

ASSESSING SELECTED EUROPEAN UNION EXTERNAL ASSISTANCE AND COOPERATION PROJECTS ON WMD NON-PROLIFERATION

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I. INTRODUCTION

The European Union (EU) and its member states have financed and implemented assistance and cooperation projects in the area of weapons of mass destruction (WMD) non-proliferation in countries outside of the EU since the early 1990s. Since 2003 EU projects in this area are specifically designed to meet the agreed objectives on non-proliferation set out in the EU Strategy against Proliferation of Weapons of Mass Destruction (WMD Strategy).¹ This paper outlines some of the EU's external efforts to prevent the proliferation of WMD and related technologies following the adoption of the WMD Strategy and in light of its commitments made as part of the Group of Eight (G8) Global Partnership Against the Spread of Weapons and Materials of Mass Destruction 2002–2012 and the chemical, biological, radiological and nuclear (CBRN) risk mitigation programmes financed under the EU's seventh financial perspective 2007–13.² The paper limits its focus to established EU cooperation projects with non-EU countries (so-called 'third countries') and therefore does not touch on other non-proliferation approaches such as sanctions, other trade restrictions or clauses of political conditionality. Its aim is to give a fuller picture of the nature and type of non-proliferation-related contributions made by the EU in order to provide some context to the preparation of EU assistance under a second G8 Global Partnership mandate and to the EU's eighth financial

¹ Council of the European Union, 'Fight against the proliferation of weapons of mass destruction: EU Strategy against Proliferation of Weapons of Mass Destruction', 15708/03, 10 Dec. 2003, <<http://www.consilium.europa.eu/showpage.aspx?id=718>>.

² The Group of Eight (G8) Global Partnership, <<http://www.partnershipforglobalsecurity.org/Official%20Documents/G-8%20Global%20Partnership/index.asp>>; and the seventh financial perspective, <http://ec.europa.eu/budget/biblio/documents/fin_fw0713/fin_fw0713_en.cfm#adopted_CF>.

SUMMARY

The central policy of the European Union (EU) on the non-proliferation of weapons of mass destruction (WMD), known as 'effective multilateralism', is twofold. The EU not only supports and works with multilateral non-proliferation regimes, but also assists non-EU countries to implement their commitments under the international non-proliferation regimes to which they are party. The EU's chemical, biological, radiological and nuclear (CBRN) risk mitigation programmes are currently guided by the EU CBRN Action Plan, which aims to 'reduce the threat and damage from CBRN incidents of accidental, natural and intentional origin'. Thus, the programmes cover but are not limited to CBRN non-proliferation and have increasingly come to include international cooperation, including engagement with industries and scientific communities. Due to EU institutional arrangements, these programmes are often labelled as 'internal security matters' and thus overlooked in EU external action, despite their contribution to non-proliferation objectives. This paper presents some of the EU's WMD non-proliferation activities: as an actor in multilateral regimes and in its external CBRN cooperation programmes, with a focus on the seventh financial perspective (2007–13). It points to emerging areas where EU actors might want to consolidate their interests in the next phase of programming of EU non-proliferation activities.

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perspective 2014–20—both of which are currently under discussion.

A number of financial instruments are used to fund the EU's CBRN risk mitigation programmes. While all of the instruments are part of the common EU budget, a distinction can be made between the Common Foreign and Security Policy (CFSP) budget established to provide short-term assistance and the European Commission's budget instruments used for long-term responses to global security threats.

It should be noted that the EU has several mechanisms in place to evaluate the implementation of its non-proliferation policies. As a function of the CFSP, the disarmament and non-proliferation division in the European External Action Service (EEAS) follows the implementation of the WMD Strategy and the New Lines for Action on EU WMD Strategy by producing six-monthly progress reports, which are unique in the EU in that they follow the implementation of a single policy document, the WMD Strategy (similar but less detailed reports are published since 2006 on the EU's Small Arms and Light Weapons Strategy). In addition, each implementing agent benefiting from EU funding is required to report to the Commission on project results, budget spending and so on. Several of the implementing agents to larger multi-annual non-proliferation projects supported by the EU have set up dedicated project websites, which list some of the results of EU funding. Non-proliferation regimes set aside a part of their annual reports to describe EU assistance or invite EU representatives to present its support during meetings of the states parties, in order to acknowledge the effects of EU support.

The Commission evaluates its CBRN non-proliferation projects and programmes based on the 'financial regulation' and the 'communication on evaluation'. The financial regulation, as spelled out in its implementing rules, requires all programmes and activities involving 'significant spending' to be evaluated both before and after such spending.³ The communication on evaluation requires all Commission activities addressed to external parties to be periodically evaluated.⁴ These evaluations fall

³ See e.g. Regulation (EC) no. 1717/2006 of the European Parliament and of the Council of 15 November 2006 establishing an Instrument for Stability, *Official Journal of the European Union*, L327, 24 Nov. 2006, Article 21.

⁴ European Commission, Communication to the Commission from Ms Grybauskaitė in agreement with the president, 'Responding to strategic needs: reinforcing the use of evaluation', SEC(2007)213, 21 Feb. 2007.

within the competence of the Directorate General (DG) managing the instrument. For example, evaluation of activities funded by the Instrument for Stability (IFS) falls under the Directorate General for Development and Cooperation–EuropeAid (DG DEVCO). Each DG has an evaluation function responsible for ensuring that the conclusions and recommendations of evaluations are used to improve ongoing and future policy initiatives. The Commission Secretariat General coordinates the evaluation framework centrally and communicates priorities from the central function to the functional DGs through a network of representatives from the evaluation units.

However, neither the EU nor the various implementing agents conduct an overarching policy evaluation of the EU non-proliferation effort. The decentralized evaluation system makes it very difficult to jointly evaluate different institutional actors' activities and programmes within the same policy area (e.g. non-proliferation activities under the CFSP and the IFS budgets). At the programme level, the Commission DGs and other institutional bodies in the EU may turn to independent evaluators, as was the case with the 2011 evaluation of the IFS—one of the main budget instruments for external assistance on CBRN risk mitigation. However, the results of these evaluations are generally not open to the public.⁵

Two internal and fundamental barriers prevent a full internal impact assessment of the combined efforts on EU WMD non-proliferation activities involving third countries. The first is the absence of a good methodology to assess effectiveness and efficiency in the output of WMD non-proliferation policies. The second is the institutional division in the EU that separates CBRN risk mitigation projects funded by the IFS from other WMD non-proliferation programmes.

An objective of this paper is to examine the external EU efforts on both WMD non-proliferation and CBRN risk mitigation to provide a broader view of the nature of EU programmes. Section II looks at the policy of 'effective multilateralism' and the EU support to multilateral non-proliferation instruments. Section III outlines general tendencies in EU external assistance projects and gives examples of four specific projects by way of illustration. Section IV explores the EU's scientific cooperation on CBRN risk mitigation with third countries, and section V provides conclusions.

⁵ International Conflict and Security Consulting Ltd, <<http://www.incasconsulting.com/assignment-log/4540757515>>.

II. EFFECTIVE MULTILATERALISM

Although the term ‘effective multilateralism’ was coined in the EU’s 2003 WMD Strategy, the EU’s intention to take a leading role in multilateral non-proliferation regimes has been clear since at least the mid-1990s. Effective multilateralism is a policy of multilateral treaty-based governance of non-proliferation, an approach that has been described as the core principle of ‘Western’ security culture.⁶ Since 1993 the EU has had legal instruments at its disposal to implement its foreign and security policy, such as joint actions (now called Council decisions under the Lisbon Treaty) in support of multilateral instruments and uses the CFSP budget to fund these policy instruments.⁷ Since 2003, 20 Council decisions in support of WMD non-proliferation have been adopted, together worth €57.5 million. The beneficiaries have included the Biological and Toxin Weapons Convention (BTWC) Implementation Support Unit (ISU), the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the Organisation for the Prohibition of Chemical Weapons (OPCW), the International Atomic Energy Agency (IAEA) and the World Health Organization (WHO).

Given that each Council decision required unanimous consent from EU member states, the decisions may in themselves be seen as an achievement in effective multilateralism. The EU common contributions from the CFSP budget to international non-proliferation instruments are, however, only a fraction of what EU member states—as individual state parties to the regimes—provide bilaterally. The national contributions are based on the United Nations ‘scale of assessment’ determined by a country’s capacity to contribute and based on an assumption of zero real growth. In addition, states and other actors may choose to make additional payments, called ‘voluntary contributions’, and a number of EU member states regularly do so. For example, in 2010 the IAEA, which has received by far the largest support from the CFSP budget during 2003–11, received about €120 million in national contributions from EU member states; the OPCW received €28 million; and the CTBTO received

⁶ Krause, K. and Latham, A., ‘Constructing non-proliferation and arms control: the norms of Western practice’, *Contemporary Security Policy*, vol. 19, no. 1 (1998), pp. 24–25.

⁷ To minimize confusion this paper refers to ‘joint actions’ adopted prior to the entry into force of the Lisbon Treaty as ‘Council decisions’.

Table 1. European Union Common Foreign and Security Policy funding to selected non-proliferation regimes, 2003–11^a

Beneficiary (implementing agent, if different)	Number of Council decisions	Total funding (€ m.)
BTWC (several implementing agents)	2	2.3
CTBTO	4	10.4
HCOC	1	1.0
IAEA	6	33.7
OPCW	4	7.3
UNSCR 1540 (UNODA)	2	0.7
WHO laboratory biosafety and biosecurity	1	2.1
Total	20	57.5

BTWC = Biological and Toxin Weapons Convention (1972); CTBTO = Comprehensive Nuclear-Test-Ban Treaty Organization (1997); HCOC = Hague Code of Conduct (2002); IAEA = International Atomic Energy Agency (1957); OPCW = Organisation for the Prohibition of Chemical Weapons (1997); UNODA = United Nations Office for Disarmament Affairs (1982); UNSCR 1540 = United National Security Council Resolution 1540 (2004); WHO = World Health Organization (1948).

^a The Council decisions include funding targeted for assistance projects implemented by the organizations.

Source: European External Action Service (EEAS), Six-monthly progress report on the implementation of the EU Strategy against proliferation of weapons of mass destruction (2011/I), June 2011, pp. 9–18.

nearly €40 million.⁸ As the EU is not itself a member of the selected non-proliferation instruments listed in table 1, all financial contributions made by the EU fall under the category of voluntary contributions. EU support is often high relative to other voluntary contributions (although the US is by far the largest voluntary donor to the IAEA). The rest of this section looks more closely at the output from these Council decisions in light of the stated common objectives that all Council decisions in support of the BTWC, the OPCW, the Hague Code of Conduct (HCOC) and the CTBTO share, which are the universality,

⁸ IAEA General Conference, ‘Fifty-third regular session scale of assessment of members’ contributions towards the regular budget for 2010’, GC(53)/17, 28 Aug. 2009, pp. 21–25; Organisation for the Prohibition of Chemical Weapons (OPCW), ‘Decision: scale of assessments for 2011’, OPCW document C.15/DEC.7, 2 Dec. 2010; and Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO), ‘Member states payments as at 31 Dec. 2010’, 31 Dec. 2010.

Table 2. Changes in signatory or ratifying states of selected non-proliferation instruments, 2003–11

	2004	2011	Increase, 2004–11 (%)
BTWC signed (ratified)	167 (151)	177 (164)	5.99 (8.61)
CTBT signed (ratified)	170 (89)	182 (153)	7.06 (71.91 ^a)
CWC signed (ratified)	158 (136)	188 (186) ^b	18.99 (36.76)
HCOC subscribing states	109	133	20.18
IAEA additional protocol signed (in force)	83 (29)	135 (108)	62.5 (272.41)

BTWC = Biological and Toxin Weapons Convention (1972); CTBT = Comprehensive Nuclear-Test-Ban Treaty (1996); CWC = Chemical Weapons Convention (1993); HCOC = Hague Code of Conduct (2002); IAEA = International Atomic Energy Agency (1957).

^a These include 3 Annex 2 States: Colombia, the DRC and Viet Nam.

^b As of 21 May 2009.

