SCIENTIFIC AND TECHNICAL CENTER
ON EXPORT AND IMPORT OF SPECIAL TECHNOLOGIES,
HARDWARE AND MATERIALS

SECURITY AND NONPROLIFERATION

ISSUE 1(13)2006

KYIV 2006

Table of Content

Global Partnership

KALEIDOSCOPE

Sergiy Kondratov
Institute for National Security Problems

IDENTIFYING GLOBAL PARTNERSHIP PRIORITIES: UKRAINIAN CONTEXT

24–26 January 2006, an international conference *Control and Security of Nuclear Materials in Ukraine: Past Achievements and the Global Partnership Agenda Ahead* devoted to Ukraine's accession to the G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction as a recipient country was held in President Hotel Kyivsky, Kyiv, Ukraine

The Swedish Nuclear Power Inspectorate (SKI) was the initiator and one of the sponsors of the conference. Jointly with SKI, the conference was co-funded by STUK – the Radiation and Nuclear Safety Authority of Finland, and GRS – Gesellschaft für Anlagen- und Reaktorsicherheit mbH (Germany).

The State Nuclear Regulatory Committee and the Ministry of Foreign Affairs of Ukraine represented Ukrainian organizers. The conference minute arrangements had been made by the Scientific and Technical Center on Export and Import of Special Technologies, Equipment and Materials (Ukraine).

The conference was attended by nearly 120 participants representing 16 countries and 7 international organizations and institutions. In the course of four plenary meetings, 39 presentations were made on pressing problems of nuclear security and nuclear non-proliferation. 40 project proposals from Ukrainian State authorities and enterprises, scientific institutions and educational establishments, non-governmental organizations and private companies were distributed among the conference participants, which covered major areas and forms of potential bilateral and multilateral cooperation in this field.

The conference was opened by SNRCU Chairman ***Olena Mykolaichuk***, who had supervised the Organizational Committee's efforts in arranging the event. In her welcome speech the Head of the national regulatory body for nuclear and radiation safety noted that, despite successful co-operation and reaching substantial progress in nuclear security assurance in our country over the recent years, the new challenges and problems are so dangerous that Ukraine does not always have sufficient resources to adequately respond to them. But aware of the need to receive donor assistance under the Global Partnership and giving it its due credit, O. Mykolaichuk nevertheless emphasized that the ultimate goal of our State in this area is to reach such a level of economic and political development, using this effective assistance, that would enable Ukraine to participate in the Global Partnership as a donor country itself.

Deputy Minister of Foreign Affairs of Ukraine ***Andriy Veselovskiy*** extended on behalf of Minister ***Borys Tarasyuk*** personal greetings and wishes of successful performance to the conference participants and also underscored the relevance of international co-operation in countering nuclear proliferation and nuclear terrorism.

The conference participants met with an especially warm welcome the greeting speech by Deputy Head of the Swedish Nuclear Power Inspectorate International Co-operation Programme ***Lars van Dassen***, the originator of the idea to conduct the conference and its immediate organizer.

The audience paid close attention to the greetings by other sponsors of the event, with which Ukrainian State authorities, scientific institutions and other organizations have fruitfully co-operated for many years. The Conference was greeted by Physical Protection Programme Manager under the Global Partnership ***Peter Zalevski***, a representative of GRS, and ***Juha Rautjärvi***, a STUK representative.

From the perspective of Ukraine's declared pursuit of the European vector in foreign policy, close attention was paid to the brief speech by ***Annaliza Giannella***, Personal Representative of the EU High Representative for Non-Proliferation of WMD ***Javier Solana***. Ms. Giannella informed the participants that the European Community efforts in this area are carried out pursuant to the *WMD Strategy* adopted in 2003, based on conflict prevention and co-operation. At that, EU does not reject the option of coercive action, if necessary, in accordance with the international law, but considers it the ultima ratio in solving international problems. In suppressing the threats of terrorism by preventing them, EU supports universal multilateral instruments such as the Protocol Additional[1] and export control regimes for military and dual-use goods transfers. Under the Global Partnership EU provides assistance to the Ukraine Science and Technology Centre, negotiates for participation in the funding of Chornobyl Shelter activities, reviews project proposals regarding a bio-laboratories physical protection project. The high-ranked EU representative assured the conference participants that the EU is ready to address the challenges posed by WMD proliferation, but, as she noted, they constitute just one important element of the developing and much wider relationship between Ukraine and the EU.

Director of the Scientific and Technical Center on Export and Import of Special Technologies, Equipment and Materials, member of the Organizational Committee ***Oleksandr Siver*** welcomed the participants and informed them on organizational issues and additional items within the conference agenda.

The first plenary meeting was dedicated to safeguards, nuclear material accountancy and control. The meeting commenced with a presentation by *Göran af Ekenstam,* in which Section Head of IAEA's Department of Safeguards explicitly presented the fundamentals underlying the Agency's activities related to nuclear weapons non-proliferation safeguards, dwelt on the special role of international legal instruments such as the Protocol Additional to the IAEA Safeguards Agreement.

Sergiy Lopatin (SNRC of Ukraine) made a brief retrospective overview of the creation and development of the State's System for Nuclear Material Accountancy and Control (SSNMAC) in Ukraine. He particularly focused on the Protocol Additional, whose ratification in November 2005 challenged SSNMAC to develop further. In addition, the presentation identified the State's Safeguards System development areas, as well as specific tasks to be performed in Ukraine in the near future.

Yuriy Abramov made a presentation on how the nuclear material accountancy and control system is organized at nuclear facilities of the national NPP operator NAEK *Energoatom.* In particular, he emphasized the major role of Swedish-Ukrainian co-operation in building out nuclear material accountancy and control systems at Ukrainian NPPs, now that all reporting documentation on nuclear material at our country's nuclear power plants is prepared based on software developed and introduced by the Swedish firm *AMC Consult*. This software has been in use in Ukraine for 10 years already, but with ever higher requirements to nuclear material accountancy and control process, as Y. Abramov emphasized, the software needs upgrading and associated designer support. The presenter also made the audience aware of the quality problem of water in cooling ponds, which is a major impediment to IAEA inspectors' efforts in identifying heat-generating assemblies with Cherenkov counters.

Achievements, problems and development prospects of the system for training of specialists in nuclear material control and accountancy were discussed in the presentation by ***V. Kyryshchuk, V. Gavrylyuk, A. Gavrylyuk-Burakova, E. Dikov and C. Drapey*** of the George Kuzmycz Training Center for Physical Protection, Control and Accounting of Nuclear Materials (NASU Institute for Nuclear Research), established with assistance by the U.S. Department of Energy. The presentation featured specific suggestions as to training process improvement with a view to enabling the Center to conduct advanced training of Ukrainian specialists in fairly all areas of nuclear material accountancy and control.

[1] Ms. Giannella was pleased to know that Ukraine had already ratified that important document last November.

Clifford Järnry of *AMC Konsult AB*, Sweden, spoke on Swedish-Ukrainian nuclear material accountancy and control co-operation, which began back in 1992. The firm that he represents was behind the creation of software for the State's System for Nuclear Material Accountancy and Control of Ukraine, and later provided its upgrading and related training of Ukrainian specialists. C. Järnry referred to one critical challenge that questions the effective use of technical assistance, – turnover of trained personnel resulting in the need of re-training. The presenter indicated that due to Ukraine's ratification of the Protocol Additional, the new generation of software currently under development for SNRC of Ukraine must address our State's commitments to comply with the requirements of this document.

