# Switzerland and Cooperative Threat Reduction

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# **Introduction**<sup>1</sup>

An increasingly prominent item or concept on the international security and arms control agenda of the post-Cold War world is the one of 'Cooperative Threat Reduction' or CTR. CTR programmes have their origins in the immediate aftermath of the cold war, when the so-called Nunn-Lugar threat reduction programme was launched to safeguard weapons of mass destruction on the territory of the collapsing Soviet Union. Recently, however, such threat reduction efforts have gained much in salience with the emergence of international terrorism as a prime security 'western' countries. concern among subsequent to the terrorists attacks on the US on 11 September 2001. One core objective in the fight against terror, at least from the perspective of western countries, is to prevent terrorist and similar organisations from gaining access to weapons of mass destruction (WMD). Arguably the most telling sign of the growing importance attributed to CTR in this regard has been the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, an initiative which was launched by the G8 in June 2002, and which was subsequently joined by a number of other countries as Sweden, well. such as Norway or Switzerland. Under the Global Partnership, the participating states have pledged a total of 20 billion USD for threat reduction and WMD disposal projects to be carried out in Russia and other countries of the former Soviet Union.<sup>2</sup>

This paper provides an overview of recent and current involvement of Switzerland in CTR-type activities in the countries of the CIS and Central and Eastern Europe. CTR traditionally been seen as issue has concerning first and foremost the two (former) superpowers, a view which seems justified given that the US has been by far the most important actor and donor country in this area, and that by far the largest weapons disposal projects have been carried out in Russia. However, also other, including smaller, countries have been engaged in WMD disarmament assistance and other CTR-type efforts, and these have been conducted in other countries as well. As this paper will suggest, this is even true for Switzerland, despite the fact that Swiss security policy — under the traditional doctrine of 'armed neutrality' - was long considered to have practically no international or cooperative dimension, and as being concerned almost exclusively with ensuring the autonomous defence of the national territory. However, even though at least some smaller countries have made sizeable contributions to CT-typeR projects, very little attention has thus far been paid in the literature to their activities in this area.<sup>3</sup>

The paper is structured as follows. I begin with a few conceptual remarks on the notion of CTR. Second, I briefly outline the evolution of Swiss arms control and disarmament policy since the end of the cold war more generally, so as to provide a broader context for discussing Switzerland's

<sup>&</sup>lt;sup>1</sup> The author would like to thank Vitaly Fedchenko, Vladimir Orlov and Fred Tanner for their comments on earlier versions of this paper.

<sup>&</sup>lt;sup>2</sup> Information on the various efforts undertaken within this framework can be found on the website of the CSIS-led project *Strengthening the Global Partnership*, at: *http://www.sgpproject.org/*.

<sup>&</sup>lt;sup>3</sup> Vol. 3 of the CSIS publication *Protecting Against the Spread of Nuclear, Biological, and Chemical Weapons* (Washington: CSIS Press, 2003) contains brief overviews of CTR-type activities of all member countries (except Switzerland) of the Global Partnership, which now also includes a number of non-G8 countries. To date, no literature exists on Swiss activities in this area.

CTR-type activities. The bulk of the paper is then devoted to Swiss disarmament assistance and other CTR-like policies since the beginning of the 1990s. These can be roughly divided into two main areas: support for chemical disarmament on the one hand, and nuclear safety efforts, on the other. I throughout the argue that 1990s. Switzerland's involvement in disarmament assistance, at least if compared to the efforts of other small countries within the Global Partnership, have overall been rather modest, and largely confined to 'soft', i.e. environmental and social, aspects of WMD demilitarisation. By contrast, Switzerland has been rather active in the area of nuclear too safety-which underscores its traditionally main focus on non-military ---in this case: environmental — aspects. With Switzerland's most recent initiative on support for chemical weapons disarmament launched in 2002, however, its efforts in the field of WMD demilitarisation have been stepped up considerably, so that at least in the area of chemical weapons disposal Switzerland is set to play an increasingly important role.

# A Conceptual Note on CTR

The term 'cooperative threat reduction' or CTR, as already suggested above, was first used in reference to the Nunn-Lugar threat reduction programme, whose principal aim was to improve the safety of WMDs in the countries of the former Soviet Union and to prevent their diversion to potentially hostile states and other 'rogue' actors. A distinctive feature of CTR is thus the element of cooperation in that CTR projects typically involve activities carried out by one (or several) state(s) in support and on the territory of another state, with the consent of the recipient state.<sup>4</sup> However, the concept of CTR can also be said to have a broader meaning-not only in the sense that also

countries other then the US have been involved in CTR-type programmes (even if these have not necessarily been formally labelled as such) but also in that CTR-type projects have also been carried in pursuit of objectives other than non-proliferation and military security in the traditional sense of the term. One other significant area where CTR-type projects have been carried is environmental protection. In particular (smaller) European countries, for example within the 'Northern Dimension' of the EU's external relations, have tended to focus their policies towards the countries of the former Soviet Union more on 'soft' security issues which have no military dimension in the traditional sense, such as ensuring safe disposal of nuclear waste, dismantling of nuclear-powered submarines, which no longer pose any military threat, or upgrading the safety and emergency preparedness of nuclear power reactors.<sup>5</sup>

In addition, it can be noted that even in the context of actual weapons destruction projects, there is often a need to address environmental and social problems which are related to disposal efforts. For example, chemical and other WMD demilitarisation activities might pose, or might be perceived as posing, a serious health risk for the local population, which in turn could generate considerable resistance on the part of the local community against weapons disposal projects. Hence, a number of 'soft tools' might thus become necessary to successfully implement a project, such as information campaigns and other measures aimed at mediating between the local population and those engaged in constructing and running of disposal facilities.<sup>6</sup>

Given this multi-faceted nature of CTR, and the rather diverse objectives which have been pursued by CTR-type projects, this paper will adopt a broad definition of CTR which takes

<sup>&</sup>lt;sup>4</sup> Ian Anthony, *Reducing Threats at the Source. A European Perspective on Cooperative Threat Reduction* (Oxford: Oxford University Press, 2004), p. 6.

