

AN ARCTIC NUCLEAR WEAPON FREE ZONE:  
SCANDINAVIA AS A FIRST STEP

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Figure 1: *An image from Hiroshima*

I would like to begin by saying a few words about why it is extremely urgent for the world to rapidly eliminate all nuclear weapons. It is appropriate to begin by remembering Hiroshima and Nagasaki:

On August 6, 1945, at 8:15 in the morning, an atomic bomb was exploded in the air over Hiroshima. The force of the explosion was equivalent to twenty thousand tons of T.N.T.. Out of a city of two hundred and fifty thousand people, almost one hundred thousand were killed by the bomb; and another hundred thousand were hurt.

In some places, near the center of the city, people were completely vaporized, so that only their shadows on the pavement marked the places where they had been. Many people who were not killed by the blast or by burns from the explosion, were trapped under the wreckage of their houses. Unable to move, they were burned to death in the fire which followed.

The following description of the nuclear bombing of Hiroshima was given by the city's present Mayor, Dr. Tadatoshi Akiba, who has interviewed many of the survivors: "The skin of people seeking help dangled from their fingernails. Their hair stood on end. Their clothes were ripped to shreds. People trapped in houses toppled by the blast were burnt alive... Hiroshima was a hell where those who somehow survived envied the dead."

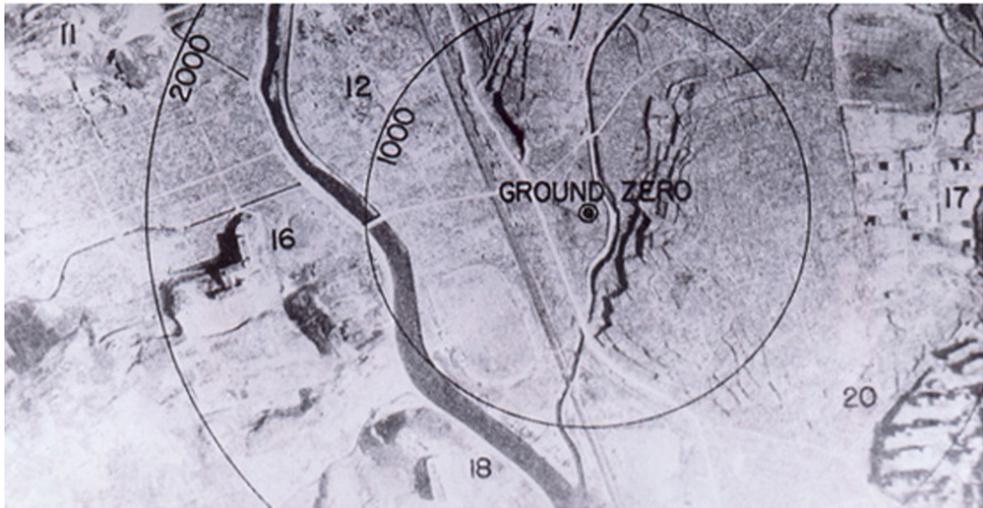


Figure 2: *Nagasaki, before and after the bomb.*



Figure 3: *While the nuclear bombings of the two Japanese cities were tragic in themselves, the greatest threat to humanity has come from the nuclear arms race that followed. This photograph shows a hydrogen bomb exploded near the island of Enewetak in the South Pacific in 1952. The explosive force of the bomb was 500 times greater than the bombs that destroyed Hiroshima and Nagasaki. The Soviet Union tested its first hydrogen bomb in 1953. In March, 1954, the US tested another hydrogen bomb at the Bikini Atoll in the Pacific Ocean. It was 1000 times more powerful than the Hiroshima bomb. The Japanese fishing boat, Lucky Dragon, was 130 kilometers from the Bikini explosion, but radioactive fallout from the test killed one crew member and made all the others seriously ill. Russia later exploded a bomb that was approximately 6000 times more powerful than the Hiroshima bomb. At the height of the Cold War, collective paranoia had driven the two superpowers to produce more than 50,000 nuclear weapons, with a total explosive power roughly a million times greater than the bombs that destroyed the two Japanese cities - sufficient to destroy human civilization and much of the biosphere many times over.*

## **The dangers are very great today**

Although the Cold War has ended, the dangers of nuclear weapons have not been appreciably reduced. Indeed, proliferation and the threat of nuclear terrorism have added new dimensions to the dangers.

