SECURITY AND NONPROLIFERATION ISSUE 1(19)2007

KYIV 2007

CONTENTS

EXPORT CONTROL

Oleksandr Grishutkin: Russian Federation Indisputable Leader in Purchasing Ukrainian Controlled Goods

Summary of the State Service of Export Control of Ukraine activities in 2006

NUCLEAR NONPROLIFERATION

Ukrainian officials and experts with representatives of the donor states discussed informally the progress in GP projects implementation in Ukraine

Sergiy Kondratov

On the dangerous edge. Nuclear nonproliferation regime, the year 2006. Olga Kosharna

On Some Problems of Creation of the State System for Responding to Crisis Situations Caused by Nuclear Terrorism

Sergiy Kondratov

Concept of Scientific and Technical Center "Establishment in Ukraine of Specialized Information and Analytical Bureau "SECURITY and NON-PROLIFERATION"

CURRENT IMPORTANT SECURITY PROBLEMS

Ukrainian Initiative for the Establishment of a Permanently Functioning Forum on Conflicts Resolution, Regional and Global Security Challenges

KALEIDOSCOPE

Dear Reader!

An extremely important document was approved in Ukraine on 12 February 2007 – Ukraine's National Security Strategy. Among factors threatening strategic stability in the world, the Strategy identifies "uncontrolled spread of weapons of mass destruction and their delivery means. Ukraine with its scientific and technical potential; nuclear, chemical and missile production may be an object of interest for international terrorist groups". It is noteworthy that the existence of such threats is finally recognized at the highest level in Ukraine whereas high-ranked officials, those of special services in particular, previously dismissed the possibility of Ukraine becoming an object of interest for international terrorists.

The year 2006 was difficult for the nuclear non-proliferation regime. The tension around Iran's nuclear program led the UN Security Council to adopt Resolution 1737 of 23 December. According to it, "all States shall take the necessary measures to prevent the supply, sale or transfer directly or indirectly from their territories, or by their nationals... for the use in or benefit of, Iran, and whether or not originating in their territories, of all items, materials, equipment, goods and technology which could contribute to Iran's enrichment-related, reprocessing or heavy water-related activities, or to the development of nuclear weapon delivery systems." The Council urged all States to "freeze the funds, other financial assets and economic resources" of Iranian entities and individuals involved in activities posing a threat to the nuclear non-proliferation regime as well as in the development of delivery systems for such weapons. The Resolution Annex also lists 12 individuals and 10 organizations whose assets may be subject to freezing.

Another last year's event of extraordinary importance for the nuclear non-proliferation regime was the underground test of a low-power nuclear explosive device in North Korea and the launch of ballistic missiles from its territory.

Unfortunately, we have to admit that the dangerous processes worldwide since international terrorism occurred bearing the threat of putting weapons of mass destruction to use are outstripping the measures taken by the world community to counter international terrorism. In addressing the new threats, it is only a genuine cooperation based on an essentially new level of confidence and interaction as well as a more rigorous and universal observance of commitments made under international treaties that can give us hope that the world will not get entangled in a new phase of nuclear arms race.

Development of cooperation under the *Global Partnership against the Spread of Weapons and Materials of Mass Destruction* will clearly facilitate mutual understanding and be beneficial for the non-proliferation regime. This issue of the Journal informs on the progress of informal talks on Ukraine's cooperation under the Global Partnership, held in December 2006 in Kyiv.

The State Service of Export Control of Ukraine is demonstrating this year a new degree of openness and reasonable transparency. To illustrate this trend, we are publishing responses by acting Head of SSECU Oleksandr Grishutkin to journalists' questions and a summary report for SSECU activities in 2006.

The Editorial Team is also offering for discussion the Concept for a specialized information-analytical bureau *Security and Non-Proliferation* to be established in Ukraine. This initiative ensues from the need to form a circle of WMD non-proliferation experts and to improve the expertise on this subject of journalists working for socio-political mass media. We will highly appreciate your suggestions and comments on the Concept.

Olga Kosharna, Deputy Editor-in-Chief

Oleksandr Grishutkin: Russian Federation Indisputable Leader in Purchasing Ukrainian Controlled Goods

On 21 February 2007, acting Head of the State Service of Export Control of Ukraine O. Grishutkin gave a press conference to summarize the agency's progress in 2006. The press conference was attended by representatives of information agencies such as *UNIAN*, *Ukrinform*, *Itar-TASS*, *Defense-Express*, along with those of *Security and Non-proliferation Journal and Export Control Newsletter* and the *Scientific and Technical Centre of Export and Import of Special Technologies*, *Hardware*, and *Materials*.

Profile: Oleksandr Grishutkin is one of the founding fathers of Ukrainian export control system; he has been working in this area for 12 years, since early 1994. PhD in Engineering and Economics, "distinguished contributor to Ukrainian industry", author of 16 inventions and over 40 publications. He co-authored the Law of Ukraine on State Control over International Transfers of Military and Dual-Use Goods, the key document in this field, a contributor to fairly all export control regulations.

The Journal's Editorial Board publishes O. Grishutkin's answers to some of the questions posed by journalists.

On the role of the parliament in controlling international transfers of military and dual-use goods

There is hardly any area or field where the saying "enough is enough" is applicable. Any area should be under constant development, including that of parliamentary control to be strengthened as applicable to export control.

Speaking of how this issue has been evolving, it must be admitted that 5 years ago very few individuals in the parliament had any idea what an export control system is all about. Due to active performance by all components of the system and, sadly, to international scandals eventually breaking out in this field and covered by mass media, the parliament has been confronted with the need to implement direct controls applicable to this area.

In 2000, jointly with the parliament, we began to develop the Law of Ukraine *On State Control over International Transfers of Military and Dual-Use Goods*. It is noteworthy that the draft, being originated by SSECU and under a meticulous scrutiny by the Cabinet of Ministers, afterwards ended up substantially amended by none else than the parliament. Therefore, it can be asserted that controlling international transfers of controlled goods and export control system organization is an important objective for the parliament. It is a form of control.

Another form of parliamentary control is appropriate reporting – something that we have been doing for 3 years in a row now, since 2004. A similar report is under preparation this year.

It is also an efficient form of control to hold parliamentary hearings not only on export control issues, but on those related to adjacent areas: defense-industrial complex, military-technical cooperation, etc.

There are other forms envisaged by Ukrainian law. Parliamentary control is augmenting step-by-step. I believe we will end up with a European-type model where the parliament plays an extraordinary role in any field.

On enlarging the circle of special exporters and draft CMU Resolution to extend the authorization validity terms for special exporters

Please be aware that such authorizing activities as enlarging or reducing the circle of special exporters are not a function of SSECU. This is a task to be handled by CMU only. SSECU just processes applications, prepares documents as appropriate, seeks interagency agreement on related issues, clarifies all circumstances that can encourage or discourage such authorizing. Still, let me

again emphasize that decision-making on enlarging or reducing the pool of special exporters is the exclusive responsibility of CMU, defined in at lease two Ukrainian laws.

We are constantly approached by enterprises and we consistently consider the issue of eligibility for authorization. But it is a process far from being simple. At least 10–15 administrative agencies are involved in the process of preparing licensing decisions. The CMU resolution regulating the authorizing process specifies that the government takes up the issue of authorizing once a year, as a rule.

To date, documents of three or four enterprises are at various stages of processing (State-owned Enterprise Kharkiv Morozov Machine Building Design Bureau, AVIANT Kiev State Aviation Plant, AVTOKRAZ Holding Company).

Enlarging the circle of special exporters is actually a very complicated issue. On the one hand, increasing the number of special exporters leads to competition. We have already been through it. On the other hand, extreme reductions entail monopolization.

There exist no limits to the number of authorized special exporters. Authorizing depends on the nature of business of the enterprise in question, its functions, organization methodology and other factors.

The Russian Federation experience is a vivid example of gradually narrowing the circle of special exporters followed by a period of enlarging the list of authorized enterprises. Presently, the circle is again very limited.

Hence this process is rid of any explicit confines; it will change depending on eventual challenges.

As for authorization term extensions, all decisions to that effect were already made last year. The authorization term was extended by 3 years for nearly all enterprises. Presently, we have prepared another draft. In response to numerous suggestions coming from enterprises, especially large-scale ones with a stable presence at the foreign trade market, being authorized and manufacturing products; upon recommendations by the relevant VR Committee and based on public discussions of this issue, particularly under the SSECU Civil Council, we have come up with a draft resolution that essentially restores the situation of 5 years ago when the authorization validity term was not limited to a specific timeframe. This question only depended on how the enterprise performs at the foreign trade market. Given any violations, the authorization would be terminated.

A comeback to such a system would be logical and understandable. Now, it is impossible for any enterprise with time-limited authorization to pursue quality long-term marketing activities. During negotiations, attention is normally paid to the enterprises' authorization and if a long-term contract is planned while the validity term is nearing its end, then concluding such a contract becomes a problem. This is experience, unfortunately. Experience showing that to conduct serious marketing activities and realistic long-term planning, it requires a return to the system of infinite authorization. The resolution defines the essential procedure for authorization and its validity. If this resolution is approved it must be followed by approval of a resolution on infinite authorization specifically for each special exporter.

On numerous accusations of illicit export of military goods, disclosed by mass media

I would not spend much time discussing this issue because what is at work here is the factor of competition at the world weapons market and speculating if there really was an intent to a undertake such supplies. Facts analysis demonstrates that all accusations that have emerged throughout the years of SSECU's existence exemplify unscrupulous competition. They are not worth of attention. Such influence techniques are reflected even in marketing tutorials.

It is impossible to prevent such accusations. It is extremely hard to predict them. Overall, how can manifestations of unscrupulous competition be foreseen in specific cases? Such competition has always been and will always be there. Someone does it a in tougher way, someone milder, but competitive rivalry waged by diverse methods is to be seen at all times.

On creating a closed nuclear fuel cycle in Ukraine and the world community's attitude towards this idea

I am unwilling to comment on the position held by any Ukrainian politician. Let me tell you that it is quite possible to predict, taking some nations as an example, the world community's attitude towards creating full fuel cycles and, accordingly, to enlarging the circle of countries possessing them. It is perceived by the world community primarily not as a need, but rather as a possibility of creating nuclear weapons. That's why I don't believe this process can be simple. But creating fuel cycle elements (except enrichment) is quite possible and does not contravene the behavioral principles in this area.

On the list of countries to which exports of military goods from Ukraine are banned

All this information is available on the website of Ukrainian Ministry of Foreign Affairs. It is prohibited to supply to those countries subjected to UN Security Council restrictions and, as far as Ukrainian law is concerned, whenever CMU Resolutions regulating international goods transfers to those countries are applicable. Indeed, there are countries towards which both the international community and specific countries pursue a national policy of their own, but it does not mean Ukraine must ban exports based on these recommendatory restrictions. Ukraine may take such restriction into consideration, but it is not an unconditional ban.

It is in no way binding upon Ukraine, but if we seek to be on goods terms with the European Union, then we may have to take the European Community's opinion into account. I would like to refer you to the terminology of the Law of Ukraine *On State Control over International Transfers of Military and Dual-Use Goods*. Priority of national interests tops the list. We must do what is consistent with our national interests.