Sources: International Atomic Energy Agency (IAEA), Status of the Additional Protocol, 4 May 2011, <http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html>; United Nations Disarmament Yearbook, 2003, p. 47; Austrian Foreign Ministry, 'Hague Code of Conduct against Ballistic Missile Proliferation', 30 June 2011, <<http://www.bmeia.gv.at/en/foreign-ministry/foreign-policy/disarmament/weapons-of-mass-destruction/hcoc.html>>; Note by the Technical Secretariat, 'Status of the participation in the Chemical Weapons Convention as at 31 December 2003', doc. no. S/394/2004, 16 Jan. 2004; Note by the Technical Secretariat, 'Status of participation in the Chemical Weapons Convention as at 21 May 2009', S/768/2009, 27 May 2009; Meeting of the states parties, BTWC, 'List of States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) Weapons and on Their Destruction', BWC/MSP/2003/INF.2, 14 Nov. 2003; United Nations, 'Membership of the Biological Weapons Convention', 9 June 2011 <http://www.unog.ch/_80256ee600585943.nsf/%28httpPages%29/7be6cbbca0477b52c12571860035fd5c?OpenDocument&ExpandSection=2%2C1#_Section2>; and Comprehensive Nuclear-Test-Ban Treaty (CTBT), status of signature and ratification, <<http://www.ctbto.org/the-treaty/status-of-signature-and-ratification/>>.

implementation, and enhancement and improved functioning of the conventions and the code.

Universality of the conventions and the code

One way in which the WMD Strategy measures effective multilateralism is the universality of selected multilateral non-proliferation instruments. The EU sees increased participation in these selected instruments as an objective and the higher the rate of participation in a certain regime, the stronger the degree of confidence in the normative effect is believed to be. Table 2 shows the changes in signature and ratification of relevant treaties and other instruments from 1 January 2004 (close to the adoption of the WMD Strategy) until mid-2011. The table shows a clear increase in states' participation in all instruments during this time, with a remarkable increase in the number of states that have an additional protocol to their bilateral safeguards agreement with the IAEA in force, as well as a very high increase in the number of states that have signed an additional protocol. A similar pattern can be observed for the number of states ratifying the Comprehensive Nuclear-Test-Ban Treaty (CTBT), including three Annex 2 states—that is, states whose ratification is needed before the treaty can enter into force.⁹

It would be unreasonable to point to the Council decisions alone to explain the sharp increase in the number of signatory and ratifying states to these key non-proliferation instruments during this seven-year period, as this would ignore other significant developments in the area of multilateral non-proliferation. For example, alongside EU efforts, state actors—including EU member states—have also been working for universalization through outreach to non-parties to the instruments.¹⁰ EU funding of €7.1 million to the OPCW Technical Secretariat has included support for regional seminars to promote the universalization of the Chemical Weapons Convention (CWC) by increasing the number of adherents in Africa, the Mediterranean, the Middle East and the Caribbean. Later support to the OPCW has prioritized bilateral

⁹ Colombia, the DRC and Viet Nam. Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) 'Entry into force formula', <<http://www.ctbto.org/the-treaty/1993-1996-treaty-negotiations/1994-96-entry-into-force-formula/page-1-1994-96-entry-into-force-formula/>>.

¹⁰ For outreach efforts in the biological field, see BTWC Meeting of the States Parties, 'Report of the Chairman on universalization activities', document BWC/MSP/2010/4, 30 Nov. 2010, p. 2.

visits to enhance universality (instead of regional seminars) with a particular focus on African states. However, the targeted action for the universalization of the CWC ‘complements the more political/diplomatic action carried out by the EU Presidency and member states in the form of démarches to individual countries to convince them to ratify the CWC and to implement it fully’.¹¹ Furthermore, the EU has other instruments at its disposal to realize the objective of enhancing participation in multilateral instruments, such as the so-called non-proliferation clause initiated in 2003.¹²

There are also cases where the timing of a Council decision did not correspond with a sharp increase in participation, such as the HCOC, which was opened for participants in November 2002. While participation in the HCOC has increased by 20 per cent since December 2003, only three states—Iraq, the Central African Republic and the Democratic Republic of the Congo (DRC)—have subscribed to the code after the adoption of the EU Council decision to support it in December 2008.

On a more critical note, the CTBT has not entered into force and does not seem likely to do so any time soon. In July 2003 the EU adopted a Council decision to increase participation, but none of the four subsequent EU Council decisions directed at the CTBT has included actions towards raising the number of signatory states to the treaty.¹³ Although EU financial support has played a part in the strengthening of the CTBT in the area of training and capacity building for verification, little progress has been made in securing the ratification of states whose support is critical if the treaty is ever to enter into force. Despite the EU’s outspoken commitment to ‘promote the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty’, the only so-called Annex 2 states which have signed or

ratified the CTBT since 2003 are Colombia, the DRC and Viet Nam.¹⁴

Nevertheless, it is likely that increased state participation in the multilateral instruments (table 2) in recent years has been encouraged by EU support and targeted actions, with several beneficial effects. Increased adherence to conventions and codes is important as a more global membership increases the legitimacy of the multilateral instruments and opens the way for the EU to support national implementation measures—vital elements in achieving the purposes of the selected instruments.

Implementation of the multilateral instruments

The quality of national implementation of the obligations accepted through participation in multilateral conventions and agreements is very difficult to measure. This section outlines changes in participation in initial national reporting on various conventions. Frequently defined by the EU as a measure of states parties’ adherence to an instrument, this is one indicator of whether the minimum requirements for adherence are met—a first step towards full implementation.

The EU has laid out some specific objectives to promote the submission of the voluntary declarations that are called for as confidence-building measures (CBMs) in support of the BTWC (documents that are collected and compiled by the UN Office for Disarmament Affairs). EU funding has supported the production of a ‘Guide to Participation in the Confidence-Building Measures of the BWC’ to help states parties prepare their annual CBM declarations.¹⁵ The Council decision also funded a national implementation workshop for West and Central Africa, held in Nigeria in October 2010, and a CBM workshop, held in Switzerland in August 2010. Participation in the CBM reporting process dropped in the 1990s and early 2000s but has steadily increased since 2003: from 33 reporting countries in 2003 to 72 reporting countries in 2010 (the highest number yet). For 2011, 60 countries

¹¹ Giannella, A., ‘EU Action in support of OPCW activities 2005–2008: effective multilateralism in practice’, Second Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (second review conference) EU side event, The Hague, 14 Apr. 2008, pp. 4–7.

¹² For a discussion on the complementarity of Council decisions and the non-proliferation cause see Grip, L., ‘The EU non-proliferation clause: a preliminary assessment’, SIPRI Background Paper, Nov. 2009, <http://books.sipri.org/product_info?c_product_id=394>.

¹³ Council of the European Union, Council Decision 2003/567/CFSP of 21 July 2003 implementing Common Position 1999/533/CFSP relating to the European Union’s contribution to the promotion of the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), *Official Journal of the European Union*, L192, 31 July 2003.

¹⁴ Council of the European Union, Council Common Position 2003/805/CFSP of 17 November 2003 on the universalisation and reinforcement of multilateral agreements in the field of non-proliferation of weapons of mass destruction and means of delivery, *Official Journal of the European Union*, L302, 20 Nov. 2003, Article 9.

¹⁵ See United Nations Office at Geneva, ‘Regular and full submission of CBM declarations’, <<http://www.unog.ch/80256EE600585943/%28httpPages%29/EBAC29581BD29848C12575E400508114?OpenDocument>>.

Table 3. Changes in national reporting to weapons of mass destruction non-proliferation instruments, 2003–11

Instrument reporting mechanism	BTWC ISU CBM	HCOC annual declarations ^a	IAEA safeguards verification activities	OPCW initial reporting	UNSCR 1540 first report
Number of reporting states prior to EU policy (%)	33 in 2003 (20%)	n/a	40	150 at the end of 2003 (95%)	106 during the period 2004 – May 2006 (55%)
Number of states currently reporting (%)	72 in 2010 (41%)	85 in 2010 (63%)	175	177 at the end of 2009 (94%)	142 in July 2011 (72%)

BTWC ISU CBM = Biological and Toxin Weapons Convention (1972) Implementation Support Unit Confidence-building measure; HCOC = Hague Code of Conduct (2002); IAEA = International Atomic Energy Agency (1957); OPCW = Organisation for the Prohibition of Chemical Weapons (1997); and UNSCR 1540 = United National Security Council Resolution 1540 (2004).

^a HCOC annual declarations are not open to the public.

Sources: International Atomic Energy Agency (IAEA) ‘Safeguards Statement for 2003’, <<http://www.iaea.org/OurWork/SV/Safeguards/es/es2003.html>>; International Atomic Energy Agency (IAEA) ‘Safeguards Statement for 2009’ <http://www.iaea.org/OurWork/SV/Safeguards/es/es2009.html>; Organisation for the Prohibition of Chemical Weapons (OPCW), ‘Report of the OPCW on the implementation of the convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction in 2003’, C-9/5, 30 Nov. 2004, p. 3; OPCW, ‘Report of the OPCW on the implementation of the convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction in 2009’, C-15/4, 30 Nov. 2010, p. 4; United Nations Office in Geneva, ‘CBM Returns’, <http://www.unog.ch/___80256ee600585943.nsf/%28httpPages%29/4fa4da37a55c7966c12575780055d9e8?OpenDocument#_Section25>; United National Security Council Resolution (UNSCR) 1540 database, <<http://www.un.org/sc/1540/nationalreports.shtml>>; Immediate Central Contact, Hague Code of Conduct against Ballistic Missile Proliferation, Austrian Federal Ministry for European and International Affairs, Vienna, Communication with author, 19 Aug. 2011.

have submitted reports as of September 2011 (although Gambia and Senegal are the only West or Central African states to have done so at the time of writing).¹⁶

The two Council decisions in support of UN Security Council Resolution 1540 were aimed at raising awareness of the requirements laid down in that resolution and at ‘contributing to strengthening third States’ administrative capacities in drafting national reports on the implementation of [Resolution] 1540’.¹⁷ Since the first Council decision in June 2006, 36 countries have submitted their first report to the 1540 Committee. UN member states have also submitted 23 additional reports, providing new or supplementary information. Many of these are developing states, and identified as countries

with no or low proliferation risk.¹⁸ Their reports could therefore be seen as an indicator that their administrative capacities have been strengthened, rather than proof that their national policies towards WMD non-proliferation have actually changed. The increase in reporting could also be interpreted as a shift in priorities for states with limited administrative resources.

EU funding for the OPCW has included support for assistance visits by legal experts to states parties to promote national implementation.¹⁹ The initial reporting to the OPCW by states parties remains high, although the frequency of reporting has not increased if seen as a share of total participation. At the end of 2003, 150 of the 158 states parties had submitted reports, while 177 out of 188 states parties had done so by the end of 2009 (a one per cent decrease).²⁰

¹⁶ United Nations Office at Geneva, ‘CBM returns’, <http://www.unog.ch/___80256ee600585943.nsf/%28httpPages%29/4fa4da37a55c7966c12575780055d9e8?OpenDocument#_Section25>.

¹⁷ Council of the European Union, Council Joint Action, 2008/368/CFSP of 14 May 2008 in support of the implementation of United Nations Security Council Resolution 1540 (2004) and in the framework of the implementation of the EU strategy against the proliferation of weapons of mass destruction, *Official Journal of the European Union*, L127, 15 May 2008, p. 1.

¹⁸ 1540 Committee, ‘List of national reports by submitting member states’, 27 July 2011, <<http://www.un.org/sc/1540/nationalreports.shtml#Other>>.

¹⁹ Giannella (note 11), pp. 4–7.

²⁰ OPCW, ‘Report of the OPCW on the implementation of the convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction in 2003’, C-9/5, 30 Nov. 2004, p. 3; and OPCW, ‘Report of the OPCW on the implementation of the convention on the prohibition of the

IAEA safeguards verification activities have greatly increased in numbers, mainly reflecting the increased number of countries with a safeguards agreement with the agency, and are difficult to ascribe to EU assistance.²¹

Improving the functioning of multilateral instruments

The third objective called ‘enhancement and improved functioning of’ the conventions and the HCOC is also difficult to measure and could include, for example, any administrative or financial improvement of the instrument. In 2003 the Council adopted a set of basic principles on WMD non-proliferation, of which one immediate action was to provide ‘the IAEA with adequate budget increase for implementing its safeguard tasks’. The agreed document did not expect any cost to the community budget to implement the action, as EU member states would pay for it bilaterally.²² The EU and its member states have not managed to settle on the role of the EU as a contributor to an adequate budget increase for the IAEA. Meanwhile, the IAEA has been ‘unable to meet infrastructure requirements’ as its ‘regular budget remains largely locked into a policy of zero real growth’ and has repeatedly urged funders to increase their voluntary contributions.²³ The annual budget of the IAEA increased from €248.9 to €315.4 million during the years 2003–10 and, although the EU’s contributions remain a limited part of that increase, the EU’s grant to the IAEA is notably higher today than before 2003.²⁴

A number of workshops, facility visits and industry outreach activities funded by the EU could fall under the category of enhancement and improved functioning of the conventions and code.²⁵ For example, EU support for the HCOC provided software and hardware for an

development, production, stockpiling and use of chemical weapons and on their destruction in 2009’; C-15/4, 30 Nov.2010, p. 4.

