



Denmark and Modern Non-proliferation Assistance and Disarmament

October 2009

Many countries address the proliferation of weapons of mass destruction by cooperatively allocating money, resources and expertise into projects.

This DIIS Policy Brief outlines the specific areas where Denmark has the potential to expand on its already well-established expertise to develop a niche non-proliferation and disarmament programme.

The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction was established by the Group of Eight (G8) industrialised nations at the 2002 G8 Summit in Kananaskis, Canada, with a total financial commitment of up to US\$20 billion over ten years in support of cooperation projects to address non-proliferation, disarmament, counter-terrorism and nuclear safety issues. The Global Partnership (GP) has since developed into a large-scale effort with over 20 partner countries participating to varying degrees. In 2008, Leaders expanded the GP beyond countries of the former Soviet Union (FSU) to address global proliferation risks and anticipate the 2010 Summit to include an extension of the GP for another 10 years. Denmark's contributions to the initiative total over 18 million EUR, but no new commitments have been announced since 2004. Leading up to the 2010 Summit, Denmark has an opportunity to discuss its role in the newly expanded and extended partnership and raise its international non-proliferation and disarmament profile. This DIIS Policy Brief examines areas of Danish expertise and capacity and makes 10 recommendations for Denmark to develop a niche GP programme.

TEN POLICY RECOMMENDATIONS FOR DANISH NON-PROLIFERATION AND DISARMAMENT ASSISTANCE:

- 1 Fund Green Cross outreach offices in support of chemical weapons destruction projects in Russia.
- 2 Take the lead on a project to develop a chemical risk assessment methodology.
- 3 Since all decommissioned Russian submarines should be dismantled by 2010, this is not an area that DK should consider as a future priority.
- 4 Await results of the Global Partnership review and funding decisions by the members of the two science centers to discern the potential for long-term funding.
- 5 Wait and see approach to determining whether additional funds will be required by project partners on the disposition of fissile material.
- 6 Partner through "piggybacking" with others in the area of nuclear safety and security projects in Russia.
- 7 Utilise the National Board of Health/ National Institute of Radiation Protection expertise in creating databases for radioactive sources and export control drafting and implementation.
- 8 Include funding for the IAEA's Nuclear Security Fund (NSF) as GP funding.
- 9 Establish a Danish 'niched' programme in the area of biological non-proliferation.
- 10 Establish a targeted chemical and biological non-proliferation education programme.



1. CONTINUE GREEN CROSS FUNDING

Donor countries have been supporting the efforts of Green Cross International to provide independent and objective information about Russia's chemical weapons (CW) destruction programme to the populations living in close proximity to CW storage and destruction facilities. Green Cross' programs and outreach offices provide grassroots education about chemical disarmament projects, and address public concerns and anxieties about related health, environmental, economic and social issues. Canada, Denmark, Italy, Switzerland, UK, and US have provided funding to Green Cross for facilitation of public involvement through outreach offices. Denmark provided 255,000 EUR between 2002-2004 for three outreach offices in Maradykovsky (Kirov Oblast), Kambarka (Udmurtia), and Bryansk. Committing additional funding for 1-2 outreach offices from 2010 to 2012 would further complement past Danish funding as well as projects currently undertaken by major donors at Russia's CW destruction facilities.

2. DEVELOP A CHEMICAL RISK ASSESSMENT METHODOLOGY

Memories of the 1995 Sarin attacks in the Tokyo subway, which killed 12 people and sent thousands to hospital, remind of the need to consider the degree of risk associated with certain chemicals and whether preventive measures can be designed. The First and Second Review Conferences of the Chemical Weapons Convention (CWC) reaffirmed concerns that "chemical facilities may be subject to attacks or other incidents that could lead to the release or theft of toxic chemicals." Denmark could consider taking the lead for a project to develop a method for classifying high risk chemical agents and their potential for being used for malicious purposes, and assess the vulnerability of facilities where chemicals are produced, used or stored and the risks connected with transport. This risk assessment methodology in turn could be applied to specific situations, countries and facilities and potentially lead to a cost-benefit study, which would form the basis for a decision on how the issue of chemical security could be incorporated into the work of the Organisation for the Prohibition of Chemical Weapons (OPCW) and the Global Partnership after 2012.