On a separate body of administrative authority in the military-technical cooperation system

Throughout the existence of Ukrainian export control system there have been attempts to establish new bodies of authority, reorganize existing ones... In my opinion, the current system works efficiently enough. I am not inclined to assert that the system must remain unchanged, it goes without saying that it must be upgraded from time to time.

But the need to establish a separate body will be finally addressed later. To date, a law on military-technical cooperation is missing, and each of us has his or her own understanding of the term "military-technical cooperation".

It is extremely difficult to state at this very point whether such a body or structural subdivision under any ministry is needed or not. Administrative authorities' military-technical cooperation objectives are identified in Presidential Decree № 276 On Differentiation of Authorities among Central Administrative Authorities in the Area of Military-Technical Cooperation with Foreign States dated 20 March 2002. In principle, this currently is the basis for MTC activities.

On forms of cooperation with the public

I don't think we should favour any form of cooperation both with the public and with non-governmental organizations. Any form that facilitates improvement of control over international transfers and successful performance by our enterprises is generally worth using and developing. All that is inefficient is dropped in a natural way.

In this regard I would like to thank Mr. Oleksandr Siver, whose Centre provides assistance not only to SSECU, but to all enterprises as well. The Centre is enthusiastically promoting the export control system, thus making it no *terra incognita* anymore, but more transparent, clear and simple.

Seminars, conferences, training, issuing explanatory literature, public opinion polls... By the way, we seem to face a problem in this respect— whom exactly to question, the problem of respondent professionalism. If we go out to the market and quiz market vendors it will yield one public opinion,

a poll of experts on the subject will result in a different one. But it is by involving experts in the process that we can obtain statistics on this or that issue.

Another problem concerns expert training in export control. In Ukraine (and not Ukraine alone) actually no higher education establishment trains specialists in this area. Whereas this is an extremely important and specific activity based on strict rules whose observance requires special knowledge.

It is also crucial to retain the workforce with a stable professional record in this field. Sometimes they even have to act by analogy because of facing multiple cases yet to be reflected in the regulatory framework.

On plans for harmonizing export control law with European Union standards and issue of transition to new lists of controlled goods

For SSECU, specialists dealing with and well-versed in lists of controlled goods, it is not a challenge to produce an updated consolidated list of controlled goods. A real challenge is transition to a new level of understanding of this process.

For an expert dealing with missile equipment it is now all clear – see Annex 2 to CMU Resolution No. 86 for a list of such goods and related requirements to their international transfers. Integration of all appendices to the Resolution, i.e. lists of goods of different types, into one list would rather complicate things.

Yet transition to harmonized lists is a must because it is part of the task to bring national regulatory framework to conformity with the harmonized system adopted in the European Union. It must be done, but it takes time and it takes qualified manpower.

Even a mere translation of international lists of controlled goods would entail various approaches. Each country has its own mentality, its terminological nuances. These are technical texts to be translated in a way that is understandable for specialists of this specific country.

The transition to a new list will create certain problems for enterprises. It warrants a fundamental reconstruction of regulatory documents. And such a reform is always somewhat stressful for users. It takes plenty of time to study, realize and master the new system.

Even the U.S. transition to the harmonized list took three years. It takes a rearrangement of enterprises' functional systems in a way, a realignment of the automated systems involved in the export control process. This is a challenge in terms of organization as well.

On the leader in purchasing Ukrainian controlled goods

According to last year's results, Russian Federation is the indisputable leader. Ukrainian goods were supplied under bilateral cooperation.

Summary of the State Service of Export Control of Ukraine activities in 2006

As was scheduled in the SSECU Programme of Activities for 2006, a number of measures have been implemented as regards governmental control over international transfers of military and dual-use goods, protection (within SSECU competence) of Ukraine's national interests, fulfillment of international commitments regarding non-proliferation of weapons of mass destruction and their delivery means, as well as limitation of conventional arms transfers.

Throughout 2006, SSECU received from actors of entrepreneurial activity and foreign actors of economic and other activities a total of 4863 applications for registration as actors of international goods transfers, obtaining State guarantee documents, granting permits (conclusions) authorizing international goods transfers, including those for export/import— 2566/509 applications, conducting

negotiations associated with the entry into foreign economic agreements (contracts) for goods supplies—439 applications, goods transit through Ukrainian territory—290 applications.

Throughout the period, the applications were processed in 84 SSECU working protocols and reviewed at 31 meetings of the SSECU Interagency Export Control Council and 10 meetings of the President of Ukraine Committee for Military – Technical Cooperation and Export Controls. Based on review results, SSECU decisions were made to issue 3921 licenses, including 2663 permits authorizing:

- export (total) 2328 permits, including 2206 individual ones, of which 55,2 % concerned military goods;
- import (total) 335 permits, including 308 individual ones, of which 48,2 % concerned dual-use goods.

There were 258 conclusions issued authorizing transit of controlled goods across Ukrainian territory.

Throughout 2006, permits were issued authorizing export of controlled goods to 90 States of the world. Therefore, the geography of expected export under individual permits (number of potential States-importers of controlled domestic goods) increased by 4,4 as compared to 2005.

An important task of SSECU's in the foreign trade area was to promote high-end and science-driven technology export from Ukraine, reaching new sales markets for Ukrainian aircraft manufacture, space industry, energy industry machine-building, military-industrial complex, etc.

In those efforts, one of SSECU's key objectives was to promote international goods transfer activities consistent with national interests, primarily by creating new and preserving existing jobs in high-end technology. To further develop favorable conditions for Ukrainian enterprises to carry out such foreign trade activities, SSECU with involvement of leading exporters and non-governmental organizations drafted the Law of Ukraine *On Amending the Law of Ukraine on State Control over International Transfers of Military and Dual-Use Goods*.

In September 2006, as requested by SSECU, the Cabinet of Ministers of Ukraine adopted a resolution to extend the validity term of the authorization to export/ import military goods for a number of leading Ukrainian exporters including affiliates of the State-owned company for military and dual-use exports *Ukrspetsexport*, and such potent industrial enterprises as OJSC *Motor Sich* (Zaporizhya); *Artem* Holding Company (Kyiv); *Malyshev Plant* (Kharkiv); *Antonov Aviation Scientific-Technical Complex* (Kyiv); *Ukrainian Aviation Transport Company* (Kyiv); Southern Machine-Building Works (Dnipropetrovsk), and SE NVKgazoturbobuduvanya Zorya-Mashproyekt (Mykolayiv).

This governmental decision has undoubtedly facilitated both current and future augmentation in exports of items manufactured by high-end industrial branches and defense-industrial enterprises.

With a view to creating more favorable conditions for the implementation of domestic export potential, SSECU continued to take action so that exporting enterprises would implement export control internal compliance systems as a prerequisite for subsequent establishment within such enterprises of the so-called "licensing exceptions", making them eligible for obtaining general and open licenses for international goods transfers. During 2006, SSECU conducted validation of export control internal compliance systems for 5 Ukrainian enterprises and verified performance of such systems at 16 enterprises. Export control internal compliance systems of 49 enterprises qualified.

In order to protect national interests and provide a prompt response to proposals by States parties to international export control regimes, during 2006 SSECU actively participated in the measures undertaken throughout the period within international export control regimes that Ukraine is party to – working group meetings and plenary meetings of the Missile Technology Control Regime, Nuclear Suppliers Group, Wassenaar Arrangement, and Australia Group. Best experts from leading Ukrainian enterprises – manufacturers and exporters – such as *Motor Sich*, *Pivdenne* Design Bureau, *Ukrspetsexport*, and others were involved.

The measures conducted by SSECU over the period were aimed at further development of bilateral

and multilateral cooperation with export control agencies and organizations of other countries. Thus work continued under the agreement between Ukrainian Ministry of Economy and European Integration and the U.S. Department of Defense on providing assistance to Ukraine in establishing an export control system designed to prevent the spread of weapons of mass destruction from Ukraine.

22 August and 13 December 2006, joint meetings were held in Kiev between European Union representatives (German Federal Office of Economics and Export Control (BAFA), representatives of export control agencies of Hungary, Poland, Estonia, and Sweden) with SSECU, which discussed the subject of EU assistance to Ukraine under the EU 2005 pilot project to further develop and improve the export control system.

Transparency in activities of all administrative bodies is one of the most crucial elements of a democratic society. In 2006 it was the first time that SSECU provided information to mass media on the amount of international weapons transfers carried out by Ukraine in 2004 and 2005.

SSECU is not a founder or co-founder of any governmental printed media, therefore it places information on export control-related events at its website, see: "Novyny" (News), as well as in the digest *Ukrinform: DIC, Aviation, and Cosmonautics News*, and journals *Security and Non-Proliferation* and *Export Control Newsletter*.

As part of additional measures to improve the processing of public requests, regular personal reception of citizens has been initiated and scheduled topical telephone lines ("hotlines") introduced. The Civil Council, Public Reception Office and Export Control Information Center have been instituted under SSECU. As part of the program to inform the public, the SSECU website launched a section "Answers to Questions" for visitors of the website. Questions obtained from that section are promptly processed and analyzed by SSECU experts to provide well-grounded responses.

Another important element of transparency is to make the public aware of the issues related to SSECU's activities. In 2006, for this purpose SSECU made arrangements jointly with other organizations over the last months to hold eight training seminars and international conferences involving representatives of leading Ukrainian industrial enterprises from various regions and of mass media.

An efficient mechanism to study the public opinion on some aspects of Ukrainian governmental export control system's functioning was interviewing experts during seminars and conferences. Throughout 2006 over 230 questionnaires were turned in with suggestions indicating areas of improvement for existing export control system, including: due account to be taken of domestic manufacturers' interests when harmonizing export control regulatory and legal bases with international law in this area; improvement of the system transparency; reducing timeframes and enhancing effectiveness of interagency agreements; arranging assistance to enterprises when establishing export control internal compliance systems, etc. At the same time a number of suggestions were offered with respect to improvement of existing export control regulatory and legal bases. At this point the suggestions are under review and ways to implement them are being planned.

30 June, 29 September, and 26 December 2006, joint meetings were held between the SSECU Collegium and the Public Council on Coordination of Arrangements to Conduct Consultations with the Public on the State Export Control Policy Formation and Implementation. The meetings discussed Public Council members' proposals of draft export control regulations as well as a summary of SSECU activities in 2006 and main tasks for 2007.

The tasks assigned to SSECU for 2006 were basically accomplished. Owing to the measures taken by SSECU within its competence, no failure to meet Ukraine's commitments as regards national export control and non-proliferation of weapons of mass destruction and their delivery means occurred in 2006.

The current regulatory and legal bases in the area of State export control enable effective regulation of activities related to State control over international transfers of military and dual-use goods, in order to protect Ukrainian national interests, meet its international commitments as regards non-

proliferation of weapons of mass destruction and their delivery means, limit transfers of conventional weapons, and take measures to prevent the use of these goods for terrorist and other unlawful purposes.