²¹ IAEA Safeguards Statement for 2003, <<http://www.iaea.org/OurWork/SV/Safeguards/es/es2003.html>>; and IAEA Safeguards Statement for 2010, <<http://www.iaea.org/OurWork/SV/Safeguards/es/es2010.html>>.

²² Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction, presented to the GAERC on 16 June 2003 (Luxembourg), p. 3.

²³ Gerami, N., ‘The International Atomic Energy Agency: An Organizational Perspective’, Global Consortium for Security Transformation Non-Proliferation and Disarmament Series, no. 1 (Feb. 2011), p. 6.

²⁴ IAEA, ‘The agency’s budget update for 2003’, p. 4; and IAEA, ‘Annual budget 2010’, <<http://www.iaea.org/About/budget.html>>.

²⁵ Giannella (note 11), pp. 4–7.

information exchange system, financed workshops and seminars, and facilitated a visit to Europe’s Spaceport in Kourou, French Guiana, in May 2011, as a transparency measure of the code.²⁶

The EU’s target actions on strengthening national reporting to the 1540 Committee could have played a role in the increase of states submitting annual reports. In April 2011 the UN Security Council unanimously passed Resolution 1977, which extended the mandate of the 1540 Committee charged with overseeing the implementation of the resolution for 10 years. Expert support for the 1540 Committee has been strengthened since 2004, but this cannot easily be directly connected to EU financial support.²⁷

EU support for the IAEA, CTBTO and OPCW has also been dedicated to technical assistance projects. For example, EU funding for the OPCW has included the transfer of equipment to laboratories and database development. These projects could be said to have strengthened the organizational capacity of the Technical Secretariat that is responsible for carrying out the EU-supported activities. Like many national contributions, the Council decisions supporting assistance projects implemented by these organizations earmark specific projects and beneficiaries. This causes a degree of inflexibility for the organizations and risks unbalancing the issue areas and countries involved in cooperation. In the case of the IAEA, the EU continues to use the IFS alongside the CFSP budget to strengthen the capability of the IAEA Safeguards Analytical Service—by allocating €5 million to the new nuclear material laboratory (see appendix B) and providing €20–25 million to support the regime’s Multilateral Nuclear Assurance initiative (table 4). Using two different budget instruments to support one organization might complicate coordination and can give a confused impression of the EU institutional actors and funding mechanisms related to WMD non-proliferation.

²⁶ Immediate Central Contact, Hague Code of Conduct against Ballistic Missile Proliferation, Austrian Federal Ministry for European and International Affairs, Vienna, Communication with author, 19 Aug. 2011.

²⁷ Cole, J., ‘Two steps forward, one step back: slow, but steady progress implementing UNSCR 1540’, *NTI Issue Brief*, 20 July 2011.

Table 4. Indicative budget for chemical, biological, radiological and nuclear risk mitigation projects under the Instrument for Stability, 2011–13

Project	Objective	Indicative payment (€ m.)
Regional centres of excellence	To develop comprehensive tailored training and assistance packages on illicit trafficking, safety and security culture etc.	25–30
Fighting illicit CBRN trafficking	To broaden the geographic scope of its cooperation programmes to new regions of significance for EU security, including the Middle East and South East Asia, as well as parts of Africa	12–14
Support for biosafety and biosecurity	To give priority to increasing biosafety and biosecurity in the Middle East, former Soviet Union, Central Asia, South Asia and South East Asia. Additionally to consider actions in Africa	14–18
Assistance and cooperation on export control on dual-use goods	To consolidate existing actions, reinforce related training and add new countries	6–10
Support for the retraining and alternative employment of former weapon scientists and engineers	To reduce the risk of WMD expertise proliferation and the associated threat to international security	20–26 (2010–11)
Support for Multilateral Nuclear Assurance initiatives	To create a nuclear fuel bank of low-enriched uranium with the objective of sending a positive signal to countries willing to develop civil nuclear programmes by increasing the security of fuel supply	20–25

CBRN = chemical, biological, radiological and nuclear risk mitigation; EU = European Union; WMD = weapons of mass destruction.

Sources: Joulia, J. P., 'EU cooperation in export control of dual use goods', EuropeAid Cooperation Office presentation, Expert Meeting, Frankfurt, 28 Feb. 2011; and European External Action Service (EEAS), Six-monthly progress report on the implementation of the EU Strategy against the proliferation of weapons of mass destruction (2011/I), June 2011.

III. COOPERATION WITH AND ASSISTANCE TO THIRD COUNTRIES

At the other end of the policy continuum of effective multilateralism, technical cooperation and financial assistance to third countries are often aimed at increasing third states' abilities to implement their multilateral obligations. For the past 10 years, the two main frameworks in which the EU has committed this assistance are the G8 Global Partnership and the EU multi-annual financial frameworks.

At the G8 Summit in Kananaskis in 2002, the participating states agreed to raise \$20 billion between 2002 and 2012. This was primarily to support practical projects in Russia, to help reduce any risks from the huge military potential still present as a legacy of the cold war. The Commission pledged to commit €1 billion over the period.²⁸ The G8 Global Partnership identified four main functional areas to prioritize for project support: the destruction of chemical weapons, the dismantlement of decommissioned

nuclear submarines, the disposal of fissile materials and the redirection of former weapon scientists in the former Soviet Union. In 2010 the EU had committed more than €955 million and spent over €635 million, mainly in Russia and Ukraine.²⁹ The lion's share of this money was paid from the Technical Assistance to the Commonwealth of Independent States (TACIS) nuclear safety programme, supplemented by relatively small donations from the CFSP budget. On France's initiative, the G8 Global Partnership also included the improvement of the nuclear safety of nuclear installations in Russia—something that the EU was already heavily engaged in prior to 2002, in the light of evidence suggesting that safety failures could pose a direct threat to the EU after the Chernobyl nuclear accident. These safety projects, while justifiable on safety grounds, have little relevance in terms of CBRN weapons-related risk reduction or preventing terrorists from acquiring WMD materials (the principal policy objectives of the G8 Global Partnership 2002–12).

²⁸ The USA committed \$10 billion that was to be matched by other donors from the G8 countries—Canada, France, Germany, Italy, Japan and the United Kingdom—as well as the EU. Other donors, including some EU member states, also subsequently agreed to provide contributions to the Global Partnership.

²⁹ Council of the European Union, Six-monthly progress report on the implementation of the EU Strategy against the proliferation of weapons of mass destruction (2010/I), 11135/10, Brussels, 14 June 2010, p. 44.

The CFSP budget has been used to fund disarmament and non-proliferation projects in Russia, both before and after 2002. Since the adoption of the 2003 WMD Strategy, the CFSP budget has supported two external assistance projects in Russia worth a total of €11 million: in the areas of chemical weapons disarmament and physical protection of nuclear sites. This support is a modest contribution to the pledge of €1 billion made by the EU at Kananaskis. The EU financing for these projects was provided as a supplement to other financial contributions channelled through the countries that were responsible for project implementation, the UK and Germany.³⁰

A reform of the Commission budget instruments in 2007 created the Instrument for Nuclear Safety Cooperation (INSC), as a successor to the TACIS nuclear safety programme, and the new IFS to ‘undertake development cooperation measures, as well as financial, economic and technical cooperation measures with third countries’ in a way that was complementary to the CFSP-financed activities due to their long-term components. Novel to the IFS and the INSC was that they were global in their scope of funding, in contrast to predecessors like TACIS, which were focused on a particular geographical area. This gave EU external assistance the option of moving away from an exclusive focus on the former Soviet Union to areas of emerging concern, such as countries with new nuclear power ambitions or regions with assessed proliferation risks due to, for example, terrorism. The WMD Strategy and the New Lines for Action were central in setting these new priorities for EU assistance—which in 2007 was renamed as ‘cooperation measures’.

The range of potential actors to benefit from cooperation is also broad: from state agencies and regional bodies to private companies and non-governmental organizations. EU bodies such as the Joint Research Centre (JRC), international organizations and financial institutions are also eligible for funding in cases where they conduct projects outside the EU.³¹

³⁰ European External Action Service (EEAS), Six-monthly progress report on the implementation of the EU Strategy against the proliferation of weapons of mass destruction (2011/I), June 2011, pp. 15 and 17.

³¹ Development and Cooperation–EuropeAid DG (DG DEVCO), ‘Nuclear Safety Co-operation Instrument (NSCI)’, <http://ec.europa.eu/europeaid/how/finance/nscli_en.htm>.

The Instrument for Nuclear Safety Cooperation

In comparison with the TACIS nuclear safety programme, which had four beneficiary countries (Armenia, Kazakhstan, Russia and Ukraine), the INSC has, since its creation in 2007, involved 15 countries including in the Middle East and Central Asia. Nuclear safety cooperation has further expanded to countries in Latin America and South East Asia.³² One of the requirements for funding under the INSC, decided by the Council, is that the states receiving assistance ‘Should fully subscribe to the principles of non-proliferation; be parties to the relevant conventions, within the framework of the IAEA, on nuclear safety and security or have taken steps demonstrating a firm undertaking to accede to them. Community assistance could be made conditional on accession or the completion of steps towards accession to the conventions’.³³ However, in the 2009 strategic document of the INSC, the Commission proposed both China (non-ratifier of the CTBT) and India (non-signatory of the Nuclear Non-Proliferation Treaty and CTBT) as possible future beneficiaries of assistance due to the ‘rapid expansion of their nuclear power programmes’. The Commission acknowledged that ‘The political context with these countries will have to be taken into account before identification of concrete needs and cooperation possibilities are considered.’³⁴

The legal framework for the INSC was provided by the Treaty establishing the European Atomic Energy Community (Euratom) and in the preamble of the regulation that founded the instrument it is noted that ‘there is a particular need for the Community to continue its efforts in support of the application of effective safeguards of nuclear material in third countries, building on its own safeguard activities within the European Union.’³⁵ Historically, Euratom

³² European External Action Service (EEAS), ‘Instrument for Nuclear Safety Co-operation’, <http://www.eeas.europa.eu/nuclear_safety/index_en.htm>.

³³ Council of the European Union, ‘Council Conclusions on assistance to third countries in the field of nuclear safety and security’, 2913th Transport, Telecommunications and Energy Council meeting, Brussels, 9 Dec. 2008, p. 3.

³⁴ European Commission, ‘Commission Decision on the Revised Strategy for Community Cooperation Programmes in the field of Nuclear Safety for the period 2010-2013’, C(2009) 9822 final, 8 Dec. 2009, p. 13.

³⁵ Council of the European Union, Council Regulation (Euratom) no. 300/2007 of 19 February 2007 establishing an Instrument for Nuclear Safety Cooperation, *Official Journal of the European Union*, L81, 22 Mar. 2007.

had no mandate to carry out work outside the EU. However, the INSC not only specifically authorizes financial support for work in third countries, including measures to support the application of efficient and effective safeguards of nuclear material in third countries, it also lists EU agencies as eligible for funding in order to implement projects.