3. DISMANTLING DECOMMISSIONED SUBMARINES NOT A FUTURE PRIORITY

Identified as a priority in 2002, the dismantling of decommissioned nuclear submarines in both Northwest Russia and Russia's Far East has undergone substantial progress. According to current dismantling rates by Russia and donors, all decommissioned nuclear submarines should be dismantled in 2009/2010. Large donors do not plan to focus on submarine dismantlement after 2012, although some will shift focus to the safe removal of spent nuclear fuel. Since these submarines should be dismantled by the end of 2010, this is not an area that should be considered as a future priority for Denmark.

4. AWAIT GP REVIEW RESULTS BEFORE CONSIDERING LONG-TERM FUNDING OF SCIENCE CENTERS

After the fall of the Soviet Union, tens of thousands of weapons scientists were immediately left unemployed or underemployed, increasing the risk of proliferation of their expertise. Aware of the human potential, Canada, EU, Japan, Sweden, the US and other countries funded close to 4,000 research projects through the International Science and Technology Center (ISTC) in Moscow and the Science and Technology Center in Ukraine (STCU) in Kiev to reemploy former weapons scientists in peaceful scientific work. In all, over 58,000 weapons scientists, technicians and engineers across the former Soviet Union have been engaged through the ISTC and 24,000 through the STCU. The long-term viability of the centers, however, remains questionable since situations for scientists are improving for the better in the region generally (but not uniformly) and former weapons scientists are retiring. It is likely that a review of funding for these centers will be made as part of an overall GP review that is expected in 2010; therefore Denmark should await the results before considering whether to fund projects at the centers.

5. 'WAIT AND SEE' APPROACH TO DISPOSITION OF FISSILE MATERIALS FUNDING

The Multilateral Plutonium Disposition Group (MPDG) was set up in 2002 as a G8 working group to decide on the conditions for carrying out the Russian weapons-grade plutonium disposal program. In September 2000, the US and Russia concluded an agreement declaring that each had 34 tonnes of surplus weapons-grade plutonium, unsuitable for nuclear weapons, to be destroyed over a 17-year period. The Russian section of this programme was decided to be financed internationally as part of the GP. Negotiations regarding the project's terms have been ongoing for years however and have not yet reached a conclusion. It is therefore recommended that Denmark take a 'wait and see' approach and decide whether project partners will require additional funds when MPDG negotiations have been successfully concluded.

6. PARTNER THROUGH "PIGGYBACKING" IN THE AREA OF NUCLEAR SAFETY AND SECURITY PROJECTS IN RUSSIA

Despite the global expansion of the GP, the G8 focus in the nuclear area remains primarily on Russia, where over half of the sites in the country still require nuclear safety and security upgrades, and where the Kola Peninsula has at least 100 storage sites for nuclear and radioactive material that lack necessary required material accountancy. Since Denmark is not a nuclear energy state, it lacks the human resources and capacity required for bilaterally engaging in nuclear safety or security projects in Russia. This does not mean that Denmark cannot provide critical support to nuclear safety and security assistance since it can begin

“piggybacking” with other countries such as Canada, Sweden or the UK which have been already engaged in such assistance projects for 5-10 years. This would allow for the implementation of projects by the other donor partner on behalf of Denmark, while also providing Denmark an increased role and experience in safety and security programming (i.e. identifying/ prioritising projects and sitting at the table with trilateral partners).

7. ASSIST WITH EXPORT CONTROL IMPLEMENTATION AND DATABASES FOR RADIOACTIVE SOURCES

Outside of Russia, a potential niche area for Danish assistance lies in creating a national radioactive sources database and developing export controls. The Danish National Institute of Radiation Protection (*Statens Institut for Strålebeskyttelse*) has unique expertise in the creation of a national database which tracks the some 11,000 radiation sources in Denmark. Many states with similarly limited nuclear and radiological sectors need registries of the small amounts of nuclear materials that are used, stored or transferred through their territories (i.e. Kyrgyz Republic, Tajikistan, smaller countries in Africa and Asia etc). The Institute of Radiation Protection is also responsible for national legislation and could play a role in assisting other countries in drafting and implementing radiation legislation and export controls. Denmark’s export control system has always placed great emphasis on dialogue and cooperation with industry, which is increasingly being recognised as indispensable to efficient export control enforcement. Denmark’s distinctive edge in government/ industry export control cooperation could be further developed into an export control industry outreach ‘module’ that could be offered and adapted in the frame-work of existing export control assistance programmes (such as those in Canada, UK, Germany etc).