**There are 26,000 nuclear weapons in the world today, about 4,000 of them on hair-trigger alert.** Today, more than 90% of the world's nuclear weapons are in the hands of the USA and Russia. Although their number has been cut in half from its Cold War maximum, the danger of nuclear omnicide has not been appreciably reduced. The most important single step in reducing this danger would be to take all weapons off hair-trigger alert.

**The total explosive power of today's weapons is equivalent to roughly half a million Hiroshima bombs.** To multiply the tragedy of Hiroshima and Nagasaki by a factor of half a million changes the danger qualitatively. What is threatened today is the complete breakdown of human society.

**The danger of accidental nuclear war continues to be high.** A number of prominent political and military figures (many of whom have ample knowledge of the system of deterrence, having been part of it) have expressed concern about the danger of accidental nuclear war. Colin S. Grey, Chairman, National Institute for Public Policy, expressed this concern as follows: "The problem, indeed the enduring problem, is that we are resting our future upon a nuclear deterrence system concerning which we cannot tolerate even a single malfunction." General Curtis E. LeMay, former Chief of the United States Strategic Air Command, has written, "In my opinion a general war will grow through a series of political miscalculations and accidents rather than through any deliberate attack by either side." Bruce G. Blair, Brookings Institute, has remarked that "It is obvious that the rushed nature of the process, from warning to decision to action, risks causing a catastrophic mistake... This system is an accident waiting to happen." Fred Ikle of the Rand Corporation has written, "But nobody can predict that the fatal accident or unauthorized act will never happen. Given the huge and far-flung missile forces, ready to be launched from land and sea on on both sides, the scope for disaster by accident is immense... In a matter of seconds - through technical accident or human failure - mutual deterrence might thus collapse."

**There is no defense against nuclear terrorism.** We must remember the remark of U.N. Secretary General Kofi Annan after the 9/11/2001 attacks on the World Trade Center. He said, “*This time* it was not a nuclear explosion”. The meaning of his remark is clear: If the world does not take strong steps to eliminate fissionable materials and nuclear weapons, it will only be a matter of time before they will be used in terrorist attacks on major cities. Neither terrorists nor organized criminals can be deterred by the threat of nuclear retaliation, since they have no territory against which such retaliation could be directed. They blend invisibly into the general population. Nor can a “missile defense system” prevent terrorists from using nuclear weapons, since the weapons can be brought into a port in any one of the hundreds of thousands of containers that enter on ships each year, a number far too large to be checked exhaustively.

## **Nuclear weapons are illegal**

In 1996 the International Court of Justice ruled that “the threat and use of nuclear weapons would generally be contrary to international law.” The key argument against nuclear weapons is their essentially genocidal nature. (Not only genocidal but potentially omnicidal!)

Judge Fleischhauer of Germany said in his separate opinion, “The nuclear weapon is, in many ways, the negation of the humanitarian considerations underlying the law applicable in armed conflict and the principle of neutrality. The nuclear weapon cannot distinguish between civilian and military targets. It causes immeasurable suffering. The radiation released by it is unable to respect the territorial integrity of neutral States.”

President Bedjaoui, summarizing the majority opinion, called nuclear weapons “the ultimate evil”, and said “By its nature, the nuclear weapon, this blind weapon, destabilizes humanitarian law, the law of discrimination in the use of weapons... The ultimate aim of every action in the field of nuclear arms will always be nuclear disarmament, an aim which is no longer utopian and which all have a duty to pursue more actively than ever.”

The World Court’s 1996 advisory Opinion unquestionably also represents the opinion of the majority of the world’s peoples. Although no formal plebiscite has been taken, the votes in numerous resolutions of the UN General Assembly speak very clearly on this question.