<sup>&</sup>lt;sup>5</sup> Anthony, *Reducing the Threats at Source*, pp. 16-20.

<sup>&</sup>lt;sup>6</sup> This is one of the main fields of activity of the Green Cross, which is discussed below.

into account not only directly weaponsrelated activities but also efforts aimed at alleviating non-military — e.g. environmental — challenges, or at addressing the social and environmental aspects of WMD disarmament.

# **Evolution of Swiss Arms Control and Disarmament Policy**

In order to put Switzerland's disarmament assistance and other CTR-type activities in a broader context, it is useful to briefly consider the evolution of Swiss arms control and disarmament policy more generally since the end of the cold war.

Throughout the post-world war II period, and up to the beginning of the 1990s, Switzerland generally adopted a rather passive and sceptical stance towards arms control and disarmament issues-an attitude which can Switzerland's be traced to traditional conception of security policy and in particular its doctrine of 'armed neutrality'. Under this doctrine, Swiss security policy was geared almost exclusively towards ensuring the autonomous defence of the national territory against military aggressions through mass mobilisation of the entire (male) population. Within this framework, arms control issues, as well as international cooperation on security matters more generally, were considered only marginally relevant for Swiss foreign and security policy. Indeed, prior to the mid-1990s, Switzerland had no national strategy or policy in the areas of arms control and disarmament, and there was no official document describing its position in this regard.<sup>7</sup>

<sup>7</sup> Laurent Götschel et al., *Schweizerische Aussenpolitik. Grundlagen und Möglichkeiten* (Zürich: NZZ Verlag, 2002), pp. 131-133; and Fred Tanner, *Die Schweiz und Rüstungskontrolle: Grenzen und Möglichkeiten eines Kleinstaates.* Zürcher Beiträge zur Sicherheitspolitik und Konfliktforschung, Nr. 14, pp. 15-17.

During the cold war, Switzerland did participate in multilateral arms control and disarmament processes, but it pursed a largely defensive and reactive strategy in this respect. At times, it was even outright opposed to international arms control initiatives. This was the case, for instance, for the Nuclear Non-Proliferation Treaty (NPT). Although Switzerland did eventually ratify this treaty, the country's military establishment was very critical of the agreement, as it did not want to rule out the acquisition of nuclear weapons bv Switzerland.<sup>8</sup> Switzerland's limited interest in arms control and disarmament issues was also evident in the lack of arms control experts within the Swiss administration. Thus, in the late 1980s, there was only one expert on disarmament issues in the Swiss Ministry of Defence, and the situation in the Ministry of Foreign Affairs was not much better.<sup>9</sup> As a consequence, it often proved difficult for Switzerland to take part in international arms control negotiations, and its contributions tended to be limited to general statements of policy.<sup>10</sup>

Over the 1990s, however, Switzerland's stance towards arms control and disarmament evolved considerably, and it began to play an increasingly active role in this area. A significant event in this respect was the breakthrough in the area of chemical weapons control in the early 1990s. When Switzerland realised that the intrusive inspection mechanisms set up by the Chemical Weapons Convention (CWC) would have a direct impact on the country's chemical industry, it started to become actively involved in the negotiations on this convention, as well as in the subsequent creation of the Organisation for the Prohibition of Chemical Weapons (OPCW)

<sup>&</sup>lt;sup>8</sup> Andrea Heinzer 'Swiss Arms Control Policy: From Abstention to Participation', in Jürg Martin Gabrial and Thomas Fischer (eds), *Swiss Foreign Policy*, *1945-2002* (Palgrave/Macmillan, Houndmills, Basingstoke 2003), pp. 160-163.

<sup>&</sup>lt;sup>9</sup> Tanner, Die Schweiz und Rüstungskontrolle, pp. 16-17.

<sup>&</sup>lt;sup>10</sup> Heinzer, 'Swiss Arms Control Policy', p. 168.

in The Hague, which is responsible for overseeing the implementation of the treaty.<sup>11</sup> Subsequently, Switzerland also played a rather important, and at times even pioneering, role in other disarmament processes, such as in the negotiations on the Protocol to strengthen the Biological and Toxins Weapons Convention, or in the areas of anti-personnel mines and small arms and light weapons.<sup>12</sup>

On a doctrinal or conceptual level, this increased activism in the area of arms control and disarmament went hand-in-hand with a considerable shift in the official understanding of the concept of security. In the latter half of the 1990s, the main principle of Swiss security policy was defined as security cooperation' 'flexible (flexible Sicherheitskooperation), which thus replaced the traditional concept of territorial defence of the homeland by autonomous means.<sup>13</sup> According to this new security doctrine, the main threats to the country are seen no longer in traditional inter-state conflicts and potential military invasions of the national territory. but rather in cross-cutting challenges such as weapons proliferation, terrorism, organised crime, mass migration and natural disasters. As a consequence, security policy is now no longer defined in strictly unilateral and predominantly military terms but is rather considered to require flexible cooperation with other countries on a broad range of both military and non-military security matters.