The status and development prospects of the Knowledge Support System on Physical Protection, Nuclear Material Control and Accounting were discussed in the presentation by ***Kostyantyn Gushchin and Sergiy Smirnov*** (Sevastopol National University of Nuclear Energy and Industry). Due to having completed an IAEA project and to U.S. financial aid, the educational institution has reached significant progress in creating modern training laboratories, training and re-training of specialists in the area, specifically those majoring in Physical Protection of Nuclear Material, Radioactive Waste and Other Radioactive Sources. K. Gushchin, who made the presentation, discussed a whole range of promising areas of co-operation including further development of the training basis, design of training material and other ones, which were specifically reflected in SNUNEI's project proposals.

IAEA Department of Safeguards representative ***Ivo Perez Herrera*** dwelt on the procedures of Protocol Additional (PA) implementation in Ukraine, focusing a major part of his presentation on reviewing the status of our State's compliance with such an important requirement as providing additional IAEA inspector access. Based on the previous experience of PA application in other countries, the Agency representative expressed his confidence that transparency and high level of co-operation would inevitably result in due PA compliance in Ukraine.

Important problems and status of preparedness of Ukrainian nuclear industry enterprises for Protocol Additional implementation were discussed in the presentation by ***Boris Sukhovarov-Zhornovyi*** of the Ministry of Fuel and Energy of Ukraine.

An overall picture of all areas of Japan/Ukraine co-operation in the area of nuclear non-proliferation and nuclear safety in our country was presented by Japan's Ministry of Foreign Affairs representative ***Soichiro Toyoshima***. Bilateral co-operation in this field has been successfully developing in three major areas: facilitating Ukrainian efforts to renounce nuclear weapons, assurance of the nuclear-weapon non-proliferation regime, as well as coping with environmental protection and public health problems. According to Mr. Toyoshima, promising areas of further co-operation between our countries may include improvement of the State's system for accountancy and control over nuclear material and physical protection of nuclear material and nuclear facilities.

The plenary meeting ended in a brief overview of project proposals, presented by Ukrainian State authorities, enterprises, scientific institutions and educational establishments to foreign conference participants.

The second plenary meeting reviewed the issues of export control over nuclear material and dual-use technologies. The meeting commenced with a presentation by First Deputy Chairman of SSEC of Ukraine ***Oleksandr Gryshutkin,*** which comprehensively demonstrated that Ukrainian Export Control System has developed and improved enough to become an alienable part of the global non-proliferation regime. It is attested by the fact that Ukraine has become the first country in the post-Soviet area to have successfully integrated into all international export control regimes. Interacting with relevant international organizations and other States as well as Ukrainian State authorities' efforts to improve the export control system effectiveness are primarily aimed at constant improvement of the procedures and mechanisms of this control and provide for applying the most up-to-date world practice and adequate response of the system to newly emerging challenges and threats. Thus, the presenter informed the audience that last year Ukraine had published a report on weapons trade for the first time.

In terms of long-term tasks that Ukrainian export control system is faced with, significant attention should be paid, in particular, to fostering safety and non-proliferation culture. According to O.Gryshutkin, this is one promising area of international co-operation, including when Ukraine receives international assistance.

Tetyana Vidzigovska (SSEC of Ukraine) thoroughly reviewed the status of control over nuclear goods at the national level, provided a brief summary of the legislative and regulatory framework, as well as the basic specifics of export control procedures in this area, which directly ensue from Ukraine's international commitments to assure the nuclear non-proliferation regime.

Since 2003 the Swedish nuclear power inspectorate has been actively cooperating with Ukrainian governmental and non-governmental organizations in the area of export control, financing of number of successful projects. The subject of this co-operation was co-presented by a SKI representative ***Sarmite Andersson*** and a representative of the Scientific and Technical Center on Export and Import of Special Technologies, Equipment and Materials (STC) ***Sergiy Khanenko*** (Ukraine). Based on experience of creating a reliable national export control system and experience of adapting EU directives to national legislation, SKI and STC concluded a co-operation contract, assuming two major goals: 1 – by disseminating authentic information and knowledge among the State authorities, enterprises and relevant civil society institutions such as mass media, to improve the effectiveness of export control in Ukraine; 2 – Facilitate Ukrainian export control system getting closer to European standards. To reach these goals, a whole range of projects have been or are being successfully completed, including preparation of comments to export control law, issuance of the *Security and Nonproliferation Journal*, maintenance of the updated STC website etc. The conference participants could rest assured that, despite comparatively small amounts of funding for these projects, bilateral co-operation in this area has reached convincing accomplishments due to careful selection of goals and partners by the Swedish side.

Facilitating Ukrainian export control system development has always been considered by the U.S. one of the highest priorities in bilateral relations with our country. The accomplishments and prospects of U.S/Ukraine co-operation in this area were presented by U.S. Department of State representative ***Roseanna Oliver***. One important program to prevent proliferation of weapons of mass destruction and their delivery means is the *Export Control and Related Border and Security Program*, managed under supervision by U.S. Department of State. Under this program, Ukraine has received assistance worth over USD 15 million since 1998. This funding was spent on improving of legislation and regulatory framework, licensing procedures and implementation of advanced practices, development of coercion capability and techniques, establishing efficient liaison between the State authorities and industrial enterprises, raising the level of interagency coordination and interaction in this area in Ukraine.

In another presentation on the subject of U.S/Ukraine export control co-operation, ***Douglas Evans***, who represented the U.S. company *Commonwealth Trading Partners (CTP), Inc*., a U.S. Department of State contractor that has a long-standing and successful record of cooperating with relevant State authorities and nongovernmental organizations of our country, particularly, as regards training of personnel of the state customs service and state border guard service of Ukraine, as well as representatives of business entities involved in international goods transfers. Due to the high level of corruption within the State authorities controlling export/import operations in Ukraine, joint projects with *CTP* focused on drastic reduction of corruption within the said State authorities could constitute a promising area of co-operation.

Actors of foreign-economic activity implementing export control internal compliance systems is an important factor successful compliance with the requirements of national export control law. Positive experience of implementing such a system at the biggest Ukrainian supplier of nuclear-physical items, was presented by ***Ivan Velykoivanenko*** (Ukrainian State Production Enterprise *Izotop*).

Werner Knapp, a representative of the German *Federal office of Economics and Export Control, BAFA,* spoke on the approaches applied by the European Union in its fight against proliferation of weapons of mass destruction in developing its export control co-operation with other countries. Proceeding from the main provisions of EU's security strategy, Mr. Knapp specifically identified the following promising areas of potential EU co-operation with Ukraine: supporting regulatory framework development; training of employees and personnel responsible for licensing and coercive action, as well as Customs personnel; raising awareness of and information support for actors of foreign economic activity as regards export control legislative requirements.

Globalization processes and a boost in information technology development seriously challenge the existing export control systems. The associated problem of controlling intangible technology transfers was approached in his presentation by ***Valeriy Mikhailov*** (National Research Centre *Kharkiv Institute of Physics and Technology*). According to the presenter, this problem cannot be solved at the national level only, it requires joint international community efforts, and to this effect, relevant international legal and political controls must be developed, considering that such intangible technology transfers may very soon become a major concern for multilateral export control regimes aimed at non-proliferation of weapons of mass destruction.

