SECURITY INDEX

Nos. 3–4 (108–109), Summer–Fall 2014
Publisher: PIR Press

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2,888
October 1, 2014

2,784
September 1, 2014

2,807
November 1, 2014
Nos. 3–4 (108–109),
Volume 20
Summer–Fall 2014

Website: http://si.pircenter.org/eng

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- The editorial work on this issue was finished and approved for printing on December 25, 2014.

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EDITORIAL

1 No Peace No War 2015: An Outlook for Cyberspace and Global Security – Oleg Demidov

In 2014 cyberspace has become a distorted mirror for the global security agenda and what this mirror reflects now is a situation which could be described by Leo Trotsky's formula "No peace no war" which was used almost a century ago to wreck the negotiations on the separate peace between the German Reich and the Bolshevists government in Russia. What this formula implies is a shift away from elaborated longer-term strategies and institutionalized decision-making procedures to the domain of situational judgments and frenemy type relationships. This has always been quite a typical pattern for cyberspace, but 2015 might be its crescendo. No war no peace between Russia and the USA, signing agreements on CBMs in cyberspace, but fighting desperately over the internet governance in cyberspace. No war no peace between Beijing and Washington engaged in strategic cybersecurity talks but stabbing each other in the cyberespionage arena. USA-Brazil, the NSA – the EU, ICANN-Russia in cyber affairs ... and no peace no war beyond the distorted mirror of cyber domain – e.g., in the Russia-Ukraine relations. This is the world of 2014, and likely to even more extent of 2015.

INTERVIEW

5 Brave New PIR: Turning the 20-Year Journey into Generation 2.0 – Vladimir Orlov

In 2014 PIR Center met its 20th anniversary, a milestone event which reflects a long history of challenges and victories in the windy way of conducting research in the field of international security. Instead of resting peacefully on its laurels, the think tank is actively reimagining its model and redefining its goals and strategies. How did PIR Center come to this anniversary and what plans does it have for the nearest and a longer-term future? What should be the optimal collaboration model between the civil society and nongovernmental research institutions and, on the other hand, the state in the pretty peculiar Russian case? Finally, what the PIR Center 2.0 would look like and how does it translate the experience of the older generation of experts to a younger team? All those issues are highlighted in a detailed interview of the founder and the permanent leader of PIR Center Dr. Vladimir Orlov for the Security Index journal.

19 Nuclear Energy and Nonproliferation Agenda for Iran: International Cooperation Priorities and Russia's Role – Mehdi Sanaei

For many years, the Iranian nuclear program has remained one of the key flashpoints in international politics and one of the most sensitive issues in the
Greater Middle East. But just over a year since the election of Hassan Rouhani as the new Iranian president, resolution of the Iranian nuclear problem seems to be closer than ever. What is Iran’s own vision of its nuclear industry development goals, and what does it hope for in terms of international cooperation in that area? Does it regard Russia as a promising partner for current and future nuclear energy projects? What are the basic principles of the Iranian leadership as far as nuclear nonproliferation is concerned? Ambassador Extraordinary and Plenipotentiary of the Islamic Republic of Iran to the Russian Federation Mehdi Sanaei highlights these issues in his interview to Security Index.

23 Vietnam’s Nuclear Power Industry: Key Projects and International Cooperation Priorities – Hoang Anh Tuan

Back in the end of 1990s, Vietnam launched its first projects in the field of nuclear power. Today the government plans that Vietnamese NPPS will provide 15 percent of the nation’s demand for power supply by 2015 already. To meet its ambitious goals Vietnam has been intensively developing international cooperation with the nuclear powers possessing vast experience in this field, including the USA, France, South Korea and Japan. Among this list, cooperation with Russia has become a special priority for Vietnam, with the bilateral intergovernmental agreement of 2010 implying construction of the NPP Ningh Thuan 1 by Rosatom. What are the future prospects of Russian-Vietnamese cooperation in the field of nuclear energy? How does the country see its longer-term goals in this area? The interview by Director General of the Vietnam Atomic Energy Agency Dr. Hoang Anh Tuan sheds the light on the nuclear future of Vietnam.

27 Towards the NPT Review Conference of 2015: Deceptive Ease of the Third PrepCom – No Harbinger of a Miracle – Andrey Baklitskiy

A research associate of the PIR Center who has been involved since 2011 in extensive research activities on the issues of nuclear nonproliferation and peaceful nuclear energy in the Greater Middle East, examines the ups and downs of the Third Session of the PrepCom half a year ahead of the 2015 NPT Review Conference. Andrey Baklitskiy, who also participated in the work of the PrepCom as a representative of the Russian NGO, notes a distinct lack of progress in the implementation of the 2010 Conference Action Plan. With regard to nuclear disarmament, no visible progress could be witnessed at all; similarly, the perspectives of holding the conference on establishing a WMD-free zone in the Middle East look more and more distant. These are just some of the problems that the international community will have to deal with in 2015.

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As the 9th Nuclear Non-Proliferation Treaty Review Conference is scheduled to commence on April 27, 2015, the reality feeds mounting uncertainty about the longer-term trajectory on the Treaty’s implementation process. With the past RevCons and PrepCons being a kaleidoscope of local successes and failures, the coming Review Conference promises neither breakthroughs nor definite responses to some long-standing questions about the NPT’s future path in the increasingly turbulent international realities. The fundamental challenges capable of blowing NPT would come true only if the future flow of international negotiations and global process undermines the principle of equal importance of the NPT’s three pillars – nonproliferation, disarmament, and peaceful use of nuclear energy. This threat might be brought to life by a combined impact of a number or risks ranging from the failure to establish the WMD free zone in the Middle East and stagnation of the U.S.-Russian bilateral disarmament talks to North Korea nuclear program running wild. Dr. Vladimir Orlov, President of the
PIR Center, makes an in-depth study on what future brings to NPT as a cornerstone of global stability and security.

57 Lethal Autonomous Robots: A Test for the International Humanitarian Law – Elliot Serbin

The recent decades were marked with a tremendous progress in the development of the robotic technologies and their adaptation for practical use in very different fields and niches. However, in the nearest future the real beneficiaries of this technological progress might become the military, who are trying to bring to life a new class of lethal autonomous robotic systems (LARS). In 2013 the issue of LARS was for the first time addressed at the UN General Assembly. But what seems to be an early call in fact might be a belated reaction; the killers robots are a total blank spot for the existing system of the international law, including the international humanitarian law (jus in bello) and the law of armed conflict (jus ad bellum). The author explores how the international community might try to respond to this legal challenge now, in a decade before we witness LARS performing combat missions throughout the world.

69 U.S.–Russian CBMs in the Use of ICTs: A Breakthrough with an Unclear Future – Oleg Demidov

Since 1998, Russia and the USA have been conducting a dialogue on the issues of cybersecurity, both in multilateral frameworks and bilaterally. Throughout this time, there was more of a rivalry of two fundamentally different approaches with global projections than of a mutually beneficial cooperation. Quite surprisingly, in June 2013 Barack Obama and Vladimir Putin – signed a set of bilateral agreement on confidence building measures in the field of the use of ICTs. The agreements enforced adaption of the Russian and the U.S. Nuclear Risk Reduction Centers to the exchange of information on cyber incidents, gave green light to collaboration of the two countries’ Cyber Emergency Response Teams, etc. What is the future of these agreements now, in the midst of the deteriorating crisis on the U.S.- Russian relations? Addressing this question, the article also highlights ways of potential application of the bilateral experience in CBMs for cyberspace to multilateral frameworks.

81 Weapons of Mass Destruction in Muslim Fatwas – Kamal Gasimov

Beyond diplomatic negotiations, political debates and expert discussions on the WMDs and their role in the world there are other ways and dimensions on thinking on those issues that are extremely rarely addressed as a subject of research. There are doctrinal disputes in the world’s major religions on the very existence of the weapons of mass destruction and their status with regard to the divine order. Doctrinal thinking in that field has become especially notable and developed in Islam, giving birth to a variety of religious behest – fatwas – dedicated to the issues of WMDs. How does Islam perceive nuclear weapons and other WMDs? How could the existence of the nuclear doomsday machine in the world be accommodated with the wisdom of the Creator? Kamal Gasimov, expert of the Center for Strategic Studies under the President of Azerbaijan unravels the secrets of Islamic fatwas on the WMDs.

93 Iran In The Regional And Global Context: is There Life after the Comprehensive Agreement? – Andrey Baklitsky, Kayhan Barzegar, Wu Bingbing, Farhad Mamedov, Eman Ahmad Ragab, Tariq Rauf, Mustafa Fetouri, Mohammed Shaker

The roundtable is based on the discussions held in 2014 in the framework of the high-level working group “Iran in a Regional and Global Context” established by the PIR Center and the Strategic Studies Network. The participants attempted
to analyze in an in-depth way the full spectrum of potential consequences of any future outcome of the negotiations on the Iranian nuclear issue, with regard to both regional and global context. Potential signing of the comprehensive agreement by November 24, 2014 could not only settle the situation around the Iranian nuclear program – it would also open a window of opportunities for extension of this successful experience to other regional security issues, which require Iran’s involvement. However, even the sides of the negotiation process fail to achieve the agreement, the situation on the regional scale still would not collapse back to the full-fledged crisis of the times of Mahmoud Ahmadinejad.


Military and technical cooperation remains on the key instruments in today’s foreign policy, the same being true for Russia even against the backdrop of the Ukrainian crisis and under the press of Western sanctions. Arms exports still have to play the role of a major component of Russian foreign trade and foreign policy aspirations, the turbulent market situation not being an excuse. However, it is no accident that in the past months of 2014 the EU, the USA and Ukraine suspended arms trade with Russia. What is the real impact of this decision for Moscow so far and is it going to mount further? Would Russia be able to effectively refocus its defense industry and exports towards the Asian markets? Finally, is Russian defense industry still capable to meet the high demands of the Russian army for advanced and high-tech weaponry? Leading Russian experts, including the PIR Center graduates, staff and the Executive Board members, contributed to the roundtable aimed to highlight these issues.

COMMENTS

Russia in the Global Nuclear Energy Market: Trends to Foresee, Aims to Achieve – Mikhail Lysenko

As the world has recovered from the psychological shock of the Fukushima disaster in 2011 and has learnt its lessons, the global nuclear energy industry today is entering next cycle of an upward spiral, opening new emerging markets for ambitious projects. Russia is among the world’s top players in the field, with an unprecedentedly large portfolio and advantages in terms of state-of-the-art technological solutions for constructing NPPs and other nuclear fuel cycle objects. How is Russia maintaining its position in the worldwide competition for the NPP projects in the developing markets? Who are our major partners and what solutions do we offer to them? What major technological, political and other challenges have we been facing in the nuclear energy field and what is waiting the nuclear power on a global scale in a strategic perspective? Mikhail Lysenko, Director of the Department of International Cooperation at Rosatom shares this knowledge with Security Index.

Energy Exports To East Asia: The New Old Dimension of Russia’s Strategic Pivot To The East – Yury Fedorov

In the spring of 2014 Moscow moved a strategy known as a pivot to the East to the forefront of its foreign policy. The strategy, brought to life and revitalized to a major extent in response to several waves of the Western sanctions, implies reinforced development of the Russian Far East and Eastern Siberia, and puts heavy emphasis on accelerated exploration and exploitation of eastern Russia’s natural resources. One essential leverage for meeting these ambitious goals is attracting large foreign investments to the Russian energy sector and advancing Russia’s energy exports to the Asian markets. What is the state of affairs with Russian energy exports in its most important segments – oil, natural gas and coal? Does the dynamism that these export niches have been demonstrating so far provide a basis for implementation of Russia’s ambitious strategy?
121 The Terrorist International: Is There a Future For a Democratic Afghanistan? – Vadim Kozyulin

The second round of the presidential elections in Afghanistan in June 2014 was a success, and the country now has Ashraf Ghani as the elected president. However, with the new president the struggle for power in Afghanistan remains far from being over as long as the Taliban exists and presents an existential threat to the current political order in the country. The new Afghan leader has to confront both the Taliban and other radical Islamist groups, and is does stand a quite good chance to succeed with a well-equipped army, trained by NATO instructors, strong support of the international community, technical and information assistance from the U.S. military, some of them still stay in the country despite the withdrawal plan. On the other hand, each month of this struggle illustrates the fact that a young and fragile democratic state is confronting not a single Islamist group, but a global and international terrorist hydra. Vadim Kozyulin, Senior Researcher at the PIR Center shares his insights on the future of democratic Afghanistan.

PAGES OF HISTORY

129 Nuclear Threat Reduction and Pulp Fiction by Richard Perle – Aleksey Obukhov

The establishment of the Nuclear Risk Reduction Centers in Moscow and Washington in the end of 1980-s which followed with regard to the signing of the Intermediate-Range Nuclear Forces Treaty became an important and long-sighted step in the process of strengthening of strategic stability. Today the NRRC mechanism maintains its relevance and even expands its functions to the new issues entering the strategic stability agenda (such as prevention of cyber conflicts). But back then, in the 1980s, this decision was preceded by a set of peracute internal contradictions and intrigues both in the USA and the Soviet Union. Alexey Obukhov, one of the key participants of the negotiations on NRRCs, examines the role of the U.S. diplomat Richard Perle in achieving the compromise between Moscow and Washington on that crucial security issue.

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141 When Hooliganism Becomes a Merit – Vyacheslav Trubnikov

The new millennium has brought to the world the reality of integrated communications – a complex communication phenomenon, which goes far beyond any form in its essence and functions. In fact, the true role of the integrated communications is being an instrument of exploitation and a carrier of ideology. These are the key arguments and discussion points presented to the reader in the monograph Integrated Communications as a Global Reality of the 21st Century. In a review of the book, Vyacheslav Trubnikov, General of the Army and member of the PIR Center Executive Board admits that embracing such a subject in a single issue would be close to impossible unless the author resorts to a breaking-the-mould genre, as Dr. Evstafiev exactly did. 500 paragraphs of academic hooliganism manage to bring the subject to the reader in an unfragmented way, which is even more valuable with regard to its applied aspects, such as the geopolitical origins of integrated communications.

143 The NPT RevCon 2015: Time to be More Ambitious – Tariq Rauf

prepared by the PIR Center was in the focus of a discussion organized in the margins of the 2014 NPT PrepCom in New York in May 2014. Today, it is reviewed for Security Index by Tariq Rauf, Director of Arms Control and Non-proliferation Programme at the Stockholm International Peace Research Institute and former Principal at Global Nuclear Solutions at the IAEA. The author matches the good news picture of The P5 and NPT Article VI provided in the PIR Center’s report with his own observations of the NPT implementation process. Though the reality so far gives few reasons for optimism, and the nuclear weapons states would hardly implement the agreements reached in the NPT Review process, the 12 Steps Towards Launching Multilateral Nuclear Disarmament, crowning the PIR Center’s report provide useful and relevant solutions for some of the issues to be raised at the NPT RevCon of 2015. So the PIR Center should be more ambitious about updating and promoting its White Paper in New York next spring.

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FINAL QUOTES

On the Motions of a Spirit
At the end of 1917, the Bolsheviks, supported by the October revolution, was engaged in negotiations on a separate peace with the German Reich. Though the diplomatic maneuvers ultimately resulted in the infamous Treaty of Brest-Litovsk (which was signed on March 3, 1918 and eventually turned to dust in less than a year), there was one peculiar strategy, which the Bolsheviks attempted to use in the course of the negotiations. This was the “No peace no war” formula coined by Leo Trotsky, the father of the Red Army who many years after took the place of the Antichrist in the Stalinist totalitarian ideology.

What that formula implied was a type of diplomatic behavior aimed at dodging any concrete agreements and clear positions on the subject of negotiations. More than that, the Bolsheviks’ delegation started to avoid direct contacts with the German negotiators and almost brought diplomatic communications to a halt. The aim of this weird and deviant approach was very clear—to buy some time while the revolutionary government was making desperate attempts to establish its control over the collapsing country and somehow get the administration mechanisms and the evaporating armed forces back on track. The strategy in fact turned out to be a success, and the pitiful fate of the Brest-Litovsk peace treaty serves as further evidence of that.

Today in 2014, almost a century after those events, the same “No peace no war” formula with certain adjustments can be used in order to characterize the totality of international interactions in cyberspace and Internet governance. What does it mean with regard to today’s reality?

First, the term “war,” when applied to cyberspace today, remains to a large extent metaphoric and mostly relates to intensive diplomatic and international rivalry over the promotion and establishment of legal, institutional, and political paradigms for cyberspace and global cyber-governance. However, the episodes of power games are also in place—let us remember Stuxnet once again—and yet they do not constitute the prevailing type of international interactions in the cyber domain. Certain activities are somewhere in between public diplomatic clashes and a hidden power struggle, this being true for cyber-espionage campaigns and jiggery-pokery on the vague brink between patriotic hacktivism and the activities of state-sponsored proxy actors. Yet, there is no war in its literal sense in cyberspace, and it would hardly ever occur, at least in the observable future.

Let us assume that Leo Trotsky’s formula today characterizes a number of trends in the behavior of international actors in the cyber arena, which became clearly visible or even dominant throughout 2014.

First, the members of the international community are avoiding decisive concerted steps aimed at mitigating major challenges to international security and the security of Internet users, when the source of the challenge is too big to deal with effectively or when it is your major partner.
One example is global governmental programs of electronic espionage conducted throughout recent years by the United States, the UK, and probably some more nation-states as “partners.” Edward Snowden’s bomb exploded in August 2013, raising a huge wave of righteous indignation all around the world and...nothing has followed so far. Brazil, Germany, Russia, and many other states who were claimed to be the victims of the NSA’s activities in fact did very little to restrain the NSA. There was no war even in the diplomatic sense of the word—no sanctions, no embargoes against the United States, not even suspension of dialogue frameworks.

What kind of a phenomenon is it? In October 2014, I attended the concluding conference of the three-year project “A Twenty-First Century Concert of Powers” run by the Peace Research Institute Frankfurt (PRIF). At the discussions, one of the distinguished French academic scholars raised the issue of connivance as an increasingly typical mode of interaction between major powers today, and my comment followed on whether the concept of connivance reflects the reaction of the international community to the Snowden revelations. Then there are not a few major powers versus the rest of states as in the typical connivance scenario of the twenty-first century, but all the governments versus other actors—businesses, technical community, experts, internet users, etc.

However, the concept of connivance might provide only part of the answer to the post-Snowden cyberspace agenda, since we observe certain other reactions to the NSA activities. Once again, a deviant scenario takes place in Russia, where the government policy in the field of regulation of the Internet has led the decision-makers to the idea of developing an autonomous infrastructure able to ensure the work of the national segment of the Net even under the circumstances of disruption of the operation of the global DNS system. On one hand, this move is largely dictated by domestic policy priorities. On the other hand, the national security imperative that guides the Russian initiative to a considerable extent is rooted in the perception of the Internet as a playground of foreign cyber units and intelligence services, NSA being in first place.

And here Russia once again invents the “No peace no war” formula, neither engaging in a presumably dead-end diplomatic fight against the NSA, nor being resigned to how things have been going so far. Instead of opposing the United States on the issues of global surveillance on the Internet, Moscow is buying time to change the rules of the game by creating an autonomous Net infrastructure. It should be noted that Brazil, Germany, and some other states have also been considering this option in 2013 against the backdrop of Snowden’s revelations, yet none of them went to these lengths.

Typical of the “No peace no war” paradigm, Russia little by little is starting to loosen its grasp on the International Telecommunication Union (ITU) which has always been seen by the Russian Ministry of Foreign Affairs (MFA) as the key legitimate framework for dealing with Internet governance issues on a global scale. In December 2012, Moscow, together with China, the Gulf States, and some more of its allies, initiated a true diplomatic war at the ITU’s World Conference on International Telecommunications. The only aim was to include a paragraph on the Internet and the rights of nation-states in the field of Internet governance in the updated text of the ITU’s major document—International Telecommunication Regulations. Though these efforts largely failed, the final vote split the ITU member-states and gave ground for the bellictristic talks about a Cold War on the Internet.

This time, at the ITU Plenipotentiary conference, held in Busan on October 20–November 7, 2014 there was almost nothing reminiscent of a diplomatic war. Russia did highlight its views on the potential role of the ITU in global Internet governance, and that was all. Constructive discussions with other delegations and the election of Russian representatives to the ITU’s functional bodies followed, and the Conference “was a great success” in UN bureaucratic language.

Does it mean Russia has been giving up the idea of transforming the Internet governance architecture and reallocating the real decision-making process to an intergovernmental framework from the slimy tentacles of the multistakeholder octopus? No—but the balance of priorities has probably shifted. When the Bolsheviks had no army to fight the German Reich, they gave up fighting for some time and concentrated on urgent domestic issues, and soon there was no more German Empire to fight with. Today, when the State has been winning territory step by step from other stakeholders and attempting to accommodate the Internet
for its Westphalia-designed economy and administration model, there might be no need for Russia to fight so desperately now, when the number of its allies is not yet enough to win at once. Let us just wait, until the multistakeholder mechanism starts to creak at the seams under the global pressure of governmental intervention into Internet governance issues—and who knows, maybe in a few years Russia’s proposals will be praised to high heaven by the majority of the international community. Until then, it might be sensible to withdraw from the global war of diplomacy and mitigate the challenges to the national digital sovereignty domestically; and Moscow is just occupied with that now.

The second principal moment for the “No peace no war” approach with regard to cyberspace today is the broadening practice of a “frenemy”-type relationship among international actors.

Without going far, let us take U.S.–Russia relations. In June 2013 the two countries signed a set of breakthrough bilateral agreements on confidence-building measures in the field of the use of ICTs. The agreements enforced adaptation of the Russian and U.S. Nuclear Risk Reduction Centers to the exchange of information on cyber incidents, gave the green light to collaboration of the two countries’ Cyber Emergency Response Teams, and established a Working Group on the issues of the use of ICTs in the context of international security under the Bilateral Presidential Commission. The agreements crowned the 15-year U.S.–Russian bilateral dialogue on cyber issues, which used to be quite fruitless and was sliding into confrontation; they even survived the Snowden revelations and were seriously affected only by the Ukrainian crisis of 2014. So these documents, which Russian diplomacy in June 2014 called “a non-aggression pact for cyberspace,” used to be a clear example of a “peacetime mechanism,” a tool of constructive cooperation between two major cyber powers. However, today this mechanism has been undergoing a strong depreciation because of the crisis in bilateral relations.

At the same time, 2014 has brought several cases when the Department of Homeland Security, the American military, and other government agencies accused Russian state-sponsored hackers of breaching U.S. critical information infrastructure objects (e.g. the Energetic Bear and the Dragonfly campaigns) and conducting permanent advanced attacks on American banks and other businesses. Statistics of that kind, speculating on Russian hackers and the scary shadow of the Kremlin behind them, was always in place but this year witnessed a dramatic increase in this.

This is just one example of frenemy-type relationships with regard to the cyber domain, and we can claim that it has nothing to deal with regarding any kind of exception—cyberspace rather consists of such modes of interaction now. “No peace no war” takes place between Beijing and Washington as long as the two giants are engaged in strategic cybersecurity talks but continue to stab each other in the cyberespionage arena. The “No peace no war” principle governs relations between the Russian government and the Internet Corporation for Assigned Names and Numbers (ICANN), the global coordinator of the DNS system. The two actors just pretend to ignore each other, though they are obviously have a common stake in the domain name and cybersecurity issues. At the same time, there is neither Russia conducting a war of extermination against ICANN, nor the Internet Corporation heading the multistakeholder crusade against the Kremlin. Pretend that nothing is happening and it might actually work.

The same approach, once again, describes the relations between Brazil and the United States, and the United States and the EU on electronic surveillance and privacy protection on the Internet. There are plenty of examples, so the list might be continued.

Finally, the third inherent pattern for the “No peace no war” paradigm is the shift away from elaborated longer-term strategies to the benefit of tactical thinking and a situational response. One of best examples here that come to my mind is the extrapolation of the principle of collective defense, as formulated in Article 5 of NATO’s Washington Treaty, to cyber-attacks. This decision took place at NATO’s recent summit held in Wales in September 2014.

What is peculiar about it and drives it closer to the “No peace no war” paradigm in its most literal sense is that this decision did not rely on any elaborated calibration mechanism or set of criteria for classifying cyber-attacks as the use of force. Previously, the possibility to respond to hostile cyber-activity with NATO’s full combat potential was a juicy but rather
hypothetical topic. Surprisingly, it took the Organization only a year to indoctrinate this principle, which was first deducted by the experts of NATO’s Collective Cyber Defense Center of Excellence in Tallinn, Estonia, in a publication of 2013 known as the Tallinn Manual. Today, reserving the right to respond to a cyber-attack with NATO’s arsenal of kinetic weaponry ultimately blurs the shaky brink between war and peace, since no reliable and universal criteria are present in international law to qualify a cyber-attack as an armed attack, which would open the window for the use of Article 5 of the Washington Treaty. Moreover, the very state of a conflict with the prevailing use of cyber weapons is in no way described in international law unless a universal adaptation is elaborated in the UN framework.

So this is the “No peace no war” reality in its extreme sense, and all chances are in place that the world will increasingly face it in the coming year of 2015. The more interesting thing to think about is that the “No peace no war” trend is not unique for cyberspace—the latter just serves as a distorted mirror that exaggerates trends taking place in other fields of international affairs. In fact, the formula perfectly describes the current state of the relationship between Russia and the Ukraine. Taking into account that back at the end of 1917 the battle line between Russia and the Kaiser’s Reich was just crossing over the territory of the present-day Ukraine, that could be a nice story for Leo Trotsky to listen to.
Vladimir Orlov
BRAVE NEW PIR: TURNING THE 20-YEAR JOURNEY INTO GENERATION 2.0

PIR Center marks its 20th anniversary this year. How did that organization manage to overcome the many obstacles that lay on its path to such a jubilee? What are PIR Center’s strengths, and what are its weaknesses? What is the bar its leadership has set for the near term, and what are the long-term goals? What kind of relations should be built between the state and civil society, including non-governmental research organizations specializing in international relations? The Security Index journal has put these and other questions to the PIR Center founder and President, Vladimir Orlov.¹

SECURITY INDEX: Two years ago, when we marked the publication of the 100th issue of Security Index, you half-jokingly, half-seriously quoted lyrics by the famous Russian twentieth-century poet Vladimir Vysotsky: “Be grateful that you’re still alive.” Today, however, some really wonder: 20 years is a long time.... NGOs don’t usually live that long in Russia.

RELEVANCE, RESPONSIBILITY, REPUTATION

ORLOV: As you can see, we’re still very much alive and kicking. We are still moving forward; that includes PIR Center itself and our partner organizations.

I think it is extremely important to make sure that a vigorous foreign-policy debate continues in Russia, and that foreign-policy and global security research is pursued across various platforms, including non-governmental.

In fact, I believe that in the current conditions, with information warfare being waged on a grander scale than ever, reputable and authoritative Russian NGOs specializing in foreign policy can make a great contribution to that debate via Russian media outlets that work for an international audience, as well as via the foreign media. These NGOs are in a much better position to do that than governmental organizations, or entities closely associated with the Russian government.

SECURITY INDEX: The 20th anniversary is clearly a time to accept congratulations, among other things. I was greatly impressed by all the congratulations PIR Center has received from its own graduates, from its partners all over the world, and from several heads of state and government. Russian Foreign Minister Sergey Lavrov, Defense Minister Sergey Shoigu, Deputy Prime Minister and Government Chief of Staff Sergey Prikhodko, and other senior officials have all sent their warm wishes and compliments. Sergey Ivanov, head of the Russian Presidential Administration, emphasized that “over the years, PIR Center has earned itself a place of honor among the Russian non-governmental entities specializing in international security, nuclear nonproliferation, and arms control. The high professionalism of its staff and effective organization of their work have earned PIR Center an excellent reputation in the political, academic, and non-governmental communities both in Russia and

SECURITY INDEX Nos. 3–4 (108–109), Volume 20
ISSN 1993-4270 (print)/ISSN 2151-7495 (online)  http://dx.doi.org/10.1080/19934270.2014.986364
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abroad.” Don’t you feel a bit of a pressure and a certain weight of expectation, with all this high praise?

ORLOV: No. But there is a great sense of responsibility for the quality and the results of our research and our various projects. A reputation is like an English lawn: it takes years, even decades to nurture. Over the past two decades, more than 800 people have graduated from PIR Center, including our own staff members, interns, and graduates of our education programs. All of them know very well that working for us can be a hard slog. Some have even compared themselves to the character played by Uma Thurman in Quentin Tarantino’s “Kill Bill,” when she presented herself for training at a Tibetan monastery. Well, it’s not quite as bad as that, but you get the idea.

Those who don’t buckle under the pressure, those who pass the test—these people make their own contribution to the reputation of the entire organization. Such a reputation cannot be credited to any single person. Team play is what makes us different from the numerous one-man shows. PIR Center is not merely a stage for any single star to shine, however talented that star may be. By definition, a one-man show cannot be an orchestra of diverse opinion, even if some individual performers pretend to be such an orchestra.

A NUCLEAR START

SECURITY INDEX: So you have been dealing with nuclear nonproliferation issues for the past 20 years....

ORLOV: Longer than that, actually. It has been almost a quarter of a century. It was on December 1, 1991, when I was a correspondent for the Moskovskie Novosti weekly, that I arrived in Ukraine to cover the referendum on independence. I was already worried by the question of what would happen to the Soviet Union’s nuclear legacy left in Ukraine. I then made frequent visits not only to Kiev but also to Minsk and Almaty. I was part of the “presidential pool” of journalists in Massandra in 1992, when Russian president Yeltsin tried to persuade his Ukrainian counterpart Mr Kravchuk to relinquish the nuclear weapons left on Ukrainian territory. I found these subjects very interesting and promising. At about the same time, the subject of alleged nuclear smuggling came to the fore. There were scaremongering reports in the media about the mysterious “red mercury.” I had to establish the truth behind those rumors, and to pursue journalistic investigations.

I was lucky. Even before the establishment of PIR Center, I had the honor and the privilege to meet such talented and experienced professionals as Ambassador Roland Timerbaev and Professor William Potter. Their views have largely informed my own opinions on the subject of nuclear nonproliferation. I was also lucky enough to meet a whole constellation of talented researchers from Russia and the CIS—some of them young, others grizzled veterans. They included Dmitry Evstafiev, Ildar Akhtamzhan, Alexander Pikayev, and Dastan Elekunov, among others. Bill Potter did a great job in building an “international nonproliferation mafia” in Monterey, California. That informal club opened up completely new vistas from my journalistic window. It was also very interesting to exchange opinions with Western experts, such as Rose Gottemoeller, George Bunn, Tariq Rauf, and many others.

SECURITY INDEX: How did the idea of creating the PIR Center come about?

ORLOV: In September 1993 I was covering for the Moskovskie Novosti newspaper what later became known as President Yeltsin’s Decree No 1400—the decree ordering the use of force to dissolve parliament. I had numerous conversations with people on both sides of the barricades, as well as those who tried to remain above the fray, especially the chairman of the Constitutional Court, Valeriy Zorkin. I was the first journalist to interview him after his appointment, and I spent a lot of time with him in early October 1993. Tanks shooting at the parliament building, the chairman of the Constitutional Court being removed from office—I thought all these things had very little to do with democracy. I was deeply disappointed. Also, since I was a Kremlin correspondent, I was accustomed to entering via the Spassky Gates
and interviewing top government officials (including those who played prominent roles behind the curtains). At some point, however, I realized that I had an overdose of "Kremlinology." I wanted to try something different.

That is how the outlines of the PIR Center project began to emerge in April 1994. Early discussions involved such different people as Vadim Kozyulin, Roland Timerbaev, and General Gennady Evstafiev.

SECURITY INDEX: Was the PIR Center originally conceived as a "private think tank?"

ORLOV: Not at all. As a journalist, I was more comfortable with print media projects. The first such project was Yaderny Kontrol (Nuclear Control). The pilot issue of that journal came out in the autumn of 1994. The PIR Center was launched as an informal club for exchanging research and opinions on nuclear nonproliferation. It had the Yaderny Kontrol journal at its center, and was essentially set up as an auxiliary project. Our team used the editorial office of Moskovskiy Novosti for its meetings, perhaps somewhat overstaying the welcome of the paper's editor-in-chief, Victor Loshak. Moskovskiy Novosti was one of the PIR Center founders. Another founder, the Moscow State Institute of International Relations (MGIMO) soon gave us our new home; it offered not only shelter but also the creative atmosphere our work required. Moskovskiy Novosti entered a difficult period at that time. The newspaper itself went into decline; on top of that, its sponsors wanted to lay their hands on the lucrative piece of real estate at Pushkin Square occupied by the editorial office, not caring at all about the paper itself. As a member of the Moskovskiy Novosti Board of Directors (I also served as a vice-president for a period) I raised my voice against such a dismal turn of events. Unfortunately, I was in a minority.

As for MGIMO, it was my Alma mater, after all. Our office there was crowded, but the MGIMO President, Anatoly Torkunov, and Vice-President Ivan Tyulin made us all feel very welcome.

SECURITY INDEX: Who were the first members of the PIR Center team?

ORLOV: Vadim Kozyulin and Dmitry Evstafiev were invariably at the center of all our ideas and projects. Roland Timerbaev first gave us advice from afar, from his place of work in the United States. He later joined us in Moscow. In the early stages, we also had a lot of help from Aleksey Zakharov, who used to work as a deputy head of a project I led at Moskovskiy Novosti. He was extremely enthusiastic about Internet projects, and at some point he plainly told us that he wanted to focus on those projects rather than the PIR Center. I am glad to say that he chose the right path for himself and is now a very successful businessman. Idar Akhtamzyan was heavily involved in the journal. He was helped by Ekaterina Shkolnik. Vladimir Misychenko soon joined the projects that focused on the role of the executive power. There were also some excellent and very committed administrative staff, such as Lyudmila Balandina and Elena Bokova, who were later joined by Maria Vernikova. Lyudmila Kozyulina was our first accountant. Later on she passed that mantle to Vyacheslav Zaytsev, a very experienced and reliable colleague hailing from the Minsredmash empire. He remains the PIR Center chief accountant to this day.

Equally as important as the dedication of the PIR Center team was the help and support of the people I call "friends of PIR Center." This is a vague term; in fact, some of these friends prefer to remain anonymous to this day. What's important, however, is that I have always felt their support right from the start, even though I have never asked for it.

SECURITY INDEX: Who were the first of these people?

ORLOV: Yury Baturin, presidential aide for national security, just to give you an example. A man who later on had the courage to leave a comfortable Kremlin office and twice went into outer space on a spaceship. People like him realized that WMD nonproliferation efforts require strong intellectual support, and not necessarily from government sources. They took
an interest in the PIR Center, which they saw as an independent meadow in which all kinds of flowers can bloom.

We also had our fair share of impassioned critics. These were government officers or experts with close links to the government. They did not agree with everything we did or wrote; some of them took issue with that. And I mean that in a good sense: they were not indifferent readers! As for ourselves, we were still fairly inexperienced writers, in many ways. We had quite a few verbal duels. I remember a phone call from a Foreign Ministry official who took issue with our article on missile technology proliferation. He was very outspoken and emotional, but he presented a strong argument. I do believe now that our article was in fact rubbish. I did not like the angry tone of that phone call, but I was greatly impressed by the emotional and impassioned argument of the caller. I heard the voice of a diplomat who was genuinely worried about Russia’s international reputation. That diplomat was thinking like a real statesman. His name was Anatoly Antonov. Years have passed since then, and we have become friends. I am proud of that.

SECURITY INDEX: Were there any attempts to shut you up?

ORLOV: There were. We have had all kinds of situations. On occasion we had to convince people that we are not the enemy of the state. There were also attempts to put pressure on our newcomers, especially our administrative staff. In most of these cases, however, it wasn’t the government trying to play it safe, as it were. It was people merely being jealous of our success and envious of our achievements. The most sensitive blows were actually caused by that envy. At some point, as a character in a novel by Viktor Pelevin used to say, I no longer understood how their envy can be transformed into my happiness.

SECURITY INDEX: You were pioneers....

ORLOV: No, that’s not true. The PIR Center has plenty of real achievements, so it has no need to spread tales about imaginary ones. The pioneer in the field of international security was Professor Anatoly Dyakov of the Moscow Institute of Physics and Technology (MFTI), along with a whole brood of talented students, including Oleg Bukharin, Pavel Podvig, and Evgeny Miasnikov. When we were only just making a start, Dyakov was already giving me valuable advice; even back then I saw him as a teacher I could look up to. Sergey Karaganov set up the Council for Foreign and Defense Policy. The Moscow Carnegie Center reached its zenith in the first half of the 1990s. They published the Nuclear Proliferation newsletter and held lots of interesting workshops. Andrey Zobov played a significant role in the rise of the Carnegie Center. Of course, all of us were inspired by one extraordinary figure who worked for the Carnegie Center—I am talking about Alexander Pikayev, an outspoken man of great intellect and wit.

There were also the Association for Nonproliferation (Andrey Zagorskiy), the Council for Critical Technologies (Boris Dluzhnevskiy), and the Center for Export Control (Anatoly Bulochnikov). In other words, the field was already fairly competitive. We were newcomers in that field. Nobody knew us, and nobody wanted us as competitors.

SECURITY INDEX: Still, it is hard to believe that when you were creating the PIR Center, you had no strategic plans, no vision of what that organization should become in 3, 5, or 10 years’ time.

ORLOV: You’ll have to believe it, because that’s how it was. During the early days of PIR Center as a fully fledged and active research organization (1994–1995), neither its own leadership nor any external players, including PIR Center friends, had set any strategic goals for that organization. For the first two years we were left to our own devices; we did not pursue any ambitious tasks, with the exception of the Yaderny Kontrol project. Back at the time, PIR Center was more of an editorial office than a research center. Incidentally, this was
reflected in the early version of our name. Do you know what it was? PIR Information, Publishing and Research Center. Information and Publishing came before Research.

SECURITY INDEX: Yes, but you have always been known as the PIR Center, and few people cared about the full name or what the letters in that name stand for. Did you choose such a pseudo-acronym on purpose?

ORLOV: I was inspired by a line from a poem by one of the greatest Russian poets Fyodor Tyutchev: "Blessed is he who has visited this world in its dire moments." And we had plenty of those dire moments, right? And then the next line is, "He was called by the omnibenevolent as an interlocutor to a feast." I liked that image of an interlocutor at a feast.

SECURITY INDEX: So the feast is not from Plato?

ORLOV: No. It is from the nineteenth century. From Tyutchev.

SECURITY INDEX: Let us go back to the 1990s. What persuaded you to venture into new areas?

ORLOV: First of all, it was an unexpectedly quick success of the Yaderny Kontrol journal, which helped us to draw the attention of the Russian and international expert community, and to secure more financing. Another factor was the loss of the Moskovskije Novosti newspaper as a co-founder. That forced us to search for a new, non-journalistic platform for PIR Center. Finally, our dialogue with Russian government entities and with the international expert community was going from strength to strength, so we felt our relevance increasing.

A BOUTIQUE THINK-TANK

As a result, in 1996 the PIR Center expanded into new areas. We launched new projects on chemical weapons; missile technology nonproliferation; military and technical cooperation; civilian controls over military activities, etc. That is when we started to transform into a very compact, but extremely dynamic private think-tank, with a heavy but not exclusive focus on WMD nonproliferation.

The success of the journal was sustained and quite unexpected, both for our competitors and for our friends. That success gave us recognition, a reputation, and independence. The PIR Center began to grow in terms of staff numbers, financial resources, and the number of projects. In some years during that period we published as many as four different journals and bulletins at the same time, and held more than 10 conferences and workshops every year.

The question of whether PIR Center had a raison d'être, and whether it was viable, was no longer on the agenda. The new question was how we should move forward, and what the limits are for our growth. We were now in a position to choose only the most interesting projects, and only the best partners.

SECURITY INDEX: By the late 1990s the PIR Center had earned a solid reputation as the leading Russian think-tank featuring nuclear nonproliferation. Its competitors had lost ground. Nevertheless, you staunchly refused to expand onto new turf, especially in the related areas of international security. Why?

ORLOV: At that stage, the PIR Center was not ready for such an expansion. Our first priority was to strengthen our position as the leading authority on nuclear nonproliferation. In the late 1990s we were joined by a number of renowned specialists. Apart from Roland Timerbaev,
they included General Yevgeny Maslin, General Vladimir Dvorkin, General Vassily Lata, Professor Yury Fedorov, and several others. It was a whole new level of expertise compared with the early days of our young team.

We devoted much of our energies to co-hosting and organizing the Moscow International Nonproliferation conferences. They were initiated by Roland Timerbaev and Joseph Cirincione. The entire PIR Center team had to put their shoulder to the proverbial wheel during the preparations; many of us literally had to take a week’s vacation afterwards because the whole thing was so exhausting. Still, those conferences certainly gave us things to remember. It is during those conferences that the basic approaches to the Iranian nuclear problem began to emerge; the contours of the Global Partnership against proliferation started to take shape; and efforts were conceived in the area of nonproliferation and disarmament education and training. That is also where experts and officials voiced the ideas that were later included in the New START Treaty.

In the late 1990s and early 2000s we made several forays into new fields. For example, we published several papers on international terrorism, protection of critical infrastructure, and cyber security. These papers elicited a broad response both here in Russia and abroad. To me that was a sure sign that the PIR Center was ripe for expansion into new fields of research.

Nevertheless, the PIR Center Executive Board, our highest governing body, was sticking to a fairly conservative stance; they believed it would be preferable not to lose our focus.

SECURITY INDEX: You have mentioned education and training programs in the area of WMD nonproliferation. How did those programs come to be part of the PIR Center portfolio?

ORLOV: They did so against my wishes. One of our young staff members, Ekaterina Shkolnik, a MEPhI graduate, literally dragged me kicking and screaming to Professor Khromov, head of the Fifth Department (who was later succeeded by Eduard Kryuchkov). As I specialized strictly in the humanities, the idea of reading lectures on the subject of nuclear nonproliferation at the technical university famous for its nuclear physics courses seemed alien and even scary to me. What if all those students start asking me questions on nuclear physics, which is not my forte at all? Professor Khromov did not seem very enthusiastic either. But we acted according to the classic PIR Center principle: let’s plunge into this fray, and then see what happens. And it worked. As a result, the PIR Center developed a training module on nuclear nonproliferation as part of the MEPhI Master’s program.

After that we launched a nonproliferation training program that did not involve MEPhI. It was gradually transformed into the Nonproliferation Summer School. We also launched visiting training courses in other Russian cities, such as Vladivostok, Nizhny Novgorod, St Petersburg, Tomsk, and others. This helped the PIR Center to strengthen its ties with regional universities. Again, Bill Potter's nonproliferation education efforts around the globe were my inspiration.

Upon Bill’s friendly advice, I spent two years working as a UN consultant for education and training in the area of nonproliferation and disarmament. I was involved in preparing a report by government experts for the UN secretary-general. I worked with Yukiya Amano (Japan), Mohamed Shaker (Egypt), and Venkatesh Varma (India), all of them great professionals who also became my friends. The report we prepared was then used to draft a UN General Assembly resolution.

As a result, we made a strategic decision to add education projects to the two traditional PIR Center fields, information/publishing and research.

SECURITY INDEX: So in the mid-2000s the PIR Center did, after all, venture into new areas?

ORLOV: After 10 years of success and near-monopoly in the WMD nonproliferation field among the Russian NGOs, the PIR Center began to experience a certain degree of fatigue from these self-imposed restrictions, as far as the subject matter of our work was concerned.
It was another print media project that gave a fresh impetus to our development. In 2007 we launched the Security Index journal, which succeeded Yaderny Kontrol. The launch was a great success. We unambiguously positioned the new publication as the leading Russian journal on international security.

We also re-branded the Club. It retained the status of a PIR Center partner, but it became an independent player in its own right, called Triologue Club International. Over the past 10 years the Club has invariably focused on a broad foreign-policy and defense agenda during its meetings.

We also launched the iSi International Security Index, which we positioned as the Dow Jones of international security.

Finally, we rebranded the PIR Center itself, giving it a new logo: three arrows in the colors of the Russian flag, pointing decisively upwards, against the backdrop of a crisscrossed and fragmented globe. That logo is a good reflection of how the organization sees its own mission.

In recent years the PIR Center Executive Board and our friends have been working hard to take the organization on a new path as the leading Russian NGO specializing in international security in all its aspects.

The expansion of our projects, in terms of both their geography and their subject matter, has facilitated an impressive growth of our organization’s network of international contacts. We are maintaining and strengthening ties with research centers in the CIS countries and Europe. We are also establishing contacts—albeit tentatively for now—with partners in other regions, such as the Middle East, South Asia, and Latin America.

SECURITY INDEX: Would it be fair to say that the PIR Center is an international institution?