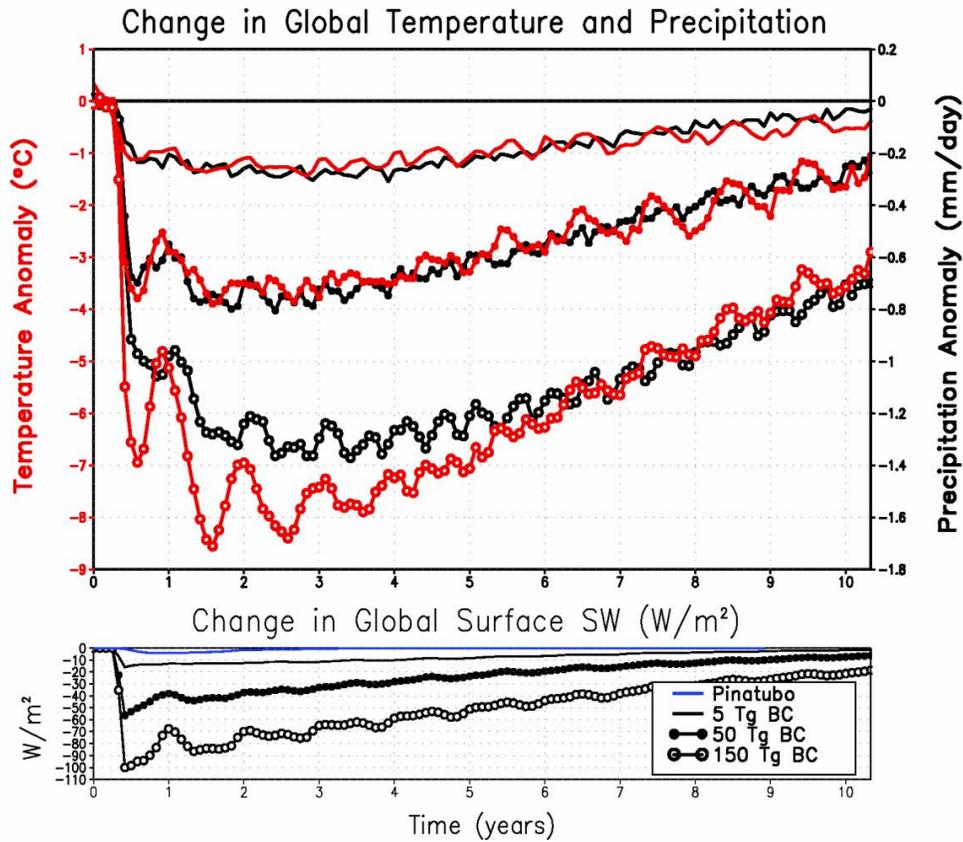


Figure 4: **New research on famine from nuclear darkness.** *Recent studies by atmospheric scientists have shown that the smoke from burning cities produced by even a limited nuclear war would have a devastating effect on global agriculture. The studies show that the smoke would rise to the stratosphere, where it would spread globally and remain for a decade, blocking sunlight and destroying the ozone layer. Because of the devastating effect on global agriculture, darkness from even a small nuclear war (e.g. between India and Pakistan) would result in an estimated billion deaths from famine. Nuclear darkness resulting from a large-scale war involving all of the nuclear weapons that are now on high alert status would destroy all agriculture on earth for a period of ten years, and almost all humans would die of starvation. (See O. Toon , A. Robock, and R. Turco, “The Environmental Consequences of Nuclear War”, Physics Today, vol. 61, No. 12, 2008, p. 37-42).*

## **An Arctic Nuclear Weapon Free Zone**

Let us now turn to the specific proposal for establishing an Arctic NWFZ. Polar sea ice is melting at a rate that exceeds expectations. The Northern Sea Route on the Russian side and the Northwest Passage on the Canadian side will soon be free from ice for large portions of the year. Russia has already made its first oil delivery to China through the Northern Sea Route.

As climate change makes resource extraction possible, there will be large-scale competition for the natural resources of the Arctic. Militarization of the Arctic in support of territorial claims threatens the fragile ecology of the region and threatens its indigenous peoples.

