In diplomatic circles it may not be considered appropriate to discuss money, but it is important in regard to the activities of the IAEA on safeguards. An effective safeguards regime is a vital adjunct to ensuring the "peaceful uses of nuclear energy" a key tenet of the NPT bargain.

A contentious question is whether safeguards funding should be matched by the funding available for technical cooperation programs.

In his address to the Review Conference, Mr. ElBaradei, Director General of the IAEA, noted that the 1995 Conference had reiterated the call of successive Review Conferences that "every effort be made to ensure that the IAEA has the financial and human resources necessary", inter alia, to meet its safeguards responsibilities effectively. But despite these calls our safeguards mandate continues to be increasingly under-funded.

ElBaradei noted the amount of nuclear material under safeguards is increasing, as is the number of nuclear facilities, yet the budget for safeguards has been frozen for "over a decade" due to a policy of zero real growth. The regular budget for safeguards stands at approximately $82 million per annum, but expenditure has averaged about $95 million per year. Additional amounts are being met through extra-budgetary funding - by 2001 some 20% of the safeguards program will be met by voluntary contributions.

A number of States in their opening speeches touched on the need for the IAEA to be "efficient" but there must be a limit to just how much the Agency can restrict spending in this area of its work.

With regard to this, the G10 has submitted a working paper to MCII on Resources for Safeguards, which suggests that the Conference, "strongly urge all States to ensure that the Agency’s budget provides these (safeguards) resources through assured regular financing" and that the States of the IAEA use the forthcoming review of the safeguards financing formula to agree "on an equitable and stable formula which will fully fund the Agency safeguards activities".

The IAEA’s predicament is reflected in the situation being experienced by some national safeguards agencies. Australia’s Non-Proliferation and Safeguards Office has, for a number of years, noted it does not have the recommended complement of staff due to funding problems and yet faces an increasing workload. An official from Australia’s Department of Foreign Affairs has said ANSO is, however, "coping". Does the same view hold of the IAEA? Is such a situation acceptable to meet the needs and expectations of the international community?

A major problem is that whenever increased funding for safeguards is raised, pressure is also put on the IAEA to increase the Technical Cooperation Fund. In 1999 the IAEA’s technical cooperation work represented an investment of $100 million (an amount matched by in-kind donations, from Member States of the Agency). Mexico, Egypt and China have all submitted papers to MCIII calling for an increase in funding for technical assistance, noting that there has been an increase in IAEA membership from 122 to 130 states, without a corresponding increase in budget.
For many observers it is highly questionable whether technical assistance funding should match that for safeguards work and whether “peaceful uses of nuclear energy”, are worth pursuing instead of focussing greater energy and effort on safeguards. It is also argued that even if some nuclear applications (such as in agriculture, health and environmental monitoring) are not contentious, safeguards work must take priority.

A number of States, however, continue to press their right to use atomic energy. Although many of these countries have rejected nuclear power — and may not even operate research reactors — they believe they should have the opportunity to exploit what benefits there may be from utilizing other applications of nuclear technology.

Whether the call for increased technical funding is genuine — or an attempt to expose the failure of the NPT to deliver on the beneficial side of the bargain — these maneuvers may act as a block on the IAEA in securing increased funding for safeguards. Some States may be willing to pay more for safeguards but may not want to see additional contributions to technology transfer. If forced into making contributions to both areas, so that funding matches, they might simply refuse to make any additional contributions.

The discussion over allocation of finances does, however, serve to highlight the conflicting objectives of the IAEA as promoter of nuclear technology and as the agency overseeing the safeguards regime. Who pays for what activities is perhaps the most telling issue. Some States may believe that increases in safeguards financing should come from those countries that play the biggest part in the use of nuclear power and the supply of nuclear materials. Given the profits that some countries make in trading in nuclear technology and materials (and the astronomical amounts some spend on nuclear weapons) it is not an unreasonable idea that they should bear the cost of additional funding and that this should be mandatory.