Within this new framework, arms control and disarmament policies have also come to be viewed as key elements of Swiss foreign and security policy.<sup>14</sup> Moreover, in 1996, the

Swiss government for the first time issued a document on Switzerland's policies in this area, and in 2000, it published its first comprehensive report on Switzerland's activities and policy objectives in the field of arms control.<sup>15</sup>

In these documents, the following are identified as Switzerland's main objectives in the areas of arms control and disarmament:

- implementation and strengthening of multilateral arms control regimes
- enhancing of export control for sensitive goods and technologies
- elimination of sources of conflict that might foster WMD proliferation

Noteworthy in this respect is also the considerable increase in the number of experts within the Swiss administration dealing with arms control and related questions. Thus, in the Ministry of Defence, the number of specialists working on arms control and disarmament issues had grown from one to six (including two persons stationed at the UN in Geneva and New York) between 1990 and 2000. Similarly, as of 2003, there were five persons within the Foreign Ministry working on arms control in the area of WMD, in addition to a number of others dealing with small arms, land mines and other conventional weapons.<sup>16</sup>

## **Swiss CTR Policies**

Switzerland's involvement in CTR-type efforts has shown a similar evolution as that of its arms control policies more generally. Just as Switzerland was relatively slow to incorporate the issue areas of arms control

<sup>&</sup>lt;sup>11</sup> Stefan Brem et al., *Abrüstungs- und Rüstungskontrollpolitik der Schweiz,* NFP 42 Synthesis, 2000, p. 12-15, 20.

<sup>&</sup>lt;sup>12</sup> Heinzer 'From Abstention to Participation', pp. 172-174.

<sup>&</sup>lt;sup>13</sup> Bericht des Bundesrates an die Bundesversammlung über die Sicherheitspolitik der Schweiz (SIPOL B 2000) vom 7.Juni 1999.

<sup>&</sup>lt;sup>14</sup> Bericht des Bundesrates an die Bundesversammlung über die Sicherheitspolitik der Schweiz (SIPOL B 2000) vom 7.Juni 1999, pp. 16-25.

<sup>&</sup>lt;sup>15</sup> Bericht des Bundesrates über die Rüstungskontroll- und Abrüstungspolitik der Schweiz vom 31. Januar 1996; and Bericht des Bundesrates über die Rüstungskontroll- und Abrüstungspolitik der Schweiz vom 30. August 2000.

<sup>&</sup>lt;sup>16</sup> Information provided Swiss Ministry of Defense and Ministry of Foreign Affairs, March 2004.

and disarmament into its security doctrine and policy, its activities in the field of disarmament assistance remained rather modest throughout the 1990s. In fact, until 2002, when Switzerland issued a first report on support for chemical weapons destruction, there was no official document and thus no formal legal basis for Switzerland's policies in this area.<sup>17</sup> Nevertheless, Switzerland has been involved in certain disarmament assistance projects since the beginning of the 1990s-although for the most part, these activities have not been directly weaponsrelated, but have rather focused on 'soft' aspects of weapons destruction efforts, such as protecting the local population from hazardous effects of disposal activities.

The other main area where Switzerland has undertaken certain CTR-type activities is the one of nuclear safety. Needless to say that here too environmental and not traditional military security concerns have been at the forefront. This generally stronger focus on environmental or social as opposed to military security aspects, and the fact that disarmament assistance was traditionally not really considered part of Swiss security policy, was also reflected in the fact that, until the end of the 1990s, the lead agency in the area of disarmament assistance (and other CTR-type activities) was the Swiss Agency for Development and Cooperation (SDC), in contrast to many other countries where CTRtype projects have fallen under the responsibility of the Ministry of Defence or the Ministry of Foreign Affairs.

In the following these two main domains where Switzerland has been involved in CTR-type projects — chemical weapons disposal and nuclear safety — are discussed separately.

#### Chemical weapons disposal

One main part of Switzerland's contribution to chemical disarmament throughout the 1990s has consisted in its support for projects of the Green Cross in this area. The Green Cross was established in 1993 by Mikhail Gorbachev with the aim of implementing the goals set out at the 1992 Earth Summit in Rio de Janeiro, and in particular to offer help across the world in the event of natural disasters. At the same time, the Swiss MP, Roland Wiederkehr, founded the World Green Cross to pursue the same objectives in Switzerland. In 1994, the two organisations merged to form Green Cross International.<sup>18</sup> Subsequently, national Green Cross organisations were set up in a number of countries, including the US and Russia. In Switzerland, the Green Cross is arguably the non-governmental organisation which enjoys the strongest links with the political system: it has its own parliamentary group, which in 2004 comprised 95 MPs in both chambers of parliament.

Since the early 1990s, the Swiss Agency for Development and Cooperation (SDC) has been financing projects of the Green Cross in the Russian Federation which have aimed at enhancing the transparency of chemical weapons destruction projects through awareness-raising and information campaigns. Within the framework of the socalled Legacy Programme, the Green Cross has been undertaking a broad range of projects in Russia (and elsewhere) to improve public involvement in the planning and implementation of chemical weapons destruction programmes. This has involved, for example, the organisation of public hearings in chemical weapons storage areas, the establishment of information centres and the publication of brochures for the local population providing information on chemical weapons destruction efforts. The Green Cross has also been conducting

<sup>&</sup>lt;sup>17</sup> Bundesrat, *Botschaft über die Unterstützung der weltweiten Chemieabrüstung vom 20. September* 2002.