Dr. Adele Buckley of the Canadian Pugwash Group predicts that there will be a vast geo-economic shift to the North: “Adaption to climate change in the Arctic is a huge challenge with many facets.”, she writes, “ There is no room for conflict of a military nature... Humanity does not possess the monetary or human resources to apply to both militarization and development of the Arctic. We must choose development and collaboration.”

## **Arctic Security in the 21st Century**

On April 11-12, 2008, a Conference on Arctic Security in the 21st Century took place at Simon Fraser University, Vancouver, Canada. The conference was convened by Amb. Jayantha Dhanapala, Former UN Under-Secretary-General for Disarmament, Prof. John Harriss, Director of the School for International Studies, and Jennifer Simmons, President of the Simmons Foundation. The full report of the conference is available on the following link:

[www.sfu.ca/internationalstudies/Arctic\\_Security\\_Conference.pdf](http://www.sfu.ca/internationalstudies/Arctic_Security_Conference.pdf)

In his introduction to the conference, Amb. Dhanapala states that “The melting of the Arctic Cap will facilitate the mining of resources, especially oil and gas, and will lead to an increase in commercial shipping. The ownership of resources, and the sovereignty of areas like the Northwest Passage are already being contested; the application of the United Nations Convention on the Law of the Sea has to be more sharply defined, especially where there is overlap. Developing nations that are going to be hardest hit by climate change, where the “Bottom Billion” lives in extreme poverty, see this potential resource exploitation in the context of globalization and its impact on

energy costs, especially as the UN tries to achieve the Millennium Development Goals (MDGs). Some also see the area outside the territory claimed by the littoral states of the Arctic, as part of the global commons and the common heritage of humankind. A global regime could be established over the Arctic, to mitigate the effects of climate change and for the equitable use of resources in areas outside the territory of the eight circumpolar countries.”

## **Call for an Arctic NWFZ**

In August, 2009, the participants at a conference in Copenhagen issued the following Call for an Arctic NWFZ:

We the participants in the Conference on an Arctic Nuclear-Weapon-Free Zone, held in Copenhagen 10-11 August 2009:

*Recognizing* that polar-ice-cap melting, caused by climate change, increases the potential for greater human and economic activity as well as conflict in the Arctic region, making more urgent the establishment of non-military, co-operative mechanisms for environmental protection, adaptation and security;

*Inspired* by promising new opportunities and political momentum for the achievement of a nuclear-weapon-free world;

*Believing* that nuclear-weapon-free zones play an important role in building regional security and confidence in order to achieve a nuclear-weapon-free world;

*Recognizing* the value of international treaties as instruments for building mutually beneficial collaborative arrangements and ensuring verification and compliance;

*Welcoming* treaties prohibiting nuclear weapons in specific regions, including Antarctica (1959), Outer Space (1967), Sea-Bed (1971), Latin America and the Caribbean (1968), the South Pacific (1986), South East Asia (1995), Africa (1996), Mongolia (2000), and Central Asia (2006);

*Encouraged* by the April 2009 resolution adopted by the Inter-Parliamentary Union, representing 150 national parliaments, calling for the establishment

of additional Nuclear-Weapon-Free Zones;

*Welcoming* international treaties which take additional steps to completely demilitarize geographic zones, such as the 1959 Antarctic Treaty;

*Welcoming especially* the 1971 Seabed Treaty which prohibits the placement of nuclear weapons on the ocean floor including in the Arctic region;

*Recognizing* that each region, including the Arctic, has its own unique security environment which requires creative, multifaceted negotiations in order to achieve the establishment of the desired Nuclear-Weapon-Free Zone;

*Encouraged* by the May 2008 declaration of Illulissat in which the Foreign Ministers of the littoral states of the Arctic region agreed to work together to promote peaceful cooperation in the Arctic region, on the basis of international law, including the 1982 United Nations Convention on the Law of the Sea.

