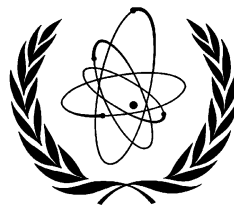

STATEMENT BY THE DIRECTOR GENERAL

THE ENDURING LESSONS OF CHERNOBYL

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INTERNATIONAL ATOMIC ENERGY AGENCY

THE ENDURING LESSONS OF CHERNOBYL

The April 1986 accident at the Chernobyl nuclear power plant remains a defining moment in the history of nuclear energy. The enduring lessons of this tragedy are interwoven with a recurrent theme: the essential nature of international cooperation. With its recently released document — entitled “Chernobyl’s Legacy” — the Chernobyl Forum has solidly reinforced that theme. For the next few minutes, therefore, I would like to use the topic of international cooperation as a lens through which to view: the major impacts of the Chernobyl accident; the progress we have made since that time; and — in keeping with the title of this conference — our outlook for the future.

Major Impacts of the Chernobyl Accident

The major impacts of the Chernobyl accident fall into three categories: the physical impacts, in terms of health and environmental effects; the psycho-social impacts on the affected populations; and the influence of the accident on the nuclear industry worldwide.

The physical impacts mark Chernobyl as the site of the most serious nuclear accident in history. The explosions that destroyed the Unit 4 reactor core released a cloud of radionuclides that contaminated large areas of Belarus, Russia and Ukraine. Hundreds of thousands of workers participated in efforts to mitigate the consequences of the accident, and many of these individuals were exposed to substantial radiation doses.

The definitive numbers compiled in the Chernobyl Forum report are sobering:

- Among the emergency rescue workers at the scene of the accident, some 50 individuals died — either from acute radiation syndrome in 1986 or due to other radiation-related illnesses in the years since.
- About 4000 children and adolescents contracted thyroid cancer from ingestion of contaminated milk and other foods, and 9 of those children have died.
- Overall, based on statistical modeling of the radiation doses received by workers and local residents, a total of 4000 deaths will eventually be attributable to the Chernobyl accident.
- Environmental fallout from the accident affected cropland, forests, rivers, fish and wildlife, and urban centers. In the three countries most affected,

nearly 800 000 hectares of agricultural land was removed from service, and timber production was halted for nearly 700 000 hectares of forest.

The psycho-social impacts were also devastating. Over 100 000 people were evacuated immediately after the accident, and the total number of evacuees from severely contaminated areas eventually reached 350 000 people. While these resettlements helped to reduce the collective dose of radiation, it was deeply traumatic for those involved.

Studies have found that exposed populations had anxiety levels twice as high as normal, with a greater incidence of depression and stress symptoms. Despite enormous relief efforts by the affected governments and outside organizations, these populations came to regard themselves not as ‘survivors’, but as helpless, weak and lacking control over their futures. This psycho-social milieu has been exacerbated by severe economic hardship, the exodus of skilled workers (especially young people), the difficulty in delivering social services, the prevalence of misconceptions and myths regarding health risks, and what the report calls a ‘paralysing fatalism’ that has led to both excessive health anxieties and reckless conduct.

As a result, poverty, mental health problems, and “lifestyle” diseases have come to pose a far greater threat to affected communities than radiation exposure.

The third impact I mentioned is the enormous influence of the Chernobyl accident on the nuclear industry. A decade earlier, the accident at Three Mile Island had already cast doubt on the ability of nuclear power plant operators to prevent severe accidents. Chernobyl had far greater impact; the accident emblazoned itself on public consciousness as proof positive that nuclear safety was an oxymoron. Some countries decided to reduce or terminate further construction of nuclear facilities, and the expansion of nuclear capacity came to a near standstill. It has taken nearly two decades of strong safety performance to repair the industry’s reputation.

International Cooperation: the Key Factor

But the key point in understanding each of these impacts, in turn, is that they were all driven, in a sense, by a lack of international cooperation. The Chernobyl accident revealed a sharp disparity in nuclear design and operational safety standards. The first lesson that emerged from Chernobyl was the direct relevance of international cooperation to nuclear safety. The accident also made clear that nuclear and radiological risks transcend national borders; that (as Dr. Blix said at the time) “an accident anywhere is an accident everywhere.”