<sup>&</sup>lt;sup>18</sup> For basic information on Green Cross International, see its website at:

http://www.greencrossinternational.net/index.asp.

research to examine the impact of such activities on the health of the local population as well as on the environment.<sup>19</sup> Switzerland has been allocating between 130,000 to 260,000 Euros per year to the Green Cross for such projects. As of 2002, Switzerland's total contribution to the Green Cross in this area amounted to some 2 million Euros.<sup>20</sup> Switzerland has also generally been one of the main sponsors of the Green Cross, financing about 10% of its total budget.<sup>21</sup>

Within the Swiss administration itself, the most important institution concerned with CTR-type activities in the chemical field has been the AC laboratory Spiez, which is part of the Ministry of Defence. The Spiez laboratory's main focus is on protection from NBC weapons. It examines current risks and threats in the field of NBC weapons, develops methods and technologies for protection against NBC threats, and provides assistance to other countries in the area of arms control and disarmament.<sup>22</sup> The Spiez generally laboratory enjoys а good international reputation, and it has repeatedly been appointed by the UN to carry out inspections. Moreover, it is nowadays one of twelve laboratories which have been designed by the Organisation for the Prohibition of Chemical Weapons (OPCW) for overseeing the implementation of the Chemical Weapons Convention (CWC). In terms of CTR or disarmament support, the main contribution of the Spiez laboratory has consisted in the training of chemical weapons inspectors, as well as the provision of certain technical equipment. Thus, over the 1990s, the Spiez laboratory trained some 150 inspectors from transition and developing countries, which is more than half of all

international inspectors charged with monitoring national chemical industries under the CWC. Since 1997, the Spiez laboratory has also been involved in certain projects of the International Science and Technology Centre in Moscow (ISTC), whose main objective is to reorient former scientists towards weapons peaceful scientific research.

While throughout the 1990s, Switzerland has generally not been directly involved in weapons destruction efforts, there has been one at least partial exception to this rule. Between 1999 and 2000. the Spiez laboratory, together with a Swiss chemical firm, carried out the so-called VETOXA project in Albania.<sup>23</sup> The objective of the project was to destroy some 20 tonnes of chemical agents which belonged to the Albanian army, and which were stored in a bunker outside Tirana. When the Albanian armed forces practically disintegrated in 1997, these substances came to be seen as a major health risk for the local populationalthough for the most part these were not actual chemical weapons but rather toxic substances which had been used by the Albanian army for training purposes. The VETOXA project was launched following a request by the Albanian military, which was first sent to NATO headquarters in Brussels, and then transmitted to Switzerland. For Switzerland, this was a rather unique project, as it carried out the entire destruction process, supported by minor contributions from Italy and the UK. The costs of VETOXA were initially estimated at about 1.3 million Euros, but the final bill climbed to more than 3.2 million Euros.

A significant change in Switzerland's traditionally rather passive attitude and limited involvement in WMD disarmament was initiated in 2000, whereby the impetus came not from the Swiss government but

<sup>&</sup>lt;sup>19</sup> For basic information on the Green Cross and its Legacy Programme, see its website at: http://www.gci.ch/GreenCrossPrograms/LEGACY

<sup>&</sup>lt;sup>20</sup> Oral information, Swiss Ministry of Foreign Affairs, March 2004.

<sup>&</sup>lt;sup>21</sup> Author interview with Head of Legacy Programme, Basel, February 2004.

<sup>&</sup>lt;sup>22</sup> For basic information on the Spiez laboratory, see its official website at: http://www.vbs.admin.ch/ls/.

<sup>&</sup>lt;sup>23</sup> For an in-depth description on Operation Vetoxa, see Labor Spiez, *VETOXA – Vernichtung toxischer militärischer Chemikalien in Albanien*, LS 2002-04.

rather from the parliament. In late 2000, the aforementioned Green Cross Parliamentary Group introduced an initiative in the Swiss parliament which called upon the considerably government to increase Switzerland's efforts in the field of chemical disarmament assistance, particularly in the Russian Federation.<sup>24</sup> The proponents of the initiative argued that Russia was incapable of carrying out its commitments under the Chemical Weapons Convention, and thus needed broad international assistance in dismantling its chemical arsenal. Switzerland should carry 2% of the overall costs of destroying Russia's chemical weapons. The supporters of the initiative pointed not only to the environmental hazards that emanated from Russia's chemical stockpile but also to the dangers of chemical agents falling into the hands of terrorists.<sup>25</sup> Notably, the Swiss government initially opposed the initiative, arguing that it went beyond Switzerland's financial capacities.<sup>26</sup> The proposal did, however, enjoy almost unanimous support in the Swiss parliament, thus making it binding on the Swiss government. One main drawback, however, was that, for budgetary reasons, the sum initially envisaged by the supporters of the initiative was reduced considerably, from 39 to 11 million Euros.<sup>27</sup>

