60 Years Since Hiroshima

John Avery, Mads Fleckner and Tom Børsen Hansen July 26, 2005

Some facts:

- Despite the end of the Cold War, and despite reductions following the SALT treaties, there are still 30,000 nuclear weapons in the world. 95% of these weapons are in the United States and Russia, but China, Great Britain, France, Pakistan, India, North Korea and Israel have sufficient numbers to do enormous damage. Israel is thought to have between 100 and 200 nuclear weapons, including thermonuclear bombs and neutron bombs.
- 44 countries have access to the fissile materials and technology needed to make nuclear weapons. As the number of countries possessing these weapons increases, there is an increasing danger that they will be used in conflicts, or that, through collapse of an unstable state, the weapons will fall into the hands of subnational groups.
- More than 4,500 warheads remain on hair-trigger alert. If the "fire on warning" status of these warheads is not reduced, then, over a long period of time, the danger that a catastrophic accident will occur will increase so much as to become almost a certainty. According to the US government, there were 32 accidents, false alarms and malfunctions involving US nuclear weapons prior to 1980. Several of these brought us to the brink of accidental nuclear war. In the USSR, an especially dangerous accident occured on 26 September, 1983. A newly-installed Soviet surveillance system reported that the United States had launched a missile attack against the Soviet Union. Had it not been for the insistance of Colonel Stanislov Petrov that this should be reported as a

false alarm, thousands of warheads would have been launched against the US in retaliation. The megatonnage involved in the resulting thermonuclear exchange between the two countries would have been 30 to 60 times the amount needed to produce nuclear winter. This incident is considered by many analysts to be the closest the world has come to a full-scale nuclear disaster, but there is a great threat that such an accident will actually occur in the future.

- There are more than 3,000,000 kilograms of highly enriched uranium (HEU) and plutonium in the world. Almost half of this fissile material is in Russia, in poorly-guarded installations. A subnational organization in possession of a critical mass of HEU would be capable of constructing a crude gun-type nuclear weapon. In such a device, two grapefruit-sized subcritical pieces of HEU are placed at opposite ends of a cannon, and are driven together by conventional explosives. Such a device, brought into a city by means of a truck or boat and exploded, could destroy the city center and cause several hundred thousand deaths.
- The Nuclear Non-Proliferation Treaty (NPT) is in danger. The NPT has been in force as international law since 1970 and it has now been signed by 187 nations. In this treaty, the five original nuclear weapon states (the US, USSR, France, China and England) agreed to take effective steps towards complete nuclear disarmament (Article IV). In return, the non-nuclear-weapon states agreed not to obtain these weapons. Israel, India and Pakistan have refused to sign the NPT, and North Korea has withdrawn its signature. The NPT is reviewed every 5 years and it is due to be reviewed again in May, 2005. However, the disagreement between the nuclear weapon states and those lacking these weapons is so great that they have not even been able to agree on an agenda for the 2005 NPT Review Conference. The nuclear weapon states refuse even to discuss the 13 Practical Steps towards nuclear disarmament which were agreed on at the NPT Review Conference in 2000. Furthermore, they have not only failed to honor their obligations under Article IV of the NPT, they have also begun to develop new types of nuclear weapons (e.g. the Robust Earth Penetrator) and new command systems (e.g. MILSATCOM). The Comprehensive Test Ban

Treaty (CTBT) is also in danger.

- The no-first-use principle has been abandoned. For many years the tabu against use of nuclear weapons except in response to a nuclear attack has acted as a safeguard. However, this important principle has now been abandoned. For example, NATO policy states that the US nuclear weapons in Europe would be used in response to an attack with chemical or biological weapons. (According to Reuters, there are more than 400 US nuclear weapons stationed in Europe. Chemical and biological weapons are several orders of magnitude less destructive than nuclear weapons.) Furthermore, the George W. Bush Administration's Nuclear Posture Review paper, published in 2002, proposes that US nuclear weapons might be used in many situations, including war in the Middle East, conflict between China and Taiwan, North Korean invasion of South Korea, or "surprising military developments", a vague term that could include many things.
- Nuclear weapons are illegal under international law. In an historic 1996 decision, the International Court of Justice in the Hague ruled that "the threat and use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and particularly the principles and rules of humanitarian law... There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament under strict international control." The ruling was made in response to questions put to the Court by WHO and by the United Nations General Assembly.
- Between 1940 and 1998, the United States spent \$5.7 trillion on nuclear weapons. This estimate was made by the Brookings Institution on the basis of a four-year study initiated in order to form the basis for an honest and informed public debate. The US currently spends \$100 million per day on nuclear weapons.

Some policy suggestions

• The EU should vigorously support international efforts to save the NPT Treaty, the CTBT Treaty and the ABM Treaty. We should put pressure on the nuclear weapon states to fulfill their obligations under Article

VI of the NPT. The Thirteen Practical Steps should be part of the agenda of the 2005 NPT Review Conference.

- The EU should press for the removal of all US nuclear weapons from Europe. NATO should not be armed with nuclear weapons.
- The EU should not participate in the development of new nuclear weapons control systems. Bases in Greenland should not be used for this purpose.
- The EU should support the establishment of nuclear-weapon-free zones, especially in the Middle East, the Indian subcontinent, and the Korea-Japan region.
- The EU should oppose US-Israeli plans for a military attack on Iranian nuclear installations. At the same time we should press Iran to abandon its uranium-enrichment program.
- The EU should oppose nuclear weapons as part of the armament of any future military force of the European Union.
- The EU should press for a lowered operating status for existing nuclear warheads. No warheads should be maintained on a "fire on warning" status.
- Sweden is already part of the Middle Powers Initiative, a group of countries pressing for nuclear disarmament. All the countries in the EU should join Sweden in this effort.
- The EU should oppose widespread use of nuclear power as a response to the global energy crisis because of the difficulty of distinguishing between civil and military nuclear programs. (This difficulty can be seen, for example, in Iran).
- The EU should support European involvement in efforts to make fissile material in Russia more secure against theft, for example by buying highly enriched uranium from Russia and mixing it with natural uranium.

• The EU should support a program of public education on current nuclear dangers.