INESAP Annual Report 2008

The International Network of Engineers and Scientists Against Proliferation (INESAP) is a non-profit, nongovernmental network organization with participants from all over the world. It is part of the worldwide activities of the International Network of Engineers and Scientists for Global Responsibility (INES). The decision-making body of INESAP is the Coordinating Committee which has seven members from four continents.

The main objectives of INESAP are to promote nuclear disarmament; to strengthen existing arms control and non-proliferation regimes in the nuclear and the missile field; to develop and promote cooperative approaches to curbing the proliferation of nuclear, chemical, and biological weapons and their means of delivery and controlling the transfer of related technology; as well as to support a transformation of the nuclear nonproliferation regime into a nuclear weapons free world regime.

Global Background

In January, Russian Chief of Staff Balujevsky proclaimed that his country needed to protect its sovereignty and territorial integrity. For this reason, Russia won't exclude preventive nuclear airstrikes from its range of military possibilities.

A report was published by the IAEA in February stating that numerous questions concerning the Iranian nuclear program remained unanswered. Subsequently, the Security Council (SC) decided on Resolution 1803 putting in place further sanctions against Iranian staff and facilities. Reasons given were the continuation of Uranium enrichment and the absence of trust building steps by Teheran.

Following up on President Putins initiative from 2007, Russia proposed a new multilateral agreement on the bases of the INF Treaty at the Disarmament Conference in February. The obligations of eliminating nuclear and conventional ground-launched ballistic and cruise missiles with intermediate and short range shall be rendered global.

In April, news spread about the installation of another 6.000 centrifuges in Iran increasing the Uranium enrichment process by three times. The Director General of the IAEA, ElBaradei, confirmed in May that Iran was continuing its Uranium


enrichment program and that he can still not waive all doubts about the non-military character of the program, but he stated also that all relevant nuclear materials in declared facilities are under safeguards and accounted for. Supreme Leader Ayatollah Ali Khamene‘i reiterated in a speech in June that his country opposes nuclear weapons ‘based on religious and Islamic beliefs as well as based on logic and wisdom.’ He added, ‘Nuclear weapons have no benefit but high costs to manufacture and keep them. Nuclear weapons do not bring power to a nation because they are not applicable. Nuclear weapons cannot be used.’

Russian President Medwedjew and Chinese President Jintau published a joint declaration condemning American plans for an anti-missile system in Europe in May. Both agreed on it being contra productive to the strategic balance and stability in the region. Nonetheless, the Czech Republic and the US signed a treaty on the installation of a radar-system in July followed by an agreement between the US and Poland about the deployment of 10 US interceptive rockets in north Poland to which the Czech radar station will provide field data.

Meanwhile, the P5+1 (5 permanent members of the SC and Germany) submitted a revised proposal of their 2006 offer of incentives to Tehran asking in exchange for more cooperation. After a meeting with Iranian officials Tehran’s response to it was deemed unsatisfactory. In the aftermath, the EU implemented stronger economic sanctions according to a 2006 UN-Resolution.

In June, Syria allowed IAEA inspectors to examine the Dair Alzour plant. Two months earlier the USA had confirmed Israel's bombing of the site in 2007 and disclosed a classified dossier which claimed to prove North Korean aid in helping Syria with its covert facility for nuclear weapons. But ever since June, Syria has refused the IAEA further examination of the site.

Also in June, North Korea handed over its long-awaited nuclear program declaration to China but halted the dismantlement of the nuclear reactor in Yongbyon in August. It pondered on its reconstruction claiming that the US does not hold its promise to delete it from its list of ‘axis of evil‘ states. Shortly after the submission of the declaration US President Bush had in addition demanded a verification mechanism to North Korea’s dismantlement steps. The deadlock was resolved in October when North Korea pledged to allow inspections of their nuclear facilities in Yongbyon and the USA agreed to delete North Korea form its list of state sponsors of terrorism.

Venezuela announced in September that it will pursue a peaceful nuclear program. President Chavez claimed that Russia had already offered help in this endeavor. Iran and Venezuela signed a secret ‘science and technology’ agreement formalizing their cooperation in the field of nuclear technology in November.