Jean McSorley  
Greenpeace

---

The Cost of Preparing to Fight vs. Nuclear Non-Proliferation and Disarmament Activities

Between 1940 and 1995, the United States has spent an estimated $3.5 trillion to prepare for nuclear war. This went toward building and maintaining nuclear weapons and their delivery systems as well as commanding, controlling, and defending against the bomb. Spending on nuclear weapons did not disappear along with the collapse of the Soviet Union. The United States spent $27 billion in Fiscal Year 1995 to prepare to fight a nuclear war. In contrast, the U.S. spent only $2.2 billion on efforts aimed at actually preventing nuclear war. That's roughly the price of one B-2 bomber!

| Total Costs since 1940 | $5.6 trillion |
| Current Annual Costs | $35 billion |
| Annual Costs of Stockpile Stewardship Program | $4.5 billion |
| Cost of each Trident II missile | $535 million |
| Maintaining 550 land-based ICBMs for one year | $3.4 billion |
| Estimated costs of environmental cleanup of nuclear weapons | $227 — 410 billion |

**Preparing for nuclear war -- 1995**

- Building, operating & maintaining strategic nuclear weapons: $12.4 billion
- Operating & maintaining tactical nuclear weapons: $1.5 billion
- Maintaining & upgrading C3I in support of nuclear arsenal: $8.0 billion
- Maintaining & managing nuclear warheads, materials & facilities: $4.7 billion
- National Missile Defense: $4 billion
- **TOTAL: $27 billion**

**Nuclear Non-Proliferation and Disarmament Activities – 1995**

- Assist Former Soviet Republics to dismantle their nuclear weapons and safeguard their nuclear materials (Nunn-Lugar): $1.03 billion
- Disassemble U.S. nuclear weapons: $6.3 billion
- Fissile material disposition: $0.05 billion
- R&D for nonproliferation and dismantlement: $0.23 billion
- Support for negotiation, implementation, and verification of arms control and nonproliferation agreements: $0.19 billion
- U.S. support for the International Atomic Energy Agency (IAEA): $0.06 billion
- **TOTAL: $2.19 Billion**

References:


Compiled by
William Hartung
Cora Weiss
Hague Appeal for Peace and International Peace Bureau
President, HAP, vice pres, IPB

1. What are your hopes or expectations for the Nuclear Non-Proliferation Review 2000 Conference?
   “Hope”, sang Woody Guthrie, “people are machines for hope ... expectations are another thing”. Unfortunately we can't expect much given the record. But I hope that one day some country will have the courage to say, here is a draft convention, let's work on it and vote for it.

2. What topics do you work on most or find the most interesting in this forum?
   Linking nuclear weapons and the need to abolish them, under Article VI of the NPT, to the wider issue of ending war as a legitimate institution. If the UN is dedicated to ending the scourge of war for succeeding generations, then mustn't it also be dedicated to eliminating the weapons that fuel such war. We are not calling for the abolition of nuclear weapons in order to make the world safer for warfare.

3. What led you to be doing the work that you are doing now?
   As a young mother in 1960, I joined with others in sending our babies teeth to Washington University Hospital in St. Louis to test for Strontium-90, one lethal ingredient in atomic bombs. The US was testing bombs in the atmosphere, radiation was carried by winds from the desert across the country, it landed on grassy fields where cows grazed and we fed the milk to our children.
   “Women Strike for Peace” was born to protest atmospheric nuclear testing. We couldn't imagine that testing would be driven underground, so we called the agreement which President Kennedy signed and which he attributed in part to the mothers, the Half Ban Treaty. So our children were the motivation for getting involved, and now our grandchildren are the motivation for staying involved. We can't leave them a world with even one nuclear bomb, which, according to Arundhati Roy, "could end in an

H.E. Fayza Aboulnaga
Ambassador, Permanent Representative of Egypt to the UN, Geneva
Representative of Egypt to the Conference on Disarmament

1. What are your hopes or expectations for the Nuclear Non-Proliferation Review 2000 Conference?
   A successful outcome for the Review Conference, which meets the concerns of the majority of states parties. Concrete actions should be taken towards nuclear disarmament, which has been lagging in recent years and particularly the last five years, especially regarding the full implementation of the NPT and nuclear disarmament commitments.