Information provided by the State Service of Export Control of Ukraine

Ukrainian officials and experts with representatives of the donor states discussed informally the progress in GP projects implementation in Ukraine

Sergiy Kondratov,
Institute of National Security Problems
Editor-in-chief of the Ukrainian journal "Security and Nonproliferation"

The informal discussion of the progress in Ukraine's involvement in GP occurred on December 13, i.e., the next day after the international round-table discussion devoted to the problems of elevating the role of a civil society of Ukraine in ensuring the nonproliferation regimes and export control. Almost all foreign participants of the round-table discussion – they represented both governmental and non-governmental organizations of Sweden, Germany, Great Britain, U.S. and Finland as well as such international organizations and research centers as the IAEA, European Commission Delegation to Ukraine, SIPRI (Stockholm International Peace Research Institute), *Saferworld*, International Center for Policy Studies (ICPS) took the opportunity to continue discussion in an informal way with regard to Ukraine's participation in GP projects. The majority of the Ukrainian participants of the round-table discussion also were invited to share their opinions on how to improve the efficiency of international cooperation within the GP framework. Besides, a number of representatives of the Ukrainian state authorities, research organizations of the National Academy of Sciences, National Security and Defense Council, which submitted their project proposals to donors at the Kyiv conference in January 2006 devoted to Ukraine's accession to GP, participated in the event.

The discussion was opened by V.Belashov, representative of the Ukrainian Ministry of Foreign Affairs who addressed the background and current status of the GP projects for Ukraine. Already the first statements and speeches highlighted a principal problem preventing more efficient joint efforts of Ukrainian and foreign "global partners", namely, the lack of reliable mechanisms for coordination and information exchange. Really, from the very beginning of the discussion the speakers from different organizations (both Ukrainian and foreign) referred to different lists of project proposals that made confusion and misunderstanding. The representative of the State Nuclear Regulatory Committee L. Zenyuk called attention of attendees to this fact.

The matter is that at the above-mentioned international conference in January 2006 the Ukrainian side put forward 40 project proposals the fate of which, naturally, appeared to be different. In particular, some of them were put on the list of projects responsibility for coordination of which was undertaken by the U.S. Department. These project proposals were integrated under the common title Priority Assistance Project to Help Ukraine Combat Nuclear Smuggling. But only part of them were included in the form they were submitted by the Ukrainian organizations, the other part were those either considerably reformulated and changed or merely added to expand the scope projects proposed by potential recipients. For example, instead of two project proposals for improvement Ukrainian maritime border security presented by the Administration of the State Border Guard Service of Ukraine (SBGSU) the SBGSU was included as a recipient of the technical assistance in five projects, aiming at, in particular, improvement security of Ukrainian land borders with Russia and Byelorussia. Further the originally included 15 projects list was expanded due to bilateral contacts with Ukrainian authorities and organizations to 18.

In the course of the discussion the speakers could be divided in two main groups in terms of attitude to the projects consideration. One group was prone to talk about the projects selected by the Department of State, while the second one including representatives of Finland and Sweden was more adherent to the idea that it was the list of project proposals originally presented at the January 2006 conference that had to be a basis for further cooperation within the framework of the GP.

From author's point of view, this discrepancy in positions is mainly due to different principles the donors are followed when arranging technical assistance. If the U.S. being at the front-line of war on terrorism and a main target for terrorist attacks world-wide try to identify the vulnerabilities in

security systems of recipients basing on the threats and risks evaluation made by U.S. competent authorities, such donor states as Finland and Sweden are prone to give priority in identifying problems for the partners, believing, in particular, that it is Ukrainians who know their problem the best, and that is why the project proposals submitted by the Ukrainians should be of higher priority.

Under the concrete conditions in Ukraine the both approaches can have their pluses and minuses. Bearing in mind the lack of efficient coordination and information exchange among the Ukrainian authorities involved in activities connected with GP program, the "war for power" at the highest political level, difficult time for the Ministry of Foreign Affairs, on the one hand, and necessity to take active steps against the threat of international terrorism, on the other hand, the initiative of the U.S. to play a leading role in identification of the priority projects seems to be absolutely grounded. Nevertheless, even in such specific conditions wider and more active consultations with Ukrainian officials and experts were needed. The U.S. Embassy official, M. Uyehara, informed the attendees that the list of project proposals was not drawn up by the U.S. Department of State alone but in cooperation with Ukrainian partners. At the same time, it obvious, that the consultations appeared to be insufficient, otherwise such a project proposal as Legal Assistance to Improve Prosecution of Nuclear Smuggling could not appear, since it provided for rendering assistance to the not existing working group established between the Rada and the Ukrainian Security Service.

Besides, the representative of the Ukrainian Ministry of Fuel and Energy V. Mischenko rightly noted that the project proposals included in the list were limited mainly with the activities aimed at preventing nuclear smuggling whereas nuclear security besides combating nuclear smuggling provided for physical protection measures, accounting for and control of nuclear materials, etc that was not reflected in the list of priority assistance projects.

On the other hand, the approach proposed by Swedish and Finland representatives which is absolutely reasonable for the countries where the principles of internal and foreign policy are clearly established, the state system of authorities and agencies responsible for national security is created and mature, in some cases can not be fruitful under Ukrainian conditions. Despite the representatives of "European" donors, (in particular, J. Rautijarvi from Finland) advocated the idea that it was a Ukrainians authorities that had to coordinate GP projects, the lack of coordination among state authorities and agencies the representative of the Ukrainian Ministry of Foreign Affairs V. Pokotylo named the problem No.1 in our country.

Due to this reason the essential part of discussion was devoted to answering the question: Which Ukrainian authority has to coordinate GP projects implementation in Ukraine? When sharing opinions two main positions were presented: 1 – coordination had to be performed by the Ukrainian Ministry of Foreign Affairs since the majority of problems were in the field of international relations; 2 – it was the nuclear regulatory authority who should be charged with coordination functions since the major part of the problems were within its competence. The former position was supported by IAEA's representative A. Lazarev, who emphasized that the Agency always stood for the measures strengthening the role and elevating the prestige of a national regulatory authority of a member-state. A thing, which integrated all participants of discussion, was recognition of necessity to allocate considerable resources (including manpower) for performing coordinating functions efficiently.

O. Kosharna (Rozumkov Center) attracted participants' attention to the role which could and had to play non-governmental mass media and analytical centers in this realm, illustrating it with fruitful activities of PIR Center (Moscow, RF) and the Center for Strategic and International Studies (Washington, U.S.), and called for use this positive experience in Ukraine.

The representatives of the SBGSU and Ukrainian Ministry for Emergencies presented the results of efforts performed under both already launched GP projects and GP projects were preparing for their implementation with the U.S. and Sweden, as well as the Great Britain, respectively.

In general, the majority of speakers stated that the discussion was very useful and interesting and run in the atmosphere of openness and frankness. Summarizing discussion results one of its conveners, Lars van Dassen (Sweden) noted that such absolutely free opinions exchange was not possible not far ago, and that was the great advantage of Ukraine over some other countries participating in the GP, and this advantage should be transformed in concrete results of cooperation in this field.

On the dangerous edge. Nuclear nonproliferation regime, the year 2006.

Olga Kosharna,

The Ukrainian Centre named after Olexander Razumkov

Symptoms of long-standing crisis, in which the nuclear weapons non-proliferation regime is, became especially apparent in 2006. It is hopefully that situation is under the control so far. But it is clear that the urgent measures for prevention of a new round of nuclear armament race are necessary to apply. Together with the majority of countries that haven't possessed nuclear weapons the nuclear states firstly have to implement in practice a common strategy of nuclear non-proliferation in order not to harm by its action the consolidation process since often satisfying its own political and economic goals they used double standards and even not ashamed to confess on that.

Nuclear fright, that first was the U.S. and the USSR prerogatives, and later even the state-cofounders of the Treaty on the Non-proliferation of Nuclear Weapons (NPT) – U.S., Russia, China, Great Britain and France, began to use other states that today possessing nuclear weapons de-facto (Pakistan, India, Israel). Technical innovation in the nuclear sphere, transfers of nuclear materials and dual-use technology by leading nuclear states for "alien" support in the tension regions, smuggling of nuclear materials and technologies (existence of the so called "black market") led so that about 30 states worldwide are able to realize in short term sensitive from the non-proliferation point of view nuclear-fuel cycle – enrichment of uranium and extract of plutonium.

Three significant events for the existence of non-proliferation regime as such were held in 2006. And the first of them – is refusal of Iran to halt the uranium enrichment.

Along the last year Iran achieved the progress in developing of nuclear technology. Concentration of enriched uranium increased at least 5% of Uranium –235. With such level of enrichment uranium can be used as a nuclear fuel for the NPPs. Despite of many years intention of the International Atomic Energy Agency (IAEA) to reach an agreement with Iran on the halting of uranium enrichment work, Iran's dossier exceed the limits of the IAEA and on 23 December the UN Security Council unanimously adopted the Resolution #1737.

According to the Resolution, "all States shall take the necessary measures to prevent the supply, sale or transfer directly or indirectly from their territories, or by their nationals or using their flag vessels or aircraft to, or for the use in or benefit of, Iran, and whether or not originating in their territories, of all items, materials, equipment, goods and technology which could contribute to Iran's enrichment-related, reprocessing or heavy water-related activities, or to the development of nuclear weapon delivery systems".

The Security Council insisted all states "to freeze the funds, other financial assets and economic resources" of Iran's natural persons and legal entities, involved in activities threatening to nuclear weapons non-proliferation regime and in developing of means of their delivery.

There is a list of 12 Iranian persons and 10 entities in Annex to the Resolution assets of those can be frozen. Russian diplomats have all reasons to be proud due to achieving their objective – to mitigate sanctions to their own business partner. From the Draft Resolution was leaved a record on the NPP that has been building in Bushehr under the Russia support and on the signed earlier bilateral contracts of the military-technical cooperation (supply of the defense systems TOP-M1 and C-300).

It was succeeded to exclude a statement from the Resolution on a ban against visits of Iranian natural persons and legal entities, concerned with nuclear and missile programs of Tehran that the U.S. insisted.

The biggest hindrance for settling of Iran's nuclear problem is that Iran currently declares that as the member of NPT it has a right to develop nuclear technology in peaceful purposes according to Article IV of the NPT.

IAEA inspections, which have been carrying out for more than 3 years can't unambiguously answer the issue whether there are nuclear materials or nuclear activity with the military purpose in Iran.

For now Iran has renounced to make concessions along many months negotiations and one month prior issuing of UN Security Council Resolution its leader stated that after all the country will have 60 thousand centrifuges for uranium enrichment, and "God help" next year Iran will be able to meet the needs for nuclear fuel (at present Iran has it own two active cascade of 164 centrifuges and also two cascades with 10 and 20 machines appropriately, that installed for scientific and constructor work in the concentrating plant). And on 24 December Parliament of Iran by majority vote approved a bill that obliged the government of the country to reconsider conditions of cooperation with the IAEA in the nuclear sphere in response to the UN Security Council Resolution.

Near East countries responded to the Iran strong position by "nuclear demarche". On 10 December 2006 six Arab countries, members of the Cooperation Council of the Persian Gulf (Saudi Arabia, United Arab Emirates, Bahrain, Kuwait, Oman and Qatar), officially declared their intent to develop nuclear technology in peaceful purpose. One week before Algeria, Egypt, Morocco and Tunis also declared on such intention. At the beginning of January the President of Egypt Hosni Mubarak stressed:" Near East has to be free from any king of weapons of mass destruction, including nuclear one. We don't want to have nuclear weapons in our region, but we have to be able defend ourselves. We have to wield appropriate weapons. "

Evident response to the potential Iran's threat was observed from Israel as well. Prime Minister of Israel Ehud Olmert indirectly acknowledges availability of nuclear weapons in Israel, when in an interview to German TV he said: "Iran openly, evidently and publicly impends to wipe Israel out of the map. May someone say that it is the same level when they want to possess nuclear weapons as the USA, France, *Israel* and Russia?" (italic by author. – O.P.). "Slip of the tongue" as later Israel officials were trying to present this admission was that the Prime Minister allegedly meant the level of democracy. And therefore Israel got into the range of the nuclear states. But such type of "slip of the tongue" obviously was not a chance.