In conjunction with the authorisation of these funds, the Swiss government also issued a comprehensive report on Switzerland's policies in the area of chemical disarmament support — the first and thus far only official document on Swiss disarmament assistance to date.<sup>28</sup> According to this document, not only the establishment and strengthening of multilateral arms control and disarmament regimes but also the destruction of all

weapons of mass destruction constitute core policy objectives of Switzerland. While the documents posits the basic principle that each member state of the Chemical Weapons Convention should bear the responsibility for destroying its own stockpiles, it also argues that, for both environmental and security reasons, Switzerland had an interest in supporting destruction efforts in countries such as Russia which are unable to meet their obligations under the CWC.<sup>29</sup> The report also lists possible projects and areas where Switzerland could become involved in. In contrast to its pervious activities in this field, the main emphasis is now put on 'hard' aspects of chemical destruction efforts, i.e. on the construction of disposal facilities (or the participation therein), although the report also mentions projects which might be described as 'soft tools', such as confidencebuilding measures and infrastructure projects which would be carried out in area were destruction facilities are being built.<sup>30</sup>

With the commitments of these increased funds. overall responsibility for Switzerland's policies in the area of chemical disarmament assistance has also been assigned to the Foreign Ministry, so that nowadays no longer the Swiss Agency for Development and Cooperation (which is part of the Foreign Ministry) but rather the Foreign Ministry as a whole plays the lead role in this regard. This too is indicative of the fact that disarmament assistance has come to be viewed more as an issue of 'high' (security) politics than as belonging to the 'low' politics of development assistance.

In 2003, Switzerland also joined the already mentioned G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, together with a number of other non-G8 countries such as Sweden, Norway and Finland. The 11 million Euros already committed to chemical weapons disposal where thus pledged within this multilateral

<sup>&</sup>lt;sup>24</sup> Motion Paupe 003519, 4 November 2000, 'Weltweite Chemieabrüstung'.
<sup>25</sup> Motion Paupe 003519, 4 November 2000, 'Weltweite

 <sup>&</sup>lt;sup>25</sup> Motion Paupe 003519, 4 November 2000, 'Weltweite Chemieabrüstung'.
 <sup>26</sup> Motion Paupe 003519, 4 November 2000, 'Weltweite

<sup>&</sup>lt;sup>26</sup> Motion Paupe 003519, 4 November 2000, 'Weltweite Chemieabrüstung', Stellungnahme des Bundesrates, 15. 11. 2000.

<sup>&</sup>lt;sup>27</sup> Tagesanzeiger, 18 September 2002.

 <sup>&</sup>lt;sup>28</sup> Bundesrat, Botschaft über die Unterstützung der weltweiten Chemieabrüstung vom 20. September 2002

<sup>&</sup>lt;sup>29</sup> Ibid, pp. 6660-6661.

<sup>&</sup>lt;sup>30</sup> Ibid, pp. 6672-6673.

framework. By joining the Global Partnership, the Swiss government sought not only to reinforce its commitment to chemical disarmament, but also to ensure better coordination between its own projects and those of other member countries of the Global Partnership.<sup>31</sup>

The first steps towards the implementation of actual weapons disposal projects in the Russian Federation were taken in late 2003 and early 2004. In January 2004, Switzerland signed a framework agreement with Russia on chemical weapons destruction projects under which 9.5 million of the total of 11 million Euros are to be spent. As of March 2004, contracts on the first two projects were about to be signed. These projects comprise both 'soft' and 'hard' aspects of chemical disarmament. The first project involves the construction of an air, water, and soil monitoring system in the vicinity of the Shchuchye destruction facility to gauge and prevent negative impacts of chemical disposal activities on the local population. Second, Switzerland is planning to cooperate with the Netherlands in a project to build a power-supply station for the disposal facility at Kambarka.<sup>32</sup>

## Nuclear safety

The other main area where Switzerland has been engaged in certain CTR-type activities since the beginning of the 1990s, has been the domain of nuclear safety. 'Nuclear safety' can be distinguished from 'nuclear security' efforts: while the latter are aimed at reducing the risk of weapons or weaponsgrade material being diverted and falling into the 'wrong hands', the objective of the former is to ensure that there is no undue risk to the health and safety of site personnel and the general public from the operation of nuclear installations, such as nuclear power plants, research reactors, or parts of the nuclear fuel cycle.<sup>33</sup> Comparable to the chemical field (at least as far as the 1990s are concerned), Switzerland's efforts in the nuclear domain have thus far not been weapons-related, but have rather focused on improving the safety of (civilian) nuclear power plants. Since the accident of Chernobyl in 1986, also in Switzerland there has been growing concern with the security of nuclear reactors on the territory of the former Soviet Union, and potential nuclear accidents — in particular in east and central Europe — are now also viewed as an important security challenge to the country.<sup>34</sup> As a consequence, Switzerland has been carrying out a number of both bilateral and multilateral projects aimed at upgrading the safety and emergency preparedness of nuclear power plants in the CIS and Central and East European countries.

Switzerland's largest bilateral project on nuclear safety thus far has been carried out in Russia, under the name SWISRUS. The project was initiated in the mid-1990s, and has been conducted by the Swiss Nuclear Safety Inspectorate in Villigen (Hauptabtleilung der für Sicherheit Kernanlagen, HSK), which is part of the Federal Department of Energy.<sup>35</sup> Its main objective has been to strengthen the nuclear supervisory authority of the Russian Federation by providing it with new analytical tools for risk analysis (so-called probabilistic safety analysis). The project has also focused more specifically on improving the security of the nuclear power plant in Novovoronezh. In 1997, the first phase of the project was completed, which examined the risk of an internally-induced accident in this

<sup>&</sup>lt;sup>31</sup> See the declaration on the website of the Swiss government, at:

http://www.eda.admin.ch/eda/g/home/foreign/secpe/intsec/t hemes/global.html.