ORLOV: The answer is both yes and no. From the legal point of view, the PIR Center is a Russian organization. But it is also clear that as an organization that pursues international research, we are closely involved in global discussions and international projects. We hold conferences, workshops, and round tables both in Russia and abroad, in places such as Havana, Bishkek, Geneva, etc.

Take, for example, the International Expert Group (INTEG). It includes leading foreign policy and international security experts from almost every region of the globe; for now, only Southeast Asia and Australia remain an exception. The iSi Index, our "Dow Jones of International Security" includes voices from New Delhi and Belo Horizonte, Tripoli and Tashkent, Pretoria and Jeddah. It is an unprecedented project, and its full potential has yet to be tapped.

Over the past five years we have also managed to strengthen our global outreach thanks to the global edition of the Security Index journal, which is published in London. Now that our cooperation agreement with the Routledge publishing house is drawing to a close, the new emphasis will be on the bilingual PIR Center website and related electronic information products (including re-energized collaboration with our information partner, PIR Press Ltd.). Our presence in the social networks is also yielding results, although there is still a lot of room for improvement in that particular area.

No other Russian organization working in the same field as ourselves has such a diverse, and, at the same time, such a highly qualified international audience.

SECURITY INDEX: What are the highlights you remember the most from PIR Center’s 20-year history?

the Nuclear Non-Proliferation Treaty (NPT) in 1995. The Moscow Nonproliferation Conferences co-sponsored by PIR of 2004 and 2006. The meeting with President Putin in Sarov in 2012. The 2003 failure and the 2013 culmination of the efforts related to the Iranian nuclear program. The anniversary meeting of the Triadologue Club International in 2013 and a related ceremony. I also remember every single one of the 13 Summer Schools we have held so far.... This year, by the way, it will be held slightly later than usual, starting in late September. It will be School number 14. Should I call it “Indian Summer School?” [smiling]. Well, as India is not among the funders of the project, probably not.

COMMUNITY PIR

SECURITY INDEX: You were in the Russian parliament building during the August 1991 attempted coup by Communist hardliners. You have created a unique nongovernmental organization. You participated in the last four NPT Review Conferences. For two decades you have had an insider’s view of the situation with the Iranian nuclear program. Do you think it’s time for you to start working on your memoirs?

ORLOV: It’s past time for me to start working on the fourth edition of the Nuclear Nonproliferation textbook; I am the executive editor and one of the contributing authors. It is supposed to come out in time for the 2015 NPT Review Conference. This will probably be the last print edition of that textbook; we need to go in step with the times and move on to modern paperless education tools.

As for my recollections about the PIR Center, its early days and its progress.... It would be an interesting project. I once even sat down and penned some drafts. But I then realized that it’s not yet time. Too many things are still fresh in everyone’s minds. There are too many things that PIR Center friends are not yet ready to share with a broad audience, and that will have to be redacted.

SECURITY INDEX: You often mention PIR Center friends. Not partners, but friends....

ORLOV: It is truly a privilege to have so many friends who are ready and willing to help our organization. PIR Center friends are a very special group. They are not members of staff, but they represent government agencies, the expert community, and the Russian and international media, and they are always ready to help our organization, always ready to contribute. The diverse and varied backgrounds of these people are a source of new ideas for my colleagues and for me. Thanks to that diversity, this circle of friends ensures our sustainability, resilience, and impartiality.

SECURITY INDEX: And what about foes?

ORLOV: I think the fact that we have them, and that they have lately become more active, is another testament to the success and prominence of our organization.

I have already mentioned that line from Vladimir Vysotsky lyrics: “Be grateful that you’re still alive.” Remember also his line about the “dark people?” “My dark man, wearing a grey suit—He was a minister, a landlord, and an officer....” And so on. It often happens, you see, that professionals go out of fashion.

SECURITY INDEX: I think this is the place in our interview where we should play Ennio Morricone’s Chi Mai musical theme from Le Professionnel in the background.

ORLOV: Exactly. But sometimes things are simpler than that. Sometimes there is too much stupidity, ignorance, and dilettantism. Abkhazian author Fazil Iskander once made a very accurate observation: “People often take excited silliness for a sign of vigorous intelligence.”
There is too much of that excited silliness these days. And the best way to deal with it is with a sense of humor.

SECURITY INDEX: You are proud of PIR Center’s education projects. But the PIR Center is itself an education project, in a sense. It is no secret that many young people have not stayed with the PIR Center for too long; they moved on to new projects.

ORLOV: One of these young people, who has since created a successful organization of his own, has recently told me that his new team regularly drink a toast to the PIR Center. Our organization has given many people tremendous experience and valuable expertise. We have turned out to be egregious proliferators—not of WMD, but of Russian organizations, centers, and talented researchers. Some of them have set up their own think-tanks, others now work for Russian government agencies or international organizations. They include Ivan Safranchuk, Ruslan Pukhov, Konstantin Makiyenko, Nikita Perfiliev, Sergey Ponamarev, Anton Khlopkov, and Roman Ustinov, to name but a few....

SECURITY INDEX: Which are the institutional partners you prefer to work with these days? Are there any that you would have liked to work closer with?

ORLOV: In the area of education, I like how we collaborate with MGIMO, and in the area of information, with the Kommersant publishing house. They have the best professionals and the greatest potential. I am more interested in working with those partners whose bar is set very high, and whom we can learn from.

There are also some good opportunities for analytical work at the Russian Foreign Ministry’s Diplomatic Academy. Recently, in addition to my responsibilities at the PIR Center, I was appointed head of that academy’s Center for Global Trends and International Organizations.

REQUIRED: SUSTAINABLE PROGRESS

SECURITY INDEX: PIR Center has turned 20 years old. What are the things you are satisfied with, and what are the things you are not happy with?

ORLOV: I am happy that PIR Center has become an accomplished private research center, or a boutique think-tank. There is no doubt about it. We have earned ourselves a strong reputation both in Russia and internationally. There is no doubt about that, either. I am also happy that our research and our expertise are in high demand.

We also have a dedicated team. We have the creative drive, and great potential. The latter statement is not an established fact, of course—it’s more of a hypothesis that needs to pass the test of time.

I am not happy, however, with the declining quality of education in Russia, which has already affected the quality of the young candidates for PIR Center jobs. Too often there is too much ambition but not enough knowledge. Or, in some cases, there is a distinct lack in both areas. Many talented and well-educated young people from the Russian provinces are still looking for job opportunities in the West, or these days more and more in East Asia, and regard the PIR Center merely as a catapult that can propel their careers westwards or eastwards.

I am also unhappy with the lack of sustainability of our progress and development. So far, the climate in this country is not conducive to organizations like ours bearing fruit.

SECURITY INDEX: Are you referring to financial issues?

ORLOV: Correct. Radical shifts in the international situation in recent months have convinced us here at the PIR Center that the foreign financing provided to Russian foreign-policy NGOs
for their research programs should soon be substituted with Russian financing. As far as I understand, other reputable Russian NGOs involved in foreign-policy studies are arriving at the same conclusion.

Conditions here in Russia have finally become right for progress in that direction over the past three or four years. To illustrate, Russian financing received by the PIR Center has increased by 150 percent in the past two years. Still, we should be under no illusion: the Gorchakov Fund and other mechanisms are sufficient to finance certain individual projects at the very best, but not to sustain the organizations as a whole. Now that some Russian financing is available, it has become easier to hold conferences and round tables: but surely these events should not rely on volunteers alone? Sometimes there is very little interest in follow-up measures to see what kind of impact an event that has received financing has produced on foreign-policy results. The mere fact of holding such an event becomes the sole criterion of its success. There are no measures to support publication projects or to develop modern foreign-policy techniques. In other words, we have a good supplementary source of financing for current research projects—but how are we supposed to pay for our basic day-to-day needs, for our staff members and infrastructure?

Of the two pillars on which interaction with foreign-policy NGOs must be based, only one has been formed so far. That pillar can be—and is—used by those involved in people's diplomacy, or in education and awareness programs. But there is an urgent need for the second pillar to support expert, analytical, and applied research NGOs. After all, it is these organizations that participate in international expert gatherings, set the tone, and formulate the global agenda.

**SECURITY INDEX:** The *Kommersant* daily has reported that Chairman of the PIR Center Executive Board General Yevgeny Buzhinsky and you together have submitted a proposal to the Russian Foreign Minister Sergey Lavrov outlining your arguments in favor of creating instruments for supporting expert diplomacy. You envision it as Russian expert diplomacy in terms of its origin and nature, but global in terms of its impact and scope. It includes such projects as the proposed Foreign Policy Research and Development Fund. Can you give us more details about that body? Who will enjoy that fund’s support, if and when it is set up?

**ORLOV:** What we have in mind is primarily non-governmental organizations that specialize in foreign policy and are not funded from the Russian treasury. Not all of them of course—only the ones that have already earned themselves an excellent reputation.

**SECURITY INDEX:** How many such organizations are there in Russia these days, in your estimate?

**ORLOV:** Maybe 10, at the very most. That number could be reduced to five or six if some of them merge—which might actually make a lot of sense.

**SECURITY INDEX:** And what kind of money are we talking about?

**ORLOV:** In our experience, for an expert organization to work effectively and produce a quality product—without being a one-man show—its annual budget should be at least 40 million rubles. For an organization to be dynamic, sustainable, and resilient, and for its projects to be proactive rather than reactive, another 30 million rubles is needed on top of that.

For an organization that has a solid reputation, about 25 percent of its budget can be generated by contracts with Russian government agencies and corporations. Being able to win such contracts is a measurement of an organization’s success and relevance, although it would be unrealistic for a high-quality and impartial think-tank to rely only on such contracts for its funding. Another 25 percent—at least in theory—could come from grants issued for specific projects by such Russian funds as the Gorchakov Fund, Russkiy Mir, and others.
A further 10 percent could be generated by sales of publications and other sources of income outlined in the organization’s charter.

The remaining 40 percent of an organization’s budget is what we call a zone of financial vulnerability; this funding gap represents a risk for sustainability and resilience. In other words, we are talking about a 15-million-ruble shortfall at the very least, or 30 million rubles at the very most.

Simple calculations suggest that the amount of foreign financing that needs to be substituted with Russian financing from the aforementioned fund is an annual 300 million rubles at the very most. That is the kind of money that is required not only to keep afloat the NGOs specializing in foreign policy, but actually to enable them to achieve a whole new level in their development, and to feel confident at the international level. The minimum sum that is required (based on the lower estimate of the number of NGOs that will receive this financing) is at least 150 million rubles annually. The actual figure (or the starting point for the annual budget of such a fund) is probably somewhere in the middle.

SECURITY INDEX: What are the areas of activity that you envision for the fund?

ORLOV: If the approach we propose is approved on a conceptual level, it would make sense to focus on two areas: general support for research and programs that serve Russia’s foreign-policy interests, and strategic research in high-priority fields.

The grants and donations should be issued to NGOs not only for a one-year term, but also—in the case of organizations that have earned themselves a reputation as reliable suppliers of high-quality products—for two, or in some cases even three years.

Naturally, the proposed fund’s budget should include spending on that fund’s own requirements (staff). But it is very important that the fund should not pursue its own research programs—that would kill off the whole idea. The job of the fund is to support others, and to make sure that its money is being put to good use. There should be zero tolerance for ineffective research and development programs; such programs should be denied any further financing from the fund.

We are not talking about some unrealistic amounts of money, are we? To illustrate, the Russian treasury spent as much as 250 million rubles in presidential grants in 2013 to support NGOs specializing in human rights; another 500 million rubles was earmarked for future periods. A total of 2.5 billion rubles was spent in 2013 on socially significant projects.

SECURITY INDEX: Does that mean that the Russian NGOs specializing in foreign policy should stop accepting any financing from foreign sources?

ORLOV: It would be sufficient for each individual project to have at least 50 percent of its financing coming from Russian sources (i.e. from the fund we propose, or from other Russian grants and contracts). Such a level of Russian funding would be a demonstration of Russian interest in the project. It would also be a guarantee of equality of cooperation. We believe that as long as at least 50 percent of the funding for any individual project comes from Russian sources, there is no reason to be suspicious. Any suspicious foreign grants would be disallowed early on, when the Russian side decides whether to co-finance the project.

SECURITY INDEX: Do you reckon that the proposed fund should be set up under the Russian Foreign Ministry?

ORLOV: General Buzhinsky and I believe that would be the best way to go about it. But other options can also be considered. One of them would be to set up an independent legal entity, or to designate one of the organizations that have earned a solid reputation as the operator of the fund.
Trying to build entirely new mechanisms would delay the launch of the fund, which is not what we want. Announcing the establishment of the fund over the next few months, however, would send a strong message to the rest of the world that Russia is not putting pressure on its foreign-policy NGOs, or trying to shut them down. On the contrary, it would demonstrate Russia’s respect for independent political expertise. It would show that such expertise is relevant, and that it receives support on a fair and competitive basis.

SECURITY INDEX: And what if the decision to set up the proposed fund, or a similar outfit, is not taken? What if it is postponed indefinitely?

ORLOV: That would lead to a rapid decline and fall of Russian foreign-policy real NGOs. I am not talking here about GONGOs—those government-built and government-controlled entities who pretend they are nongovernmental though they one hundred percent are.

PIR 2.0

SECURITY INDEX: It is difficult to put aside the financial, or rather financial-political issues we have just discussed. Still, if we put them aside for the moment, what are the goals and objectives you want the PIR Center to achieve in the coming months and years?

ORLOV: The goals and objectives are set by the Executive Board, not by me. But as a member of the Board, I can share my ideas with you.

The strategic course is clear: the PIR Center should contribute to the analysis of new challenges facing global development. It should contribute its expertise and the network of contacts it has established all over the world in the past two decades, while also retaining its own distinctive voice. We will contribute independent, impartial, high-quality, and proactive expertise on key international security and foreign policy problems, including nuclear nonproliferation, the Iranian nuclear problem, European security, the role and place of BRICS, etc.

We are determined to strengthen the PIR Center, which has evolved over the past 20 years into an independent platform for dialogue on the most pressing foreign-policy issues.

SECURITY INDEX: So the PIR Center will retain its independent, nongovernmental status?

ORLOV: Certainly, if it wants to keep its reputation intact.

SECURITY INDEX: Should it also remain a not-for-profit organization?

ORLOV: The case for that is less clear-cut. Even if the PIR Center retains its not-for-profit status, this should not be taken to mean that we provide services free of charge. The relevance of our publications, consultancy products, educational, and other services should increasingly be measured by the willingness of our customers and the consumers of these products to pay for them.

SECURITY INDEX: There is one thing I completely fail to understand: in the first issue of Security Index that came out eight years ago, you published From Pindemonte by Alexander Pushkin, as if by way of a keynote speech. "Quite other, better rights are dear to me"..."To be accountable to no one"... When one reads these lines today, they don’t quite seem to be in step with the times. How can one be accountable to no one? And what does it have to do with Security Index?

ORLOV: First, Pushkin is always in step with the times. And second.... Well, I am not even
sure.... Second, there may really be a contradiction here. Perhaps an irresolvable one. But Pushkin is right.

SECURITY INDEX: You have already mentioned that you would welcome opportunities for the PIR Center to enter into various partnerships. Are there any limitations here?

ORLOV: I would welcome the kind of partnerships that improve the PIR Center’s capability to achieve its goals in terms of creativity, finance, logistics, and educational projects—but without impinging on the organization’s independence. We are ready to enter into such alliances and partnerships for some specific individual projects, larger programs, and broader goals involving our organization as a whole.

SECURITY INDEX: Do you have any geographic priorities? Which parts of the world should the PIR Center focus on?

ORLOV: We are still very interested in Europe. It has become glaringly obvious that the European security architecture is broken. Sooner or later, a new architecture will have to be created on the ruins of the old one; not much can be built merely from the memories of Helsinki 1975. Another region we focus on is the Middle East, of course. We have a pool of reputable experts here, and an extensive network of contacts with applied research centers in various countries of the region. Another fairly recent focus is on Southeast Asia. In this region we have yet to make progress in terms of comprehensive research, although some individual studies—focusing on Myanmar, in particular—have already been noticed by the relevant agencies in Russia and Southeast Asian countries. Finally, another priority is Central Asia. PIR Center staff have accumulated a wealth of expertise on this subject, but so far it is not part of some overarching objective, and remains rather disjointed, for the time being.

SECURITY INDEX: This celebration of the PIR Center’s 20th anniversary—is it a celebration of stability and a steady course, or a warm-up before a revolution?

ORLOV: There will be no revolutions. But the PIR Center is a young and dynamic team. And the task it is facing is to reformat 2.0 into 2.0. In other words, yes, I do believe that the entire PIR Center and its projects should be reformatted. PIR 2.0 is what these times are calling for.

THE RHINO’S FATE

SECURITY INDEX: So there will be changes in the PIR Center’s methods and technologies?

ORLOV: Undoubtedly so. We must make the best use of the opportunities opened up before us by the latest technologies, without any delay. That includes our office policy (we have already begun to get rid of the idea that the office is merely a place for staff to loiter about, and Microsoft’s Office 365 helps); the ways of conducting educational and research events that involve foreign participants (Skype conferences, webinars); and promoting our products (via our website and e-newsletters).

SECURITY INDEX: But you don’t believe that the electronic media can entirely replace the print media?

ORLOV: This may disappoint you, but I do believe exactly that, actually. In my view—and, please, do not forget that I received education and training in classical journalism schools—the print media’s days are numbered. OK, maybe they have a few years left. But paper is no longer of any real use to publishers, readers, or libraries. We just need to learn how to produce high-quality electronic publications. And I think this is not a matter of distant future for Security Index, either.
SECURITY INDEX: And what about the rhino on the front cover? We have all got used to it by now.... And why the rhino, by the way?

ORLOV: To me, the rhino is a symbol of how relative security is. The rhino seemed to have everything going for it: the armor, the power, the strong defenses. And yet, it is now on the verge of extinction. It has proved to be vulnerable.

SECURITY INDEX: Global security has also proved to be very vulnerable. In recent months its foundations have become increasingly shaky. What is your forecast for the iSi security index?

ORLOV: We have entered another Cold War. But it will be less predicable than the previous one, which was fought in a bi-centric world. Global tensions will continue to rise. So will the intensity of regional conflicts. Ukraine is not at the heart of it. Ukraine is merely a symptom of larger problems. I do not believe in controlled chaos. But the world plunging into chaos while some actors continue to pretend that they are still in control—I do believe that is a realistic prospect. The world is sliding towards that scenario.

SECURITY INDEX: There is a macabre joke in the medical profession: the more ice on the pavement, the more work for us. Bad news in the international arena will mean more subjects for PIR Center research. But can an independent research organization continue to exist, let alone bear fruit, during a Cold War?

ORLOV: That is a fair question. Time will tell. As for that medical joke, I often find myself wondering these days: do we still need surgeons with a scalpel, or have new times already arrived, with butchers and bludgeons running the show here in Russia?

Actually, there is no doubt that new times have in fact arrived. The only question is what kind of instruments these times call for.

SECURITY INDEX: To come back to what we started this interview from: when you founded the PIR Center, how did you envision that organization 20 years down the line? And what is your vision for the PIR Center in another 20 years’ time?

ORLOV: I did not plan that far ahead back in the early days. We sometimes seemed to follow Tyutchev’s advice: “We have survived through the day, thank God for that.”

I am glad that the PIR Center is still moving forward. I like the PIR Center team very much. We have clear goals and objectives for tomorrow and the day after; I have already outlined some of them. I do believe that the PIR Center team is up to that challenge. But the PIR Center is not my sole identity, and vice versa. Thank God, that is not the case, thanks to our team play spirit. To me, the PIR Center is not a lifelong project. I remember well Chancellor Gorchakov’s words: “The greatest difficulty is knowing when to stop.”

So it’s time to call it a day, I think.

NOTES

1 The interview was recorded in Zvenigorod in the Moscow region on June 8, 2014.
2 The word pir means a feast in Russian [translator’s note].
For many years, the Iranian nuclear program has remained one of the key flashpoints in international politics and one of the most sensitive issues in the Greater Middle East. But just over a year since the election of Hassan Rouhani as the new Iranian president, resolution of the Iranian nuclear problem seems to be closer than ever. What is Iran’s own vision of its nuclear industry development goals, and what does it hope for in terms of international cooperation in that area? Does it regard Russia as a promising partner for current and future nuclear energy projects? And what are the basic principles of the Iranian leadership as far as nuclear nonproliferation is concerned? Security Index has put these and other questions to Ambassador Extraordinary and Plenipotentiary of the Islamic Republic of Iran to the Russian Federation, His Excellency Mehdi Sanaei.

SECURITY INDEX: Now that the Russian-built Bushehr nuclear power plant is up and running, Iran has become a full member of the global nuclear energy market. What is the Iranian vision of the global nuclear industry’s future, and does Iran believe that nuclear energy poses a threat to humankind?

SANAEL: As you know, the global population is projected to increase by 2 billion people over the next 30 years. Nuclear energy can help to meet the planet’s growing energy demand and counteract climate change, so global demand for nuclear energy will continue to increase.

There are currently 438 nuclear power reactors in operation in countries around the world. They produce 17 percent of the world’s electricity. China intends to build 30 nuclear power reactors over the next 20–25 years. The United States has issued approval for another 15–20, and Britain for 6–10. Countries such as Finland and France are also seriously considering the possibility of building new NPPs. Some other countries, such as Germany, are moving towards reviewing their earlier decision to abandon nuclear energy. The global economy keeps growing, and according to some projections by 2050 global energy demand will have doubled compared with 2000.

The IAEA director-general has said that greenhouse gas emissions and rising global temperatures could cause an environmental catastrophe and kill billions of people; to prevent that catastrophe, the number of nuclear power plants will have to increase 20-fold. Rising global temperatures and fossil fuel prices are propelling nuclear energy to the forefront of many national energy programs.

There are, however, major concerns in connection with nuclear energy development. The biggest of them is the risk of nuclear energy being used to wage war and threaten the entire human race.
SECURITY INDEX: Iran has always positioned itself as a staunch opponent of the proliferation of WMD, including nuclear energy. Has that position undergone any changes since the election of President Hassan Rouhani?

SANAEEI: Iran has always been decisively opposed to nuclear weapons possession. Such weapons have no place in the Iranian defense doctrine. The Iranian nuclear program has a strictly peaceful nature; it is entirely in line with the rights and obligations stipulated in the Nuclear Non-Proliferation Treaty. In fact, the Supreme Leader of Iran, Ayatollah Khamenei, has issued a fatwa against nuclear weapons. This is a religious edict that is based, among other things, on the understanding of the humanitarian consequences of nuclear weapons use. That edict is based on our firm beliefs and values, and on our understanding of the need to provide security for all.

Our country has repeatedly declared at the very highest levels that its nuclear program has always been and will always remain strictly peaceful. The rights and responsibilities stipulated in the NPT give Iran and other members of the treaty an inalienable right to peaceful use of nuclear energy.

SECURITY INDEX: What do you regard as the main nuclear weapons nonproliferation problems? And what are the steps that can be taken to address them?

SANAEEI: Forty years ago the international community concluded the Nuclear Non-Proliferation Treaty as a basis of nuclear disarmament and the nuclear nonproliferation regime. According to that treaty, the non-nuclear-weapons states have undertaken an obligation never to seek nuclear weapons, while the nuclear-weapons states have undertaken an obligation to destroy their nuclear arsenals. Taken all together, these decisions constitute two pillars of the NPT. The third pillar is the NPT members' inalienable right to use nuclear energy for peaceful purposes, as well as to pursue nuclear energy cooperation.

Clearly, the continued existence of thousands of nuclear warheads constitutes a grave threat to mankind. There is an urgent need to agree a clear timeframe, with a concrete deadline, for fully implementing the provisions of Article VI of the NPT. The deadline proposed at the 2010 NPT Review Conference was 2025, for example. To that end, the countries that possess nuclear weapons must develop and implement concrete measures completely to eliminate nuclear weapons from their military doctrines and security strategies. The international community cannot wait forever for a complete elimination of nuclear weapons.

SECURITY INDEX: One of the possible steps being discussed by the international community in the context of WMD nonproliferation is the establishment of a WMD-free zone in the Middle East. What is the Iranian view of that initiative and its chances of being implemented?

SANAEEI: The establishment of a nuclear-weapon-free zone in the Middle East was proposed by Iran in 1974 as a next step towards a world free of nuclear weapons. Unfortunately, that initiative has yet to be implemented. The conference on establishing a WMD-free zone in the Middle East, which was supposed to be held in 2012, has yet to be convened, despite a unanimous decision to that end by the 2010 NPT Review Conference.

Iran has been a victim of WMD used against it by another country. It firmly believes that the international community must find a speedy way towards fully eliminating the threat of deliberate or accidental use of nuclear weapons. The nature of those weapons and the instant catastrophic consequences of their use make it necessary for all of us to work together in order to preserve mankind. The next NPT Review Conference in 2015 should seek progress towards a process of declaring all nuclear weapons illegal, and completely eliminating them in an expeditious fashion.

SECURITY INDEX: What is the current state of Iran's cooperation with the IAEA?
SANAEI: Following the election of Hassan Rouhani as president, the foreign policy of our country is based on constructive cooperation and mutual respect. Over a relatively short period of time we have managed to open up new opportunities, and to make important achievements in our cooperation with the IAEA. Our full cooperation with that agency, which in some cases goes beyond the scope of the Safeguards Agreement and includes voluntary steps as part of the Joint Action Plan and Cooperation Framework, demonstrates our good will and genuine efforts by Iran to fulfill its commitments. As a matter of priority, we are seeking to achieve maximum transparency and eliminate artificially created uncertainties over Iran’s nuclear activities.

SECURITY INDEX: Apart from the nuclear problem, what are Iran’s international and regional security priorities? And how are they being pursued in the international cooperation format?

SANAEI: Speaking after his election as President at the 68th Session of the UN General Assembly in 2013, Dr Rouhani proclaimed a new goal of a world free of violence, and called for joint efforts against extremism. These initiatives were supported in a UN General Assembly resolution. Such a proposal by the Iranian president could become a beacon that lights the way towards achieving peace and security all over the world by means of eradicating violence and extremism. It was also decided to hold the first international conference against violence and extremism in Tehran on December 9–10, 2014.

SECURITY INDEX: How realistic is the prospect of Iran and the six international mediators reaching a comprehensive agreement over the next few months?

SANAEI: The window of opportunity to reach the comprehensive agreement remains open. For our part, we have no doubts or hesitations whatsoever about our own commitment to achieving that goal. At the same time, much will also depend on the mediators, on our partners in this dialogue.

In addition, irrespective of the comprehensive agreement negotiations I would like to emphasize the importance of broader cooperation between NPT members in many areas. The priorities here include cooperation on nuclear safety and security, as well as technical cooperation. Efforts in that area could make a major contribution to the well-being and prosperity of our peoples, and Iran is ready and willing to participate in such efforts.
Vietnam launched its first projects in the field of nuclear power at the end of 1990s. Today the annual total power generation in the country has reached 20GW. The governmental programs imply that the nuclear power plants (NPPs) will already provide 15 percent of the nation's demand for power supply by 2015. In order to meet this ambitious goal Vietnam has been intensively developing international cooperation with the nuclear powers that possess vast experience in this field. The list of major Vietnamese partners in the field of nuclear power includes Russia, the United States, France, South Korea, and Japan. Cooperation with Russia is a special priority for Vietnam. In October 2010, an intergovernmental agreement between Russia and Vietnam was signed which implied construction of the NPP Ninh Thuan 1 which includes two electric power units with 1.2MW pressurized water reactors (PWRs). The first power unit is planned to be brought into operation by 2020.

Security Index discussed the development of the Vietnamese nuclear energy industry, its priorities in terms of international cooperation, aims for the future, and plans for further cooperation with Russia with Director General of the Vietnam Atomic Energy Agency Dr Hoang Anh Tuan.

SECURITY INDEX: In recent years, Vietnam has been actively implementing its plans of construction of a NPP. What is the role of the nuclear energy in the Vietnamese power industry? What share of the national power generation mix is nuclear power expected in reach in the foreseeable future?

TUAN: Nuclear power today plays an important role in ensuring the energy security, environmental protection, and industrialization of Vietnam. This type of power generation is planned to make a considerable contribution to the national electricity generation mix of Vietnam in the period up to 2030. It is also expected that the role of nuclear power for the national electricity generation mix will further increase by 2050. A share of 20–25 percent of total power generation should be provided by the nuclear power industry by that time.

A major milestone on the way towards implementation of these goals was achieved in November 2009. Then the National Assembly of Vietnam passed Resolution No. 41/2009/ NQ-QH12 on investment in the Ninh Thuan Nuclear Power Project, which consists of Ninh Thuan 1 and Ninh Thuan 2 NPPs (NPPs). Each of the NPPs will have two 1,000MW power units of the PWR type.

SECURITY INDEX: How is the preparation for the construction of Ninh Thuan 1 NPP being conducted? What role does Russia play in these activities?

TUAN: In October 2010, Vietnam and Russia signed the Intergovernmental Agreement on the construction of the Ninh Thuan 1 NPP. Since then, multiple activities have been conducted in the framework of cooperation with Russia, which were aimed to contribute to the implementation of the project. In November 2011, the Agreement on Credit Support by the Russian Federation for the Construction of the Ninh Thuan 1 NPP was signed. One year
later, in November 2012, the Agreement on the Construction of the Center for Nuclear Energy Science and Technology (CNESST) in Vietnam was signed, which is expected to help Vietnam in building capacity for a nuclear workforce.

In November 2011, Vietnam Electricity (EVN), the largest power company in Vietnam with installed electricity generation capacity of 8,860MW, signed the Contract on Consulting Service for development of the Site Approval Dossier (SAD) and Feasibility Study (FS) of the Ninh Thuan 1 Nuclear Power Project with the Consortium consisting of E4 Group Jsc., KIEP Jsc., and EPT Llc. Currently, both the Feasibility Study and Site Approval Dossier for Ninh Thuan 1 NPP are largely completed.

**SECURITY INDEX:** Expanding the topic of Russia–Vietnam cooperation in the nuclear power area, what mechanisms are used to promote education, training, and human capacity building for the nuclear power industry?

**TUAN:** Taking into account the priority of human resource development, the Ministry of Education and Training of Vietnam has sent around 320 students to the National Research Nuclear University MEPhI in Moscow for undergraduate and graduate programs on nuclear power since 2010. The government agency will continue sending students to Russia for nuclear programs in coming years.

Regarding public information and communication, in October 2011, the Ministry of Education and Training and Rosatom State Nuclear Energy Corporation signed an agreement on the establishment of the Atomic Energy Information Center located in Hanoi. The Center opened just one year later, in December 2012. Also, Vietnam and Russia have exchanged information on NPP technologies in order to select safe, proven, and advanced technology for the Ninh Thuan 1 NPP.

In general, the two nations have achieved comprehensive cooperation in the work on implementation of the Ninh Thuan 1 NPP Project through joint activities in the project’s framework, human resource development, and public information.

**SECURITY INDEX:** At what stage is the preparation for the Ninh Thuan 2 Nuclear Power Project currently, and how has it been conducted?

**TUAN:** In 2011, the Intergovernmental Arrangement on the Construction of the Ninh Thuan 2 NPP was signed by Vietnam and Japan. Activities supporting the implementation of the Ninh Thuan 2 NPP Project have been conducted almost in parallel with the implementation of the Ninh Thuan 1 Nuclear Power Project. The EVN signed the Contract on Consulting Service for development of the Site Approval Dossier (SAD) and Feasibility Study (FS) of the Ninh Thuan 2 project with the Japan Atomic Power Company (JAPC) in September 2011. Similarly to the Ninh Thuan 1 case, the FS and SAD of the Ninh Thuan 2 NPP are almost finished now. The siting has also taken into account the risks to plant safety that might potentially arise from natural disasters such as tsunami and earthquakes.

**SECURITY INDEX:** These comments provide quite a clear and optimistic picture of Vietnamese cooperation with two advanced actors in the global nuclear power market—Russia and Japan. As for some broader frameworks of international cooperation in this area, is Vietnam involved in such multilateral formats and mechanisms? Did the Socialist Republic join any international treaties or conventions regulating the nuclear power sector?

**TUAN:** So far, Vietnam has signed governmental agreements on the peaceful use of atomic energy with eight countries: Argentina, China, France, India, Japan, Korea, Russia, and the United States. With regard to the international norms in the field of nuclear security, Vietnam signed the Additional Protocol to the Safeguards Agreement in August 2007 and ratified it in September 2012. In October 2012, the country acceded to the Convention on Physical Protection of Nuclear Material (CPPNM) and ratified its Amendment. In September 2013, Vietnam took part joined the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Source Management. Also, Vietnamese representatives actively participated in the Nuclear Security Summits in 2010, 2012, and 2014.

**SECURITY INDEX:** How much attention is paid in Vietnam to the issues of nuclear safety with regard to the country’s new ambitious projects? Did the incident of 2011 at the Fukushima 1 NPP influence the methods and approaches that Vietnam has developed with regard to nuclear safety issues?
 TUAN: With regard to nuclear power, Vietnam conducted the Pre-Feasibility Study on Nuclear Power Introduction during the 1990s. In the process of development of its national nuclear power infrastructure, Vietnam has continuously received significant support and assistance from the International Atomic Energy Agency (IAEA).

Special attention has been paid to the comprehensive and simultaneous development of nuclear infrastructure in Vietnam to ensure safety, security, and safeguards. After the Fukushima accident, the Vietnam Government has shown its consistent commitment to pursuing a nuclear power program and has put the highest priority on the nuclear safety and security of the NPP projects.

SECURITY INDEX: The issues of international cooperation and assistance to developing countries implementing their programs in the field of nuclear power cannot be discussed without mentioning the IAEA and its role. How does the Agency assist in the development of the nuclear power infrastructure and promote a nuclear security and safety culture in Vietnam?

 TUAN: As a newcomer in the nuclear energy field, Vietnam has received valuable support from the IAEA and advanced nuclear power countries such as Russia, Japan, Korea, France, and the United States in developing its nuclear infrastructure. The Vietnam Atomic Energy Agency, in cooperation with relevant organizations, has been promoting national capacity building and conducting studies on the international experience of participation in supply chain and local industries' involvement in the NPP projects. These two working directions were listed among the 19 infrastructure issues according to the IAEA Milestones guide, so they are indeed important.

In January 2014, Mr Yukiya Amano, the Director General of the IAEA, during his second visit to Vietnam stated that Vietnam demonstrated significant progress in nuclear infrastructure development since the official decision to launch a nuclear power program was made in 2009. However, a lot of work still had to be done. He also reaffirmed that the IAEA was ready to support Vietnam in preparation of the necessary infrastructure for the safe and secure implementation of the Ninh Thuan Nuclear Power Project.

Finally, it is important to note that during the past decades Vietnam has received effective, fruitful, and timely technical assistances from the IAEA as well as from other advanced nuclear power countries. It should also be mentioned that the IAEA Integrated Nuclear Infrastructure Review (INIR Mission) conducted in Hanoi in December 2012, and the IAEA Integrated Regulatory Review Service (IRRS Mission) conducted recently in October 2014 have shown the important contributions of the IAEA’s experts and international experts invited by the IAEA to Vietnam’s preparation for nuclear power introduction.
The Third Session of the Preparatory Committee for the 2015 NPT Review Conference was held in New York on April 28–May 9, 2014. In his opening speech, the Chairman of the Third Session, Peruvian Ambassador Enrique Roman-Morey, had this to say: “The realism I am talking about must make us understand that there is no miraculous way to make nuclear weapons disappear overnight, or during the period between two Review Conferences.” Ambassador Roman-Morey would have been no less genuine had he added that neither did he know of any miraculous way to eliminate all the differences between the NPT member states—even though such a miracle would have been very useful.

The third session of the Preparatory Committee (PrepCom), which is the last before the Review Conference itself, has always been the most important. The job of the Third Session is to approve a unanimous report containing recommendations for the upcoming NPT Review Conference of 2015. Given the numerous disagreements between the NPT members, the task of achieving a coordinated position of 198 members is extraordinary, to say the least.

The contradictions between the participants were numerous and deep. At the Second Session of the Preparatory Committee in 2012, the Egyptian delegation walked out in protest at the lack of progress in convening the conference on establishing a weapons of mass destruction (WMD)-free zone in the Middle East. Since there has not been much progress on the Middle Eastern front over the past 12 months, further démarche were expected from the regional actors. The Action Plan adopted at the 2010 RevCon stood a good chance to become another source of tensions since many of the actions it contains have yet to be implemented. The plan was adopted by a unanimous vote in 2010, and was hailed as a clear achievement of the 2010 RevCon in the diplomatic community. Now, however, it is thought to have been overly optimistic. The delegations of the five nuclear-weapon states were expected to come under a great deal of pressure from the anti-nuclear movement within the NPT. Finally, the Third Session was taking place amid a sharp deterioration in the international situation because of the crisis in Ukraine. It was just over a month since Crimea became part of Russia, and since Moscow’s expulsion from the G8. At the Nuclear Security Summit in The Hague, the G7 representatives discussed not only the key subject matter, i.e. bolstering the security of fissile materials, but also the situation in Ukraine. Kiev was accusing Russia of violating the Budapest Memorandum, under which Ukraine was given security assurances in return for the country’s accession to NPT. The issue was bound to become part of the PrepCom agenda. So, to summarize, the Third Session was facing a whole host of contentious and intractable issues.

ON THE WAY TOWARDS PREPCOM

Nuclear disarmament issues have always been at the center of the NPT review process. The very principle of dividing countries into two groups—those that have nuclear weapons, and those that do not—has been very contentious right from the start. Many countries regarded
that principle as discriminatory. The NPT itself addresses the issue in Article VI, which reads that “Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to...nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.” The absence of any clear deadlines for disarmament left that article wide open to interpretation. The non-nuclear-weapon states (NNWS) have regularly accused the nuclear-weapon states of failing to achieve progress on disarmament and thereby violating the spirit of the treaty. In response, the five nuclear-weapon states (NWS) argued that the text of the treaty links nuclear cuts to conventional arms reductions.

Meanwhile, the nuclear disarmament process was taking place primarily outside the NPT Review Process, in the form of either bilateral agreements (the strategic offensive reductions treaties between Russia and the United States) or unilateral initiatives (the British and French reductions). As one of the NWS diplomats put it in a private conversation, “All the real work is taking place in formats other than the NPT Review Conferences.”

The movement for nuclear disarmament was not limited to the NPT framework, either. In July 1996, at the request of the UN General Assembly, the International Court ruled that, on the whole, using or threatening to use nuclear weapons would constitute a breach of international humanitarian law. The General Assembly annually adopts resolutions related to nuclear disarmament. Since these resolutions are not legally binding, in December 2013 alone more than 10 nuclear-related resolutions were passed, including Resolution 68/58 “Convention on the Prohibition of the Use of Nuclear Weapons” (passed by 126 votes to 49), Resolution 68/47 “Nuclear Disarmament” (122 votes to 44), and Resolution 68/40 “Reducing Nuclear Danger” (125 votes to 50).

The disarmament movement is spearheaded by a group of countries that are active both in the review process framework and on other international platforms. Their reasons and goals are not necessarily the same. Efforts by the Non-Aligned Movement (NAM) and the New Agenda Coalition (NAC) were well in line with the traditional north–south division. But the emergence of the Non-Proliferation and Disarmament Initiative (NPDI) in 2010 heralded the beginning of a new phase. The promotion of the nuclear disarmament efforts by countries protected by the U.S. nuclear umbrella demonstrated to Washington and the other NWS that energetic calls for nuclear disarmament are becoming part of the mainstream.

Finally, on May 2, 2012, a Swiss representative at the First Session of the Preparatory Committee for the 2015 Review Conference announced the Joint Statement on the Humanitarian Dimension of Nuclear Disarmament. On behalf of 16 countries, including some NAC and NPDI members, the Statement emphasized the catastrophic consequences of possible use of nuclear weapons, and urged the nuclear powers to abide by international humanitarian law in that area. A similar statement by a Swiss representative at the First Committee of the UN General Assembly in the autumn of 2012 was backed by 35 countries.

On March 4–5, 2013, Oslo hosted the First Conference on the Humanitarian Impact of Nuclear Weapons, which was attended by delegates from 128 states. A statement by the Humanitarian Initiative made at the Second Session of the Preparatory Committee was supported by 80 countries, i.e. by almost half of the NPT members.

Martins Pundors, Head of Arms Control Division of the Security Policy Department at the Ministry of Foreign Affairs of Latvia:

Latvia participated in the first humanitarian conference in Oslo and is generally supportive of the humanitarian initiative. At the same time, we believe that discussion of the nuclear disarmament process will not be effective without the participation of the nuclear-weapon states.

Amb. Benno Laggner, Head of the Division for Security Policy at the Swiss Federal Department of Foreign Affairs:

The humanitarian consequences narrative is now firmly anchored in the review process. I think you can already see in some of the statements that some delegations of the nuclear-weapon states are realizing that this is not an issue that will go away. And now of course the major question is to see, can we find some areas of convergence, where we can have something stronger in the outcome document in 2015 on nuclear disarmament in
response to this humanitarian narrative. And there will have to be something more than just repeating what was in there in 2010. But it also has to be something realistic enough to make it possible for the nuclear weapon states to join the consensus.

The Second Conference on the Humanitarian Impact of Nuclear Weapons was organized by the Mexican government in February 2014. It was universally ignored by the five nuclear-weapon states. Nevertheless, the foreign ministries of Britain, China, France, Russia, and the United States shared the understanding that the PrepCom will be a serious trial in that regard.

The trial was not long in coming. On April 24, 2014, four days before the launch of the Third Session of the Preparatory Committee, one of the Humanitarian Initiative members, the Marshall Islands, launched legal action in the International Court against all nine countries that possess nuclear weapons, demanding that these states relinquish their nuclear arsenals.10

UNIVERSAL DISARMAMENT IN THE REVIEW PROCESS FRAMEWORK

Six months before the start of the Third Session of the Preparatory Committee, during a session of the First Committee of the UN General Assembly, 125 countries (63 percent of the total number of NPT members) supported the Joint Statement on the Humanitarian Consequences of Nuclear Weapons, which was proposed by a New Zealand representative. That humanitarian initiative, backed by an impressive number of countries representing different groups, was expected to have a significant impact on the work of the Preparatory Committee. However, from the very first day of the session, contradictions began to emerge between members of the initiative.

A speech by the Indonesian foreign minister on behalf of the Non-Aligned Movement11 contained no mention of the humanitarian conferences in Oslo and Nayarit. The very word “humanitarian” was used only in the context of international humanitarian law. The Non-Aligned Movement emphasized instead the need to ban nuclear weapons by signing an international convention. In private conversations, European members of the Humanitarian Initiative described such actions as counterproductive.12

Switzerland, one of the founders of the Humanitarian Initiative, during the Third Session put an emphasis on one practical aspect of disarmament, and spoke on behalf of a group of countries that are calling for a reduction in the operational status of nuclear weapons (the De-alerting Group).13 The Swiss representative, Ambassador Benno Laggner, said that even though such a measure was contained in the 2010 Action Plan, the five nuclear-weapon states have not undertaken any new measures in that area. Chile, Malaysia, Nigeria, New Zealand, and Switzerland urged the countries that possess nuclear weapons to reduce the operational status of their nuclear arsenals, citing positive experience from the period at the end of the Cold War and the high risks of maintaining that status at its current level.

Ambassador Uffe Balslev, Undersecretary for Disarmament, Non-Proliferation and Arms Control, Kingdom of Denmark:

We see the Humanitarian Initiative as a sort of third track, where the first track is the traditional military balance negotiations, and the second track is the old discussion of legality of nuclear weapons based on the 1996 advisory opinion from the International Court of Justice. This is sort of a third, separate track and, so far, we think it has worked fine, it has energized the debate. Of course, there has been criticism from particularly the P5, but this shows that they are sensitive to this aspect, as well. The danger now is that when you have a group of 125 countries there appear tendencies to split up.

Iran, which has always been very critical of the Western states during the NPT Review Process, was a lot less outspoken in 2014. The interim agreement on settling the Iranian nuclear problem signed in November 2013 was being faithfully implemented by all the parties, and they had no interest in stoking up confrontation. The head of the Iranian delegation at the PrepCom was Hamid Baidi-Nejad, Director General for Political and International Affairs at the Iranian Foreign Ministry and member of the Iranian delegation at the nuclear talks. He appeared determined to keep the dialogue constructive. A general improvement in relations between Iran and the Western countries helped to reduce tensions and contributed to the friendly atmosphere that many participants of the PrepCom commented upon.
Even though many countries made references in their statements to the humanitarian consequences of the use of nuclear weapons, the Humanitarian Initiative failed to present a united front at the PrepCom.

THE NUCLEAR FIVE

The five official nuclear-weapon states have always had a special place among the NPT members due to their additional rights and obligations. They have held special annual conferences since 2009 to coordinate their joint positions on the entire range of nuclear nonproliferation and disarmament issues. NWS representatives had also adopted a consolidated position on the humanitarian dimensions of nuclear weapons.