The last presentation of this plenary meeting shed light on the role of civil society in assurance of nuclear non-proliferation. ***Olga Kosharna,*** who acted as Editor-in-Chief of our *Security and Non-Proliferation Journal*, convincingly demonstrated that without a developed civil society and effective impact of its elements on the formation of the state policy in the security sector, it does not make sense to think about the necessary transparency level of the State's decisions, to be achieved by their independent review and monitoring, about reaching a high level of public awareness and understanding of current problems of nuclear safety in general and of nuclear non-proliferation in particular. It is nongovernmental organizations that must play an exceptionally important role here. According to O. Kosharna, it is them that have to actively influence the civil society formation, especially through knowledge-disseminating activities. The two-year experience of issuing the *Security and Non-Proliferation Journal* has led the presenter to conclude that "in Ukraine there's a lack of quality information on non-proliferation of nuclear weapons", and one of the project proposals, proposed by STC on Export and Import of Special Technologies, Equipment and Materials – is directly aimed at solving this problem.

The focus of the third plenary meeting was physical protection of nuclear material and nuclear facilities**,** but an active discussion also concerned other pressing issues of countering nuclear proliferation and nuclear terrorism. The opening speech was delivered by SNRCU representative ***Yuriy Knut*****,** and it concerned the national regulatory body's tasks ensuing from the actual signing of amendments to the Convention on the Physical Protection of Nuclear Material (CPPNM) by our State last July. The presenter briefly described the main improvement areas of the regulatory framework with respect to physical protection of nuclear material and nuclear facilities in terms of the Schering implementation of the fundamental physical protection principles formulated in the amendments to CPPNM.

German *Gesellschaft für Anlagen und Reaktorsichrheit (GRS) mbH* is a long-standing and reliable partner for our country's relevant State authorities, institutions and organizations in their efforts to create the State's system for physical protection of nuclear material and nuclear facilities. Personnel training and experience exchange proved to be the most successful area of bilateral co-operation. It was GRS experience in holding international physical protection workshops and working meetings that GRS representatives ***Axel Hagemann, Peter Zalevski, Anna Dabrovski*** presented.

The status of physical protection of nuclear facilities and nuclear material at Ukrainian NPPs was presented by ***Ivan Zhebet,*** who represented South-Ukraine NPP and NAEK *Energoatom*. The presenter gave a general description of the regulatory framework referred to by NAEK *Energoatom* in conducting its physical protection

activities, presented the physical protection organization, regulation and controls at NAEK *Energoatom* enterprises. In addition, his presentation made the conference participants aware of the main physical protection assurance activities underway at NPPs. Concluding his presentation, the presenter dwelt on problems experienced by SUNPP, which are, in particular, associated with uncertainty as to completion of a series of activities initiated under the U.S.-Ukraine co-operation on upgrading the physical protection system of the plant.

A joint presentation on protected perimeter creation for the *Kharkiv Institute of Physics and Technology* by ***Arne Nilsson*** and ***Lars-Gunnar Flyghed***, representing the *Advisory Group of Security* (Sweden), *and* ***Valeriy Mikhailov*** (NRC *Kharkiv Institute of Physics and Technology*) demonstrated a general success of international physical protection co-operation. Nevertheless, on behalf of the co-authors, Mr. Nilsson brought the participants' attention to the gigantic and unjustifiable efforts that the Swedish and Japanese sides had had to apply to overcome the hurdles caused by deficient Ukrainian customs procedures despite the availability of intergovernmental decisions made.

The design-basis threat developed based on the State-defined level of threat to nuclear material and nuclear facilities according to IAEA recommendations is an important element of the State's Physical Protection System. Unfortunately, the design-basis threat is yet to be developed and thus adopted in our country. This causes problems in assuring physical protection of nuclear material and nuclear facilities. ***Sergiy Kondratov and Valeriy Kravtsov,*** representing the Institute for National Security Problems under NSDC of Ukraine, reviewed certain reasons why the situation had developed and how to overcome it.

Günter Pretzsch, a representative of GRS (Germany), approached in his presentation an important Global Partnership item. The German expert shared about the experience of safe deconstruction and destruction of radio-isotope thermogenerators in Russia under a German-funded project.

The International Atomic Energy Agency is a leading international organization as regards not only facilitating peaceful uses of nuclear energy, but also controlling nuclear proliferation and countering nuclear terrorism. Information on co-operation between IAEA and Ukraine in such an important area as physical protection of nuclear material and nuclear facilities was presented by the Agency's Physical Protection Office representative ***Reza Abedin-Zadeh***. This co-operation is under good development in many areas, but the most successful ones seem to include training and re-training of personnel.

The largest physical protection assistance to our country in terms of funding amounts and extraordinary diversity of its forms and areas concerned is provided by the U.S. A summary of previous co-operation stages and further joint work prospects was the subject presented by ***Adrian Pidlusky*** of U.S. Department of Energy and ***Deborah Dickman*** *of Pacific Northwest National Laboratory*, U.S.).

The world community is seriously concerned over the nuclear safety condition of Chernobyl Shelter. In this regard, substantial financial aid is being provided to Ukraine to solve the problems associated with the ChNPP Disaster. The important role of the European Bank for Reconstruction and Development, problems and prospects of co-operation in this area were taken up in the presentation by the Bank's representative ***Steven White***.

The last presentation within this meeting featured, as we believe, the most successful project of the previous stage of international physical protection co-operation in Ukraine. Director of the George Kuzmycz Training Center for Physical Protection, Control and Accounting of Nuclear Materials (NASU Institute for Nuclear Research) ***Viktor Gavrylyuk,*** in his presentation jointly with his colleagues ***O. Romanova***, ***V. Kyryshchuk, A. Gavrylyuk-Burakova,*** told about the Center's accomplishments, where hundreds of specialists not only from Ukraine but also from the Baltic and CIS countries had been trained and re-trained. To proceed further in training highly-qualified

physical protection experts, the Center needs assistance to enhance its training capability for practical studies and training of Ukrainian instructors of the Center.

Like previous plenary meetings, this meeting ended in a brief overview of project proposals in promising areas of co-operation under the Global Partnership with respect to physical protection of nuclear material and nuclear facilities.

The last plenary meeting discussed aspects of ***suppressing illicit trafficking, transformation of nuclear weapon-making experience and other nuclear non-proliferation issues of relevance.***

Volodymyr Golubiev and Olga Makarovska presented the State Regulatory Committee of Ukraine position with respect to suppressing illicit trafficking in radioactive material in Ukraine. The presenter (V. Golubiev) indicated that Ukraine focuses its main efforts on preventing illicit trafficking. To that effect, the State authorities conduct activities in the following areas: strengthening the State's system for regulation of radioactive source use safety; establishing the State's system for registration, accountancy and control of radioactive sources; strengthening the security system; strengthening security of *historical sources and vulnerable sources.* Major attention is paid to detecting radioactive sources being in illicit trafficking. In particular, work had begun to erect "the second line of defense", to which donor countries plan to commit significant funding for Ukraine. A separate item in the presentation emphasized the importance of developing the system of emergency response to occurrences of malevolent use of radioactive sources.

Suppression of illicit trafficking in radioactive material at the Southern frontiers of our country was discussed in the presentation by the State Border Guard Service of Ukraine representative ***Viktor Khomenchuk***. Highlighting the major national security threats in this area, the presenter provided a justification for the need to enhance the technical capability of the State Border Guard Service to increase the effectiveness of border control, create state-of-the-art systems for detection of and response to illicit trafficking in radioactive material.