At the end of 2008, Russian President Medwedjew announced the development and installation of a new nuclear deterrence system which shall also include components in outer space.
INESAP projects and activities in 2008

iGSE

The iGSE project explores technologies and procedures for remote environmental sampling and other novel methodologies that would allow the detection of clandestine nuclear-weapons-usable material production. iGSE was, inter alia, founded by INESAP members and its activities and outreach are coordinated by individuals of the network. The project has obtained grants from the John D. and Catherine T. MacArthur Foundation. In 2007, a new request for funding was generously granted which will last until May 2009. iGSE works closely with the International Panel on Nuclear Material (IPFM).

In 2008, iGSE published a database on their website which contains past and recent krypton-85 emissions of 28 sources with details on each facility, when it was operated, its exact location and krypton-85 emission data from 1945 to 2007. Krypton-85 is released to the atmosphere when plutonium is chemically separated from spent fuel in reprocessing facilities. With no relevant natural sources of the noble gas other than reprocessing and great technical difficulties in preventing the emission of this tracer, the presence of krypton-85 can be an indicator of (clandestine) plutonium separation.

In May 28-29, 2008, the iGSE held a workshop on Remote Environmental Sampling for Nuclear Safeguards in cooperation with the Working Group on Verification Technologies and Methodologies of ESARDA (European Safeguards Research and Development Association). The workshop took place in the European Commission Conference Centre in Luxembourg.

The second workshop took place at the Max Planck Institut for Meteorologie (MPI-M) in Hamburg/Germany in cooperation with the Hamburg University on June 19-20, 2008. It investigated the issue of Atmospheric Transport Modeling of Radioactive Noble Gases related to long-distance detection.

A working meeting was held in Darmstadt/Germany in cooperation with the Interdisciplinary Research Group Science, Technology and Security (IANUS) of Technische Universität Darmstadt on Matching Trace Analysis with Proliferation Indicators on August 25-26, 2008. The meeting was conducted in preparation of an expert workshop with participation of the Novel Technology unit of the IAEA which will be held in autumn 2009.

Also 10 oral presentations were given by iGSE members in 2008: by Ole Roß on Modeling of global atmospheric krypton-85 concentration for detection of unreported nuclear reprocessing at the 72. Annual Meeting of the German Physical Society (DPG) in Berlin February 29, 2008 and at the IMPRS PhD candidate seminar at the Max Planck Institute of Meteorology in Hamburg June 16, 2008; by Martin B. Kalinowski on Detection of clandestine nuclear weapons production and testing by analysing air samples at the XVII. International Amaldi Conference in Hamburg March 15, 2008; also by Martin B. Kalinowski on Environmental Sampling at the ESARDA course on 'Nuclear Safeguards and Non Proliferation' in Ispra April 14-15, 2008; by Ole Roß on Atmospheric transport modeling supporting verification of nuclear arms control treaties at the Union Concerned Scientists’s Summer
Symposium on Science and World Affairs in Boston July 26, 2008; also by Ole Roß on Krypton-85 distribution in the troposphere - Implications for the detection of nuclear reprocessing at the Annual Retreat of the International Max Planck Research School on Earth System Modeling in Lüneburg September 25, 2008; by Heiner Daerr and Hauke Gravenkamp on Status des ATTA Experiments und KR85-Messungen (Status of the ATTA experiment and Kr-85 measurements), by Manuela Meppen on Dibutyl phosphate emissions from reprocessing plants, by Paul Stanoszek on Kr-85 Source Term for various plutonium scenarios as well as by Ole Roß on Modellierung der globalen Kr-85 Verteilung - Bedeutung für die Entdeckung nuklearer Wiederaufbereitung (Modelling the global Kr-85 distribution - significance for the detection of nuclear reprocessing) all at the FONAS Autumn Conference 2008 in Osnabrück September 29, 2008.


Non-Proliferation Treaty

The 8th Review Cycle of the NPT continued with a Preparatory Committee meeting in Geneva from April 28 till May 9, 2008. INESAP accredited more than 50 people and participated as well as chaired several side events.