<sup>&</sup>lt;sup>32</sup> Neue Zürcher Zeitung, 29 January 2004.

<sup>&</sup>lt;sup>33</sup> Anthony, *Reducing the Threats at Source*, p. 17.

<sup>&</sup>lt;sup>34</sup> Bericht des Bundesrates an die Bundesversammlung über die Sicherheitspolitik der Schweiz (SIPOL B 2000) vom 7. Juni 1999, pp. 19-20.

<sup>&</sup>lt;sup>35</sup> Swiss Agency for Development and Cooperation, Documentation About the Current Projects of Technical Assistance with the Countries of Eastern European and the CIS, p. 77.

reactor, while the second phase, which lasted from 1997 to 2002, also took into account accidents caused by external events.<sup>36</sup> In 2002, the project entered its third and final phase. By 2001, total funds allocated to this project by Switzerland amounted to some 1.6 million Euros.<sup>37</sup>

Subsequently, Switzerland has also been undertaking similar projects on nuclear safety in Slovakia and the Ukraine. These have been modelled largely on the SWISRUS project, but have been considerably smaller in size. In 1998, the SWISSLOVAK project was launched, which similarly to SWISRUS was aimed at strengthening the nuclear supervisory authority of Slovakia through the transfer of technical and management knowhow.<sup>38</sup> Its overall costs have amounted to about 520,000 Euros.<sup>39</sup>

The last of these bilateral projects to date was initiated in 2002 in the Ukraine (so-called SWISS-UKRAINE). Also this project has been aimed at improving the safety and emergency preparedness of Ukranian nuclear power stations. In the framework of SWISS-UKRAINE, Switzerland has been training Ukrainian nuclear safety experts and has been providing Ukraine with technical equipment for carrying out safety analyses of nuclear reactors.<sup>40</sup> In terms of finances, this has been the smallest of the three projects: its costs have thus far amounted to 64,000 Euros.<sup>41</sup>

In addition to these bilateral projects, Switzerland has also been engaged in multilateral initiatives on nuclear safety in the region. In September 2002, Switzerland set up the Centre for Nuclear Safety (CENS)

in Bratislava.<sup>42</sup> CENS is a regional centre specialised in the training of national nuclear supervisory authorities of the countries of the region. It carries out workshops and training courses for experts in the area of nuclear safety analysis, and provides support to the supervisory authorities of East and Central European countries. The already mentioned Swiss Nuclear Safety Inspectorate has been playing a lead role in the creation and running of the Centre, but also other agencies have been involved, such as the International Atomic Energy Agency (IAEA), GRS (Gesellschaft für Anlagen -und Reaktorsicherheit GmbH) and the Nuclear Regulatory Authority of the Slovak Republic. CENS is funded entirely by the Swiss government (through the SDC). In the first year of its operation, CENS's budget amounted to some 260,000 Euros.<sup>43</sup>

Finally, Switzerland has also been making a rather substantial contribution to the Nuclear Safety Account (NSA) of the European Bank for Reconstruction and Development (EBRD). The NSA, too, focuses on improving safety of nuclear powers plants in central and eastern Europe, as well as on promoting early closure of high-risk rectors. As of 1997, Switzerland's contribution to the NSA amounted to 10.9 million Euros.<sup>44</sup>

When in 2002, the Swiss parliament, as discussed previously, decided to considerably increase Switzerland's contribution in the area of WMD disarmament assistance, the Swiss Ministry of Defence also considered undertaking certain projects in the field of nuclear demilitarisation (which would have been carried out in collaboration with the ISTC in Moscow). However, when the credits initially envisaged by the Swiss parliament for weapons destruction purposes were reduced from 39 to 11 million Euros

<sup>&</sup>lt;sup>36</sup> HSK Jahresbericht 1998, p. 88.

<sup>&</sup>lt;sup>37</sup> Neue Zürcher Zeitung, 14.9.2001

<sup>&</sup>lt;sup>38</sup> HSK Jahresbericht 1998, p. 88.

<sup>&</sup>lt;sup>39</sup> Oral information, SDC, March 2004.

<sup>&</sup>lt;sup>40</sup> HSK Jahresbericht 2002, p. 76.

<sup>&</sup>lt;sup>41</sup> Swiss Agency for Development and Cooperation, Documentation About the Current Projects of Technical Assistance with the Countries of Eastern European and the CIS, p. 87.

 $<sup>^{\</sup>rm 42}$  For basic information on the CENS, see ist website at: http://www.censee.org

<sup>&</sup>lt;sup>43</sup> Oral information, SDC, March 2004.