Pascal Daures and ***Omer Cromboom***, who represented the *Institute for the Protection and the Security of the Citizens*, Ispra, Italy and *Institute for Transuranium Elements*, Karlsruhe, Germany respectively, jointly presented the positive experience of co-operation between scientific institutions of the European Commission/Ukraine Joint Research Centre under the TACIS programme. Some time ago, those European scientific institutions and relevant Ukrainian State authorities and institutions successfully completed a project to strengthen Ukrainian capability in suppressing illicit trafficking. That pilot project being a success facilitated the execution of similar projects in other countries as well as the launching of three new projects under the TACIS programme last year: that related to multilateral approach to suppressing illicit trafficking where synergistic effect is expected due to international co-operation; a project to enhance border security; a project to expand and upgrade the scientific and technical analysis potential for the area of safeguards and nuclear security.

Chief Engineer of the Ukrainian State Production Enterprise *Izotop* ***Olexiy Shevtsov*** dwelt on the problems experienced by suppliers of radioactive sources in terms of preventing illicit trafficking in radioactive material. Among those problems, the presenter singled out deficient accountancy of radioactive sources in our country; unsatisfactory condition of the special vehicles for sources transport; insufficient physical protection measures, especially during transport; lack of "hot chambers", which increases the number of transports by about three times. *Izotop's* project proposals are exactly intended to solve those problems.

The conference participants listened with great interest to the presentation by ***Michael Stafford***, a representative of the U.S. Department of State, a U.S. governmental agency that provides Ukraine with large-scale assistance in its efforts to reduce the risks associated with nuclear smuggling. The presenter informed the conference participants that under the *International Radiological Threat Reduction Program* the Department of State renders assistance to our country to raise the level of security of vulnerable facilities owning powerful

radioactive sources. Mr. Stafford highlighted priorities for potential bilateral co-operation in this area: developing Ukrainian regulatory infrastructure; solving problems of the so-called *orphan* radioactive sources; creating new (or upgrade the existing) radioactive waste storages; enhancing the capability of detecting radioactive material in sea ports and at the State Border; improving response mechanisms and procedures, including law-enforcement measures; enhancing the capability of identifying the origin of removed material etc. In addition, anti-corruption activities within the Customs and Border Guard Services were identified in the presentation as a separate priority item of U.S. assistance.

Nor did Ukrainian and foreign participants omit the position held by Russian Federation – the country originally meant to be assisted under the Global Partnership. In his speech, ***Valeriy Biryukov***, a representative of RF Ministry of Foreign Affairs, shed detailed light on all problems occurring when converting political agreements into practical co-operation, primarily including: project funding allowances much lower than promised; conflicting administrative approaches (lack of agreement on the succession of activities, inclusion or exclusion of previously completed activities under the "umbrella" of the Global Partnership). The Russian diplomat reaffirmed Russia's positive perception of Ukraine's accession to GP and highlighted the following areas of co-operation as promising ones: increasing the security of handling closed disused radioactive sources; creating a comprehensive system of radioactive waste management; improving the export control system. The presentation also emphasized the need to reach an agreement with donor countries on allocating to our country additional funding beyond USD 20 billion, which had been committed to GP projects implementation prior to Ukraine's accession to the initiative.

The experience of re-orienting former USSR scientists who used to work on military items to "peaceful" work was shared by ***Andrew Hood*** and ***Leo Owsiacki***, managers of such international organizations as *Ukrainian Science and Technology Center*, Kyiv, *and the International Science and Technology Center*, Moscow, respectively. Those international scientific institutions already have enough project management experience in the area of nuclear non-proliferation and have expressed their willingness to co-operate. Specifically, L. Owsiacki mentioned in his presentation the experience of co-operation with Russia's Ministry of Interior on legal reviews in the area of nuclear non-proliferation.

To the plenary meeting was concluded by ***Laura Holgate***, who represented the *Nuclear Threat Initiative* – a U.S. non-governmental organization well-known in the world. Ms. Holgate's speech discussed global threats resulting from wide use of high-enriched uranium (HEU) in the civil sector. Osama bin Laden having declared the acquisition of nuclear weapons a "religious duty", accessibility of design data on simplest nuclear bombs in open information sources, availability of over 100 facilities in 40 countries where the amount of HEU is fully sufficient to manufacture one or more nuclear explosive devices, the complexity of detecting shielded HEU by existing engineering devices – that altogether, as she believes, makes it an urgency to undertake a global purge of HEU. Ms. Holgate offered a number of international cooperation proposals to reduce that global threat. They included: creating global norms delegitimizing ownership and use of HEU; taking a global inventory of HEU available and associated threats; streamlining the conversion of research reactors to the use of low-enriched uranium; diversifying the HEU return process; expanding the circle of funding sources for the suppression of proliferation weapons and material of mass destruction.

An overview of thoughts, viewpoints and proposals would be incomplete if we omitted an event that is key to understanding the conference goals, feeling the atmosphere of sincerity and interest that dominated both the meeting hall and the lobby. I refer to the conference-opening dinner speech made by Head of the Committee on Foreign Affairs of the Swedish Parliament Mr. ***Urban Ahlin***. The content of the speech is understood by its very title: "Something Old and Something New in the Field of International Non-Proliferation Cooperation". The prominent Swedish politician came up with a whole series of ideas. In particular, he believes that all participant countries – irrespective of whether they are "donors" or "recipients" under the Global Partnership – are beneficiaries when it comes to the benefits of co-operation. Mr. Ahlin dwelt on the specifics and problems of

practical day-to-day non-proliferation activities: all States that offer assistance start with issues they themselves find important; States and organizations in our field tend to expand the issues they deal with as compared to what the co-operation began with; many organizations and agencies – both donors and recipients – have an interest in prolonging certain co-operation projects even at the expense of lower efficiency; there is significant competition among various agencies – both donors and recipients. In this regard, Mr. Ahlin urged the participants to be careful in nuclear non-proliferation co-operation to avoid situations that will undermine the investment made. In particular, such situations may occur when a country that receives assistance declares its plans to develop new armament systems. Mr. Ahlin went on to refer to the nuclear-weapon States' responsibility in reaching non-proliferation goals. In his opinion, it would be a mistake working with one hand to reduce nuclear threats while with the other hand working to increase them and create new arms race dynamics. Concluding, Urban Ahlin explicitly stated his country's attitude to the nuclear non-proliferation processes, noting that the Global Partnership can become a major contribution to NPT, yet it is not there to replace NPT but merely to complement it.

The last plenary meeting was concluded by reviewing the project proposals and general discussion among conference participants. During a brief but quite lively exchange of thoughts, the dominant majority of presenters referred to the significance of this action for further development of co-operation under the Global Partnership. A few foreign participants appreciated the high goals that Ukraine set for itself by acceding to this initiative. The issue of effort coordination was taken up as well for both donors and recipients. Even despite some skepticism expressed as to the possibility of effective effort coordination in this area (***Juha Rautjärvi***, STUK, Finland), the participants were unanimous all that the conference held is an important step in practical implementation of the ideas and declarations with respect to our country's accession the Global Partnership. During informal communication and in their presentations, both foreign and Ukrainian participants expressed their satisfaction with the high level of conference organization and its preliminary results, and extended their sincere appreciation to its sponsors and organizers.