On April 29, Jürgen Scheffran convened a Statement to the Prepatory Committee Meeting. Regina Hagen presented the INESAP statement on Missiles, Missile Defense, and Space Weaponization at the NGO Statement Session.

On May 2, INESAP Coordinator Regina Hagen moderated a panel on The US-India Nuclear Deal and the NPT. The Role of Nuclear Weapons States and Non-Weapons States sponsored by the Abolition 2000 US-India Working Group. In the workshop Zia Mian (Research Scientist, Princeton University’s Program on Science and Global Security, Princeton/USA) and M.V. Ramana (Senior Fellow, Centre for Interdisciplinary Studies in Environment and Development, Bangalore/India) provided an update on the current status of negotiations on the US-India nuclear agreement and analyzed key issues raised in it.

Coordinator Regina Hagen moderated a presentation by Stuart Parkinson, Executive Director of Scientists for Global Responsibility (SGR), on newly found research results on Military Research and development in the USA concerning the nuclear complex on May 5.

INESAP hosted a panel on Environmental Aspects of Nuclear Energy in cooperation with University of Hamburg on May 6. Manuel Meyer (University of Hamburg), Philipp Wessels (University of Hamburg), Merav Datan (Greenpeace International, Tel Aviv) and Sharon Dolev (Greenpeace International, Tel Aviv) came together to explain to the audience the different interrelationships between atomic energy, nuclear incidents and their consequences for our ecosystem.
**Middle Power Initiative and MPI’s Article VI Forum**

INESAP continued to co-sponsor the Middle Powers Initiative (MPI), and is now represented by Armin Tenner from the Netherlands on the MPI International Steering Committee [http://www.middlepowers.org/mpi/index.shtml]. In 2005, MPI established Article VI Forum. Armin Tenner and Regina Hagen (both INESAP representatives) share participation in 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 in 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 fifth Article VI Forum was held in Dublin/Ireland in March 27-28, 2008. The consultations dealt with the *reductions and de-alerting of strategic forces and missiles, missile defense systems and space weapons* as well as *strategies for the elimination of nuclear weapons*. A summary report was published titling *The Dublin Article VI Forum. NPT Pathfinder to a Nuclear Weapons-Free World*. In advance the Article VI Forum also published a briefing paper titled *Back from the Margins: The Centrality of Nuclear Disarmament.*

In January 2008 the MPI also circulated a Briefing Paper on *Visible Intent: NATO’s Responsibility to Nuclear Disarmament*. The paper is an active contribution to the upcoming 60th anniversary summit of the NATO and urges NATO to end its Cold War reliance on nuclear weapons, nuclear sharing and abide by the NPT.

**Model Nuclear Weapons Convention**

In 1996, three non-governmental organizations - IALANA, INESAP, and IPPNW - drafted a model Nuclear Weapons Convention (mNWC) outlining what a nuclear weapons convention could look like and exploring the roads to a nuclear-weapons-free world. Costa Rica submitted the mNWC to the United Nations Secretary General in 1997 (UN Doc. A/C.1/52/7).

At the NPT PrepCom in Geneva INESAP gathered students for the second time to stage a model of *Negotiations for a Nuclear Weapons Conventions*. In cooperation with Ban All Nukes generation (BANg) the simulation game took place in the International School on May 3. More than 50 youths and university students were present. They had observed the first week of the NPT PrepCom while staying in one of Geneva’s nuclear fall-out shelters that are rented out as cheap accommodations. To prepare for this conference the students followed the real proceedings of the PrepCom and researched the positions of the countries they represented. They also met with members of nearly all 13 official delegations represented in the model conference. Similar to a Model UN, the young people negotiated Article I (General Obligations) and Article IV (Phases for Implementation) of the Model Nuclear Weapons Convention (UN document A/62/650). The meeting was able to attract Ambassador Alfredo Labbé of Chile, Prof. Tilman Ruff, member of the official Australian delegation to the NPT PrepCom, and Xanthe Hall from IPPNW Germany as its Chairs. In their negotiations the young delegates agreed to a *no first use policy.*
The positive reception by many diplomats and the emphasis made by Germany that youth is needed to improve international security encouraged the continuation of the project.