Nevertheless, five days before the NWS meeting in Beijing, the U.S. Under Secretary of State for Arms Control and International Security Rose Gottemoeller visited Japan, where she took part in a ministerial meeting headlined Disarmament and Nonproliferation Initiatives. In unofficial comments, representatives of the other NWS said the United States was trying to keep a foot in both camps. Speaking later at the Third Session of the Preparatory Committee, Gottemoeller also noted that it was important to remember the human consequences of using nuclear weapons. As she argued, “Indeed, it is the United States’ deep understanding of the consequences of nuclear weapons use—including the devastating health effects—that has guided and motivated our efforts to reduce and ultimately eliminate these most hazardous weapons.”

Overall, however, representatives of the nuclear-weapon states pursued similar policies at the PrepCom. On May 6, 2014 the representatives of Russia, Britain, China, France, and the United States met on the margins of the PrepCom to sign a protocol to the Central Asian Nuclear-Weapon-Free Zone Treaty (also known as Semipalatinsk Treaty). This set a precedent of a simultaneous signing of a protocol by all five nuclear-weapon states—a rare display of unity among the permanent members of the UN Security Council.

André Sobral Cordeiro, Head of Disarmament and Non Proliferation Division of the Security and Defence Department at the Directorate-General of External Policy of the Ministry of Foreign Affairs of Portugal:

As for the catastrophic humanitarian consequences of the use of nuclear weapons, there are no doubts about it, everything is quite obvious. But unlike many other countries, we believe that only the use of nuclear weapons can have humanitarian consequences, not nuclear weapons as such. That is a significant difference in our approaches, and we will not accept such wording.

Almost eight years after the signing of the Semipalatinsk Treaty, the official nuclear-weapon states undertook a legally binding obligation to respect and observe the status of the NWFZ and not to use, or threaten to use, nuclear weapons against Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. By the standards of the nuclear-weapon states’ usual approach to such protocols, the decision on Central Asia was adopted fairly quickly. The Treaty of Rarotonga, which established an NWFZ in the South Pacific, was signed in 1985, but the United States has yet to ratify the protocols to that treaty.

The issue of signing the protocols posed no difficulties for Russia, not least because three of the five regional states involved are Moscow’s allies in the Collective Security Treaty Organization. The Western NWS, however, had several objections to the protocol. They had a particular problem with Article 12 of the treaty, which stipulates that previously signed agreements shall have priority over the provisions on establishing an NWFZ in Central Asia. Washington, London, and Paris were concerned that in view of Central Asian states’ membership of a Russian-led military alliance, Article 12 was a loophole that could potentially allow Russia to station nuclear weapons on these states’ territory. In the end, that concern was addressed by interpretive statements and qualifications to the protocol.

It is traditional for nuclear-weapon states to sign protocols to NWFZ treaties only with interpretive statements and qualifications. For example, in 2012 Russia signed the protocol to the Treaty of Bangkok only after the inclusion of an interpretation regarding the geographic scope of the zone, and two conditions under which Russia would no longer be bound by the protocol’s provisions (an attack against Russia or its allies involving a nuclear-weapon
state, and violation of the treaty’s provisions by a member state). The Central Asian NWFZ was no exception, and all five nuclear-weapon states signed the protocols only with qualifications.

To summarize, there were great worries that events in Ukraine and growing confrontation between Russia and the West would have a detrimental effect on the NPT—but these fears proved unfounded.

According to the U.S. Under Secretary of State Rose Gottemoeller, the United States remained open to talks with Russia on further nuclear arms reductions, including strategic and non-strategic weapons. “Recent actions have significantly undermined mutual trust and that trust will take time to rebuild,” she said in a statement. “Still, no one should forget that even in the darkest days of the Cold War, the United States and the Soviet Union found it in our mutual interest to work together on reducing the nuclear threat.”

Even though the Third Session of the Preparatory Committee was held just over a month after Crimea became part of Russia, the situation in Ukraine did not have any major impact on its work. The full title of the Budapest Memorandum, which guaranteed Ukraine’s territorial integrity, is the Memorandum on Security Assurances in Connection with Ukraine’s Accession to the Treaty on the Non-Proliferation of Nuclear Weapons. Nevertheless, it was essentially a four-party agreement between Kiev, Moscow, London, and Washington. Most of the delegates at the Third Session were only happy to let these four capitals sort out the problem with the Budapest Memorandum on their own. Even though several countries expressed concern, the Ukrainian issue was reflected mostly in an exchange of statements between the heads of the Russian and Ukrainian delegations, Mikhail Ulyanov and Yury Sergeyev.

NONPROLIFERATION AND NUCLEAR ENERGY

As expected, the nonproliferation and peaceful use of nuclear energy issues (Clusters 2 and 3) proved less controversial than the topic of disarmament.

As far as nonproliferation is concerned, the key issue was achieving universal membership of the Additional Protocol to the Safeguards Agreement with the IAEA. The Brazilian representative focused in his statement on the discriminatory nature of the approach to NPT members’ rights and responsibilities, whereby the countries that abide by the treaty are faced with a constantly growing burden of responsibilities. In Brazil’s opinion (which is shared by many other members of the Non-Aligned Movement), relations between the IAEA and an NPT member state must be regulated only by bilateral agreements with the Agency. For all the importance of the Additional Protocol, its signing should be a sovereign matter for each individual country to decide. Decisions of the IAEA Board of Governors and the 2010 Review Conference Action Plan have demonstrated that countries cannot be bullied into signing the Additional Protocol.

The issue of establishing a WMD-free zone in the Middle East did not draw quite as much attention as in 2013. Speaking on behalf of the Arab Group, the Iraqi delegation said that unless the conference on establishing such a zone is convened before the 2015 NPT Review Conference, the Arab countries might review their support for the indefinite extension of the NPT. In practice, that meant that the region’s countries and the three co-sponsors of the 1995 resolution (Russia, Britain, and the United States) had another year to revitalize the process and achieve a satisfactory result.

The situation with the peaceful nuclear energy issues within the Review Process framework is quite similar to the situation with disarmament. Even though the division between the haves and the have nots is not so stark in the nuclear energy sphere, it is still very much present. The countries that do not possess nuclear technologies—especially the Non-Aligned Movement states—insist that peaceful nuclear energy development is an inalienable right of every NPT member. The states that have highly developed nuclear technologies (most of them are members of the Nuclear Suppliers Group) advocate restrictions on access to certain parts of the nuclear fuel cycle, and make the level of peaceful nuclear energy cooperation with third countries contingent on those countries’ nonproliferation record. In recent years, this issue has gained prominence. More than a third of the paragraphs in the 2010 RevCon Final Document (47 to 121) are related to Article IV of the Treaty.
Tariq Rauf, Director of Disarmament, Arms Control and Non-Proliferation Programme at Stockholm International Peace Research Institute:

Participants of the Preparatory Committee were mostly concerned with the issues where their approaches differed, however they also saw that there were a number of issues where the approaches of the delegations converged. This is a positive sign. If we avoid any new cataclysms between now and 2015, I believe we could get to the Review Conference in a similarly good atmosphere.

One of the mechanisms of facilitating the third countries’ access to modern nuclear technologies in the framework of Article IV of the NPT is the IAEA’s International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO). The initiative was proposed by Russia in September 2000. It currently includes 39 IAEA member states and the European Commission. At its member states’ request, INPRO conducts comprehensive analysis of proposed or planned nuclear energy systems in order to determine their optimum configuration and draw up recommendations.

The INPRO’s doors are open to as many countries as possible. It already has members from Asia, the Americas, Africa, and Europe, all of them NPT member states. Israel, India, and Pakistan, which remain outside the NPT, also take part in the INPRO project. In January 2014 INPRO was transformed into a division within the Department of Nuclear Energy of the IAEA. Another important format of cooperation is the Agency’s Technical cooperation programme. Financed by voluntary contributions by its member states, the program provides assistance to IAEA members in the peaceful and safe use of nuclear technologies.

Assured supplies of nuclear fuel are an important element of putting in place a sustainable program of nuclear energy development. In order to reduce the concerns of states that do not have their own nuclear fuel cycle regarding reliability of supply, the IAEA provides active support to projects on establishing international nuclear fuel banks. Kazakhstan announced at the Third Session of the Preparatory Committee that talks with the IAEA on establishing such a bank in Kazakhstan territory had entered the final phase. If these talks conclude successfully, this will be the second such project in the world.19

Finally, a key precondition for successful development of the nuclear newcomer countries is to train indigenous specialists for the national nuclear programs. Speaking at the Third Session of PrepCom, Russia’s representative Vladimir Kuchinov emphasized the importance of providing equal opportunities for access to nuclear training. He stated that Russia had established “an international personnel training center which is currently training specialists from Vietnam, Turkey, Belarus, and other countries. Russia’s MEPhI National Nuclear Research University trains specialists not only for the Russian nuclear energy industry but also for other IAEA member states.”20

SEARCHING FOR A CONSENSUS

On May 7, 2014 Ambassador Enrique Roman-Morey presented to member states’ delegations the draft Report of the Preparatory Committee containing recommendations to the Review Conference.21 The Preparatory Committee has not managed to adopt a unanimous document ahead of the RevCon since 2000. Nevertheless, the Chairman made great efforts to prepare a draft that was as free of controversy as possible. Apart from the three sections focusing on the three pillars of the NPT (disarmament, nonproliferation, and peaceful use of nuclear energy), the report also highlighted regional issues (the Middle East and North Korea) and efforts to achieve universal membership of the treaty (countries outside the NPT and withdrawal from the NPT). The draft was largely based on the successful Final Document of the 2010 Review Conference. That was supposed to help make it acceptable to as many countries as possible. For the same reason, the recommendations were worded using studiously neutral language. The term humanitarian consequences of the use of nuclear weapons, to which the nuclear-weapon states seemed positively allergic, was used only once in the 10-page draft. The recommendations did not contain any references to conferences focusing on the humanitarian consequences of using nuclear weapons.

Nevertheless, the parties failed to achieve a consensus. In the morning of May 8, 2014, on the penultimate day of the session, delegations of NPT members voiced their commentaries
on the draft recommendations. Even though all the speakers praised the work of the Chairman and the team that worked on the draft, the compromise nature of that draft left the nuclear-weapon states as well as many non-nuclear-weapon states unhappy.

Predictably, nuclear disarmament proved the biggest obstacle. Most of the non-nuclear-weapon states believed that the wording of the sections on disarmament was too timid. Indonesia, speaking on behalf of the NAM countries, and Iraq on behalf of the Arab Group, said that the proposed draft failed to reflect key proposals they had made. The Arab states noted the text did not contain a call for Israel to join the NPT. NAM representatives said that neither did the text contain any references to UN General Assembly resolutions on nuclear disarmament. The Non-Proliferation and Disarmament Initiative states supported the draft recommendations on the whole, but said that the section on the humanitarian consequences of nuclear weapons use could have been stronger.

Representatives of all five nuclear-weapon states said the text could not be accepted in its current form. The United States was unhappy with the wording of the paragraph on the process of establishing of a WMD-free zone in the Middle East. France focused on deviations from the 2010 document, and added that mentioning humanitarian consequences was not conducive to achieving a consensus. British, Chinese, and Russian representatives said the document lacked balance.

For all the critical remarks, everyone agreed that the draft of the recommendations was a good starting point for further discussions. Nevertheless, there was not enough time left to produce a new consensus document. Ambassador Roman-Morey therefore decided to release the draft PrepCom report as the Chairman’s own report and to present it to the delegates of the 2015 NPT Review Conference as a working document. The Third Session of PrepCom, the last before the 2015 RevCon, concluded on May 9, 2014.

CONCLUSION

Predictably, the Third Session failed to achieve a breakthrough. Nevertheless, it laid solid ground for the 2015 Review Conference.

The RevCon delegates will not have to start from scratch in 2015: the Chairman’s Working Document, prepared by Ambassador Roman-Morey, will be a good starting point for further talks. The document will almost certainly be used by the RevCon Chairman in preliminary consultations with representatives of all the key states in the winter and spring of 2015.

The Third Session also managed to agree the agenda of the 2015 RevCon. The document was based on the 2010 RevCon agenda, with added items from the 2010 Final Document. It was put to the vote by the PrepCom Chairman on the first day of the Third Session, and approved by NPT member states. Even though adopting the agenda is largely a technical issue, the absence of an agreed agenda would have detrimental effects on the work of the Review Conference. In 2005 the delegates spent more than a week of the conference trying to produce an agreed agenda.

Finally, the positive climate of the Third PrepCom will also make a contribution to the work of the 2015 NPT Review Conference. Despite significant contradictions between the member states, the delegations demonstrated their willingness to pursue constructive dialogue, with vitriol and personal attacks being an exception rather than the rule.

Unfortunately, the Third Session has not generated any further good news for the 2015 RevCon. Even the positive climate of the Third Session was a double-edged sword: the delegations were so eager to achieve a consensus that they dropped the most contentious issues from the PrepCom agenda, and left them for the Review Conference to deal with in 2015. Debates at the RevCon will inevitably focus on nuclear disarmament and the Middle East, and the international community will eventually have to tackle these problems head-on.

The non-nuclear-weapon states will call for faster nuclear disarmament and concrete steps towards a nuclear zero. The countries that possess nuclear weapons, meanwhile, will insist on their own approaches to disarmament.

In 2015 the NPT member states will have to report on the implementation of the 2010 Action Plan, for which the P5 countries will bear particular responsibility. The Action Plan still
remains largely on paper, and no major progress is expected before the 2015 RevCon. It has been five years since the signing of the New START treaty; that treaty was already announced in New York in 2010. In view of the deteriorating relations with Russia and the West, there is no reason to expect any breakthroughs on disarmament in the bilateral or multilateral format, either. The conference on establishing a WMD-free zone in the Middle East is unlikely to be convened any time soon, and the failure to hold that conference will inevitably draw sharp criticism from the Arab states. To summarize, the Chairman of the 2015 Review Conference, who has yet to be elected by the African states group, will have his job cut out.

Finally, it is well worth noting a rather curious situation that has come about in the Review Process framework. The nuclear-weapon states, whose nuclear arsenals should be—at least in theory—aimed at each other, have essentially formed an independent group that works and votes in a coordinated fashion, presenting a united front against the states that do not possess nuclear weapons. In the strategic sphere, Russia, the United States, and China are in fact closer to each other than to their non-nuclear allies. It would be entirely reasonable to assume that the closer the positions of the nuclear-weapons states are to each other, the smaller the risk of nuclear war—and it is largely to reduce that risk that the NPT was signed in the first place. Then again, this fact will hardly become a substantial argument in the discussion that will take place in New York in May 2015.

PIR Center’s Alumni

Dauren Aben, Senior Researcher at the Kazakh Presidential Institute for Strategic Studies:

I view the results of the Third PrepCom with cautious optimism, as they say. Despite growing international tensions and deteriorating relations between the leading states, the Third Session was held in a constructive and positive climate. Much of the credit for that belongs to the PrepCom’s Peruvian chairman, Ambassador Roman-Morey. However, the member states once again failed to approve unanimous recommendations for the Review Conference, which reflects major differences between them on all three of the NPT pillars. Clearly, next year the debate will focus on the lack of any serious progress in implementing the 2010 Action Plan or the decisions of all the previous review conferences. Nuclear disarmament will become the main stumbling block, as always. This time around it will be compounded by the non-nuclear-weapon states’ emphasis on the humanitarian consequences of nuclear weapons use. In my view, chances for a successful outcome of the 2015 RevCon would be greatly improved if a comprehensive agreement were to be signed with Iran, and if the conference on the establishment of a WMD-free zone in the Middle East were to be held before the RevCon.

Notes


3 The international treaty on the Republic of Crimea’s accession to the Russian Federation was signed on March 18, 2014. On the same day, French Foreign Minister Laurent Fabius announced that the Western countries had agreed to suspend Russia’s membership of the G8.


5 Author’s interview, New York, May 2014.
At the same time, the Court failed to reach a final verdict on whether the use of nuclear weapons is acceptable if the very existence of a state is under threat.

The New Agenda Coalition was established in 1998. It includes Brazil, Egypt, Ireland, Mexico, New Zealand, and South Africa.

The Non-Proliferation and Disarmament Initiative includes Australia, Canada, Chile, Germany, Japan, Mexico, the Netherlands, Nigeria, the Philippines, Poland, Turkey, and the UAE.


Author's interview, May 2014

The De-alerting Group was set up in 2007. It includes Chile, Malaysia, Nigeria, New Zealand, and Switzerland.

Author's interview, April 2014.


Ibid.


The first international nuclear fuel bank was set up in 2010 in Russia's Angarsk.


The next Nuclear Non-Proliferation Treaty Review Conference will kick off on April 27, 2015. It will be the ninth RevCon since the entry of the NPT into force in 1970, and the fourth since the treaty's indefinite extension in 1995.

I was there at the truly momentous 1995 RevCon, when the NPT was extended for an indefinite term in a very elegant manner, without a vote and by a de facto consensus decision. I also took part in all the subsequent conferences. Those were far less momentous, and the job of their participants was made much easier by that fact that there was no Damocles' sword of fateful decisions hanging over their heads.

The expert community generally deems the 2000 and 2010 RevCons to have been successful, and the 2005 event is usually branded as an utter failure. Looking further back across the years, it is easy to see that a successful conference is usually followed by a failed one, and vice versa. This was usually a reflection of the fluctuations in the international climate, but an unsuccessful RevCon did not necessarily presage future dramas for the entire nuclear nonproliferation regime. In the end, these are just conferences, nothing more and nothing less. They are bureaucratic events, and delegates are sometimes prone to exaggerating the drama—if only to add some gravitas to the cables they send back home, and to justify their four-week absence from the office.

That is why even if the upcoming Review Conference turns sour, it will not necessarily mean the collapse of the entire NPT edifice.

Still, eager as I am to avoid unnecessary drama and doom-mongering, it would be remiss of me not to recognize that there are too many worrying signs. There is a distinct chance of an eruption on a monumental, volcanic scale. Volcanoes can stay dormant for ages, and even when they start to show signs of activity an eruption is not necessarily imminent. But when worrying symptoms accumulate past a certain threshold, it is high time to start thinking about a general evacuation, not about avoiding unnecessary drama at press briefings.

**THE 2000 REVCON: 13 STEPS THAT WERE NEVER MADE**

The sixth NPT Conference, and the first since the treaty's indefinite extension in 1995, was held in New York on April 24–May 20, 2000. The climate of the event was notably different from 1995, when delegates debated the extension. The nuclear-weapon states had already achieved their main objective, which was to extend the NPT indefinitely. They were now resting on their laurels and saw no reason to make any real steps towards implementing Article VI. The worst fears of those who opposed the treaty's indefinite extension in 1995 had come to pass; the nuclear powers had already got what they wanted most, and thought they could now relax and enjoy themselves.

On top of that, there was no longer unity among the NWS. The U.S. and NATO aggression in the Balkans in 1999 had drawn sharp criticism from Russia and China. Moscow and Beijing
were also angry at Washington over its intention to pull out of the 1972 ABM Treaty. Finally, clouds were darkening over the Middle East, where the United States and Great Britain were already laying the ground for the second Gulf War in order to topple Saddam Hussein and occupy Iraq under the pretext of Saddam’s alleged possession of WMD (including allegations that Baghdad had restarted a nuclear weapons program). Independent experts argued that there were no grounds for such allegations; in fact, as it later turned out, these charges were not confirmed even by America’s own intelligence community. But the banner of the struggle for nonproliferation had already been unfurled so as to provide Washington and London with a pretext for attacking Iraq.

Nevertheless, the White House was still held by the Clinton administration, which was not ready completely to abandon the traditions of multilateral diplomacy, and the positive momentum of the 1995 RevCon had not yet fizzled out.

The nuclear disarmament cause had also benefited from the efforts of the New Agenda Coalition, an informal alliance of seven states set up in June 1998. It included Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden.

In the end, after fierce debates on some individual issues—especially Article VI—the Conference unanimously approved the Final Document. That document contained an assessment of the previous efforts to achieve NPT goals, and outlined several future steps to strengthen the international nuclear nonproliferation regime and facilitate nuclear disarmament. It was the first time in 15 years that the RevCon had actually managed to produce a Final Document. At the previous two events (in 1990 and 1995) the delegates failed to do so because of profound differences, especially on the matter of nuclear-weapon states’ compliance with the provisions of Article VI. The action program approved at the 2000 RevCon was dubbed “13 Steps to Nuclear Disarmament.” Among other things, it contained the following obligations by the NWS:

- Make further unilateral efforts to reduce their nuclear arsenals.
- Ensure greater exchange of information with regard to nuclear capabilities and the implementation of nuclear disarmament agreements.
- Pursue reductions of non-strategic nuclear arsenals.
- Undertake concrete measures for further reduction of the operational status of nuclear weapons.
- Diminish the role of nuclear weapons in security policies.
- Engage as soon as possible in negotiations on nuclear weapons reductions and nuclear disarmament.

The program of further measures on nuclear disarmament also included a moratorium on nuclear tests pending the entry into force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT). It emphasized the principle of irreversibility of nuclear arms control (this is important in view of the trend among several nuclear-weapon states towards reprocessing plutonium, highly enriched uranium (HEU), and other components of dismantled nuclear weapons that could be used in the future to produce new or upgraded nuclear warheads).

Even more importantly, NWS reiterated their unambiguous commitment “to achieve a total elimination of their nuclear arsenals.” Never before had NWS gone so far in deciphering the provisions of Article VI of the NPT. They undertook a very substantial burden of commitments, at least in their declarations. In that sense, the year 2000 saw the peak of multilateral disarmament commitments in the framework of the international nuclear nonproliferation regime. All the subsequent RevCons have failed to go further than the 13 Steps in terms of their language; indeed, they have failed even to reiterate their commitment to those steps.

In a matter of another few months all the differences that had emerged between the nuclear-weapon states broke out into the open, making it impossible to achieve further progress, or even a comprehensive implementation of the already agreed 13 Steps.

For the moment, however, the NWS were still trying to sweep their growing differences under the rug. On May 1, 2000 they even made a common declaration on the sidelines of the RevCon. The declaration stated, in particular, that “not a single one of our nuclear missiles is targeted at any other country.” It went on to say that:
Ratification of START II by the Russian Federation is an important step in the efforts to reduce strategic offensive weapons and is welcome. Completion of ratification of START II by the United States remains a priority. We look forward to the conclusion of START III as soon as possible while preserving and strengthening the Anti-Ballistic Missile Treaty as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.1

The provisions on a speedy entry into force of the START II treaty and on “preserving and strengthening the ABM Treaty” as a cornerstone of strategic stability were also included in the 13 Steps to Nuclear Disarmament. But only 18 months later the United States invoked Article XV of the ABM Treaty and notified Russia on December 13, 2011 of its pullout from the treaty. On June 13, 2002, that treaty, which had been recognized by the international community as a “cornerstone of strategic stability and the basis for further reductions of strategic offensive weapons,” ceased to exist. START II, meanwhile, never entered into force because the U.S. Senate refused to ratify it.

DAWN OF A NEW CENTURY: THE NUCLEAR NONPROLIFERATION REGIME ENTERS A PERIOD OF STRESS TESTING

The arrival of the George W. Bush administration (2001–2008) had a chilling effect on all the advocates of an effective international nuclear nonproliferation regime. The new U.S. administration showed a positive aversion to legally binding international actions and initiatives. The words “disarmament” and “arms control” disappeared from the official Washington vocabulary for eight years. Nonproliferation was replaced by the new concept of counterproliferation, which boiled down to stopping the flows of WMD proliferation in those cases when it threatened U.S. national security. George W. Bush spearheaded the crusade against the axis of evil, which he held to include North Korea, Iraq, Libya, and Iran. The American pullout from the ABM treaty was announced under the false pretext that North Korean and potentially Iranian) missiles represent a threat to U.S. territory.

The United States then suffered a terrible attack—though not by any of the axis of evil states, but by the Al Qaeda terrorist organization. Rather than using missiles or nuclear devices, the attack relied on three passenger airplanes hijacked by terrorists on September 11, 2001 in U. S. airspace and flown into the World Trade Center towers in New York and the Pentagon building in Washington. The tragic 9/11 events spelt the end of a unique period in modern history that began with the fall of the Berlin Wall in 1989—a period when the fate of the whole planet largely depended on the will of a single superpower. The United States failed to make use of that historical chance. It showed precious little wisdom or strategic thinking, and did not even try to convert its unprecedented influence on international events into building a new international system that would respect the interests of many actors. On the contrary, growing national egoism and appetites soon led to the loss of America’s leadership and unique international role. The monocentric world order began to give way to a new polycentric world. Of course, 9/11 was merely a catalyst of that process, which by its very definition could not take place overnight, and which is still in progress to this day.

The attention of the United States—and, due to Washington’s pressure, of a large part of the international community—switched for a period from the proliferation threats posed by state actors to the threats and risks posed by non-state actors, especially international terrorist organizations. Having secured the support of many allies, in 2001 the United States entered the war in Afghanistan, where it drove the Taliban underground and dealt painful blows to Al Qaeda. Documents seized at Al Qaeda compounds left little doubt that the terrorists were interested in gaining access to nuclear weapons and fissile materials, even though they were not found to be in possession of even a rudimentary nuclear weapons program. Worries about possible use of WMD by terrorists were stoked in October 2001, when the United States was still reeling from the impact of 9/11. The United States’ own postal system was used to commit an act of biological terrorism. Letters containing the anthrax contagion and a message “Death to Israel! Allah is great!” were sent to several U.S. senators. Five people died of the disease. The U.S. public was in a state of panic. The Pentagon’s spending on bioterrorism defenses grew sharply, and fear of WMD terrorism spread far beyond U.S. borders. (It later turned out, however, that the terrorist act was perpetrated by a lone attacker, a U.S. citizen who worked for a military laboratory; international Islamist terrorists had nothing to do with it.)
In late 2002 the foreign-policy course pursued by the Republican administration in Washington led to the demise of the Framework Agreement that was signed between the United States and North Korea in 1994. The formal pretext was an accusation by the United States that Pyongyang was pursuing a secret uranium enrichment program in breach of its previous commitments. North Korea reacted angrily to being branded as part of the axis of evil. On January 10, 2003 it announced the resumption of the procedure of withdrawal from the NPT, and expelled IAEA inspectors. It also restarted the gas graphite nuclear reactor in Nyongbyon, and conducted test launches of missiles that could potentially be used as nuclear weapons delivery vehicles.

Meanwhile, the United States turned its attention to another member of the axis of evil, Iraq. Even though the country did not pursue nuclear weapons or other WMD programs of any significance whatsoever after 1991, the United States and the United Kingdom used the alleged existence of such programs in Iraq as a pretext to launch a military invasion on March 20, 2003, occupy the country (the last U.S. soldiers left in 2011), and then effect a change of regime there.

During the second Gulf War the United States failed to win the support of the international community or to obtain a UN Security Council mandate for military action. What is more, the reaction of such U.S. allies as France and Germany was very negative. Russia and China were also angry. After occupying Iraq, the United States and Britain were forced to admit that they had found no trace of Iraqi WMD, including chemical, biological, or nuclear weapons. Neither did they find evidence of any active WMD programs, despite the alleged documentary proof that was previously presented by the United States at the UN Security Council. These findings justified the conclusions made by the UN Monitoring, Inspection and Verification Commission in Iraq (UNMOVIC), which were ridiculed by Washington prior to the war.

The war in Iraq caused massive human casualties and suffering. It also delivered a painful blow to the entire international nuclear nonproliferation regime. Washington had essentially launched an unauthorized and unmotivated aggression against an NPT state that had cooperated with UNMOVIC and dismantled its WMD and missile programs under international supervision. That aggression had shown to the rest of the world that international law was being substituted with political expediency, and that the struggle against nuclear proliferation was a convenient excuse for an armed invasion, even if there is no UN Security Council authorization and the evidence is dubious or simply fabricated. In the end, international regimes failed to keep Iraq safe and secure. But would the United States have launched an invasion if it had known that Iraq really did possess nuclear weapons? That was the question asked in the axis of evil capitals that had not yet shared Baghdad’s fate.

In late 2003 reports began to come in about the so-called A.Q. Khan network, which had been active since the 1990s. The name of Abdul Qadeer Khan, one of the leading Pakistani nuclear weapons scientists, became familiar even to those who know nothing about Kurchatov, Oppenheimer, or Homi Bhabha. The Pakistani nuclear Herostatus gained infamy by organizing an effective nuclear proliferation network. Formally, he was acting on his own initiative, albeit with the tacit blessing of the Pakistani government, to provide services in the development of the nuclear fuel cycle to such countries as North Korea, Iran, and Libya. He had also cooperated with Saudi Arabia. He ran an extensive and commercially successful international production and trading network, with branches or representatives in Pakistan, Sri Lanka, Malaysia, South Africa, Germany, Switzerland, and other countries. “They will sell their own mother, let alone nuclear technologies,” A.Q. Khan used to say about the Western companies that circumvented export controls.

It is via the A.Q. Khan network that Libya first acquired 20 uranium enrichment centrifuges, and then tried to buy 10,000 R-2 centrifuges in 2000. Such a number of centrifuges would have been capable of producing enough HEU to build 10 nuclear devices every year. In 2001–2002 the A.Q. Khan network supplied Libya with documents (albeit obsolete) on designing and building explosive nuclear devices.

After secret talks with Britain and the United States, on December 19, 2003 Libya announced that it would relinquish its WMD programs. In particular, it vowed to destroy the materials, equipment, and programs that could be used to build WMD. Subsequent large-scale IAEA inspection missions confirmed that the country did not have the capability to produce
The 20 billion dollars pledged in Kazakhstan were eventually allocated for the program's non-proliferation efforts, which included disclosure of chemical weapons.

Significance:

The program reached its political and financial zenith in 2002-2006: after the start to lose its

project in Russia.

projects in Russia. There is no substitute for the Global Partnership Program which brings us closer to a safer world. But even a modest amount of cooperation could have a significant impact. The region’s leaders recognize the potential of the program. In fact, they see it as a mechanism to address some of their own energy and security needs.

The non-proliferation agreement of international programs to address some individual programs of non-proliferation of weapon of mass destruction. This

an agreement that has been signed by several countries, including the United States, the European Union, and Russia. A key element of this agreement is.

Meanwhile, the United States has proposed a comprehensive solution to the problem of nuclear proliferation and to

warrant and agenda for a nuclear-free world is not seen in the end. We expect that the

non-proliferation measures are a strong basis for the success of the global program. It began as a country with significant financial and political aid.

The role of the United States is crucial in this process. It has tremendous influence over the countries in the region and the international community. The U.S. has been a strong advocate for the program, providing significant financial and technical support. It has also taken a leading role in negotiating the Nuclear Non-Proliferation Treaty (NPT) and other international agreements on nuclear non-proliferation.

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submarines, and in need of modern technologies to ensure physical protection of its nuclear ammunition stockpiles. But it soon restored adequate financing of the defense sector and the nuclear industry, and it was no longer tenable for Russia to remain a recipient of foreign assistance. The country sought to change the donor/recipient format of cooperation under the GP program to a new format of equal partnership. On top of that, the inevitable bureaucratization of the program, which involved billions of dollars' worth of spending, raised a pressing problem of preventing corruption during its implementation.

For all its obvious flaws, during the first four or five years of the program the Global Partnership produced a positive experience of developing mechanisms of cooperation between the G8 states and other participating countries in several sensitive areas, including those related to nuclear nonproliferation.

Speaking in Krakow, Poland, on May 31, 2003, George W. Bush announced the Proliferation Security Initiative (PSI), which is aimed at countering the proliferation of WMD, delivery systems, and related materials by states and/or non-state actors. During the second PSI meeting held in Paris, the core of 11 states that supported the initiative formulated the interdiction principles, which were aimed at preventing illegal transportation and shipment of WMD and delivery system components and technologies. The PSI became yet another iteration of the counterproliferation principle that was promoted by the Republican administration in Washington. That principle was based on the notion that international organizations are too cumbersome and ineffective; all decisions are put to the vote, and often require a consensus; even worse, the parties taking part in the voting process may include the proliferators themselves. Washington sought to introduce instead a flexible and informal system spearheaded by a U.S.-led group of states that share U.S. anti-proliferation approaches. The PSI aims to conduct operations to inspect and interdict suspected cargoes on land, at sea, and in the air, beyond the areas of national jurisdiction. That does not sit well with some international rules and regulations, which obviously held the initiative back, especially during the early stages. For example, such leading states as China and India refused to join the PSI. Russia joined after a period of deliberation on May 31, 2004.

On April 28, 2004, as part of the efforts against proliferation threats posed by non-state actors, especially terrorist organizations, the UN Security Council unanimously approved Resolution 1540. There was a clear need for such a resolution because neither the NPT, nor the chemical and biological weapons conventions contain any references to proliferation by non-state actors. One distinctive feature of Resolution 1540 is that the document was adopted in accordance with Chapter VII of the UN Charter ("Actions with respect to threats to the peace, breaches of the peace, and acts of aggression"). The resolution's provisions are compulsory for all UN members, including states that remain outside the NPT.

The 12 articles contained in Resolution 1540 set out the principles and mechanisms of coordinated efforts against the black market for WMD and its components, with measures to prevent such weapons and components from falling into terrorists' hands. In Article 1 of the resolution, the UN Security Council has ruled that all states must desist from giving assistance to non-state actors who "attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery." Article 2 of the resolution obligates UN members to adopt and use legislation aimed at preventing any such attempts or actions by non-state actors, and forbids them from giving any indirect assistance to these attempts. Compliance with this resolution and reporting by member states is monitored by a special UN Security Council body, Committee 1540.

On April 13, 2005 the UN General Assembly unanimously approved and opened for signature the International Convention for the Suppression of Acts of Nuclear Terrorism. The initiative to adopt such a convention was proposed by the Russian Federation. Work on the proposal began back in 1998, and the convention entered into force on July 7, 2007. As of March 26, 2013, it was signed by 141 states and ratified by 85. The convention aims to prevent, suppress, and investigate terrorist acts involving the use of radioactive or nuclear materials or devices built using such materials. Another goal is to establish an instrument of international cooperation in investigating acts of nuclear terrorism and bringing the perpetrators to justice.
To summarize, the beginning of the twenty-first century proved a difficult period for international security, and for the international nuclear nonproliferation regime in particular. Nevertheless, in 2001–2005 the international community produced a set of various instruments that enabled new mechanisms of cooperation in preventing nuclear proliferation. A particular emphasis was on non-state actors, such as international terrorist organizations, because the war on terror was a leading topic on the international agenda during the first five years of the new century.

THE 2005 NPT REVIEW CONFERENCE: FARCE AND FAILURE

In his opening speech at the 2005 NPT Review Conference, UN Secretary-General Kofi Annan delivered an impassioned speech in which he tried to prod the delegates to action. He argued that their inaction was increasing the likelihood of a nuclear catastrophe, such as a major nuclear accident, a terrorist attack, or an aggression by one state against another. He said that if such a disaster were to strike, the leaders of all the countries represented at the conference would ask themselves the same questions: How could this happen? Could I have done more to reduce this threat by strengthening the regime that is meant to counter it? He then urged the delegates to face that challenge and take concrete steps in a number of areas, such as:

- strengthening the integrity of the NPT in the face of violations and possible attempts at withdrawing from the treaty;
- increasing the effectiveness of measures to ensure compliance with the NPT by achieving universal membership of the Additional Protocol to the Safeguards Agreement with the IAEA and using the Protocol as a new standard in verifying compliance with commitments;
- reducing the risk of proliferation among states and non-state actors;
- resolving the problem of the dual nature of nuclear energy.

Nevertheless, the undermining of the nonproliferation regime during the previous years, the emergence of double standards in nonproliferation, and the U.S. delegation's lack of interest in the success of the RevCon had all sapped the delegates' will to achieve tangible results. William Potter, one of the leading international experts on nuclear nonproliferation, had this to say on the matter:

"This year turned out to be not the easiest one for the stage productions on Broadway. But without doubt, the most expensive and the most failed performance set in New York in the past season was the NPT Review Conference. That was a poorly thought-out mixture of farce and tragedy, played without any sign of inspiration, with a weak direction and a far too predictable culmination."

Predictably, the 2005 RevCon was a failure. The delegates failed to produce a Final Document, heed the call of the UN Secretary-General, or answer the challenges of the time.

There were three main authors of that failure—and none of them made any great effort to deny their role. The first was Egypt, which played the Middle Eastern card in a very vociferous manner. It accused the co-sponsors of the 1995 resolution on the Middle East of inability to achieve the implementation of its provisions, especially with regard to any progress towards Israeli membership of the NPT. On the whole, these charges were quite fair. The second author was Iran, which used the RevCon as a stage for accusations against the George W. Bush administration and its policy of undermining the disarmament process. The third author was the United States itself. The George W. Bush administration showed no interest or confidence in such a mechanism as NPT Review Conferences. It deliberately sent middle-ranking officials of no great skill or knowledge to represent Washington at the event. They not only failed to demonstrate the usual American leadership, but proved unable even to answer the charges leveled at the United States by Iran. As a result, the conference ended on a note of Iranian triumph. The failure of the 2005 RevCon was taken by the George W. Bush administration as another demonstration that all such forums are useless at best, and positively harmful at worst.

The conference was such an inept and muddled affair that its delegates even failed to reach a decision on whether North Korea should still be regarded as a member of the NPT, or as a
state that had pulled out of the treaty. All they proved capable of was to remove the North Korea nameplate from the chamber and place it in storage with the Secretariat, arguing that the status of North Korea in terms of the NPT was unclear. North Korea and all the other states that remained outside the NPT thereby received a clear signal that the key mechanism of ensuring compliance with the treaty’s provisions was weak and ineffective.

On October 9, 2006 Pyongyang conducted its first nuclear weapons test, thereby demonstrating its nuclear capability. On May 25, 2009 it conducted a second test, proving its status as a de facto nuclear-weapon state. For all the skepticism expressed by experts regarding the underlying technology or size of the North Korean nuclear arsenal, there is no doubt that Pyongyang has walked even farther away from the NPT. It has become the first—and, so far, the only state to have pulled out of the treaty.

THE PROBLEM OF WITHDRAWAL FROM THE NPT

Article 10 Paragraph 1 of the NPT reads:

Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance.

Even though the NPT has remained viable for more than 40 years, it is also imperfect. Time has put its weaknesses into stark relief. One of them is the provision on withdrawal from the treaty.

On the one hand, states must have the right to withdraw from international treaties if their national interests are at stake. Treaties must not be seen as a trap. On the other hand, NPT membership confers such benefits as access to peaceful nuclear energy, including international cooperation in that area in the IAEA framework. If a state pulls out from the NPT, it must in some way return the fruits of such cooperation rather than taking them with it on the way out.

Another obvious question is whether the state has violated the provisions of the NPT while it was still a member, and whether its escape from the treaty is merely an attempt to cover its tracks.

North Korea has already made use of this loophole in the NPT. So far, it remains the only state to have done so. But what if others follow suit? Clearly, Iran is the main cause of concern among international diplomats and experts as far as the possibility of another pullout from the NPT goes. Up to mid-2013 such concerns were being expressed very regularly. But it cannot be ruled out that if states become disillusioned with the treaty, its effectiveness, and its ability to prevent the spread of nuclear weapons or protect countries from unjustified accusations or threats of force made under the pretext of enforcing nonproliferation norms, other countries may also consider quitting the NPT (although, for now, such a turn of events appears purely hypothetical).

Russia has made some interesting proposals to address the problem. One of them is that if a state party withdrawing from the NPT, the IAEA must verify that state’s compliance with its commitments under the Safeguards Agreement. Deliberate actions and preparations for a pullout from the NPT in order to pursue a nuclear weapons program must be regarded as a violation of the treaty. If a state pulls out, all the nuclear materials, equipment, technologies, and facilities created for peaceful purposes must remain within the IAEA safeguards regime. If nuclear technologies imported to the country in question are not returned to the supplier country, they must remain under IAEA safeguards indefinitely.

The commission on nuclear nonproliferation co-chaired by Gareth Evans and Yoriko Kawaguchi has proposed an even tougher approach:

The UN Security Council should severely discourage withdrawal from the NPT by making it clear that this will be regarded as prima facie a threat to international peace and security, with all the punitive consequences that may follow from that under Chapter VII of the UN Charter.
For now, however, UN Security Council Resolution 1887, which was adopted in 2009, goes only as far as hinting at a solution: “a State remains responsible under international law for violations of the NPT committed prior to its withdrawal.”

OBAMA AND A NUCLEAR ZERO

Barack Obama was elected U.S. president in November 2008 and inaugurated in January 2009. Four years later he was re-elected for a second term. Just like his Republican predecessor George W. Bush did eight years earlier, Barack Obama decided to change the foreign-policy agenda in a radical way. International cooperation in the framework of international organizations and nuclear arms reductions were once again at the center of U.S. policies. The term nuclear disarmament also made a return to the political vocabulary in Washington.

On April 1, 2009 Presidents Dmitry Medvedev and Barack Obama announced during their first meeting in London that Russia and the United States would spearhead the international movement towards a world free of nuclear weapons. Five days later Obama fleshed out that announcement in another speech made in Prague. He recognized that a nuclear zero was unlikely to be achieved in his lifetime, but made an impassioned argument in favor of energetic efforts to reduce nuclear arsenals, with the ultimate goal of their complete elimination.

Obama’s Prague speech became famous, and the idea of a nuclear zero became fashionable. Numerous conferences have been held on the subject. The international Global Zero movement even drew up a road map that aimed to achieve a complete elimination of nuclear arsenals by 2025; in other words, that movement voiced a much more optimistic view of the feasibility of nuclear zero than the U.S. president did. Four influential, albeit retired U.S. statesmen—Henry Kissinger, George Shultz, William Perry, and Sam Nunn—also threw their weight behind the idea, although they refrained from proposing any specific deadlines. The Nuclear Zero goal received the backing of many leading politicians, both active and retired, in Japan, Britain, and other countries.

In actual fact, as we all know, the Nuclear Zero goal is not just an aspiration but a commitment undertaken by all 189 NPT members, including nuclear-weapon states. That commitment is spelt out very clearly and unambiguously in Article VI of the NPT, which is often described as one of the three pillars of that treaty, along with nuclear nonproliferation and the right to pursue peaceful use of nuclear energy. The commitment was expressed in even greater detail in the Final Document of the 2000 NPT Review Conference, as already mentioned in this paper.

Having assumed the role of the leaders of nuclear disarmament, Presidents Medvedev and Obama instructed their delegations to negotiate a new strategic nuclear reductions treaty (the New START treaty) as soon as possible.

Negotiations of the treaty were difficult, sometimes even painfully so. Strangely enough, the proposed new ceilings for nuclear warheads and delivery systems were not the main obstacle. The real hurdle was a profound lack of mutual trust.

On April 8, 2010, less than a year after the talks began, the New START treaty was signed in the Czech capital. Prague was chosen as a sign of respect for President Obama’s eponymous 2009 speech and as a symbol that his exhortations were turning into practical steps. The new ceiling of 1,550 deployed nuclear warheads apiece introduced by the New START treaty was about a third lower than the ceilings mandated by the previous Strategic Offensive Reductions Treaty (even though that treaty looked more like a protocol of intentions). The new ceiling for delivery systems, at 700 apiece, represented a more than twofold reduction compared with the previous treaty. Such an approach was not overly radical; after all, neither American nor Russian security would have suffered any damage even if the new ceiling for deployed warheads were to be reduced to 1,000 apiece or even lower. Nevertheless, both sides were happy with the outcome, which also sent an important and unambiguous message to the rest of the world: Moscow and Washington are actively pursuing genuine nuclear disarmament rather than merely talking about it. Such a result was especially valuable coming as it did shortly before the 2010 NPT Review Conference.
It seemed at the time that the Disarmament Spring was here to stay.... But it soon turned out that further and deeper reductions were not in the interests of the two leading nuclear powers. Moscow and Washington have not returned to the negotiating table since the entry into force of the New START treaty in 2011.

THE 2010 NPT REVIEW CONFERENCE: AN ILLUSION OF FRESH MOMENTUM

The only function of nuclear weapons is to destroy everything that lives.... Possessing a nuclear bomb is disgusting and shameful, as is the threat of using nuclear weapons.... Those who dropped nuclear bombs on Hiroshima and Nagasaki are among the most hated enemies of humankind.... Nuclear weapons are not a source of dignity or power. The time of reliance on nuclear weapons is in the past.

The excerpt above is from a speech delivered at the 2010 RevCon debates by the very first speaker. That speaker was none other than Iranian President Mahmoud Ahmadinejad. He was the only head of state to visit that international event, so he was the first to speak.

Paradoxically, Iran, which ended the previous failed RevCon with verbose rhetoric, was now opening the next NPT review cycle.