<sup>&</sup>lt;sup>44</sup> WISE News Communique, 19 June 1998, http:// www.antenna.nl/~wise/493-4/account.html

(see above), such projects were no longer considered feasible, and Swiss policy-makers decided to concentrate their efforts solely on chemical disarmament support.<sup>45</sup>

# Swiss CTR Activities in Comparative Perspective

How, then, do Switzerland's CTR-type activities as presented above compare to those of other countries of similar size, or least those which have joined the already mentioned G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction? Beginning with Switzerland's involvement in disarmament assistance, it can be argued that, throughout the 1990s its efforts in this area has been rather modest. To be sure, the training and other activities of the Spiez laboratory can certainly be seen as an important contribution to chemical disarmament in transition (and developing) countries. Moreover, with the VETOXA project (carried out in Albania) Switzerland has also demonstrated that it is capable of independently carrying out an entire chemical disposal project. Nevertheless, the funds which Switzerland overall has allocated in this area have been rather limited. Adding the costs of VETOXA and the funds which Switzerland has been devoting to projects of the Green Cross in the field of chemical demilitarisation, suggests that, over the 1990s, Switzerland spent a total of some 5 million Euros on WMD disarmament assistance. In comparison, Norway allocated more than 22 million Euros to WMD demilitarisation (in addition to more then 70 million Euros spend on nuclear safety) over this period<sup>46</sup>, Sweden is estimated to have spent between 8 and 12 million Euros on non-proliferation-related projects between 1991 and 200247, and the Netherlands have earmarked some 11 million

Euros to chemical disposal projects, although these monies have not yet been disbursed.<sup>48</sup>

Noteworthy in this respect is also the lack of involvement of Swiss chemical companies in weapons destruction efforts. Despite the fact that the Swiss chemical industry is commonly considered one of the most technologically sophisticated in the world, and Swiss chemical firms play an important role in the implementation of the CWC, it seems that Swiss firms have to date not been engaged in any chemical weapons disposal projects. In part, this has of course been a consequence of the fact that, most countries providing disarmament assistance, favour their own companies in allocating projects. Another reason, however, seems to be that Swiss firms have generally made only very little efforts to develop technologies for chemical weapons disposal-which in turn has been a consequence of the fact that Switzerland itself never developed or possessed chemical weapons, and Swiss companies thus did not see any need to invest in such technologies.49

Similarly, Swiss companies also do not yet seem to have been involved in any 'brain drain' prevention projects in the Russian Federation, for example in the form of collaborative research projects which would allow former weapons scientists to use their knowledge for peaceful purposes, thus preventing them from selling their 'deadly expertise' to other countries or terrorists. This is despite the fact that it could be commercially very attractive for Swiss (and other 'western') companies to buy cheap but high quality research in Russia and other countries of the former Soviet Union, both in the chemical and biological fields.<sup>50</sup>

<sup>&</sup>lt;sup>45</sup> Tagesanzeiger, 18 September 2002.

 <sup>&</sup>lt;sup>46</sup> Morten Bremer Maerli, 'Norway', in *Protecting Against the Spread of Nuclear, Biological, and Chemical Weapons,* Vol. 3 (Washington: CSIS Press, 2003), p. 146.

<sup>&</sup>lt;sup>47</sup> Tor Larssson, 'Sweden', in: op. cit., p. 170

 <sup>&</sup>lt;sup>48</sup> Marianne van Leeuwen, 'Netherlands', in: *op. cit.*, p. 128.
 <sup>49</sup> Mauro Mantovani, 'Abrüstungstechnologien – Fachwissen und Potenziale der Bundesverwaltung und der schweizerischen Rüstungsindustrie' (undated).

<sup>&</sup>lt;sup>50</sup> According to some Russian experts, there actually seems to be a considerable 'brain drain' from Russia towards

However, with the 11 million Euros pledged by Switzerland within the framework of the Global Partnership, its contribution to disarmament assistance has roughly come to match that of other small countries within the Global Partnership, although it is located at the lower end of the spectrum. The table below shows the pledges of all non-G8 members of the Global Partnership which have officially declared their financial commitments.

### Global Partnership (GP) Pledges of non-G8 member countries (as of July 2004)

Country	GP Pledge	GDP (2003)	GP Pledge as Percentag e of GDP
Australia	€6 million	€431 billion	0.00139%
Czech Republic	€61,000	€129 billion	0.00005%
Finland	€15 million	€109 billion	0.0136%
Nether- lands	€24 million	€359 billion	0.00669%
Norway	€100 million	€122 billion	0.08197%
Poland	€122,000	€373 billion	0.00003%
Sweden	€26 million	€189 billion	0.01376%
Switzer- land	€11 million	€191 billion	0.00576%

Worth mentioning in this regard is also Switzerland's rapid conclusion of a framework agreement with Russia on chemical demilitarisation. Even though Switzerland joined the Global Partnership only in 2003, it succeed in finalising such an agreement as early as January 2004. This stands in considerable contrast to other member countries of the Global Partnership. Canada or France, for example, although—as G8 countries-members of the Global Partnership from the very beginning, have to date still not managed to conclude a framework agreement with Russia in this area. According to Russian experts, the successful conclusion of such an arrangement by Switzerland has been mainly due to the fact that Switzerland, in contrast to certain other countries, has not been overly demanding in terms of being exempted from liabilities (e.g. Switzerland accepted to be liable for 'premeditated' damage), as well as due to its 'pragmatic' and 'apolitical' approach and the fact that Switzerland has not attempted to link its assistance to any other issue areas.<sup>51</sup>

Somewhat in contrast to the area of disarmament support, Switzerland's efforts in the field of nuclear safety can be said to have been rather substantial in international comparison already from the beginning of the 1990s. At least this is the conclusion which can be drawn from comparing the contributions of individual countries to the already mentioned Nuclear Safety Account (NSA) of the EBRD. By the end of 1997, Switzerland's contribution (10.9 million Euros) was the highest of all smaller countries, more than twice as high as the contributions of Denmark (4 million Euros), Finland (4 million Euros), the Netherlands (4.2 million Euros) or Norway (4 million Euros)—although it should also be noted that some Nordic countries, and in particular Norway, have also spent large sums on bilateral nuclear safety projects. Among smaller countries, only Sweden (9 million Euros) has contributed comparable amounts to the NSA.<sup>52</sup>

Switzerland in that many former weapons scientists are reported to have left for Switzerland.

