

---

# UNSC 1540 – Next Steps to Seize the Opportunity

Matthew Bunn

Managing the Atom Project, Harvard University

Institute for Nuclear Materials Management Seminar

“The Impact of UNSC 1540”

March 15, 2005

<http://www.managingtheatom.org>

# UNSC 1540: a dramatic opportunity

---

- ◆ New binding legal obligation on every UN member state to put in place “appropriate effective”:
  - Laws criminalizing non-state WMD proliferation
  - Security and accounting for WMD, their means of delivery, and related materials
  - Physical protection
  - Border controls and law enforcement to block illicit trafficking
  - Export controls and transshipment controls
- ◆ Obligation not limited to parties to NPT or other multilateral agreements
- ◆ But what would an “appropriate effective” system be, in each of these cases? Not defined

# How big an impact?

---

- ◆ Spectrum of possibilities
- ◆ Weak extreme: nothing changes
  - Each country declares that its existing approaches are “appropriate effective,” therefore no major changes needed
- ◆ Strong extreme: foundation for stringent, binding, global standards, elimination of weak links worldwide
  - Broad agreement develops on demanding definitions of what is required, and fast-paced global effort is undertaken to help countries put in place much stronger security and accounting, export controls, border controls, and criminal laws than now exist
- ◆ To make the second outcome happen will take an intense effort, pushed from the highest levels of the U.S. government and other leading governments
- ◆ *“Nuclear security is only as good as its weakest link.”*

# Implementation so far

---

- ◆ Implementation in the first months focused on the one item with a deadline – countries preparing reports
  - Most (though not all) reports are now in
  - Some reports simply say “we’re taking appropriate effective measures” – most have too little detail to judge whether countries really have effective nuclear security and accounting systems, export control systems, etc.
- ◆ UNSC committee to monitor implementation has been established
  - Committee’s experts will review reports
  - With no definitions of what “appropriate effective” systems include – or what must be included in national reports – not clear on what basis a report’s adequacy might be challenged
- ◆ Some small, initial steps to press countries to act, and offer to help – but as yet no agreed definitions of what is required

# Next steps in implementation

---

- ◆ *Defining what's required:* For each major obligation, find a way to reach a definition of what, specifically, states are required to do
- ◆ *Assessing what's needed:* Find approaches to finding out what states already have in place, what the most urgent weaknesses to correct are
- ◆ *Helping put the needed measures in place:* Help (and pressure) states to put in place the measures required for an “appropriate effective” system
- ◆ Each of these steps will be most effective if all are linked together, in an integrated approach

# Defining what's required

---

- ◆ Need to lay out ideas of what could be done to meet the obligation that are *specific enough* for states to act on them:
  - Draft model legislation in some cases
  - List of “essential elements” of effective system in others
- ◆ *Not* just a single piece of model legislation:
  - Need different approaches for each obligation (criminalization, security and accounting, export controls, etc.)
  - Likely need different approaches for each technology (nuclear, biological, chemical, delivery...)
- ◆ Venues/approaches for promoting a definition:
  - Unilateral U.S. definition of what's needed
  - Definition jointly supported by group of leading powers (e.g., at next G8 summit)
  - Definition developed through, or adopted by international organization

# Assessing what's needed

---

- ◆ To plan effort to eliminate weak links, essential to understand what states already have in place
- ◆ National reports required by UNSC 1540 a starting point
  - Most have insufficient data to realistically assess whether nuclear security or export control systems are “appropriate effective”
- ◆ Likely requires teams to visit countries for on-the-ground needs assessments – presumably would be voluntary in general
  - Likelihood of states inviting such assessments would be increased if closely linked to likely assistance to correct any weaknesses
  - UNSC *could* act to require states to accept such reviews, if needed
  - Major powers could exert other leverage – e.g., for nuclear, could make such reviews a condition of supply
- ◆ Venues/approaches for assessment teams: bilateral, multilateral (e.g., IAEA-organized)...

# Helping put needed measures in place

---

- ◆ Many states have little past experience with export controls, trans-shipment controls, etc. – and few resources to address the problems
  - UNSC 1540 is a global “unfunded mandate”
  - Assessments likely to identify major weaknesses needing correction
- ◆ United States, other major powers, should launch fast-paced global effort to assist states in meeting “appropriate effective” standard
  - Should become central focus of globalized cooperative threat reduction effort (threat reduction is about improving controls *everywhere*, not just dismantling WMD in the few countries with WMD they are willing to dismantle)
  - This year’s G8 summit should make Global Partnership truly global, with focus on eliminating weak links in these key measures globally
  - Venues/approaches for assistance: bilateral, multilateral (e.g., IAEA)...



# Picking venues for implementation

---

- ◆ UNSC 1540 committee:
  - Too few resources, too short lifetime (only 1 more year)
- ◆ Bilateral:
  - Could expand, accelerate existing export control, nuclear security assistance programs – definitions and assessments done by state offering assistance
  - Could be fast-paced, straightforward to assign adequate resources, United States could fully control its own efforts – but U.S.-imposed approach may not be accepted in many countries
- ◆ International organization:
  - E.g., could strengthen IAEA's nuclear security and accounting assistance, expand it to export controls, model criminal legislation
  - May be more broadly acceptable, but likely to be more difficult to reach agreement on approaches and implement them quickly
  - OPCW could play similar role on chemical; no comparable body for biological or delivery

