



**GLOBAL PARTNERSHIP WORKING GROUP (GPWG)**

**RECOMMENDATIONS FOR A COORDINATED APPROACH IN THE FIELD OF  
GLOBAL WEAPONS OF MASS DESTRUCTION KNOWLEDGE PROLIFERATION  
AND SCIENTIST ENGAGEMENT**



## RECOMMENDATIONS FOR A COORDINATED APPROACH IN THE FIELD OF GLOBAL WEAPONS OF MASS DESTRUCTION KNOWLEDGE PROLIFERATION AND SCIENTIST ENGAGEMENT

### Introduction

1. Following the G8 Kananaskis Statement adopted in Canada in 2002 launching the Global Partnership against the Spread of Weapons and Materials of Mass Destruction (WMD), a number of countries adopted the Principles and the Guidelines for New and Expanded Cooperation Projects, and pledged up to 20 billion dollars to support specific projects related to non-proliferation, disarmament, counter-terrorism and nuclear safety issues. The priority areas identified were: the destruction of chemical weapons, dismantling of decommissioned nuclear submarines, disposition of fissile materials and engagement of former weapons scientists.

2. The proliferation of WMD expertise, or any sensitive knowledge in the chemical, biological, radiological, and nuclear (CBRN) areas, remains a serious concern.

Preventing the illicit use of such knowledge is one of the most difficult non-proliferation challenges to address, as we are dealing with scientists, engineers and technicians who, in some cases (those doing biological research, for instance), may not consider their expertise and current activities as potentially vulnerable to misuse by others for whom their “proliferation-critical” knowledge could represent a route to developing a WMD capability. They should be made aware that their legitimate work could have dual-use applications and be diverted for malicious purposes.

3. Under the umbrella of the Global Partnership, projects addressing the human dimension of proliferation have thus far focused on engaging former WMD scientists in the development of sustainable non-weapons-related R&D and commercial activities.

The lessons learned, mainly by the International and Science Technology Centre (ISTC) in Moscow and the Science and Technology Centre in Kiev, and also by other bilateral programmes of technical and financial assistance, could be used – with the necessary adaptations to different cultures and working conditions – to shape appropriate new projects outside the G8 countries, as a way to contribute to global non-proliferation efforts.



4. Closer attention is now needed to engaging scientists<sup>1</sup> and raising awareness and responsibility among them, to prevent their knowledge in legitimate scientific disciplines to be diverted for unintended malicious purposes, and to strengthen frameworks within which to prevent the spread of sensitive information and to promote collaborations to advance common non proliferation objectives.

It is expected that an increasing number of projects in new geographical areas will be directed toward fostering awareness<sup>2</sup> of the multiple uses of high risk materials and sensitive know-how and technologies, thereby contributing to a risk-conscious culture among scientists at all levels.

5. Chemical, biological, radiological and nuclear research and applications are receiving growing attention in this perspective. Education and training are becoming increasingly important, notably in areas where the knowledge and expertise are rapidly advancing.

6. A suitable co-ordinated approach would enhance international collaborations and enable them to take place in an effective manner. The following recommendations are designed to be taken into consideration in implementation of projects outside the G8 countries in the field of WMD related knowledge proliferation prevention and scientist engagement, also in view of spurring initiatives in new geographical areas.

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<sup>1</sup> Scientists: Individuals at all levels in possession of proliferation-critical knowledge, including engineers and technicians having technological skills or WMD-related knowledge or any dual-use expertise in sensitive CBRN areas of proliferation concern.

<sup>2</sup> Awareness: a set of measures aimed at promoting a culture of awareness and responsibility among scientists, as defined above, in order to prevent the use of their knowledge for unintended and illegal purposes; enhancing the safety and security of scientific facilities and installations, including access to them.



## RECOMMENDATIONS

### I. Shared Principles

1. Technological development calls for effective and cross-cutting non-proliferation policies, in order to face new challenges to international peace and security.
2. The spread of proliferation-critical knowledge is taking place at a rapid pace and over an ever wider geographical area, resulting in new potential risks regarding their illicit use.
3. The human factor is a key element in any effective non-proliferation policy. Scientists with specific knowledge on sensitive CBRN related technologies, including dual-use technologies, play an important role in this respect, for example in working together on projects that advance international, regional, or bilateral non-proliferation objectives.
4. Scientist engagement and non-proliferation awareness-raising programmes, reinforcing scientists' professional responsibility and codes of ethics, can be effective risk-reduction tools.
5. Principles and guidelines of "the G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction", adopted in Kananaskis, constitute the fundamental reference of these recommendations.

### II. Objectives

These recommendations aim at improving coordination among countries already engaged, or willing to become involved, in the prevention of WMD knowledge proliferation and in scientist engagement programmes. The main objective is the more effective use of resources by avoiding the duplication of efforts and by helping identify unaddressed areas of common concern and new partner states. More specifically, countries are encouraged to:

- periodically consult each other to assess developments in the international economic and geopolitical context, and emerging risks and needs;
- consult one another in the preparation and implementation of projects for prevention of WMD knowledge proliferation and for scientist engagement;
- share best practices and the lessons learned in implementing such projects and identifying the challenges that have surfaced;



- identify problems related to the human dimension of proliferation, that could be tackled more effectively through international bilateral and multilateral cooperation;
- identify potential areas of collaboration to best utilize the unique skills of CBRN experts for civilian purposes;
- implement bilateral and multilateral projects on a voluntary basis.

### III. General Considerations

Project planning should include, as appropriate, the following considerations:

- compliance with national and international provisions in the field of non proliferation, including, inter alia, UNSCR 1540;
- close cooperation with UN, IAEA, OPCW, BTWC in the exchange of information, knowledge and expertise, as needed;
- promotion of international collaboration among scientists to facilitate their integration into the global scientific community and to advance common non proliferation objectives;
- identification of beneficiaries and partners, scientific and technological infrastructures, and means for achieving objectives;
- development of sustainable partnerships with relevant state authorities and scientific institutions in the country or region in which the specific program applies;
- development and adoption of codes of conduct and of awareness raising tools in the scientific education at the national level;
- encouraging awareness of issues relating to transfers/exports of proliferation sensitive goods/technologies/information;
- protection of intellectual property rights and other related matters as provided by the Kananaskis Guidelines;
- access to installations, facilities and sites, granted by the country where the project is to be carried out, as provided by the Kananaskis Guidelines;
- safe and secure disposal of obsolete laboratory equipment and materials;
- proper utilisation of relevant ISTC and STCU experience and expertise and appropriate application of the resulting lessons;
- encouragement, when possible, of a proactive private sector role along with commercialisation of scientific results.



#### **IV. Implementation and follow-up**

The Global Partnership Working Group encourages:

- States which plan to launch projects in the field of WMD knowledge proliferation and scientist engagement to consider these recommendations;
- Interested Global Partnership members to organise workshops and technical meetings.

The GPWG will consider, as appropriate, reviewing the effectiveness of these recommendations for the implementation of specific projects in the area of global WMD knowledge proliferation and scientist engagement.