The mood of the delegations was very different this time round. Most of them came to New York with a clear goal to achieve a result, which meant that they were already halfway there. The New START treaty signed shortly before the 2010 RevCon was not a radical breakthrough. Nevertheless, it was an important step forward, especially after a decade of stagnation and disappointment.

As one of the South African delegates put it, the Filipino chairman of the conference, Libran Cabactulan, spent the four weeks of the event building a delicate balance between the interests of all the key players: the nuclear-weapon states, the Nonaligned Movement, the Arab states led by Egypt, and Iran.

There were two main items on the agenda of the 2010 RevCon, both of them traditional: nuclear disarmament and the Middle East.

As a result of numerous compromises, the Conference managed to adopt the Final Document by a unanimous vote. Among other things, that document contained 64 steps (or recommendations) that were to be undertaken by NPT states in the 2011–2015 period.  

In the disarmament package, the following recommendations deserve special mention:

- NWS commit to make further efforts to reduce and eventually eliminate all types of deployed and non-deployed nuclear weapons.
- Russia and the United States commit to seek the early entry into force and full implementation of the New START treaty; they are encouraged to continue discussions on measures to achieve deeper reductions in their nuclear arsenals (Action 4).
- All NWS must: rapidly move towards an overall reduction in the global stockpile of all types of nuclear weapons; further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines, and policies; consider the legitimate interest of non-nuclear-weapon states in further reducing the operational status of nuclear weapons systems; and further enhance transparency (Action 5).
- All NWS undertake to ratify the CTBT with all expediency (Action 10).
- All NWS are encouraged to agree as soon as possible on a standard reporting form and determine appropriate reporting intervals for the purpose of voluntarily providing standard information without prejudice to national security; the Secretary-General of the UN is invited to establish a publicly accessible repository, which shall include the information provided by the NWS (Action 21).

On the disarmament front, the parties failed to go beyond the decisions made at the 2000 RevCon; indeed, the wording of some of the decisions adopted in 2010 represented a step backwards compared with the 13 Steps. This was the result of the unwillingness of some states (including Russia) to include such issues as non-strategic nuclear weapons (NSNW) in the plan of action or to approve concrete steps to be made in the area of transparency.
No progress was made on important proposals made during the conference on banning a numerical increase in NWS' nuclear stockpiles or banning the placement of nuclear weapons outside national territory.

Proposals on plotting the way towards a convention on banning nuclear weapons were not properly reflected either.

The Middle Eastern section of the Final Document was born in great pain, without any exaggeration. With only two days left before the end of the conference, the United States was still not ready to accept any mention of Israel in the text of that document. It is only after Vice-President Joe Biden had dinner with Arab ambassadors in Washington, and then a telephone conversation with Egyptian president Hosni Mubarak, that the United States finally agreed to a single mention of Israel in the Final Document: “The Conference recalls the reaffirmation by the 2000 Review Conference of the importance of Israel’s accession to the Treaty and the placement of all its nuclear facilities under comprehensive IAEA safeguards.”

Nevertheless, that unwieldy phrase cleared the way to a compromise decision on convening in 2012 a conference on establishing a zone free of nuclear weapons and all other weapons of mass destruction in the Middle East, to be attended by all Middle Eastern states “on the basis of arrangements freely arrived at by the States of the region.” The Final Document also stated that “the 2012 Conference shall take as its terms of reference the 1995 Resolution.” Preparations for the 2012 conference were entrusted to the UN Secretary-General and the three co-sponsors of the 1995 resolution, the United States, the UK, and Russia. The Finnish diplomat Jaakko Laajava was appointed as a special coordinator to spearhead practical efforts in convening the conference. One of the most difficult tasks he faced was to ensure the participation of all states in the region (i.e. including Israel), as stipulated by the 2010 RevCon.

It is worth noting that the RevCon decision to convene a conference on a WMD-free zone in the Middle East was the result of the development of a Russian initiative proposed at a RevCon Preparatory Committee session in 2009.

To summarize, the conference achieved a modest but positive result. “The seeds of hope have been sown,” as the head of the Canadian delegation put it. A strengthening of a positive climate around the NPT and a demonstration of the treaty’s viability generated a positive momentum to start addressing old problems in earnest. Experienced diplomats and experts realized that the adoption of a Final Document was much less important than strengthening that new positive momentum with a set of concrete steps. It was crucial not to repeat the mistakes of 1995, when some people thought they could simply relax and enjoy themselves now that the NPT had been extended indefinitely.

THE NUCLEAR RENAISSANCE AND NONPROLIFERATION

The accident at the Fukushima 1 nuclear power plant in Japan that happened on March 11, 2011 after a massive earthquake forced even the most enthusiastic proponents of nuclear energy development around the world to postpone their plans. The problem of nuclear safety was once again at the top of the agenda, just like after the Chernobyl disaster in 1986. Germany, Switzerland, and Belgium announced their decision to end their nuclear energy programs. Japan was forced to put the construction of all new NPPs on hold.

The nuclear renaissance—a term coined to describe the resurgence of global interest in nuclear energy to pre-Chernobyl levels—has been postponed. It is, nevertheless, quite inevitable.

In the estimate of former French president Nicolas Sarkozy, by 2030 global demand for nuclear energy will rise by 40 percent. The nuclear energy boom will be especially obvious in such countries as China and India. The most promising parts of the world also include the Middle East, Southeast Asia, and Latin America. It cannot be ruled out that, sooner or later, Sub-Saharan Africa will also be added to that list.

There are now 194 nuclear power plants and 437 power reactors in operation in 30 countries around the world. Another 68 power reactors are currently under construction. The IAEA believes that by 2020 another 11 countries will have launched a nuclear energy industry. On
top of that, a further 23 countries are now seriously considering peaceful nuclear energy programs. The list of nuclear newcomers (i.e. countries that have already placed contracts to build their first NPP, as well as those that are only just considering such a possibility) is very diverse: from Vietnam and Myanmar to Jordan and the UAE in Asia; from Nigeria and Morocco to Cape Verde and South Africa in Africa; and from Venezuela and Ecuador to Cuba and Chile in Latin America. Of course, some of these states have already begun to build their first NPP, while others will never go beyond plans and proposals.

How will the peaceful use of nuclear energy in countries that have no great experience in that area sit with their nuclear nonproliferation commitments? The main principle at the core of Article IV of the NPT must remain inviolable: unless a country has been caught violating its obligations under the NPT, it is entirely within its rights to pursue peaceful nuclear energy development without any restrictions.

This opens up great opportunities for the international community. It is important to use these opportunities to ensure a reliable and guaranteed supply of nuclear fuel to countries that pursue nuclear energy development.

One possible option is for each country to build its own uranium enrichment, fuel fabrication, and spent fuel reprocessing capacity. That option, however, is very costly in terms of financial, intellectual, material, and technical resources. Can it ever be justified, given that the global market is well able to supply all the current as well as future needs in that area? I do not think so, especially since building all the required national capacity will take a lot of time, thereby delaying the launch of NPPs in the newcomer countries. I entirely agree with former IAEA director-general Mohamed ElBaradei, who insisted that in this day and age there is no need whatsoever to build new uranium enrichment or spent fuel reprocessing capacity.

It is often argued that the nuclear newcomer countries should not become completely dependent on the situation in the global market for nuclear fuel or the political will of the supplier states. These concerns are entirely legitimate. They can, however, be addressed by using multilateral approaches to the nuclear fuel cycle. Such approaches can be an economically sound and practically feasible alternative to developing every single component of the nuclear fuel cycle on a national level.

Several initiatives in this area have been put forward in recent years. For example, Russian President Vladimir Putin has proposed a joint project to develop a global nuclear energy infrastructure and set up international centers that would provide nuclear fuel cycle services. As a first step, Russia, Kazakhstan, Armenia, and Ukraine have set up the International Uranium Enrichment Center (IUEC) at the Russian uranium enrichment facility in Angarsk. The center is also ready to welcome new members. Its existing members have already gained guaranteed access to enrichment services. This will meet their demand for nuclear fuel without having to build national enrichment facilities of their own.

Russia has also accumulated a reserve stockpile of 120 metric tons of low-enriched uranium at the IUEC. That stockpile is managed by the IAEA. An agreement to that effect between Russia and the IAEA was signed on March 29, 2010. Material from that reserve stockpile can be supplied to a third country at the IAEA’s request in the event of a politically motivated disruption of regular supplies to that country. Any country can request a supply of material from the guaranteed reserve stockpile, so long as it remains in compliance with its nonproliferation commitments.

Some developing countries (including Egypt) fear that they are being lured into a technological trap and denied their legitimate right to pursue national nuclear energy programs. Clearly, the international nuclear fuel cycle service centers must be economically attractive and politically acceptable to all the interested NPT states, and possibly also to India. Those who remain wary of such proposals would do well to heed the opinion of Sergio Duarte, the Brazilian former high representative of the UN secretary-general for disarmament: “The establishment of the IUEC in Angarsk is a constructive step that can address nuclear proliferation concerns because it makes it unnecessary to build national enrichment capacity.”
UNIVERSAL NPT MEMBERSHIP AND TODAY’S REALITIES

Universal membership of the NPT was proclaimed an “urgent priority” back at the 1995 RevCon. Some progress has in fact been made since then: Andorra, Angola, Brazil, Chile, the Comoros, Cuba, Djibouti, Oman, the UAE, and Vanuatu have all joined the treaty, to bring its total membership to 189. Only five states remain outside the NPT (of which one, South Sudan, is of zero immediate proliferation security concern). That appears to be a significant achievement, since the NPT now has a broader membership than any other international treaty in human history.

Nevertheless, the NWS do not deserve much credit for the aforementioned states’ decision to join the NPT. Meanwhile, the states that still remain outside the treaty are a major cause for concern. It is for a good reason that the 1995 RevCon placed special emphasis on urgently securing membership of those states that have nuclear facilities outside the safeguards system.

Israel, India, and Pakistan appear very unlikely to join the NPT any time soon. Compromise measures could be implemented instead: for example, all their nuclear facilities could be placed under IAEA safeguards. Alternatively, regional atomic energy agencies could be set up, using the ABACC template. Nevertheless, no progress has been achieved on that front, either. On the contrary, after the nuclear tests in South Asia, the cause of achieving universal membership of the NPT was set back even further.

In view of serious differences between the NPT states, especially within the expert community, on September 8, 2008 the Nuclear Suppliers Group decided to open up its markets for nuclear trade with India. The necessary changes were made to the NSG export rules on Washington’s initiative, which was backed by such states as France and Russia. A year previously, on August 1, 2007, the United States signed a peaceful nuclear energy cooperation agreement with India (the so-called 123 Agreement), which was ratified by the U.S. Senate on October 9, 2008. That set a precedent of a de facto nuclear-weapon state that remains outside the NPT essentially being given the same status as non-nuclear-weapon NPT states.

Apart from the four de facto nuclear-weapon states that remain outside the NPT (see Table 1), there is also one threshold state, Iran. Although the country is a member of the NPT, there are

<table>
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<tr>
<th>State</th>
<th>NPT member</th>
<th>CTBT status</th>
<th>Nuclear tests held</th>
<th>IAEA members</th>
<th>Nuclear technology transfer to other states</th>
<th>Physical protection of nuclear infrastructure</th>
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<tr>
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<td>Iran</td>
<td>Yes</td>
<td>Signed, not ratified</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Adequate</td>
</tr>
</tbody>
</table>

Notes: *Israel is unlikely to have conducted nuclear tests, although its complicity in a mysterious flash in the South Atlantic in 1979 has yet to be ruled out. **North Korea announced the launch of the NPT withdrawal procedure on January 10, 2003. It is unclear whether this procedure should be considered fully completed or not.
worries about a possible undeclared component of its nuclear program (at present or in the past).

Clearly, an individual, rather than one-size-fits-all approach must be used for each of these states.

India has developed its own nuclear weapons in response to a humiliating defeat in a war with China, which had by that time already acquired nuclear weapons and was even recognized as a nuclear-weapon state under the NPT. India just missed the NPT train and did not become a legitimate nuclear-weapon state because its nuclear test in 1974 came shortly after the cutoff point. But has India not demonstrated by its behavior over the past decades that it is a responsible nuclear power? Has New Delhi proliferated nuclear technologies or materials to third countries? Finally, would it be right to insist on India becoming a non-nuclear-weapon state without raising the same issue with regard to China?

The NSG decision to lift the restrictions on nuclear trade with India was controversial, but it was a step in the right direction. The international community must continue to engage India in the nuclear nonproliferation cause as though the country were the sixth nuclear-weapon state under the NPT, without formally being a member of the treaty.

For its part, New Delhi must view such steps by the international community not as a pardon for all its sins, but as an invitation to dialogue. That presupposes mutuality and reciprocal steps, including a responsible Indian policy on nuclear nonproliferation and disarmament.

The nuclear nonproliferation steps outlined above with regard to the five official nuclear-weapon states can and must include India. If these states make a commitment not to increase or improve their nuclear arsenals, India must make a simultaneous statement to the same effect. Rather than waiting to be persuaded into signing the CTBT or pointing at the absence of U.S. or Chinese ratification of the treaty as an excuse not to sign, India should set an example of responsible behavior by expeditiously signing and ratifying the CTBT, and maintaining a moratorium on nuclear tests pending its entry into force.

Finally, India must diligently comply with its obligation to place all its peaceful nuclear activities under IAEA safeguards.

Pakistan, meanwhile, is a completely different case, even though it launched its own nuclear program to catch up with India. Of all the states that possess nuclear weapons, Pakistan is now the only one whose political regime is teetering on the brink of collapse. Pakistani generals continue to insist that there is no reason to worry about the state of the country’s physical protection, control, and accounting system for nuclear weapons and materials, but these assurances ring hollow. After all, Pakistan and its vicinity are the home turf of the most aggressive non-state actors who seek to gain unauthorized access to nuclear weapons and components.

The Pakistani delegation at the Conference on Disarmament in Geneva should stop blocking the launch of negotiations on the treaty banning the production of fissile materials for weapons purposes. Islamabad should join the CTBT and observe a moratorium on nuclear tests pending the treaty’s entry into force. It should also allow IAEA inspectors full access to all the materials related to the A.Q. Khan network, which sold nuclear secrets to countries around the world. Finally, the Pakistani political and military leadership should think long and hard about whether their country is actually gaining anything by being in possession of a nuclear arsenal. Has it actually become any more secure as a result? Or is there a real risk of nuclear weapons becoming a nail in the coffin of Pakistani statehood rather than a guarantee of that statehood, as the Pakistanis tend to believe?

It is hard to assess the size or capability of the North Korean arsenal. The country’s stockpile of nuclear materials is probably very small. Nevertheless, Pyongyang has already conducted three nuclear weapons tests. Its missile program is also a serious cause for concern. For its own part, the North Korean leadership has no liking for being alternately ignored or branded as part of the axis of evil (as we all know, two other axis of evil countries have already been crushed, and their leaders hanged or torn to pieces).

Pyongyang needs attention, security guarantees, and room for bargaining. This will probably be at the center of the six-party talks between North Korea, South Korea, China, Russia, Japan, and the United States. Implementation of agreements reached at these talks will
eventually enable North Korea to restore its full membership of the NPT as a non-nuclear-weapon state. Pyongyang could also support a moratorium on nuclear tests and at some point join the CTBT. Further steps might include North Korea’s participation, together with South Korea, in making the Korean peninsula a nuclear-weapons-free zone.

Israel is a special case, because the situation in the Middle East and the main problem—which is Israel’s possession of nuclear weapons and its non-participation in the NPT—could prove the biggest ticking bomb for the entire treaty.

Israel is now the only Middle Eastern state that remains outside the NPT. It ignores all calls to open up its nuclear facilities to IAEA inspectors or to join negotiations on establishing a zone free of nuclear weapons and all other WMD in the Middle East. What is more, the Israelis are prone to openly debating the best ways of destroying nuclear facilities in Iran (which does not have nuclear weapons), and of killing Iranian nuclear scientists.

The current situation in the Middle East is such that any optimism about the possibility of resolving the Israeli nuclear problem would seem naive and misplaced. Nevertheless, if and when that situation begins to change for the better, and when more responsible and visionary leaders come to power in Israel itself, there will be no need to reinvent the wheel. The recipes for progress towards a nuclear-free Middle East have already been drawn up, including plans laid out in the early 1990s, when the situation was very different and there was still hope for progress.

First and foremost, Israel must agree to place its nuclear infrastructure in Dimona under IAEA safeguards. Once that is done, the establishment of a nuclear-weapon-free zone must be preceded by an unambiguous commitment of all parties not to attack each other’s nuclear facilities. The treaty on establishing such a zone could be based on the provisions of the Joint Declaration on the Normalization of Bilateral Relations signed by Israel and Jordan in 1993. It would be extremely important to produce a system of verification and monitoring, since the traditions of mutual trust and confidence have been lost in this region. Such a system could make use of the experience of such regional organizations as Euratom or ABACC.

Even though Israel is the key (and for now, the main obstacle) to resolving the Middle Eastern nuclear problem, other countries in the region must not use anti-Israeli rhetoric as a cover for their own ambitions.

IN THE RUN-UP TO THE 2015 REVCON: CLOUDS ON THE HORIZON

Three sessions of the Preparatory Committee (PrepCom) have taken place since the 2010 Review Conference ahead of the next such conference in 2015. Each PrepCom session lasted for two weeks. I took part in each of these sessions, so I was in a position to form my own impression of their results.

The first PrepCom in Vienna in 2012 was merely a warm-up and did not achieve anything major—but at least it paved the way for more substantive work in the future.

The most notable event of the second PrepCom in Geneva in 2013 was a walkout by the Egyptian delegation, which left the chamber when the debates were in full swing, never to return. In fact, Egypt had a fairly good reason for such behavior. It was very disappointed with the failure to convene the conference on establishing a WMD-free zone in the Middle East, which was supposed to take place in 2012. In Washington’s opinion, hastily convening such a conference without meticulous preparations and without taking Israel’s interests into account would have doomed the event to inevitable failure. Israel did not demonstrate any willingness to take part (unlike Iran, which confirmed its participation). As a result, the conference, which was tentatively scheduled for late December 2012 in Helsinki, never took place.

The other Arab states shared Egypt’s indignation, but did not follow suit, and their delegations continued to take part in the PrepCom. Nevertheless, the Egyptian walkout sent a clear message to those still entertaining fond hopes that the review process would be a walk in the park.

The second half of 2013 brought a seemingly positive trend in nonproliferation. The Iranian leadership decided to enter into a constructive dialogue with the United States, the European trio (the UK, France, and Germany), Russia, and China in an effort to find a diplomatic
solution to the nuclear problem, achieve the lifting of UN Security Council sanctions on Iran, and defuse tensions. Substantial, albeit tentative progress was made in this area in Geneva in November 2013.

Another notable event was Syria’s decision to relinquish its chemical weapons arsenal and to hand it over to international forces for disposal. Russia played a key role in finding diplomatic solutions to the Syrian chemical weapons problem. The United States also opted in favor of a diplomatic solution in that particular case, abandoned the idea of using force against Syria, and assumed the leading role in the disposal of Syrian chemical weapons (a process that was completed in the spring of 2014). Syria also joined the Chemical Weapons Convention. Even though these developments centered on chemical rather than nuclear weapons, it was easy to see their positive implications for WMD in general.

Unfortunately, the volatile nature of international relations has prevented these positive trends from taking hold. Starting from March 2014 the United States and its NATO allies adopted a new course of putting all kinds of pressure on Russia, including the imposition of sanctions, under the pretext of punishing Moscow for its role in the Ukrainian crisis. Such a policy has produced a boomerang effect. Many mechanisms of consultations on global security, including informal ones, were destroyed overnight, and the parties were now facing the deepest crisis in their relations in the entire post-Soviet period. The degree of tensions is probably comparable to the worst years of the Cold War, such as 1983.

Russia, which was preparing to host the G8 summit in Sochi in June 2014, was suspended from that club, which has reverted to its old G7 format. The Global Partnership program also entered its dying days, although it has not been formally shut down by the G7.

The mechanism of annual meetings between the P5 states has, however, been retained. A scheduled meeting took place in April 2014 in Beijing, although nobody expected much progress to be made at the event.

The United States, the UK, and Ukraine have accused Russia of being in breach of its obligations under the 1994 Budapest Memorandum on giving Ukraine security guarantees in return for the country becoming a non-nuclear-weapon state. After Crimea’s reunification with Russia in March 2014 on the one hand, and the illegitimate change of government in Kiev in February 2014 on the other, the Budapest Memorandum had essentially ceased to exist.

It is against this backdrop that the third PrepCom, the final one ahead of the 2015 Review Conference, was held in New York in April–May 2014. The agenda was dominated by a traditional and predictable list of issues. Its was becoming clear that the 2010 Plan of Action was not being fully implemented, and that there was no longer any chance of its full implementation in time for the 2015 RevCon.

Two main issues are at the center of the problem. The first is disarmament, where even very modest expectations have proved unrealistic. A large number of countries are increasingly calling for a more speedy elimination of nuclear stockpiles. They are also focusing on the humanitarian aspects of nuclear disarmament, for example by promoting the idea of the immorality of nuclear weapons in general. (There is no doubt that this old/new idea will become a leading topic of the 2015 RevCon.)

The second key issue is, of course, the Middle East. There has not been any tangible progress in that area, either—except for Iran’s constructive engagement in negotiations on its nuclear program.

Tentative success on the Iranian front has in fact persuaded many PrepCom participants to desist from overly critical statements or pessimistic assessments so as not to derail nascent progress on the Iranian track. This largely explains the lack of drama or ostentatious walkouts at the third PrepCom.

The event also saw modest but tentative progress being made in some areas. For example, working on the sidelines of the PrepCom, the P5 states signed protocols to the treaty on the establishment of a nuclear-weapon-free zone in Central Asia. As a result, the implementation of that treaty is no longer being blocked by any of the official nuclear powers.
Nevertheless, the superficially calm atmosphere at the third PrepCom was deceptive. There is a major build-up of frustration ahead of the 2015 Review Conference in various parts of the world, including the Middle East and the countries that are unhappy with the slow pace of nuclear disarmament, as well as with the restoration of nuclear weapons' role as the main guarantee of security in the twenty-first century. That frustration may soon break out into the open. Also, during the previous RevCons the United States and Russia worked in tandem to produce persuasive counterarguments, channel that frustration, and make it manageable. In 2015, however, such a concerted effort will require a miracle of political acrobatics—and miracles are in very short supply at the moment.

DOES THE NPT HAVE A FUTURE?

The NPT was opened for signature on July 1, 1968. Some called it the year that changed the world; others described it as the year of fever. The spring of Paris barricades was still fresh in everyone's minds. The Prague Spring was still in full swing; only two months later Soviet tanks would rumble along the streets of the Czechoslovakian capital.

The NPT survived the cold spell in Europe. It then went on to survive the height of the Cold War and the collapse of the bipolar world order. It entered the new century, with its new set of challenges and threats. The treaty's 11 weighting articles never shook the world, but they have always served as a solid foundation of the international nuclear nonproliferation regime. And when the world was facing successive crises, the NPT always proved resilient to the seismic shocks. Some even find it suspicions that the treaty is not crisscrossed with fissures and fractures after all these decades.

The achievements of the NPT are unquestionable. Most importantly, it has managed to minimize the enlargement of the nuclear club. Before the signing of the treaty, many assumed that there would soon be dozens of nuclear powers all around the world. Countries such as Sweden, Switzerland, Australia, and Canada were all actively pursuing nuclear weapons programs. Over the years, Egypt, Turkey, South Korea, Taiwan, Argentina, and Brazil also demonstrated more than casual interest in going nuclear. But, throughout the entire history of the NPT, only a handful of countries have ever violated their commitments under the treaty (namely, Romania, Iraq, North Korea, Libya, and, in all likelihood, Iran and Syria).

According to the Peace Research Institute Frankfurt, 27 nuclear weapons programs had been launched in countries around the world prior to the entry of the NPT into force, and three such programs had been shut down. Since the treaty's entry into force, only nine nuclear weapons programs have been launched, and as many as 23 shut down.9

There are now only three countries that stubbornly refuse to join the nuclear nonproliferation regime and have acquired nuclear weapons: Israel, India, and Pakistan. There is also North Korea, the only state in the history of the NPT that initiated the withdrawal procedure in 1993, resumed it in 2003, and brought its nuclear program all the way up to conducting nuclear weapons tests. Iran has never quit the NPT, so nominally it remains within the fold of the treaty, but starting from the mid-1980s and until 2003 it pursued a limited nuclear weapons program under the cover of NPT membership.

For almost two decades, the entire nonproliferation debate has remained centered on this worrying but very limited list of countries. A certain sense of déjà vu is inevitable if one reads 20-year-old newspaper articles on nonproliferation. No matter what the proponents of the falling domino theory might say, that list is not getting any longer, with no new candidates for NWS status. On the contrary, over the past 20 years two recognized nuclear-weapon states, France and China, have joined the NPT. The same is true of South Africa, which has voluntarily relinquished and destroyed its nuclear arsenal. Belarus, Kazakhstan, and Ukraine have also joined the treaty as non-nuclear-weapon states, after inheriting large numbers of strategic nuclear weapons from the former Soviet Union. In the case of Ukraine, this was the result of a difficult compromise.

In the foreseeable future, fundamental problems capable of blowing up the NPT can only emerge if three of the treaty's pillars—nonproliferation, disarmament, and peaceful use of
nuclear energy—stop being perceived as equally important and substantial, and if more energetic attempts are made to make one of these pillars more equal than others.

I have already outlined the challenges that can slowly but surely undermine the NPT and the international nuclear nonproliferation regime, without destroying them in one fell swoop. Allow me to summarize that negative forecast.

The first risk is the failure of the efforts to form the necessary climate for eventually establishing a zone free of nuclear weapons and all other WMD in the Middle East. If ever the nonproliferation regime begins to crumble, the process will surely start in the Middle East.

The second risk is inability to untangle the Iranian nuclear knot, reversals during the negotiations with Iran, and general frustration and disappointment, which could result in an act of aggression being committed against Iran. If such an act takes place, Iran will withdraw from the NPT because the treaty will have demonstrably failed to protect it. An alternative scenario, which would also be very negative, is an Iranian political decision to build nuclear weapons and quit the NPT once all the conditions for building a nuclear device are in place.

The third risk is the failure of the negotiating process with North Korea, which could, under certain circumstances, prod the country's regional neighbors—especially Japan—to review its hitherto unshakeable non-nuclear-weapon status.

The fourth risk is stagnation of the bilateral nuclear disarmament process between Russia and the United States, and lack of any progress on engaging all the other P5 states in that process to make it multilateral.

The fifth risk is self-destruction of the Conference on Disarmament in Geneva because of its continued inability to launch negotiations on a convention banning the production of fissile materials for weapons purposes.

Finally, the sixth risk is non-state actors gaining unauthorized access to nuclear weapons or components—possibly via Pakistan or in some other way—and then launching a nuclear attack.

Individually, none of the elements of this negative forecast can destroy the nuclear nonproliferation regime in its current form, either at the 2015 NPT Review Conference or at some later stage. But a combination of several of these elements could mean very tough times for the NPT and the international nuclear nonproliferation regime, when their very survival will be in question.

NOTES

1 Letter by representatives of the People's Republic of China, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and France of May 1, 2000 to the Chairman of the 2000 NPT Review Conference, Doc. NPT/CONF.2000/21, Yaderny Kontrol, No. 5, September–October 2000, pp. 44–47.


5 The treaty entered into force on February 5, 2011. For more details about the essence of the treaty, see: Chapter 14.

6 The status of these recommendations is somewhat diminished by Footnote 1 to Part I of the Final Document, which reads: “The present review is the responsibility of the President and reflects to the best of his knowledge what transpired at the Review Conference with regard to matters under review.”

7 This number does not include North Korea, even though documents from the NPT Review Conference do not exclude it from the list of NPT members, with a "status unclear" footnote.
Neither does this number include Taiwan, which is recognized by Russia and the majority of other states as an inalienable part of the People’s Republic of China. Taiwan signed the NPT on July 1, 1968.

8 NPT 2010: Strengthening the Regime (Moscow: PIR Center, 2010); Towards Nuclear Disarmament (Moscow: PIR Center, 2014).

We are in the midst of a paradigm shift in the nature of warfare. Weapon systems are moving toward increased autonomy, with robots being delegated great control over decision-making on the battlefield. Experts predict that in as little as 20 years we could see the development of lethal autonomous robots (LARs) — robots that are fully capable of making decisions to target and engage without human involvement. This robotics revolution in warfare is arguably on a par with the significant changes caused by the advent of gunpowder or the nuclear bomb.

Recognizing its importance, the UN Convention on Conventional Weapons (CCW) will open an investigation into the issue of lethal autonomous robots in 2014. This decision by the CCW could set in motion the possible adoption of a legal instrument to regulate LARs, and follows on the heels of a swelling effort to initiate a preemptive ban on this category of weapons. As autonomous weapon systems could have far-reaching moral and legal implications, it is certainly the correct course of action to assess such implications and to decide on the degree of autonomy that the international community would allow in weapon systems.

This article examines the degree to which international humanitarian law in its current state is equipped to guide the use of LARs during an armed conflict. Leaving the issue unresolved on the international level is likely to bring to life the risk of undermining international security and the legitimacy of international law once the technology for LARs becomes commonplace. Currently there are no international agreements governing the research, development, and use of LARs, so it is imperative that the international system addresses any potential governance problems.

A legal analysis hinges around two crucial points:

1. Are LARs, as such, illegal under international humanitarian law?
2. Would the use of LARs during armed conflict violate important legal provisions that protect innocents?

The answers to these questions will help determine the best regulatory policy going forward.

While I do not find LARs as a category of weaponry inherently unlawful, they will certainly have difficulty complying with the targeting constraints mandated by the rules of armed conflict. However, despite the potential challenge of programming the laws of armed conflict into a robot, it is impossible to rule out at this stage that autonomous systems may be an acceptable military option in certain contexts. A preemptive ban on the research and development of the technology would not necessarily be the best course of action.

**LARS PROJECTS OVERVIEW: ON THE WAY TO A ROBOTIC ARMS RACE?**

Lethal autonomous robots would be unique from current automated systems in that they could "select and engage targets without further intervention by a human operator."
completely removing humans from the decision-making loop. While the acquisition and deployment of LARs on the battlefield remains years away, the technology is developing at an exponential rate. It is only a matter of time before autonomous weapon systems, or at least the technological capacity to create them, become a reality.

Even now, states are developing and employing robots that exhibit varying degrees of autonomy, from human-controlled to highly automated. Though they fall short of full autonomy, these weapon systems provide a glimpse into the eventual development of LARs.

At one end of the autonomy spectrum exist human-controlled robotic systems, which are controlled remotely by a human operator. While they can perform basic functional tasks independently, these robots can only select and engage when commanded to do so by a human being. Thus their defining characteristic is that a human decision-maker is always kept "in the loop."

The United States has been at the forefront of research and development of these human-controlled systems. Its unmanned combat aerial vehicle program (UCAV) is perhaps the best known, employing the Predator drone as well as its larger cousin the Reaper, in Afghanistan and other regions. While UCAVs have automated some tasks necessary to take off, land, and maintain flight, the human operator remains in control of the targeting and attack decisions. In addition its UCAV program, the United States began deploying unmanned ground vehicles (UGV) in Iraq in 2007. The newest weaponized UGV is known as the Modular Advanced Armed Robotic System (MAARS). The successor to less-powerful SWORDS, MAARS boasts a sophisticated targeting system and a wide range of compatible weaponry, but remains under the control of a human operator.

Human-supervised systems exist somewhere in between controlled and fully autonomous systems. While the human oversees the operations of the robot and issues the command to attack, the robot carries out the targeting system independently. The degree to which the robot is autonomous depends on the level of engagement from its supervisors. Because the speed of war places a high premium on quick decision-making, the human operator often has little choice but to trust the robot’s suggested action. Thus some human-supervised robotic weapons may be considered de facto autonomous.

Falling on the highly automated side is the Phalanx. Deployed on Aegis-class cruisers in the Navy, it is an automated defense system that detects, targets, and possibly shoots down incoming missiles. Although technically human-supervised, in order for the Phalanx to operate effectively it cannot be directed by a human because human decision-making is just too slow. Israel operates a similar system known as the Iron Dome, a land-based automated missile defense system like the Phalanx. While both these systems are highly automated, they are designed to target and attack other machines, not humans.

Lastly, at the fully autonomous end would exist LARs, in which the human is completely “out of the loop.” These weapon systems could operate as independent entities on the battlefield: searching, targeting, and attacking targets without human input. Fully autonomous robots would be able to perform these tasks in an “open and unpredictable environment.” LARs would likely be used most often in tandem with human soldiers—however, it is possible that they could also be deployed for independent missions.

New increasingly autonomous weapon systems are already on the horizon. The UK is developing the Taranis, an unmanned stealth aircraft. While the system will function “with a human operator in the loop,” the Taranis project is pushing the boundaries of autonomous aerial vehicle technology. The Israeli Harpy is a UCAV that operates autonomously to target and destroy enemy radar. South Korea has deployed an autonomous sentry robot, SGR-A1, to patrol the demilitarized zone with North Korea. The robot’s sensors are designed to detect people and send warnings back to its human operators. And the United States is in the process of testing new pilotless drone technology that would allow for autonomous take-off and landing procedures on aircraft carriers.

A newcomer to the growing group of countries pursuing autonomous technology (see Figure 1) is Russia. It is currently developing its own weaponized robot, a robo-cop that would operate domestically during policing and counter-terrorism operations. The technology is being designed with the goal of mitigating the casualties from terrorist attacks and hunting down the terrorists themselves.
### Figure 1. Advanced automated systems projects in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>United States</strong></td>
<td>The United States has been developing its newest UCAV, the X-47B, which successfully completed an autonomous landing on an aircraft carrier in 2013.</td>
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<tr>
<td><strong>South Korea</strong></td>
<td>The SGR-A1 guards South Korea’s demilitarized border with North Korea. Its sensors can target human beings, but it cannot fire without command of a human operator.</td>
</tr>
<tr>
<td><strong>Russia</strong></td>
<td>In 2014 the announcement was made on the establishment of a Robotics Laboratory in Russia. The key task of the new structure would be elaboration of advanced robotic warfare systems. In 2013 the Russian Defence Ministry adopted a special-purpose program of development of robotics for the period to 2020. The initial annual funding of the program is reported to be 3 billion rubles and can be further increased.</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td>Britain’s stealth fighter can fly faster than the speed of sound, follows a pre-programmed flight path, and can identify targets on its own.</td>
</tr>
<tr>
<td><strong>Israel</strong></td>
<td>The Israeli Harpy is a “Fire-and-Forget” UCAV that carries a warhead designed to automatically target and destroy radar systems. The aircraft has been purchased by a number of countries, including Turkey and China.</td>
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While right now the technology requires a human operator, the end goal is to have an autonomous robot “able to make shoot-to-kill decisions on its own.”

It is evident that governments are investing the necessary resources to ultimately develop lethal autonomous robots, in the absence of any preemptive action to enact a ban. We are seeing drone-operating states, notably the United States, making it clear that “they intend to significantly increase the autonomy of future systems.” The U.S. Department of Defense has formally recognized the need to integrate autonomous systems in its war fighting capabilities, envisioning “unmanned systems seamlessly operating with manned systems while gradually reducing the degree of human control and decision making required for the unmanned portion of the force structure.”

Of course, it remains the stated objective of governments always to keep human decision-makers somewhere in the loop. While the UK Ministry of Defence “is looking to increase levels of automation where this will make systems more effective,” it also “has no intention to develop systems that operate without human intervention in the weapon command and control chain.” This is similar to the U.S. position, which stresses that all autonomous systems are supervised at some level.

However, based on the trends of current development and the military advantages offered by LARs, states have strong incentives to move rapidly in the direction of full autonomy. As Peter Singer of the Brookings Institute put it, “they [LARs] simply make too much sense to the people who matter.”

The employment of LARs offers numerous potential advantages over current weapon systems, primarily because they distance the human soldier from the battlefield, reducing the risk of casualties for the attacking side and increasing the range of force projection. In this new age of asymmetric warfare, LARs allow a state to extend its military capabilities beyond where it would be willing to risk putting human soldiers. Militaries envision increased productivity, measured as “mission accomplishment per soldier lost.”

Furthermore, the pace of war is incredibly important and benefits autonomous systems. Their sensors and processing power, without the cumbersome involvement of a human being, allow for quick and effective decision-making. Lastly, it is conceivable that LARs would prove beneficial in serving humanitarian purposes. Their sensors could offer greater precision for targeting and their decision-making process would not fall prey to the darker side of human nature.

**LARS and International Law**

This section addresses the legal questions raised by the potential use of LARs during armed conflict. The international community will have to determine whether the use of weapons absent human judgment is compatible with the standards of international humanitarian law. This assessment must consider whether (1) autonomous weapon systems as such would be unlawful and, further, (2) if their use during hostilities would be unlawful. If the answer to either of these two questions is in the negative, then it would be reasonable for the international community to institute a preemptive ban. However, it appears that LARs are not prima facie illegal under international law.

Under international human rights law the most fundamental principle is the human right to life. It is this cornerstone right by which I will evaluate the legality of LARs. The right to life is codified in the International Covenant on Civil and Political Rights (ICCPR), which was ratified by the UN General Assembly in 1966. This covenant proclaims that the “inherent right to life” shall not be “arbitrarily deprived.” During armed conflict, the applicable lex specialis, international humanitarian law, prescribes the circumstances under which a deprivation of life is “non-arbitrary” and therefore lawful. We must turn to the primary body of law governing the conduct of hostilities, the Geneva Conventions, to evaluate the possible use of autonomous weapon systems in conflict.

First of all, states are required by international humanitarian law to undertake the necessary review and testing procedures during the weapon development stage, according to Article 36 of the Additional Protocol to the Geneva Convention. When a state is contemplating the development or acquisition of a new “means or method of war,” it is “under an obligation to
determine whether its employment would, in some or all circumstances, be prohibited. In the absence of any specific prohibiting treaty, as is the case with LARs, the legality of a new weapon or means of warfare must be reviewed in regards to international treaty law and international customary law.

States must review both the design and characteristics of the weapon as well as how it will be used, as “the weapon’s effects will result from a combination of its design and the manner in which it is to be used.” Thus the review process is twofold: States must assess whether a lethal autonomous robot would be unlawful per se, and if the answer is in the negative to this first question, then whether it can be used in accordance with the rules of armed conflict law. Although this point is contested, it seems that the potential for violations of the law must also be considered under Article 36, in addition to a priori judgments about the legality of a new weapon system.

LARS’ LEGAL STATUS: ILLEGALITY PER SE VERSUS THE ILLEGALITY OF USE

Under this review, the first test for LARs will be to ensure that they do not violate the ban on indiscriminate or superfluous harmful means of war. Such weaponry, that either “cannot be directed a specific military objective” or the “effects of which cannot be limited as required by humanitarian law,” is inherently unlawful; there is no way that it could be deployed in a way compliant with human rights law. The 1977 Additional Protocol to the Geneva Conventions stipulates that weapons designed to be indiscriminate in their targeting or to result in excessive harm are strictly prohibited. Customary international law specifically bans the employment of “weapons, projectiles and material and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering or which are inherently indiscriminate.”

It does not appear that LARs, in virtue of the fact that they are autonomous systems, would automatically violate the ban on indiscriminate or superfluous means of warfare. If an autonomous weapon were programed with insufficient targeting information and reasoning capacity, then it could violate the ban. Or such systems could be mounted with weaponry that would in turn violate the ban on indiscriminate or excessively harmful attacks—but this need not be the case. In principle, the “fact that an autonomous [emphasis added] weapon system selects the target or undertakes the attack” does not render it unlawful per se. Autonomy itself does not preclude LARs from being designed to adhere to these requirements, and thus we cannot conclude that they are indiscriminate by nature.

If we cannot rule out LARs per se, then the review process requires that we look at their ability to be constrained during the conduct of hostilities. As noted earlier, any weapon system that results in the “arbitrary deprivation” of life is prohibited. It is possible that LARs used during armed conflict may fail to meet the requirements of proper use under international humanitarian law—specifically, the law of targeting.

The Geneva Conventions have, over time, codified the jus in bello legal standards for weapons use during war. Of concern here is the possibility that LARs used during armed conflict may fail to meet the key standards of distinction and proportionality as required by the law of targeting. Both principles have been laid out in Additional Protocol I to the Geneva Conventions. Although the United States is not party to this convention, the contents of the Protocol are generally accepted as customary international law.

The principle of distinction requires that weapon systems target only legitimate military objectives for attack. Thus, the ability to distinguish between combatants and non-combatants, including civilians and those who have been rendered hors de combat, is crucial. Article 48 of Protocol I stipulates that, at all times, the parties must “distinguish between the civilian population and combatants and between civilian objectives and military objectives.” Attacks that fail to adhere to this principle employ indiscriminate methods of war and are prohibited according to Protocol I.

In addition to the principle of distinction, weapon systems are also required to exercise proportionality in the conduct of an attack. This principle requires that the collateral damage resulting from the attack not surpass the expected military gain. It involves, in essence, a utilitarian calculation to determine the correct use of force in any given situation. The U.S.
Army countersurgency field manual, for example, describes the rule of proportionality as requiring that "the loss of life and damage to property incidental to attacks must not be excessive in relation to the concrete and direct military advantage expected to be gained." Autonomous weapon systems would need sophisticated sensors and reasoning capacity to assess the battlefield, as the proportionality assessment is "extremely contextual, and its value can change rapidly based upon developments on the battlefield."

The principles of distinction and proportionality pose a significant challenge for autonomous technology. It remains an open question as to whether LARs could properly distinguish between combatants and civilians, as well as other non-combatants—including wounded combatants and those who have surrendered—and then make the correct value assessment in determining the amount of collateral damage.

Some contend that certain human qualities are necessary for compliance with these two principles. The rules of armed conflict require a level of human subjectivity that cannot simply be translated into code for a robot to follow. Humans have emotional states that machines lack, and are able to empathize and understand the intentions of their targets—simply put, "humans understand each other in a way that machines cannot." The ability to read a target's intentions is crucial for determining whether it qualifies as a legitimate combatant, an important requirement for the principle of distinction. The same problem applies to the proportionality assessment, which traditionally involves a "human judgment call evaluated on the basis of reasonableness." Thus these nuanced principles seem to implicitly require a human quality that would preclude machines from ever being lawful decision-makers. As Peter Asaro, pro-ban advocate, put it, "in the absence of human judgment, how can we determine that such killing is not arbitrary?"

Yet it is worth noting that human soldiers themselves are not perfect in upholding the values of humanitarian law. In some contexts, the case could be made that a robotic system may be better equipped to conduct war more ethically. Robots are not prone to emotional outbursts of anger or revenge that cloud their judgment, and therefore do not commit crimes that spring from dangerous emotional states. In addition, autonomous weapon systems could arguably allow for more precise and discriminating attacks, reducing collateral damage and ensuring the legitimacy of the target. For example autonomous weapon systems can enter a building and wait to be shot at before returning fire (a luxury that a human soldier does not have). Autonomous robots do not have a right to self-defense, and this would allow them to take greater risks on the battlefield, in turn helping them to target legitimate combatants. If we ban the development of autonomous weapon systems now, we rule out the possibility of more controlled and precise target and fire decisions that such systems could offer.

Thus, some believe that the lack of a human decision-maker does not, and should not, inherently prevent robots from fulfilling their legal obligations. Some theorists are attempting to distill the rules of war into a robotic system. Arkin's proposal of an "ethical governor" is one such solution. He has already begun work on developing a software package that would give a robotic system a code of ethics and would allow it to comply with the rules of armed conflict. While the technology is far off, it is not inconceivable that some constraints can be applied to the conduct of an autonomous system, but it is an open question as to how effective and comprehensive they can be. If autonomous weapons systems can serve as an effective means to the end of protecting civilians and reducing harms on the battlefield, then it is certainly desirable to continue research into programming the laws of armed conflict.

As the technology develops under the constraints of international humanitarian law, it seems that the environment of their deployment will ultimately determine the admissibility of LARs on the battlefield. Of course, if current drone technology were used in autonomous mode, it would be "incapable" of compliance with targeting law. However, it is not impossible that technological advances, in strong AI for example, would create LARs that are able to confidently operate in accordance with the law, in certain operational environments. In situations where the likelihood of civilian presence or collateral damage is low, LARs may be better able to comply with international humanitarian law, as opposed to a more confusing urban environment—thus "what is sufficient for robots to comply with the rules of armed conflict will be context-dependent." As long as it could be shown that the autonomous weapon system could sufficiently assess the rules of armed conflict within its operational context, the use of such a system would be lawful.
LARS LEGAL ACCOUNTABILITY: A BLANK SPOT IN INTERNATIONAL LAW

A sticking point for the opponents of LARs, in addition to the problems posed by the rules of armed conflict, has been the issue of legal accountability. In order for the rule of law to remain effective, some party must be held responsible for the LAR should a violation of the law occur. Critics of autonomous weapons technology cite the "responsibility gap" created when human beings are no longer the agent of the violation. Someone must always remain "legally responsible...irrespective of the operational autonomy achieved by such systems."56 Because robots do not have traditional human "agency," in that they are presumably incapable of possessing the intent to commit a wrongful act, they are not subject to the same legal prosecution as a human soldier would be. Therefore they present a unique case for legal accountability. Who is the responsible party: the engineer, the programmer, the commanding officer, or the state as a whole? If a "responsibility vacuum" emerges, and states can use LARs with impunity, then such weapons could conceivably be prohibited from deployment.