Welcome address by the Minister of Foreign Affairs of Ukraine Mr. Borys Tarasyuk to the participants of the international donor conference "*Control and Security of Nuclear Materials in Ukraine: Past Achievements and the Global Partnership Agenda Ahead*", 24 - 26 January 2006 Kiev, Ukraine

(Presented by the Deputy Minister for Foreign Affairs of Ukraine Mr. Andriy Veselovsky)

Dear ladies and gentlemen,

It is a pleasure to participate in this important international Conference that has assembled here today a number of prominent home specialists and international politicians and experts to discuss nuclear safety issues of relevance and, undoubtedly, of major interest for both Ukraine and the world community.

In this regard, I have the privilege to read out the address by the Minister of Foreign Affairs of Ukraine Mr. B. Tarasyuk on the occasion of this forum.

Dear conference participants,

Greetings to you and the organizers of this important international forum on its opening day.

Above all, I would like to thank the Swedish Nuclear Power Inspectorate as a co-organizer of this Conference -for their efforts that made sure this event had been adequately prepared and facilitated involvement of a wide range of participants from various countries. The high representative level is emphatically indicative of major interest in the problems to be considered during the Conference. This entitles me to express confidence in the productiveness of its outcomes.

Dear participants,

The 11 September 2001 events in New York and Washington demonstrated to the world the particular danger of the new challenges and threats to international peace and security ensuing from the potential of terrorist groups acquiring and utilizing weapons of mass destruction. The nature of those threats has produced a critical need for the international community to seek adequate approaches to solving the problem, developing efficient interfaces in order to maintain and strengthen global peace and security.

It is in this context that special attention must be credited to the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction initiated by G8 during the 2002 Kananaskis Summit. This initiative undoubtedly has a great potential in terms of responding to the current negative trends in the field of nuclear non-proliferation and disarmament. Ukraine highly appreciates the efforts applied by the world's leading countries to further strengthen the comprehensive.

Welcome address by the People's Deputy of Ukraine of 3rd Convocation Mr. Oleksander Tishchenko to the participants of the international donor conference "*Control and Security of Nuclear Materials in Ukraine: Past Achievements and the Global Partnership Agenda Ahead*", 24 - 26 January 2006 Kiev, Ukraine

Dear Conference Participants,

Let me extend my greetings to all the present and thank you for your attention to this important problem - assurance of nuclear safety and security.

The Supreme Council of Ukraine and specifically its Committees for National Security and Defense and for Environmental Policy, Use of Natural Resources and Liquidation of Consequences of Chornobyl Disaster attach a great significance to issues of nuclear safety and security, radiological protection and nuclear non-proliferation. This is primarily due to the fact that over the recent years the world community has been facing new challenges and threats associated with illicit trafficking in nuclear material, equipment and radioactive sources that can be exploited by various terrorist organizations in manufacturing nuclear weapons. Such illicit trafficking takes place in different parts of the world. This is a major concern for us all and a reason to take action as necessary to improve existing scientific and engineering controls in exercising surveillance over nuclear safety and security, radiological protection, nuclear non-proliferation and prevention of illicit trafficking in nuclear and radioactive material.

Ukraine is an active participant of international co-operation for assurance of safety and security in the use of nuclear energy and for preventing the use of nuclear material, equipment and technology for military purposes.

In November 2005, the Supreme Council of Ukraine ratified the Protocol Additional to the Agreement between IAEA and Ukraine on the Application of Safeguards in Connection with the Nuclear Non-Proliferation Treaty. This was another step in our country's efforts to reach nuclear safety and security.

The present Conference is a sign of the international community being highly interested in Ukraine's achievements and plans in the area of nuclear material control and security in Ukraine under the Global Partnership for Peace.

I do thank the Conference organizers - the State Nuclear Regulatory Committee of Ukraine and its Chairman Mrs. Olena Mykolaichuk, with a special credit to the Swedish Nuclear Power Inspectorate and Mr. Lars van Dassen, Deputy Head of the Swedish Nuclear Power Inspectorate's International Co-operation Programme for their work to solve nuclear safety and security problems of relevance in organizing the integrated international nuclear non-proliferation system for a number of years.

I wish to all participants of this Conference fruitful work and a pleasant stay in our beautiful city, despite the cold weather.

Welcome address by the Minister, Embassy of Sweden to Ukraine, Mr. Hans-Gunnar Aden to the participants of the international donor conference "*Control and Security of Nuclear Materials in Ukraine: Past Achievements and the Global Partnership Agenda Ahead*", 24 - 26 January 2006 Kiev, Ukraine

Dear Ladies and Gentlemen!

On behalf of the Swedish Ministry for Foreign Affairs it is my pleasure and honor to bid you welcome to this conference on nuclear non-proliferation and security.

Sweden has conducted cooperation projects with Ukraine in the area of control of nuclear materials since 1992. Non-proliferation is thus one of the most long term cooperation fields between Ukraine and Sweden. Already in 2003 Sweden and Ukraine agreed to hold a conference on nuclear non-proliferation, and we are very happy that it now takes place.

If we look at things with hindsight, then there are in fact three good reasons to be happy that this conference takes place now and not earlier.
First of all, Ukraine has changed a lot over the past year. The process towards greater democracy and transparency that is now going on facilitates larger and better cooperation in the field of nuclear security and cooperation with Ukrainian partners. Secondly, it is important to find the right partners when you want to organize a conference. In this respect we have been fortunate to have found able and willing co-organizers from the host country Ukraine but also from Germany and Finland.

Thirdly, Ukraine has recently joined the Global Partnership as established in 2002 by the G-8 countries. This creates a platform for engagement and commitment - for Ukraine and a long range of other states that also adhere to the Global partnership. There are also other initiatives and strategies, among them as Mrs. Annalisa Gianella just pointed out in her introduction speech, the European Union's strategy against the proliferation of weapons of mass destruction, to which I, representing an EU Member State, naturally attach particular importance. I think it is fair to say that nowadays, we have been equipped with an improved framework for international cooperation to curb proliferation hazards. There is a platform, and therefore I hope that the coming three days will have more tangible results than just nice words and rhetoric's. It is my expectation and the expectation of my fellow countrymen who have been actively involved in organizing this conference that it will result in further steps being taken to implement a range of activities that increase nuclear security in Ukraine. In today's world, where boundaries fall and borders open up, this means that if there is better nuclear security in Ukraine, then this will also affect other countries in a positive way. Let me add, that while we are gathering here in this hotel, Sweden's Prime Minister Goeran Persson is making an official visit to Ukraine. He has for several years taken a strong personal interest in strengthening the political and economic development of Ukraine - as well as strengthening the ties between Sweden and Ukraine. The Prime Minister has on many other occasions discussed issues concerning non-proliferation of weapons of mass destruction when exchanging with other heads of state - and this visit to Ukraine is no exception. I am therefore happy to convey to you the Prime Minister's best wishes and hopes for the conference. I wish you success in your important work. Thank you for your attention.

Welcome address by the Personal Representative of the EU High Representative for Non-Proliferation of WMD, Mrs. Annalisa Gianella to the participants of the international donor conference "Control and Security of Nuclear Materials in Ukraine: Past Achievements and the Global Partnership Agenda Ahead", 24 - 26 January 2006 Kiev, Ukraine

Dear Ladies and Gentlemen!

- European security strategy and European strategy against WMD proliferation

The adoption by the European Council in 2003 of the WMD Strategy, together with the EU Security Strategy, was a landmark event in the construction of a CFSP: for the first time in Europe, the two nuclear weapons States, the other NATO countries, the two members of the New Agenda Coalition and the other non-NATO countries supported, all together, a common approach towards non-proliferation of WMD.