2. What topics do you work on most or find the most interesting in this forum?
   The Middle East issue, of course, is of special interest to us. Due to Israel’s widely suspected nuclear capabilities, and the fact that all Arab countries are now parties to the NPT, we feel we have a basic position to defend. This situation threatens the very viability of the NPT as well as the eventual achievement of its universality.
   Egypt has been quite active on the other main issues in the NPT as well. Nuclear disarmament is key, for which we urge the NWS to embark on an unequivocal undertaking to fulfill Article VI. This is a goal and objective very dear to all of us, and an obligation under the NPT. The International Court of Justice confirmed this obligation in its 1996 advisory opinion. NSAs are important. There has not been enough done until now and they have not been legally binding.
   We hope to see NWFZs in new areas, especially the Middle East (we have been calling for this for many years) and in South Asia. There is a stalemate in the CD, the forum where we should be getting to work on multilateral negotiations on FMCT and nuclear disarmament.
   This review conference is probably the last opportunity to uphold the credibility of the NPT as the cornerstone of global nuclear non-proliferation and disarmament.

3. What led you to be doing the work that you are doing now?
   I started my diplomatic career in 1976 by working on disarmament and international security issues. My first posting abroad was to the New York Mission in 1979, where I worked on Third Committee issues, then three years on First Committee (International Security) issues. I am now the permanent representative for Egypt in Geneva and the representative in the CD, which is one of my major assignments.
A common perception is that scientists became close to the defense establishment only during the Second World War. But in reality the connections go back a long way – at least to Aristotle, who is believed to have invented giant catapults, and Galileo, who suggested that his telescope be used to spot enemy ships at a distance. In the United States, organized participation of scientists in military affairs began with the First World War. There were even earlier efforts – the National Academy of Sciences was, after all, created by Lincoln during the Civil War to aid the war effort. But they were on a relatively small scale, both in size and in scope.

One of the prominent figures in the effort to "penetrate the sanctum" of the military was George Ellery Hale, a distinguished astronomer and foreign secretary of the National Academy of Sciences. Early in his life, Hale had gone to Europe to study science and had come back with this lesson: "to accomplish great results" academies had to "enjoy the active cooperation of the leaders of the state." With the unanimous endorsement of the National Academy, a delegation of scientists went to meet President Wilson at the White House. Stressing the importance of research for defense, Hale and others argued that the Academy could plan an arsenal of science for the country. In response to the President's official request, the National Research Council was set up, in secret, with the objective of encouraging pure and applied research for "national security and welfare."

This trend, started during World War I increased hugely during World War II and the establishment of the Manhattan Project and the development of the Radar. The Manhattan Project, more than anything else, cemented a solid relationship between scientists and the military. The decades that followed saw the economic benefits of that relationship flow to the academy in general, and the physical sciences in particular. With the Korean war, overall federal expenditures for research and development passed the $1 billion mark; by 1956, it was over $3 billion. In the physical sciences, the bulk of the funding came from the Department of Defense or the Atomic Energy Commission. Apart from the expected subjects, such as nuclear physics or electronics, there were also unexpected ones: Earth Sciences, for example, grew enormously as a result of DOD’s desire to detect nuclear weapon tests. This is not to say that each project supported by DOD or the AEC was directly related to the development of weapons or related equipment or knowledge. They were not. But the influence of this pattern of funding can certainly not be discounted.

The process of militarization of science did not necessarily change the way scientists perceived themselves and their work. An example is Arthur Compton’s characterization of the destruction of Hiroshima as "a technical reply to a technical question". Indeed, as this comment shows, there is a deliberate effort to separate out the moral and the technical in their activities and to maintain an image of scientists as somehow apolitical. The sociologist C. Wright Mills said: "These actions are not necessarily sadistic; they are merely businesslike; they are not emotional at all; they are efficient, rational, technically clean cut."

While maintaining this image of themselves, scientists, especially some of the leaders, have been busy lobbying for increased expenditure on armaments and defense related research. Having found the key to the treasury, the science establishment has to keep coming up with newer and "technically sweet" ideas to maintain this access. This technological and bureaucratic momentum does not respect arms control or any other measures of restraint.

M. V. Ramana
Center for Energy and Environmental Studies
Princeton University
From Nuclear Weapons Convention Monitor, April 2000

“There is a crime here which goes beyond denunciation. There is a sorrow here that weeping cannot symbolize. There is a failure here that topples all our success.”

John Steinbeck
On Nov. 1 the United Nations considered a resolution entitled "Prevention of an Arms Race in Outer Space." The resolution, which 138 nations voted for, said that space "shall be used for peaceful purposes." The United States was not one of these nations, however. It cast a lonely abstention. This was a shameful vote, and it puts the United States on a path toward weaponizing space.

