

Comments on Policy Options for HEU Minimization and Elimination

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**Remarks prepared for the International Symposium on Minimization of HEU in the
Civilian Nuclear Sector, Oslo, Norway (June 17-20, 2006)**

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I. INTRODUCTION

Mr. Chairman, thank you for the opportunity to speak at this panel on "Policy Options for HEU Minimization and Elimination." I will focus my brief remarks on both the general topic of the panel and the presentations made by this afternoon's panelists, several of whom were senior figures at the 2005 NPT Review Conference where Norway took the lead in introducing a working paper on "Combating the Risk of Nuclear Terrorism By Reducing the Civilian Use of Highly-Enriched Uranium." Although as we all know, the Review Conference was a major disappointment, the Norwegian initiative on HEU minimization received widespread and diverse support in Main Committee 3, and represented one of the relatively few issues at the Conference on which their appeared to be the possibility for finding common ground.

Over the course of the past three days, and particularly at today's sessions, we have heard a variety of views expressed about the technical, economic, and political dimensions of the HEU minimization initiative. Some of these perspectives also have been expressed by speakers on this panel. Before I comment on their specific arguments, however, I would like to recall and highlight several fundamental points that served as the basis for the HEU minimization initiative in the first place.

II. THE KEY ISSUES AT HAND.

Stated succinctly, the proposal to phase out HEU in the civilian nuclear sector is based on four **facts**:

(1) An act of nuclear terrorism anywhere would have major ramifications everywhere--It is not someone else's problem; it is everyone's problem.

(2) HEU is the fissile material of choice for would-be nuclear terrorists because it is easier to build a nuclear explosive device with HEU than plutonium. HEU minimization is not a nonproliferation strategy; it is a practical and time-urgent approach to deny non-state actors access to weapons usable material and to prevent catastrophic nuclear terrorism;

(3) There are over 50 tons of HEU in the civilian nuclear sector worldwide, much of it in need of improved material protection, control, and accounting measures. It is this material that is most likely to be the target of terrorists efforts to acquire a nuclear explosive capability. IAEA safeguards are important in their own right, but they do not address the vulnerability of HEU to theft.

(4) There are relatively few commercial uses for HEU. As was agreed at the technical component of this symposium, low-enriched uranium can be substituted for most, if not all, of these applications. As such, the HEU minimization initiative in no way restricts fuel cycle technology development or commerce and does NOT infringe on Article 4 rights.

As we contemplate alternative policy options to minimize the use of HEU, it is important to distinguish among **technical obstacles** to minimization--of which there are very few; **economic obstacles**--of which there are very few and then only for an exceptionally small number of countries; and **political impediments**, which in most instances turn out to be linked to considerations that have little or nothing to do with the issue of HEU itself.

Because there are few commercial uses for HEU, a phase-out would have a very limited impact on most states, especially those in the developing world. Indeed, although the

Norwegian HEU minimization initiative is truly a **non-discriminatory** one and applies equally to NWS and NNWS, because most HEU in the civilian sector remains located on the territory of the NWS, it is these countries, rather than the NNWS, that would be most affected by the reduction or elimination of HEU use in the civilian nuclear sector.

As I've indicated, there are a very few states--mainly those who dominate or seek to increase their share of the world market in the export of medical isotopes--who are wary that substitution of LEU for HEU will jeopardize their current market advantage. This concern is understandable, but one must recognize the argument as an economic one rather than one based on either technical or political grounds such as those related to peaceful use since HEU minimization in no way constrains peaceful use of nuclear energy.

I also believe it is not prudent to condition support for an initiative urgently needed to counter the danger of catastrophic nuclear terrorism with progress on disarmament. Although there is a compelling need to move forward on the nuclear disarmament front, and the FMCT in particular, one does no service to that objective by holding hostage an equally vital international security objective. HEU minimization in the civilian nuclear sector is not a substitute for a Fissile Material Cut-off Treaty, but it is a complementary measure directed at denying non-state actors access to the type of fissile material most easily used to make a crude nuclear explosive. Linkage is a recipe for doing nothing.

III. COMMENTS ON THREE PRESENTATIONS [Not prepared in advance]

IV. A WAY FORWARD

My own research on nuclear terrorism persuades me that the threat of catastrophic nuclear terrorism is real, but also that there are a number of practical steps that the international community can take to reduce the risk. **The over-arching principle for action,**

I would argue, is a four-pronged approach to **enhance the security** of HEU, **consolidate** HEU stocks, **reduce the size** of these stocks, and **move toward elimination** of HEU use in the civilian nuclear sector as quickly as technically possible. More concretely, I believe the following priority steps might usefully be taken:

1. The NWS should lead by example, showing that they are committed to eliminating the civilian use of HEU within their own borders. The United States, in particular, has taken some important steps in this regard, but further efforts are required, especially by Russia, which can and should display leadership on this issue by not only supporting the concept of HEU minimization, but by converting its own reactors domestically. In addition, the United States Congress would be wise to reverse its 2005 relaxation of export controls on HEU for medical isotope production -- an action directly opposed to the principal of GTRI.

2. The IAEA General Conference should consider adopting new policy guidelines for the civilian use of HEU which call for its minimization and eventual elimination. It also would be useful to call for a moratorium on the construction of additional civilian facilities using HEU.

3. Existing programs to consolidate and eliminate civilian HEU stocks, like the Global Threat Reduction Initiative should be accelerated. The G-8 Global Partnership against Weapons and Materials of Mass Destruction also should make HEU minimization a priority.

V. CONCLUSION (Not prepared in advance)