One solution could be found if we turn to the notion in international law of state agency, according to which "the conduct of any State organ shall be considered an act of that State under international law."57 A state is responsible for the agents carrying out military operations on its behalf. Thus, while LARs may lack "criminal culpability" at the agent level, this "has no bearing on the continued legal responsibility of states" for possible wrongful acts committed by LARs.58 We will need a "stronger emphasis on State as opposed to individual responsibility," which can be achieved, among other ways, by assigning responsibility in advance, mandating the installation and review of recording devices, as well as spreading the responsibility among a group of potentially culpable parties.59

Martens Clause

A number of activists and human rights groups contend that lethal autonomous robots are unlawful per se for a different reason: they violate the "principles of humanity" that form the bedrock of international humanitarian law. Some would argue on moral grounds that we cannot delegate to a machine the power to take human lives—such power must always fall within the purview of a human decision-maker.60 War remains a human exercise, and the widespread usage of LARs in the future could deprive war of its slim semblance of humanity.

One possible legal reason to support this claim is the Martens Clause, which was originally introduced in the 1899 Hague Convention, and was later restated in the preamble to the 1949 Geneva Conventions and Additional Protocols.61 This clause is considered customary international law and prohibits weaponry that violates "the principles of humanity" and the "requirements of public conscience."62 The International Court of Justice in the case of the Legality of the Threat or Use of Nuclear Weapons affirmed the importance of the Martens Clause, "whose continuing existence and applicability is not to be doubted" and stated that it "had proved to be an effective means of addressing rapid evolution of military technology."63 The clause certainly remains relevant, and it has been argued further that these humanitarian principles imply that humans must always be making target-kill decisions on the battlefield.

However, interpretations vary as to the applicability of the clause in every situation. It seems that the most commonly accepted interpretation is one in which the clause acts as a failsafe in the event that existing treaty or customary law does not cover a new weapon system.64 This position was affirmed in an Advisory Opinion by the International Court of Justice (ICJ): "A weapon which is not covered by existing rules of international humanitarian law would be considered contrary to the Martens Clause if it is determined per se to contravene the principles of humanity or the dictates of public conscience."65 Over time, these core principles of humanity have been upheld by the norms of international humanitarian law. It would rare for a weapons system not to violate customary or treaty law, but still contravene the Martens Clause.66 Thus one cannot rule on the unlawfulness of a weapons system solely on the grounds of the Martens Clause.
POLICY OPTIONS WITH REGARD TO LARS: WHERE HIGH AIMS MEET LIMITED CAPACITIES

On one side exist those who see lethal autonomous robots as inherently violating the principles of humanity and unable to meet the requirements of international humanitarian law. Because LARS would violate international law, a comprehensive treaty banning their use is the best option for the international community and should be the next step forward. On the other side exist those who see nothing unlawful per se about lethal autonomous decision-making, and while they recognize the difficulties of compliance, view international humanitarian law as able to regulate (and ultimately permit) lethal autonomous robots. They make the case that LARS can successfully operate according to the rules of armed conflict, as long as states are transparent about their development and collectively adhere to “best practices,” including the proper legal review and recognition of the law.67

I fall somewhere in between. Attempts to have lethal robots operate in fully autonomous mode are unacceptable today, as current technology lacks the ability to accurately conform to the nuanced, context-dependent laws of targeting. However, we may eventually be capable of and compelled to use LARS in specific operational theatres. Thus, a timely dialogue and international consensus on their future is essential.

However, an absolute ban on LARS, as advocated by such groups as Human Rights Watch and the International Committee for Robot Arms Control, appears to be premature for the moment.68 We should not halt research and development on this topic without knowing yet whether technology could eventually allow LARS to follow an ethical code. In certain contexts, States may conclude that this technology reduces human rights violations on the battlefield and thus must necessarily be deployed instead of less discriminating weapon systems.

A moratorium on LARS production, as advocated by a recent report from the UN Special Rapporteur to the UN High Commissioner on Human Rights, is perhaps a prudent course of action until an international framework is discussed and finalized. While we need not implement a ban, I am less optimistic than some that we can leave the issue up to the norms of international humanitarian law and the “best practices” of States to insure that all eventual uses of LARS will be lawful. Of course we need States to be transparent and accountable to the law with regards to their development and use, but this is not enough. While we should not ban LARS per se, States will still need to agree on the level of autonomy that can be allowed given the intended context of use. There is a blurred line between highly automated (read “human-supervised” but possibly de facto autonomous robots) and fully autonomous ones. This will be a tricky issue for States to resolve and will be better left to the regulation of a specific convention on autonomous weapons, rather than each State’s interpretation of legal norms.

As alluded to earlier, an intergovernmental policy dialogue will begin in 2014 in the UN CCW with regards to the legal standards governing future autonomous technology. This is a positive development, and hopefully a consensus can soon be reached, either in the CCW or another body, resulting in either a “binding international agreement” or a “non-binding code of conduct.” While a preemptive prohibitory treaty is undesirable, the creation of a regulatory treaty of some kind is certainly wise. A combination of approaches, from a treaty to the existing rules of armed conflict, to the development of “soft law” and “best practices” aspects, should all be considered as States discuss governance mechanisms.69

CONCLUSION

Just last year, military expert Peter Singer remarked that the “the humanitarian community is ex post reacting to things that already exist and are being used.”70 While this is true in part, it is also true that great attention was brought to the issue of lethal autonomous robots during 2013. An international dialogue has begun, and I am hopeful that the international community will seize the opportunity to properly regulate lethal autonomous robots, rather than pontificate and delay action. It is a unique chance to preemptively address a controversial and potentially divisive future technology.

Ultimately, it seems that international humanitarian law goes a long way toward regulating the development of lethal autonomous systems, though a regulatory treaty is important to clarify
the permissibility of these systems. The fact of autonomy itself does not prevent LARs, as a
category of weapon, from being able to adhere to the norms of international humanitarian
law. The employment of LARs will be constrained by the Laws of Armed Conflict, and they will
likely only be lawful when used in certain contexts. This is true of almost every weapon
system. Of course the complex and nuanced calculations, often requiring subjective
human reasoning, that are necessary to determine compliance with these principles will be
incredibly difficult, and in some cases impossible, to install into a robotic system.

But it is not unreasonable to assume that, as our knowledge regarding robotics increases
exponentially in the coming decades, we will be able to employ lethal autonomous robots that
can adequately adhere to the rules of war in limited contexts. Furthermore, autonomous
robots may in fact uphold humanitarian values on the battlefield better than their human
counterparts, in addition to the military advantages they offer. Of course, at the moment it is
impossible to say whether LARs would ultimately result in ethical progress or regression on
the battlefield. A wait-and-see approach without any regulation or discussion would be risky,
yet a preemptive ban on the research and development of these autonomous systems would
likely be premature and counterproductive. A regulatory treaty will ultimately be the best
course of action for codifying norms concerning the appropriate use of LARs.

NOTES

1 Also referred to interchangeably in this article as “autonomous weapon systems.”

   <http://www.hrw.org/sites/default/files/reports/arms1112ForUpload_0_0.pdf>, last accessed
   September 15, 2014.

3 P.W. Singer, Wired for War: The Robotics Revolution and Conflict in the 21st Century (New

4 Brid-Aine Parnell, “Killer Robots Could Be Banned By The UN Before 2016,” Forbes
   killer-robots-could-be-banned-by-the-un-before-2016/>, last accessed September 15,
   2014.

5 Nils Melzer, Human Rights Implications of the Usage of Drones and Unmanned Robots in
   Warfare (European Parliament: Directorate-General for External Policies of the Union, 2012),
   p. 44 [hereafter Melzer, Human Rights Implications].

6 “Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions,”

7 Singer, Wired for War, p. 104.

8 For an overview of future technologies, see generally: Gary Marchant et al., “International
   Governance of Autonomous Military Robots”, Columbia Science and Technology Law Review

   4258963>, last accessed September 15, 2014.

    systems/maars/>, last accessed September 15, 2014.


13 Melzer, Human Rights Implications, p. 6.

14 Arkin, p. 5.


25 Singer, Wired for War, p. 128.


31 Protocol I additional to the Geneva Conventions, 1977, art. 36.


33 Ibid, p. 17.


35 Protocol I additional to the Geneva Conventions, 1977, art. 51 and 35(2).


40 Protocol I additional to the Geneva Conventions, 1977, art. 51(4).

41 Protocol I additional to the Geneva Conventions, 1977, art. 51(5)(b) and Article 57(2)(iii).

42 David Petraeus and James Amos, Counterinsurgency Field Manual (Kissimmee, FL: Signalman, 2009), p. 7.


46 Thurnher, Jeffrey, “The Law That Applies to Autonomous Weapons Systems.”


53 Melzer, Human Rights Implications, p. 28.


56 Melzer, Human Rights Implications, p. 37.

57 ILC, ARSIWA, Chapter II, Art. 4.

58 Melzer, Human Rights Implications, p. 39; emphasis added.


See Geneva Convention Protocol I, art. 1(2), as well as the preambles to the Hague Conventions of 1899 and 1907.


Melzer, Human Rights Implications, p. 45.


The track record of U.S.–Russian bilateral cooperation on the issues of ICT and cybersecurity in the global security context probably goes back to the end of the 1990s when this agenda for the first time emerged in bilateral negotiations. One major step at that early stage of bilateral dialogue was the meeting of the U.S. and Russian Presidents and the resulting Joint Statement “The Common Security Challenges at the Threshold of the 21st Century” signed on September 2, 1998. The first document of its kind, the Statement addressed the ICT-related issues in the context of international security, and focused on several points:

- The Statement urged for “promoting the positive aspects and mitigating the negative aspects of the IT revolution.”
- It also called for “ensuring the future strategic security interests” of the USA and Russia, including the ICT agenda into this context.
- However, the major focus in the document was on some short-term and local issues rather than on strategic relations on the field of information security. Thus, the Statement stressed the necessity of “resolving the potential Year 2000 computer problem.”
- Concerning the working mechanisms for bilateral collaboration, the Statement called for the launch of bilateral consultations and study of the wider consequences of potential common challenges, including those in the field of ICT.

This episode, which clearly marked the start of U.S.–Russian bilateral dialogue on ICT issues in the global security context, did not receive consistent logical development in the immediate perspective. While negotiating the text of the Statement, the two parties realized the profound divergence of their approaches towards the ICT issues in a security context. The United States had the military ICT revolution on the march after the tremendous success of the use of smart weapons and information technologies in Iraq in 1990–1991 (Operation Desert Shield, Operation Desert Storm). The ICT-based solutions and information warfare itself were regarded as an emerging game changer of the existing military paradigms and an undisputed advantage of the United States in any future military conflict. Conversely, Russia was one of the first countries in the world to regard the meteoric growth of the military and strategic potential of the ICTs as a major threat to global security, and to call for the introduction of international norms restricting and regulating the elaboration and use of “information warfare.” This deep-rooted controversy should be mentioned among the major reasons that prevented successful development of bilateral dialogue in this area after the Clinton–Yeltsin Statement.

A long period of time followed when the issue of ICT in security and military contexts was not put in the framework of U.S.–Russian bilateral negotiations. Instead, the discussion on these issues gained momentum within the multilateral and global framework of the United Nations. In September 1998 the Russian Minister of Foreign Affairs Sergey Ivanov sent a special letter to the UN Secretary-General, which included the draft resolution “Developments in the Field of Information and Telecommunications in the Context of International Security.” In December 1998 the draft resolution was submitted to the First Committee of the UN General
Assembly and was adopted without a vote (A/RES/53/70). The resolution contained a recommendation to all member-states to express their views on this agenda.

In 2001, two years after sponsoring the Resolution, Russia proposed establishment of a special Group of Governmental Experts (GGE) in order to consider existing and potential threats in the sphere of ICT and possible cooperative measures, and to conduct a study of key security issues in this field. Despite the consistent skepticism of the United States towards the inclusion of ICT security in the hard security and disarmament context, Washington sent its representatives to the GGE alongside Russia and 13 other nations. The GGE convened a series of meetings in 2004 and managed to produce only a formal report (because of a lack of consensus among its members on key discussed issues).¹

However, both the practice of the annual resolutions on “Developments...” and the work of the GGEs took root and have been continuing up to now. Another two GGE meetings were convened in 2009 and in 2013, and two Reports were adopted as a result of their activities.

The fourth GGE set up in 2014 includes representatives of 20 countries and has convened its four meetings in 2014 according to the UN GA resolution 68/243, adopted on December 27, 2013. The work of the fourth GGE is focused on an in-depth examination of the issues of application of international norms and international law to the ICT domain and behavior of states in the information space.

Starting from the first Resolution inspired and sponsored by Russia as well as the idea of the first Group, the GGE track has become the major multilateral framework for discussions on ICT in the international security context. In fact, the discussion in the GGE framework for a long period of time absorbed (or rather substituted) the bilateral U.S.–Russian dialogue in the international information security and cybersecurity area. Not accidentally, the key agenda of debate within the GGEs was (and still is) largely shaped by the dispute between the Russian and U.S. representatives, both of them trying to promote the approaches and paradigms of their country. So it took almost 10 years for this tug-of-war and intensive negotiation to result in a first consensus GGE Report adopted in 2010 and introducing a compromise terminology and vision of the whole debated agenda.² This step chronologically coincided with the Reset effort in U.S.–Russian bilateral relations and intensification of bilateral cooperation in the security area, which started in 2009.

**2011 AND ON: A NEW START OF BILATERAL DIALOGUE**

So probably the Reset and successful activities of the second GGE opened the door for the next round of U.S.–Russian negotiations on information security, cybersecurity, and building trust in cyberspace. However, there was another powerful factor which also might have prompted Moscow to seek some transparency and mutual trust with Washington in ICT area. 2010 faced the world with the unprecedented might of cyber sabotage demonstrated by Stuxnet—the famous uniquely sophisticated worm that was used to slowdown the Iranian nuclear program and did it with great efficiency by physically damaging over 1,000 centrifuges at the uranium enrichment facility in Iranian Natanz. Whoever was the real creator of this cyber-weapon, its revealed capabilities turned out to be shocking for the Iranian government—but they also impressed Moscow. For the first time ever digital technology revealed itself as a weapon of potentially tremendous destructive power, posing a real physical threat to critical infrastructure, strategic and hazardous objects, nuclear assets, etc. The time to reassess the scale and urgency of the cyber-threat came all of a sudden.

However, the general opinion of experts the world over (later supported by the New York Times reporter David Sanger and former National Security Agency (NSA) employee Edward Snowden) left no chance for Stuxnet to be created without the participation of U.S. hackers and militaries. So for the Kremlin, handling potential threats from cyberspace to a certain
extent has become linked with ensuring a due level of transparency and predictability of White House policies and programs in this sphere.

These and maybe some other factors in combination led to a revival of U.S.–Russian bilateral negotiations on ICT issues in the context of international security after more than a decade-long pause. In February 2011 a call for a high-level cybersecurity bilateral working group followed from Moscow. And on June 21–23, 2011 the meeting of U.S. and Russian delegations took place in Washington, DC with the aim “to continue discussions of confidence-building measures, with the goal of preventing misunderstanding and inadvertent escalation of cybersecurity incidents.” After a few days of negotiations a Joint Statement was adopted by the U.S. Government Cybersecurity Coordinator Howard Schmidt and the Deputy Secretary of the Russian Security Council Nikolai Klimashin.

The Statement laid the basis for all subsequent bilateral negotiations and discussions in this area; it also very clearly reflected the changes that the information security (or ICT security) agenda has undergone since 1998. It has become much more concrete, diversified and truly strategic. The negotiations of the two delegations and the Statement itself were focused on three particular issues:

1. the exchange of military views on cyberspace operations;
2. implementation of regular information exchange between both nations’ Cyber Emergency Response Teams (CERTs);
3. establishment of protocols to communicate regarding cybersecurity issues via existing risk-reduction/crisis-prevention communications links between Moscow and Washington.

For the first time the mechanism of confidence-building measures (CBMs) was put in the focus of U.S.–Russian negotiations in the field of ICT in the security context. According to the text of the Statement, the discussions were held with the goal of preventing misunderstanding and inadvertent escalation of cybersecurity incidents. The major aim identified by the parties was to ensure trust and transparency in communication on cybersecurity incidents in order to mitigate the risk of escalation during crisis incidents. With these formulas, the meeting in Washington became an organic and considerable complement to the bilateral Reset efforts.

After the new start further steps were required. The Joint Statement of June 23, 2011 called for implementation of the steps of practical bilateral cooperation by the beginning of 2012. That required some sort of a formal agreement between Moscow and the White House. Preparations started quite quickly after the meeting in Washington but for certain reasons they were not finished in 2011 and moved to 2012.

The draft agreements on bilateral CBMs in cyberspace were prepared for the meeting of President Putin and President Obama on June 18, 2012 on the margins of the G20 Summit in Los Cabos, Mexico.

However, they were neither signed nor ever discussed by the Presidents during their meeting. The reason was quite trivial though disappointing: the two sides of the bilateral working group failed to agree on the final text before the U.S.–Russian high-level meeting in Los Cabos. To explain the reasons behind this failure a brief insight into the approaches and paradigms of the two countries in the field of ICT security is required.

There were not any serious contradictions or disagreements on the CBMs themselves or methods of their implementation. The factor that prevented signing of the historical document was the insurmountable controversy over the terminology of the document; in fact, initially it was just one term—the definition of the whole sphere of bilateral relations: “cyber security” in the U.S. version VS “international information security” in the Russian draft text. In an attempt to overcome this terminological clash the Russian side suggested a more “neutral” term: “CBMs in the field of security in the use of ICTs.” This attempt turned out to be fruitless as well, as the U.S. side insisted on different wording: “CBMs in the field of security of ICTs,” excluding the word “use” from the Russian definition. As a result, the agreements were not signed, and the Joint Statement of the U.S. and Russian Presidents from June 18, 2012 does not mention cyber issues at all.
CLASH OVER CONCEPTS: A FEW WORDS ON THE RUSSIAN APPROACH

This might seem strange or even ridiculous, but in fact the terminological dispute in this field between Russia and the United States reveals the latent rivalry of two quite different paradigms, each of them providing a complex and self-sufficient interpretation of the whole ICT domain in national and global security and legal contexts. The gap between the two paradigms goes to the level of the very basic concepts in the field of information technology and reflects the existence of two different systems of thinking in this sphere during the Cold War era.

One way to illustrate the difference in the U.S. and Russian approaches is to provide a few underlying definitions of something as basic and primary as the term “cyberspace” from different official documents and expert reports produced in the two countries.

1. The U.S. Department of Defense Dictionary of Military and Associated Terms defines cyberspace as follows:

“A global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the Internet, telecommunications networks, computer systems, and embedded processes and controllers.”

In the U.S. terminological school there is no any particular diversity or controversy, so this definition serves as a basic and almost universal one.

2. Unlike the U.S. approach, the Russian doctrinal document signed in August 2013 and known as the Basic Principles of State Policy in the Field of International Information Security to 2020 refers to “information space”:

“The sphere of activity connected with the formation, creation, conversion, transfer, use, and storage of information and which has an effect on individual and social consciousness, the information infrastructure, and information itself.”

In fact, this definition was agreed on the intergovernmental level by Russia and its allies within the Shanghai Cooperation Organization (SCO) back in 2009 and fixed in the Agreement between the Governments of the SCO member-states on cooperation in the field of international information security signed on June 16, 2009 at the SCO Summit in Ekaterinburg, Russia. Since then, it has been reproduced and referred to in Russian official documents including those adopted by the MFA and the Security Council of the Russian Federation, and signed by the President.

3. However, a year-long effort to elaborate a different piece of legislation was initiated at the end of 2012 by a member of the upper chamber of the Russian Parliament (The Council of Federation)—Mr Ruslan Gattarov. The resulting document was a Project of the Conception of the National Cybersecurity Strategy of the Russian Federation, which was presented in Parliament in November 2013. Though not adopted as an official document, the draft Strategy for the first time made an attempt to introduce into Russian legislative practice the concepts of “cybersecurity” and “cyberspace.” The latter was defined as:

“...a sphere of activity within the information space, comprising the totality of communication channels of the Internet and other telecom nets, technological infrastructure enabling their operation, and all forms of human activities (conducted by state, society and the individuals) enabled by using such nets and infrastructures.”

For the moment the draft Conception of the Strategy after the parliamentary discussion was sent to the MFA and other federal bodies for comments and coordination. At the same time, despite the support of the draft document by the Russian expert and Internet community, many experts have doubts concerning the perspective of the Strategy’s adoption in its present-day form. One of the major reasons is just the fact that the terminology and vision of the ICT in security context in the draft documents does not fully follow in line with the already adopted documents and doctrines that develop the concept of international information security.

One of the rare and remarkable attempts to elaborate some consensus terminology was the project of the East-West Institute and leading Russian governmental think-tank in the field of information security—the Institute for Information Security Issues under the Moscow State University of Lomonosov. The project, called “Russia–U.S. Bilateral on Cybersecurity: Critical
Terminology Foundations" and implemented in 2010, brought together top Russian and American experts in an effort to elaborate 20 critical definitions for ICT in strategic security context. Among others, the project publication of 2011 included the term "cyberspace":

"An electronic domain through which information is created, transmitted, received, stored, processed and deleted."

However, at the official level the Russian approach has at its core the concept and terminology of international information security, which was defined previously. Based on its official definition, one can enumerate some of its essential characteristics.

First, the imperatives of the Russian approach consistently follow the general logic of prevention and restriction of the use of ICT for political and military purposes. There is no room for consensus on "reasonable" or "admissible" ways of use of cyber weapons or waging conflicts in the information space, since such actions are aggressive and counterproductive for international security by their nature—or that is the idea. And it clearly reflects that Russia has been considering the ICT potential in the military and strategic areas first as a potential threat to its national security—and to global security as well. Conversely, the United States till relatively recently regarded the ICT-enabled military and strategic capabilities as its own asset, one of the major and brilliant asymmetric advantages Washington gained in the post-Cold War period as a fruit of its unmatched leadership in global ICT revolution. No wonder that for a long time the White House was not interested in any restrictions of this potential on the international level, especially on the level of international hard law.

So from 1998 onwards the United States has been opposing the initiatives of Russia and its allies to urge the global community for elaboration and adoption of some rules of states' responsible behavior in the information space and to impose effective restrictions on the use of information weapons and waging conflicts in the information space. The clash of positions started to gradually cool off at the beginning of the 2010s (mostly due to the evidence of effective international regulation of the cyber-sphere and rapid growth of cyber threats), but it still took place during the Reset and preparation of the bilateral agreements on CBMs.

Second, the Russian approach is based on the concept of the Triad of Threats developed by the Russian Security Council and the MFA back in the 1990s. The Triad of Threats includes three types of threats to the state, society, and citizens in the field of ICT: criminal use of ICT, use of ICT for terrorist purposes, and military and political use of ICTs. The elements of the Triad are interrelated and inseparable, so in this logic it is not correct to regard, assess, and negotiate the mitigation of criminal threats in the information space out of the context of the two other elements of the Triad. Negotiating on prevention of cybercrime at the international level, one should keep in mind the correlation of strategies and joint efforts in this field with the goal of preventing the use of the information space for terrorist and military purposes.

The concept of the Triad was first formulated in the UN GA Resolution A/RES/54/49 adopted on December 1, 1999, also under Russia's initiative. From then onward Russia has been seeking global recognition and support for this model, and it was a significant success in the GGE framework. The concept of the Triad also became a cornerstone for the official approach of the Shanghai Cooperation Organization (SCO) when the Ekaterinburg Agreement was signed by the SCO member-states on June 16, 2009. Later, the Triad was reproduced in two projects of UN documents. The first was the Concept of the UN Convention on International Information Security, which was elaborated by Russia and presented to the global community first in Ekaterinburg in September 2011, then at the London Conference on Cyberspace on November 1-2, 2011. The second was the draft International Code of Conduct for Information Security which was sent to the UN Secretary General in a letter from September 12, 2011 signed by the Permanent Representatives of Russia, China, Uzbekistan, and Tajikistan (the SCO minus Kazakhstan and Kyrgyzstan).

Second, the international information security in its nature is a paradigm that is not restricted to any particular technology or technological domain (like the digital or cyber domain) and in fact is applicable to any process or format of information flow and any medium. It was elaborated, shaped, and defined clearly in the light of the ICT revolution—but its key premises and axioms do not bring any inherent restriction to digital technology or cyberspace. Theoretically, they might be applied to analog media, even to printed media and press as far as those are regarded as means of transmission and storage of information. That is why they work equally for the Internet and air gapped networks, for digital and analog systems,
and also for all types and methods of data transmission and processing through radio-frequency spectrum (e.g. including non-selective jamming).

Just for that reason the international information security concept does not reserve any separate and specific niche for the technological sphere which is generally identified as "cybersecurity" in U.S. practice. Consequently, all references to the international experience of strategic thinking and normative regulation linked to cyber-security issues were considered to be inadequate and too narrow for the Russian approach and established legislative practice.

Another reason for this is that international information security has an inherent and major focus on content-related issues. The data transmitted via ICT is also put in the security context—and first of all with regard to its social and political implications. After the Arab Spring of 2011 a new element was added to the former Triad: "[the threat of] intervention in the internal affairs of sovereign states, breach of the peace, stirring up national, racial, or confessional hatred, propaganda of racist and xenophobic ideas and doctrine stirring up hatred, discrimination and violence." This fourth major type of threat in the information space was included in the Basic Principles of State Policy in the Field of International Information Security to 2020, signed by President Putin in August 2013.14

This makes a dramatic difference from the United States, where social and political implications of transborder data flow content are in most cases regarded from the perspective of the human rights "basket" and are rarely considered within the ICT security context. This contradiction turned out to be one of the major obstacles hidden in the terminology of the draft bilateral agreements on CBMs in the ICT sphere. "The use of ICT" as opposed to "ICT" might have been understood by the US delegation as an attempt to draw the content regulation issues into the agenda of bilateral agreements (the use of ICT is transborder transmission and processing of certain content)—which was unacceptable for the White House as a part of the CBMs for cyberspace.

Many important details and facts are obviously missing in this snapshot of the Russian approach to the information security agenda—and yet it might provide some insight into the reasons that made the Kremlin and the White House delay the signing of the breakthrough bilateral agreements for a year because of a single definition.

2013: LONGSTANDING EFFORTS TURN INTO SUCCESS

However, the work on the bilateral agreements did not stop after Los Cabos and the start of the gradual evaporation of the U.S.–Russian Reset in 2012. After a series of negotiations by the two delegations some kind of a terminological compromise was found (and it was the Russian wording "the use of ICT"). With a one-year delay the bilateral initiative was brought to a successful result. A set of agreements was finally signed on June 17, 2013 at the meeting of President Obama and President Putin at the G8 Summit in Lough Erne, Northern Ireland.

Particularly, three agreements on CBMs were signed and a Joint Statement by the two Presidents was adopted after the meeting. A year after the G20 Summit in 2012 the compromise on terminology was reached almost in the same wordings: the Joint Statement refers to the "issues of threats to or in the use of ICTs in the context of international security."15 This diplomatically brilliant though quite vague definition now serves as a compromise solution for negotiations on sensitive issues related to ICT between Russia and its U.S. counterparts. The Russian side also made certain efforts to expand its use to GGE activities and terminology. For example, the text of the Report of the UN Secretary General prepared by the third GGE in 2013 contains multiple references to the "the use of ICTs by States," "malicious use of ICTs," "international security in the use of ICTs by States," etc.16

The Statement also admits and promotes the Russian concept of the Triad of Threats and contains multiple references to "threats to or in the use of ICTs [which] include political-military and criminal threats, as well as threats of a terrorist nature."17 To a certain extent this remarkable detail strikes the balance for the many-year-long efforts of Russian diplomacy to establish the information domain as one still falling under traditional categories of peace and security diplomacy and appropriate means of international regulation.
The Statement summarized the outcomes of the Presidents’ meeting, while all details were put on paper in three agreements signed by President Putin and President Obama; each of the agreements was focused on a particular mechanism of CBMs in the field of ICT security.

The first agreement implied the establishment of a direct secure voice communication link between high-level officials in the White House and the Kremlin with the purpose of ensuring effective management of potentially dangerous situations “arising from events that may carry security threats to or in the use of ICTs.” In particular, the agreement indicated the U.S. Cybersecurity Coordinator and the Russian Deputy Secretary of the Security Council as the decision-makers to use the hotlink. The concept of the hotlink and its initial functionality were based on the experience of the Cold War era. Initially the first hotlink was created in 1963, soon after the Caribbean crisis, when the need for a reliable, instant, and direct channel of communication between decision-makers was dictated by the ultimate threat of a nuclear war. Since 2008 the modernized hotlink was operating on the basis of a dedicated computer network and also provided a secure voice communication channel; instant online chat and email functions also became available. In 2013 its purpose and the scope of functions should have been expanded to the issues mentioned in the bilateral agreement on CBMs in cyberspace.

The second agreement was dedicated to the authorization of the use of the 24/7 direct communication link between the U.S. and Russian Nuclear Risk Reduction Centers (NRRCs) with the purpose to facilitate the exchange of urgent communications that can reduce the risk of miscalculation, escalation, and conflict. Just as in the case of the aforementioned hotlink, this agreement implies adaptation of the bilateral mechanism established in the Cold War era. The channel of urgent communication for the prevention of nuclear war was established in December 1987 when the U.S. and Russian NRRCs were created. This step is regarded as part of the Soviet leader Michael Gorbachev’s “New Thinking” foreign policy initiative (though the decision to establish the NRRCs was made by Gorbachev and the U.S. President Ronald Reagan in 1985 at a conference in Geneva). It also took into account several incidents when failures of the U.S. and Russian automated missile launch detection systems almost triggered massive nuclear counter-strike and pushed the world to the threshold of a nuclear war even closer than the Caribbean crisis. According to the agreement of 2013 the communication link implies 24/7 staffing at the Ministry of Defense in Moscow and the Department of State in Washington, DC.

The particular purpose of these two communication channels might include informing a party of the agreements on activities or incidents that might otherwise be regarded by it as a threat coming from the other party. The experts of the Cooperative Cyber Defence Centre of Excellence (CCD COE) mention that the communication links can be used to provide the other party with a warning on cyber exercises to avoid their miscalculation as a threat or a cyber-attack. Another important aspect is avoiding misperception of actions or incidents related to the activities of third parties or proxy actors. For example, Party A might warn Party B about a cyber-attack targeted at Party B (or to its infrastructure/assets or citizens) but routed through the territory or infrastructure of Party A and potentially appearing as being conducted by this party. This a direct example of how maximum speed and reliability of communication between high-level decision-makers can prevent miscalculation of one’s activities and an inadequate response triggering a political crisis or an interstate clash in the information space.

One more peculiar detail of the hotlink arrangements is their clear connection to the Cold War period mechanisms facilitating urgent communication on strategic nuclear security issues between the two superpowers. The functions of the Russian NRRC have been undergoing the process of expansion since the Treaty on Conventional Armed Forces in Europe (CFE) was signed in 1990. In October 2013 Russian Prime Minister Sergey Lavrov commented on a new U.S.–Russian bilateral agreement on modification of the original Agreement on NRRCs from 1987, stating that “the time has come to adapt the NRRCs to the new realities.” This just reminds us of the fact that today both Russian and U.S. hard security experts and decision-makers see ICTs as equal to WMDs in terms of their influence on global security. So it appears that the use of ICTs in the field of international security may be regarded by Moscow and Washington as not only one of the new functions of the NRRCs, but also a potential new support pillar for U.S.–Russian bilateral relations in the strategic security area. Here, however, the question remains open as the recent deterioration in
bilateral relations with the outbreak of the Ukrainian crisis threatens to cancel achievements in this area, including the adopted CBMs (see the conclusion for more details).

The third bilateral agreement was focused on fostering cooperation by the national Cyber Emergency Response Teams (CERTs). For Washington, multiple channels for exchange of information on cyber incidents were already open with a number of states, due to participation of the US Government, private companies, or the U.S. CERTs and CSIRTs in the Council of Europe Convention on Cybercrime of 2001, NATO cybersecurity efforts, FIRST, APCERT, CERT-EU, US-EU Cyber Dialogue, etc. That was not the case with Russia, which was engaged in transnational cooperation between CERTs and CSIRTs to a lesser extent, had no special agreements on cooperation of CERTs with the EU or the USG and refused to join the Council of Europe convention. So the agreement in fact made a precedent for permanent and systemic exchange of data between Russian and the U.S. CERTs. In particular, it implied establishment of a communication channel and information sharing arrangements between Computer Emergency Response Teams of the United States and Russia. From the U.S. side the structure in charge is the US-CERT located in the Department of Homeland Security.

Open sources of data provide no evidence on its Russian counterpart. Russia has several CERTs with a different status and relations with the government; the most active and operational CERT for the moment is the privately run CERT-GIB established by Group-IB—the leader in the Russian market for fraud prevention and hi-tech crime investigation. However, the official Russian CSIRT is RU-CERT which has been a member of FIRST since 2001. In 2012 the Federal Security Service of Russia created GOV-CERT.RU—a structure solely focused on responding to information security incidents in the networks of Russia’s public agencies. So in fact it might be the GOV-CERT to be responsible for the contacts with the US-CERT in the framework of the bilateral agreement, though no firm evidence can be provided.

Finally, the mechanism of bilateral cooperation on CBMs in cyberspace would not have gained enough efficiency and enhancement potential without establishment of a new dialogue platform. Such a platform was also negotiated as part of the Lough Erne agreements. It was the 21st Working Group on Threats to and in the Use of ICTs in the Context of International Security. The Group was established and started its activities in Fall 2013 under the U.S.–Russia Bilateral Presidential Commission, which in its turn was launched in 2009 as a major component of the U.S-Russian bilateral relations Reset.

The Working Group was composed of two delegations from Russia and the United States respectively. Accordingly, one co-chair was appointed from each side. The U.S. Co-Chair was Michael Daniel, Special Assistant on Cybersecurity to the President of the United States—or simply “the Cyber Czar.” The Russian side delegated Deputy Secretary of the Security Council of the Russian Federation Nikolai Klimashin to co-chair the Working Group. But the most experienced expert in cyber issues among Russian members of the Group was Andrey Krutskikh, then Special Coordinator of the Ministry of Foreign Affairs for the Political Use of ICTs. In February 2014 Mr Krutskikh was appointed Special Representative of the President of the Russian Federation for International Cooperation in Information Security, thus defending his own informal title of “the Russian Cyber Czar.” He is also known as one of the most consistent and experienced architects of the Russian approach in the field of international information security and a Chair of the first two UN GGEs. So it would not be an exaggeration to claim that both sides provided their very best and high-level experts on ICT security to the Working Group.

Moscow and Washington formulated the purpose of the new expert dialogue site as follows: “to assess emerging threats, elaborate, propose and coordinate concrete joint measures to address such threats as well as strengthen confidence.” The working format was based on regular meetings and discussions of the members of the group.

The inaugural meeting took place on November 21-22, 2013 in Washington, DC, and its agenda included several particular issues:

- development and implementation of bilateral CBMs;
- regional scope: finding ways to promote regional CBMs in venues such as the OSCE and the ASEAN Regional Forum (ARF).
discussion of norms of state behavior, cooperation to combat crime in the use of ICTs, and defense issues resulting from the use of ICTs.

The author was not able to find any open information regarding possible further meetings of the Working Group. One of the meetings was probably scheduled for spring 2014. Unfortunately, deterioration in U.S.—Russian relations in the light of exacerbation of the Ukrainian crisis affected bilateral collaboration in the field of ICT security as well. In April 2014 the activities of the Bilateral Presidential Commission including the Working Group on Threats to and in the Use of ICTs in the Context of International Security were suspended on the initiative of the U.S. side. At the same time, that did not imply the denouncement of the bilateral agreements on CBMs, which were still in force at the beginning of August 2014.

AFTER CRIMEA: SHADOWY FUTURE OF THE BILATERAL BREAKTHROUGH

Quite surprisingly, the U.S.—Russian bilateral agreements were almost unaffected by the Snowden revelations in 2013—though those events obviously undermined the US Government position in building trust and confidence in cyberspace. The Ukrainian crisis of 2014 and the swirl of mutual accusations pushing back or even dismantling U.S.—Russian collaboration turned out to be a far more serious challenge for the agreements on CBMs. In April 2014, a few weeks after the referendum in Crimea took place, the work of the U.S.—Russian Bilateral Presidential Commission was suspended on the initiative of the U.S. side. As part of the Commission’s mechanism, the Working Group on CBMs also brought its activities to a halt after conducting only one meeting.

Except for the Working Group, the bilateral agreements and the mechanisms that they enable (information hotlinks, CERT cooperation, exchange of information between NRRCs, etc.) de jure were still in force by fall 2014. However, it is unclear whether the exchange of information and technical collaboration is systematically conducted now. In the light of expanding erosion of cooperation between Russia and the West on certain security tracks and formats (e.g. Russia—NATO cooperation) the future of the developed CBMs looks increasingly shadowy. If the Ukrainian crisis follows the path of further deterioration (which appears to be a probable scenario), and the broadening gap between Russia and the West ultimately transforms into a Cold War-era-like wall of partition, would there ever be room for confidence building, particularly in such a sensitive area as the use of ICTs?

From the Russian side, there were quite inspiring signals as late as in June 2014, after the first wave of Western sanctions against Russia was already in place. Remarkable comments were made in June 2014 by Andrey Krutskikh. In the interview to leading Russian newspaper Kommersant the Russian Cyber czar agreed that the U.S.—Russian agreements on CBMs could be called “a non-aggression pact for cyberspace” and characterized them as “unique and absolutely practical.” He also confirmed that the information exchange mechanisms had already passed technical testing and proved their efficiency. In particular, they were used during the preparation and conduct of the Winter Olympic games 2014 in Sochi in February 2014 and the Russian side was satisfied with their efficiency. At the same time, the Special Representative of the President stressed that freezing the activities of the Working Group on the use of ICTs threatens the future of the agreements since they are not comprehensive and further work on their development and enhancement is necessary.

At the same time, there is some bad news from Moscow for Washington as a bilateral counterpart, and this is called “diversification.” Even if cooperation on ICT security with the United States is still regarded an essential strategic priority for Russia, it will seek active collaboration with the developing world. In so far as the global information security regime does not exist, Moscow regards bilateral agreements on CBMs as just one of the components of a multilayer “safety net” that should be maintained instead. Russia has been discussing adoption of similar sets of CBMs with France, Germany, Japan, Israel, Republic of Korea, China, and other BRICS states. Moscow was one of the initiators and major contributors to the process of elaboration of a multilateral set of CBMs aimed at reducing the risk of a cyber conflict in the OSCE framework. Discussion of the CBMs started in 2012 and so far has resulted in adoption of an initial set of 11 CBMs in December 2013. For Russia, work in this format was a good chance to apply the experience gained previously on the bilateral track. Finally, one more promising format where developments on CBMs in
the cybersecurity area might take place as soon as in 2015 (with both Russia and the United States engaged) is the ASEAN Regional Forum (ARF).

So if the deterioration in bilateral relations continues and ruins the agreements of 2013, the Kremlin will ultimately switch to other countries and international organizations in its efforts to ensure transparency and reliability of major cyber powers' behavior. Of course, the course aimed at counterbalancing the U.S.-led efforts and alliances in that area implies making concerted efforts with China. It is reported that a Russian–Chinese bilateral agreement on CBMs in the field of the use of ICTs might be signed in November 2014, and it will encompass a far broader range of issues than the U.S.–Russian agreements of 2013.

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To summarize, the key question is whether the decay of bilateral cooperation on ICT security and CBMs between Washington and Moscow and slipping into a coma of the agreements of 2013 are the only options for the short and medium term. However strange, the rationalist answer would be “No.” One reason for that is the growing vital necessity for the international community to control the use of ICTs for military and strategic purposes, almost to the degree it took place with WMD during the Cold War. After Stuxnet, the concept of inappropriate damage is little by little making its path in strategic thinking with regard to cyberspace. Also, the increasing understanding of the potential global consequences of the uncontrolled use of cyber-weapons brings to life the interdependency of states and need for mutual predictability in this field. We still may hope that in the future the issues related to strategic ICT security might reproduce the path of the issues of strategic nuclear balance on the Cold War era international security agenda.

Even in the worst times of the U.S.–Soviet clash (1979–1985) the dialogue on strategic nuclear issues was conducted in a framework of a separate “basked” of bilateral relations and never stopped. There is a chance that cybersecurity will play a similar role of a “too grave to ignore” security basket in bilateral and multilateral relations among the world’s key cyber powers, including the United States, Russia, and China. But to ensure the peaceful nature of these relations and to avoid conflicts in cyberspace we need to develop “safety nets” of bilateral mechanisms like the U.S.–Russian agreements on CBMs—and to do so in a strategic perspective, notwithstanding current political fluctuations and crises.

Notes


4 Ibid.


11 See: “...Expressing concern that these technologies and means can potentially be used for purposes that are inconsistent with the objectives of maintaining international stability and security and may adversely affect the security of States in both civilian and military fields, considering that it is necessary to prevent the misuse or exploitation of information resources or technologies for criminal or terrorist purposes,...” (“Developments in the Field of Information and Telecommunications in the Context of International Security,” Resolution Adopted by the General Assembly. A/RES/54/49, December 1, 1999, <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N99/777/13/PDF/N99777713.pdf?OpenElement>, last accessed August 19, 2014.


17 Ibid.


26 Ibid.


33 Joint Statement by the Presidents of the United States of America and the Russian Federation on a New Field of Cooperation in Confidence Building.


37 Ibid.

38 Ibid.

39 Ibid.

Kamal Gasimov

WEAPONS OF MASS DESTRUCTION IN MUSLIM FATWAS

Whosoever kills a human being for other than manslaughter or corruption in the earth, it shall be as if he had killed all mankind, and whoso saveth the life of one, it shall be as if he had saved the life of all mankind.

The Koran (5:32)

All war is cunning.

The Prophet Muhammad

Muslim theologians (the Ulama) often spearhead novel ideas in society. In many states where Islam is the predominant religion, they directly participate in the formation of public opinion on various issues, events, and phenomena. Sometimes their conclusions or legal rulings (fatwas) decide whether ordinary Muslims will take part in elections or stay away from the polling stations, or whether they accept or reject various advances of science and technology. The authorities also use the Ulama to prepare public opinion for various events, or to justify the government's socio-political decisions. In other worlds, the Ulama often plays the role of an intermediary between the authorities and ordinary people.

This article analyses the legal conclusions (fatwas) of Muslim theologians and scholars on the subject of creating and using weapons of mass destruction (WMD), with a specific focus on nuclear weapons. In particular, this paper aims to answer the following questions: Why do Muslim scholars have to debate this issue in the first place? What are the methods and arguments they use to justify (or reject) the need to develop nuclear weapons? What ideological and political goals do they pursue when they issue their fatwas on the subject? What are the differences between the fatwas issued by Sunni and Shia theologians, or the moderate scholars and the radicals? And what do these fatwas have in common? Muslim theologians have long debated the subject of WMD and nuclear weapons. The debate centers on the question of whether or not Muslims should seek nuclear weapons; whether seeking nuclear weapons is a violation of Islamic ethics and legal principles; and what is the right approach any Muslim state should adopt on the issue of WMD.

In this context, this paper will analyze the most famous and authoritative fatwas by Sunni Muslim scholars on the subject of WMD, including a collective fatwa issued by scholars of Al-Azhar University in Cairo; a fatwa issued by the former Grand Mufti of Egypt, Ali Goma; a fatwa by the Global Mufti, Yusuf al-Qaradawi; and a fatwa by the Saudi theologian Nasr Al-Fahd (regarded as the supreme authority by Al Qaeda supporters). This paper will also discuss fatwas by the Supreme Leader of Iran, Grand Ayatollah Ali Khamenei, who issued a tahrím (prohibition) against developing nuclear weapons, triggering a fierce debate among scholars and scientists.
THE FATWAS OF MASS DESTRUCTION

In 2002 members of the Fatwas Committee of Al-Azhar University issued a fatwa in response to numerous questions about Islam’s position on WMD, such as: Is it permitted for Muslim states to build or acquire nuclear weapons? And does Islam permit Muslim states to use nuclear weapons in self-defense? The Al-Azhar scholars’ response was that building or acquiring nuclear weapons is wajib (obligatory, a necessity) for Muslims. Allah commands Muslims to be strong in order to put fear in their enemies, deter them from any hostile actions, and protect themselves from transgressors. At the same time, Muslims are commanded not to be unnecessarily cruel. Islamic states are allowed—or rather, it is a necessity (wajib) for them—to use any weapons at their disposal for self-defense. The central argument cited by the Ulama is a verse from the Koran: “And prepare against them whatever you are able of power and of steeds of war by which you may terrify the enemy of Allah and your enemy and others besides them whom you do not know [but] whom Allah knows” (8:60). It follows from that verse that Muslims must know their enemy very well.