Faced in 2003 with the threat of major terrorists' attacks after 11 of September 2001, and in view of the EU's failure to define a common approach on Iraq, the EU Member States decided to formulate a common strategy: a far-reaching, coherent and multi-dimensional strategy which was the result of a collective effort.

- Effective multilateralism and preventive engagement

The strategy is based on the principle of effective multilateralism, which means that the focus is on prevention and cooperation. We define prevention as "preventive engagement": the EU is ready to address difficult situations and to consider, if necessary, the option of coercive measures, in accordance with the UN Charter and international law. But this is the ultima ratio. Preventive engagement has to start much earlier, since acting before a crisis occurs, working on the root causes of proliferation, makes more sense than having to enforce the rules when it might sometimes be already too late.

The strategy acknowledges the need for international cooperation for an effective fight against WMD proliferation. A State in isolation cannot solve this problem. The EU has adopted a series of Joint Statements and their corresponding Action Plans on non-proliferation with the US, Japan and China. Russia has also expressed interest in such a statement.

- Addressing main proliferation threats

In its strategy adopted in 2003, the EU clearly identified two main aspects of the proliferation threat:

a) A number of States continue to seek to develop WMDs and their means of delivery in breach of their non-proliferation commitments or outside non-proliferation regimes;

b) The risk that terrorists will acquire chemical, biological, radiological or fissile materials and their means of delivery.

In order to address both threats in a preventive way we need to engage in promoting the universalisation of multilateral instruments, the enhancement of the control and protection of sensitive material and equipment and the strengthening of export controls.

The EU, on the basis of its WMD Strategy is addressing these concerns by working with others, its partners and international organisations, such as the IAEA and the OPCW, to increase effectiveness.

A few examples with particular relevance for the nuclear field:

1. Universalisation of the IAEA Additional Protocol

The EU WMD strategy promotes the universalisation of the IAEA Additional Protocol which, together with comprehensive safeguards agreements represents the IAEA safeguards standard of today. Through the IAEA, the EU is providing legislative assistance for the implementation of the Additional Protocol. Ukraine, being - as I understand - in the process of ratifying the Additional Protocol, is on the list of potential beneficiaries for this kind of assistance.

2. EU assistance to strengthen nuclear security

The increased risk of nuclear terrorism, i.e., the possible use by terrorists of nuclear and radio-active materials in a "dirty bomb" has to be addressed as a matter of highest priority. Therefore, the protection and control of even small quantities of nuclear materials, and radio-active sources has to be a high priority in our efforts.

So far, EU Foreign Ministers have adopted two Council Joint Actions supporting IAEA activities carried out under the Nuclear Security Fund aimed at preventing acts of nuclear terrorism. The first Joint Action, adopted in May 2004 has already been implemented for more than a year and has contributed to the improvement of the nuclear security situation in several countries in the Balkans, in the Caucasus and in Central Asia.

More precisely, the following three areas have been covered:

(1) improving the physical protection of nuclear facilities,
(2) enhancing protection and control of nuclear and radio-active materials which are used for agricultural, industrial and medical purposes;
(3) assisting states in taking measures against illicit trafficking in nuclear and radio-active materials.

The second Joint Action, adopted in July 2005, has added North African and Mediterranean countries to the geographic scope for assistance to be provided starting from January 2006.

3. EU assistance in the area of export controls

Effective export controls are a crucial element in preventing the proliferation of sensitive equipment, material and technology and to fight against the threat of state proliferation and terrorism. In line with the EU WMD strategy, the provision of export control assistance has become an important objective and first actions have already been taken, e.g., an export control seminar jointly organised with Chinese authorities in January 2005, which will be followed by targeted assistance channelled through an EU project financed by the European Parliament (Pilot Project 2005), as well as assistance provided to the Balkans through the New Neighbourhood Policy Action Plans.

Just yesterday, a jointly organised EU-Ukraine ad-hoc meeting on dual-use export controls took place with the objective to exchange our experiences in this important field. I am convinced that it marks only the starting point for further intensified co-operation.

4. G-8 Global Partnership Programme

The EU is also an important contributor to the G-8 Global Partnership Programme. In addition to national contributions provided by our member states, significant contributions have been made under the TACIS programme in order to raise the nuclear safety level in the Newly Independent States. Furthermore in November 2004 the Council adopted a Joint Action in support of the physical protection of a nuclear site in the Russian Federation.

Financial support is also provided to the budget of the Ukraine Science and Technology Centre (USTC) in Kiev where scientists formerly involved in WMD research and development are now using their knowledge in less sensitive fields.

In the case of Ukraine, the EU is participating in the discussions on how to cover the construction costs of the Chernobyl shelter.

5. Further EU/Ukrainian cooperation

EU cooperation with Ukraine will continue under the umbrella of the G8 Global Partnership. Furthermore, I held yesterday meetings with representatives from the Ministry of Health to have a first insight into a bio-laboratories physical protection project. An area in which the EU is eager to start taking action.

The EU is ready to address the challenges posed by WMD proliferation. However, as important as they are, they constitute just one important element of the developing and much wider relationship between Ukraine and the EU.

Assuring Compliance with the Non-Proliferation Objectives; Increasing Role of the National Safeguards System

Director TeroVarjoranta
Senior Adviser Juha Rautjärvi
Radiation and Nuclear Safety Authority, STUK,

ABSTRACT

The paper first discusses how currently the global safeguards and security challenges are changing and reflected in our national systems, and how success not only depends on superiority of equipment but also on trust and confidence. It is discussed, how rapidly growing global demand for electricity, high oil and natural gas prices and concerns about their supply security, Kyoto protocol entering into force have made nuclear power not only competitive but also attractive alternative in national energy pallets. The paper then discusses selected challenges and opportunities in the global security and safeguards arena, including multilateral approaches to secure peaceful use for nuclear energy, and nuclear and radiological terrorism. It describes various roles and results of national safeguards system from Finnish viewpoint concluding accordingly those well functioning national safeguards systems with their new challenges are becoming vital success factors in global safeguards climate and related public safety.

CHANGING SECURITY CHALLENGES

The Cold War ended 15 years ago. At that time there was a great hope associated with this dramatic historical moment. The nuclear deterrence was hoped disappearing through pragmatic steps taking by the Nuclear Weapon States particularly in the area of disarmament. The international community members were expected to take efficient steps with countries like North Korea and Iraq in the area of non-proliferation so as to remove the concerns caused by weapons of mass destruction means and to mitigate the growing tensions.

The hopes were however not fully realized and the dangers are still looming large. How the world sees the recent developments is pretty much reflected through the Nobel Peace Prize given to the IAEA and to its Director General and by the given justifications. Namely, "the threat of nuclear arms is again increasing", "disarmament efforts appear deadlocked", "there is a danger that nuclear arms will spread both to states and to terrorist groups". Further to this, the "nuclear power again appears to be playing an increasingly significant role", and "...makes active opposition to nuclear arms all the more important today". The security challenges have changed in nature and scope.

Nuclear security and safeguards regimes are not matters implemented by a State in isolation from other securities essential for well being of the people in different regions of the world. Political, economical, social and military security considerations are determining the role of nuclear energy. Nuclear safety, security and safeguards regimes and their implementation are aimed at responding efficiently to any given or perceived threat so as to enable peaceful utilisation of nuclear energy.

