



Achieving

A distinguished panel was asked to come up with recommendations for the future of the IAEA. This is what they had to say.

The Commission of Eminent Persons was asked to reflect on how the nuclear future might evolve to 2020 and beyond, what the world is likely to demand of the IAEA, and what steps need to be taken to allow the IAEA to fill those needs.

We produced a document entitled 'Reinforcing the Global Nuclear Order for Peace and Prosperity: The Role of the IAEA to 2020 and Beyond'.

The national and professional backgrounds of the Commission members are quite diverse.* This circumstance provided for a wide range of perspectives on nuclear and related issues throughout our discussions and drafting of the Report. It is remarkable that notwithstanding our different, and in some cases opposing, views on several important topics tackled in our work, the Commissioners unanimously believe that the IAEA must be strengthened by its member states with additional authority, resources, personnel and technology.

We believe that a stronger IAEA is warranted by a robust demand for those crucial services of the Agency that in all likelihood will increase and prevail in the foreseeable future.

Consider that the spiraling cost of fossil fuels and the impending threat of climate change, against which nuclear power is recognized as an important mitigating option, may make a renaissance of nuclear energy likely in the near future.

International cooperation should be strengthened immediately to ensure that any possible expansion of nuclear energy will be safe and secure and will not contribute to nuclear weapons proliferation. The IAEA should help newcomer states put in place the necessary infrastructure needed to develop nuclear energy safely, securely and peacefully. It should work with member states to coordinate research to design reactors that are economical, safe and proliferation-resistant.

It must expand its efforts to help states establish safe and sustainable approaches to managing nuclear waste, and to build public and international support

for implementing them. The Agency will also be required to develop international nuclear safety standards and to promote the harmonization of certification processes for new reactor models. Shared regional nuclear plants, mechanisms for the assured supply of nuclear fuel, including international banks of enriched uranium, multinational management of the entire fuel cycle, estimation of global resources of uranium and research and development of thorium fuel cycles are among the endeavors that may result in additional responsibilities for the IAEA.

It should also be taken into account that safeguards will continue to be a central part of the Agency's work. In fact, the IAEA's safeguards responsibilities have been expanding rapidly. From 1984 to 2007 the amount of nuclear material under safeguards increased more than tenfold. Many are calling on the Agency to implement the Additional Protocol as well as to pursue a country-level, information-driven approach to safeguards that requires the Agency to examine a broad range of additional and more sophisticated types of information.

The IAEA's existing authorities should be interpreted to give the Agency the responsibility to inspect for indicators of nuclear weaponization activities. As has become clear from recent events, sometimes transparency going well beyond the measures called for in the Additional Protocol is needed to provide confidence that a state's nuclear program is entirely peaceful.

The IAEA should work closely with member states developing new fuel cycle processes, so that effective safeguards, nonproliferation, and physical protection measures can be designed into such new systems from the outset. Clearly, further increases for safeguards work will be needed if nuclear energy grows and other circumstances change in the future.

Though nuclear security is fundamentally the responsibility of individual states, the IAEA has an important role to play in addressing the threat of nuclear terrorism. It is the only global body with relevant competence and expertise relied on by a wide range of countries.

the Vision

by Ernesto Zedillo

States should negotiate binding agreements that set effective global nuclear security standards. They should agree to give the IAEA an important role in developing those binding standards and assisting in and confirming their implementation. The IAEA should develop model legislation that will help states fulfill their United-Nations-Security Council-Resolution-1540 obligations to enact effective national laws prohibiting acts related to nuclear terrorism and nuclear smuggling.

The IAEA should expand its efforts to ensure effective security for the most dangerous radiological sources worldwide and increase the priority it gives to preventing nuclear smuggling. And it should continue its efforts to help states prepare to cope with the consequences of a radiological dispersal.

Although nuclear safety has improved enormously in recent decades, the risk of an accident at any given reactor must continue to be reduced. The IAEA's role in persistently improving the global safety regime is critical and must be reinforced. The Agency should lead an international effort to establish a global nuclear safety network, and ensure that critical safety knowledge, experience, and lessons learned are broadly exchanged.

Over time, with the IAEA's involvement, states should enter into binding agreements to adhere to effective global safety standards and to be subject to international nuclear safety peer reviews.

Member states and the IAEA should strengthen their critically important efforts to ensure that countries embarking on nuclear power programs develop sound safety infrastructures, including effective and independent regulatory bodies. The Agency should expand its efforts to assist states in assessing and strengthening the nuclear safety culture.

The IAEA's technical assistance in developing countries for nuclear applications in health, agriculture, industry, environment, hydrology and biological and physical research is important both for its direct contribution to human well-being and because it helps to build broad support for the Agency itself and its larger energy, safety, security, and non-proliferation missions.

Consequently, the Agency's technical cooperation program needs to be expanded and diversified to ensure it keeps pace with the growth in the Agency's other activities. Demand for technical assistance will always exceed the resources allocated for it, but developing countries' expectations for such support from the IAEA need to be better satisfied in the future.

The Commission believes that to enable the IAEA to properly accomplish these and other duties, its members should allocate it considerably larger resources. We suggest an immediate one-time increase in the IAEA's budget in an amount sufficient for, at least, refurbishing the Safeguards Analytical Laboratory and for adequate funding of the Agency's Incident and Emergency Response Center.