The financial reference amount for implementation of the INSC 2007–13 is €524 million and Article 2(c) of the regulation established nuclear safeguards as a potential area for INSC funding. However, the first report on the annual action programmes 2007–2009 of the INSC, published in March 2011, did not highlight any non-proliferation project in the almost €200 million allocated so far.³⁶ The six-monthly progress report on the implementation of the EU WMD Strategy only identified one project funded by the INSC for implementing the WMD Strategy: the €0.5 million project ‘Nuclear Material Accountancy and Control—procurement of equipment 2nd part’, which follows on from a €5.3 million TACIS project running from 2008 to 2011 (see appendix B). In the 2010–11 indicative programming for the INSC, the Commission maintained that ‘Effective safeguards systems and effective control of all nuclear materials is a key non-proliferation issue. Activities will be continued under the current projects in NIS [Newly Independent States] countries, and extended as appropriate to meet the concrete needs of other third countries during the programming period’. However, the proposed budget allocation to the programme component ‘Accounting and control of fissile materials’ was €2.5 million, or 1.7 per cent of the 2010–11 INSC budget.³⁷ Safeguards projects were envisioned for Armenia and Ukraine.³⁸

The Instrument for Stability

The seventh financial perspective (2007–13) foresaw spending up to €300 million on CBRN risk mitigation and preparedness in third countries under the IFS’s Article 4.2, representing a maximum of 15 per cent of

the total IFS budget of €2.1 billion.³⁹ All of the projects in the IFS 2007 and 2008 annual action programmes were contracted and started by 2009 (€83 million).⁴⁰ In the 2009 budget, the €47 million allocated to Article 4.2 was fully committed and half of the funds were contracted within the same year.⁴¹ However, the 2010 annual report of the IFS shows that, for several of the WMD non-proliferation projects, only a small part of the contracted funds have actually been paid out.⁴²

At least three other Commission budget instruments are used to finance external cooperation projects in the broader WMD non-proliferation area: the Instrument for Pre-Accession Assistance on, for example, regulatory framework, radiation protection and illicit trafficking; the Development Cooperation Instrument on, for example, border management projects; and the Civil Protection Financial Instrument on, for example, civil protection interventions in third countries. The non-proliferation value of these projects is extremely difficult to pinpoint, as these are more likely to be an indirect consequence of the project rather than its main purpose. Simply to identify the projects appears to be problematic, among other things, as they are not included in the project overview in the six-monthly progress reports.

Biosecurity is more prominent under the IFS than it was either in past instruments like TACIS or under the current CFSP funding (which clarifies the complementarity of the instruments). With the new focus on cooperation rather than assistance, the new budget instrument also introduced funding for ‘softer’ external non-proliferation projects in comparison with the rather technical assistance under the G8 Global Partnership, such as ‘knowledge management systems on CBRN trafficking’. The language in project descriptions has changed from emphasizing large engineering projects such as ‘chemical weapons

³⁶ European Commission, ‘First Report, Annual Action Programmes for 2007, 2008 and 2009’, Accompanying document on the implementation of the Instrument for Nuclear Safety Cooperation, SEC(2011) 284 final, 10 Mar. 2011.

³⁷ European Commission, ‘Commission Decision on the Indicative Programme 2010–2011 for Community Cooperation Programmes in the field of Nuclear Safety’, C(2009) 9820 final, 8 Dec. 2009, p. 14.

³⁸ European Commission, C(2009) 9820 final (note 37), p. 12.

³⁹ Council Regulation (Euratom) no. 300/2007 (note 35), Articles 2 and 20; European Commission, C(2009) 9822 final (note 34), p. 6; and Regulation (EC) no. 1717/2006 (note 3), Article 24.

⁴⁰ European Commission, ‘Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: 2009 Annual Report from the European Commission on the Instrument for Stability’, COM(2010) 512 final, 28 Sep. 2010, p. 7.

⁴¹ European Commission, COM(2010) 512 final (note 40), p. 10.

⁴² European Commission, ‘Commission staff working paper accompanying the document report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions: 2010 Annual Report of the Instrument for Stability Part II’, COM(2011) 494 final, 16 Aug. 2011, pp. 18, 24–27.

destruction' and 'nuclear submarine dismantlement' under TACIS, to focusing on developing legislative and regulatory capacity through 'durable cooperation' and 'capacity building' under the IFS. Another new aspect is that the activities have also involved a UN programme as an implementing actor for several of the projects (common in EU external conventional arms control projects for a long time).

In the remaining two years of the seventh financial perspective (2012–13), the focus of EU WMD non-proliferation external cooperation projects will be on using IFS financing to establish the planned Centres of Excellence (COEs). Of the €100 million that has been allocated for COEs, €35 million has already been transferred to the UN Interregional Crime and Justice Research Institute (UNICRI). According to one EEAS official, about €150 million will go towards support nuclear safety and security; several Commission budget instruments will also be used during this time for combating illicit trafficking, establishing infectious disease early warning systems, biosafety projects and so on (€50 million).⁴³ In the Commission's multi-annual indicative programming for the IFS, the Commission foresees spending up to €123 million on CBRN risk mitigation cooperation projects in the years 2011–13.

The main body in the EU responsible for the management and review of these cooperation programmes under the IFS is DG DEVCO in cooperation with the EEAS. The implementing DG for several of the projects is the JRC, which is involved in EU external assistance activities both as an implementing agent and as a provider of technical and scientific support. Under the IFS, the JRC (besides being the co-implementing agent together with UNICRI) also carries out assistance in the regional COEs, for example, in fighting illicit CBRN trafficking. It is also part of the Expert Support Facility (a European network of technical experts available to the Commission to support projects of short duration) and gives its support to the IAEA Safeguards Analytical Laboratory.⁴⁴ The JRC is also heavily involved in the implementation of the EU's CBRN action plan and conducts 'competitive security research projects' funded under the seventh framework for research (FP7). In this sense, the JRC is distinctive within the

EU institutions in that it is deeply engaged in both the internal CBRN risk mitigation policy and the external EU policies on WMD non-proliferation.

Four cases of EU cooperation projects

This section looks at four cases of EU external cooperation projects: the retraining of former weapon scientists and engineers, dual-use export control cooperation, knowledge management systems on CBRN trafficking and the subsequent regional centres of excellence. The cases have been selected based on four different kinds of implementing agents (intergovernmental organization, member state agency, the UN and EU agency), while keeping some regional diversity. This section does not make an assessment of the projects' impact or efficiency, but aims to illustrate some tendencies in EU external cooperation projects.

Retraining former weapon scientists and engineers

The EU's biggest non-proliferation assistance programme so far is the support given to the retraining of former weapon scientists and engineers under the G8 Global Partnership framework. The primary beneficiaries are the International Science and Technology Center (ISTC, Moscow) and the Science and Technology Center in Ukraine (STCU, Kiev) to which TACIS committed €124.7 million in the period 2002–2007 (see appendix A). The two centres are intergovernmental organizations set up by a handful of Western countries and the former Soviet Union as emergency programmes after the fall of the Soviet Union.⁴⁵ Although TACIS ended on 31 December 2006, the implementation of the projects committed under the last annual action programmes will continue for a few years.

The EU's share of the support to the ISTC has significantly increased as the budget support for the programme by other donors has decreased. The ISTC budget was reduced from \$49.2 million to \$14.6 million during 2007–10. As in other EU programmes, there has been a shift in focus from nuclear issues to biosecurity and biosafety. In spite of a reduction in the overall ISTC budget by 70 per cent, the category of biotechnology research doubled its budget between 2008 and 2010. In 2010, biotechnology was the biggest funding category

⁴³ European External Action Service official, Interview with author, Brussels, 5 July 2011.

⁴⁴ Abousahl, S., 'Joint Research Centre (JRC) CBRN security activities', Presentation at DG ENTR workshop, 9–10 Nov. 2010, Brussels, p. 10.

⁴⁵ ISTC website, <http://www.istc.ru/istc/istc.nsf/va_WebPages/WhoweareEng>.

(out of a total of 15 technology areas) and was allocated \$6.4 million, nearly half of the annual budget.⁴⁶

Besides being non-proliferation programmes, the ISTC and the STCU have clear commercial components and so-called 'commercialization support initiatives' are central to both organizations' activities.⁴⁷ To illustrate this, the ISTC's annual report focuses on projects with spin-off effects as commercial products.⁴⁸ The ISTC and the STCU not only prevent weapon scientists from seeking employment in WMD programmes in the former Soviet Union or elsewhere, they also provide firms and other financiers with highly skilled labour. The organizations offer beneficial intellectual property rights (IPR) to attract financiers to projects; the financial contributor is granted the IPR in the territory of the contributor, and the scientist gets to keep the IPR everywhere else (ISTC) or only in the territory of the receiver (STCU). For example, a Ukrainian scientist in an STCU project financed by a US firm owns the IPR to his or her invention only in Ukraine, whereas the US firm owns the IPR everywhere else.⁴⁹

In 2007–2009 the Commission continued its support by allocating €30.5 million from the IFS to the ISTC and the STCU for their work in redirecting scientists and engineers to civilian and peaceful activities. The ISTC is also implementing a biosafety and biosecurity capabilities programme in Russia and Central Asia through the IFS (€6.8 million, 2009–12).

According to the ISTC, 'over 58,000 weapons scientists and their team members in 765 research institutes spread across Russia/CIS have been involved in ISTC projects and activities'.⁵⁰ The Commission ordered an assessment of the centres following the termination of TACIS.⁵¹ The Commission's external consultants found that the centres constituted

'an exceptional asset' for the EU and, with some modifications to changing security challenges, 'should be preserved and used to deal with Russia and other CIS countries'.⁵² Other assessments, while underlining the valuable contribution that the centres made in the past, have been more critical and have questioned the programmes' value to non-proliferation going forward.⁵³ In the 2007–2009 indicative programming for the IFS, the Commission made future ISTC and STCU support conditional on a modification of 'ongoing internal reform efforts of both institutes to maximise the cost-effectiveness of IFS financial support, including much greater emphasis on funding partner projects'.⁵⁴

Assessments by donors notwithstanding, Russia has decided to withdraw from the ISTC as it considers that the initial goal of the centre has been met. Russia no longer believes that external assistance is needed to manage the threat of knowledge proliferation. The EU has decided to end its financial support once existing projects are completed. As noted above, EU-funded projects are still ongoing and the Commission plans to use the IFS to extend EU activities on WMD expertise redirection to other regions, where the communities of concern are smaller and less highly qualified than in the former Soviet Union, such as Iraq, North Korea, Libya and Syria. So far, one project to assist Iraq with the redirection of scientists and engineers by engaging them in decommissioning, dismantling and decontamination of nuclear facilities has been approved (€2.5 million). The implementing actor for this project has not yet been confirmed (see appendix B). Indicators for reaching the objectives of the project are the 'number of proven WMD scientists and engineers involved' and the 'quality and number of EC supported projects with a distinct non-proliferation outcome'.⁵⁵ This suggests that some lessons learned from the STCU and ISTC support are, according to the Commission, to find a methodology for identifying weapon scientists and to increase the number of projects which are distinctly on non-proliferation.

⁴⁶ ISTC, 'Annual Report 2010: Developing International Scientific Cooperation', p. 9.

⁴⁷ STCU website, <<http://www.stcu.int/offer/commercialcontrres/applyps/principles/>>.

⁴⁸ ISTC (note 46), p. 10.

⁴⁹ ISTC, 'Statute', 27 Dec. 27 1993, Article XIII, <http://www.istc.ru/istc/istc.nsf/va_webpages/StatutoryDocumentsStatuteEng>.

The STCU statute contains similar language. STCU, 'Statute', 25 Oct. 1993, Article XIII <http://www.stcu.int/documents/stcu_inf/Founding_Documents/Statute/>.

⁵⁰ ISTC website, <http://www.istc.ru/istc/istc.nsf/va_WebPages/WhowareEng>.

⁵¹ Richard, M., Daoust Maléval, I. and Louvet, P., 'Status and prospect of non-proliferation activities of ISTC and STCU', *ESARDA bulletin*, no. 41 (June 2009), <http://esarda2.jrc.it/bulletin/bulletin_41/index.html>.

⁵² Richard, Daoust Maléval and Louvet (note 51), p. 22.

⁵³ Boureston, J. and Nikitin, M. B., 'Improving the ISTC/STCU science centres' programmes to support worldwide non-proliferation objectives', Background paper 8, Conference on Strengthening European Action on WMD Non-proliferation and Disarmament: How Can Community Instruments Contribute?, Brussels, 7–8 Dec. 2005.

⁵⁴ European Commission, 'The Instrument for Stability: multi-annual indicative programme 2009–2011', C(2009)2641, 8 Apr. 2009, pp. 29–30.

⁵⁵ C(2009)2641 (note 54), pp. 29–30.

Export control of dual-use goods

EU external assistance in the area of dual-use export control started with three pilot projects, implemented in 2005–2006, and initially focused on countries in South Eastern Europe. SIPRI implemented the first pilot project and since 2006 the Federal Office of Economics and Export Control (BAFA) has been the implementing agent for the projects—with support from other EU member states experts and with SIPRI continuing to provide expertise. The EU pilot projects were concluded in October 2008 and transitioned into the long-term programme ‘EU Cooperation in Export Control’.⁵⁶ The focus of the project work has been agreed jointly between the EU and BAFA, and the geographical scope of the programme has expanded to include new recipient countries and regions. The project is divided into five pillars: legal, licensing, customs, awareness and penalties. Activities within each pillar have included study visits, outreach to industry, customs and legal seminars, training, awareness raising, prosecution and investigation workshops, production of handbooks, and so on.