NUCLEAR NON-PROLIFERATION AND DISARMAMENT ARE CONTITIONS FOR PEACEFUL UTILIZATION OF NUCLEAR ENERGY

The peaceful utilisation of nuclear energy is understood to depend on success in nuclear disarmament and non-proliferation efforts. Ukraine responded to desires of the community and to the threats very timely and with courage, already in early 90's by renouncing the nuclear weapon state status. The Nuclear Weapon State Russia co-operated to that end and made it possible for the International Atomic Energy Agency to apply its safeguards system for Ukraine as a Non-Nuclear Weapon State. This contribution to the peaceful utilisation of nuclear energy has been universally appreciated.

This understanding was turned into various commitments in the NPT review conferences in 1995 and 2000. This year conference, the 7th NPT review conference held in New York in May 2005, was however unable to discuss any substantive issues in agenda. The conference is widely perceived as a failure. On the other hand, the historical events and their consequences will not necessary respect our five-year plans! The next conference in 2010 hopefully will report progress in all three areas. These hopes can be realised by continued focus and effort on implementation of the current obligations.

How Ukraine has been benefiting from that what they have given to the members of the international community is a fair question - And, also that, what could be done more. How could we ensure timely progress? The problem hindering progress was described by a nuclear disarmament expert participating in the NPT review conference as follows: We are lacking confidence! The reliability of the required techniques, equipment and procedures are largely proven. But how is the confidence level between stakeholders and partners? There are several doubts on that, and without good confidence and trust it is not possible to move ahead to the practical success. To overcome that problem would mean that any nuclear verification activity and, as a matter of fact, co-operation in any security and safeguards relevant matters must be embedded in an efficient confidence-building process. Is this just something that we are also expecting to take place here in Ukraine during our conference in January 2006!

CURRENT PERSPECTIVE OF PEACEFUL USE IS PROMISING

Rapidly growing global demand for electricity, high oil and natural gas prices and concerns about their supply security, Kyoto protocol entering into force have made nuclear power not only competitive but also attractive alternative in national energy pallets. In OECD countries at the beginning of 2005, there were 352 operating nuclear power stations, eight under construction and 19 units were firmly committed for construction. Taking into account the 11 units expected to be shut down in next 5 years, nuclear power's share in electricity generations continues to grow. The statistics offers promises. To be able to turn these in to a sustainable progress requires trust that is based on proven approaches and partnerships.

MULTINATIONAL APPROACHES TO SECURE PEASEFUL USE

An international group of experts to considered possible multilateral approaches (MNA) to the civilian nuclear fuel cycle from June 2004 till February 2005 (INFCIRC/260, 22 Feb 2005). The questions relating to the assurances of non-proliferation and assurances of supply and services were dominating in the considerations.

Most probable scenarios of the future world-wide nuclear energy use are such that the demand of enriched uranium is going to increase and there will be a need to construct new enrichment capacity. Old gas diffusion technology will gradually be replaced with more economical gas centrifuge technology. At the back end of the fuel

cycle there is already a demand for additional long term spent fuel storage capacity and a desire among some countries to export their spent fuel for final disposal in centralised international facility.

In its considerations, the Group Experts concluded that the objective of increasing non-proliferation assurances, while preserving assurances of supply and services, could be achieved through a set of gradually introduced multilateral approaches. 1) Reinforcing existing marker mechanisms; such as fuel leasing and fuel take back offers, commercial offers to store and dispose of spent fuel, commercial fuel banks etc. 2) Provision of reliable international supply guarantees; such as IAEA acting as administrator of fuel bank. 3) Voluntary conversion of existing facilities to multinational undertakings that is operating within the established MNA. 4) Creating multinational and regional MNAs for new facilities based on joint ownership in particular in the areas of enrichment, reprocessing and disposal and storage of spent fuel.

The considerations for the establishment of multinational approaches started as early as 1976 and were followed by numerous reports. It's seems now very obvious that there are important incentives for developing MNAs and thereby enhancing the international trust on NPT as a whole and on nuclear material security and safeguards in particular.

In Finland, we strongly support exploring further the idea of MNA, of starting concrete actions to develop such MNAs that are found most promising. We are somewhat concerned however, that after the expert group report the motivation is slowly disappearing. The time to develop concrete well enough structured proposals for NMAs and to subject these for evaluation by the relevant societal, technical, commercial and political parties is now however, if we would like to see progress reported in this area during the next NPT review conference.

Some of the MNA solutions need not to be sophisticated ones like the example of supplying fuel for the Loviisa NPS in Finland demonstrated. Russian Federation offered one reliable way, years with good experience in terms of quality of the fuel and smoothness of the fuel shipments offering thereby also solutions to managing back end of the fuel cycle. Similar experiences elsewhere could contribute to the development of the specifications for an NMA.

DISPITE OF THE COUNTER PROLIFERATION EFFORTS THE DANGER IS LOOMING LARGE

States are not the only actors contributing to the proliferation risk. The terrorists that are pursuing nuclear capacity are perceived to day as the main risk. The nuclear materials and their stockpiles as well as weapons shall be therefore accurately accounted for and protected so as to reduce their vulnerability to theft or terrorist acts.

Also conventional radioactive materials shall be appropriately accounted for and protected. These may also be in the shopping lists of the ill-mined ones. Globally, orphan radiation sources constitute a real challenge, also in the EU. The regulatory system, including accounting, reporting and control on national level, is not even close to the level of nuclear materials. For example in the EU, the number of "lost " radiation sources every year has been substantial and the understanding of the actual situation is not helped by the fact how detailed inventories and their verification is not always known even to the state authorities.

Recent developments suggest that proliferation of nuclear capabilities has reached a new dimension: sensitive information, drawings, and charts and specs in electronic form can easily be distributed by CDs, DVDs and Internet.

Despite of all efforts in strengthening the counter proliferation measures, including these of the International Atomic Energy Agency's material security and safeguards, the impact in resources and the implementation has been slow taking into account the size of the risk. For many countries like Finland, the risk of being a direct target of nuclear terrorism may be minimal, but the impact of such an attack anywhere to world economy would be so bad, that eliminating this type of risk is in the interest of all countries.

NATIONAL SYSTEMS OF SAFEGUARDS AND MATERIAL SECURITY NEEDS STRENGTHENING TO ENSURE TIMELY AND EFFECTIVE RESPONSE

In Finland like in many other countries the NPT remains one of the cornerstones of the nuclear non-proliferation regime. Strengthening the national safeguards system, enabling the Agency's safeguards, strengthening of export and import controls, operating the Comprehensive Test-Ban Treaty (CTBT) based monitoring and data centre, and possible contribution to facilitate the start of negotiations on a Fissile Material Cut-Off Treaty (FMCT) and its early conclusion are some other essential elements of the regime. Other initiatives can well complement the NPT regime functions, but they cannot replace these.

Finland has strongly supported the efforts to improve the efficiency of the Agency's safeguards system in order to improve the technical capability and strengthen its legal authority to be able to apply all measures available to it so that there is credible assurance of the absence of undeclared nuclear materials and nuclear activities. The implementation of Finland's Additional Protocol started last year in good co-operation with the Agency and Euratom. Finland provided the initial declarations to the Agency, and partly to Euratom, according to the provisions of the Additional Protocol. In December 2004, the first complementary access was carried out at the Helsinki University, Radiochemical Laboratory.

Over the recent years good result have also been gained in international co-operation including the following: upgrading national legislation; effective physical protection; security upgrades on sites, building and materials; equipping border posts and training personnel; export control and illicit trafficking. To give an example on the results of the programmatic defence-in-depth approach implemented to all the crossing points of the Finland-Russia border, the cooperation, covering automatic radiation monitors and search detectors, exchange of information and joint training, has resulted in clear decrease of illicit trafficking cases in the boarder from top year 1997 with 23 cases to the zero cases for years from 2001 till 2005.