Actually, the United States is on that path already. Just look at the material coming out of the Pentagon's U.S. Space Command based in Colorado Springs, Colo. The cover of the "Vision For 2020" report of the Space Command, for example, depicts a laser weapon shooting a beam from space zapping a target below. The report opens: "U.S. Space Command--dominating the space dimension of military operations to protect US interests and investment. Integrating Space Forces into war-fighting capabilities across the full spectrum of conflict."

"Vision For 2020" compares the U.S. effort to "control space" with the effort centuries ago when "nations built navies to protect and enhance their commercial interests" by ruling the oceans.

General Joseph Ashy, former commander-in-chief of the U.S. Space Command, has said: "It's politically sensitive, but it's going to happen. Some people don't want to hear this, and it sure isn't in vogue, but--absolutely--we're going to fight in space. We're going to fight from space and we're going to fight into space. We will engage terrestrial targets someday — ships, airplanes, land targets — from space. That's why the U.S. has development programs in directed energy and hit-to-kill mechanisms".

And far more than rhetoric is involved. Last year, the U.S. signed a multi-million dollar contract for a "Space-Based Laser Readiness Demonstrator." A promotional poster shows the laser firing its ray from space, a U.S. flag somehow waving in space above it.

The main justification that Washington gives for the rapidly expanding U.S. military push into space is that it's about missile defense.

But U.S. military documents stress not defense but "control" and "domination" of space and from it the Earth below. They talk of space as the "ultimate high ground." "Belligerently offensive" is how Bruce Gagnon, coordinator of the Global Network Against Weapons & Nuclear Power In Space, describes current U.S. space military doctrine.

We have only a narrow window to prevent an arms race in space. The key is an international pact to ban all weapons in space--the original intent of the basic international law on space, the Outer Space Treaty. Once the United States moves to turn space into "the ultimate high ground" and to weaponize the heavens, other nations will follow.

At the UN's Conference on Disarmament in March, China moved to strengthen the Outer Space Treaty, to "negotiate and conclude an international legal instrument banning "any weapons, weapons systems and their components in outer space, with a view to preventing the weaponization of outer space." China received wide support from other nations. Approved in 1967 and now signed by 91 nations, including the United States, the Outer Space Treaty ended up banning nuclear weapons and other weapons of mass destruction. It's high time we return to its original intent.

The people of the United States need to oppose this reckless U.S. policy of weaponizing space. The heavens should not be a war zone.

Karl Grossman
member of the Commission on Disarmament Education, Conflict Resolution and Peace of the International Association of University Presidents and the United Nations.

"We have guided missiles and misguided men."

Dr. Martin Luther King, Jr.
Imagine US Defense Strategists singing this little ditty (to the tune of 'Dancing Cheek to Cheek'), high kicking with American Flags waving in the background.....

Heaven, nukes in Heaven 
and we won't be stopped by the ABM Treaty 
we will shoot our missile tests into the sea 
as we force on States Parties our amnesty.

Heaven, nukes in Heaven 
we will militarise space for only we 
and defend our nuclearised country 
from rogue states that have signed the NPT.

Oh we'd love to destroy the mountains 
and contaminate earth's creeks 
but that doesn't thrill us half as much 
as lasers into space that go beep 
(Repeat ... for 250,000 years)

by Kathleen Sullivan

**Song Competition**

“Let us focus all our efforts on realizing a 21st Century free from nuclear weapons and building a world in which our children can live in peace.”

Mr. Iccho Itoh 
Mayor of Nagasaki, Japan

---

**What’s On**

5 May 2000

**event:**

**place & time:**
Conference Room C @ 1.15 - 2.45pm

**Plenary Meeting**
Sessions begin @ 10am
Plenary/interim reports of the Main Committees and the Credentials Committee:

**Main Committee 1:**
Subsidiary Body 1
Sessions begin after the Plenary Session in the morning:
Conference Room 4

**Main Committee 2:**
Subsidiary Body 2
Sessions begin @ 3pm:
Conference Room 4

**Main Committee 3:**
Sessions begin after the Plenary Session in the morning:
General Assembly Hall
and
Sessions begin @ 3pm:
General Assembly Hall

---

**Vox Pop**

“Let us focus all our efforts on realizing a 21st Century free from nuclear weapons and building a world in which our children can live in peace.”

Mr. Iccho Itoh 
Mayor of Nagasaki, Japan

---

Soldiers shielding eyes at Bikini Atoll test in Time Life Photographs