**Various INESAP Activities**

During the course of winter 2007/08 INESAP provided assistance for dissemination of the Recommendations of the Weapons of Mass Destruction Commission (WMDC) Report. In order to inspire the German speaking civil society to engage in further efforts to support international disarmament and to prevent further spreading of WMDs, as well as to stimulate a free debate regarding these topics, the summary of the Commission’s report and its recommendations have been translated into German under the auspices of Regina Hagen at a translation seminar in Germsheim with students of the Johannes Gutenberg University Mainz.

In July 2008, the Secretary-General submitted his *Disarmament and non-proliferation education - Report* to the General Assembly (UN A/63/158). Pursuant to resolution 61/73 the report reviews the results of the implementation of the recommendation of the UN study on disarmament and non-proliferation education and possible new opportunities for promoting disarmament and non-proliferation education. In chapter IV. Implementation of the recommendation by civil society and non-governmental organization the INESAP and BANg project of simulated negotiations for a nuclear weapons convention at the NPT PrepCom in Geneva was mentioned.

In July 2008, IPPNW and INESAP issued a press release named *Deutschland darf nicht zustimmen* (“Germany must not agree”). The press release came as urgent warning to the German government and the IAEA Board of Governors shortly after India turned in its draft of a safeguards agreement. In it the organizations point out that the US-India deal will undermine the nuclear non-proliferation efforts and might spark an arms race in South Asia. Accepting the agreement will mean that the 45 member strong Nuclear Suppliers Group (NSG) will have to make an exception of their nuclear trade directives for India giving India the privileges of a nuclear weapon state without being part of the NPT or admitting full IAEA safeguard measures.

In September, Costa Rica and Malaysia hosted a seminar and roundtable with the support of IALANA, IPPNW, The Simsons Foundation and INESAP called *Steps toward a Nuclear Weapons Convention: Exploring and developing legal and political aspects*. The event provided a setting for delegates to consider legal and political steps towards a comprehensive prohibition and elimination of nuclear weapons.

**General Networking**

INESAP has extended contacts to government officials and diplomats as well as to other NGOs and active individuals.

As the network’s only staff person, the INESAP Coordinator Regina Hagen now represents the network at many events and in many NGO bodies. On appropriate occasions, many INESAP participants continue to represent INESAP and its expertise and ideas at conferences, in other organizations, at UN meetings, in expert bodies, and in a variety of other forums. INESAP also maintains, among others,
regular contact with the Pugwash Conferences on Science and World Affairs, the United Nations Institute for Disarmament Research, the International Peace Bureau, and the Women’s International League for Peace and Freedom.

INEASAP Coordinating Committee

In August 2008, the INESAP Coordinating Committee started to explore and discuss the future of the network under the challenging new condition of having no more financial income. A brochure was drafted that shall help raising new funds by presenting a summary of the goals and achievements of INESP.

INEASAP Information Bulletin and Briefing Paper

The 28th edition of the INESAP Information Bulletin was released in April 2008. The issue headlined under Last Exit Disarmament. World at the Crossroads.

INEASAP Homepage

At the end of the year INESAP launched successfully its re-designed website. Its new menu bar adverts to News, What is INESAP?, Projects, Bulletins, Publications, Meetings, Membership, Contact and Donate and provides many sub-pages and interesting links. Special thanks goes to Simon Frisch for the new design and Moritz Kütt for programming and Drupal support.

Organizational Matters in 2007

INESAP Coordinator

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) <http://www.ianus.tu-darmstadt.de>.

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

INESAP funding in 2008 came from the Nuclear Age Peace Foundation (core funding for Coordinator salary, project work, and general expenses) and from the IANUS group at Darmstadt University of Technology (office and infrastructure). The former is due to end in February 2009 which will pose an enormous challenge to the network on how to finance its future activities. Discussion on how to find new financial means are under way.

Selected Publications of INESAP or INESAP Participants

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 relevant publications.


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