### **Recommend:**

1. That governments and relevant sectors of civil society collaborate in developing the modalities for establishing a nuclear-weapon-free and demilitarized Arctic region;
2. That such collaboration should include active participation of, among others, indigenous and northern peoples, inhabitants of the region, parliamentarians, scientists, health professionals and academics;
3. That the aim of a Nuclear-Weapon-Free Arctic should be promoted in relevant environmental and development forums;
4. That the aim should also be promoted in relevant national and international political forums including, but not limited to, the United Nations, Arctic Council, Organization for Security and Cooperation in Europe, Nordic Council, North Atlantic Treaty Organization, Cooperative Security Treaty Organization (Tashkent Treaty), Non Proliferation Treaty Review Conferences and the Conference on Disarmament;

5. That countries in nuclear alliances be encouraged to reduce the role of nuclear weapons in their security doctrines in order to better facilitate the establishment of Nuclear-Weapon-Free Zones involving these countries, including in the Arctic region;
6. That countries in the Arctic region not possessing nuclear weapons (Canada, Denmark, Finland, Iceland, Norway, Sweden) take initial steps towards a Nuclear-Weapon-Free Zone in close cooperation with the United States and the Russian Federation;
7. That governments undertake steps to increase transparency and to redress negative impacts on inhabitants and the environment from military activities in the Arctic region including those in the past.

### **An Arctic NWFZ meeting in the Danish Parliament**

A small meeting of the leadership of the opposition parties in the Danish Parliament was held on the 23rd of March, 2010, to discuss whether advocacy of an Arctic NWFZ could be adopted as a common policy by all the parties in the opposition. Those who spoke at the meeting were MP Margrethe Vestager, Leader of the Social Liberal Party, MP Jeppe Kofod, Foreign Policy Spokesman for the Social Democrat Party, and MP Holger K. Nielsen, Defense Policy Spokesman for the Socialist Party. Speakers from outside the Parliament included Dr. Jan Prawitz of the Swedish Institute of International Affairs and Alyn Ware, Global Coordinator for Parliamentarians for Nuclear Nonproliferation and Disarmament.

MP Jeppe Kofod's speech emphasized the desirability of an Arctic Nuclear Weapon Free Zone as a step towards the elimination of all nuclear weapons. He said that with climate change making commercial exploitation of the Arctic possible, there is a danger of militarization of the region in support of territorial claims. However, the fragile ecology of the Arctic needs to be protected, as do its indigenous peoples. In particular, nuclear weapons must be barred from the region.

The next speaker was Dr. Jan Prawitz, who reviewed the history of NWFZ's in other parts of the world. He said immediately that he strongly believed that an Arctic NWFZ is achievable, but warned that the achievement would probably require both time and effort. He put forward four urgent steps:

1. Introduce a working paper on the subject at the upcoming NPT Review Conference next May 3rd-28th.
2. Introduce the idea of a nuclear-weapon-free Arctic in the current update of NATO's Strategic Concept.
3. Prepare a draft resolution on a nuclear-weapon-free Arctic for the next UN General Assembly.
4. Initiate a process on a broad range of issues within the Organization of Security and Cooperation in Europe (OSCE)

Next, MP Margrethe Vestager said that she remembered participating in marches against nuclear weapons, but that since the end of the Cold War, the issue had seemed to be neglected. However, she said that US President Obama's Prague speech opened up new possibilities, and she hoped that it would now be possible to place issues relating to elimination of nuclear weapons on the agenda of the Danish Parliament. She said that she hoped the present meeting of the Danish opposition parties could be the start of cooperative discussions of a wide range of foreign policy issues. Denmark should play as active a role in foreign policy as Norway currently does.

MP Holger K. Nielsen said that he urged Denmark to concentrate more attention on the Arctic because of the large area of Danish territory in this region. He promised to make Arctic issues a priority on the agenda of the Danish Parliament.

Finally Alyn Ware gave the meeting the benefit of his extremely wide knowledge concerning nuclear-weapon-free zones. He discussed many cases of such zones to emphasize the great flexibility of provisions. He said that most of the world's nations belong to NWFZ's.