The definition of the “enemy” includes, first, enemies of Allah and enemies of Muslims, i.e. everyone who commits an act of aggression against Muslims or their holy sites. Second, it includes the enemies whom Muslims do not know, that is, everyone who secretly works to sow discord among Muslims, conducts subversive activities, or wages ideological war. That is why Muslims must know their enemy and be prepared to repel any attack. To that end, it is necessary for them not to fall behind their enemy in science and military technology, always to have accurate and full information about the enemy, and to acquire weapons that are at least as strong as the enemy’s own weapons. “All the Arab and Muslim states should arm themselves with the latest weapons,” the fatwa declares. Its authors also state that the greatest indication of the Islamic Ummah (nation, community) failing behind its enemies is that Muslims are not developing the latest weapons, whereas their enemies are working day and night to achieve superiority over Muslims in WMD. Also, the chairman of the Fatwas Committee, Sheikh Ali Abu Al-Hassan, had this to say in his comments on the fatwa: “Scholars agree that if Muslims forego the acquisition of such weapons, in accordance with Islamic law they will be regarded as sinners.”

To summarize, in accordance with the collective fatwa by scholars of Al-Azhar University, it is necessary for Muslims to develop WMD because other nations have already built such weapons or are working to build them, and these weapons can be used against Muslims. In essence, theologians of one of the most famous and prestigious Islamic schools (which is known as a center of moderate, mainstream Islam) urge Muslim governments to acquire nuclear weapons. It is worth noting that fatwas on such important socio-political issues are usually issued when the government and the national elite urge the Ulama to support and legitimize their decisions and justify them by verses from the Koran and the Sunnah, and when the Arab Street demands the Ulama urgently to give an answer to a pressing question.

In June 2002 the Egyptian minister of electricity and energy, Hassan Ahmed Younis, announced plans to build a nuclear power plant near Alexandria. Also in June, the German newspaper Die Welt published an article claiming (on the basis of secret intelligence and expert analysis) that Egypt was trying, with China’s assistance, to produce uranium on the Sinai peninsula for weapons purposes—more specifically, to build long-range missiles. In response, the Chinese embassy in Egypt published a statement on its website describing these claims as a complete fabrication.

After these events, on June 29, 2002 the commander of the Egyptian Air Force, Lt. Gen. Sami Annan, said at a news conference in Cairo that Egypt urgently needs to acquire weapons that could serve as a deterrent. Also, the Egyptian leadership has often made statements to the effect that until certain countries in the Middle East relinquish nuclear weapons (meaning Israel, first and foremost), many Arab governments will seriously consider using nuclear energy for military purposes. In addition, some Egyptian politicians and representatives of the intelligentsia have repeatedly asked the Egyptian government to acquire nuclear weapons so as not to be defenseless against the Israeli threat. Clearly, it is no coincidence that the Al-Azhar University fatwa mentions “enemies who threaten Muslims and their holy sites, and work day and night on building WMD.” It is therefore entirely possible that, in this particular case, Egypt’s nuclear policy was one of the reasons for the appearance of such a fatwa (especially since it was issued by the country’s main religious institution). Signs of activity in Egypt’s nuclear policy in 2001–2002 point to the same conclusion.
Apart from the Al-Azhar University theologians, a fatwa on the same subject was issued by Yusuf al-Qaradawi, a prominent Muslim theologian and thinker who is regarded by his followers as the Global Mufti. The following question was put to him on his website:

Numerous branches of science have emerged this century, including nuclear physics. As we know, the nuclear bomb was used against Japan, and chemical weapons against the Kurds in the Iraqi town of Halabja. All of this has demonstrated the enormous harm of nuclear and chemical weapons. Nevertheless, many countries possess such weapons. Meanwhile, Muslims do not have such weapons. What is more, they have even signed treaties that ban them from possessing nuclear or chemical weapons. My question is, do Muslims have the right to seek the acquisition of such weapons?

Al-Qaradawi’s answer was that yes, Muslims do have the right to develop WMD, but only for self-defense and as a deterrent. He further cites the example of the United States and the Soviet Union; in his opinion, the two countries did not destroy each other only because both possessed nuclear weapons.9

According to al-Qaradawi, acquiring nuclear weapons is a communal obligation (fard kifaya) of the Muslim community. He further states: “Nuclear weapons are a special kind of weapons that guarantee peace. Why is Israel allowed to possess a nuclear shield, but the Arabs who live around Israel are not? We are a special and numerous community (Ummah), and therefore we have the right to possess such weapons for the purpose described in the Koran: “And prepare against them whatever you are able of power and of steeds of war by which you may terrify the enemy of Allah and your enemy and others besides them whom you do not know [but] whom Allah knows. (8:60).”

Essentially, al-Qaradawi relies on the same argument that was used before him by members of the Fatwas Committee of Al-Azhar University—but in his own fatwa he directly mentions Israel. It is worth noting that the Global Mufti has long been urging Muslims to pool their efforts in order to (a) develop advanced weapons, and (b) fight Israel. In this context, let us look at another fatwa by al-Qaradawi issued in response to a question from a Muslim woman living in Germany. She mentioned in her question that her husband’s work has to do with the production of weapons and missiles. He works on the development of weapons that have a great destructive power. His projects found no support in the Arab countries, so he has now been working in Germany for a long time. Her specific question was whether her husband was committing a sin or doing something of which Allah does not approve.

Al-Qaradawi’s answer was this: if the woman’s husband knows for a certainty that the weapons he works on will be used against Muslims, then he should not be working at the German plant. If, however, he is certain that those weapons will not be used against Muslims, he can carry on. Al-Qaradawi also opines that the woman’s husband should move to Indonesia because the country is energetically developing its defense industry (especially such segments as missiles and combat aircraft). Those efforts were launched under former science and technology minister Bacharuddin Yusuf Habibie. Al-Qaradawi notes that Habibie also used to work in Germany, but then returned to Indonesia. In the scholar’s opinion, enemies of Muslims are trying to prevent the resurgence of Indonesia’s defense industry, so Muslim scientists should try to make a contribution to that resurgence.10

To summarize, Muslim theologians strongly advise their governments to acquire nuclear weapons because Israel has WMD, and because the Western countries (which, in Muslim scholars’ opinion, are doing all they can to support Israel) also enjoy military superiority over Muslims. Apart from the external threat factor, the aforementioned fatwas also have another thing in common.

These fatwas regard nuclear weapons as an instrument of containment and deterrence. In other words, theologians emphasize that nuclear weapons should be developed for the purpose of self-defense. This is very important, in our view. This is part of the ongoing debate with the radicals who call for using WMD in an offensive war. This debate was re-energized by the 9/11 attacks. After those attacks, the Al Qaeda ideologists and various Jihadist groups affiliated with Al Qaeda increasingly began to talk of the need to use WMD against the United States and its allies.

In 2003 the Saudi theologian Nasir Al-Fahd11 issued a fatwa in which he explained why first use of WMD is allowed to Muslims. The fatwa was issued in response to the following question: “There have been media reports that Al Qaeda plans to deliver a WMD strike
against the United States. But nobody among the contemporary scholars has explained whether Islamic law allows the Mujahedeen to use such weapons. Before answering, Al-Fahd notes that such decisions are made by not just anybody but only scholars actually involved in the Jihad movement. He thereby tries to delegitimize the other Ulamas, i.e. those who are linked to their national governments, participate in the politics of nations, reject the goal of building a global caliphate, and criticize Al Qaeda (such as the aforementioned Al-Azhar University theologians or al-Qaradawi).

Nasr Al-Fahd then proceeds to the essence of his response, and declares that Muslims have the right to use WMD, especially if they are being defeated on the battlefield by a stronger adversary. His cites the following arguments: Even though the Prophet prohibits killing civilians (children, women, and the elderly), nevertheless, if the need arises, in wartime, when abiding by this rule becomes impossible, peaceful civilians may be sacrificed. According to Al-Fahd, opponents of that line of thinking cite three counterarguments:

- Islam forbids the killing of women and children (it is haram).
- It is also forbidden to despoil the land and cause destruction.
- WMD will not kill only enemies; it will cause collateral casualties among Muslims as well, and killing fellow Muslims is a great sin.

Al-Fahd offers the following rebuttal: Yes, Islam forbids the killing of children and women, but even the first Muslim community, which was engaged in a war with heathens in Mecca, conducted surprise night raids during which women and children also died because it was impossible for the warriors to tell in the dark who was armed and who was not. Also, the first Muslims used catapults, which killed not just enemies but women and children as well. In other words, the use of WMD against infidels can be compared to the use of catapults.

As for the second counterargument, Al-Fahd offers the following refutation: Yes, the use of such weapons will destroy arable land and render large territories unusable, which is forbidden in Islam. It is known, however, that the Prophet approved the felling of date trees in order to achieve victory over the Jews. This means that in the case of necessity, Muslims are allowed to use scorched earth tactics.

Al-Fahd’s refutation of the third counterargument is very similar. He argues that even though Islam strictly forbids the killing of Muslims, and many Muslim luminaries insist that attacks should be avoided if there are Muslims among the infidels (traders, tourists, etc.), such attacks are, nevertheless, allowed if they are needed to achieve the ultimate goal of the Jihad, i.e. defeating the infidels, even though some Muslims will also be killed along with the enemies.

In other words, Al-Fahd builds his entire argument on the classical principle of Islamic law: “necessities overrule prohibition” (al-darurat tubih al-mahzurat). More specifically, if there is an urgent necessity, if “the preservation of religion, life, mind, progeny, or property of a Muslim” is at stake, it is allowed to do things that are banned by Islamic law. Moderate Muslim scholars usually use that principle to reform Islamic law and answer the challenges of this day and age. For example, this principle is used as the justification for fatwas that allow Muslims who do not have the means to buy or build their own home to take out a mortgage and pay interest on it. But radical scholars such as Al-Fahd use that principle to justify mass killings. In other words, Al-Fahd tries to persuade Muslims that using WMD is allowed because the enemy is much stronger and leaves Muslims no other choice. He urges that all international treaties be ignored (“various Geneva accords”) that ban Muslims from possessing such weapons. In his words, only Allah can ban or allow anything at all. According to Al-Fahd, a single argument is sufficient to legitimize the use of WMD. There is a general rule expressed in the following ayat in the Koran: “And the retribution for an evil act is an evil one like it” (42:40).

Al-Fahd argues that:

The United States has dropped so many bombs of various destructive power on Muslims over the past several decades that Muslims have the right to repay that country in kind, and no other proof is required. According to some calculations, the Americans have killed about 10 million Muslims in Afghanistan, Iraq, and other countries. This gives Muslims the right to respond in kind, using WMD, and to destroy the same number of Americans.
This particular fatwa by Al-Fahd is cited by many proponents and ideologists of the global Jihad. The fatwa has been translated into Russian and published by the leading websites of the jihadists in the Caucasus. The Al Qaeda leader, Ayman al-Zawahiri, also refers to it in his works. This has given the fatwa greater legitimacy and made it very popular among radicals. Regardless of whether the jihadists possess nuclear or chemical weapons (or acquire them in the future), they already have a fatwa that declares the use of WMD a godly act, using Islamic law principles and numerous references to holy texts as their justification.

This fatwa has become a serious challenge to opponents of Al Qaeda. Ever since its emergence, it has been a security threat to many Muslim and Arab states (such as Saudi Arabia and Egypt) because it urges Muslims to ignore all international treaties signed by the governments of those states. Also, the fatwa by Al-Fahd, and a similar fatwa issued by al-Zawahiri, undermine the reputation of the theologians who work within the framework of nation-states, as well as the legitimacy of the nation-state itself. Essentially, that fatwa leaves it to the leaders of armed groups to decide when and how to use nuclear or chemical weapons. There was an urgent need to refute such dangerous ideas. The first detailed response to the fatwa by Al-Fahd was issued by Ali Gomaa, former Grand Mufti of Egypt and a prominent Muslim theologian. Let us look at Gomaa’s own fatwa in greater detail because it has obvious relevance to our discussion.

The question that prompted the release of Gomaa’s fatwa was this:

Several assemblies (Jamaats) have recently claimed in their works and books that they are allowed to use WMD against non-Muslim states; they believe that such a position is in line with Sharia law. They cite several legal texts, and compare WMD to the use of catapults.... Are they right, and are their words in accord with Sharia law?

Before proceeding to the essence of his answer, Ali Gomaa says that Sharia law demands that Muslim states acquire WMD, and refers to the already mentioned ayat: “And prepare against them whatever you are able of power and of steeds of war by which you may terrify the enemy of Allah... (8:60)”. Creating WMD is necessary to achieve strategic goals; these weapons are a deterrent and can help restore the balance of power. In other words, on this particular issue Ali Gomaa is in agreement with the Al-Azhar theologians and with al-Qaradawi.

As for using WMD during war, Ali Gomaa says that this would require the decision of the legitimate ruler of the state (president, monarch, etc.).

First, since only a legitimate ruler has the right to declare war, conclude international treaties, etc., such a ruler does not make such decisions on the spur of the moment; he first takes advice from specialists in various areas. Mere chieftains of war bands have no right to make such decisions.

Second, Muslim countries have voluntarily signed various agreements with international organizations that aim to preserve peace and security. Islamic law stipulates that agreements must be honored. Treacherously breaking agreements is a great sin.

Third, the Prophet forbids treacherously attacking people.

Fourth, killing innocents, women, and children is one of the greatest sins in Islam, and is forbidden by the Prophet.

Fifth, if WMD are used against non-Muslim countries, Muslims living in those countries will also be killed, and killing Muslims is a great sin.

Sixth, such reckless actions will cause enormous damage to Muslims themselves. A country against which WMD are used will retaliate using even more destructive weapons, and the wind will carry radioactive contamination to neighboring countries. Even assuming that such actions are based on public interest/benefit (maslahah), their consequences will do far more harm (masfsada) than good. And as one of the principles of Islamic law says, “Removing harm is more important that achieving benefit.”

Seventh, using WMD is also illegal because Islamic law forbids causing material damage to people. If such weapons are used, they will cause damage to property of many people who are not involved in any way whatever in the military conflict.
Eighth, in order to use such weapons in the territory of a non-Muslim country, one must first get into that country. As a rule, every country allows persons to travel to its territory only on the condition that they will respect its laws and not commit crime. This is an obvious rule, and it comes into effect the moment a person obtains a visa and crosses the border. If a Muslim resorts to using weapons, he or she thereby treacherously breaks this agreement with the country that has allowed him or her onto its territory. Treachery and breaking agreements are condemned by Islam.

In his summary, Ali Gomaal says that the texts (Hadith and ayats) referred to by the proponents of using WMD in their fatwas are taken out of context and misinterpreted. In essence, the authors of these fatwas refer to events that happened many centuries ago and are no longer relevant. As for the Hadith records of the Prophet’s followers making no distinction during their night raids between women, children, and armed combatants; or the Prophet approving of the use of catapults, which also kill unarmed people; or the texts saying that Muslims’ lives can be sacrificed in case of extreme necessity, Gomaal offered the following rebuttal. First, those Hadith texts were referring to situations during wartime, and wars can be waged only by a legitimate ruler. Meanwhile, the groups that call for using WMD do not recognize the rulers of Muslim states and claim that they themselves have the right to declare war, calling it Jihad. Also, there is a huge difference between catapults and WMD, and the destruction caused by a catapult is incomparable to the devastation wrought by WMD.24

Even though there are great differences between the legal conclusions of the aforementioned theologians, it is also obvious that the fatwaa issued by Al-Fahd (as well as Ayman al-Zawahiri) and the fatwas of their opponents (theologians of Al-Azhar University, al-Qaradawi, and Ali Gomaal) have much in common. They all agree that Muslim countries need to acquire WMD. Both sides regard Israel and the United States as a threat to the Muslim nations, and believe that since Israel and the United States have nuclear weapons, Muslims must also acquire such weapons. Interestingly, both sides refer to the same religious texts, but interpret them in their own different ways, based on personal preferences, worldview, and political goals. What is more, the Jihadist theologians and moderate Islamic scholars agree that, according to Islamic law, it would be legitimate not only to acquire nuclear weapons, but also to use them during war, if the need arises. The difference is that the radicals regard the monarchs and presidents of the Muslim states as satellites of the colonial powers, i.e., the United States, Israel, and their allies. That is why, in their opinion, Muslims should not wait for a decision by these rulers, or abide by the international agreements signed by them. Once they gain access to nuclear or chemical weapons, Muslims have the right to use them in order to cause maximum damage to a strong and numerous adversary. Meanwhile, the moderates (i.e., theologians linked to the state or representing the interests of the elite or government of their country) insist that only the government has the right to make decisions on using WMD because otherwise radical groups will start using such weapons at their own discretion and trigger a global catastrophe.

THE IRANIAN NUCLEAR FATWA

On September 27, 2013 U.S. President Barack Obama and Iranian President Hassan Rouhani had a telephone conversation. This was the first such conversation between U.S. and Iranian presidents since the Islamic revolution of 1979. Speaking to journalists, Obama later said that President Rouhani had informed him of a fatwa banning the development of nuclear weapons issued by the Supreme Leader of Iran, Ayatollah Ali Khamenei.26 Five months before that telephone conversation, several prominent U.S. diplomats, senators, and intelligence officers (including the former CIA chief Michael Hayden and the famous political analyst and statesman Zbigniew Brzezinski) wrote a letter to President Obama urging him to acknowledge the fatwa issued by Ayatollah Khamenei and to use it as “one of the bases for nuclear negotiations.”26 Earlier, Hillary Clinton said in 2012 after meeting Turkish Prime Minister Recep Erdogan in Istanbul that she was “very interested” to hear that the Turks had been told “that the supreme leader viewed weapons of mass destruction as religiously prohibited, against Islam.”27 Speaking to journalists after a visit to Iran in April 2012, Erdogan himself quoted Khamenei as saying that “Islamic law strictly forbids the development of WMD,” so he saw no reason to disbelieve Iran’s claims that it had no intention of developing nuclear weapons.28
The fatwa issued by Ayatollah Khamenei gave many Western politicians and journalists reason to insist that Iran has no plans to use its nuclear program for military purposes because Islam forbids the development of WMD. After all, Iran is an Islamic republic, and the fatwa in question was issued by its main religious and political leader, so there is no reason not to trust it. Meanwhile, the Iranian information projects that seek to foster dialogue with the West—or rather, with Western politicians, journalists, and scientists—such as the Iran Project, began to trumpet the fatwa as a substantial piece of evidence pointing to the peaceful nature of the Iranian nuclear program. The website http://www.nuclearenergy.ir, which was set up by the Iranian government to provide the English-language audience with detailed information about its nuclear program, devotes an entire section to the fatwa.

Nevertheless, opinions about the fatwa among researchers are divided. Some believe, for example, that the fatwa is legally binding and can have a positive effect on the negotiations. One of them is Seyyid Hossein Mousavian, who believes that the Grand Ayatollah’s fatwa is a binding instruction to all Iranians. He writes that in accordance with Article 57 of the Iranian Constitution, the Iranian Supreme Leader has special authority over all three branches of power: the executive, the legislature, and the judiciary; all his instructions are legally binding. In view of the strong link between religion and politics in Iran, this fatwa is a document of both religious and political nature. Besides, it has not been disputed or rejected by any politicians or religious leaders because Ayatollah Khamenei has an unassailable reputation in Iran. Mousavian argues that the fatwa serves the same function as a government resolution. It can be defined as a regulation issued by a religious leader who governs the nation. Such a regulation is binding for the executive power, and it is also supported by other religious leaders, Mousavian says. He adds that the fatwa banning the production, possession, or use of nuclear, chemical, and biological weapons is permanent. No religious leader will be able to issue a fatwa against the Grand Ayatollah’s fatwa because such weapons cause only evil and destruction. Mousavian further argues that all the most reputable and authoritative Sunni and Shia theologians agree on this. Even if one of the theologians rejects this fatwa, he will be left in a small minority because he has no reputation and very few followers.

That assertion by Mousavian is debatable. First, we disagree that fatwas by all the most authoritative Sunni theologians are in accord with the fatwa issued by Ali Khamenei. As we have already demonstrated, many reputable Sunni theologians not only approve of developing WMD, but actively encourage their governments to do so. These theologians are not in a minority, as Mousavian claims. They have thousands or even millions of followers (especially in the case of al-Qaradawi and Ali Goma). There are also some Shia theologians who approve of developing WMD. The word count limit for this article prevents us from discussing all the key Shia fatwas on the subject. Nevertheless, let us mention the opinion of Sheikh Hussain Al-Khashen, a Lebanese Shia theologian, who states on his website that it would be acceptable to develop WMD as a deterrent, especially when faced with the threat of aggressive Zionism. There have also been reports that Iranian Ayatollah Gerami has approved of developing nuclear weapons as a deterrent. This is completely unsurprising: every theologian is free to issue a fatwa on this subject based on the socio-political situation and the interests of his country. Those situations and interests can vary, and the fatwas will not all agree. Mousavian’s attempt to demonstrate the allegedly universal nature of the fatwa by Ali Khamenei therefore looks unconvincing.

We do not share the views of Mousavian or others making the same claims. We are inclined to agree with those researchers who warn against hasty conclusions, and offer a critical few of the Iranian nuclear fatwa.

It is well known that the Iranian Supreme Leader, Grand Ayatollah Ali Khamenei, has made several declarations on WMD from the point of view of Islamic law and Islamic values because he has had to rebuff WMD-related accusations against Iran since the mid-1990s. In one of his public pronouncements made in March 2005, he declared that:

...the president of the United States and other U.S. statesmen have repeatedly spoken of the dangers of the nuclear weapons they say Iran is going to build. But they know perfectly well that the narrative of Iran allegedly creating nuclear weapons is bogus.... In truth, they don’t want an independent country in this complex region, the Middle East, which has the world’s largest oil reserves—they don’t want an independent
country living under the banner of Islam to achieve development and benefit from knowledge, progress, and modern fatwas." He went on to say that only the Americans have ever used nuclear weapons to destroy other nations, whereas the Iranians, who have been victims of chemical attacks during the war with Iraq, have not used such weapons because it is forbidden by Islam. Nevertheless, the information that the Supreme Leader had gone as far as issuing a fatwa on the subject of nuclear weapons appeared only in August 2005 in an official Iranian statement to the International Atomic Energy Agency. The report read, “The leader of the Islamic Republic of Iran has issued a fatwa declaring that production, possession and use of nuclear weapons is forbidden by Islam, and that the Islamic Republic of Iran must not acquire such weapons.” Ayatollah Khamenei once again used the term haram (forbidden by Sharia law) with regard to WMD in his speech at the International Conference on Disarmament and Nonproliferation held on April 17-18, 2010 in Tehran. He said, in particular: “We believe that using such weapons is forbidden (haram), and that protecting mankind from this great threat is our common duty.”

As soon as Iranian officials and media outlets began to spread the word about the nuclear weapons fatwa, some critics countered that the fatwa is not really a proper fatwa but merely a declaration because the text of the fatwa does not exist in writing. Neither can it be found in the Fatwas section on the Supreme Leader’s official website. The researcher Mahdi Khalaji rightly says, however, that in Shia tradition oral fatwas can have the same force as written ones. Another thing worth mentioning is that Ayatollah Khamenei’s website has posted explanations for this fatwa (or, more specifically, for the statement made at the 2010 nonproliferation conference) by the Shia theologian Yaddasht Akhmad Mobleghi. The author praises the fatwa and says that it is based on all the key rules and values of Shia Islam. The commentary to the fatwa is headlined “Legal Proof of Illegality of Nuclear Weapons.” This is essentially an addendum to the speech by Ali Khamenei, with paragraphs from various religious texts cited as evidence. Incidentally, the author of the commentary relies on almost exactly the same arguments as the already mentioned Sheikh Ali Gomaa.

The central question now is this: If an oral fatwa is little different in Shia tradition from written fatwas; if that fatwa has been augmented by a commentary; and if it is seen by Shia theologians as a proper fatwa, i.e. a religious-political resolution, and not simply a conference speech—does it all mean that Ali Khamenei has truly forbidden the development of nuclear weapons, and that the Iranian leadership will strictly abide by that instruction? And if Mousavien is right when he says that the fatwa is permanent, does that mean that the opponents of the Iranian nuclear program now have nothing to worry about?

In fact, things are not quite as simple as that. As already mentioned, a fatwa is a legal conclusion by a theologian on some specific issue. In other words, a fatwa is not a divine instruction but a scholar’s personal opinion (even though it is justified by religious texts). Clearly, opinions can change, and the situation or problem on which a scholar has expressed his opinion can also change. Of course, if the question put to the theologian is of a purely religious nature (How to pray properly/How to fast properly, for instance), the text of the fatwas seldom changes. The answers to these questions are clearly spelt out in the Koran and the Prophet’s guidance. The Mufti has no right to add anything or remove anything from the words spoken in religious texts. But when the fatwa concerns various secular issues or socio-political subjects, it may well change because secular affairs and the socio-political situation change with the passage of time. In fact, there is even a rule in Sunni law that can best be rendered in this way: a fatwa must change as the time and place change. In other words, theologians have the right to adjust their fatwas or even to relinquish them, depending on the time and place. This means that Ali Khamenei’s fatwa that bans nuclear weapons cannot be regarded as a permanent and immutable decision, as Mousavien claims. That fatwa is not a divine edict; it is merely a religious-legal decision that emerged in response to a specific problem.

It is worth noting that the leader of the Islamic Revolution, Ayatollah Ruhollah Khomeini, changed his opinion on various important issues more than once. For example, in one of his books published in 1944 he defended monarchy as a form of government, and said that scholars had never objected to the principles of monarchism. He changed that opinion when he was sent into exile to the town of Najaf by the Shah’s government. He wrote in one of his works, “Monarchy is contrary to Islam, the Islamic model of government, and its rules.” He
also issued a fatwa in which he rejected Shah Mohammad Reza Pahlavi’s 1963 edict granting women the right to vote. After the Islamic Revolution, however, he announced that women could freely vote in elections.44

As for the question of whether building WMD is forbidden by Islam, we believe that the views of Shia and Sunni scholars on this issue largely coincide. If, after considering all the arguments, a Muslim scholar arrives at the conclusion that building WMD is a necessity (darura), and the interests of the state during a specific historical period or in a specific socio-political situation require the possession of WMD, that scholar will have no difficulty finding a justification for such a decision in the Koranic texts and the Sunnah. This is despite the fact that Islam forbids mass killing and destruction, or the killing of children, women, and the elderly. Islamic law has a fundamental principle that allows scholars to issue the kind of fatwas that address the problems faced by society in a most pragmatic and effective way, especially during critical moments. That principle is called maslaha; it means public interest, benefit, or public good.

In Islamic law, anything that serves public interest and removes harm (mafsada) is maslaha. In other words, when faced with a difficult and pressing problem, and in the absence of clear instructions on the matter from the Koran or the Sunnah, Muslim law scholars have the right to formulate their own legal norms in order to bring the maximum benefit (maslaha) to the Muslim community. Naturally, different scholars may have different ideas about what constitutes public interest or benefit. This has been amply demonstrated by our comparison of the fatwas issued by the favorite Al Qaeda theologian and the fatwas by moderate scholars who represent the interests of their respective states. Nevertheless, all of these theologians, both Shia and Sunni, use the maslaha principle. For example, the prominent Shia law scholar Sayyid Ali Tabatabai (1748–1816) wrote that in order to achieve victory in a war, it is allowed to use catapults, fell trees, cut off the water supply to the population of besieged cities, torch houses, etc.45 To strengthen his argument, he referred to the Prophet’s actions during his war with the residents of Taif. The same opinion is expounded by Al-Fahd, one of the favorite theologians of the Al Qaeda organization; he also refers to the Prophet’s example.

Finally, there is a well-known principle in Shia Islam called taqiyyah (prudent religious dissimulation). If a Muslim’s life or the interests of an entire Muslim community are in jeopardy, in order to preserve that life and protect those interests Muslims are allowed to conceal their true beliefs, lie, and even commit acts that are illegal under Islam.46 It is therefore entirely possible for a fatwa to pursue the purpose of prudently concealing the true goals of the Iranian nuclear program in order to serve the interests of the Iranian people. Let us recall that the fatwa by Ayatollah Khamenei was issued in response to criticisms by the IAEA, which were ramped up in 2004 (especially because of plans to install uranium enrichment centrifuges in Natanz).47 That fatwa is now used as ostensible evidence of the strictly peaceful nature of the Iranian nuclear program.

We believe that in all likelihood, when Ayatollah Khamenei issued that fatwa, he genuinely believed (and probably continues to believe) that nuclear energy must be used only for peaceful purposes. If, however, the political context or the global balance of power change at some point in the future, and the interests of the Iranian state require the creation of nuclear weapons, the Supreme Leader of Iran will be free to change his fatwa or issue a new one to allow not only building but also using WMD.

CONCLUSION

The fatwas approving of the development of WMD that have been issued by various Sunni Ulamas, both radical and moderate, essentially represent their reaction to Israel’s possession of nuclear weapons and the aggressive policies of the United States and its allies in the Middle East. These scholars feel the defenselessness of their countries before these threats. That is why they urge their governments to acquire WMD, and declare the development of nuclear or chemical weapons to be allowed or even desirable under Islamic law. Meanwhile, the fatwa by the Supreme Leader of Iran was issued to defend the national nuclear program from criticisms by the international community.

All of this demonstrates that the Muslim theologians who issue fatwas on the religious and legal status of WMD represent the interests of their own religious groups, countries, and
elites. The fatwas by the Sunni and Shia scholars analyzed in this paper were issued in a specific context, and they are aimed at achieving specific ideological and political goals. It would therefore be entirely unproductive to discuss the question of whether Islam as such allows or forbids the creation of WMD. Everything depends on the specific context. Based on that context, the specific situation at the time, and the interests of the state (or an international organization, such as Al Qaeda) represented by the specific Ulama, WMD may be declared as either allowed or forbidden by Islamic law.

Notes

1 A fatwa is a response, oral or written, by a Mufti (Islamic law scholar) to a Muslim’s question on a religious, social, or religious subject. In other words, a fatwa is a religious-legal conclusion on a specific question issued by a Muslim theologian.


8 Yusuf al-Qaradawi (born 1923) is often referred to as the spiritual leader of the Muslim Brotherhood. His books and ideas command much respect not only among the Muslim Brotherhood but also among the followers of many other Islamic social-political movements. He is called a Global Mufti because he has millions of followers all over the Islamic world and because he issues fatwas on many pressing problems that are relevant for Muslims living in different countries. This is why his fatwas, including those on the subject of WMD, deserve special attention. For more details, see: Yakob Skovgaard-Petersen and Bettina Graf, eds., Global Mufti: The Phenomenon of Yusuf al-Qaradawi (London: Ed. Hurst and Co., 2009), pp. 55–74.


10 Ibid.

11 Nasir al-Fahd (born 1968) is a theologian who is quite famous in Saudi Arabia. He has authored numerous works, including fatwas on Jihad against the Americans. His works are published mainly on the Jihadists’ leading website (<http://www.tawahed.ws>). He is one of the theologians whose work is often praised and studied by the leader of Al Qaeda, Ayman al-Zawahiri. He was arrested by Saudi secret services after explosions in Riyadh on May 12, 2003.


13 Ibid.
14 Literally, "to commit abuse on the earth." See also the following ayats: "And of the people is he whose speech pleases you in worldly life, and he calls Allah to witness as to what is in his heart, yet he is the fiercest of opponents. And when he goes away, he strives throughout the land to cause corruption therein and destroy crops and animals. And Allah does not like corruption" (2:204–205); "and do not commit abuse on the earth, spreading corruption" (2:60).

15 Nasir Al-Fahd cites the Hadith (narrations about deeds and sayings of the Prophet) in support of his ideas. For example, he writes: "Sa'ab Jasima asked the Prophet (pbuh) about the women and children and polytheists who were killed during the night raids. And the Prophet answered, 'They are of their number.'" Like many similar theologians, Al-Fahd takes these Hadith out of their historical context and tries to find in them some justification of his ideas.

16 He refers to the following Hadith: "The Prophet (pbuh) used catapults to attack the residents of Taif."

17 This prohibition is contained in the following ayats: "And cause not corruption upon the earth after its reformation" (7:56); "And when he goes away, he strives throughout the land to cause corruption therein and destroy crops and animals. And Allah does not like corruption" (2:205).

18 This was during a war between the first Muslim community with the Jewish tribe Banu Nadir.

19 Al-Fahd, "Legal Status of Using WMD against Infidels."

20 Ayman al-Zawahiri cites a fatwa by Nasir Al-Fahd in his work Justification. He uses the Saudi theologian's arguments and arrives at the same conclusions. For more details, see: Rolf Mowatt-Larssen, "Islam and the Bomb: Religious Justification For and Against Nuclear Weapons." Belfer Center for Science and International Affairs, 2011, pp. 35–37.


22 Ali Gomaa cites the Koran: "O you who have believed, fulfill [all] contracts" (5:1).

23 He refers to a Hadith from a reputable collection of the Prophet's deeds and sayings compiled by the theologian al-Buhari: "The Prophet forbade the killing of women and children."

24 Gomaa, "The Use of WMD against Non-Muslim States."


27 Goodenough, "Iranian Nuclear Fatwa Cited by Obama May Not Exist."


33 Ibid., P. 154–155.
38 Ibid.
IRAN IN THE REGIONAL AND GLOBAL CONTEXT: IS THERE LIFE AFTER THE COMPREHENSIVE AGREEMENT?*

Among the issues that surround the negotiations over the Iranian nuclear program, there are two which stand out for their importance to regional and global security. The first one covers the Comprehensive Agreement itself. The question is: How can we make sure that the Middle East would be better off with this agreement in place, and that it would not only close the Iranian nuclear dossier, but also would benefit the region? Could the agreement bridge the gap between the Gulf and Iran or Israel and Iran? The second issue is the possibility of failure, which is always present in any negotiation or agreement. If anything goes wrong and the parties end with no deal, what do we do next? How could the confidence-building part or IAEA agreements be preserved?

The international team of experts under the PIR Center auspices tried to elaborate on these and other aspects of the most important agreement in decades for the Middle East. The roundtable benefited from the participation of leading experts on Iran and the Middle East, who included: Andrey Baklitskiy, Director of the Program "Nuclear Nonproliferation and Russia" at the PIR Center; Kayhan Barzegar, Director of the Institute of Middle East Strategic Studies (Iran); Wu Bingbing, Director of the Department of Arabic Language and Culture at Peking University; Farhad Mamedov, Director of the Center for Strategic Studies under the President of the Republic of Azerbaijan; Eman Ragab, Al Ahram Center for Political and Strategic Studies (Egypt); Tariq Rauf, Director of the Arms Control, Disarmament and Non-Proliferation Programme at the Stockholm International Peace Research Institute; Mustafa Fetouri (Libya), member of the PIR Center International Expert Group; and Mohammed Shaker, Chairman of the Board of the Egyptian Council for Foreign Affairs.

REGIONAL DYNAMICS IN THE MIDDLE EAST: A PREMISE OR AN OBSTACLE FOR THE COMPREHENSIVE AGREEMENT?

BAKLITSKIY: Today we witness a permanently changing dynamics both regionally and globally which influences the odds of getting to a Comprehensive Agreement on the Iranian nuclear issue. In your opinion, is everything ready to make this deal successful?

MAMEDOV: There is a huge effect that Israel has on the process of normalization of the situation in the region. It can be felt primarily in the United States. As the Azerbaijani part, we are working intensively with the Israeli diaspora in the United States. We see the Department of State as for now neutralizing their activity. They are aiming for a long-term solution to relations with Iran. At the same time, the major Israeli message is that Iran has just been buying time for finishing its nuclear activities. The U.S. message is that they are solving the security issue that Israel has been facing, but they are doing it without Israel because direct talks between Iran and Israel for the moment and for the short-term perspective are impossible. As neighbors, we feel those tensions around the Iranian nuclear problem; but since Rouhani took the lead over a year ago, a considerable change has taken place. In spring and summer of 2014 there are almost no mentions in the Iranian media about closer
relations between Azerbaijan and Israel, while before we were called a Zionist state. In
November 2013 Rouhani visited Azerbaijan, and in April 2014 the Azerbaijani President Ilham
Aliev made a visit to Iran.

One more point should also be mentioned in this regard: before, there were repeated talks
about possible dismantling of the Iranian state; with the latest events that we have witnessed
in Ukraine, and not only there, it is clear that nuclear weapons are a guarantee of state
sovereignty and integrity. What could be assumed from this observation is that when the
representatives of Iran are saying they are willing to shut down all of the military dimensions
of their nuclear program and claim that it would always be peaceful, it is not really trustworthy
because it would not really make sense for Iran.

RAUF: I do not think that there will be an agreement by the set deadline. There are still too
many outstanding issues. However, fortunately the interim Agreement has already provided
for what might be a second extension. What is not well recognized is that Iran has rolled back
some elements of its nuclear program, and that was reflected in the reports of the IAEA. The
Iranians have drastically reduced their stockpiles; by summer 2014 Fordow was not
producing 20 percent enriched uranium and also talks were held about reconfiguring the
Arak reactor. Those are all definitely good signs.

I think that the second extension of the Interim Agreement by six months would have mixed
play in Washington. As you know, there are many cooks on this issue, a lot of the U.S. think-
tanks and experts have been micromanaging it, raising questions like how many centrifuges
Arak should have exactly and so on. Their activities are part of the challenge we have,
because they might create additional difficulties for the Comprehensive Agreement. Thus far,
the U.S. Administration has marginalized them. However, the longer this drags on, the more
opportunity it gives the different lobbies and the think-tanks to try to take over the process.
Six months in politics is quite a long time, which might be enough for some other things to
happen that might not be directly related to the comprehensive settlement of the Iranian
nuclear issue but may still have an impact.

RAGAB: In my opinion, drawing the scenarios of these talks requires looking at the drivers
that are pushing forward and handling them. On the Iranian side, it is very clear that there is
support from Ayatollah Ali Khamenei for Rouhani and the negotiating team to proceed further
with the negotiations with the United States as well as the P5 countries. This might be
justified by the sanctions that have been imposed against Iran and which are still affecting
the economy of the Islamic Republic. Besides, one should also take into account the internal
balance of power in Iran after the Rouhani election, and it seems not to be that stable for the
moment. The role of the Revolutionary Guard is a point of concern, and it is unclear whether
the Guards will be supporting any result of these negotiations, especially if the Agreement
compensates not only the nuclear issue. An option exists that the agreement would also
create obligations for Iran with regard to its missile arsenal. On the American side, two major
trends have been observable recently. It is clear that the Obama Administration is supporting
the direction of pushing the talks with Iran forward, trying not to have any collapse in this
process, and maintaining the talks for as long as it takes but avoiding any major failure. There
are many justifications and reasons for such a policy.

The first justification is the change of priorities of the United States in the Middle East 2008–
2014 compared with that of the Bush administration 2000–2008. Another one is the intention
of the Americans to avoid any military intervention in the Middle East and to provide more
room for Russia or other regional powers to solve the crisis that Washington was not able to
solve in the previous months (i.e., conflict in Syria). These two drivers are not working in a
vacuum. The regional powers are waiting and seeing what is going on and what the results
that might be achieved throughout these talks are. We have Israel that is watching, and
Russia that is playing very hard, and making outstanding efforts in order to push these talks
to be successful. Egypt is also watching and trying to balance its reaction towards any results
of the talks with the strong relations that it has with the Gulf countries after the June 2013
revolution. These drivers would work to the benefit of the Iranian talks being successful.
Thus, collapse of the talks or failure of the negotiation process would be less likely to occur.
The Agreement might be reached by the deadline or there would be an extension of the talks
for another period.
FEYTOURI: I tend to see the issue of the Iranian nuclear program as more about Iran and its regional role than about technology itself. I see it maybe 10 percent about enrichment technology and the bomb and 90 percent about what Iran should be in the next two years with regard to its role in the Middle East region. I share the idea that the Iranians have been accommodating to the idea of regionalization of their enrichment technology. If they accept this concept, they will at least get better funding from the Gulf States, which have a lot of money. However, the Islamic Republic may not be prepared to regionalize its concept of nuclear power itself. Some basic questions are going to be raised in this regard: is there going to be a deal or not, and if not, what would be the consequences for the region? If we were to look at the situation from a helicopter view, we would see that the Iran’s role in the region is mostly not limited to sensitive technology.

To me the way of negotiations around the Iranian nuclear issues appears to be preferable to almost all powers. Nobody wants war for the moment. My analysis of that is that if you look at the situation from the economic point of view, the sanctions might have hurt Iran for some time but the Iranians have been living under this pressure for some time and they have what I call a sanction generation in the country. They have been under sanctions for many years and nothing dramatic has happened so far. Of course, it would be a nice thing to have the sanctions eased or completely lifted for Iran. But the Iranians have become very clever in working under the conditions of the sanctions and have made considerable progress in their attempts to move forward.

Another factor, which is quite important, is that the whole region is in a very turbulent situation now and no one knows what will happen in Syria, in Lebanon, in Iraq for that matter, let alone Saudi Arabia. These are all factors that have a certain impact on the Iranian nuclear program, and that are indirectly related to it in the context of Iran’s role in the region. Iran is not going to waste too much time or money to get the bomb for the time being. They will get nuclear weapons eventually, I am sure of that—but at the moment it is not their priority. The West, from its own side, is not in a hurry to close a deal with the Iranians, because there are too many variables around in the Middle East, which should be taken into account with regard to the Iranian role in the region. In particular, the U.S. Government has to look at what is happening in Syria, to consider the so-called Palestinian peace process, the role of Hamas, the developments in Iraq, etc.

BAKLITSKIY: The great powers play a crucial role in negotiating the comprehensive agreement with Iran and ensuring that all parties would stick to their promises. What is your perception of the place of the great powers in the region and their approach towards Tehran?

WU: We have to consider the US-Iran relationship, and the US policy toward Iran against the background of the regional situation. Let us look back to the US response to the Arab Spring since 2011. In 2011, all the Western countries focused on the war in Libya. In 2012 Syria took its place, and in 2013 there was a very strong effort by the United States to push Turkey towards reconciliation with Israel. The idea was to make these two countries an axis of US policy in the region and try to respond to the threat arising from Iran and some uncertainty in Egypt with this Turkish-Israeli alliance. However, after the political situation changed in Egypt in mid-2013, a new idea emerged implying that Saudi-Israeli cooperation is more important. We could witness this in the first half of 2014.

When I went to the United States in 2013, I had conversations with some Israeli scholars, and they thought Israel and Saudi Arabia were real allies for that moment and an informal alliance between Saudi Arabia and Israel was emerging, and Egypt could support this kind of Saudi-Israeli cooperation. However, today the situation appears to be different. After 2013 and the efforts aimed at solving the chemical weapons issue in Syria, it probably became clear to the United States that without cooperation with Iran they would not be able to resolve the regional problem. Based on this, I think the President’s administration, especially Obama and the small circle around him, is trying to push reconciliation between Iran and the United States. Still there is Saudi-Israeli cooperation in place, and it is very strong. But Iran is a new factor, so by permitting Iran to play a more positive and active role in the Middle East, the United States could find solutions to many problems, maybe including Syria and even Afghanistan. They could also try to make Iran a kind of leverage in order to influence (or to limit the influence of Russia); the same is true with regard to China.
In addition, I believe that Egypt could play an important role in this regard because some new signals have emerged. For example, Egyptians want to play some security role in the whole Arab world based on anti-terrorism discourse. Based on this, I think it is very clear that the U.S. Administration has a strong intention to push Iranian-U.S. reconciliation. There are two trends within the United States on the issue. One trend is to push the reconciliation forward; the other one is to make obstacles to this process, so we still do not know what is actually going to happen. But, basically speaking, we rather remain pessimistic.

BARZEGAR: The Rouhani government would like to establish reasonable relations with the West. This relationship has been lacking for many years and there is belief that this somehow misbalanced Iran’s international relations. The debate is going on in Iran that relations with China and Russia are good but, at the same time, the Western powers should also be present in the country’s international affairs. I would say that, given this fact, the Rouhani government would like to take advantage of any opportunities, even beyond not signing the deal, to somehow process this détente policy with the United States. This is important, but at the same time we understand that Iran’s nuclear program is in certain aspects impacting Iran’s regional relations as well, and making a strategic impact on the regional countries; this is quite obvious.