The comprehensive safeguards agreement, together with the Additional Protocol represents in fact the current standard implying changes to the scope and functional responsibilities of the national system in Finland and also in Ukraine. Ukraine as a non-nuclear weapon state can expect full support from the members of the international community in its efforts to establish a fully functional national system of safeguards.

SUMMARY

The civilian use of nuclear energy is expected to grow in the future. However, at the same time several global risks, such as terrorist trying to get weapons of mass destruction, are increasing. Well functioning national safeguards systems with their new challenges are becoming vital success factors in global safeguards climate and related public safety. Due to its global importance and national nature, networking and cooperation of national safeguards systems is becoming vital success factor in assuring compliance with the Non-Proliferation objectives and related public safety.

Russia and the Global Partnership

Valeriy Biryukov,
Department on Security and Disarmament Issues,
Ministry of Foreign Affairs

1. Russia and the Global Partnership

- In the course of our chairmanship, we will continue to cooperate in the framework of the Global Partnership with G-8 countries and other participants concentrating main efforts on realization of the projects on complex utilization of nuclear-powered submarines written off and removed from the Navy of Russia and elimination of the chemical weapons. We are still a long way from completion of these priority tasks. Yet, many things should be done to turn those statements made by the G-8 leaders during foundation of the Global Partnership to substantial and specific achievements.

- Conversion of the political arrangements into practical cooperation still remains the main task in the framework of the GP. The declared in Kananaskis liability of the GP members (without Russia) allowed to expect the assistance to the amount of more than $5 billion taking into account three and a half years of the initiative realization. In reality for the projects on the complex utilization of the written off nuclear-powered submarines and elimination of the chemical weapons we received only $430 million and that is 12 times less. The volume of assistance promised in Kananaskis does not correspond to the real contributions.

There are also other problems. The organizational questions on initiation of the certain cooperation projects are not easily solved. Frequently disagreements with partners occur on the cost estimation of the projects. Quite often donors do not agree to provide assistance on realization of some work for one or another reason, and because of that the deadlines for the projects fulfillment are not met in time, and sometimes frustration of the contemplated plans take place. Some of our partners register in the GP with antedate the programs the realization of which began (and in most cases finished) in the nineties of the last century, and they do not hasten to initiate any new project.

- In the existing situation, we consider it righteous that the GP still focuses on the projects in Russia. It was confirmed by the annual report in Gleneagles.

- From the part of the Russian Federation, more than $ 1,25 billion has been already spent for these directions.

Utilization of the nuclear-powered submarines. Altogether, 197 of the nuclear-powered submarines were removed from the Navy of Russia. 126 submarines were utilized. 34 of them or 27% were utilized due to foreign assistance. 16 nuclear-powered submarines are still in the process of utilization including five of them, which are being utilized due to assistance of our partners.
From the year 2002 until 2005 Russia received $170 million according to the contracts connected with utilization of nuclear-powered submarines. The expenses of Russia in this field for the same period made up $260 million.

2. Ukraine and the Global Partnership.

- Ukraine's official joining to the GP in the year *2004* corresponds with the spirit of Kananaskis. All members of the G-8 supported the acceptance of Ukraine.

- From our part, we could share the experience of cooperation with the donors including the issues concerning the formation of the legislative base and solutions of other organizational questions for the initiation of the certain cooperation projects.

- In the framework of the GP the projects in the field of circulation of radioactive sources and radioactive wastes and in the field of export control we find promising. In view of the aforesaid:

We are ready, in particular, to consider the suggestions on the realization of the project concerning the increase of safety of the used radioactive sources circulation including services on facility demounting, their transportation to the place of the safe storage, intensification of physical protection of the storehouse objects. We believe that it would be helpful to use here the experience of the experts in trilateral initiative of Russia, the USA and IAEA.

We are ready to contribute to the advancement of the projects in the G-8 concerning the creation of the complex system of radioactive sources circulation, perfection of the export control system of Ukraine.

- From its part, Ukraine in contacts with the donors of the Global Partnership could discuss the possibility of assignment of funds in addition to those $20 billion declared in Kananaskis, which would be sacred for the projects realization within the territory of Ukraine.

KALEIDOSCOPE

UKRAINE CUSTOMS SERVICE PARTICIPATES IN INTEGRITY AWARENESS/ANTI-CORRUPTION WORKSHOP IN KIEV

Howard Douglas Evans
Commonwealth Trading Partners

On November 16-19, 2005, 16 officials from the Customs Service of Ukraine participated in a workshop, "Integrity Awareness and Workplace Ethics". The workshop was hosted at the Ukraine Scientific and Technical Center. This workshop was sponsored by the U. S. Department of State. As part of the State Department's Export Control and Related Border Security Assistance (EXBS) Program, the Bureau of International Security and Non-proliferation, Office of Export Control Cooperation (ISN/EC) is working with key governments to develop Integrity Awareness training. As part of this program, the Bureau of ISN/EC conducted the three day training Workshop on "Integrity Awareness and Workplace Ethics" in Kiev, Ukraine on November 16-18, 2005. The overall goal of this workshop was to support enhance Ukraine efforts and programs to improve the ethics of government organizations.

Commonwealth Trading Partners (CTP) (A U. S. Company), on behalf of the U. S. Department of State, presented the workshop. The leaders of the workshop were two of the foremost instructors in this field, Dr. Neil Trautman and Mr. Douglas Evans. Mr. Evans noted the following: "No problem does more to alienate citizens from their political leaders and institutions, and to undermine political stability and economic development, than endemic corruption among government workers and leaders. Ukraine is one nation that is taking steps to participate in programs to address this problem of corruption. It is always a pleasure to work with Ukraine, because the people here have a unique history, a history of courage, strength, and honour. By their participation in this technical exchange regarding corruption, the leaders of Ukraine and its government agencies have again demonstrated their commitment to making meaningful change to address the difficult problems of the 21st century, including corruption."

The interactive design of the workshop resulted in a free and open debate and conversation concerning integrity/anti-corruption issues. Participants gave excellent reviews of the workshop. Ukraine participants stated that highlights of the workshop included:

1. Identifying leadership skills that counter unethical behaviour
2. Examining how a "code of silence" can perpetuate corruption
3. Locating causes of existing corruption
4. Understanding practical approaches to ethical decision making

Ukraine participants provided written feedback concerning the workshop stated that the workshop exceeded their expectations, and stated that they hoped Ukraine would participate in additional integrity/anti-corruption

workshops and programs offered by Commonwealth Trading Partners (CTP). Like participants in all countries where this seminar has been held, Ukraine participants noted that there was a need for training instructors to teach the course material to host country officials. A second seminar, Ethics Instructor Certification, has been developed by CTP to address this need. Ukraine agencies, including Customs, would have to make official requests to the U. S. Department of State in order to begin the process to determine whether this second seminar will be presented in Ukraine.

The basic workshop, Integrity Awareness and Workplace Ethics, is just the first step in series of in depth and insightful training and programs designed for all levels in government and business. CTP and its' instructors have conducted over 400 institutional reform programs worldwide. CTP customizes each anti-corruption program to meet the needs of the individual agency or country. CTP offers a thorough anti-corruption program including the first basic workshop that was presented here in Kiev. Additional Ukraine participation in these anti-corruption programs will depend in part on whether the Ukraine agencies request additional participation.