In addition to the bilateral and regional assistance activities, BAFA organizes expert meetings and multilateral conferences within the framework of the EU programme. While the programme initially focused on states in South Eastern Europe, the scope has progressively expanded to cover 30 countries in Europe, Asia and Africa. Since 2008 the Commission has committed €10 million from the IFS budget to the long-term project.⁵⁷

Cooperation has been especially intensive with countries that have an EU membership perspective—Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro and Serbia—and since the start of the activity these South East European states have undergone major changes in the area of export control facilitated, among other things, by EU assistance. All six countries have filed national reports to the 1540 Committee describing the progress: Albania once, Bosnia and Herzegovina twice, and Croatia, Macedonia, Serbia and Montenegro three times.⁵⁸

⁵⁶ Federal Office of Economics and Export Control (BAFA), ‘Cooperation in export control of dual-use goods’, <<http://www.eu-outreach.info/>>.

⁵⁷ Federal Office of Economics and Export Control (BAFA), ‘General project information’ <http://www.bafa.de/eu_outreach/general_project_information/index.html>.

⁵⁸ United Nations Security Council 1540 Committee, ‘Assistance requested by member states: excerpts from national reports submitted

Since 2005 the six states have either adopted new export control legislation or revised existing laws. Albania adopted the ‘Law No. 9707 on the State Control over Import-Export Activity of Military Equipment and Dual-use Goods and Technologies’ in April 2007. Among other things, this created an independent export control state authority under the Ministry of Defence. Bosnia and Herzegovina has a revised dual-use export control law in force since December 2009. Croatia revised its 2004 ‘Act on Export of Dual-Use Goods’ in 2008. Macedonia revised and amended its export control law in force since 2005, in December 2010. Serbia’s ‘Law on Foreign Trade of Weapons, Military Equipment and Dual-Use Goods’ has been in force since 2005 (which at that time also covered Montenegro). Montenegro revised and amended the law on ‘Foreign Trade of Armament, Military Equipment and Dual-Use Goods’ in 2008.⁵⁹ As noted above, several of the recipient countries have submitted applications for EU membership during the period of implementation of the export control programme: Albania in April 2009, Montenegro in December 2008 and Serbia in December 2009. Croatia had already applied for EU membership in 2003. Three of the states have reached candidate status (Croatia, Macedonia and Montenegro), which means that they have taken a series of steps to align their national export control legislation with that of the EU under the standard procedure of adopting the ‘Community *acquis*’ (the broader EU regulatory framework of common rights and obligations) as a precondition for entering the EU.⁶⁰ Furthermore, all of the countries are heavily dependent on the EU for trade and the region is an important axis for EU exports to the Middle East and beyond.

While difficult to quantify, there is no doubt that the external assistance programme has been instrumental in bringing about reforms. However, there are specific conditions in the region that do not apply in other countries and regions. These unique characteristics have certainly made the countries positive to cooperation with the EU on dual-use export control, and open to revising national legislation to

pursuant to UNSCR 1540 (2004)’, <<http://www.un.org/sc/1540/requestsforassistance.shtml>>.

⁵⁹ Federal Office of Economics and Export Control (BAFA), ‘EU cooperation in dual-use export control’, <http://www.bafa.de/eu_outreach/>.

⁶⁰ In Oct. 2011 the EU decided that Serbia’s full-candidate status would depend on Serbia normalizing its relations with Kosovo. ‘Serbia recommended for EU candidate status’, BBC News, 12 Oct. 2011, <<http://www.bbc.co.uk/news/world-europe-15277402>>.

make it compatible with that of the EU, as well as underpinning EU interest in collaboration. At the same time, the general methodology developed and tested in South Eastern Europe has been possible to apply in an adapted form in other countries where the EU now has active programmes under way.

Knowledge management systems on CBRN trafficking

Knowledge management systems (KMS) on CBRN trafficking represent an early attempt by the EU to make use of national and regional knowledge that has been built up in the area of export control to expand its assistance to other functional areas and other regions. In 2008 and 2009 the Commission spent €2 million on developing two regional KMS: the first in South Eastern Europe and the Caucasus, and the second covering North Africa and some countries in the Middle East (see appendix B). The purpose of the KMS is to help states implement their national commitments under Security Council Resolution 1540, as well as to create regional 'security cultures', improve coordination within and between countries, and raise the efficiency of intergovernmental processes and regional organizations. The KMS promote the sharing of information, best practices, and lists of national and regional experts that can be drawn on to implement specific projects tailored to the requirements of Resolution 1540.⁶¹

The EU has mandated UNICRI to implement this project drawing on its previous experience in a programme called 'Strengthening International Cooperation to Combat Illicit Trafficking and Criminal Use of CBRN Substances and Weapons'. That programme aimed to address what UNICRI saw as the main challenges in countering illicit trafficking of biological and chemical materials, such as the lack of clear communication channels, and the lack of harmonization of definitions and standardized data between different international, regional and national actors.⁶²

The KMS support actors in the collection, management and dissemination of technical data and

information on illicit trafficking of CBRN materials in order to identify trends in trafficking, predict the location of future incidents and assess existing vulnerabilities and risks. A special focus on chemical and biological threats was aimed at filling a gap in existing knowledge and mechanisms in the light of global developments in these sectors. UNICRI set up the KMS with the technical support of the BTWC, Europol, the IAEA, Interpol, the OPCW, the Southeast European Cooperative Initiative Regional Center for Combating Trans-border Crime and the World Customs Organization. One of the main objectives is to make the system self-sustaining and to provide participating states with a sense of ownership of the KMS. Overall, 16 countries and several international and regional organizations have been involved in the KMS. Activities have included assistance to develop methodology, reliable data collection and CBRN risk assessment.⁶³ It is too early to tell what the practical impact of the KMS will be, but the nature of the project is rather different from previous EU external assistance projects on WMD non-proliferation. The main outcome of the KMS is likely to be as a part of the preparation phase of setting up regional COEs on CBRN, which is currently under way through funding from the IFS.

Regional CBRN Centres of Excellence Initiative

The establishment of COEs is the single biggest project under IFS Article 4.2, with an indicative budget of about €100 million during the seventh financial perspective (about one third of the IFS budget on WMD issues) that is implemented by UNICRI and the JRC. Around one-third of this money has already been committed and the implementation of this phase is foreseen to go on until 2016. The CBRN COEs are meant to create regional platforms for providing assistance in CBRN risk mitigation. They aim at developing the institutional capacity at regional and national levels for CBRN risk mitigation, from needs assessment through to project implementation and review, facilitated by a permanent secretariat and with support from regional and national capacity building and networking.⁶⁴ The Commission held the first meeting with national focal points of the COEs in South East Asia in November 2009 to discuss the overall project and to define the future role of the

⁶¹ United Nations Interregional Crime and Justice Research Institute (UNICRI), 'CBRN Knowledge Management Systems', <http://lab.unicri.it/cbrn_kms1.html>.

⁶² Calvani, S., 'Geopolitical overview: safety and security in Western and Eastern Europe with particular reference to new trends. Highlighting new threats and an innovative approach to the necessary regional knowledge management systems', Workshop on Control and Risk Prevention of Dangerous Materials and Crisis Management, Sofia, 26–27 Mar. 2009, p. 5.

⁶³ Calvani (note 62), pp. 5–7.

⁶⁴ EU Counter-Terrorism Coordinator, 'EU Counter-Terrorism Strategy: discussion paper' (Council of the European Union: Brussels), 10622/11, 27 May 2011, p. 12.

national focal points. This meeting was followed by other events organized by UNICRI to introduce a needs assessment tool and consider future activities of the COEs. The EU intends to establish COE secretariats in South East Asia (Thailand), the Middle East (Jordan), South Eastern Europe, Ukraine, Moldova and South Caucasus (Georgia), West Africa (Morocco) and North Africa (Algeria) by December 2011.⁶⁵ Three COEs are planned for 2012: in Central Asia, the Gulf Cooperation Council states and sub-Saharan Africa.⁶⁶ According to one official in the EEAS, Africa will be a priority for 2012-13; an initial meeting with sub-Saharan African representatives is planned to take place in early 2012. The COE initiative is a methodology to channel EU assistance, where the coordination committee (made up of DG DEVCO, the EEAS, the JRC and UNICRI) decide on projects for funding based on the priorities set by countries in the region (and checked with other assistance providers to avoid different actors initiating or implementing duplicate projects). The coordination committee foresees funding 15–20 projects per region, and the activities will cover legislative assistance, workshops and seminars, training and, in exceptional cases, the provision of equipment.⁶⁷

The operational success of the COEs will be determined by many factors, of which the ability of partner countries to identify projects and then implement them locally will probably be the most critical. However, within the EU it will also be important to develop new working relationships between the COEs, EU delegations and EU member states' national embassies. According to one EEAS official, each delegation and embassy will ideally have one person to follow CBRN issues. However, at the moment, efforts need to be made to increase the expertise in EU delegations, which before the Lisbon Treaty had a limited mandate within the area of security (an intergovernmental policy area in the second pillar).⁶⁸ Within the Commission, DG DEVCO is responsible for managing the COE programmes. While the EEAS (of which EU delegations constitute one part) and DG DEVCO have a mutual duty of cooperation with each other, coordination will have to include

many other actors as well. Regional stakeholders have expressed a demand for the COEs to go beyond CBRN threats to cover cooperation and coordination on other security issues, such as terrorism and broader illicit trafficking threats.⁶⁹ For 2012–13 the different units of the EEAS have conducted, for the first time, a joint programming process for the IFS—the instrument that will finance the centres—to strengthen the links between the different articles in the IFS.⁷⁰ This joint programming could help to facilitate the broader cooperation requested by regional partners through the COEs. The COEs aim to be a hub for a range of EU non-proliferation stakeholders, including the export control enforcement community as well as sectors of industry working with sensitive goods and technologies, to channel EU expertise and build relations in the field of CBRN risk mitigation with the regions where centres are established. In this regard, DG DEVCO and the EEAS consult the Directorate General for Enterprise and Industry (DG ENTR). DG ENTR is entrusted with managing the EU FP7 and is expected to provide a link between CBRN research and development actors within the EU and the regional networks in connection with the COEs. As an early step in this process, DG ENTR will invite UNICRI and regional actors to inform them about EU FP7 Security at the end of 2011.⁷¹

IV. SCIENTIFIC COOPERATION

A third way in which the EU is directing its resources to mitigate and respond to CBRN risks is through the strengthening of technological and scientific capacity. This capacity is being used to develop products and services, build scientific networks, and inform policy on CBRN issues. The main source of funding is the security theme of FP7, which is managed by DG ENTR. However, since the adoption of the CBRN Action Plan in 2009, internal policy DGs in the Commission are managing growing budgets for CBRN research. This research may include international partners, as some projects already do; for example, the EpiSouth and EpiSouth Plus projects to strengthen infectious disease surveillance networks in the Mediterranean region and South Eastern Europe. The research carried out for internal security purposes may also lead to

⁶⁵ European Commission, 'CBRN Centres of Excellence: an initiative of the European Union', <<http://www.cbrn-coe.eu/>>.

⁶⁶ Dupré, B. (EEAS), 'CBRN Centres of Excellence: political rationale', Information meeting for EU representatives, 21 Oct. 2011, <<http://www.cbrn-coe.eu/>>.

⁶⁷ European External Action Service (EEAS) official (note 43).

⁶⁸ European External Action Service (EEAS) official (note 43).

⁶⁹ European External Action Service (EEAS) official (note 43).

⁷⁰ European External Action Service (EEAS) official (note 43).

⁷¹ European Commission official, Interview with author, Brussels, 6 July 2011.

the development of products and tools that can then support external actions.

