



**International Network
of Engineers and Scientists
Against Proliferation**

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Global Background

With a view on INESAP's fields of activities, the years 2004 and 2005 were determined by the following themes:

- In spite of President George W. Bush's proud announcement, under the banner "Mission Accomplished" on a US aircraft carrier in May 2003, that major combat operations in Iraq were over and Saddam Hussein's capture in December of the same year, the Iraq war continued to rage on in 2004/5 and it became more probable that there is no military solution to the conflict. Suicide bombings cost ever more lives on all sides, most often among Iraqi civilians. Contrary to the main justification prior to the US attack, no stockpiles of weapons of mass destruction could be found in Iraq by the Iraq Survey group. Similarly, no proof for support of "Islamic terrorism" by the government of Saddam Hussein was found, but terrorism became a determining feature in the new Iraq.
- Mostly as a result of the "war on terror", worldwide military budgets increased to more than 1.1 trillion US dollars in 2005. The US contributed about 80% to the increase and about 50% to the overall military expenses. The decision to solve security problems – among them the role of "non-state actors" – preliminarily with military force contradicted the trend at the United Nations to stress the "human security" aspects of life ("freedom from want and freedom from fear").
- The political bodies of the European Union suffered a blow in 2005, when a majority of the voters rejected the proposed constitutional treaty in referenda in France (May) and the Netherlands (June). Despite this, implementation of the European Security Strategy adopted in December 2003 has started. The constitution states that "Member States shall undertake progressively to improve their military capabilities" and that a "European Armaments, Research and Military Capabilities Agency shall be established to ... contribute to identifying and, where appropriate, implementing any measure needed to

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strengthen the industrial and technological base of the defence sector“. This provision provoked broad and harsh criticism, in particular among many non-governmental organizations (NGOs), as well as the refusal to address the issue of the two nuclear weapon states (France and the UK) in Europe.

- According to the Stockholm Peace Research Institute (SIPRI), the five official nuclear weapons states (China, France, Russia, the UK, and the United States) had still 13 000 operational nuclear weapons deployed. Including the so-called „reserves“ (deployed, spares, in active and inactive storage, and plutonium cores), the total nuclear weapons arsenals of these countries amounted to 32,300 nuclear warheads, and all countries had major modernization programs under way, with the exception of Britain where a public debate on the renewal of the nuclear Trident submarine and missile system took off in 2005.
- In the United States, modernization of the nuclear arsenal centered around the Robust Nuclear Earth Penetrator (not a mini-nuke by design) and “usable” low-yield nuclear weapons (mini nukes). For the latter, however, Congress refused the necessary funds. Preparations for a modern pit facility to build new plutonium cores and renewed tritium production were also pushed forward. Deployment of missile defense systems around the world, in particular in Northeast Asia and the Middle East, continued, although test results for the ground-based mid-course system were either faked or failed. Several technologies under investigation for use in space are suspected to provide offensive weapons capabilities.
- Missile defense was also an issue for NATO and individual NATO countries. In June 2004, NATO’s Council approved the ALTBMD (Active Layered Theatre Ballistic Missile Defence) program, which according to NATO is to “provide protection against the threats of [theatre-range] ballistic missiles to our soldiers deployed to NATO missions” The system is designed such that it can integrate different TMD systems (e.g. Patriot, MEADS, SAMP-T). The charter for the ALTBMD Programme Management Organization has been approved in March 2005. MEADS (Medium Extended Air Defense System), a joint project of Germany, Italy, and the United States, is planned to replace Hawk and Patriot systems worldwide and to provide protection against tactical ballistic missiles, low and high altitude cruise missiles, UAVs, aircraft and helicopters – an array of tasks, critics say, that will be impossible to fulfill.
- In mid-2005, President Bush and Indian Prime Minister Manmohan Singh agreed to joint cooperation in energy and satellite technology, with the US giving assistance to India’s civilian nuclear energy program and a lift of the US moratorium on nuclear trade with India. With this move, the US singles India out among the *de facto* nuclear weapons states and further weakens the nuclear non-proliferation regime.
- Nuclear ambitions of North Korea and Iran continued to be high on the political agenda throughout both years and resulted in several proposals for restricting capabilities to enrich uranium and re-process plutonium to just a few countries.
- Very unexpectedly, a debate on involvement in NATO’s nuclear sharing arrangement was initiated in Germany just prior to the 2005 Review Conference of the Non-Proliferation Treaty (NPT). Launched by a parliamentary motion of the liberal party FDP that demanded immediate withdrawal of the 150 US nuclear weapons deployed on German soil, the ruling Social Democrat and Green parties quickly picked up on the issue. While German Foreign Minister Joschka Fischer acknowledged in his speech to the NPT Review Conference that "there is a serious public debate on this issue [in Germany] which calls