At the same time the President of Iran Mahmoud Ahmadinejad approved intention of the Persian Gulf countries to develop nuclear technology jointly and declared on the readiness "to transfer a valuable experience to the neighboring countries" in the field of peaceful nuclear technology. Iranian leader gave an explanation that strengthening relations between the region's countries are counteracting a secret plot of the Islam enemies. Owing to the available dislocation of forces in the region Sunnite monarchy hardly accept the assistance from Shiah (Shiite) Iran. For Saudi Arabia this is an issue of leadership in region and preservation of its influence on the Arabian countries.

Another extremely important event that undermines the non-proliferation regime was held 9 October of the last year – underground test of nuclear experimental device of low power in the People's Democratic Republic of Korea and ballistic missile launching.

Nuclear tests in North Korea provoked the thought in neighboring countries regarding necessity to change basic principles of their nuclear policy. In Japan aroused talks concerning opportunity to infringe upon the "holy" – change of the constitutional principle "not to produce, not to store and not to possess nuclear weapons on its territory". A government report "On opportunity of creating nuclear weapons on its own territory" was gotten to the Japan media. In the report, issued 25 December, the thing is that creation of nuclear warhead may have taken from 3 to 5 years. This pleasure will come to 200-300 billion yen (1,5-2,5) billion U.S. dollars) for the tax payers. And the Minister of Foreign Affairs of Japan Taro Aso openly called to public discussion of issue regarding opportunity for Japan to possess nuclear weapons.

From the clear reason South Korea feels itself running the danger. In the presence of park of scientific and industrial nuclear reactors and appropriate research and technical ability creation of nuclear weapons for this country will not make (create) great difficulties in case of sufficient enough political will.

At the end of November in Beijing took place the first consultation regarding renewal of six-party negotiations on nuclear problem at the Korean Peninsula in which besides both Koreas took part Russia, China, the U.S. and Japan. Negotiation process was interrupted in November 2005 on the initiative of the PDRK as a response to the USA "pressure and intrusion into the internal affairs of the country". However year later Pyongyang position has been changed – at present it is ready to refuse military part of its nuclear program, requiring lifting of sanctions instead.

Yet, six-party talks with PDRK that lasted in China capital 18-22 December hadn't any result. Kim Kye-gwan, the head of North Korean delegation depended the probable curtailing of the PDRK nuclear program on the range of previous requirements. This is first of all lifting of UN SC sanctions, imposed after nuclear test in PDRK on 9 October and North Korea's accounts release in Macao on the request of the USA, resulted in terminating of six-party negotiations 13 months later. PDRK insists on supply of light water nuclear reactor, and before its installation - on the free fuel supply for its power stations. In case of refusal PDRK has intent to resort "expanding its nuclear containment arsenal". In turn the USA considers unacceptable to make unilateral concessions. The head of the US delegation Christopher Gill said that UN sanctions will be lifted and US will bring back to normal the relations with PDRK only after its "nuclear disarmament". Information regarding the date of further negotiations in the final communiqué is absent.

Third event that drastically influences the prospective of non-proliferation regime preservation - is approving by the USA Parliament in December 2006 of bill "Act on the peaceful cooperation between the USA and India on the nuclear energy" and its signing by U.S. President George Bush. The document lifts a prohibition that was in force in U.S. more that 30 years and allows nuclear fuel, reactors and civil nuclear technology supply to India. It will allow U.S. companies dealing in the field of nuclear energy and NPPs installation to enter the Indian market and to begin implementing the range of joint projects in this field. The bill is passed for implementation of U.S.- India agreements on cooperation in the field of nuclear energy use, reached in July 2005 and confirmed in March 2006 (about U.S.-India agreement – see Dzerkalo tyzhnya. – 2006 – 30 (8 August).)

It is envisaged that implementation of agreements will start in the second half of 2007. If to take into consideration that India is not the NPT's member than mutual cooperation in the nuclear sphere is an infringement of NPT's principles and regime control adherence, according to the main principles of Nuclear Suppliers Group (responsible for the nuclear export control).

Insisting on Iran's suspension of the nuclear technology development and following the Additional Protocol to the IAEA Safeguards Agreement clauses (it is foreseen more strong control over nuclear materials from the IAEA to prevent nuclear materials switching from peaceful to military purposes, from the other hand the U.S. and Russia have not ratified this Protocol yet.

It is clear that such activity of the "nuclear club" countries resulting to the non-proliferation regime corrosion and discredited its goals and in fact spurred up nuclear proliferation, providing the right of rehabilitation for those states that for some reasons wanted to possess at least one nuclear charge.

In his interview for the News Agency "Mechr" Mr Hussein Musavijan, Deputy Director of the Center for Strategic Studies in the sphere of international relations at the Security Council of Iran said: "U.S. double standards confined not only to Israel. Despite the UN SC Resolution N1172, that requests India and Pakistan to suspend their military nuclear programs, U.S. power started to negotiate over renewal of nuclear trade with India".

The destiny of nuclear weapons non-proliferation regime significantly depends on the position and coordination of activity of the "nuclear club" members. Unfortunately someone may to ascertain that development of dangerous process worldwide owing to the international terrorism apparition and threat of the use of WMD leaved behind measures of the world community on the counteraction of international terrorism.

Nuclear containment doctrine seems outmoded taking into consideration the new global safety challenges. Only real cooperation in reacting to the new threats, based on the principally new level of confidence and coordination, more strong and equal for all obligations according to the international agreements may shape well on that world will avoid new round of the nuclear arms

race. It seemed that one of such measures could be ratification by U.S. and China the Comprehensive Nuclear-Test-Ban Treaty (CTBT). This would help joining this Treaty by India, Pakistan, Israel, PDRK putting an end to improvement of available weapons.

It would be reliable to support calls to India and Pakistan to join the Safeguards Protocol Additional, CTBT and Fissile Material Cut-off Treaty (FMCT) with the ratification of this Protocol Additional by U.S. and other "nuclear states" and by their joining of FMCT.

Ban of nuclear materials and technology supply to the countries that are NPT non-members and not joined the Safeguards Protocol Additional should be binding prerequisite of cooperation in the frame of Nuclear Suppliers Group.

It should also to provide guarantee of nuclear fuel supply for the NPPs on the favorable conditions to the countries that refused the tangible nuclear fuel cycle stages from the point of view of nuclear proliferation. It seemed at glance that measures are easy but efficient ones. As only own military-political and economical interests of leading countries are more priority for them either global security care. Hence, what terrible event should happen so that Global Partnership against proliferation of WMD is not a name of the next international project but reality?

On Some Problems of Creation of the State System for Responding to Crisis Situations Caused by Nuclear Terrorism

Sergiy Kondratov, Institute of National Security Problems

Introduction

The 9/11 terrorist acts in the U.S. led to clear understanding that the threat from large, well organized and replete global terrorist networks focused on peoples mass destruction would not be treated as hypothetical since it became a real one. On September 11 the threat revealed itself more dangerous, sophisticated, and organized and deadly than those threats to protect against which the most security systems in the world had been designed.

One of the consequences of the 9/11 terrorist acts was a conclusion that the threats against which the adequate protection was needed had to be cardinally reviewed. Before 9/11 a lot of scenarios leading to severe consequences were ignored since they were treated as unlikely and, thus, gave a neglected contribution to the general risks of terrorist attacks. The recent years demonstrated that a lot of probabilistic evaluations of relevant risks are subject to a reviewing process, first of all, with regard to safeguarding the objects in the field of nuclear power utilization. It is necessary to take all reasonable steps to efficiently protect nuclear materials and nuclear facilities world-wide.

When doing so it is important to be aware that any system for ensuring nuclear security can not guarantee one hundred per cent protection of nuclear and other radioactive materials, relevant facilities and an infrastructure against unauthorized and malicious actions. Actually, even the most efficient of these systems can only minimize the risks connected with the threats of nuclear terrorism and other illegal and unauthorized actions. Thus, the State must make arrangements for timely and efficient responding to possible incidents connected with such acts.

Legislative support to responding to crisis situations connected with the acts of nuclear terrorism

Ukraine, on the territory of which the largest technogenic catastrophe in mankind history occurred, has a quite developed legislation and regulations for responding to emergencies caused by manmade and natural factors. Among the principal legislative and regulatory acts directly regulating this field the first should be mentioned is the Cabinet of Ministries of Ukraine's Decree "On the Integrated State System for Preventing and Responding to Techongenic of and Natural Emergencies" dated 3 August 1998 No.1198 as well as the joint order of the State Nuclear

¹ In the literature of the subject nuclear terrorism also often covers so called "radiological terrorism" which mainly includes the acts of use (threats to use) of radioactive (including nuclear) materials to contaminate environment and exposure people without nuclear device explosion. Hereinafter, in the text this approach is applied.

Regulatory Committee of Ukraine and the Ministry of Ukraine of Emergencies and Affairs of Population Protection from Consequences of Chornobyl Catastrophe dated 17 May 2004 No.87/211 "On the Approval of the Plan for Responding to Radiological Accidents" (registered in the Ministry of Justice of Ukraine on 10 June 2004 No.720/9319).

These documents were developed, mainly, in terms of responding to emergencies caused of manmade and natural origin while emergencies caused due to terrorist acts, unfortunately, are typically mentioned only among other reasons which can lead to an emergency without specifying any peculiarities characteristic for this particular case. Actually, in the above mentioned joint order of the State Nuclear Regulatory Committee and Ministry for Emergencies the term "loss of control over a radioactive source" is defined as a "dangerous event associated with dangerous sources disappearance or theft or its loss including terrorism threat, as well as satellite's loss or uncontrolled recovery, or accidents with nuclear materials, radioactive wastes, other sources of ionizing radiation in transport". And this is the only place in the given document where a terrorism threat is mentioned. Among all measures provided for the plan approved by this order *there is no reference to peculiarities of responding to emergencies (incidents) associated with malicious (terrorist) actions*. Besides, in this particular document when talking about the functional subsystems to be created by the central executive authorities according to the above Governmental Decree of 3 August 1998 No.1198 to respond in case of a radiological emergency of a nation-wide scale, subsystems for responding to terrorist acts in the field of nuclear power utilization were not included.

This regularity can also be observed when considering another Cabinet of Ministers' Decree of 15 February 1999 No.192 "On Approval of the Regulation on Warning and Communication Organization in the Case of Emergencies". In the item 2 of the Regulation approved the scope of the document is presented as follows: "It addresses the warning of the central executive officers of the state and local authorities, ... agencies of local self-government, enterprises, institutions and organizations as well as public about the threats of emergency origination caused by natural, technogenic and military reasons in peacetime, in a special period, and in wartime and informing them about the situation in the area of likely destruction to take efficient measures to protect public, industrial and agricultural objects against emergency consequences. Thus, the given normative act also has no provisions for special procedures required in case of responding to the acts of nuclear terrorism.