But again, what we are witnessing is the change of course of the negotiating theme. What this negotiating team would like to focus on more is verification and transparency, rather than regionalization of Iran’s nuclear program. The reason is that the negotiators believe that too much focus on the strategic and weaponization aspects of the Iranian nuclear program would give the upper hand to the Israelis’ and the Saudis’ tracks, which are both influencing the U.S. policy to bring the Iranian nuclear program to zero. That is something that is very important, and I would guess that the attempts to improve Iran’s relations with the United States will still be in place, but in the short term some negative implications for Iranian regional relations might also emerge. At the same time, the point has already been mentioned here that Iran has implemented some confidence-building measures, and it is also true that Iran somehow worked on this and enriched its stock.

WU: Chinese-Iranian relations should also be elaborated in more detail because, no matter what happens in this negotiation, China always thinks Iran and Egypt are its two major partners in the Middle East. I think we can witness some very important progress in Chinese-Iranian financial relations in the first half of 2014. First, our minister of commerce made a visit to Iran and signed an agreement to double the trade between the two countries within three years, so it is a major agreement in fact. Second, our Ministry of Foreign Affairs has been holding a dialogue with Iran on the security of Afghanistan, and that is also happening for the first time. Third, we have signed an agreement with Iran implying that we are going to import 400,000 barrels a day of crude oil.

Effectively, this means we set a bottom line for the U.S. sanctions. Maybe the United States wants us to reduce our oil import from Iran by 15 percent each six months, but this bottom line serves as a signal that we cannot have a zero import; we cannot buy less than that. More than that, in May 2014 the Iranian president was in Shanghai to attend the Fourth Conference on Interaction and Confidence-Building Measures in Asia (CICA). CICA could be a very important forum for future relationships between China, Russia, and Iran. So, altogether these signals show that Iran has become a very important partner for China and whatever the result of this negotiation is, Beijing wants to further strengthen the relationship with Tehran.

FETOURI: The Iranians have proved that they are very skillful at negotiating. They have been negotiating for many years, nothing has been produced, and yet they never stop doing what they are doing. Over the years, they accumulated a certain amount of experience not only in terms of technicalities but also in terms of political negotiations, which is very important to settle an issue like the Comprehensive Agreement. However, they are not in any kind of a rush, and definitely not ready to sign anything they are offered in order to settle the issue by tomorrow. Things do not work that way with Iran, even if some participants in the negotiation process would like to see them that way.

The other kind of strong backbone the Iranians have is the fact that neither Russia nor China will change its mind in the UN Security Council in the foreseeable future. At least, they would hardly ever allow another UN Security Council resolution that might authorize the use of any kind of sanctions against Iran to pass through. It is not really because Russia loves Iran or
China loves Iran in the international policy context, but because of strategic interests that both countries have and pursue. Moreover, I do not see any kind of resolution passing through the UN Security Council whereby the use of force might be authorized or even hinted at against Iran for the next 10 years, if you like, because of the economic situation and the role of the Iranians in the region. One needs strong incentives to accept such a decision, to give up some of one’s demands, and this is true with regard to Iran. The Iranians require some kind of really convincing incentive to accept whatever the West wants out of their nuclear program and to give up some of its positions. For the time being, I do not see such incentives, and sanctions do not work here either. The Iranians might be hurt by the Western sanctions to some extent, but along the way the sanctions get weaker, so it is not the case.

**ROLES AND INTEREST OF THE REGIONAL POWERS IN SETTLING THE IRANIAN NUCLEAR ISSUE**

**BAKLITSKIY:** The terms of agreement with Iran were hammered by the powers outside the region; however, the outcomes will heavily influence the Middle East. Where do the regional countries stand on the deal, especially the countries of such importance as Saudi Arabia and Egypt?

**BARZEGAR:** In Iran, a big debate has been going on since the first half of 2014 on why Egypt was going to be so attached to the GCC [Gulf Cooperation Council] track, especially with Saudi Arabia. From an Iranian perspective, Egypt is a big and really important country, which is able to influence the Arab world. Iran would like to have a close relationship with Egypt, no matter what kind of government is in Cairo. But what Iran wants today in particular is to achieve a close and improved relationship with Egypt. If you look at Iran’s reaction to Mohammed Morsi’s fall, you see that Iran was not that active in expressing its position on those events. The official reaction was that the change of Egyptian government was an internal issue, and we can live with that further, we would like to have good relations. Not letting Egypt move towards instability is an issue that reflects Iran’s geopolitical interests because again, Egypt is not Syria for Iran, it is in Iran’s second circle of security, so having a good relationship with Egypt is something really important. It was so even in the time of the Shah. But the question for Tehran now is why Egypt has become so influenced by Saudi Arabia. The search for answers leads Iran to think perhaps that some special kind of relationship between the Sisi government and Saudi Arabia has been taking place, and that might complicate the situation.

This is an important debate inside Iran because the expectation from Egypt is to stay on its independent track as a big regional power, but it is too much involved with the Saudis’ ideological track in dealing with the Iranian issue. Before Sisi the situation was a bit different, but now Egypt’s role has become critical to Iran in the context of the GCC. If we consider the option of including Egypt in the negotiation process on the Iranian nuclear issue, this will complicate the situation from an Iranian perspective just because of that Saudi influence on Egypt.

From the Iranian perspective, we see the Saudis coming onto the whole issue with their own regional ambitions and regional policies. And for example, when it comes to Syria, the Saudis are even extremely influencing U.S. policy. For me, again, it is a matter of certain concern. Of course, we can say that the Israelis are influencing the United States as well, and there is a clear logic behind that. However, the fact that the United States appears to be this submissive to the Saudi track is seriously complicating the situation. In that sense, one more reason for the Iranians aiming so much to improve relations with Saudi Arabia and Egypt is that the Islamic Republic sees the situation as a matter of strategic rivalry in the region.

**FETOURI:** I will pick up the comments concerning the Saudis and Egypt. Egypt is likely to search again for its own role in the region. This role has been outside the equation for a while during the Mubarak era. I do not see the new Egypt to be dominated by the Saudis except for tactical reasons and for a limited period, maybe for economic reasons. Neither do I expect Egypt to come back to its historical role in the region as a big power because of the multitude of economic and social problems the country has been facing. I see President Sisi being very busy with the domestic agenda for a while and he will not be that much concerned about the
Iranian nuclear program or very accommodating of the Saudis' role, especially in the ideological aspect. In the long run, however, Egypt has the chance to become again what it used to be, a dominant power in the region, and that will lead directly to a very kind of accommodating relationship with the Iranians just as it always has been; let us also not forget that competition between the two will always be there. This consistency is just a fact of life.

SHAKER: With regard to what was said before, I would like to stress the mutual appreciation between Iran and Egypt. Concerning Saudi Arabia, it is the most popular country in Egyptian public opinion. We had several polls and Saudis always came at the top. Why? The historic relationship, the major shrines, the Kaaba and so on, so Saudi Arabia is really popular. The relationship is Islamic and very supportive by its nature. The proposal I am making is about reaching friendship with the Iranians. We want to rebuild our relationship with Iran. If we can help in any way to rebuild this relationship and confidence in Iran, I think the situation will change. Forget about the negotiations and so on, since this is not really the most important issue. The truly vital issue is about bringing the Iranians and the Arabs together. What we want for regional relations is to overcome all this animosity between Arabs and Persians, between Sunni and Shia, and other issues of that kind.

RAGAB: Egypt's foreign policy and security policy over the decades considers GCC security as part of national security. Saying that in public does not make Egypt less independent in its foreign policies, but Egypt's current government is more realistic than any other government in the region. It is more pragmatic in seeking its own interests. If any other country has any issue with that, I think it is not an Egyptian issue. Also, it is not about the Sisi government or whatever government is ruling, since the reasons are more deep-rooted and fundamental. As for Iran's position towards the Muslim Brotherhood, I think there are details that are more complicated when it comes to Iran's foreign policy towards Egypt at the time when the Muslim Brotherhood was ruling in the country (June 2012–June 2013).

STRENGTHENING THE FUTURE COMPREHENSIVE AGREEMENT

BAKLITSKIY: The comprehensive agreement on the Iranian nuclear issue should be sustainable and lasting. What creative solutions can we come up with to provide such a result?

SHAKER: The ongoing negotiations should be enlarged to allow countries of the region to join the group that is negotiating in the second round of talks. This is based on the simple idea that in the case of negotiations with North Korea we had the six powers of the Pacific on the table. Here, we have Iran and the 5+1. But none of the regional powers are there. So my idea is that the negotiations should have participation from major powers of the region, including Saudi Arabia, Egypt—or if it is difficult to accommodate them all, Iran and other negotiators at least should be in touch with them and put them in the picture as the negotiations go on. That is my personal view that countries like Egypt, Saudi Arabia, should be on the table at the negotiations because this concerns not only the 5+1 and the world, but also concerns the direct neighbors of Iran in the region. The major powers in the Middle East should be included in the negotiation's composition.

BARZEGAR: The Iranian side will likely not accept the issue of regionalizing the negotiation. We already have a lot of problems by saying that 5+1 format involves too many countries, and it is just making the process slower, while the Iranian government wants to expedite it in order to get to a deal for a number of reasons. Bringing regional countries with their own interests and narratives regarding Iran's nuclear program would definitely not be welcomed by Tehran, because the view would be that that makes the process more complicated and more time-consuming, and Iran is not in the position of going in that direction.

SHAKER: My second point boils down to the idea to regionalize sensitive technologies in Iran. Tehran would be in control of its own sensitive enrichment technology, but with partners who would benefit from Iran's endeavors in this area and at the same time would have a seat to make sure that these activities are solely for peaceful purposes. The solution is to create in Iran something like the Treaty of Almelo mechanism in Holland, or in France. We already have something like this, when a group of countries would be producing low-enriched uranium for
the benefit of the region. If such a mechanism is implemented in the Middle East case, Iran would become very powerful, and in fact, a problem with the West would emerge in that case. But would it really matter if everyone benefits from such cooperation? It would bring the Iranians and the Arabs closer together, and it would also remedy the situation of Shia and Sunni, and so on. We can see even now some glimpses of possible improvement of relations between Saudi Arabia and Iran: the Saudis have suggested visiting, establishing closer links with the Iranians, and those steps could be continued in the future.

So I think some people may say: “You are now rewarding a violator of the NPT!” So if we want to bring Iran into the fold and commit Iran to the community of peaceful users of nuclear energy and ensure better relationships with its neighbors, we have to be more imaginative and audacious in the way we think and find a solution that would change the course of the negotiation process.

BARZEGAR: I think regionalization of Iran’s sensitive technology is something that will be accepted by Iran. I have always said that for the sake of regional cooperation we like the idea of a regional consortium and other things to give some assurances to the regional countries that Iran’s nuclear program will not divert towards weaponization.

FETOURI: It is important to understand the value of the nuclear program for Iran. The successive governments in Iran have been very clever in making the nuclear program kind of a national issue to the Iranians. I have spoken to many Iranians, both pro-government and anti-government, also pro-Islamic Republic and anti-Islamic Republic, and the majority of them agree that this is our business, and the nuclear program should be developed. As they perceive it, it is not the concern of the United States, it is not the concern of the West, it is our own legitimate right and nobody should stop us. This is a very important thing because when one goes through hard times like the successive Iranian governments did given the sanctions and the economic difficulties, one needs public opinion to be supportive at least on one major, principal issue. So the Iranians made the nuclear program such an issue, they made it very important, so it became a national issue to the majority of Iranian people. That is a very hard wall to fall back to if you are pushed too much in terms of negotiations.

BARZEGAR: I want to reiterate that involving new parties in the process of negotiations might trigger the opening of a Pandora’s box by bringing a lot of narratives and at the same time a lot of interests that are influenced by regional politics. Therefore, it would complicate the process and make it more time-consuming. But at the same time I understand Ambassador Shaker’s suggestion; indeed, this should happen between Iran and Egypt. However, going in that direction with the negotiations might be a little bit infeasible. In this regard, one point that is important is Iran’s missile program. Bringing this into the negotiation will definitely break the Iranian domestic consensus on the negotiating issue, because it is a matter of strategic prestige for Iran, and it is a matter of modernization and technological sophistication and development. Finally, it is most of all a matter of Iran’s deterrent power. You know the Israelis possess such deterrent power with their aircraft and nuclear arsenal. If Iranians are pushed too much in that direction, that will somehow preempt Iran concerning the threats to its security that are arising in the region. This is the extreme red line from Iran, unless the Americans were to go to the length of breaking the entire negotiation process by bringing the missile issue into it. It is perceived in Iran as the Israelis trying to somehow preempt that issue.

SHAKER: In my mind, we have a good opportunity and if we want to regionalize the Iranian fuel cycle, to the nation’s benefit, we will have partners running peaceful nuclear programs without access to sensitive technology. We will have Iran rebuild its nuclear objects, and in fact, there are many partners in the Middle East that would benefit from this regionalization. We have the UAE, which is building four reactors. Egypt is rethinking building its first nuclear plant at El-Daba’a. So Egypt, the UAE, Jordan—all of us will need low-enriched uranium. Where do we go? Shall we go to Angarsk—or shall we go to Iran as a partner? I think Iran as a partner would make sense. In addition, Iran, by putting its hands with its Arab counterparts, will become a country that is cooperating and coexisting with its neighbors, so that will create a completely new atmosphere in the region.
FUTURE OF THE NEGOTIATIONS UNDER THE “NO COMPREHENSIVE AGREEMENT” SCENARIO

BAKLITSKIY: There is always a possibility of failure in any negotiation or agreement. Is there any “Plan B” for Iranian nuclear negotiations?

RAUF: If we end up with no agreement, I do not think it will be the end of the world. Even without the Agreement, they still could take measures that would at least value those voices that say Iran is racing to the bomb. Some of these technical measures are underway now. What I mean here is that the Iranians do not produce any more 20 percent enriched uranium, Fordow becomes a research and development facility, and they have a better balance between under 5 percent enriched uranium and what they need, Arak is converted into a light water reactor, and they continue to provide IAEA access to the sites as they are doing now, which is essentially the access that is needed under the Additional Protocol to the NPT.

WU: We Chinese are not very optimistic about the result of the negotiation. So I think that all these steps could also be considered as an assessment that if the negotiation fails, then the United States might impose more sanctions. Before this happens, we should do more to strengthen the relationship between China and Iran. I think it is very clear that Washington wants to add more issues to this negotiation. That might include charging Iran to be a state sponsor of terrorism; also, the Iranian missile program could be included in this negotiation by the United States, although I think Washington wants to explain to Iran that it takes a long time to lift the sanctions, not one year or two years. In the eyes of the White House a reasonable term for lifting the sanctions might be five years, maybe 10 or even 20 years. Also, with regard to the results of the Congress elections, I think that Obama would not be able to push Congress to agree to the Comprehensive Agreement as a result of the negotiations. So, based on all of this, the result would not be as what we want it to be.

BARZEGAR: The debate in Tehran is that there has been nothing concrete enough from the other side of the negotiation process. I mean, the European foreign ministers visited Iran but this did not lead to anything tangible. The opposition forces within Iran maintain their traditional pessimism about the Western side in the process of the negotiations. So if it takes more time, the opposition, which is not trying to sabotage Rouhani’s track—though that assumption might be taken in a mistaken way—would become increasingly worried that if Iran trusts the Western side too much and undertakes a lot of confidence-building measures like it did on its enriched stock, there might not be anything in Iran’s proposal for further negotiations and final deals. Also, with regard to the Congress elections in the United States held on November 4, 2014, the Obama Administration finds itself under increasing pressure to put pressure on Iran again.

These factors are not good in the process of confidence-building because, on the one hand, Iran is making a lot of concessions, but, on the other hand, there has been not that much from the Western side in response. Such a misbalance in positive steps, in my view, might break the domestic consensus within Iran’s domestic politics in the course of the negotiations. Of course, there is still the support of the Supreme Leader for Dr Rouhani, which is quite obvious. In May 2014 some hardline forces in Iran started to change track on the issue of the negotiations on the Comprehensive Agreement. This means that the country is trying to become united in terms of domestic forces so that this government can negotiate effectively. But again, the issue is very sensitive and related to Iran’s strategic perspectives and even national pride in certain aspects.

Therefore, there is still the potential for criticism from domestic forces, especially when we get closer to the Iranian parliamentary election, which is in 2015. So time is short for Mr Rouhani within Iran, and if he is not able to solve the issue in the short term and there are not going to be any tangible results, that might somehow break the domestic forces when we get closer to the parliamentary elections. Iran’s domestic politics is in some way similar to U.S. domestic politics: it has its own hardliners, and some middle forces who are waiting to see which side is taking more weight.
BEYOND THE COMPREHENSIVE AGREEMENT: FURTHER ISSUES TO DISCUSS WITH IRAN

BAKLITSKY: The comprehensive agreement with Iran is an important yet not the final step in the solution to the Iranian nuclear issue. What are other things we should be looking at?

RAUF: In November 2011, the current IAEA Director General put out the report on the possible military dimensions of the Iranian nuclear program. This means that the closure of the Iranian dossier will be complicated. The negotiation between the 6 countries [P5+1] and Iran will produce a political agreement. It might include some technical elements, but what would be agreed in this document could not substitute for the IAEA’s own findings. As the Director General has reported to the Board on seven areas of military dimensions of the Iranian nuclear activities, he has to provide a technical report based on the Agency’s work rather than the negotiations in Geneva or wherever on how these seven elements are going to be resolved. One possible way out is to admit that some of the previous information was incorrect or not precise. Another theoretical option is that Iran admits that it was conducting some of these activities but terminated them after 2003 or 2004. In that case, no big punishment would likely follow. So in this scenario the Iranians admit that they were doing something, then some extra verification is implemented at the Iranian entities, and we move on. Therefore, we are not quite sure how this is working out, and the progress between Iran and the IAEA on these issues is quite slow. For the moment there is a discussion on this exploding bridge-wire: the Iranians admitted that they were using this technology, but for the oil and gas industry. It might be of interest in this context that in May 2014 the list of sanctions imposed by the United States on Russia included provisions concerning exploding bridge-wire exports from the United States to the Russian oil industry. This could potentially strengthen the Iranian case, because it is a clear example, confirming that there are not only Iranians who use this technology.

RAGAB: I would like to examine to what extent the Agreement might affect the structure of security and stability in the Middle East. Here I am trying to make use of what I discovered during my field studies of the GCC countries in the previous few months. GCC countries are still concerned with the results of the Comprehensive Agreement. Yes, such an agreement has a technical side, but at the same time, GCC countries—especially Saudi Arabia and the UAE—are very concerned about the political and strategic implications of this agreement. This is especially true for Saudi Arabia, which is more ideological on its position, and here we are not only speaking about King Abdullah. There are differences inside the Saudi elite, and the recent shift of power to younger princes within the Saudi family is a sign that there is something going on inside the Saudi elite. So any final agreement with Iran would impact Saudi foreign policy not only towards Iran but also towards other countries in the Middle East.

However, the Saudis still have concerns regarding Iranian political ambitions in the Middle East and the Gulf; one more issue that raises concerns among them is whether the Americans, by reaching the Comprehensive Agreement on the Iranian nuclear issue, would unwillingly provide legitimacy for Iran as a regional superpower with regard to the Middle East and the Gulf. They also have their own concerns regarding the missile arsenal of Iran.

Against this background, I expect that if the Agreement were to be reached by the same structure of negotiations that has been taking place until now, it would be a proliferation of missile capabilities in the Middle East, namely in the Gulf, and there would be a proliferation of nuclear capabilities in the Gulf. Given that Saudi Arabia, the UAE, and Kuwait, and to a certain extent Bahrain, have their own programs for using nuclear power for peaceful use, they would not accept Iran still having the capability of increasing the enrichment level of the uranium. Colleagues may correct me in that the Agreement itself does not make Iran a non-nuclear country—it just puts a shield or a limit on its capability to enrich uranium. For the GCC countries, this is a major concern. Aside from that, there are other countries, such as Kuwait and UAE, which are concerned with the environmental impact of any nuclear capabilities that Iran has, whether it is used for peaceful or non-peaceful usage. This concern is mainly raised regarding the Bushehr reactor, which is located very close to these two countries, and they are afraid that it would pollute the water and affect the environment.

RAUF: I would like to comment on the possibility to mention in the Comprehensive Agreement that the IAEA would proceed with searching for evidence of past activities in the military dimension of the nuclear program, but that they would present them to the UN
Security Council only as information that would not lead to any sanctions or penalties. The P5+1 states could suggest so, but the IAEA Board has to pass a resolution confirming this. So if the six intermedias are able to make such a deal, then they could actually win as regards the IAEA Board as it is unlikely the Board will object. You never know of course, but the Western countries have a majority on the Board and they can always count on at least 20 votes. That is why Iran has so many resolutions passed against it. However, it would not be so easy for Iran to agree on that. The representatives of the Agency will want to speak to the Iranian scientists; they will want to have a detailed look at the documentation and visit the sites where any technical and engineering activities were conducted. These actions in fact might open a whole new Pandora’s box, as the IAEA specialists might have a lot of new questions on where and why did Iran get these or that type of equipment, construction, etc.

Even if Iranians are able to provide a satisfactory respose, there would be a likely next round of questions going into details on any new revealed objects or past activities, so it would take a long time. With this perspective in mind, admitting some past military dimensions in the national nuclear program would not be a smart thing for Iran to do. It could be very easy—almost like the sanctions on the UN Security Council—to agree to them, but it is going to be very difficult to remove them, and this is part of the problem. The easiest thing for Tehran would be to claim that some of the information on its WMD-related activities was just cooked up. In that case, you might have closure in some defined and foreseeable period. If that does not happen we have no idea how long it is going to take the IAEA to investigate the issue and to take final decisions. This is part of the problem with the facility in Parchin, the reason why Iran is not allowing the Agency to visit the site once again.

RAGAB: Summarizing our discussion, I will briefly mention two more points. First is that the issue of Iran’s nuclear program has already become complicated. Simplifying it by considering it a technical issue in its essence would make us miss many parts. Second, everyone is well aware that if the Comprehensive Agreement is reached, it will have strategic implications for Iran’s regional role in the Middle East. That means that if Iran is just keeping an eye open, watching the Americans and Europeans conducting their own policies without giving any attention to the regional powers, Iran will likely lose a lot in the long-term prospect. In the end, Iran is located and developing in the Middle East, it is not situated in Europe, or North America, or in Asia beside Russia, or in Central Asia. It has its own interests and its own active role in the Middle East. Thus paying attention to the concerns of Egypt as well as other GCC countries, when it comes to the Iranian role, I think would enable Iran to consolidate its role and policies throughout the region of deducting them.

NOTE

* This roundtable makes use of the materials of the 2nd Meeting of the Working Group “Iran in The Regional and Global Context” held in Moscow, Russia on May 24, 2014 on the margins of the III Moscow Conference on International Security, organized by the Russian Ministry of Defense.
Arms exports are an important component of foreign trade and foreign policy aspirations of every country aiming to strengthen its role in the global arena. It is no coincidence that against the backdrop of the ongoing Ukrainian crisis, the EU, the United States, and Ukraine itself have sought to put pressure on Russia by restricting their arms trade with it. How will these restrictions affect Russian arms exports and imports, and the country’s defense industry? Will Russia manage to reorient its defense industry towards the Asian markets? And will the defense industry be able to keep the Russian armed forces supplied with all the required weaponry, including the state-of-the-art high-tech systems?

Security Index presents an in-depth analysis of these issues, which was conducted in the format of an expert roundtable. The discussion benefited from participation of leading experts in the field: Evgeny Buzhinsky, Senior Vice President at PIR Center and Deputy Director General for foreign markets at the JSC Vega Radio Engineering Corporation; Natalia Kalinina, Chief Researcher at the Institute of World Economy and International Relations of the Russian Academy of Sciences (IMEMO RAN) and member of the PIR Center Executive Board; Vadim Kozyulin, senior researcher at PIR Center; and Dmitry Litovkin, political commentator for the Vzglyad business daily.

THE RUSSIAN AND UKRAINIAN DEFENSE INDUSTRIES: AT THE EPICENTER OF THE UKRAINIAN CRISIS

KALININA: The crisis in Ukraine and the suspension of trade between the Russian and Ukrainian defense industry companies will obviously have an impact not only on the Russian arms trade but on the Russian defense industry as a whole. Until recently, over 100 Ukrainian defense companies supplied at least 250 million dollars’ worth of various parts and components to Russian defense contractors every year. Ukrainian suppliers also had a further 250 million dollars’ worth of subcontracts under Russian defense procurement programs. Taken all together, Ukraine was selling about 500 million dollars’ worth of defense products and services to Russia every year. These sales made up almost half of Ukraine’s entire defense exports.

Some of the defense products and services supplied by Ukrainian contractors are crucially important to Russia, including:

- maintenance services for the RS-20 ICBM, provided by the Yuzhnoye (Pivdenne) Design Bureau;
- air-to-air missiles supplied by Artem;
- components for the Khrizantema-S systems supplied by Fotopribor;
- computing stations for the S-300 SAM systems supplied by Lorta;
helicopter engines supplied by Motor Sich; these engines are used in Russian helicopters destined for exports and supplied to Russia's own armed forces.

Before the Ukrainian crisis broke out, Russia and Ukraine were considering a joint venture to launch mass production of the An-124-100 Ruslan heavy transport aircraft. This would have been the largest bilateral cooperation program in the aerospace sector for the next 15–20 years. Russia and Ukraine were also working together on the development and testing of the An-70 medium transport aircraft. Ukraine supplied engines for the Yak-130 combat trainers and ship engines (including engines for frigates built under export contracts). The products and services supplied to Russia by the Ukrainian defense industry were not subject to quotas, licensing, or customs tariffs, and the number of individual items on the list of defense imports from Ukraine was approaching 10,000.

Experts reckon that the weapons systems that cannot be produced without continued cooperation with Ukraine and some other CIS states include the entire range of Sukhoi and MiG planes, as well as helicopters, diesel-electric submarines, various types of ships (corvettes, anti-submarine ships, and missile boats), the T-90A tank, the Smerch MLR system, the Iskander theater ballistic missile, various radars, SAM systems such as the Tor-M2, Buk-M2, and Triumfator, the Igla MANPAD system, the Tunguska gun-missile AA system, and others.

Reducing Russia's dependence on defense imports from Ukraine has lately become one of the most pressing national security concerns, with direct implications for the country's capability to defend itself. The government has announced a program of Ukrainian imports substitution to be completed over the next two or three years. These ambitious deadlines, however, appear overly optimistic, and a certain amount of disruption to Russian production of weapons and defense hardware for both domestic and foreign customers seems inevitable.

KOZYLIN: Clearly, the ban introduced by the Ukrainian government on exports of weapons and components to Russia is as painful as an amputation. But history holds numerous examples of a national defense industry starting to flourish precisely after the introduction of sanctions. There are even examples of arms embargos forcing countries to create a national defense industry from scratch.

Another important consideration is that the Ukrainian defense industry has an even greater interest in continued cooperation than the Russian industry. Defense exporters in Ukraine have numerous loopholes to circumvent the ban, including re-exports, setting up joint ventures in third countries, or simply ignoring the government's orders. Ukraine has always been and still remains a corrupt country, and money still opens all kinds of doors there.

LITOVKIN: Disruption of the arms trade with Ukraine will be a painful but not fatal blow for Russia. Ukraine was the sole supplier of many components imported by the Russian defense industry, including helicopter and ship engines, air-launched cruise missiles, and artillery fire control systems. Launching production of these components at Russian facilities will be costly and will take a long time. But the launch of new production facilities and the rollout of new technologies will be a major boost for Russian developers of weapons systems. In fact, these effects are already being observed in some areas.

BUZHINSKY: For Russia, the most important area of cooperation with the Ukrainian defense industry is the production of engines for aircraft (the Antonov transports), helicopters (TVZ-117 engines for the Mi-24 and Mi-8 helicopters), and ships (the M70 and M75 gas turbine engines for various classes of ships, especially Project 11356R frigates that are being built for the Black Sea Fleet). Other crucial imports include air-launched guided missiles, radars, and avionics.

The list of products imported from Ukraine by Russian defense companies includes more than 3,000 parts and components supplied by more than 160 Ukrainian companies. These imports are used in the production of more than 200 weapons systems and special hardware. Disruption of these supplies could have an adverse impact on the Russian defense procurement program, especially in such areas as aircraft and engines. It could also make it difficult for Rosoboronexport to fulfill several arms export contracts.

Nevertheless, there is no denying that in recent years Russia has been implementing a deliberate plan of Ukrainian defense imports substitution. Also very few, if any, Russian
defense programs that are crucial for national defense capability rely on Ukrainian components (Topol-M, Yars, the new railway-based missile complex, and the latest S-300 and S-400 SAM system modifications). Experts from the Defense Industry Commission believe that it will take Russia three or four years to launch production of the parts and components that were previously imported from Ukraine. Once that happens, Russia will have a complete in-house production cycle for almost every single type of weapons systems.

For Ukraine itself, meanwhile, the consequences of the disruption of the arms trade with Russia will be catastrophic. To illustrate, 70 percent of the components used in Ukrainian weapons systems are made by Russian companies. Russia was also the destination of more than 50 percent of Ukrainian arms exports.

THE IMPACT OF WESTERN SANCTIONS ON RUSSIAN ARMS TRADE

KALININA: On the whole, Western sanctions will not be able to disrupt Russia's arms trade with its key partners. They can, however, have an impact on Russia's ability to secure new weapons contracts because they will affect the decision-making process by the existing and potential buyers. The United States and the EU will undoubtedly put pressure on these countries (for example, Washington has already urged the agricultural producers who are not on Russia's own retaliatory sanctions list to desist from increasing their exports to Russia). But the arms contracts that have already been signed will continue to be fulfilled, so there will be no sharp fall in Russian defense exports over the next four or five years. The Russian portfolio of defense export contracts currently stands at almost 50 billion dollars. The figure was rising rapidly in recent years, but that growth will now slow down.

BUZHINKSY: As far as the disruption of the arms trade with the EU and the United States is concerned, the losses will not be large because that trade was fairly small to begin with. This is especially true since the contracts that have already been signed remain in force, with the exception of the Russian order for Mistral ships. (These contracts include maintenance of aircraft and other weaponry in Eastern European countries. The only known exception is the Russian contract with Germany's Rheinmetall for building and equipping a combat training center in Mulino; that contract was cancelled by the German government when its implementation was already at the final stages.)

The Western markets for complex, high-tech and the most expensive weaponry (aircraft, air defense systems, ships, and submarines) are cornered by suppliers from the United States and the leading EU countries. What is more, NATO maintains an unspoken ban on buying such weapons systems from non-NATO countries, especially Russia and China. The only exception to that rule was the Greek contract for the S-300 SAM systems that were originally destined for Cyprus, as well as small Greek contracts for Russian air defense systems and hovercraft. The only kind of weaponry Russia was formally allowed to export is armored vehicles and small arms, even though it is quite difficult for Russia to compete with Western suppliers in that segment of the Western defense markets.

Most of the Russian defense exports are in such product categories as aircraft, air defense systems, armor, ships and submarines, and some types of missile weaponry and ammunition. Very few imported components are used in the export-destined Russian systems in these categories. Besides, the EU, the United States, Canada, Japan, and Australia are not among Russia's traditional defense export markets. Western sanctions are therefore unlikely to have a significant impact on the Russian arms trade with foreign countries.

KOZYULIN: Clearly, the Western countries will now be more cautious about the arms trade with Russia. Nevertheless, there is still a chance that the Russian defense industry will be able to receive components and technologies from Western suppliers, provided that the conflict in Ukraine is quickly resolved. Such hopes are based on the position adopted by France, which is trying to keep the Mistral deal alive. After all, France has worked hard to enter the Russian defense market over the past 20 years, so it does not want to lose that market if it can be helped.
IMPACT OF THE UKRAINIAN CRISIS AND SANCTIONS ON THE RUSSIAN DEFENSE INDUSTRY

KALININA: Russia has long begun to import parts and components for domestically produced defense hardware because Russian defense technology is lagging behind, especially in microelectronics. Russian defense contractors have no other choice but to import some components, including microelectronics. According to the information at our disposal, imported components are being used in the production of all the main weapons categories, including airplanes and helicopters, naval weaponry, armor, and large-caliber artillery systems.

For example, various types of fighter jets, which account for over 50 percent of Russian defense exports in dollar terms, are equipped with imported (mainly Western) avionics. To illustrate:

- The Su-30 KI jets produced under a contract with India are equipped with components imported from France and Israel.
- The Su-30 KM jets supplied to Malaysia are equipped with components from France, South Africa, and India.
- The Su-30 KA jets supplied to Algeria are equipped with French components.
- The latest Su-35 jet, which Russia is only just beginning to market to foreign customers, was expected to contain French components.
- The MiG-29 fighters upgraded under a contract with Slovakia include imported components to ensure their full compatibility with the existing NATO navigation systems.
- The MiG-29Ks being upgraded under an Indian contract are fitted with components supplied by France’s Thales.

In dollar terms, up to 50 percent of the components of the An-148 military transport aircraft are supplied by Ukraine. Uzbekistan supplies up to 40 percent of the components for the Il-76MD transport, and up to 35 percent for the Il-78 aerial refueling tanker. The United States supplies engines for the Il-103 combat trainer, which accounts for about 10 percent of the value of the contract. Ukraine supplies the engines for the Yak-130 combat trainer, which also accounts for about 10 percent of the contract’s value.

The proportion of imported components is even greater in the Russian production of helicopters. All of the helicopters destined for exports and most of the aircraft built for domestic customers are equipped with Western engines. For example, the Ansat multirole helicopter is equipped with Canadian engines; the Ka-226 and Ka-226K with British and French engines; the Ka-28 anti-submarine search and attack helicopter uses Ukrainian engines. Engines made in Ukraine are also the sole option for the Ka-31 AWACS helicopter, the Ka-32 and Mi-17 multirole helicopters, the Mi-35 attack helicopter, and the Mi-26 heavy transport. Depending on the type of helicopter, the engine accounts for 7 to 20 percent of the finished product’s value.

Several Russian armored vehicles produced under export contracts (BMP-3, T-80, and T-90) are equipped with thermal imagers made by France’s Thales and targeting systems made by Peleng, a Belarusian company. The launchers of several SAM systems (including the 2S6, the Pantsir-S1, and the S-300PMU), as well as the launchers used in the 9K58 Smerch MLR system rely on chassis supplied by Belarus, Germany, and even India (where they are being made under Czech license).

It is also well known that the engines of many Russian corvettes and frigates made under domestic and export contracts are supplied by Ukraine. France’s Sagem was involved in upgrading the Admiral Gorshkov aircraft carrier under an Indian contract; it supplied the initialization systems for the carrier itself and the MiG-29K carrier-based fighters.

Imported components are also used these days in weapons systems produced for Russia’s own armed forces. The first precedent was the 2007 contract with Thales for 100 Catherine FC imagers that were installed on Russian armored vehicles. A second contract for another 130 imagers was signed in 2008. A joint French–Russian service and maintenance center for these imagers was set up at the Vologda Optics and Mechanics Plant.
Of course, there is a whole range of weapons systems (including those used in the Russian strategic nuclear forces and strategic defense forces) where imported components cannot be used as a matter of principle. The same applies to the Iskander theater ballistic missile system, high-precision weaponry (especially homing heads), and some other weapons systems.

Counting the cost of the requirements of “ideal” armed forces and the amount of resources that are needed to implement the State Armament Program, it becomes perfectly obvious that our country cannot afford such figures. What is more, the priority arms procurement list drawn up by the Defense Ministry two or three years ago (and consisting of about 200 advanced weapons systems) cannot be fulfilled without imported components. This means that it simply cannot be fulfilled within the originally scheduled time frame.

The crisis in Ukraine and the EU restrictions on defense exports to Russia will therefore be a painful blow for Russian weapons programs.

RUSSIA IN THE GLOBAL ARMS MARKET: STILL COASTING ON SOVIET-ERA TECHNOLOGY?

LITOVDIN: Russia can no longer rely on Soviet-era defense technology to maintain its positions in the global arms market. Its arms trade with India is a good illustration. This is exactly why we have set up joint ventures with the Indians to develop the fifth-generation fighter and the latest anti-ship cruise missile, BrahMos. That is why the Indians have leased our most advanced nuclear submarine, etc. Other customers are also raising their requirements. Iraq has placed orders for Mi-28N helicopters and Pantsir gun-missile AA systems. Vietnam has bought Su-30 K fighter jets, and Algeria T-90 tanks and Yak-130 combat trainers. Libya has shown interest in the Khrizantema, our latest anti-tank system, etc. All of these weapons systems represent the latest technology. Importantly, Russian weapons are still cheaper than Western equivalents. Even more importantly, Russia never links arms contracts to political preconditions, and always fulfills its contractual obligations.

KALININA: For a long time Russia had the advantage in the global arms market in terms of value for money and speed of delivery. In some categories, Russian weapons systems were 30–40 percent cheaper than Western equivalents, but offered roughly similar performance. This attracted buyers who are not very wealthy or very demanding. Now, however, the Russian advantage in terms of value for money and speed of delivery is disappearing. The quality often leaves the buyers complaining; the prices keep rising all the time (not only because of expensive imported components but also due to growing domestic costs), and the speed of delivery has long ceased to be a major competitive advantage.

In the medium term these negative trends will become even more pronounced because there are no reasons to expect any technological breakthroughs in the Russian defense industry, given the general state of that industry and yet another crisis that has been triggered by the situation in Ukraine. In many weapons categories Russia no longer has world-class technologies; the few exceptions include some aerospace programs and long-range air defense systems. Neither is Russian industry investing enough in R&D in such crucial areas as UAVs, remote-controlled aerial vehicles, UAV-mounted anti-missile systems, etc.

Another area where very little, if anything, is being done at the moment is drawing up the criteria for assessing the national security risks of export contracts that include the transfer of dual-use technologies or the results of R&D projects to foreign countries. One example of the damage done to THR military-political interests of the Russian state is China’s policy of copying Russian weapons technologies.

The problem of improving Russia’s competitiveness in the global arms market cannot, however, be resolved in isolation from the general state of the Russian defense industry. To retain its current status as a leading arms exporter, Russia must take measures to modernize defense industry production facilities and press ahead with import substitution programs. Meanwhile, the Russian arms trade system is increasingly becoming commercially oriented. This raises the risks of corruption and criminalization in this area of state policy.

BUZHINSKY: I do not have a feeling that Russia is starting to lag seriously behind in crucial technology areas. In the traditional Russian weapons markets, which I have listed above,
Russian weapons systems still remain competitive and in high demand. Of course, we are in fact lagging behind in some individual areas, especially electronic components. In recent years, however, major efforts have been undertaken to close that gap.

UPS AND DOWNS OF RUSSIAN DEFENSE INDUSTRY REFORM

BUZHKINSKY: The State Armament Program that covers the 2011–2020 period is worth 20.7 trillion rubles. That includes procurement by the MoD and other uniformed agencies. The federal program Defense Industry Development Through 2020 is worth about 3 trillion rubles. Both of these programs include spending on the retooling and modernization of the Russian defense industry. Judging from the situation at the Vega Radioelectronics Concern, where I serve as deputy director-general for foreign markets, this process is already making rapid progress. Reliable financing has been made available, and the concern’s production facilities are being retooled in accordance with the approved plans. Furthermore, there is a new modern facility being built in Tomsk that will produce high-tech radio-electronic modules (the so-called 3D microchips). I therefore believe that the measures being taken are entirely adequate to the requirements of the Russian armed forces and the country’s national defense requirements. The main problems facing these plans include a shortage of skilled designers and technicians. This is a consequence of the Russian defense industry’s degradation in the 1990s and the utter collapse of the vocational training system.

KALININA: Military experts believe that Russia is lagging about 20 years behind the United States in terms of the latest technologies. Even the Russian fifth-generation fighter, which is still in development, is no longer at the cutting edge because the Americans developed their own fifth-generation fighter almost 20 years ago.

The languid progress being made by Russian defense industry reform makes any further increase in Russia’s arms export capability unlikely. Even more importantly, the government will probably miss its target of bringing the proportion of modern weapons systems in service with the Russian armed forces to 70–80 percent of the fleet from the current 15–20 percent.

There are also grave doubts about another target in the new State Armament Program for 2011–2020: “to refresh 9–11 percent of the Russian weapons and military hardware fleet every year”. Under that program, the Russian armed forces are to receive 1,500 new planes and helicopters, 200 air defense systems, and many other weapons systems. The previous three SAP programs were severely underfunded, and none of them had achieved its targets. If the same happens to the latest program, the relevance and value of the government’s strategic plans on national security will become a moot point.

KOZULIN: Western experts often voice concerns about Russia’s rapidly growing defense spending. But let us recall that the Russian defense industry and the Russian armed forces were close to an utter collapse in the 1990s, and the situation remained very difficult for almost two decades. Current spending will merely restore the capability that was very nearly lost. The Russian defense industry has yet to close the huge technological gap that appeared during the long crisis.

THE PILLARS OF RUSSIAN DEFENSE EXPORTS

LITOVKIN: Russia’s main defense customers are Latin American and Southeast Asian countries. It has been demonstrated time and again that national defense procurement programs are usually the last to be affected by austerity measures during economic crises. On top of that, Russia is now in a position to offer credit financing to its defense customers. Some of them, such as Iraq, are buying Russian weapons with American money allocated to support democracy in that country. Rosoboronexport has a 35 billion dollar portfolio of contracts. This demonstrates beyond any doubt that weapons are an essential commodity.

KOZULIN: I expect that the next several years will be a good time for Russian arms exporters. Demand for inexpensive and user-friendly weapons always grows at times of instability and international tensions—and these are exactly the qualities Russian weapons systems are known for.
KALININA: Russia is now second only to the United States in terms of arms exports. It will remain the world's second-biggest arms exporter over the next five or six years despite the ongoing crisis. Incidentally, the United States ranks first not because it ships more weapons units than any other country, but because the weapons it sells command very high prices. In unit terms, Russia already is the world's largest exporter in many weapons categories, especially aircraft.

As far as the geography of Russia's arms exports is concerned, over the past eight years the largest destination was Asia Pacific, which accounted for 55–57 percent of the total exports figure. It is followed by the Middle East with 14.2 percent, North and Northeast Africa (12.7 percent), South America and Mexico, the post-Soviet states, Sub-Saharan Africa, Eastern Europe, Western Europe, North America, and Central America and the Caribbean.

Over the next several years, Russian arms exports will still be dominated by such categories as planes and helicopters, armor, naval weaponry, and air defense systems. In 2013 aircraft accounted for 38.3 percent of those exports, naval weaponry about 17 percent, ground weapons systems 14.2 percent, and air defense systems 26.2 percent.

Asia Pacific, the Middle East, and North Africa will remain the largest buyers of Russian weapons. India will remain the most important customer in Asia Pacific. Large contracts may also be signed with China, Vietnam, Indonesia, and Malaysia. Key buyers in other parts of the world include Venezuela and Algeria. The seven aforementioned countries accounted for over 75 percent of Russian arms exports in 2013; the list of Russian defense customers included 60 countries that year.

Russia currently offers a complete range of weapons systems, from small arms to air defense systems. It also has several promising new products, including Mi and Ka-series helicopters; SAM systems such as the S-400 Triumph, Antey-2500, Buk-M2E, and Tor-M2E; the Pantsir-S1 gun-missile AA system; and the Igla-S MANPAD system. New Russian naval systems offered to foreign customers include Project 11356 and Gepard-3.9 frigates, Project 636 and Amur-1650 submarines, and Svetlyak and Molniya patrol boats. In the ground weapons segment Russia offers the upgraded T-90S tank, the BMP-3 infantry fighting vehicle and other armor using the same chassis, and the Tigr light armored vehicle. The Su-30 and MiG-29 jets were in especially high demand in 2013; the Yak-130 combat trainers are also quite popular with foreign customers. The latest Russian Su-35 aircraft is expected to score large sales over the next several years.

These forecasts, however, may have to be significantly adjusted if the pressure of sanctions against Russia continues to increase.

BUZHINKSY: I believe that over the next few years, the range of key Russian arms exports (aircraft, air defense systems, ships and submarines, armor and artillery, missiles, and ammunition) will remain unchanged. In addition to our traditional Asian markets, Russia will probably try to win new defense customers in Central and South America, and re-discover the markets of Sub-Saharan Africa. Neither should it abandon our markets in the Middle East and North Africa, but extreme instability in the region will make it difficult to secure new contracts.
Mikhail Lysenko

RUSSIA IN THE GLOBAL NUCLEAR ENERGY MARKET: TRENDS TO FORESEE, AIMS TO ACHIEVE*

GLOBAL NUCLEAR ENERGY: ONWARDS AND UPWARDS

Sixty years ago the Soviet Union launched the world's first nuclear power plant in Obrinsk, ushering in the era of global nuclear energy. There are currently 435 power reactors in operation in 30 countries around the world, with a total installed capacity of 370GW. Another 72 power reactors are now under construction.