for practical steps,“ the debate quickly subdued when suddenly early elections were announced for the Bundestag. Rather than making nuclear disarmament a topic in the election campaign, the political figures chose to not make it a major issue.

- On a more positive note, Libya announced in December 2003 that it had a weapons of mass destruction program which it would immediately abandon. In 2004 the country cooperated closely with the IAEA and signed an Additional Protocol to its NPT safeguards agreement. At the same time and as a result of the Libyan move, the creator of the Pakistani nuclear bomb, A.Q. Khan, admitted to his involvement in nuclear weapons technology transfer from Pakistan to North Korea, Iran, and Libya.

In April 2004, the UN Security Council unanimously adopted Resolution 1540, a non-proliferation resolution under Chapter VII of the UN Charter according to which all States shall refrain from supporting by any means non-State actors that attempt to acquire, use, or transfer nuclear, chemical, or biological weapons and their delivery systems. By the text the Security Council decided also that all States would establish domestic controls to prevent the proliferation of such weapons and means of delivery, in particular for terrorist purposes, including by establishing appropriate controls over related materials, and adopt legislative measures in that respect.

INESAP Projects and Activities in 2004/5

Non-Proliferation Treaty Conferences 2004 and 2005

In the years 2004 and 2005, respectively, the last of three Preparatory Committee meetings (PrepCom) and the seventh Review Conference of the nuclear Non-Proliferation Treaty were held at the UN headquarters in New York. As in previous review cycles, INESAP worked with many other NGOs in preparation of civil society activities during the conferences as well as in drafting the NGO statements for the official three-hours long NGO sessions (NGO representatives speak and UN delegates listen). At the same time, we participated in efforts to lobby foreign ministries and diplomats in the hope that they would ensure a balanced discussion not only on non-proliferation issues but also on the nuclear weapons states' disarmament obligations under Article VI of the NPT.

In both years, participation of large and international Mayors for Peace (www.mayorsforpeace.org) delegations, headed by Mayor Akiba (Hiroshima) in 2004 and by the Mayors Akiba and Itho (Nagasaki) in 2005, and the speeches delivered by the Mayors impressed diplomats and NGOs. The Mayors promoted the Emergency Campaign 2020 *Vision*. A second new element in this review cycle was massive participation of youth, in particular a large youth delegation from Germany, mostly with young members of the International Law Campaign (www.aktion-voelkerrecht.de) with their wooden-brick protective wall for international law. The campaign received massive support from INESAP members in Germany, including training for “NPT newcomers”.

In view of the failure of the PrepComs to move forward and agree on an agenda for the Review Conference, it was not a big surprise – even though very disappointing – that the Review Conference was unable to come to any consensus on the implementation of the provisions of the treaty and ended in utter disarray. This led to a heightened importance of the parallel civil society activities, which started with a major march past the UN and a rally for nuclear abolition in Central Park on May 1 just prior to the opening of the Review Conference. The NGO events in the UN ended, although this had not been intentionally planned, with an INESAP panel on the last conference day.

At the NPT PrepCom 2004, INESAP prepared one NGO speech and hosted one event:

- NGO presentation *Unraveling the NPT – on Nuclear Weapons, Missile Defenses, And Space Weaponization*, convened by Regina Hagen and presented by Charlotte Wohlfahrt (International Law Campaign).
- *A Fresh Look at Vertical Proliferation* with David Krieger, President of the Nuclear Age Peace Foundation; Andrew Lichterman, Director of the Western States Legal Foundation; Randall Forsberg, Executive Director of the Institute for Defense and Disarmament Studies; Jeffrey Lewis, Graduate Fellow from the Center for International and Security Studies of the University of Maryland, and Regina Hagen from INESAP.