8. CATEGORISE IAEA’S NUCLEAR SECURITY FUND AS GLOBAL PARTNERSHIP FUNDING

Denmark contributed 7 million DKK to the IAEA NSF in 2007-08. These funds were earmarked for NSF’s activities in Asian developing countries. In addition, Denmark allocated 3 million DKK in 2009 to be spent on NSF-activities in Asia, including Pakistan and South Asia. Denmark lists these funds outside its GP funding, whereas GP donors such as Canada, Germany, the UK and US list NSF funding as GP funding. For Denmark to do the same would not require any additional resources: it would only entail funding input to G8 Summits, which would then be reflected in annual GP country funding lists. If Denmark is to seriously consider a GP programme, the inclusion of NSF funding would benefit overall programming. Without an overarching framework, the funding would risk losing its coordinated function.

9. ESTABLISH A DANISH GP NICHE PROGRAMME FOCUSED ON BIOLOGICAL NON-PROLIFERATION

It is in the area of biological non-proliferation assistance that Denmark can truly provide a specialised niche programme that would complement the work of the larger donors, Canada, UK and US, particularly in the areas of disease surveillance, development of biosafety/biosecurity and export control legislation and regulatory processes, training, and non-proliferation education. The *Statens Serum Institute* (SSI) is a national and regional leader in these areas on the human health side and the Danish Veterinary and Food Administration (FVST) on the animal and agricultural level. This niched programme should focus on countries where large donors are dedicating their efforts on infrastructure and laboratory capacity, thereby providing an already existing administrative skeleton on which to build. It is recommended that discussions with Canada, UK and US be undertaken to help further identify specific areas of collaboration with a view to establishing a coordinated and complementary programme.



Photo: Cindy Vestergaard

10. ESTABLISH A CHEMICAL AND BIOLOGICAL NON-PROLIFERATION EDUCATION PROGRAMME

Not all chemists and biologists are aware of the two conventions; therefore there is a need to inform them about the treaties, their responsibilities and the choices they may have to face in their careers. Denmark has the capability to develop its expertise into a small niched chemical and biological weapons non-proliferation education programme, which would complement large donor biological assistance as well as the awareness programme in Sweden which



DENMARK FUNDING TO DATE

Project Country	Project Description	Funds Committed in 000's EUR	Funds* Expended in 000's EUR
Russia	Nuclear Safety, radiation protection and emergency planning (Leningrad Nuclear Power Plant)	(2000-2001) €1.770	€1.770
Russia	Bellona Report: Security Nuclear Waste in Northwest Russia	(2001) €67	€67
Russia	Green Cross CW public outreach programme	(2002-2004) €255	€255
Various	European Bank for Reconstruction and Development (EBRD) Northern Dimension Environmental Programme (NDEP) – Danish contribution to the fund	(2002 -) €10.000	€10.000
Ukraine	Contribution to the EBRD Chernobyl Decommissioning Fund	(2001) €2.480	€2.480
Lithuania	Contribution to the EBRD Ignalina Decommissioning Fund ^{†**}	(2001) €2.680	€2.680
	2004-contribution to the EBRD NDEP Fund nuclear window (after joining G8 GP)	(2004 -) €1.000	€1.000
Total		€18.252	€18.252

*All commitments are assumed expended, but only commitment, not expenditures are comprised within the Danish database.

**Denmark has allocated an additional DKK 80,000,000 to the closure of Ignalina

Source: GPWG Annual Report 2008 Consolidated Report Data: Annex A, see http://www.g8.gc.ca/pdf/G8_Global_Partnership_annex-eng.pdf

focuses on nuclear non-proliferation. Examples of awareness and education projects include hosting one or two 6-month Masters and/or PhD internships from the FSU on non-proliferation and disarmament research at the Danish Institute for International Studies (DIIS), and devising (with relevant national authorities) programs and teaching tools to educate scientists, engineers, technicians as well as students of political science, law, etc on their obliga-

tions under the CWC and Biological Weapons Convention within and outside Denmark.

Cindy Vestergaard
Research unit on defence and security
cve@diis.dk



DIIS · DANISH INSTITUTE FOR INTERNATIONAL STUDIES

Strandgade 56, 1401 Copenhagen, Denmark · Tel +45 32 69 87 87 · Fax + 45 32 69 87 00 · e-mail: diis@diis.dk · www.diis.dk