In the discussions following the talks the history of proposals of a Nordic NWFZ was reviewed. It was concluded that a Nordic NWFZ, or perhaps a Nordic-Canadian NWFZ would be a good first step. The need for revising the NATO Strategic Concept was discussed, and it was pointed out that the nuclear paragraphs of the Concept violate both the NPT and the 1996 decision of the International Court of Justice.

All the speakers supported advocacy of an Arctic NWFZ.



Figure 5: *Polar sea ice is melting much faster than expected. The rapidly-warming climate of the Arctic threatens both the fragile ecology of the region and its indigenous peoples. At the same time it presages a massive geo-economic shift to the north. (<http://cos-webster.st.unh.edu>)*

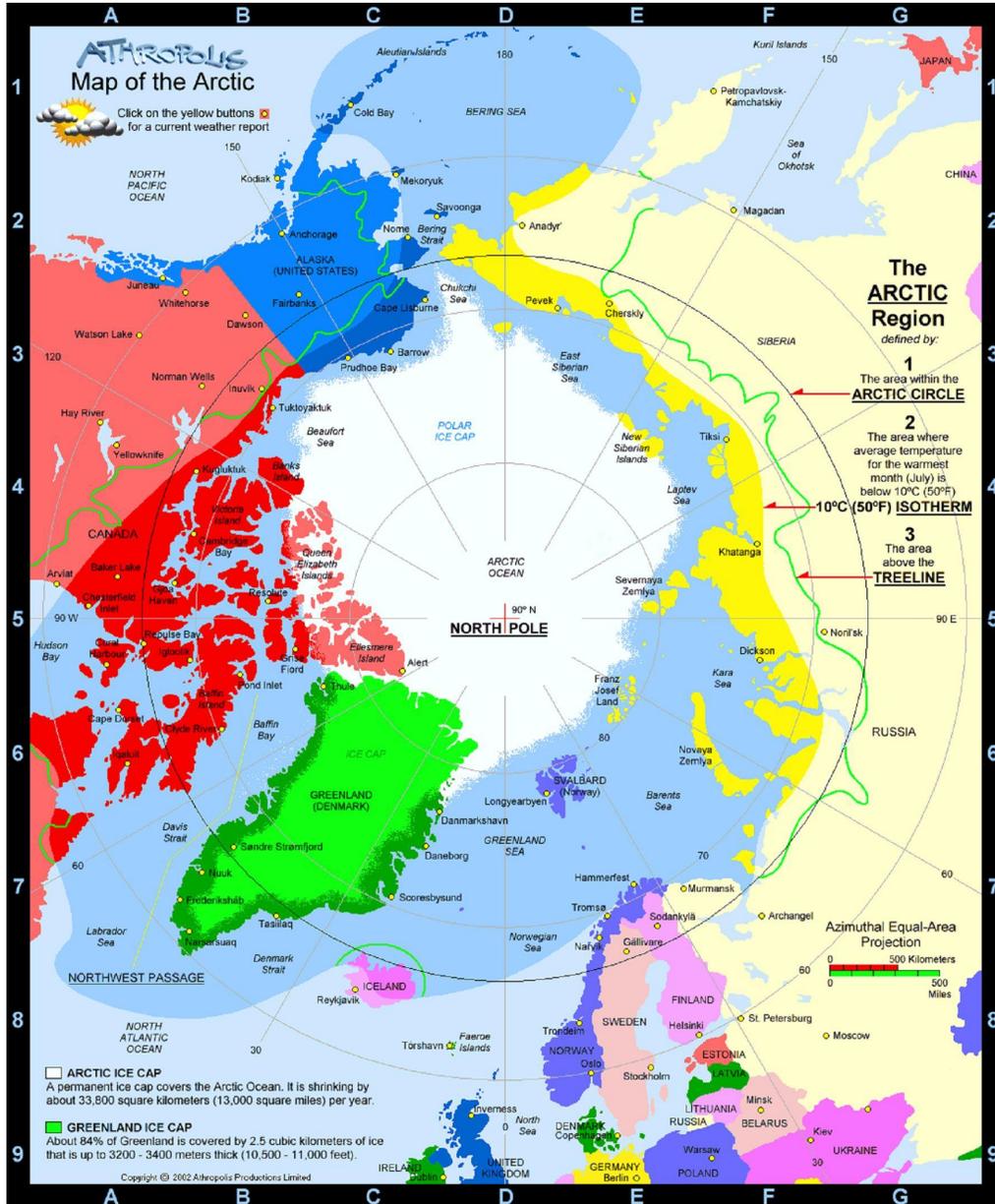


Figure 6: A political map of the Arctic region. Rights to some of the waterways are disputed.