At the Review Conference 2005, INESAP hosted three events:

- *Beyond the NPT. Towards the Nuclear Weapons Free World* with David Krieger; the writer Jonathan Schell (*The Gift of Time: The Case for Abolishing Nuclear Weapons Now* and *Fate of the Earth*); Daniel Ellsberg, who is the author of *Secrets: A Memoir of Vietnam and the Pentagon Papers*; and Jürgen Scheffran, one of the co-drafters of the *Model Nuclear Weapons Convention*.
- *A Case in Point: Rokkasho* with Akira Kawasaki from Peace Boat; Harold Feiveson from Princeton University; and Martin Butcher from Physicians for Social Responsibility.
- And bringing a ray of hope to the otherwise gloomy conference, on the very last day *Legal, Technical and Political Steps to a Nuclear Weapons Free World –A Nuclear Weapons Convention?* with Ambassador Rastam Mohd Isa from Malaysia; Ambassador Paul Meyer from Canada; and Alyn Ware from IALANA.

Middle Powers Initiative and Article VI Forum

The Middle Powers Initiative (MPI; www.middlepowers.org), which was founded in 1998 and consists of eight international NGOs, among them INES/INESAP, works primarily with „middle power“ governments to encourage and educate the nuclear weapons states to take immediate practical steps that reduce nuclear dangers, and commence negotiations to eliminate nuclear weapons. Armin Tenner (INES, formal representative) and Regina Hagen (INESAP, backup representative) share representation of INES/INESAP at MPI.

In preparation for the NPT Review Conference 2005, MPI organized an Extraordinary Strategy Consultation, the *Atlanta Consultation II: On the Future of the NPT* in cooperation with former U.S. President Jimmy Carter at The Carter Center in Atlanta, Georgia in January 2005. The gathering involved high-level representatives of key governments and was modeled after the successful *Atlanta Consultation I* that MPI held at The Carter Center in 2000. INESAP was represented by Armin Tenner.

Later that year, MPI initiated a new project, the Article VI Forum. The Forum is a new and creative initiative intended to stimulate and shape effective responses to the crisis of the non-proliferation/disarmament regime manifested by the breakdown of the 2005 NPT Review Conference. The Article VI Forum takes its name from the article of the NPT in which the nuclear states commit themselves to the elimination of their nuclear weapons.

The Forum held its inaugural meeting in at the United Nations in New York in October 2005, with INES/INESAP being represented by Armin Tenner.

Abolition 2000

INESAP, a co-founder of the international network to abolition nuclear weapons, Abolition 2000, continued to work closely within this context, internationally, in Europe, and in Germany. INESAP Coordinator Regina Hagen was co-coordinator of the German Abolition

2000 section (Deutscher Trägerkreis “Atomwaffen abschaffen – bei uns anfangen!”) in 2004/5 and gave considerable support to the Trägerkreis and its activities in the context of the Mayors for Peace’ 2020 Vision campaign. INESAP also participated in the planning and organization of the 2004 and 2005 annual conferences of the German network (in Stuttgart and Hannover, respectively). In May 2004, INESAP representatives participated in the European IPPNW congress on *Nuclear Weapons and Nuclear Energy in an Instable World. Analyses and Ways Out*.

On a regional level, the Abolition 2000 Europe network has been revived at the workshop *Making Europe nuclear-weapons free*, organized by INESAP in October 2005 in the European Parliament in Brussels on the occasion of a conference of the European Network for Peace and Human Rights.