However, finding suitable projects to fund has not been easy and success has been variable. Funding under the second Health programme 2008-2013 (see appendix C), managed by the Directorate General for Health and Consumers (DG SANCO), has been the most successful. It has used almost 100 per cent of the indicative amount for project support (€13.39 million indicative and €13.38 million paid out).⁷² In contrast, the specific programme 'Prevention of and Fight against Crime', managed by the Directorate General for Home Affairs (DG HOME), made a call for proposals on CBRN in 2010 with little success. It had €12 million available for co-financing grants and DG HOME expected to select approximately 20 projects from the proposals submitted, but only received three fairly modest proposals.⁷³ In 2010 two projects were selected and the total EU contribution to these was about €350 000. None of the projects included external partners. In the 2011 call for proposals, the Commission committed another €13 million.⁷⁴ DG HOME will report to the Council on the implementation of the EU CBRN Action Plan by the end of 2011. The Commission's mid-term review will cover the progress of each action and put pressure on member states to increase engagement in areas that are falling behind. The review could lead to changes in the action plan and recommendations encouraging international projects cannot be ruled out.

The largest budget for CBRN research is still, by far, the dedicated research programmes. In 2004 the Commission launched the Preparatory Action on the Enhancement of European Industrial Potential in the Field of Security Research (PASR), 2004-2006. One of the research themes was 'Protecting citizens from terrorist attacks with CBRN and energetic substances'. The main aim of PASR was for stakeholders in EU member states 'to develop, demonstrate and validate

technological solutions', to be mission-oriented and to deliver tangible results.⁷⁵ Following PASR, a security theme was established in FP7; FP7 Security has a budget of €1.4 billion for 2007-13, making it the second smallest funding line in FP7. The research builds on transnational collaborative projects and networks, which promote collaboration between publicly funded research and industry.⁷⁶

Since 2007 FP7 Security has funded 80 proposals (out of the 400 received), including 25 projects on CBRN issues with over €100 million in financing from FP7. DG ENTR estimates that CBRN research will fund closer to 60 projects on CBRN issues with a total budget of €250 million under the seventh financial perspective. Several of the projects have external dimensions (see appendix D) and some of the research results may be universal in character and applicable in any national setting. For example, the concept developed in the Preparedness and Resilience against CBRN Terrorism using Integrated Concepts and Equipment project could certainly be exported and applied in countries outside of the EU.⁷⁷ In fact, projects often aim to develop products that can be sold to end-users or integrated into other programmes. For example, the PASR Transport Infrastructures Protection System project developed a prototype robot capable of checking for explosives on the rail network.⁷⁸ Research results also include results in the area of social science with wider application, such as studies on the role played by national cultural differences in determining how people and authorities respond when faced with a disaster situation. These research results have, for example, been incorporated into niche software used by architects in designing safety and security features for buildings that take into account differences in cultural behaviour in crisis situations.⁷⁹

Major defence and civil security companies from the private sector benefit from funding through the FP7 Security programme, such as BAE Systems, EADS,

⁷² European Commission, 'Commission Decision C(2010)7593 of 27 October 2010 on the awarding of grants for proposals for 2010 under the second Health Programme (2008-2013)', <www.ec.europa.eu/eahc/documents/health/award_decision2010.pdf>.

⁷³ European Commission, Programme Prevention of and fight against crime 2007-2013 targeted call for proposals, 'Chemical, Biological, Radiological and Nuclear materials-CBRN', Action Grants 2010, p. 2.

⁷⁴ European Commission, Commission Decision of 21 January 2011 on adopting the annual work programme for 2011 for the specific programme on the 'Prevention of and Fight against Crime' as part of the General Programme 'Security and Safeguarding Liberties', C(2011) 131 final, 21 Jan. 2011, p. 6.

⁷⁵ Centre for Strategy and Evaluation Services, 'Ex-post Evaluation of the Preparatory Action on Security Research (PASR) Interim evaluation of FP7 Security Research Final report' (Centre for strategy and evaluation services: Kent), Jan. 2011, p. 9.

⁷⁶ Centre for Strategy and Evaluation Services (note 75), p. 99.

⁷⁷ Preparedness and Resilience against CBRN Terrorism using Integrated Concepts and Equipment Project website <http://cordis.europa.eu/search/index.cfm?fuseaction=proj.document&PJ_LANG=EN&PJ_RCN=12003306&pid=1&q=B933352087A030068E037453D6660C99&type=adv>.

⁷⁸ Centre for Strategy and Evaluation Services (note 75), p. 95.

⁷⁹ Centre for Strategy and Evaluation Services (note 75), p. 51.

Table 5. Associated countries involvement in the seventh framework programme for security research

Country	Number of projects
Israel	27
Norway	26
Switzerland	19
Turkey	9
Croatia	1
Iceland	1
Montenegro	1
Serbia	1
Albania	0
Bosnia and Herzegovina	0
Liechtenstein	0
Faroe Islands	0

Source: The CORDIS project database of FP7 research, <<http://cordis.europa.eu/search/index.cfm?fuseaction=proj.advSearch&refine=0A36E85C6BCD54E354D4093656EA1DE1>>.

Saab, SELEX-Galileo and Thalys.⁸⁰ There are different co-financing levels for participants in FP7 Security depending on the beneficiary type. For example, small to medium-sized enterprises, research institutions and universities have higher levels of co-financing (75 per cent) than large firms (50 per cent). However, large firms can benefit from EU co-financing by up to 75 per cent if the project entails certain risks, limited markets or accelerated equipment development in response to new threats.⁸¹ ‘Security scrutiny’ is a unique feature to FP7 Security and means the assessment of projects considered to be sensitive, for example, in terms of national security or dual-use aspects. FP7 also includes procedures for an ‘ethical review’ to ensure that EU funding is not allocated to research that does not comply with the relevant EU legislation and that sufficient consideration of ethical aspects is taken into account, for example, regarding dual-use technology. So far no project applications have been denied based on ethical aspects.⁸²

The availability of multi-annual funding for transnational collaboration on CBRN research in the EU is thought to fill an important gap. FP7 is meant to provide particular value due to the absence of national funding for security research in most EU countries. Only eight EU countries fund national security research programmes (Austria, France, Finland,

Germany, the Netherlands, Sweden, Romania and the UK).⁸³ However, although all EU member states participate in FP7, the level of participation varies greatly: from 4 projects in Lithuania to 78 projects in the UK.⁸⁴ Besides EU member states, the core participating states in FP7 are those that also pay into the overall FP7 budget, called ‘associated countries’. These countries participate in FP7 on an equal basis with EU member states. Associated countries include European Economic Area and European Free Trade Association countries (e.g. Iceland, Norway, Lichtenstein and Switzerland), EU candidate countries (e.g. Croatia and Turkey), and—importantly for this issue—Israel. The EU’s international cooperation partner countries are potential beneficiaries of FP7 project financing, whereas industrialized high-income countries can participate on a self-financing basis. Further cooperation with third countries is encouraged under FP7 Security and is aimed at being mutually beneficial. The broad objectives for the international cooperation in the framework of FP7 are not tied to non-proliferation, but are meant to support EU competitiveness, encourage the best third-country scientists to work in and with the EU, and address common problems.⁸⁵

During 2007–2009, 700 Israeli research entities received a total of €243 million from FP7, and almost two thirds of the funding was directed to Israeli universities and research institutes.⁸⁶ Within the area of security, Israel leads seven projects and takes part in another 20; three of the projects are on CBRN issues, of which Israel leads two. Israel’s engagement in the FP7 Security research projects is matched or outnumbered only by: Austria (30), Belgium (45), Finland (32), France (72), Germany (71), Greece (27), Italy (61), the Netherlands (48), Poland (29), Spain (62), Sweden (45) and the UK (78).⁸⁷ The EU provides financial, technical and corporate support to Israeli research institutes and firms in order to develop products, services, technology

⁸³ Centre for Strategy and Evaluation Services (note 75), p. 30.

⁸⁴ CORDIS project database of FP7 research, <<http://cordis.europa.eu/search/index.cfm?fuseaction=proj.advSearch&refine=0A36E85C6BCD54E354D4093656EA1DE1>>.

⁸⁵ Centre for Strategy and Evaluation Services (note 75), p. 14.

⁸⁶ European Commission, ‘Implementation of the European Neighbourhood Policy in 2009 Progress Report Israel’, SEC(2010) 520, 12 May 2010, p. 16.

⁸⁷ The CORDIS project database of FP7 research allows the user to link one or more countries to projects. CORDIS database, <<http://cordis.europa.eu/search/index.cfm?fuseaction=proj.advSearch&refine=0A36E85C6BCD54E354D4093656EA1DE1>>.

⁸⁰ Centre for Strategy and Evaluation Services (note 75), p. 76.

⁸¹ Centre for Strategy and Evaluation Services (note 75), p. 59, pp. 10–14.

⁸² Centre for Strategy and Evaluation Services (note 75), p. 18.

and scientific knowledge in the area of CBRN risk mitigation. The research results then feed back into EU policy, create transnational networks to facilitate further cooperation and open the EU market to Israeli stakeholders.

An evaluation of the CBRN part of FP7 Security noted that the Lisbon Treaty has strengthened community competence in EU external actions and this, in turn, has opened up the possibility of introducing an external dimension to security research activities.⁸⁸ These new possibilities should be taken into consideration when planning for the eighth framework programme. The options would include strengthening the external EU dimension of FP7 Security, integrating project results more effectively with existing EU external actions and using the framework to promote cooperation between the EU and international organizations as well as with national authorities in third countries.⁸⁹

Some steps have already been taken by FP7 Security to support the IFS via calls for proposals.⁹⁰ Since the entry into force of the Lisbon Treaty, the EEAS and DG DEVCO have further encouraged DG ENTR to fund more external projects as these would both provide opportunities for EU stakeholders and have an added value in terms of security. In this respect the EU does not restrain itself to CBRN risk mitigation, but has, for example, recently granted funding for a project on landmines—which is the first fully external project under FP7 Security. The legal basis for the research programme cannot change until FP8, but with new expectations placed on it, it is already transforming. In the July 2011 call for proposals, eight of the topics were aimed at involving international partners.⁹¹

V. CONCLUSIONS

In terms of effective multilateralism, EU funding has produced some tangible results since 2003 that can be measured using various indicators. Nevertheless, an ‘attribution gap’ remains, making it very difficult to show that EU efforts have caused the improvements. There has been an increase in

the number of participating states in important multilateral instruments and national reporting on the implementation of obligations contained in relevant treaties and UN Security Council resolution has also increased (an important CBM). Steps have also been taken to strengthen several of the instruments. However, it should be noted that these positive changes have taken place in countries of low proliferation concern. While undoubtedly strengthening the administrative and financial capacities that support these instruments, EU support does not appear to have made them any more attractive to states which choose to remain outside the regimes for ideological or national security reasons.

Although more global regimes add legitimacy to the EU policy to support multilateral instruments, it is more challenging to find an appropriate method for assessing whether the accomplishments achieved with EU resources are adequate in relation to the amount of money spent. The ten-year extension of the mandate for the 1540 Committee and the new G8 agreement to continue support for practical disarmament and non-proliferation projects may also generate additional requirements that the EU will want to support in pursuit of its wider aims.

In general, it can be said that the effectiveness of external actions has been greatest where it builds on a coherent and clear set of norms and standards within the EU. This coherence can facilitate the engagement of member states into the practical work of implementing a programme. This positive synergy between EU financing, standards adopted at the EU level and the active engagement of member state expertise has been a highly effective combination—the export control programme being a good example of this.

The EU’s external cooperation projects in the area of WMD non-proliferation and CBRN risk mitigation are expanding in numbers, budget instruments, implementing agents and regional scope. Programmes have developed from practical disarmament and non-proliferation measures, largely focused on rather advanced countries in the immediate neighbourhood of the EU and based on engineering projects, to softer security governance projects in less developed states further afield.

The first set of projects was more open to the use of quantitative indicators to measure success (though even apparently tangible results such as number of scientists participating in the projects managed by the ISTC and the STCU were not always easy to interpret).

⁸⁸ Centre for Strategy and Evaluation Services, ‘Ex-post Evaluation of PASR Activities in the field of Security and Interim Evaluation of FP7 Security Research: CBRN Case Study’, (Centre for Strategy and Evaluation Services: Kent), Jan. 2011; and Centre for Strategy and Evaluation Services (note 75) p. 101.

⁸⁹ Centre for Strategy and Evaluation Services (note 75), p. 109.

⁹⁰ European Commission official, Interview with author, Brussels, 5 July 2011.

⁹¹ European Commission official (note 90).

Going forward, the projects with a governance focus will raise different implementation and measurement challenges. The EU is currently working to create a new methodology for channelling assistance and measuring outputs.