We also propose annual increases in the regular budget to underpin the expansion of the Agency's security and safety work, other activities in support of newcomer states embarking on nuclear programs, and an expansion of work in nuclear applications and technology transfer.

In the longer time frame, the regular budget will need to continue increasing in order to meet the growing demands for IAEA services. A substantially bigger regular budget – by 2020 perhaps twice as large as the present one – would allow the needed expansion of work on nuclear reactors and the fuel cycle, security and safety, and support for meeting basic human needs through nuclear applications and technical cooperation.

The large majority of the Commissioners also believe that progress toward disarmament, or the lack of it, will deeply affect the success of the IAEA's nonproliferation mission. Article VI of the Treaty on the Nonproliferation of Nuclear Weapons (NPT) legally obligates the nuclear weapons state parties to negotiate in good faith toward nuclear disarmament, and at the 2000 NPT Review Conference, they agreed that the treaty represented an "unequivocal undertaking" to "accomplish the total elimination of their nuclear arsenals."

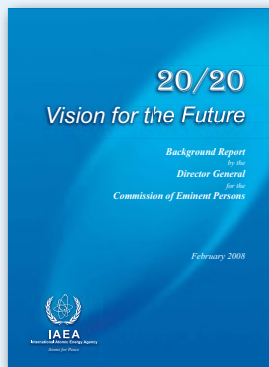
This commitment is an integral part of the NPT bargain. The need for the NPT to become universal cannot be stressed enough. States must recommit to

20/20

IAEA Director General **Dr. Mohamed ElBaradei** tasked the Agency's Secretariat with conducting a detailed review of the nature and scope of the IAEA's programme in the next decade and what resources would be needed to fund these activities. The study was given the name "20/20", reflecting the effort to look ahead to the year 2020 and beyond with the clearest possible vision.

According to the report's findings, the major challenges likely to face the IAEA in the 2020 timeframe are:

- growth in the use of nuclear power, brought on by the demand for clean energy;
- greater demand for the use of nuclear applications in health, food and the environment;
- increased emphasis on maintaining a high level of safety;
- combating the threat of nuclear terrorism; and
- strengthening of the safeguards system to ensure its effectiveness, credibility and independence.



The "20/20 Vision for the Future" report, can be found at: www.iaea.org/NewsCenter/News/PDF/20-20vision_220208.pdf

the vision of a world free of nuclear weapons and take firmer steps in that direction.

Needless to say, a world free of nuclear weapons will not be achieved quickly, and will require action by many actors in the international system, going far beyond the mandate and capabilities of the IAEA.

What is needed is an ambitious reinvigoration of the grand bargain that was struck 40 years ago in the NPT. The renewed grand bargain will need to combine steps that can be taken immediately with a vision for the longer term, and to draw in states that are not parties to the NPT.

New approaches to verifying compliance with treaty obligations, to providing security for states in the absence of nuclear weapons, and to punishing states that violate the regime will certainly be required, and new methods to control the sensitive elements of the nuclear fuel cycle will likely be needed as well.

What the IAEA's precise future role in disarmament might be remains to be determined. But international nuclear verification will certainly be essential as disarmament proceeds, and the IAEA's existing capabilities and experience make it well suited to play a central role in that endeavor. It would also be logical for states to give the Agency a central role in monitoring the huge stockpiles of fissile material that would be freed from nuclear weapons programs. These activities would also justify additional resources for the Agency.

The international community has auspicious opportunities and significant challenges to tackle as the world moves into its seventh nuclear decade. Expanded use of nuclear technologies offers immense potential to meet important development needs. But it also poses complex and broad-ranging safety and security challenges that must be addressed effectively. Consequently, to reduce risks while allowing rapidly growing contributions to human well being from nuclear technologies, our report calls for a reinforced global nuclear order.

A stronger nuclear order will emerge as a product of increased collective action and partnership, expanded transparency, increasingly effective standards for safety and security worldwide, new nonproliferation measures, and progressive steps to reduce and ultimately eliminate nuclear weapons. If it can be created, this strengthened nuclear order could ultimately produce an era of Atoms for Peace and Prosperity, as was the hope when the IAEA was conceived in 1953. Of course, this is a task that goes well beyond the IAEA's mandate and capabilities, but reinforcing the IAEA will be one of the most crucial and fundamental steps toward that goal. ☞

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*Members of the Commission were: **Ambassador Oluyemi Adeniji** (Nigeria), **Lajos Bokros** (Hungary), **Lakhdar Brahimi** (Algeria), **Dr. Rajagopala Chidambaram** and **DAE-Homi Bhabha Professor** (India), **Senator Lamberto Dini** (Italy), **Gareth Evans** (Australia), **Louise Fréchette** (Canada), **Anne Lauvergeon** (France), **Kishore Mahbubani** (Singapore), **Ambassador Ronaldo Mota Sardenberg** (Brazil), **Ambassador Pius Yasebasi Ng'Wandu** (Tanzania), **Senator Sam Nunn** (United States), **Ambassador Karl Theodor Paschke** (Germany), **Dr. Wolfgang Schüssel** (Austria), **Academician Evgeny Velikhov** (Russia), **Professor Wang Dazhong** (China), **Dr. Hiroyuki Yoshikawa** (Japan), **Ernesto Zedillo**, Chair (Mexico).