Moving Beyond Missile Defense and Prevention of an Arms Race in Outer Space

In 2004/5, in cooperation with the Nuclear Age Peace Foundation, INESAP continued work on the *Moving Beyond Missile Defense* project. The main project event in 2004/5 was the fourth project conference in Hiroshima in October 2004, sponsored by the Nuclear Age Peace Foundation and co-hosted by the Mayors for Peace, represented by Hiroshima’s Mayor Akiba. Under the title *The Challenge of Hiroshima. Alternatives to Nuclear Weapons, Missiles, Missile Defenses, and Space Weaponization in a Northeast Asian Context*, we were able to bring together a group of experts from all Northeast Asian countries (with the exception of North Korea), the US, and Europe.

At the conference, the Mayors for Peace in the person of Mayor Akiba were awarded the Nuclear Age Peace Foundation’s World Citizenship Award for Peace. Another highlight of the conference was Hiro Umebayashi’s presentation of a concrete *Model Treaty on the Northeast Asia Nuclear-Weapons-Free Zone*. For more details on the conference, see INESAP Information Bulletin #24.

The issue of missile defenses was also at the center of several other events, among them a half-day workshop on *Missile Defense and Europe* at the conference *A Europe for Peace* in Manchester, which was organized by the British Campaign for Nuclear Disarmament and the French Mouvement de la Paix and attended by Regina Hagen. Also in March 2004, Goetz Neuneck represented INESAP at a high-level conference on *Missile Defense -- Threats, Responses, and Projections*, organized in Bradford/UK by BASIC and the Bradford University’s Department of Peace Studies.

A few weeks later, in July 2004, The Institute of International Studies at Fudan University and the Japanese Peace Depot hosted the workshop *A Nuclear Weapons-Free Zone and Missile Control in Northeast Asia*, to which Regina Hagen was invited to speak on *Missile Defense and Space Weaponization*.

The close link between these two issues is recognized by the *Moving Beyond Missile Defense* project, therefore several activities on space weaponization and on the Prevention of an Arms Race in Outer Space (PAROS) complemented INESAP’s involvement in this issue. For example, Jürgen Scheffran contributed to the conference *Safeguarding Space for All: Security and Peaceful Use* at the United Nations in Geneva in March 2004 that was jointly organized by the United Nations Institute for Disarmament Research, the Canadian Department for Foreign Affairs and International Trade, the Simons Centre for Peace and Disarmament Research, Project Ploughshares Canada, the Henry L. Stimson Center and the Union of Concerned Scientists. The conference dealt with issues such as: the existing peaceful uses of outer space and the potential future threats to a peaceful space environment; means to ensure

space security and assurance; international legal approaches and the role of the Conference on Disarmament; and transparency and confidence-building in outer space.

Another example is Regina Hagen's participation in a panel on the *Role of Space in U.S. Quest for Global Empire* at the annual conference of the Global Network Against Weapons and Nuclear Power in Space, held in Portland, Maine/USA, in April 2004. In June of the same year, she participated in the International Peace Bureau congress *Towards a world without violence* co-organizing the workshop *Keep Space Weapons Free*.

Planning for a New Project: the iGSE

In autumn and winter 2005, INESAP in close cooperation with Martin Kalinowski (then working for the Comprehensive Test Ban Treaty Organization in Vienna, now Carl-Friedrich von Weizsäcker professor at the newly created Centre for Science and Peace Research at the University of Hamburg) prepared for a new multi-year project. In December 2005, the John D. and Catherine T. MacArthur Foundation from Chicago, Illinois/USA agreed to fund the coordination of and outreach for the independent Group of Scientific Experts (iGSE) on the detection of nuclear-weapons-usable materials production. The launch of the group, which will be coordinated by Regina Hagen, is planned to occur in 2006.

Organizational Matters in 2004/5

The Coordinator manages most INESAP activities. The INESAP office is located in Darmstadt and hosted by the Interdisciplinary Research Group in Science, Technology and Security (IANUS) at Darmstadt University of Technology, Germany.

In August 2004, Jürgen Scheffran, co-editor of the INESAP Information Bulletin, moved to the United States where he is now located with the Program in Arms Control, Disarmament, and International Security (ACDIS) at the University of Illinois at Urbana-Champaign.

At a meeting in Stockholm, Tom Borsen Hansen accepted to be a liaison person between INES and INESAP to improve communication.