Actually, if a needed response is considered only as the liquidation of consequences of a radiological accident, then it does not matter in which way, for example, some area has been contaminated (due to a technogenic accident or somebody's malicious actions). But that is true if responding procedures are interpreted in a narrow sense reducing them only to liquidation of accident consequences (mainly, area decontamination). But in the case of nuclear terrorism act such an approach is unacceptable, in particular, due to the following reasons:

- Necessity in a comprehensive response of all authorities involved may emerge even before the stage of radiological consequences liquidation caused by an act of terrorism (if such the stage occurs at all), since, usually, not only malicious actions but also threatening to commit them are assigned to the acts of terrorism²;
- Liquidation of terrorist act consequences on a spot can be started under certain conditions in terms of terrorists defeating and inspection of a relevant area and taking necessary measures to identify material elements of a crime and persons suspicious to commit it;
- The example of liquidation of the consequences of natural and technogenic origin (like hurricane Katrina in the U.S.) has shown a key role to be played by law enforcement and other armed forces of the State. It is obvious that such a role in case of the act of nuclear terrorism may not be less important.
- Different reasons underlying crisis situations will stipulate considerably different procedures and mechanisms for informing public, political management of the State, international organizations, relevant ministries and agencies, etc.;

² The absence of this provision, from author's point of view, is a lapse of the Law of Ukraine "On Fighting Terrorism (20 March 2003 No. 638-IV).

• The responding system has to include nuclear forensic procedures and to make provisions for equipping relevant expert organizations with necessary analytical equipment and instruments.

Among others Ukrainians laws and regulations there is a document in which once an attempt was made to take into account at most the role of law enforcement authorities and expert organizations in responding to incidents involved radioactive (including nuclear) materials. This regulation is the Cabinet of Ministers of Ukraine's Decree "On Approval of Procedures of Central Executive Authorities and Other Legal Persons Carrying out Activities in the Field of Nuclear Power Utilization in the Case of Radionuclide Sources of Ionizing Radiation Detection in Illicit Trafficking" dated 2 June 2003 No.813. But this document does not cover procedures of responding to terrorist acts regulating interaction of state authorities and other parties involved in case of detection of radionuclide sources in illicit trafficking.

Analyzing foreign countries experience in combating terrorism one can come to a conclusion that the state systems designed to combat terrorism used to be subject to radical transformation only after commitment of the terrorist acts with very severe consequences. This happened in the U.S. in the aftermath of 9/11; in Spain after a series of bombings on 11 March 2004 in the Madrid suburban trains; in Russia – after hostage taking in the Beslan School on 1 September 2004, as well as in the U.K. after bombings in the London metro on 7 July 2005.

Fortunately, no terrorist act has occurred in Ukraine, but the existing level of nuclear power industry development in the country and globalization processes do not allow to ignore the threats of nuclear terrorism and require taking measures, in particular, organizational arrangements, first of all to improve authorities' readiness to respond to possible acts of nuclear terrorism.

It should be noted that there is a positive factor with regard to efforts aiming at ensuring authorities readiness to respond timely and efficiently to the acts of nuclear terrorism, namely, awareness of importance of relevant state system creation that has been demonstrated by the central executive authorities and Ukrainian foreign partners in the NATO – Ukraine Annual Target Plan for 2005 which included development of the "system of reaction to crisis situations caused by terrorist acts of other extremist activities" and introduce it in the structures involved in combating terrorism" as an internal action.

This measure is directly connected with other item of the above Plan, which makes provision for taking "organizational and practical actions to improve the functioning of the state system of combating terrorist activities".

The main IAEA's approaches to responding to radiological accidents (incidents) caused by unauthorized and malicious actions

In the aftermath of 9/11 because of reviewing approaches to ensure nuclear security the threat of a "dirty bomb" in producing of which radioactive materials could be used was recognized as the most probable among others. To counter this threat the IAEA has developed a series of the documents focused mainly on the prevention illicit trafficking in radioactive (including nuclear) materials, these materials detection in illicit trafficking and responding to the incidents associated with illicit trafficking. Among these documents the following IAEA technical documents (TECDOCs) should be mentioned:

- Prevention of the Inadvertent Movement and Illicit Trafficking of Radioactive Materials, IAEA TECDOC 1311, 2 September 2002;
- Detection of Radioactive Materials at Borders, IAEA TECDOC 1312 2 September 2002;
- Response to Events Involving the Inadvertent Movement or Illicit Trafficking of Radioactive Materials, IAEA TECDOC 1313 2 September 2002.

The IAEA continues its efforts in developing documents aiming at support to member-states to create national systems designed for responding to radiological accidents caused by malicious actions. On 19 June 2006 the Agency issued *Nuclear Forensic Support Technical Guidance*, which is a valuable reference document for experts in identifying characteristics of materials seized in illicit trafficking and used in investigations of the illegal activities involving these materials.

Besides, special attention should be paid to the absolutely "fresh" document published by the IAEA in November 2006, - *Manual for First Responders to a Radiological Emergency*, IAEA-EPR-First

Responders. This manual provides members of first responders groups with practical advices. Such groups have to ensure responding to emergencies during the first several hours after an event has occurred. In the context of the subject under consideration it should be mentioned that one of the peculiarities of this publication is special attention paid to law enforcement actions on a spot. According to the recommendations of this document law enforcement officers should be included in a first responders team.

Conclusions and recommendations

The brief analysis of the situation with responding to crisis situations connected with nuclear terrorism has shown that even at the level of legislative support the measures to be taken in reply to nuclear terrorism acts are not integrated in the national system for responding to radiological accidents. The national laws and regulations include only mentioning about such a possibility, while the current world trends connected with the nuclear terrorism growing threat require establishment of an effective responding system with clear lines of responsibility of all parties involved.

Ukraine has already created the quite efficient national system for responding to radiological accidents, and this can be a firm ground for developing a subsystem for responding to the acts of nuclear terrorism to be integrated in the above system.

In author's view to achieve this goal it is necessary to:

- **Develop necessary laws and regulations** (according to the NATO-Ukraine Annual Target Plan for 2005 the relevant document shall be developed as well as necessary amendments shall be introduced in Cabinet of Ministers' decrees of 3 August 1998 No.1198 and of 15 February 1999 No.192);
- Include the system for responding to the acts of nuclear terrorism in the integrated state system for preventing emergencies of technogenic and natural origin and responding to them.

In its turn, created in such a way the integrated state system for preventing and responding to emergencies caused by technogenic and natural reasons as well as terrorist acts will be a subsystem of the state system designed to respond to crisis situation.

CONCEPT OF SCIENTIFIC AND TECHNICAL CENTER "ESTABLISHMENT IN UKRAINE OF SPECIALIZED INFORMATION AND ANALYTICAL BUREAU "SECURITY AND NON-PROLIFERATION"

1.Summary of the action

1.1.Brief description of the proposed action

The establishment of non-government bilingual (Ukrainian and English) Information and Analytical Bureau "Security and Non-proliferation" – the electronic mass media for provision of decision-makers, civil servants, defense industry representatives, journalists, NGOs with reliable on-line information related to the issues of non-proliferation, national security and export control via Internet.

2.Relevance

2.1.Importance and relevance of activity in the country or region

Nowadays proliferation of weapons of mass destruction (WMD), means of their delivery and international terrorism ranked by the world community among the biggest threats for mankind. From September 2004 Ukraine has acceded to the Global Partnership against the Spread of Weapons and Materials of Mass Destruction as an aid-recipient.

There is the necessity of improving the system of dissemination of relevant, on-line information and analytical materials in Ukraine on issues of non-proliferation and nuclear terrorism, particularly on legislative provision, modern system of accountancy and control of nuclear materials, export control,

physical protection of nuclear facilities, nuclear and radioactive materials, combating of illicit trafficking and other problems in this sphere resulting to:

- prevailing of opinions of foreign electronic mass media in an information environment of Ukraine, not necessarily the case for real reflection of the role of Ukraine, policy and position of the state executive bodies and the public regarding events and trends that took place in this sphere;
- insufficient level of knowledge of state servants, representatives of law machinery etc. about world tendency in the above mentioned field;
- scarcity of appropriate information from state authorities that due to the quite high level of political instability suffering from personnel and structural changes and not pay proper attention to raising of public awareness on these issues;
- absence of standing forum aimed for exchange of views, information and results of study among scientist and independent Ukrainian experts.

As a possible way out from these circumstances is rising of the role of non-governmental organizations as a connecting link between the Government and the public. Indeed, specialized nongovernmental organizations are able to provide comprehensive (valuable) information on the mentioned topics to the mass media. On the other hand it is much easier for experts of the nongovernmental organizations (NGOs) to get on well with the staff of the government authorities on the issues of major professional concern. That is to say, NGOs could serve as distinctive "public mediator" on receiving of actually checked, reliable and objective information regarding national and global security, export control and non-proliferation.

Practically this idea could be realized through establishment of a non-profit specialized Internetresource on issues of security, non-proliferation and export control under the condition of multilateral financing (from the State budget, owing to implementation of projects with the foreign state and public organizations). It is multilateral financing that will give an opportunity to provide reliable information independently and to avoid corporative or commercial interests.

Such informative resource (Information – analytical Bureau) might has at the same time the status of NGO and the mass media, combining both opportunities and peculiarities of functioning. It means that it is reasonable to invite to the Bureau both experts and journalists. This combination will give an opportunity to create high quality information product based on the expert conclusions. It will facilitate public access to the reliable Moreover another mass media could constantly have an opportunity to receive comments, assistance and support (consultations) from the experts of the Information-analytical Bureau.

2.2. What are the problems to be resolved and the needs to be met?

The main goal of the project is a significant improvement of awareness of Ukrainian society concerning the keen problems of international safety and security, struggling with terrorism and non-proliferation of the weapons of mass destruction, activity and efforts of state and non-government institutions and organizations in international initiatives such as Global Partnership by means of providing reliable information and data on the on-going events and facts taking into consideration views and (vision) approaches of the leading Ukrainian experts in this sphere.

This goal could be reached by means of implementing of the following tasks:

- 1. Establishment of the non-government bilingual (Ukrainian and English) Information —analytical Bureau "Security and Non-proliferation", electronic mass media for access to the reliable information via Internet.
- 2. Presentation of the Bureau to the national and foreign experts, officials of the state executive power of Ukraine and other countries.
- 3. Establishing of firm partnership relations with the state and non-government organizations in Ukraine (MOUs, accreditation etc.).
- 4. Formation of Ukrainian experts' society within the Bureau, establishment and development of partners' relations with the similar international state and civil organizations and institutions.

5. Participation of the Bureau in the organization and information support of measures (activities) regarding important events in Ukraine and abroad within the Bureau competency and its field of activity.

2.3. Who are the actors involved (beneficiaries, target groups)?

Ukrainian beneficiaries of the project –representatives of the state executive power and defense industry that take part in implementation of the external (international) policy, the public and the mass media, researchers and experts dealing with the modern trends and tendencies of the non-proliferation, cope with terrorism, students of appropriate educational institution and citizens.

2.4. Objectives and expected results

<u>Creation</u> of the non-government Information-analytical Bureau "Security and Non-proliferation" for provision of printing and electronic mass media, state bodies, research institutions and centers, state and private enterprises of relevant on-line information on issues of WMD non-proliferation, particularly nuclear non-proliferation, and major issues and problems with regard to the global, regional and national security and safety.