Figure 7: *The present reality: Exactly what we don't want! At present nuclear-armed submarines of both the USA and Russia regularly patrol Arctic waters, even colliding under the ice. (U.S. Navy photo by Chief Yeoman Alphonso Braggs).*

## A Nordic Nuclear Weapon Free Zone

The governments of Denmark, Norway, Sweden Finland and Iceland are opposed to nuclear weapons, and there none stationed on Scandinavian territory. Therefore a Nordic Nuclear Weapon Free Zone is a possible first step towards an Arctic NWFZ.

The Nordic countries already fulfill two important criteria of NWFZ's - non-possession of nuclear weapons and non-stationing of nuclear weapons by any state within their zone. Regarding non-use or no threat of use against targets within the zone, we think that the nuclear weapons states would agree not to threaten to use their weapons against the Nordic countries.

In 1957, Denmark enacted a ban on nuclear weapons on its territories, and that ban is still in force, despite Danish membership in NATO. This demonstrates that membership of several Scandinavian countries in NATO is not a hindrance to the formation of a Nordic NWFZ. Further support for this view can be found in the precedent of the 2006 Semipalitinsk Treaty, which involves Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Several of the member states of the Semipalitinsk NWFZ are members of a treaty organization with Russia, the Tashkent Treaty, but this did not prevent them from signing the Semipalitinsk Treaty.

The idea of a Nordic NWFZ was first proposed by Nikolai Bulganin in 1958. Bulganin's proposal was supported by President Kekkonen of Finland but it was initially rejected by the other Nordic countries. Kekkonen continued to promote the idea of a Nordic NWFZ, but it took more than 20 years before other Nordic governments gave serious support to the idea.

In September 1980 when the Norwegian diplomat Jens Eversen suggested that Norway should take the lead in establishing a Nordic zone. Eversen's proposal sparked a grand debate among the political parties in Norway, and particularly within the Labor party. In 1982, former Norwegian Prime Minister Gro Harlem Brundtland presented a list of preconditions for supporting a Nordic zone:

1. Maintaining a low level of tension in the Nordic region was imperative.
2. It had to be based on mutual commitments and restraints, in a balanced manner.
3. The broader disarmament framework, such as the negotiations on the reduction of long range missiles, was to be given priority. The zone had

to be seen as a part of the bigger picture.

4. Solutions had to be found that could be accommodated into the NATO-cooperation, and that would result in less nuclear weapons both in the east and the west.

Between 1984-85, a bipartisan commission studied the feasibility of the zone and presented its recommendations to the Norwegian Parliament. In the period from 1987 til 1991, a Nordic Senior Officials Group also discussed the possibility of the zone and in 1993, the Nordic Council recommended its establishment. But the end of the Cold War led to the mistaken belief that nuclear abolition was no longer urgent, and the idea lost momentum.

Today, however, the issue of nuclear weapons is once again at the center of the global stage. I strongly believe that the time has come for the Scandinavian countries to take a united stance on this issue. Most of the world's nations live in nuclear weapon free zones. This does not give them any real protection, since the catastrophic environmental effects of nuclear war would be global, not sparing any nation (Figure 4, References 2-7). However, by becoming members of NWFZ's, nations can state that they consider nuclear weapons to be morally unacceptable, a view that must soon become worldwide if human civilization is to survive.

By establishing a Nordic Nuclear Weapon Free Zone we in Scandinavia can express our belief that nuclear weapons are an absolute evil; that their possession does not increase anyone's security; that their continued existence is a threat to the life of every person on the planet; and that these genocidal and potentially omnicidal weapons have no place in a civilized society.

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