INESAP E-mail Discussion List

Since 1994, Johan Swahn has facilitated an e-mail discussion list for information exchange and networking among INESAP participants. To subscribe to the list, go to <http://lists.chalmers.se/mailman/listinfo/inesap>.

Funding and Support

In 2004 and 2005, INESAP continued to receive funding from the Nuclear Age Peace Foundation (core funding) and from IANUS (part of salary in 2005 and office/infrastructure). Travel expenses (flights and accommodation) to conferences and workshops has often been reimbursed by the inviting organization (among them Foreign Ministry of Sweden, Fudan University, INES, International Peace Bureau, IPPNW Germany, Middle Powers Initiative, UNIDIR, British CND and Mouvement de la Paix.) Both in 2004 and 2005, cost-free accommodation in New York was generously provided by Alice Slater, which allowed the INESAP Coordinator to stay for the full NPT PrepCom and Review Conferences.

As a project of IANUS, INESAP is tax exempt under German law.

Selected publications of INESAP or INESAP participants:

In 2004 and 2005, INESAP published the following INESAP Information Bulletins:

- #23, *Targeting the Law. (Non-) Proliferation in Review*, April 2004.
- #24, *The Challenge of Hiroshima. The Proliferation of Umbrellas in Northeast Asia*, December 2004.
- #25, *Transformation of the Nuclear Control Regime. Non-Proliferation Treaty 10 Years Later: Where to Go?*, April 2005.
- #26, *Dual Use: Civilian or Military? The Janus Face of Science and Technology*, June 2006.

Two INESAP Briefing Papers have also been published:

- # 12, *The Chemical Weapons Convention and the Role of Engineers and Scientists* by Jiri Matoušek.
- #13, *Moving Beyond Deterrence and Missile Defense. A Case for Building a Regional Missile Limitation Regime in Northeast Asia* by Akira Kurosaki.

The following selection of publications authored by INESAP participants is in no way complete. INESAP members are encouraged to inform the INESAP office of their future publications.

- Reiner Braun and David Krieger (eds.), *Einstein – Peace Now! Visions and Ideas*, Wiley-VCH, 2005, 313 pages, ISBN 3527406042. Regina Hagen, Jürgen Scheffran, *International Space Law and Space Security*, in: M. Benkö, K.-U. Schrogl (eds.), *Space Law: Current Problems and Perspectives for Future Regulation*, Eleven International Publishing, 2005, pp. 273-301, ISBN 90-77596-11-9.
- Martin B. Kalinowski, Wolfgang Liebert, Silke Aumann, *The German Plutonium Balance for the Years 1968-1999. Reprocessing, Import and Export, MOX Fuel Element Production and Usage, Stored Inventories*, second and corrected edition of INESAP Technical Report No. 2, January 2004, ISBN 3-93307105-4.
- Martin B. Kalinowski, *Nuclear Arms Race and Arms Control at the Beginning of the 21st Century*, Security Dialogue 35(2), June 2004, pp. 217-225.
- Martin B. Kalinowski, *International Control of Tritium for Nuclear Nonproliferation and Disarmament*, CRC Press: London 2004.
- David Krieger and Carah Ong (eds.), *Hold Hope, Wage Peace. Inspiring Individuals to Take Action for a Better World*, Capra Press, 2005, 168 pages, ISBN 1592660541.
- David Krieger, *Today is Not a Good Day for War*, Capra Press, 2005, 86 pages, ISBN 1592660509.
- K. Nixdorff, N. Davison, S. Whitby, P. Millett, M. Dando, *Technology and Biological Weapons: Future threats*, Commissioned for the University of Maryland Project „Controlling Dangerous Pathogens“ of John Steinbruner, Elisa Harris and Stacey Gunther, presented at the Workshop on Defining Dangerous Research, Center for International Security Studies, University of Maryland at College Park, May 18, 2004.
- Jürgen Scheffran, *Risk reduction and monitoring in outer space*, in: *Safeguarding Space for All: Security & Peaceful Use*, UNIDIR Geneva, United Nations Press, 2005., ISBN 92-9045-174-2.