An illusion of safety: Challenges of nuclear weapon detonations for United Nations humanitarian coordination and response

A UNIDIR study in cooperation with the Office for the Coordination of Humanitarian Affairs and the United Nations Development Programme

This study examines one of the conclusions of an international conference on the humanitarian impacts of nuclear weapon detonations held in Oslo, Norway, in March 2013 that "It is unlikely that any state or international body could address the immediate humanitarian emergency caused by a nuclear weapon detonation in an adequate manner and provide sufficient assistance to those affected. Moreover, it might not be possible to establish such capacities, even if it were attempted."

- The UNIDIR study describes the current humanitarian system, and considers challenges for its activation and operation in the face of a range of plausible, illustrative nuclear weapon detonation scenarios.
- As a scoping exercise the study identifies specific issues that warrant further policy and operational attention in order to enhance civilian protection from nuclear weapons.
- It suggests steps the humanitarian system could take to better plan for such eventualities, and it reinforces the importance of preventing nuclear weapons ever being used again in populated areas—whether deliberately or accidentally.

Even if the probability of a nuclear weapon detonation event is viewed as low compared with other sudden-onset disasters (as some believe), it remains a real one. There has been a certain degree of international focus on scenarios involving a single nuclear detonation in an urban area by a non-state armed group. The possibility also cannot be excluded of state use of single or multiple nuclear weapons, whether deliberately or inadvertently. While it is thought that terrorist groups possess no nuclear weapons, there are more than 17,000 in the arsenals of nine states, and growing evidence of accidents, mishaps, and near misses since their invention.

Nuclear weapon detonation events could occur in populated or remote areas, with differing implications in terms of harm to human life, infrastructure, and the environment. The consequences of even one nuclear weapon exploded in or near a population centre would be sufficiently disastrous that the United Nations-coordinated humanitarian system could be called upon to assist the victims.

UNIDIR's study indicates that this would present a range of serious practical and policy challenges: these problems range from the particular characteristics of nuclear detonation events such as prompt radiation and radioactive fallout, large numbers of injured people with multiple trauma, serious burn injuries, and radiation-related illness, to widespread fear and disruption, and a low current level of awareness and planning for response. Related to this last point, there are inadequate specific procedures and systems appropriate to nuclear weapon detonation events as these differ from civil nuclear accidents in significant ways. Protection of humanitarian personnel is highlighted as a particular issue of concern.

The study's main findings are as follows:

- 1. The current level of awareness within the humanitarian system is generally low about the specificities of nuclear weapon detonation events or its ability to respond to them.
- 2. For the United Nations to offer or be called on to coordinate humanitarian assistance suggests an event is already beyond the capacity of the state or states affected to respond effectively to assist the victims. Moreover, as a rule it would depend upon an affected state requesting it, or appropriate international decision-making to be enacted if its government was incapacitated.
- 3. The United Nations is unlikely to be able to offer much humanitarian assistance in the immediate aftermath of a nuclear weapon detonation event, and it would take time for the humanitarian system to deploy.
- 4. At present there are a number of foreseeable challenges to prompt and effective use of the humanitarian cluster system in the context of a nuclear weapon detonation event.

Executive Summary



- 5. Threat or fear of further nuclear weapon detonation events could vastly complicate decisionmaking about the nature and scale of humanitarian coordination and response, let alone its
- 6. Prevention is the best approach to the possibility of nuclear weapon detonation events. However, it is incumbent upon those humanitarian actors in a position to do so, such as the United Nations, to plan for the likely challenges of "lower end" nuclear weapon detonation events even if such a response is palliative. Such planning would, in reality, also reinforce the need for action to reduce the risk of nuclear detonations happening in the first place.

We suggest that the humanitarian system consider the following:

- 1. Giving focused attention to the issue in the Inter-Agency Standing Committee (IASC);
- 2. Assigning responsibility to a new or existing IASC task team, and inviting the Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE) to participate in the task team's work;
- 3. Studying and simulating varied nuclear weapon detonation scenarios with a view to humanitarian response;
- 4. Including representative nuclear detonation scenarios in future revisions of humanitarian procedures for large, complex, sudden-onset disasters; and
- 5. Reviewing current capacities and plans.

States and the Secretary-General could consider:

- 1. Prompting relevant humanitarian agencies and specialized agencies such as the IAEA, WHO, and CTBTO to clarify their mandates, policies, roles, and capabilities with a view to responding to nuclear weapon detonations;
- 2. Accounting for how inter-state decision-making processes could impinge on timely activation of humanitarian coordination and response efforts in the event of nuclear detonation; and
- 3. Examining how eliminating the risk of nuclear weapon use can be better pursued through practical measures. While nuclear weapons exist the risk of their detonation does too, whether caused deliberately or inadvertently.

Humanitarianism marks the broader mission of the United Nations, and since its inception it has taken a strong stand in favour of nuclear disarmament. The initiation of specific planning for how to respond to a nuclear weapon detonation event would appear to be logical and consistent with both these aims. The development of necessary understandings about decision-making and a protocol for planning can be based on existing humanitarian coordination practices and need not entail a lot of resources. The rapid mounting of a well-coordinated response will have an impact in reducing the level of human suffering, even if it may not assist those directly affected in the immediate aftermath.

Nevertheless, the study also reinforces previous findings, such as those of the World Health Organization in the 1980s, that the only really effective response to the public health effects of the use of nuclear weapons is preventing that use. Greater attention to the immense challenges of preparedness and response to nuclear weapon detonation events in populated areas complements focus on the continued risks posed by nuclear weapons.

> The full UNIDIR study will be available from www.unidir.org from early July 2014



Contacts for study authors: Dr. John Borrie Senior Researcher and Policy Adviser Ph: +41 (0)22 917 34 28 | Mob: +41 (0)76 431 05 74 jborrie@unog.ch

Mr. Tim Caughley

Senior Resident Fellow / Project Manager Ph: +41 (0)22 917 11 49 | Mob: +41 (0)79 842 95 88 tcaughley@unog.ch

xecutive Summary