The CBRN COEs are still under development and fully operational centres are not likely during this financial perspective. Although there is a general interest among stakeholders to establish well-functioning regional COEs, different actors have different ideas on the roles of the COEs, their levels of ambition and specific objectives, how much influence the EU will have and how much pressure regional EU delegations will be able to put on them. While the number of budget instruments for non-proliferation has expanded, the budget commitments to WMD non-proliferation projects remain modest. The amount of money allocated to non-proliferation under the INSC is disappointing so far. Investigations need to be made into why, out of the nearly €200 million committed from the instrument in 2007–2009, only €0.5 million was allocated to non-proliferation. In order to improve the balance, the European Parliament needs to use its powers to direct more INSC resources to Article 2(c) of the instrument.

The Lisbon Treaty has provided Commission DGs with a clearer mandate to conclude projects outside of the EU where that is material to their primary objectives. The EU, through FP7, is already engaged with Israel in CBRN risk mitigation research projects. It is concerning that Israel's participation in the FP7-CBRN cooperation is greater than most EU member states, given that the primary purpose of the programme is to raise national capacities within the EU. While Israel is not eligible for funding under the INSC due to its lack of commitment to key multilateral non-proliferation instruments (the Nuclear Non-Proliferation Treaty and CTBT), it is treated as an EU member state when it comes to industry-to-industry cooperation on CBRN research. Indeed, the results of the EU's scientific cooperation on CBRN issues with third countries do not currently feed into EU external policy on WMD non-proliferation.

The EEAS and DG DEVCO appear to consider these aspects in their future planning of projects to be financed using the IFS. However, more must be done to strengthen these links and, in particular, the relationship between scientific cooperation and CFSP. In this respect, potential cooperation with India under

the INSC instrument, as suggested by the Commission, should be looked at carefully.

Although effective multilateralism is one desirable aspect of EU's policy, it is neither the only nor the most prominent one in terms of funding. Commercial considerations have been central in all EU assistance and cooperation projects with third countries examined in this paper, and the trends are clearer than ever. Many of the positive results from the different programmes reflect the perceived incentives of trade, EU membership, large-scale employment or the like in the partner country. Not to acknowledge the commercial aspects of the EU WMD non-proliferation effort hinders transparency and exaggerates the degree of interest in third countries for WMD non-proliferation. Private sector engagement and the commercial aspects of EU activities in and with third countries need to be given a clear role in WMD non-proliferation policy in order to determine their added value for reaching EU WMD non-proliferation objectives.

APPENDIX A. EU-FUNDED PROJECTS IN THE FRAMEWORK OF THE G8 GLOBAL PARTNERSHIP, 2002–2007

Programme	Funds committed (€ m.)	Funds expended (€ m.)	Project description
TACIS Programme: Nuclear Safety	469.4	310.9 ^a	Improvement of nuclear safety of nuclear installations (Russia, Ukraine, Kazakhstan, Armenia)
TACIS Programme: ISTC and STCU	124.7	98.4	Reconversion of former weapon scientists
Northern Dimension Environmental Partnership (managed by the EBRD)	40	40	Nuclear submarine dismantlement
TACIS Programme: Border Management	78	17.6	Border security and export control
TACIS Programme	28	12	Improvement of nuclear safeguards in Russia
EU Joint Actions for Gorny, Kambarka and Shchuch'ye	14.79	10	Support for chemical weapons destruction in Russia
TACIS Annual Programmes: Russia	6	6	Decontamination and reconversion of chemical weapons facilities
EU Joint Action (Bochvar Institute)	7.9	2.3	Physical protection of a nuclear installation in Russia
EU Joint Actions: Four ongoing projects	6.7	4.8	Fissile material disposition (in particular plutonium)
Total	772.35	502	

EBRD = European Bank for Reconstruction and Development; EU = European Union; ISTC = International Science and Technology Center; STCU = Science and Technology Center in Ukraine; TACIS = Technical Assistance to the Commonwealth Independent States.

^a Ukraine €160.4 million, Russia: €108 million, Armenia €11 million, Kazakhstan €5 million, Multi-country €26.5 million.

Source: European External Action Service (EEAS), 'G8 Global Partnership', 13 Apr. 2007, <<http://www.consilium.europa.eu/eeas/foreign-policy/non-proliferation,-disarmament-and-export-control-/g8-global-partnership.aspx?lang=en#ftn2>>.

APPENDIX B. CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR EXTERNAL ASSISTANCE PROJECTS

Project	Project objective	Implementing agent	EU funding/ budget instrument/ time frame
<i>TACIS and INSC</i>			
Retraining former weapon scientists and engineers through support for the ISTC (Moscow) and the STCU (Kiev)	To redirect scientists and engineers to civilian and peaceful activities through scientific and technological cooperation	ISTC and STCU	€235 million TACIS 1997–2006
Modernization and enhancement of NMAC at the Mayak RT-1 plant	To improve the mass measurements of plutonium and uranium in hold-ups and in wastes to meet the requirements of the state NMAC	JRC Ispra Euriware (France), Canberra, (Belgium), Lider (Russia)	~€3 million TACIS 2004–2009

Project	Project objective	Implementing agent	EU funding/ budget instrument/ time frame
Integrated Safeguards and Illicit Trafficking: service part	To strengthen the non-proliferation regime by enhancing the safeguards system and NMAC; to counteract the nuclear and radiation terrorism threat; and to strengthen and improve institutional control by enhancing the collaboration and capacities of national regulatory authorities (12 sub-projects, some continuing activities that have already started)	JRC IPSC Ispra and ITU Karlsruhe	~€14 million TACIS 2006–2013
NMAC: procurement of equipment 1st part	To provide the first batch of equipment for NMAC identified by the TAREG 5.01/05 project	JRC IPSC Ispra and ITU Karlsruhe	€5.3 million TACIS 2008–2011
NMAC: procurement of equipment 2nd part	To provide the second batch of equipment for NMAC identified by the TAREG 5.01/05 project	JRC IPSC Ispra and ITU Karlsruhe	€0.5 million INSC 2008 ..
<i>Instrument for Stability (IFS)</i>			
Retraining former weapon scientists and engineers through support for the ISTC (Moscow) and the STCU (Kiev)	To redirect scientists and engineers to civilian and peaceful activities through scientific and technological cooperation	ISTC and STCU	€30.5 million IFS 2007–2009
Combating illicit trafficking of nuclear and radioactive materials in former Soviet Union countries (Russian Federation, Ukraine, Armenia, Moldova, Georgia, Azerbaijan and Belarus)	To supply equipment for the detection of nuclear and radioactive materials at border check points, as identified in the previous phase of the activity financed by the TACIS Nuclear Safety Programme, and so contribute to reducing the nuclear and radiation terrorism threat	JRC	€5 million .. 11 July 2008– 10 July 2011
Assistance in export control of dual-use goods	To support the development of the legal framework and institutional capacities for the establishment and enforcement of effective export controls on dual-use goods, including measures for regional cooperation to help fight against the proliferation of WMD and related materials, equipment and technologies	BAFA (Germany)	~€5 million .. 19 Mar. 2008– 18 Sep. 2010
Knowledge management systems on CBRN trafficking	To improve the capabilities of participating states, neighbouring countries of the EU in South Eastern Europe and possibly the Caucasus, to combat the illicit trafficking and criminal use of CBRN materials	UNICRI	€1 million .. 31 Jan. 2008–30 Apr. 2010
Knowledge management systems on CBRN trafficking in North Africa and selected countries in the Middle East	To develop a durable cooperation legacy in the area of trafficking of CBRN materials	UNICRI	€1 million .. 16 Mar. 2009–15 Mar. 2011
Strengthening biosafety and biosecurity capabilities in Russia and in Central Asian countries	To address shortcomings in the safety and security practices of key biological facilities in Russia and selected Central Asian countries; to raise the skills of the personnel working at facilities handling dangerous biological agents or supervising those facilities; and to provide any additional equipment needed to ensure an adequate level of biosafety and biosecurity	ISTC	€6.8 million .. 21 Sep. 2009–21 Sep. 2012

Project	Project objective	Implementing agent	EU funding/ budget instrument/ time frame
Combating illicit trafficking of nuclear and radioactive materials in selected former Soviet Union and Mediterranean Basin countries and preparing border management activities in the Association of Southeast Asian Nations region	To reduce the threat of nuclear and radiation terrorism by providing assistance to partner countries in the improvement of technical and organizational measures for detecting trafficking in nuclear and radioactive materials	JRC	€6.7 million .. 2 Dec. 2009–1 Dec. 2012
Awareness raising for exporters regarding export control of dual-use goods.	To enhance the awareness and effectiveness of the export control of dual-use goods in the Russian Federation through information exchange with EU exporters, support industry and researchers, and seminars for exporters	Export Control Training Center (Russian independent non-profit organization for professional advancement)	€1 million .. 1 Sep. 2009–1 Mar. 2011
CBRN Centre of Excellence: First Phase	To set up a mechanism to strengthen the long-term national and regional capabilities of responsible authorities and to develop a durable cooperation legacy in the fight against the CBRN threat	UNICRI and JRC pilot projects	€5 million .. Under contracting (Dec. 2010)
Border monitoring activities in the Republic of Georgia, Central Asia and Afghanistan	To enhance the detection of radioactive and nuclear materials at identified border crossings and/or nodal points in the Republic of Georgia, at the southern borders of selected Central Asian countries with Afghanistan and at the airport of Kabul	JRC	€4 million .. 4 May 2010–4 May 2013
EpiSouth: a network for the control of health and security threats and other biosecurity risks in the Mediterranean region and South Eastern Europe	To increase biosecurity through capacity building in the Mediterranean region and South Eastern Europe	Istituto Superiore di Sanità, Rome (Italy)	€3 million .. 15 Oct. 2010–15 Apr. 2013
Redirection of former Iraqi WMD scientists through capacity building for decommissioning of nuclear facilities, including site and radioactive waste management <i>Under contracting (June 2011)</i>	To assist Iraq with the redirection of scientists and engineers possessing WMD-related skills and dual-use knowledge through their engagement in a comprehensive decommissioning, dismantling and decontamination of nuclear facilities	Calls for tenders will be launched	€2.5 million (Tender for procurement of equipment ongoing) 9 Aug. 2010– 9 Aug. 2013
Setting up a CBRN COE for Ukraine and the South Caucasus	To set up a CBRN COE for Ukraine and the South Caucasus	UNICRI	€0.5 million
Knowledge management system on CBRN risk mitigation: evolving towards a Mediterranean Basin COE	To integrate the existing knowledge management systems, namely for South Eastern Europe and for North Africa; and to prepare the evolution towards a COE in the Mediterranean Basin dealing with CBRN risk mitigation	UNICRI	€0.5 million
Biosafety and biosecurity improvement at the Ukrainian anti-plague station in Simferopol	To contribute to full implementation of the Biological and Toxin Weapons Convention in Ukraine, which includes the prevention of illicit access to pathogens by terrorists and other criminals	STCU	€4 million

Project	Project objective	Implementing agent	EU funding/ budget instrument/ time frame
Assistance in export control of dual-use goods	To continue the ongoing activities in this field in the countries already covered, with possible extension to other regions or countries	BAFA (Germany)	€5 million
<i>Commission Decision expected by Nov 2010 (as of June 2011 progress report)</i>			
CBRN Centres of Excellence: Second Phase	To set up three or four new COEs in the Middle East (and possibly the Gulf region), the Mediterranean Basin, Central Asia and Southern Africa; to set up extensions of the projects in South East Asia and in Ukraine and the South Caucasus; and to implement thematic projects in all priority 1 project areas		€21.5 million
Enhancing the capability of the IAEA Safeguards Analytical Service: the EU contribution to the new Nuclear Material Laboratory	To ensure that the IAEA has a strong independent analytical capability for safeguards in the future by means of expansion and modernization of the IAEA Safeguards Analytical Services		€ 5 million
Establishment of Mobile Laboratories for Pathogens up to Risk Group 4 in combination with CBRN Capacity Building in Sub-Saharan Africa	To implement two mobile laboratory units to diagnose up to Risk Group 4 infectious agents in sub-Saharan Africa and to implement one standby unit based in the EU for training purposes and to be deployed in other countries outside of the EU where these agents are endemic or outbreaks occur		€3.5 million
Strengthening biosafety and biosecurity capabilities in South Caucasus and in Central Asian countries	To raise the capabilities of the state organizations responsible for biosafety and biosecurity in target countries, in order to substantially improve the countries' biosafety and biosecurity situations		€5 million
<i>Other instruments</i>			
Border Management Programme in Central Asia	To provide technical and legal assistance and training to implement United Nations Security Council Resolution 1540 —on the region's borders with Afghanistan, China, Iran and Pakistan	United Nations Development Programme	€25.7 million .. 2003–10
Central Veterinary Diagnostic and Research Laboratory (CVDRL)	To provide technical assistance to design and build a new 1100m ² CVDRL in Kabul and to offer training to a team of 12 laboratory technicians on a wide range of diagnostic tests, largely focusing on parasitology, microbiology, serology and haematology	Call for tender launched in 2009	.. Development Cooperation Instrument ..