<u>Raising awareness</u> of state servants, the mass media representatives, researchers, citizens on the most important themes of security and non-proliferation.

<u>Improvement of transparency</u> on issues of decision-making and common opinion and position formation with regard to the national interests.

<u>Strengthening of influence</u> of public society on the state policy by means of formation of independent civil experts for civil expertise of legislative acts devoted to the problems of non-proliferation, particularly nuclear non-proliferation and activity in the sphere of global, regional and national security that take place in Ukraine and worldwide.

3. Methodology and Sustainability:

- 3.1. The main project activities:
- Activity devoted to the involvement of Ukraine in the Global Partnership Initiative

Steps toward the Ukrainian legislation in the field of export control - adaptation and harmonization with the EU requirements

International security, WMD non-proliferation and countering terrorism (including export control) International regimes and export control

Physical protection of nuclear materials and legislative aspects of national and global security Facilitation of Ukrainian efforts aimed at anticorruption of the state executive power responsible for assurance (assuring) of nuclear non-proliferation regime and struggle against terrorism. Monitoring within its competency of implementation of European Council recommendations regarding adaptation of Ukrainian anticorruption legislation according to the European standards.

Realization of this Concept will be done by means of creation of the Web-site with the working name **FORPOST.UA**)

Information and analytical matters will be divided into the following topics:

- WMD non-proliferation;
- National and international security;
- Export control issues.

Besides on-line news for Ukraine and worldwide will be provided for each of the above topics.

The web site of the Information-analytical Bureau will be launched on the basis of high-tech and dynamic change of its content. The web-site hosting will be done on the backbone.

3.2. Main implementing partners of the project

Main partners of the project - are Ukrainian and foreign state organizations and agencies, research institutions and NGOs specializing in non-proliferation and export control issues, - the organizations are all united in a common security goal: opposition to the proliferation of weapons of mass destruction and their potential dual-use precursors whose activity is concentrated in the areas of research, analysis, consulting, training, tracking, exposing, informing, and problem solving and whose efforts are producing positive results in export and security arenas.

3.3. How will the project achieve sustainability?

The team of analytical experts, journalists and top specialists on issues of WMD non-proliferation, national and global security, export control will be created within the Information and Analytical Bureau. End users audience will be set up on the basis of advertising of Bureau activities. It will consist of the mass media, organizations and persons dealing with the issues of external economic activity (particularly – armament trading) and directly responsible for implementation of the existed international regimes in these issues that Ukraine is a Party to.

After termination of the project some directions of the Bureau activity to be implemented on the self-sustained basis; activity of the Bureau should be self-repaid.

Activity regarding further participation of Ukraine in the Global Partnership Initiative will allow improving collaboration all involved state and non-government organizations and widening of investment for solving of problems connected with physical protection of nuclear facilities, nuclear materials accountancy, nuclear waste storages, safeguards and nuclear materials control.

3.4. Will it have multiplier effects?

The main objective of the Bureau is to provide the state bodies and the public with the reliable, comprehensive and on-line data that is necessary for decision making. Information will be provided free and upon request.

The overall goal of the Information – analytical Bureau is to facilitate security and safety provision: counteract of WMD proliferation and its precursors.

Specific (peculiar) goals of the project are as follows:

- informing the public on issues of realization of state policy, that influencing on the international security;
- publishing of analytical finding on the programs of nuclear, biological and chemical weapons, on the missile programs of some countries, stressing on the level of threat of WMD application that is exists in the world. Dissemination of the most significant information on the efforts devoted (dedicated) to the combat with the WMD proliferation;
- research and education projects in the field of security and safety, export control and technology transfers. Elucidation of weapons proliferation with regard to export control that will serve as a source of information for government, scientists, civilians and politicians.
- provision of information, education and consulting assistance for Ukrainian enterprises –
 exporters of goods, services, technology and intangible information that could be used for
 WMD creation. Provision of training on export control for enterprises-exporters,
 assistance for establishment internal compliance program, licensing of documents and
 international contracts on the delivery of dual-use goods, services and technologies.
- publishing of analytical insights for practical decisions on issues of national security and strengthening of peace by means of linking of analysis and propaganda measures.

Other specific goals regarding participation in the Global Partnership Initiative:

- involvement of specialized non-government organizations and agencies for promotion of Ukrainian projects within the Global Partnership;
- preparing of publications in professional and other mass media regarding implementation of purposes and goals of the Global Partnership;
- providing information support to the Ukrainian Government and appropriate organization's efforts on implementation of challenges, declared by the Global Partnership;
- informing of Ukrainian society of the goals, content and advantages of cooperation with the states of Europe and Northern America in the frame of the Global Partnership as a part and parcel of Euroatlantic integration.
- joining of Ukrainian experts in the sphere of international and national security, non-proliferation, struggle against terrorism with the aim to coordinate activities and to facilitate viability of projects within the Global Partnership.

• facilitating of sharing information and experience between Ukrainian and foreign experts during international meetings and seminars within the Global Partnership, raising awareness and concerted activity.

4. Expertise and operational capacity

4.1. Experience of the organization in projects management:

The Scientific and Technical Centre on Export and Import of Special Technologies, Hardware, and Materials (STC) is a non-governmental, non-profit organization within the export control system, non-proliferation and international and national security in Ukraine. It was established in 1997 and its mission is to assist actors of foreign economic activities in the practical implementation of export control-related legislative and regulatory documents and to create conditions for enterprises to carry out foreign economic activities efficiently. STC's activities include those in the following areas:

International activity - studying and analyzing international experience in export controls, non-proliferation of weapons of mass destruction (WMD), and counter-terrorist activities; - analyzing intergovernmental and proper Ukrainian problems related to export control and WMD non-proliferation; - conducting international seminars and conferences.

Scientific and research - scientific and research work related to export control and WMD non-proliferation; distribution of knowledge in the area of export control, familiarization of the public with non-proliferation problems and main international trends by publishing "Security and Non-proliferation" and "Export Control Newsletter" Journals; - studying general development trends of national export control systems and generalizing international experience of cooperation between export control authorities of different countries;

STC provided development and issue (publishing) of two volumes "Export control of Ukraine" - exhaustive description of the Ukrainian export control system.

STC developed comments on the law of Ukraine "On State Control over International Transfers of Military Goods and Dual-Use Goods" and the relevant training Program.

STC developed and put into practice at the Kiev University of Law of the National Academy of Sciences of Ukraine the training course on export control.

Assistance to industrial enterprises

- developing export control internal compliance systems and commodity identification programs;
- rendering adequate assistance to enterprises concerning export control procedures and rules and conducting expert assessments of goods;
- -- arranging seminars for industry personnel on changes in Ukrainian legislative and regulatory documents concerning export control.

STC pays major attention to cooperation with Ukrainian industrial enterprises. Every year, training and consultative seminars are held for enterprises of different business applications and industry representatives participate at international conferences. In that manner, STC helps them to focus their attention on international security problems, which, in turn, contributes to strengthening the State Export Control System.

STC investigates the needs of the enterprises through question forms to be answered by seminar participants. STC addresses the questioning results when new training courses and seminars are being developed, taking into account suggestions for training improvement, topical diversification, and greater involvement of international experts on the subject of international non-proliferation regimes.

Co-operation between enterprises and STC promotes the effectiveness and strengthening of Ukrainian export control regime mechanisms, and facilitates their adherence to the EU standards. It was through information obtained by the Centre's experts that the urgent need was detected to assist in export control and WMD non-proliferation training of experts from industrial enterprises.

STC has long-term and productive relationships with foreign governmental and non-governmental organizations on issues of WMD non-proliferation, Export control. Such collaboration would be of overall benefit to Ukraine and can be exemplified by the cooperation with:- the Swedish Nuclear Power Inspectorate; - Commonwealth Trading Partners Inc (contracted by the US Department of State and Department of Commerce); - US DOE Argonne National Laboratory, Center for Export Controls etc.

STC is the partner of the Center for Strategic and International Studies (CSIS, USA) on implementation of the Strengthening the Global Partnership project.

5.Terms of project implementation – 3 (three) years

Ukrainian Initiative for the Establishment of a Permanently Functioning Forum on Conflicts Resolution, Regional and Global Security Challenges

Introduction

The rise of tensions and violence around protracted and acute conflicts in the Middle East, the Caucasus, throughout Asia, the lack of genuine dialogue between all parties involved in conflicts aimed at curbing further escalation define the increasing need for forums or negotiation ground for unofficial discussions and consultations on new alternative approaches to conflict resolution.

In a wide range of cases existing global and regional intergovernmental mechanisms have proved to be a vital tool in conflict prevention and resolution. But in many others these mechanisms were insufficient to put an end to the most violent and deadliest conflicts.

During the course of years non-governmental organizations, foundations and institutions dealing with issues of international peace and security have accumulated a valuable experience in conflict prevention and resolution.

One of the possible measures to improve the international community's capabilities of dealing with conflict resolution and emerging challenges could be the establishment of a permanently functioning forum dedicated to different aspects of conflict resolution and tackling emerging regional and global security challenges.

Objective

The objective of this initiative is to set an additional tool or negotiating mechanism that would complement existing ones and unite the potential of both governmental and non-governmental potentials in the field of conflict resolution.

Implementation

Such objective can be best achieved by the creation of forum that would gather on a periodical or an ad-hoc manner officials, political experts and scientists from different nations, regions and political backgrounds, parties of conflicts regardless of their status or recognition by the international community (a kind of a mini Davos on conflict resolution and security challenges) to discuss and look for new solutions to acute and protracted conflicts as well as emerging security challenges.

Conducted under the auspices of a group of authoritative and impartial NGOs with the active participation of governments and international organizations according to their interest such forum would allow for a free open but responsible exchange of views on different conflicts between all parties concerned and at the same time avoid formalism and sensitivities that are peculiar to official negotiations.

The agenda for the forum could comprise conflicts resolution in modern Europe, the situation in Kosovo, the Caucasus and Transdniester, international terrorism, reviving the peace process in the Middle East, dialogue of religions and civilizations, political and religious extremism in modern societies, new approaches to nuclear nonproliferation etc.

Willing to contribute further to international peace and security Ukraine is ready to host such international forum on conflict resolution, regional and global security challenges as well as to provide assistance to setting up of the organizational committee of the forum and its holding.

Taking into consideration the sensitiveness of the issue addressed, this initiative is open for further discussions and any comments and suggestions will be highly appreciated.

KALEIDOSCOPE

Three NPP units in Eastern Europe have been shutdown at the same time

31 December 2006 three WWER-440 nuclear units in Bulgaria (two at the NPP "Kozloduy") and in Slovakia (one at the NPP "Bohunice") were shutdown with the purpose of their further decommissioning.

The cause (reason) of shut down is political but not a technical one. Shutdown of the WWER-440 nuclear units of Soviet design was a precondition for Slovakia and Bulgaria for joining the EU, and shutdown of RBMK-1000 nuclear unit at the Ignalina NPP – for Lithuania. Slovakia and Lithuania were succeeded to postpone decommissioning of their power units for some time after joining the EU (it is envisaged to shutdown "Bohunice" NPP unit #2 in 2008 and Ignalina NPP unit #2 in 2009), however according to the Treaty of Accession of Bulgaria to the European Union, units ## 1 and 2 at the NPP "Kozloduy" were closed in 2001. Until 2009 Bulgaria has to receive from the EC of EUR 550 million as compensation for the loss owing to the capacity reduction of NPP "Kozloduy". Experts estimate of loss of Bulgaria due to premature close of four units is EUR 3-4 billion.