Since that time, international cooperation has become a hallmark of nuclear safety — resulting in innumerable peer reviews, safety upgrades, bilateral and multilateral assistance efforts, safety conventions, and the body of globally recognized IAEA safety standards. In short, what might be called the most positive aspect of “Chernobyl’s Legacy” is today’s global nuclear safety regime. Had this level of cooperation already been in place in the mid-1980s, the Chernobyl accident arguably could have been prevented.

But it was also a lack of international cooperation, in the months and years following the Chernobyl accident, that helped to exacerbate the social effects of the disaster. As the Chernobyl Forum reports have rightly pointed out, poor analysis of the health and environmental risks to affected populations led to substantial unnecessary resettlement and economic disruption. Moreover, the perpetuation of conflicting information about the accident and the resulting health and environmental risks has led to widespread distrust of ‘official’ information — including, notably, among the affected populations.

It was to correct this situation — to set the record straight on Chernobyl, through clear scientific consensus — that the Chernobyl Forum was established. And once again, international cooperation has been a key factor in success. The joint contributions of hundreds of scientists, economists and health experts — supported by eight specialized United Nations Agencies, together with the governments of Belarus, Russia and Ukraine — are what grant this compilation of research its authority. To highlight this effort, and to publicize the conclusions of these reports, the IAEA, the World Health Organization and the United Nations Development Programme have launched a joint press campaign, coinciding with this conference. This type of cooperation will continue to be essential as we look to the future. [My only regret is that it has taken us nearly 20 years to reach this point.]

Technical Cooperation to Meet Human Needs

In the nearly 20 years since the accident, nature has healed many of the effects. Near the closed down Chernobyl nuclear power plant, a new forest has matured where the so-called ‘red forest’ stood in 1986. Wildlife abounds in the nature reserve created in the exclusion zone. Human exposure levels in contaminated areas have dropped exponentially, and will continue to decline.

Nevertheless, approximately 10 000 square kilometers of land in the three most affected countries will remain substantially contaminated for decades to come. Radionuclide concentrations in crops, animals and natural food products (such as wild berries and lake fish) will remain elevated for a long period — as will the associated levels of human exposure. These abnormal human exposure levels, as well as the continuing

thyroid cancers, will still require regular monitoring and, in some cases, continued intervention and treatment.

From the time of the accident, the IAEA has been continuously involved in technical assistance and research projects to mitigate the environmental and health consequences in affected areas. Since 1990, more than \$15 million has been disbursed through the IAEA technical cooperation programme on a broad range of these projects — often in cooperation with other organizations represented here today. We will continue those efforts, and we are committed to the “UN Strategy for Recovery”, launched in 2002. We strongly support the UN focus on developing new initiatives to address “the human needs of the affected individuals”, with a view to progressively restoring life to ‘normal’ to the degree possible.

Conclusion

In closing, I would like to thank all of the organizations that have contributed, willingly and cooperatively, to the achievements to date of the Chernobyl Forum. I cannot begin to introduce all of those representing these organizations — much less the dozens of scientists and experts present today whose inputs have been central to these reports [— but I would at least name the organizations: WHO and UNDP, whom I have already mentioned; the Food and Agriculture Organization (FAO), the United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), and the World Bank].

In addition, I would like to offer a sincere thank you for the cooperation we have received on numerous from the governments of the three most affected countries. We are honored to have with us today Mr. Drazhin, Vice Prime Minister of Belarus; Mr. Shoigu, the Minister for Emergencies of Russia; and Ms. Amosova, First Deputy Minister of Ukraine’s Ministry for Emergencies and Affairs of Population Protection from the Consequences of the Chernobyl Catastrophe.

And finally, I would like once again to thank Dr. Burton Bennett for his leadership as Chairman of the Chernobyl Forum. I wish you every success in the conference we are jointly opening today.

Thank you.