# Strengthening the IAEA role

---

- ◆ In many countries, definitions of “appropriate effective” approaches; assessments of needs; and assistance in implementing UNSC 1540 coming from the IAEA will be more welcome than those pushed by the United States
- ◆ IAEA Office of Nuclear Security already provides assessments, helps coordinate assistance, on physical protection and illicit trafficking – but has very limited resources (<\$ to substantially upgrade one site)
- ◆ Export control assistance has never been a major IAEA role, but probably should become one
- ◆ Office of Nuclear Security should be given the mission and resources to help countries implement UNSC 1540 – not by itself, but in coordination with donor-state efforts
  - Judge case-by-case which activities are most effectively done through IAEA, which in other venues

# An example: nuclear physical protection

---

- ◆ What are the essential elements of an “appropriate effective” physical protection system?
- ◆ If “appropriate effective” means anything, it should mean that security systems can “effectively” defeat threats that terrorists and criminals have shown they can pose
  - A possible definition: to meet its UNSC 1540 physical protection obligation, every state with nuclear weapons or weapons-usable nuclear materials should have a well-enforced national rule requiring that every facility with a nuclear bomb or a Category I quantity of nuclear material have security in place capable of defeating a specified set of insider and outsider threats comparable to those terrorists and criminals have demonstrated in that country (or nearby)
  - Would mean states would need effective physical protection regulation, design basis threats, vulnerability assessments, facility-level security plans, probably well-armed and well-trained guards

# An example:

## nuclear physical protection (II)

---

- ◆ Other possible definitions of what “appropriate effective” physical protection might mean, or sources to draw from:
  - Physical protection “principles and objectives” in draft amendment to the Physical Protection Convention (some useful points, but very general, would not in themselves assure an “effective” system)
  - INFCIRC 225 Rev. 4 (more specific, but still quite general – possible to meet these recommendations and still be quite insecure)
  - DOE or NRC regulations, or those of another country (quite specific – but impossible to get others to join on to all the details)
  - G.T. Allison: “gold standard”: given immense stakes if weapons-usable nuclear material were stolen, should be protected to same standard that large stores of gold (e.g., Fort Knox) are
  - Nat’l Academy of Sciences: “stored weapon standard”: since getting the needed material is the hardest part of getting a nuclear bomb, nuclear material should be protected, to the extent practical, to the same standards nuclear weapons themselves are

# An example:

## nuclear physical protection (III)

---

- ◆ A broadly accepted definition of what UNSC 1540's “appropriate effective” standard requires would become, in effect, a binding global standard for nuclear security
- ◆ Decades of efforts to negotiate binding global standards have not succeeded
  - Key states have wanted to maintain complete sovereignty (and in some cases secrecy) over what they do in this area, leading states have different approaches that each considers better than the others’
  - To succeed, an effort to create a binding global standard will have to be simple enough to allow each leading state to pursue its own approaches – but specific enough to be effective
  - Will probably require political-level accord, bypassing expert-level talks where those focused mainly on costs traditionally object
  - For example, one-page statement could be agreed at G8 summit, in context of Global Partnership

# An example:

## nuclear physical protection (IV)

---

- ◆ Assessment teams led by the United States, Russia, or other major powers – or by the IAEA's Office of Nuclear Security – could assess needs worldwide
- ◆ Assistance and funding for upgrading security arrangements where needed could be provided bilaterally by the United States and other participants in the G8 Global Partnership – or through the IAEA
- ◆ Given the substantial ongoing cost of ensuring effective physical protection – and the continuing risk of theft wherever weapons-usable nuclear materials exist – removing material entirely from all sites where it is not needed should be part of this effort
  - The costs of meeting effective nuclear security standards, if adopted, will give sites incentives to eliminate nuclear material

# A similar “appropriate effective” standard for export controls

---

- ◆ Would the controls in place in a country have prevented the activities of the A.Q. Khan network that took place in, e.g., Pakistan, Malaysia, Dubai, Turkey, and South Africa?
  - Should list of example countries be lengthened?
- ◆ If “yes,” the national system can be considered “appropriate effective” – if “no,” more work to do
- ◆ Would likely require in-depth, on-the-ground assessment of countries’ national export control approaches, enforcement, private industry awareness
- ◆ Multi-year global effort likely to be required to eliminate weak points, prevent a recurrence of a Khan-like network

# Beyond UNSC 1540

---

- ◆ *From national criminalization to international criminalization:* National laws are no substitute for making WMD assistance to non-state actors or to illegal state programs an *international* crime – where offenders could be arrested wherever they were found – comparable to piracy or slave-trading
- ◆ *A treaty-based export control regime:* ElBaradei and others have called for a new treaty creating binding export control standards, mandates for sharing info on approvals/denials
- ◆ *New legal authorities to stop WMD-related shipments:* The Proliferation Security Initiative is constrained by limited legal authorities for stopping int'l shipments
- ◆ *A nuclear security treaty:* T. Shea and others have proposed treaties w/binding standards, even an international nuclear energy tax to fund security and safeguards



# A fleeting opportunity?

---

- ◆ The “Lugar Doctrine”: war on terrorism will not be won until every cache of insecure potential bomb material worldwide is secure and accounted for, to stringent and transparent standards (3/4/2002)
- ◆ UNSC 1540 provides an opportunity to take major steps toward fulfilling the Lugar Doctrine
- ◆ But a year has already passed – danger that because so little pressure has been put on them since UNSC 1540 was passed, states are already falling into complacency
- ◆ Need to launch a fast-paced global effort to define what UNSC 1540 requires, assess what states need to improve to meet those standards, and help states close the gaps
- ◆ Needed work will continue long after April 2006 expiration of UNSC 1540 committee