The EC elucidated its requirements regarding closure of Soviet units with the water reactors of the first generation WWER-440 and Chornobyl type RBMK-1000 provided that they hasn't meet the European requirements on nuclear and radiation safety.

Hitherto Bulgaria was the biggest manufacturer (producer) and exporter of energy in Balkan. Only in 2006 it exported 8 billion of kilowatt hour of energy to the region states. M.Khristozov, senior engineer of the National electric company of Bulgaria stated that in 2007 Bulgaria could export energy at amount of 20% compare to the 2006 level if the amount of precipitations in 2007 will exceed the level, expected according to a forecast. There is also an opportunity to export energy during night time. At present Bulgaria has not application from the neighboring countries regarding night supplying of energy. It is not envisaged the energy crisis in Bulgaria but the region countries to find their self in difficult situation in case of hard frost. It is necessary to indicate according to the 2005 sociological poll 31% of Bulgaria citizens deem that the government was unable to assert the national interest of the country along with the discussion with the EU of conditions of Bulgaria joining and 51% interpreted closure of units as a result of external pressure on Bulgaria.

Closed nuclear units could work 5 more years untill the end of the designed term of operation as it is 30 years for such type of reactors. During (For) the period of 1992-2001 these power units were significantly upgraded (215 million dollars were spent for upgrading of the NPP "Bohunice", as for NPP "Kozloduy" – EUR 300 million). The safety level had made by the IAEA missions and other international agencies as not low compare to those for the nuclear units of the same generation in Spain and France.

Editorial comments

So, at once Eastern Europe countries have lost 1320 Megawatt of *productive* **capacity.** There will be shortage of electro energy in Balkan countries up to commissioning of nuclear power unit No.2 "Chernavoda" NPP in Romania with the heavy water reactor "CANDU" (to be operated in autumn 2007).

Request to ahead of schedule closure of nuclear power units WWER-440 is considered by experts as a fight (struggle) for the nuclear reactors market among big European manufacturer and the RF.

Surplus capacity of Ukrainian NPP in western region might be used for power generating with the purpose to substitute capacities lost by Slovakia and Bulgaria if development of nuclear electro energy implements combining with development of a power grid. In fact Rivne and Khmelnitsky NPPs turned out to be locked owing to the absence of opportunity to transmit capacity into energy deficiency regions and neighboring countries. Two power units at Rivne NPP (WWER-1000 and

WWER-440) could work fully for export without loss for the domestic market with the maximum coefficient of utilization of installed power.

The State Concern "UKRATOMPROM" established

The Cabinet of Ministers of Ukraine Resolution on establishment of the State Concern "Ukratomprom" was adopted 27 December 2006.

State Concern 'Ukratomprom" was established by the Cabinet of Ministers of Ukraine according to the part 4 of Article 119 and the part 5 of Article 120 of the Commercial Code of Ukraine as association of enterprises established by state enterprise NAEK "Energoatom", State enterprise "SchidGZK", State enterprise "Direction of enterprise that is building on the basis of Novokostyantunivska deposit of uranic ore", State enterprise "Pitch", Ukrainian research institute of industry technology, State enterprise "Dnipripetrovsk plant of precise pipes".

The duty to represent interests of Concern in relations with the state authorities, institutions and organizations on all issues (including finance, investments, foreign –economic) and to implement daily based management was entrusted to the NAEK "Energoatom".

Throughout the month the authority regarding the State's corporate management of the open stock companies of Kyiv Institute "Energoproject", Kharkiv Institute "Energoproject", Research and Design Institute of nuclear and energy pump building" should has been submitted to the Concern.

The Ministry of fuel and energy and the Ministry of economy were obliged to "take measures" before renewal of paying ability of the NAEK "Energoatom" and "Zirconium". There is a plan to transfer to the Concern assets of the special-purpose financing fund on the nuclear fuel cycle establishment.

Editorial comments

At the same time with the Resolution on establishment of Concern "Ukratomprom" at the CMU session the "Plan of preparation for the CMU consideration of the most important issues of formation and implementation of the state policy for the first half of 2007" was adopted by the Resolution dated 27 December 2006 No.674-p.

Remarkable is that among the keenest issues there is the issue on the "development of the nuclear-energy complex". The point of the matter is explained as follows: "Non-conformity (discrepancy) of the management system of the nuclear energy complex to the tasks of the development of nuclear energy and industry, insufficient situation of fulfillment of the establishment of production of own nuclear fuel, absence of necessary conditions for involvement of non-state investments and provision of scientific support, unsettled of complex management issues at the legislative level". However it is envisaged to consider this issue only on 14 May 2007.

The CMU again demonstrates the absence system approach to the current importance issues of the state policy. In order to make a decision regarding establishment of "Ukratomprom" concern it was necessary to accomplish creation and improvement of legal basis for this concern functioning and managing as it has been made in the RF.

Thus at the end of January this year the RF Derzhduma adopted the Law "On peculiarities of management and dispose of property and share holding of organizations carrying out activity in the field of the nuclear energy and on the amendments into some legislative acts of the Russian Federation" submitted by the President of the Russian Federation at the beginning of November. The objective of the bill was to create the legislative frame margin for treatment of the RF nuclear-industrial complex by means of vertical integrated state company loop cycle "Atomenergoprom" (from uranium mining and fabrication of nuclear fuel to energy production and NPP construction abroad) for implementing of RF Nuclear Energy Development Strategy until 2015. According to the bill it is envisaged to provide the right to legal entities of the Russian Federation to possess nuclear materials that as in Ukraine are at the state jurisdiction (the list of such entities is under the President of the Russian Federation decision). Foreign legal entities have a right of possession of

nuclear materials that were imported to the Russian Federation for high technology treatment and further export.

Value of the project for radioactive waste complex construction in Chornobyl zone rose again

Due to the Cabinet of Ministers of Ukraine Resolution dated 27 December 2006 No.659 the cost of the project for radioactive waste treatment of the Chernobul NPP was risen to 47,722 million EUR (EC -44,3 mln. EUR, and Ukraine – 3,422 mln. EUR).

By this document amendments were made to the Resolution that adopted this project in December 2003. For that time the cost of the project was 44 mln. EUR (the EC part -41.3 mln. EUR).

The industrial complex consist of: on-site facility for extraction of radioactive wastes with productive capacity 525 cubic meters per year, treatment (processing) plant with productive capacity 3500 cubic meters, specially designed depository at the site "Vector" of the State enterprise Technocenter", in the exclusive zone (capacity 50250 cubic meters of low and middle activity radioactive sources containing short-lived radio nuclides).

According to the 2001 tender results the EC recognized the German company «NUKEM NUCLEAR» as the winner. Contract between this company, the EC and NAEK "Energoatom" (those time Chernobul NPP was a part of NAEK) was signed in March 2001.

«NUKEM NUCLEAR» committed itself to build the plant within 29 months for 33,3mln. EUR. But construction started in October 2004 and in March 2005 the Ministry of fuel and energy accused contractors of inobservance of the construction timetable without any end for contractors.

U.S. Department of Energy advancing a plan of the world nuclear energy development

There is a call in the plan on widening of nuclear energy use and building of innovative NPP nuclear units.

This plan is a component of an Initiative "Global Nuclear Energy Partnership" and outlining ways of global expansion of nuclear energy. Indeed such strategy can realize the increase of nuclear energy utilization "not facilitating to nuclear weapons proliferation and envisaging responsible solution of the waste generating problem". According to the plan the U.S. overall activity are provided in the following directions:

- augmentation of energy, produced at the nuclear units in the overall energy balance;
- development, demonstration and introduction of advanced technology of fuel utilization without rejecting of plutonium;
- development, demonstration and introduction of prospective reactors, that give an opportunity to utilize transuranic radionuclides;
- organizing of provision of guarantee services in the sphere of nuclear-fuel cycle worldwide;
- developing and introduction of reactor designs, provided status-quo regarding proliferation of nuclear weapons;
- development of improved system of guarantee for provision of nuclear energy system usage only in peaceful purpose.

The Initiative "Global Nuclear Energy Partnership" (GNEP) is a part of the "Initiative of Prospective Energy", brought forward by the U.S. President George Bush with the aim to diminishing imported oil dependency.

Implementation of GNEP was announced in February 2006. It includes design of advanced reactors"heaters" of the waste nuclear fuel (WNF) for production of electricity, creation of service program
in the sphere of nuclear fuel cycle, that will give an opportunity for the developing countries to
generate and use of nuclear energy basing on the benefit conditions and the same time to minimize
the risk of nuclear weapons proliferation. In December 2006 11 private and state associations were
selected as beneficiaries for on-site exploration of enterprises locations on WNF processing in U.S.

Prepared by O.Kosharna according to the website iranatom.ru, minatom.ru, nuclearno.ru, proatom.ru, information agencies arominfo.ru, UNIAN, INTERFAX

Russia Remains in Denial Regarding Existence of Nuclear Bazaar

Last week Georgian Interior Minister Vano Merabishvili disclosed that a sting operation had resulted in the February 1, 2006, arrest in Tbilisi of a Russian citizen, Oleg Khintsagov, who had attempted to sell 100 grams of weapons-grade uranium. The Georgian authorities carried out the sting operation to prove that the poorly controlled border between the Russian autonomous republic of North Ossetia and self-proclaimed independent South Ossetia is a channel of massive smuggling that includes nuclear bomb-making material.

A Georgian undercover agent, posing as a rich foreign buyer, made contact with Khintsagov, an ethnic Ossetian, described by Georgian authorities as "a small-time smuggler specializing mostly in foodstuffs." Khintsagov came to Tbilisi to sell a 100-gram sample of uranium and boasted that he had several more kilos to offer. The FBI and U.S. Energy Department helped in the investigation. The material was indeed arms-grade, ready to make a nuclear weapon. Khintsagov was secretly tried in Tbilisi and is serving an eight-to-ten-year prison term. The Georgian authorities asked the Russian FSB counterintelligence service for help, but as Russo-Georgian relations deteriorated last year, cooperation did not work out well, and Merabishvili finally exposed the entire story (New York Times, January 25; AP, January 24, 28).

Russian authorities and experts rejected the Georgian disclosure as a propaganda ploy. Andrei Cherkasenko, board chairman of AtomPromResursy, a manufacturer of equipment for the nuclear power industry, stated, "Georgia and U.S. nuclear officials decided to make this information public at the start of Vladimir Putin's visit to India," to prevent Russia from getting a contract to build four additional nuclear reactors there (RIA-Novosti, January 26). The North Ossetian authorities have denied that any "Oleg Khintsagov" is a resident of their republic. (Gazeta, January 26.) Federal Customs Service spokeswoman Natalia Sinikina told Vremya novostei (January 26) that Yantar radiation detecting equipment has been installed at Georgian checkpoints and that carrying 100 grams of uranium across the border is impossible.