<sup>&</sup>lt;sup>51</sup> Author interview with members of PIR Centre, Moscow, April 2004.

<sup>&</sup>lt;sup>52</sup> Wise News Communique, 19 June 1998.

### **Conclusions and Prospects**

The aim of this paper has been to discuss Switzerland's current and past involvement in disarmament assistance and other CTRtype activities in central and eastern Europe and CIS countries. In Switzerland, just as in most other 'western' countries, the issue of WMD proliferation has rapidly moved to the top of the country's security agenda over the 1990s, and these concerns have received and additional boost with the terrorist attacks on the US on 11 September 2001. As a consequence, Switzerland has also become increasingly involved in CTR projects, despite the fact that arms control and disarmament issues were long considered only marginally relevant for Swiss foreign and security policy. In the field of disarmament assistance, however, it can be said to have had a rather slow start: throughout most of the 1990s, Switzerland's contributions in this regard remained rather modest. On the other hand, in the area of nuclear safety, where of course environmental and not military security concerns predominate, Switzerland been rather active already from the beginning of the 1990s. One main reason for this difference can arguably be seen in the fact that in the 'functional' area of nuclear safety it has proven easier for Switzerland to reach beyond its national territory and actively engage with other countries, than in the more directly security-related field of WMD disarmament, where its traditionally strong fixation on the national territory seems to have hampered such efforts.

Nevertheless, the fact that Switzerland is now non-negligible devoting resources to chemical weapons disposal in the Russian Federation, and that it has decided to disburse these funds with the multilateral framework of the Global Partnership, are clear signs that this legacy is gradually losing its grip on Swiss foreign and security policy. Moreover, on the positive side it is also recalling Switzerland's worth swift conclusion of a framework agreement with

Russia on chemical disarmament assistance and the considerable progress it has already made in implementing actual projects. This suggests that Switzerland's traditionally apolitical and pragmatic approach to foreign and security policy matters might bear certain significant advantages in the field of CTR, where pragmatism and the setting aside of 'political' considerations are often key to success.

Needless to say, however, that Switzerland could still do more in this area. Among Global Partnership countries, as pointed out above, Switzerland's contribution is clearly on the lower end of the spectrum. Additional funds for dismantling or improving the security of weapons and materials of mass destruction in the Russian Federation (and elsewhere) are also sorely needed. In the area of chemical weapons disposal alone, for instance, the shortfall is currently estimated at some 6 billion USD. Moreover, as of June 2004, the financial goals of the Global Partnership were still not met, with some 3 billion USD remaining unpledged.<sup>53</sup>

Increasing Switzerland's contributions to disarmament assistance would also seem both sensible and feasible if one considers that Switzerland is the European country which currently spends the most on civil protection (home defence)—an instrument which in Switzerland as well is increasingly seen as a crucial in confronting WMD terrorism (and natural catastrophes), as opposed to interstate warfare in the 'traditional' sense. Thus, according to a study undertaken in 2000, Switzerland had the highest expenditures on civil protection in Europe, with 180 CHF per person.<sup>54</sup> In the late 1990s, Switzerland spend some 300 million CHF per year in this area. Given these considerable sums, the question can be

<sup>&</sup>lt;sup>53</sup> Strengthening the Global Partnership, *Global Partnership Scorecard*, May/June 2004.

<sup>&</sup>lt;sup>54</sup> *NZZ*, 13 July 2001. In comparison, Sweden spent 121 CHF, Finland 98 CHF, Austria 74 CHF, France 68 CHF and Germany 63 CHF per person.

raised whether it would not make sense to spend at least a small part of the funds currently allocated to civil protection on disarmament assistance. Among experts it is commonly agreed that the most effective and least expensive way to deal with WMD terrorism is to tackle the problem already 'at source', i.e. to prevent weapons and dangerous materials from falling into the wrong hands, instead of managing the consequences after an attack has occurred. However, in Switzerland, this linkage between disarmament assistance/CTR on the one hand, and civil protection on the other, and the fact that the former can be a costeffective contribution to the latter still seems insufficiently acknowledged.

Finally, it would be worth considering not Switzerland's only whether official institutions but also Swiss chemical or pharmaceutical companies could not play a greater role in CTR-type projects, in particular with regard to the redirection of former weapons scientists in the framework of programmes carried out by the ISTC. As suggested previously, currently no Swiss companies seem to be involved in such projects, neither in the chemical nor the biological field. There might of course be a number of reasons for why Swiss companies have thus far not shown any interest in acquiring research in the countries of the former Soviet Union. On the other hand, the inactivity of Swiss authorities in this regard is also worth noting: to date no efforts seem to have been made to inform Swiss companies about the potential benefits of qualified but comparatively inexpensive research that could done on their behalf in the Russian Federation — research which would at the same time constitute an important contribution to preventing a 'brain drain' towards potentially hostile countries and terrorist organisations.