BAFA = Federal Office of Economics and Export Control; EU = European Union; CBRN = chemical, biological, radiological and nuclear; COE = centre of excellence; IAEA = International Atomic Energy Agency; INSC = Instrument for Nuclear Safety Cooperation; ISTC = International Science and Technology Center; JRC = Joint Research Centre; NMAC = Nuclear Material Accountancy and Control; STCU = Science and Technology Center in Ukraine; UNICRI = United Nations Interregional Crime and Justice Research Institute; WMD = weapon(s) of mass destruction.

Note: Although TACIS ended on 31 Dec. 2006, the implementation of the projects committed under the last action programmes will continue for a few years.

Source: European External Action Service (EEAS), Six-monthly progress report on the implementation of the EU Strategy against the proliferation of weapons of mass destruction (2011/I), June 2011.

APPENDIX C. CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR PROJECTS UNDER THE EUROPEAN COMMISSION'S SECOND HEALTH PROGRAMME, 2008-13

Acronym	Title action	Funding (€)
CARIMEC	Chemical and Radiation Inventory of Medical Countermeasures, for establishing an inventory of public health measures and medical countermeasures to respond to toxic industrial chemicals and radioactive threats and risks	243 610
CARRA-NET	Chemical and Radiation Risk Assessment Network, for establishing risk assessment networks of toxic industrial chemicals and radioactive threats and risks	249 534
EPISOUTH	Network for Communicable Disease Control in Southern Europe and Mediterranean countries < http://www.episouth.org >	
EPISOUTH PLUS	A Network for the Control of Public Health Threats and other biosecurity risks in the Mediterranean Region and Balkans < http://www.enpi-info.eu/mainmed.php?id_type=1&id=21308 >	900 000 (SANCO) 3 m. (DEVCO)
European Workshop on Ethics (conference)	Ethics in our preparedness against an influenza pandemic in Europe today < http://www.espace-ethique.org >	28 835.43
GESTURE (conference)	Global exchange of viral sequences to underpin response to health threats	31 610.37
HEIBL (conference)	Harmonizing European Initiatives of high-level Biocontainment Laboratories	20 938.50
QUANDHIP	Quality Assurance Exercises and Networking on the Detection of Highly Infectious Pathogens. Joint action reference laboratories of highly pathogenic bacteria and viruses	3.3 m. (under negotiation)
TUBIDU EC	Tuberculosis control	750 000 (under negotiation)
EU HEP screen EC	Viral hepatitis	800 000 (under negotiation)

Source: Health Threats Unit, DG SANCO.

APPENDIX D. SEVENTH FRAMEWORK PROGRAMME SECURITY PROJECTS SUPPORTED IN THE CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR FIELD

Project	Full name	Time frame (call)	Partners	EU contribution (total budget) (€)
BeSeCu	Human behaviour in crisis situations: A cross-cultural investigation in order to tailor security-related communication	(SEC-2007-6.1-02)	Czech Republic, Italy, Sweden Poland, Germany, the UK, Spain, Turkey	2 093 808 (2 446 144)
CAST	Comparative assessment of security-centred training curricula for first responders on disaster management in the EU	(SEC-2007-6.2-01)	Austria, Czech Republic, Spain, Sweden, Germany, Hungary, the UK	1 974 670 (2 858 318)
COCAE	Cooperation Across Europe for Cd(Zn)Te based security	(SEC-2007-1.3-01)	Greece, Germany, Ukraine, Spain, Finland, Latvia	2 037 610 (2 653 007)
COPE	Common Operation Picture Exploitation	SEC-2007-4.3-03) (SEC-2007-4.3-02)	Greece, Germany, Ukraine, Spain, Finland, Latvia	2 535 049 (3 886 574)
		SEC-2007-4.3-01)		

Project	Full name	Time frame (call)	Partners	EU contribution (total budget) (€)
CREATIF	CBRNE-related testing and certification facilities, a networking strategy	(SEC-2007-7.0-03)	Austria, the Netherlands, Germany, Sweden, Switzerland, France	831 300 (831 300)
SECUREAU	Security and decontamination of drinking water distribution systems following a deliberate contamination	(SEC-2007-1.3-05)	France, Finland, Portugal, the UK, Latvia	5 269 168 (7 462 072)
FRESP	Advanced first response respiratory protection	(SEC-2007-4.3-03)	Belgium, Germany, the Netherlands, the UK, Spain, Hungary	3 029 967 (4 032 757)
LOTUS	Localization of Threat Substances in Urban Society	(SEC-2007-1.3-03)	Sweden, the Netherlands, Greece, Denmark, Germany, Spain	3.189.146 (4.298.593)
MULTIBIODOSE	Multidisciplinary biodosimetric tools to manage high-scale radiological casualties	1 May 2010–30 Apr. 2013	Sweden, Belgium, Spain, Germany, Norway, France, the UK, Italy, Finland, Poland	3.493.199 (4.580.243)
CBRNEMAP	Road-mapping study of CBRNE demonstrator	1 June 2010–30 Sep. 2011	Sweden, Germany, the UK, France, Belgium, Italy, Czech Republic	1.376.185 (1.662.022)
DECOTESSC1	Demonstration of Counter Terrorism System-of-Systems against CBRNE phase 1	1 Apr. 2010–30 June 2011	The Netherlands, France, Austria, Germany, Spain, Belgium, Finland, Sweden	1.001.627 (1.587.642)
PRACTICE	Preparedness and Resilience against CBRN Terrorism using Integrated Concepts and Equipment	1 May 2011–31 Oct. 2014	Sweden, the Netherlands, Finland, Poland, the UK, Belgium Norway, France, Italy, Denmark, Czech Republic	8.424.029 (11.695.072)
BOOSTER	BiO-dOSimetric Tools for triageE to Responders	1 July 2010–30 June 2013	France, Spain, Hungary, Germany, Ireland	3.284.291 (4.583.559)
MULTISENSE CHIP	The laboratory-free CBRN detection device for the identification of biological pathogens on nucleic acid and immunological level as lab-on-a-chip system applying multisensor technologies	1 June 2011–31 May 2015	Germany, Spain, France, Slovenia	6.619.399 (8.986.775)
NMFRDISASTER	Identifying the needs of medical first responders in disasters	1 May 2008–30 June 2009	Israel, Spain, (West Bank and Gaza Strip), Czech Republic, the Netherlands, Italy, Denmark	815.079 (815.079)
TWOBIAS	Two Stage Rapid Biological Surveillance and Alarm System for Airborne Pathogenic Threats	1 July 2010–30 June 2013	Norway, Sweden, France, Czech Republic, Cyprus, the Netherlands	3.577.834 (4.935.083)
BIO-PROTECT	Ionisation-based detector of airborne bio-agents, viruses and toxins for fast alert and identification	1 June 2010–31 May 2013	France, Germany, Denmark, Finland, Lithuania, the UK	3.125.577 (3.960.812)
SAVEMED	Microstructure secured and self-verifying medicines	1 Apr. 2011–31 Mar. 2014	Germany, Italy, Switzerland, Ireland, Poland	3 144 724 (4 278 114)
RIBS	Resilient infrastructure and building security	1 Nov. 2011–31 Oct. 2013	The UK, Denmark, Israel, Greece, Sweden	3 321 957 (4 406 966)
SECURENV	Assessment of environmental accidents from a security perspective	1 May 2009–30 Apr. 2011	Hungary, Germany, Sweden	850 596 (1 205 870)

Project	Full name	Time frame (call)	Partners	EU contribution (total budget) (€)
UNCOSS	Underwater coastal sea surveyor	1 Dec. 2008– 31 July 2012	France, Croatia, Montenegro, Slovenia, Sweden	2 763 818 (4 119 638)
ESS	Emergency Support System	1 June 2009– 31 May 2013	Israel, France, the UK, Greece, Italy, Germany, Sweden, Spain, Czech Republic	9 142 126 (14 025 624)

^a Non-EU member state.

Source: Centre for Strategy and Evaluation Services, 'Ex-post Evaluation of PASR Activities in the field of Security and Interim Evaluation of FP7 Security Research: CBRN Case Study' (Centre for Strategy and Evaluation Services: Kent), Jan. 2011, pp. 7-8; and the CORDIS project database of FP7 research, <<http://cordis.europa.eu/search/index.cfm?fuseaction=proj.advSearch&refine=0A36E85C6BCD54E354D4093656EA1DE1>>.

ABBREVIATIONS

BTWC	Biological and Toxin Weapons Convention
CBM	Confidence-building measure
CBRN	Chemical, biological, radiological and nuclear
CFSP	Common Foreign and Security Policy
COE	Centre of excellence
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
CWC	Chemical Weapons Convention
DG	Directorate General
DG ENTR	Directorate General for Enterprise and Industry
DG HOME	Directorate General for Home affairs
DG SANCO	Directorate General for Health and Consumers
DG DEVCO	Directorate General for Development and Cooperation–EuropeAid
EU	European Union
FP7	Seventh Framework Programme
G8	Group of Eight
HCOC	Hague Code of Conduct
IAEA	International Atomic Energy Agency
IFS	Instrument for Stability
INSC	Instrument for Nuclear Safety Cooperation
IPR	Intellectual property rights
ISTU	International Science and Technology Center
JRC	Joint Research Centre
KMS	Knowledge management systems
OPCW	Organisation for the Prohibition of Chemical Weapons
PASR	Preparatory Action on the Enhancement of European Industrial Potential in the Field of Security Research
STCU	Science and Technology Center in Ukraine
TACIS	Technical Assistance to the Commonwealth of Independent States
UNICRI	United Nations Interregional Crime and Justice Research Institute
WMD	Weapon(s) of mass destruction

A EUROPEAN NETWORK

In July 2010 the Council of the European Union decided to create a network bringing together foreign policy institutions and research centres from across the EU to encourage political and security-related dialogue and the long-term discussion of measures to combat the proliferation of weapons of mass destruction (WMD) and their delivery systems.

STRUCTURE

The EU Non-Proliferation Consortium is managed jointly by four institutes entrusted with the project, in close cooperation with the representative of the High Representative of the Union for Foreign Affairs and Security Policy. The four institutes are the Fondation pour la recherche stratégique (FRS) in Paris, the Peace Research Institute in Frankfurt (PRIF), the International Institute for Strategic Studies (IISS) in London, and Stockholm International Peace Research Institute (SIPRI). The Consortium began its work in January 2011 and forms the core of a wider network of European non-proliferation think tanks and research centres which will be closely associated with the activities of the Consortium.

MISSION

The main aim of the network of independent non-proliferation think tanks is to encourage discussion of measures to combat the proliferation of weapons of mass destruction and their delivery systems within civil society, particularly among experts, researchers and academics. The scope of activities shall also cover issues related to conventional weapons. The fruits of the network discussions can be submitted in the form of reports and recommendations to the responsible officials within the European Union.

It is expected that this network will support EU action to counter proliferation. To that end, the network can also establish cooperation with specialized institutions and research centres in third countries, in particular in those with which the EU is conducting specific non-proliferation dialogues.

<http://www.nonproliferation.eu>



FOUNDATION FOR STRATEGIC RESEARCH

FRS is an independent research centre and the leading French think tank on defence and security issues. Its team of experts in a variety of fields contributes to the strategic debate in France and abroad, and provides unique expertise across the board of defence and security studies.

<http://www.frstrategie.org>



PEACE RESEARCH INSTITUTE IN FRANKFURT

PRIF is the largest as well as the oldest peace research institute in Germany. PRIF's work is directed towards carrying out research on peace and conflict, with a special emphasis on issues of arms control, non-proliferation and disarmament.

<http://www.hsfk.de>



INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES

IISS is an independent centre for research, information and debate on the problems of conflict, however caused, that have, or potentially have, an important military content. It aims to provide the best possible analysis on strategic trends and to facilitate contacts.

<http://www.iiss.org/>



STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

<http://www.sipri.org/>