According to Russian nuclear experts, "It is virtually impossible to steal radioactive materials from a Russian company today" (RIA-Novosti, January 30). Ivan Safranchuk, director of the Moscow office of the Washington-based Center for Defense Information, also expressed doubt that Khintsagov really had access to the quantity of nuclear material he claimed. "I don't think the international community should give much credit to this story and express serious concern about the situation" (Los Angeles Times, January 27).

Igor Skabura, deputy director of the Russian Scientific Research Institute of Non-Organic Materials told the press in Moscow that about a year ago, its institute received a minute sample from Georgia. It was established that the material was regenerated highly enriched uranium. According to Saabura's information the amount was insufficient for a comprehensive analysis and that Russia had asked for an additional sample, but received no answer from Georgia. Therefore as Skabura stressed it was impossible to establish either its origin or the regeneration method used. The goal of the flurry of public rebuttals from Moscow is plain: "It's not our uranium; we do not know from where the Georgians and/or the Americans got the stuff to embarrass Russia; our nuclear materials are safe; our nuclear industry is sound."

Last week I received by fax from Tbilisi a copy of a confidential official letter sent last May by the

FSB to the Georgians, summing up its investigation of the Khintsagov case. The New York Times and Reuters apparently also have obtained the same document. The FSB letter exposes as deliberately erroneous most of the Russian public rebuttals.

According to the official letter of the FSB to the Georgians that was issued in the Russian "New Paper" Khintsagov was indeed born in and is officially a resident of North Ossetia. The FSB had "established" that Khintsagov's cousin, Miron Gabarayev, worked until July 2004 in the local customs service and "apparently used his connections to allow himself and Khintsagov unchecked passage into Georgia." Khintsagov and Gabarayev, according to the FSB report, crossed into Georgia a day before Khintsagov's arrest. Khintsagov's uranium was apparently stolen some ten years ago.

Georgia's Uranium Scandal: Why Russian-American Non-proliferation Cooperation Matters

The recent uranium smuggling incident in Georgia underscores the potential non-proliferation threats existing in the breakaway regions in the South Caucasus and the other "frozen conflict" regions of the former Soviet Union. Abkhazia and South Ossetia's weak law enforcement and porous borders, which permit easy transit with neighboring Russia, as well as the Republic of Georgia, facilitate trafficking in nuclear materials and other forms of contraband.

For this reason, Georgia had long been a priority of international, especially American, nuclear non-proliferation projects. Besides the lack of effective political authority in the two separatist regions of Abkhazia and South Ossetia, foreign governments have been concerned about the level of corruption in Georgian law enforcement agencies, the growing strength of transnational criminal organizations in the South Caucasus, and the republic's pivotal location at the crossroads between Europe, Russia, Asia, and the Middle East.

Since the early 1990s, concerns about the situation in Georgia have led several US government agencies to undertake initiatives to curb radiation smuggling into and through the republic. Since 1998, for example, the US Department of Energy has allocated \$130 million under its countersmuggling Second Line of Defense Core program. The SLD-Core program provides radiation detection equipment and training primarily to Russia and, more recently, other former Soviet republics like Georgia. Since 2002, the Energy Department has also been in charge of maintaining radiation detection equipment provided earlier by other US government agencies. As part of its International Counter-Proliferation Program, the US Defense Department has provided a range of training and equipment related to border security and law enforcement to Georgia and other former Soviet republics.

The State Department's Export Control and Related Border Security Program has provided radiation detection equipment and other counter-smuggling support to 30 countries, mainly in the former Soviet Union and Eastern Europe. The State Department also supplied Georgia and other countries with radiation detection equipment under the Non-Proliferation and Disarmament Fund, which ceased operations in 2001. Until funding ended in 1999, the fund provided Georgian border guards and customs officials with 137 radiation pagers and other assistance through a special Georgia Border Security and Law Enforcement program. This unique initiative, which underscored American concerns about nuclear trafficking through the country, aimed to foster the strengthening of Georgia's border security, especially against nuclear smuggling.

Funding for these initiatives has declined in recent years, as the United States, like many other countries, has placed greater emphasis on multinational approaches towards non-proliferation programs. National governments have found that cooperative projects, supported by the

International Atomic Energy Agency and other international and non-governmental organizations, can reduce duplication of effort, exploit synergies, and share costs better than single-state projects. Russia has also become a more important non-proliferation actor, as its increasing financial resources have enabled it to become less of a recipient and more of a partner.

The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction initiative serves as an important mechanism for multilateral threat reduction projects in Georgia and the other former Soviet republics. Launched at the 2002 G-8 Summit, the Global Partnership provides for enhanced coordination of national programs aimed at limiting the proliferation of dangerous chemical, biological, and nuclear agents. The United States has pledged \$10 billion to the initiative over a 10-year period, and the other G-8 members have promised a comparable amount. As part of its Global Partnership contribution, the Russian government has pledged to spend \$2 billion on threat reduction activities during the 10-year period.

The more than dozen governments now participating in the Global Partnership continue to direct most of their funding towards dismantling Russia's nuclear submarines and eliminating its chemical weapons, reflecting Russian and European environmental priorities. The recent smuggling incident highlights the need to extend greater support to nuclear security projects in the South Caucasus and other non-Russian regions. [For background see the Eurasia Insight archive].

Despite the advent of the Global Partnership, the United States and Russia remain the most important countries supporting nuclear non-proliferation projects. Many of their efforts to limit the amount of vulnerable nuclear material in the former Soviet bloc have occurred under the auspices of the US Global Threat Reduction Initiative (GTRI), launched in May 2004. GTRI aims to identify, secure, and dispose of stockpiles of vulnerable civilian nuclear and radiological materials and related equipment throughout the world.

The initiative has four core elements. The Reduced Enrichment for Research and Test Reactors program funds efforts to convert the cores of targeted civilian research reactors worldwide, many of which are Soviet-built, to use low-enriched uranium rather than HEU, or highly enriched uranium, fuel. The International Radiological Threat Reduction program involves identifying and securing nuclear materials and related equipment not addressed by earlier, pre-GTRI activities. Under this program, Russia and the United States collaborated with the International Atomic Energy Agency to secure radiological material from many sites in the former Soviet Union.

Policy makers and analysts sometimes nickname the other two elements "global cleanout" or "takeback" programs. Funded by the Department of Energy, they encompass efforts to repatriate Soviet or Russian and US-origin HEU from foreign countries. The removal of Soviet-supplied HEU from vulnerable locations began in November 1994 with Project Sapphire. Under this operation, the governments of the United States, Russia, and Kazakhstan jointly moved 581 kilograms of HEU from the Ulba Metallurgy Plant in northern Kazakhstan to the Oak Ridge National Laboratory in Tennessee. The next multinational repatriation project, Operation Auburn Endeavor in April 1998, involved a British-American-Georgian initiative to remove HEU nuclear fuel from the IRT-M research reactor in Mtskheta, Georgia, to the Dounreay Nuclear Complex in Scotland. (Russia declined to participate).

Thanks to the widespread recognition of the need to curb nuclear proliferation, Russian-American collaboration under GTRI has been able to overcome bilateral political tension. From January to April 2006, for example, the two countries worked in secret with the International Atomic Energy Agency and the government of Kazakhstan to transfer 63 kilograms of HEU from a research laboratory in Uzbekistan to a secure Russian reprocessing facility, despite the sharp deterioration in US-Uzbek relations the previous year. [For additional information see the Eurasia Insight archive]. This successful repatriation effort shows that similar Russian-American collaboration in the case of Georgia remains possible despite the recent war of words between Moscow and Tbilisi over uranium

smuggling.

149 cases of nuclear trafficking in 2006: IAEA

The United Nations atomic watchdog agency has reported 149 incidents of illicit trafficking and other unauthorised activities involving nuclear and radioactive materials in 2006. Of these, 15 involved the seizure of nuclear and radioactive materials from individuals who possessed them illegally, according to preliminary figures released by the UN International Atomic Energy Agency (IAEA) Office of Nuclear Security. Some of these individuals were attempting to sell the material or smuggle it across national borders.

Six of these incidents involved nuclear materials. Five involved materials such as natural uranium, depleted uranium, and thorium and one involved high-enriched uranium (HEU). Last time Georgia reported that in February last year, 79.5 grammes of uranium enriched to 89 per cent was seized from a group of criminals in Tbilisi, the capital.

The other 134 incidents of illegal possession reported involved radioactive sources. Just last week, the IAEA noted another reported case in which Georgia seized about 100 gms of uranium enriched to a level considered to be weapons-grade in a sting operation. Over the past several years, the agency has been assisting Georgia in the effective monitoring, control, and recovery of nuclear and radioactive materials.

The other 134 incidents reported to the IAEA in 2006 included 85 involving theft or loss of nuclear or other radioactive materials, mainly radioactive sources.

In about 75 per cent of the cases, the materials lost or stolen had not been recovered at the time of reporting, it added.

The remaining 49 involved other unauthorized activities, primarily unauthorized disposal of radioactive sources and radioactively contaminated materials and discovery of uncontrolled, or orphan, radioactive materials.

Another 103 incidents were reported in 2006 that occurred in previous years.

www.iaea.org

New Symbol Launched by the IAEA to Warn Public About Radiation Dangers

With radiating waves, a skull and crossbones and a running person, a new ionizing radiation warning symbol is being introduced to supplement the traditional international symbol for radiation, the three cornered trefoil.

The new symbol is being launched today by the IAEA and the International Organization for Standardization (ISO) to help reduce needless deaths and serious injuries from accidental exposure to large radioactive sources. It will serve as a supplementary warning to the trefoil, which has no intuitive meaning and little recognition beyond those educated in its significance.

"I believe the international recognition of the specific expertise of both organizations will ensure that the new standard will be accepted and applied by governments and industry to improve the safety of nuclear applications, protection of people and the environment," said Ms. Eliana Amaral, Director, Division of Radiation, Transport and Waste Safety, IAEA.

The new symbol is aimed at alerting anyone, anywhere to the potential dangers of being close to a large source of ionizing radiation, the result of a five-year project conducted in 11 countries around the world. The symbol was tested with different population groups - mixed ages, varying educational backgrounds, male and female - to ensure that its message of "danger - stay away" was crystal clear and understood by all.

"We can't teach the world about radiation," said Carolyn Mac Kenzie, an IAEA radiation specialist who helped develop the symbol, "but we can warn people about dangerous sources for the price of sticker."

The new symbol, developed by human factor experts, graphic artists, and radiation protection experts, was tested by the Gallup Institute on a total of 1 650 individuals in Brazil, Mexico, Morocco, Kenya, Saudi Arabia, China, India, Thailand, Poland, Ukraine and the United States.

The symbol is intended for IAEA Category 1, 2 and 3 sources defined as dangerous sources capable of death or serious injury, including food irradiators, teletherapy machines for cancer treatment and industrial radiography units. The symbol is to be placed on the device housing the source, as a warning not to dismantle the device or to get any closer. It will not be visible under normal use, only if someone attempts to disassemble the device. The symbol will not be located on building access doors, transportation packages or containers.

"The new ionizing radiation warning symbol (ISO 21482) is the latest successful result of long-standing cooperation between the IAEA and ISO. We encourage the symbol's rapid adoption by the international community," said ISO Secretary-General Alan Bryden.

Many source manufacturers plan to use the symbol on new large sources. Strategies to apply the symbol on existing large sources are being developed by the IAEA.

15 February 2007, www.iaea.org