved in close defence industrial cooperation with manufacturers in the USA and, in some cases, Canada. On 24 May 2000 the USA announced the Defense Trade Security Initiative (DTSI), intended to simplify the licensing arrangements for US manufacturers that engage in certain types of international defence industrial cooperation.<sup>69</sup> The DTSI allows for bilateral agreements between the USA and other countries to permit exports and technology transfers using simplified procedures. Initial discussion under the DTSI aimed at bilateral agreements with close allies, such as Australia, Canada, Japan and the UK, with which the USA has a long history of close defence industrial cooperation.

The DTSI is intended to support the NATO Defence Capabilities Initiative (DCI). In the framework of the DCI, but in an initiative separate from the DTSI, the USA decided on 30 October 2000 to institute simplified licensing procedures for any export of munition list items to programmes contained on a published NATO Expedite List for Munitions Export Licences.<sup>70</sup>

The Framework Agreement can therefore be seen as one part of a broader range of initiatives intended to facilitate international defence industrial cooperation in the Euro-Atlantic area while ensuring the maintenance of a responsible approach to transfers of arms and related technologies.

<sup>67</sup> Article 6 of the Framework Agreement (note 3).

<sup>68</sup> The European Union Code of Conduct for Arms Exports is discussed in Hagelin, B., Wezeman, P. D. and Wezeman, S. T., 'Transfers of major conventional weapons', *SIPRI Yearbook 1999: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 1999), pp. 439–42. It is reproduced in *SIPRI Yearbook 1999* as appendix 11D, pp. 503–505.

<sup>69</sup> Department of State, 'Defense Trade Security Initiative', Press Statement by Philip T. Reeker, Acting Spokesman, 24 May 2000, URL <<http://www.secretary.state.gov/www/briefings/statements/2000/ps000524d.html>>.

<sup>70</sup> Defense Capabilities Initiative, 'NATO Expedite List for Munitions Export Licences', 30 Oct. 2000, URL <<http://www.pmdtc.org/DCI.PDF>>.

## VII. Conclusions

The number of states that participate in export control cooperation continues to grow steadily. The states that participate in these cooperation arrangements continue to modify their export control policies and practices in the light of their discussions. Of particular importance are the revisions to export control principles and procedures that are intended to prevent unauthorized transfers of controlled items while taking into account the changing nature of industrial organization—including both ownership patterns and production.

The changes in export control policies and practices in 2000 were most noticeable in Europe and, in particular, within the European Union. The legal basis for the implementation of export controls was modified significantly during the year. As a result of the provisions contained in the 1997 Treaty of Amsterdam, the European Union also has significant new instruments that can be brought to bear in the field of non-proliferation and arms control. Therefore, in Europe the discussion of non-proliferation and export control has to take into account not only the complexities of the changing market for controlled items but also the changing political and legal framework associated with the evolution of the European Union. While a legal basis exists for the development of comprehensive and coherent policies, the implementation of such policies is still an evolving process.

Discussions within the Wassenaar Arrangement in 2000 illustrated two things. First, its informal nature has proved to have both positive and negative effects. It has been possible to hold discussions and reach agreement when it would not have been possible for the same group of states to produce legal texts, treaties and conventions on the same issues. However, while the WA provides a forum for discussion and information exchange, the agreements reached and documents produced lack the clarity and binding character of legal texts. Therefore, international norms agreed within informal regimes are vulnerable. Second, the discussions within the WA cannot be insulated from the broader political environment within and between states. Changes in the domestic priorities and policies of key states and changes in the nature of their international relations have a direct impact on the internal working of the Wassenaar Arrangement.

These characteristics taken together raise a wider question about the respective merits of political and legal approaches towards controlling the proliferation of controlled items and technologies. Under relatively fluid political conditions, legal agreements may not be achievable. Consequently, in spite of the difficulties, political forums—such as the Wassenaar Arrangement and other export control regimes—continue to be necessary and useful. However, the regimes should not be seen in isolation or expected to carry too great a weight of expectation. Rather, these forums should be seen as one of a range of instruments that may be applied to achieve non-proliferation and arms control objectives.