The global nuclear market has seen peaks and troughs over the past 60 years. Serious nuclear accidents at the Three Mile Island NPP in the United States in 1979, at the Chernobyl NPP in 1986, and finally at the Fukushima 1 NPP in Japan in 2011 had a major depressing effect on that market. Nevertheless, it is now safe to say that the international community has already recovered from the psychological shock of the Fukushima disaster in 2011. Lessons have been learnt from that accident, and additional safety measures implemented. In 2013 Saint Petersburg hosted a high-level international conference headlined Nuclear Energy in the 21st Century. The event was organized by the IAEA and attended by ministers, senior officials, and experts from 87 countries and seven international organizations. The delegates agreed that "nuclear energy will play an increasingly important role in achieving energy security and sustainable development goals in the twenty-first century."1

Earlier this year the IAEA released its projections for global nuclear industry development based on an optimistic as well as a conservative scenario. Under both scenarios, the global nuclear energy market is expected to grow substantially by 2030.

The reason for that trend is quite clear. Every state wants energy predictability. Every country wants to be able to make long-term plans for its energy future in order to eliminate the growing energy deficit, preserve the environment, and save the planet’s hydrocarbon resources. More than 60 countries have already made nuclear energy part of their national energy strategies.

RUSSIA IN THE MARKET FOR INTERNATIONAL NUCLEAR ENERGY PROJECTS

Russia is not an exception in that sense. The country currently operates 33 nuclear power reactors, which generated 172.2 billion KWh of electricity in 2013, accounting for 16.8 percent of total Russian electricity generation. Another nine power reactors are under construction, including the world’s first floating nuclear power plant (NPP). Three of these reactors are to be completed later in 2014, including the 3rd unit of the Rostov NPP, the 1st unit of the Novovoronezhskaya NPP, and the 4th unit of the Beloyarskaya NPP; the latter is based on the new BN-800 fast neutron reactor design. In the longer time frame, Russia intends to start building another three BN-1200 units by 2030.

Russia’s Rosatom nuclear energy corporation controls a large share of the global nuclear energy market, despite growing competition. It is the only company in the world that is
currently building nuclear power plants outside its domestic market. Its NPP projects are on a large scale and rely on advanced technology.

Rosatom’s foreign NPP projects that are now in progress or have already been completed include:

- Tianwan NPP in China, where two reactors have already been delivered and launched, with another two currently under construction;
- Kudankulam NPP in India, where two VVER-1000 reactors are nearing completion; a contract has already been signed for another two reactors;
- Bushehr NPP in Iran, where the No. 1 unit is already operational;
- Akkuyu NPP project in Turkey, where a site has already been selected for four VVER-1200 units to be built by Rosatom;
- Ruppur NPP project in Bangladesh, where a site has already been selected for two VVER-1000 reactors;
- Ninh Thuan NPP in Vietnam, where a site was selected for two nuclear power reactors.

As part of these projects, three nuclear power reactors have already been delivered to customers, and six are currently under construction; agreements with Russia have been signed for another 10 reactors.

Rosatom is also working on several other NPP projects in foreign countries:

- an agreement has been signed with Hungary on building two new reactors at the Paks NPP;
- a contract has been signed with Finland to build the Hanhikivi-1 NPP;
- Russia has won the tender to build the first nuclear power plant in Jordan;
- framework intergovernmental agreements were signed in recent months with Algeria, South Africa, and Argentina. A similar agreement has been initialed with Kazakhstan.

Speaking at the St Petersburg International Economic Forum on May 23, 2014, Russian President Vladimir Putin was upbeat about the Russian nuclear industry’s export projects. “We do not merely supply nuclear energy hardware,” the president said. “We build entire nuclear industries, including the research component and training specialists. We take part in international projects. We intend to build the most advanced nuclear power plants, and the most protected in terms of safety and security.”

RUSSIA’S COMPETITIVE STRATEGY IN THE GLOBAL NUCLEAR MARKET: STAYING AHEAD OF THE PACK

Clearly, Russian nuclear power plants, reactors, and nuclear services are in great demand in the global market. What, then, are the main reasons for such a success?

One of the key reasons is Russian policy, based on several tried and tested principles.

- First, Russia provides assistance to the nuclear newcomer countries in putting in place all the infrastructure that underpins nuclear energy programs, including the legal and regulatory framework, spent nuclear fuel and radioactive waste management systems, and specialist training.
- Second, Russia offers advanced nuclear technologies that meet the highest safety and reliability standards. The reactors offered to Russia’s foreign partners are of the latest Generation III+.
- Third, Russia offers cooperation on the entire range of issues related to implementing complex infrastructure projects in the nuclear industry, including localization, involvement of local subcontractors, industrial cooperation, etc.
- Fourth, Russia has earned a reputation for diligently fulfilling all its obligations. To illustrate, the Ukrainian nuclear power plants continue to receive Russian nuclear fuel without any disruptions, despite the latest tensions.

At the same time, survival in such a highly competitive environment requires constant innovation. What, then, are the key areas of that innovation?
One of the main priorities at the moment is to extend the service life of nuclear power plants. Earlier this year Russian engineers and scientists completed the development of a new type of high-purity radiation-resilient steel for use in new VVER reactor vessels. This new material will make it possible to keep nuclear power reactors in operation for more than 100 years; the figure for the previous generation of reactors was in the 40–60 years range.

Can anyone predict the political situation 100 years from now? For example, can anyone predict Russia’s relations with the United States, Europe, or neighboring countries, especially after periods of extreme volatility in international politics? Obviously, that is an impossible task.

It is, however, entirely possible to make projections and plans for the state of the nuclear energy industry in 100 years’ time, including such issues as which nuclear power plants will continue to operate, and which will have been decommissioned. This leads to an obvious conclusion: nuclear energy is a factor of stability and predictability in the international arena.

Another important priority on today’s agenda is a transition to a closed nuclear fuel cycle. Russian scientists and engineers are simultaneously working on two different fast neutron reactor technologies, based on sodium and heavy-metal coolant, respectively. This project, whose goal is to bring the nuclear energy industry to a whole new level, is called Proryv (a breakthrough). As part of that project, Russia will build a new experimental nuclear energy center that will host a fast-neutron nuclear power reactor, a nuclear fuel reprocessing and re-fabrication facility, and a facility that will process all types of radioactive waste.

Another very important priority is to improve the technologies of spent nuclear fuel and radioactive waste management. Russia is currently building new industrial infrastructure to deal with the problem of spent nuclear fuel and radioactive waste processing by means of implementing a closed nuclear fuel cycle. That infrastructure is being built at the Mining and Chemical Combine (GKhK) in Zheleznogorsk, which is already being used to store irradiated fuel and manage moderately and highly radioactive waste. Engineers have already upgraded the “wet” storage facility there, and built a new dry storage facility for spent nuclear fuel. Another two dry storage facilities are nearing completion. Russia is also building an experimental demonstration center that will test innovative spent nuclear fuel processing technologies, with an annual capacity of up to 250 tons, and a new facility that will produce MOX (mixed oxide) fuel for fast-neutron reactors.

Finally, in recent years Russia has been pursuing increasingly intensive international cooperation on various issues related to peaceful nuclear energy development.

On January 1, 2013 Russia joined the OECD Nuclear Energy Agency (NEA), an elite club of 34 countries that have a highly advanced nuclear energy sector. Russia’s accession to the OECD NEA has created an even more favorable climate for the country’s close involvement in formulating decisions on the promotion of nuclear energy technologies in the global markets and on the future shape of the global nuclear energy industry. Rosatom’s participation in the NEA databank has provided it with access to a huge amount of useful information, including the properties and characteristics of various reactor materials and advanced nuclear calculations. For its part, Rosatom will contribute its own technical information to the databank.

**CHALLENGES AND OUTLOOK**

All that being said, the Russian nuclear energy industry must not rest on its laurels. In fact, it is already facing significant challenges, including:

- aggressive competition and attempts to squeeze Russian suppliers out of several national markets;
- political instability, including crises on the Russian borders and farther afield. Are there any guarantees that aggressive extremism will not undermine the nuclear nonproliferation regime? And what should we make of the Ukrainian leadership’s recent statements to the effect that Ukraine must “return to the question of creating nuclear weapons” or withdraw from the Non-Proliferation Treaty?

Nevertheless, the Russian nuclear energy industry is making steady progress. It currently holds a record portfolio of export contracts. Russia can offer highly advanced, reliable, and
proven technologies to its foreign partners. These partners are just as interested in cooperation as Russia is. The service life of nuclear energy facilities is getting longer; it will soon reach 100 years or even more. In other words, it will span well beyond the usual time horizons, superseding short-term bouts of political volatility. Meanwhile, Russia is self-sufficient in terms of critical nuclear technologies.

Even more importantly, Russia welcomes open and equitable cooperation based on mutual interest and mutual benefit.

NOTES

* This article is based on remarks made by Mikhail Lysenko, Director of the Department of International Cooperation at Rosatom State Corporation for Atomic Energy of the Russian Federation, at an enlarged meeting of the PIR Center Advisory Board and Trialogue Club International on October 4, 2014. For more details, see: PIR Center, <http://www.pircenter.org/media/content/files/12/14126200780.pdf>, last accessed August 24, 2014.


In the spring\(^1\) of 2014, after the West imposed several waves of sanctions on Russia, Moscow came out with a strategy known as a pivot to the East to the forefront of its foreign policy. This strategy is commonly held to include the following set of key points:

- accelerated development of the Russian Far East and Eastern Siberia;
- overcoming the economic, social, and demographic imbalances between western and eastern Russia, which are slowing down the whole country’s development;
- accelerated exploration and exploitation of eastern Russia’s natural resources (which are needed to compensate for the depletion of natural resources in the European part of Russia and in Eastern Siberia);
- attracting large foreign investors to help achieve the above goals;
- achieving Russia’s comprehensive integration into the Asian economy; the reasons for this include Moscow’s belief that there is no longer any room left for closer ties with Europe and the United States.

Meeting these objectives would serve Russia’s national interests—but to what extent, and how quickly can they actually be met? It seems that, today, the implementation of Russia’s new foreign-policy strategy boils down to searching for new energy markets in East Asia, as well as trying to identify potential sources of financing and high-tech equipment that are required to develop new oil and gas fields and build new pipelines. A more detailed look at the current state of that policy, the problems it has been facing and the outlook for its implementation is necessary.

The concept of Russia’s pivot to the East was formulated at the turn of the century. Nevertheless, until the spring of 2014 Moscow had maintained its traditional focus on relations with the former Soviet states and with the Western countries. Western sanctions have now propelled the pivot to the East to the forefront of Russia’s foreign policy. In practical terms, the changes boil down to searching for new markets for Russian oil and gas in the East Asia region, as well as trying to identify new sources of financing and high-tech equipment required to develop new oil and gas fields and build new export pipelines. The reasons for that are threefold.

In the first place, the Russian leadership is concerned with falling energy exports to Europe. Second, one of the key components of the pivot strategy is to increase Russian trade with the East Asian countries. The only way to achieve that increase is to ramp up Russian energy exports to the region. Other Russian exports are not able to compete in the Asian markets. Finally, Moscow is very mindful of the interests of the largest Russian oil and gas companies, especially Rosneft and Gazprom, which are finding themselves in a difficult situation as a result of the economic sanctions.
Table 1. Russian oil exports to East Asia in 2013

<table>
<thead>
<tr>
<th>States/indicators</th>
<th>Million MT</th>
<th>Share of national imports, percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>24.3</td>
<td>9</td>
</tr>
<tr>
<td>Japan</td>
<td>11.4</td>
<td>7</td>
</tr>
<tr>
<td>South Korea</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>1.5</td>
<td>&lt;1 percent</td>
</tr>
</tbody>
</table>

Source: Energy information administration (http://www.eia.gov).

OIL

Hydrocarbons—primarily oil and coal—currently account for about 75 percent of Russian exports to East Asia (see Table 1). In 2013 Russia exported about 43 million metric tons (MT) of oil to the region’s countries, which made up about 20 percent of the entire Russian oil exports to non-CIS states. The region’s largest importer of Russian crude was China, which bought about 24.3 million MT, worth 19.7 billion dollars. China also imported 8 billion dollars’ worth of Russian petrochemicals, including lubricants.

According to preliminary data, in the first half of 2014 Russian oil exports to East Asia rose, thanks largely to falling exports to Europe. East Asian destinations now account for about a third of Russian oil exports, excluding sales to the CIS states. If this trend continues, Russia will have sold up to 60 million MT of crude to East Asian customers by the end of 2014.

China will remain the region’s biggest buyer of Russian oil over the next several years. Under the contracts that have already been signed, Rosneft expects to supply up to 720 million MT of crude oil to China by 2037 (see Table 2). Average annual supplies of Russian oil to China will reach about 30 million MT after 2020.

Rosneft hopes to increase its oil exports to China to 50 million MT per annum, but there are doubts as to whether these hopes are realistic. Such an increase in Russian exports will require the speedy and successful development of large new oil fields in Yamal (the Suzunskoye, Russkoye, Messoyakhinskoye, Pyakyakhinskoye, Tazovskoye, and Zapolyarnoye fields) and Krasnogorskoye Territory (the Kuyumbinskoye and Yurubchenskoye fields). Recent reports suggest, however, that only 7.4 million MT of oil will be pumped in 2016 via the Zapolyarye-Purpe oil pipeline, which connects Yamal to the Eastern Siberia-Pacific Ocean (ESPO) pipeline; previous estimates put the figure much higher at 20 million MT. Also, only 8.5 million MT of crude will be pumped in 2020 via the Kuyumba-Tayshet pipeline, down from the previous estimate of 14 million MT.

An increase in Russian oil exports to Asia to 65–70 million MT per annum by 2020 will only be possible if Russia reduces its oil exports to Europe by 30–35 million MT per annum, which is about 20–25 percent of its current oil exports to non-CIS countries. This has to do with falling production at the old oil fields, whereas growth of production in the east of the country is lagging well behind schedule. Also, an increase in Russian oil production will depend on ramping up the output of difficult oil at fields that require expensive investment and advanced technology; both will be hard to obtain because of Western sanctions.

Table 2. Rosneft oil export contracts with China

<table>
<thead>
<tr>
<th>Partner</th>
<th>Contract signed</th>
<th>Amount, million metric tons</th>
<th>Deliveries in</th>
<th>Value, billion dollars</th>
<th>Upfront payment, billion dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNPC</td>
<td>2004</td>
<td>48</td>
<td>2005–10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNPC</td>
<td>2009</td>
<td>300</td>
<td>2011–37</td>
<td>100</td>
<td>60 + 15</td>
</tr>
<tr>
<td>CNPC</td>
<td>June 2013</td>
<td>365</td>
<td>2013–37</td>
<td>270</td>
<td>60–70</td>
</tr>
<tr>
<td>Sinopec</td>
<td>October 2013</td>
<td>100</td>
<td>2014–23</td>
<td>85</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Data from Russian open sources.
The strategy of ramping up Russian oil exports to China is drawing sharp criticism from some quarters in Russia itself. The low-interest loans that Russian companies received from China were issued using massive future oil exports as a collateral. That oil has yet to be produced at new fields that have yet to be fully developed; production at some of these fields has not even begun. Meanwhile, the loans received from the Chinese are already being used up by Rosneft. In fact, most of that money is being channeled into paying old debts or financing new acquisitions of smaller companies, rather than developing new fields or building the required infrastructure. The price formula is not being released into the public domain either. As a result, many have begun to suspect that the increase in Russian oil and gas exports to China is in fact damaging to Russian national interests. Finally, there are grave doubts as to the long-term strategic consequences of Russia’s current foreign-policy course.

**NATURAL GAS**

The prospects for Russian exports of natural gas to East Asia (Table 3) depends on several key factors:

- the size of liquefied natural gas (LNG) exports;
- gas supplies via the “Siberian Power” pipeline to eastern China and via a future new pipeline to Western China;
- implementation of the projects (now under discussion) to build new gas pipelines to South Korea and Japan.

For now, the Sakhalin-2 facility is the only source of Russian LNG exports to East Asia. In 2013 that facility produced 11 million MT of LNG, of which 9 million was shipped to Japan (making up about 10 percent of Japan’s LNG imports) and 2 million MT to South Korea (5 percent of South Korean imports). A new facility in Yamal may also begin to export LNG to East Asia; in fact, contracts have already been signed with Asian countries for most of its future output. Another LNG production facility is expected to come on line in Vladivostok in 2018-2019; that facility will serve only the Asian markets. The prospects for the implementation of the Far Eastern LNG project (which is linked to the Sakhalin-1 project) by Rosneft and ExxonMobil remain unclear.

If all these plans are implemented (which is not a foregone conclusion), Russia will be able to supply 37 million to 42 million MT of LNG (an equivalent of 51-58 billion cubic meters [m³] of natural gas) to the Asian markets every year after 2020. According to experts at the Skolkovo center, this figure will account for 9-11 percent of annual global LNG consumption after 2020. By that time, global LNG production capacity will double to about 580 million MT per annum. This will lead to an oversupply on the LNG market and a significant fall in LNG prices. The output of Russia’s future Vladivostok LNG facility may well prove too expensive to compete with other suppliers.

Over the next several years, China will remain the only East Asian destination of Russian natural gas exports via pipelines. Gas will be supplied under the Gazprom contracts with CNPC (China National Petroleum Corporation) that were signed during President Vladimir Putin’s visit to Shanghai in May 2014. Over a period of 30 years starting in 2019 or 2020, Gazprom will supply about 1,100 billion m³ of gas to China (which is an average of 38 billion

<table>
<thead>
<tr>
<th>Project</th>
<th>Launch</th>
<th>Output, million MT per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sakhalin-2</td>
<td>2009</td>
<td>Up to 11</td>
</tr>
<tr>
<td>Vladivostok LNG</td>
<td>2018</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>+ 5 (for a total of 10)</td>
</tr>
<tr>
<td>Yamal LNG</td>
<td>2017</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>+ 5.5 (for a total of 11)</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>+ 5.5 (for a total of 16.5)</td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>5</td>
</tr>
<tr>
<td>Far Eastern LNG project</td>
<td>2018</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Data from Russian open sources.*

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m³ per annum) via the Siberian Power pipeline. The price of that gas is expected to be in the region of 350 dollars per 1,000 m³, but the actual price is linked to the oil prices and will fluctuate depending on the situation in the oil market. Natural gas for exports to China will be produced at the Chayandinskoye field in Southern Yakutia, and, starting in 2024–2025, at the Kovyktka field in Irkutsk Region. The entire project will require 77 billion dollars of investment. According to various estimates, 25 billion to 40 billion dollars’ worth of that money will be spent on building the pipeline. Over the first five years Gazprom will supply an average of 16.4 billion m³ of natural gas every year; the figure is projected to reach 38 billion m³ per annum only by the mid-2020s. The Russian government has exempted natural gas exports to China from the mineral resources tax, otherwise the contract with CNPC would have been loss-making for Gazprom.

Russian experts closely linked to the government, as well as the Russian media, recognize that the project will barely be able to break even. Nevertheless, they stress the political benefits it offers Russia, in view of the possible reduction in gas exports to Europe. Meanwhile, independent experts are worried about Russia’s growing economic dependence on China, which entails political dependence as well.

Even though China’s gas consumption is growing, it remains unclear whether Russia will be able to increase its exports to that country beyond the already agreed 38 billion m³ per annum. The future of the proposed Western Route for gas exports from Western Siberia to Xinjiang also remains uncertain. Beijing has major doubts about the feasibility of that project since it hopes to ramp up domestic gas production. It is pressing ahead with the exploration of its huge shale gas reserves. It also hopes to increase gas imports from Turkmenistan to 60–65 billion m³, and it has already signed contracts for the next 10 years to import 73.5 million MT of LNG, which is equivalent to about 100 billion m³ of natural gas.

There are no realistic prospects for Russian exports of natural gas via pipelines to other East Asian countries, even though Japan and South Korea would be interested in importing such gas since it would be cheaper by an average of 30 percent compared with LNG. Russia, however, is primarily interested in sustainable exports of LNG to be produced at its new facilities. As a result, Gazprom is showing little enthusiasm for a Japanese proposal to build a pipeline connecting gas fields in Sakhalin to Hokkaido. The capacity of the proposed pipeline is 20 billion m³, and the whole project would cost about 6 billion dollars.

The implementation of several proposed pipeline projects from the Russian Far East to South Korea also seems unlikely. The proposal to build an overland pipeline via North Korea is unrealistic for political reasons, and laying a pipeline along the sea bottom is not feasible because of the difficult underwater terrain in the Vladivostok area, great depths, and a relatively low volume of the proposed gas exports (10 billion m³). The only option that could potentially be implemented is to build a pipeline via China, with a submarine leg along the bottom of the Yellow Sea. That project, however, is still being discussed, with no agreement in sight.

If all the plans that exist at this time are actually implemented, Russia will be able to export about 40 million MT of LNG (55 billion m³) to East Asia by the mid-2020s, plus 38 billion m³ of natural gas via pipelines. Taken all together, these figures represent about 60 percent of Russia’s current gas exports to Europe.

**COAL**

Coal exports are a much less lucrative business than oil and gas. The kind of coal that is used by power plants commands a price that is roughly one-tenth of the price of oil; the price of coke coal is one-fifth of the price of crude. Nevertheless, Russian coal exports to Asia have been growing much more rapidly than exports to Europe and the former Soviet republics. To illustrate, Russian coal exports to the European countries rose by 250 percent to 71 million MT between 2000 and 2012. Over the same period, exports to the Asia Pacific region rose by as much as 400 percent to 48 million MT.

In 2010–2013, 70–90 percent of Russian exports to Asia were destined for three countries: China, Japan, and South Korea. The Russian Ministry of Energy intends to double coal exports to Asia to 110–120 million MT by 2030 by means of diverting production previously destined for other countries and launching new production in Eastern Siberia and the Far
East. These plans are predicated on the projection that coal demand will grow by 50 percent in the Asia Pacific region by 2030.

It has now become obvious, however, that the implementation of these plans has run into serious problems:

- Russia will need to significantly increase the export capacity of its Far Eastern ports, which currently stands at 70 million MT per annum, and the eastward capacity of its two main railway lines, the Trans-Siberian line and the Baikal-Amur line. The railway capacity will have to increase from the current 60 million MT to 130 million by 2020, which will require an investment of 20 billion dollars.
- The main Russian coal fields are thousands of kilometers away from the potential Asian markets. Transport overheads make Russian coal significantly less competitive compared with rivals from Indonesia and Australia, who currently control up to 90 percent of the East Asian market.
- Developing new coal fields in the Russian Far East and Eastern Siberia will require massive foreign investment, which will now be very difficult to attract.

To summarize, further exploration of energy resources in Eastern Siberia and the Russian Far East is facing major difficulties: in addition to large oil, gas, and coal fields, there are numerous small ones. Licenses for their exploration are currently held by a large number of smaller companies. Furthermore, there is a lack of industrial, pipeline, and transport infrastructure; large swathes of Russian territory are very poorly explored; and there is a big gap between projected and explored resources. Finally, a major problem remains unresolved with using and processing the ethane, propane, butane, condensate, and especially helium contained in the oil and gas produced in Eastern Siberia and the Far East.

CONCLUSION

Several major observations may be derived from the analysis above. First, speeding up the exploration of energy resources in Eastern Siberia and the Far East is a necessary precondition for overcoming the deep imbalances between western and eastern Russia. But this strategy will also facilitate the preservation of Russia’s current economic model, which is centered on exports of raw materials and minerals, and prevent its technological and institutional modernization. On top of that, such a strategy will not be able to achieve a comprehensive and systemic development of eastern Russia’s resource base any time soon. All it can do is attract Chinese investment into developing a handful of large oil and gas fields, and increase Russia’s exports of these resources, primarily to China.

However, if all the existing plans come to fruition, Russia will be able to increase its gas exports to East-Asia to 80–90 billion m³ in the early 2020s, thanks mainly to ramping up LNG production. It will also be able to increase oil exports to the region’s countries by another 30–40 million MT. This will enable Russia to diversify the geographic structure of its exports of hydrocarbons, and compensate to some extent for the likely fall in energy exports to the European market. But the reduction in Russia’s dependence on Western markets for hydrocarbons that can realistically be achieved by the end of this decade will be fairly small.

Meanwhile, China will acquire a much greater role as a major importer of Russian energy. This will increase Russia’s economic and therefore political dependence on China, and Beijing will have a much greater influence on the strategically important sectors of the Russian economy. Meanwhile, it is far from certain that Rosneft and Gazprom will be able to pay off their mounting debts to China by ramping up their oil and gas exports to Chinese customers.

NOTES

1 For the purposes of this paper, the definition of East Asia includes all APEC states, with the exception of the United States and other North American countries, Chile, Peru, Australia, and New Zealand.

2 China provided a low-interest loan of 15 billion dollars to Rosneft and another loan of 10 billion dollars to Transneft.
Experts are trying to predict what Afghanistan’s future will look like once NATO troops leave the country. Analysts agree that the main problems facing the current Afghan government — corruption, poor governance, low morale in the army — cannot be resolved with the new President Ashraf Ghani coming into power, not to mention that his reluctant division of authorities with the recent rival Abdalla Abdalla prepare ground for a future conflict.

The presidential election in April 2014 offered a measure of hope that the new president will be able to deal with these problems. The country had to choose a president who is popular with Afghanistan’s ethnic groups, and able to restore order to the government, discipline to the security apparatus, effective governance in the regions, and control of public finances. The new president has to reach an understanding with the Taliban and, in all probability, with al-Qaeda. All of which means that this Afghanistan will barely resemble the democratic Afghanistan the members of ISAF (the International Security Assistance Force, which has been operating under NATO leadership since 2001) have been trying to build over the past 12 years.

The aim of the NATO operation in Afghanistan, which began shortly after the terror attacks in the United States on September 11, 2001, was to destroy al-Qaeda, whose main infrastructure was located on Afghan territory controlled by the Taliban movement. Even so, it should be understood that the main war that was waged was against radical Islamism and global terrorism as a whole.

- On September 20, 2001, speaking at a joint session of Congress, U.S. President George W Bush promised: “We will direct every resource at our command — every means of diplomacy, every tool of intelligence, every instrument of law enforcement, every financial influence, and every necessary weapon of war — to the destruction and to the defeat of the global terror network.”

- On December 1, 2009, speaking at the U.S. Military Academy at West Point, U.S. President Barack Obama said: “Our security is at stake in Afghanistan and Pakistan. This is the epicenter of violent extremism practiced by al-Qaeda. It is from here that we were attacked on 9/11, and it is from here that new attacks are being plotted.... Our overarching goal remains the same: to disrupt, dismantle, and defeat al Qaeda in Afghanistan and Pakistan, and to prevent its capacity to threaten America and our allies in the future.”

- On December 21, 2009, in an interview for the magazine Der Spiegel, NATO Secretary-General Anders Fogh Rasmussen said: “With our troops, we must prevent Afghanistan from becoming a safe haven and pullback area for terrorists. Otherwise, they could use it as a base from which to advance into Central Asia and further. In addition, they would continue to destabilize neighboring Pakistan, a nuclear power. All of this would be very, very dangerous, both for others and for us.”

Now, more than 12 years after NATO launched its operation in Afghanistan, what we can assert is that the terror network is expanding rapidly, its morale has been strengthened by
the dream of an Islamic caliphate, and the member countries of the anti-terror coalition may well have to shift from attack to defense.

According to U.S. media, a secret American database containing information on potential terrorists has grown in size by 62 percent over the past five years — from 540,000 names to 875,000. The intelligence services admit that they do not currently know how to handle this huge amount of information efficiently. It could be said that this situation is typical of the United States’ whole counterterrorism strategy: in their rush to take the lives of terrorists, the United States forgot about their souls. In particular, in Afghanistan, they cultivated a layer of pro-Western people who grew accustomed to sponging off overseas aid contributions and the drugs trade. These ineffectual administrators and weak commanders, who on January 1, 2015, will have to assume full responsibility for Afghanistan’s fate, are doomed to remain alien to Afghan society, where opposition to everything associated with the American presence in Afghanistan is strong. With all this in mind, it is difficult not to conclude that this country will not arrive at the sort of democratic future the West would like to see, and the growing strength of the global terrorist international could turn Afghanistan into a sharia, Islamist state.

The new President of Afghanistan has to confront the Taliban and other radical Islamist groups. The new government has almost everything it needs to emerge successful from that confrontation: a well-equipped army with 350,000 soldiers, trained by experienced NATO instructors; the support of the international community (not a single state anywhere in the world will dare to show open support for the Taliban); American troops will supply the Afghan army with data obtained from the world’s best electronic intelligence; those same American troops will also provide air cover for operations by Afghan troops. This will allow President Ashraf Ghani to retain power. But it will not help him to secure complete victory over the Islamists. After all, what we are talking about at the present time is not victory over separate Islamist groups in specific countries, whether in Afghanistan, Africa, or the Middle East. Radical Islamism has evolved into a global and international terrorist network that grows new tentacles with each passing day.

In 2001, al-Qaeda was identified as the embodiment of this global evil, and seemed to have been defeated. Now, however, young Islamists all over the world see it as an honor to attach themselves to al-Qaeda. The network’s followers are waging war in many parts of the world: following the killing of Osama bin Laden, al-Qaeda, which had lost central control, restructured itself and set up regional franchises, both large and small (see Figure 1).

**Figure 1. Al-Qaeda Cells Around the World, 2013**

![Al-Qaeda Cells Around the World, 2013](image)

*Source: BBC Russian Service.*
THE MODERN GEOGRAPHY OF RADICAL ISLAMISM

Iraq

In 2013, an al-Qaeda plot to produce chemical weapons and smuggle them to Europe and the United States was uncovered in Iraq. Three laboratories where poisonous substances, including mustard gas and sarin, were to have been produced were destroyed. Remote-controlled toy aircraft, to be used to drop the poisonous substances, were also found. In 2006–2007, members of al-Qaeda in Iraq detonated 16 primitive chlorine bombs. Over the course of 2013, 8,000 people were killed by the Iraqi affiliate of al-Qaeda, the Islamic State of Iraq, and Syria. According to the American press, jihadists are sending around 30 to 40 suicide bombers from Syria to Iraq every month.

In April 2013, the leader of al-Qaeda in Iraq, Abu Bakr al-Baghdadi, announced a merger between al-Qaeda and the Syrian Islamist terrorist group Jabhat al-Nusra. He also revealed plans to wage jihad in Iraq, Syria, and then Lebanon, in order to create the Islamic State of Iraq and al-Shams (Syria’s ancient name). The main stated aim of this new group is to strengthen Islam’s role in the Syrian conflict, and to build an Islamic state, the al-Shams Caliphate.

Syria

Since April 2011, the U.S. ambassador in Syria, Robert Ford, has been saying that al-Qaeda is operating in the country. In December 2012, the Syrian group Jabhat al-Nusra was included in the United States a list of terrorist organizations with close links to al-Qaeda. Native Syrians account for only 5–8 percent of the group, with foreign mercenaries comprising the remainder.

In November 2012, Damascus sent the UN Security Council an official list of 143 foreign nationals killed “in the course of terrorist activities” on Syrian territory. The list includes mercenaries from Qatar, Saudi Arabia, Tunisia, Egypt, Sudan, Libya, Afghanistan, Jordan, Turkey, Yemen, Iraq, Kuwait, Lebanon, Algeria, Chad, Pakistan, and Palestine, as well as Chechnya and Afghanistan. The director of Russia’s Federal Drug Control Service, Viktor Ivanov, has said the number of foreign mercenaries fighting in Syria is 15,000–20,000 people, including several thousand Afghans. Quoting sources in the Jordanian security services, the Saudi newspaper al-Sha’b has reported that there are 6,000 al-Qaeda militants in the Syrian opposition. According to information published by Die Welt, quoting Germany’s BND intelligence service, only 5 percent of the militants in Syria are actually Syrians, while the remaining 95 percent are foreigners. The organization estimates that, in total, there are 14,800 insurgents operating in Syria.

Africa

According to the former commander of the U.S. Africa Command, Carter Ham, there is an arc of jihad forming in Africa, stretching from Nigeria through Mali and Libya to Somalia. Radical Islamist groups are collaborating with one another with ever greater energy, endangering Algeria, Mauritania, Tunisia, Burkina Faso, and Niger. According to the American newspaper World Tribune, in 2013 the United States deployed 3,500 troops in 35 countries across Africa in order to combat the growing threat posed by al-Qaeda and other terrorist groups.

Algeria has been home to the most unyielding Islamist fighters, who have set up well-armed extremist groups across North Africa. The main activities of these extremists have included taking hostages, trafficking, and spreading tough Islamic rules across Algeria, Mali, Mauritania, and Niger, while attacking government facilities. In 2006, following lengthy ideological and theological discussions, the North African groups merged with Osama bin Laden’s al-Qaeda under a new name — al-Qaeda in the Islamic Maghreb.

In March 2013, there was a military coup in Mali, which led to separatists and fundamentalists linked to al-Qaeda taking control of the north of the country. Following the revolution in Libya, several hundred fighters from a Touareg movement that, since the 1990s, had existed in...
various forms and enjoyed the patronage of former Libyan leader Muammar Gaddafi, returned to Mali, announced plans to seek independence, and set up the Touareg National Movement for the Liberation of Azawad. Islamist groups Ansar al-Dine and the Movement for Monotheism and Jihad in West Africa are also fighting for the creation of an independent state of Azawad in northern Mali, but based exclusively on sharia law. The Touareg group, initially driven by separatism, is gradually turning into a jihadist movement.

In 2013, the Somali group Harakat al-Shabab made a statement by seizing the Nakumatt Westgate shopping centre in the Kenyan capital, Nairobi, and killing large numbers of hostages. Formed in 2004, this group of Somali Islamists now numbers around 3,000 militants. In February 2012 it merged with al-Qaeda, following an announcement by the latter’s leader, Ayman al-Zawahiri.

Despite the fact that the Tunisian parliament recently adopted the most democratic constitution anywhere in the Arab world, al-Qaeda cells have made their way into most of this country’s provinces. The jihadists plan to create a Great Caliphate under the patronage of the Wahhabi state of Saudi Arabia, with the territory of Tunisia as one of its emirates.

Since 2002, the radical Islamist sect Boko Haram has been pushing for the introduction of sharia law and agitating against Western culture (democratic elections, secular education etc.). Over the past few years, it has killed thousands of Christians and policemen in northern Nigeria.

Central Asia

In the past, the republics of Central Asia have on more than one occasion been attacked by militants arriving from Afghanistan. Corruption, the clan-based nature of the local regimes, unemployment, and utter poverty create an environment that is conducive to the flourishing of the most Orthodox Islamic sects.

In early 2013, a group of 800–1,000 Taliban fighters, largely consisting of foreigners — Uzbeks, Chechens, Tajiks, Turkmens, and Pakistanis — seized control of the Warduj area of Badakhshan province in northern Afghanistan as they tried to establish a military and political foothold. Badakhshan is a strategic foothold situated on the borders of four countries — Afghanistan, Tajikistan, Pakistan, and China. The most active fighters were members of the Islamic Movement of Uzbekistan (IMU).

Only with the support of a foreign contingent were government troops able to force the militants out of Warduj. But in mid-April, fresh reports emerged of militants gathering some 30–40 kilometers from the border with Tajikistan. According to the secretary of Kyrgyzstan’s Defense Council, Busurmankul Tabaldiyev, militants from Central Asia and the North Caucasus, supported by the Taliban, were at the heart of this group.

The way in which the confrontation developed in Badakhshan could be seen as a rehearsal for the situation that may arise in Afghanistan once the Western coalition has withdrawn all of its troops in 2014. It is clear that the weapons Russia has delivered to Tajikistan and Kyrgyzstan will be used to combat these threats. Officials attending meetings of the Collective Security Treaty Organization (CSTO) agree that the terrorist international is standing right by the gates to Central Asia.

Over a number of years, analysts have been saying that radical Islam has penetrated the Central Asian republics. In 2012, a court in Kyrgyzstan ruled that Jaish al-Mahdi, Jund al-Khalifa, Ansar Allah, and Takfiri wa al-Hijra, which are all part of the Salafi takfiri-jihadi movement, were terrorist and extremist organizations. Meanwhile, Tabligh Jamaat, a movement that is banned in Tajikistan, Russia, and Kazakhstan, openly advocates the creation of a Kyrgyz caliphate at border posts. Law-enforcement agencies estimate that there are currently around 250 Kyrgyz nationals in the ranks of the Taliban, and in future they may pose a threat to their homeland.

According to the analysis department at Uzbekistan’s national security service, members of the IMU hiding in the mountainous Pakistani region of Waziristan have stepped up their recruitment and training of militants in the border areas of Pakistan and Afghanistan. The IMU
aims to topple President Islom Karimov and to set up an Islamic caliphate across the whole of Central Asia.

Despite its proven ability to reach agreement with any government in Afghanistan, Turkmenistan faces the danger of a confrontation with representatives of the so-called Turkmen Jamaat, which has territorial claims against Turkmenistan in the area of Mary and Serakhsa. Afghanistan’s Faryab province, which borders on Turkmenistan, is turning into a theatre of combat between local police and militias, on the one hand, and the Taliban and members of the IMU, on the other. While Saparmurat Niyazov was president, Ashgabat was friendly with Mullah Omar, but the political plans of the IMU are linked to the countries of Central Asia — it is no coincidence that one of the alternative names for the IMU is the Islamic Movement of Turkestan.

In 2011–2012, previously unknown jihadist groups committed a record number of acts of terrorism in western and southern Kazakhstan. Most of the terrorists called themselves Jund al-Khalifa (Soldiers of the Caliphate). The group’s roots lie in the tribal areas of Pakistan, where it was set up in 2001 by several militants with Kazakh passports. In Kazakhstan, the Soldiers have up to 10 groups involved in studying bomb-making and mine-laying, with plans to carry out terror attacks against the state and the public.

Pakistan

Over the course of the operation in Afghanistan, the U.S. government was convinced time and time again that Islamabad, which in 2001 had agreed to cooperate with coalition forces out of a fear of missile strikes against Taliban bases on the Pakistani–Afghan border, had all those years been supporting the Taliban. Several armed groups found sanctuary in Pakistan: al-Qaeda, Lashkar-e Taliba, Tehrik-i-Taliban Pakistan, and the Haqqani network. For 12 years, the Pakistani army and the Inter-Services Intelligence (ISI) military intelligence played a double game, killing militants and at the same time helping them. Pakistan paid a heavy price for this, with a sharp upsurge in Islamism and terrorism within the country. Now, with the climax of the Afghan drama just round the corner, the ISI will try to ensure that neither the United States nor India is a beneficiary of Pakistan’s sacrifices.

China

On October 28, 2013, an act of terrorism was committed on Tiananmen Square in Beijing. A car blew up, killing five people and injuring 38 others. The secretary of the Central Law and Politics Commission of the Central Committee of the Communist Party of China, Meng Jianzhu, who was visiting Tashkent at the time, said that the terror attack on Tiananmen Square had secretly been ordered by the Islamic Movement of East Turkestan, which is suspected of maintaining links with the Taliban and al-Qaeda.

Specter of Islamism wandering across Europe

Although it has long been known that terrorist cells are operating in a number of countries in the Old World, it has become clear over the past two years that al-Qaeda is stepping up its activities in Europe.

In August 2013, the United States National Security Agency announced that al-Qaeda was planning a series of terror attacks in Europe. A group of ethnic Albanians were arrested in the partially recognized Republic of Kosovo on suspicion of links to al-Qaeda. One of them, Genc Selimi, had recently returned from Syria, where he fought with the jihadists. During questioning, he said that the global terrorist network had serious plans on the Balkan peninsula and would soon “announce its presence for all to hear.” According to the police in Kosovo, the detainees were planning to carry out a string of terror attacks in Pristina and northern Kosovo.

In 2013, the countries of Europe admitted that they were effectively becoming suppliers of extremists to the war in Syria. A large proportion of European Islamists are members of the jihadist group Jabhat al-Nusra, which was set up in January 2012 and has close links with
al-Qaeda. Based on their monitoring of Islamist websites, experts at the international centre for the study of radical trends, based at King’s College London, counted some 600 Europeans among the ranks of the Syrian opposition, which they say equates to 11 percent of the total number of foreign mercenaries.

Aware as they are that, sooner or later, European extremists will become a problem for Europe, law-enforcement agencies from EU member countries are proposing that radical Islamists be deported. Meanwhile, the law-enforcement agencies are trying to monitor how terrorism is being funded.

**Russia – in an area of risk**

In the run-up to the 2014 Winter Olympics in Sochi, Russia once again experienced the terrorist threat that was commonplace in the early 2000s. In late 2013, suicide bombers attacked Volgograd three times: they blew up a bus, then there was an explosion at a railway station, and then, a day later, they blew up a trolleybus.

On November 7, 2013, 15 members of Takfir wa al-Hijra were detained in eastern Moscow. A large quantity of weapons and explosives was seized. It emerged that the extremists were disseminating jihadist literature in mosques around Moscow, and organizing clandestine meetings at which they preached radical ideas and raised funds for Islamic fundamentalists in Russia and abroad. The Russian affiliate of Takfir wa al-Hijra formed in Naberezhnye Chelny in Tatarstan, from where 17 members moved to Afghanistan in 1999 and launched an illegal armed group called Bulgar Jamaat. In 2001, as the United States launched its counterterrorism operation in Afghanistan, the group’s surviving members moved on to Pakistan. Since 2011, the group has acquired reinforcements and has been receiving combat training from rebels in Syria. After returning to Russia in 2012–2013, members of the organization carried out armed assaults and killings of law-enforcement officers.

According to FSB Director Alexander Bortnikov, around 200 Russians are fighting against government troops in Syria, on the side of Imarat Kavkaz under the banner of al-Qaeda. Wahhabs have spread out across Ingushetia and Dagestan, and have started to rear their heads in Bashkortostan and Tatarstan. In 2012, Tatarstan’s ministry of internal affairs said that there were 103 members of the international terrorist organizations Hizb ut-Tahrir al-Islami and Tabligh Jamaat in the republic. Graduates from the Yoldyz Islamic school, located in Naberezhnye Chelny, have been seen fighting for armed Islamist groups in Afghanistan, Chechnya, and Tajikistan. After the law-enforcement agencies received this information, Yoldyz was closed down.

Observers note that Chechen militants are prominent in many of the world’s conflicts, including in Afghanistan, Syria, and Iraq. According to the U.S.-based Jamestown Foundation, there are currently three groups operating in Syria that have significant numbers of people from Chechnya: Jaish Muhammad, Qataib Khattab, and Qataib Muhajirin.

So whereas at one time Russia used to attract radicals from around the world, today that country has turned into a supplier of militants for the world’s hotspots.

**EPILOGUE**

If, in 2001, the international community could list its main enemies by name — al-Qaeda leader Osama bin Laden, Taliban leader Mullah Omar, and several lesser figures — now, the old mujahidin who came together during the Soviet occupation are starting to be squeezed out by young militants from the so-called fourth generation. What sets them apart is their radical maximalism and their cruelty. They have inherited an attitude of irreconcilability to occupation, but, influenced by sponsors from the countries of the Persian Gulf, their plans have gone further: they would like to destroy the Old World completely, and to build an Islamic caliphate in its stead.

The new president of Afghanistan has almost everything he needs in order to succeed in the struggle against the Islamists. Those who confront him have neither artillery nor aviation, neither heavy material nor air defense systems. They will have to be ready for the prospect that their communications systems could be used by drones and high-precision missiles to
target them. But the idea of an all-conquering radical Islam may be a factor that will outweigh all others, because it represents the glory of victory over two superpowers and an extensive international network that lures new generations of fighters with promises of the pleasures of paradise.

Afghanistan’s leader is hardly likely to find other ideas and words that exert as much of an influence on Afghanistan’s Muslims. He will need either to wait until the Islamists themselves lose the trust of the public in the areas they have conquered (something that should happen sooner or later), or to adopt their radical slogans and lead an upsurge in Islamist sentiment.

Ashraf Ghani will have to prove that he is neither a puppet in U.S. hands nor just an executive for the commands coming from Washington. This factor will likely push him towards a certain degree of anti-Americanism, similarly to how it used to be with Hamid Karzai during the last year of his presidency. However, the new president will hardly be able to avoid criticism of the pro-American course of his predecessor. Seeking for support from the masses of the Afghanistan population he would also have to take the Islamist rhetoric.

An optimistic road map for a democratic Afghanistan passes through an Islamic caliphate. But will that sort of Afghanistan inspire optimism among Western sponsors? And how will the secular states of Central Asia be able to live with that type of neighbor, if that neighbor becomes a banner and a stronghold for the Islamist international?
Richard Perle was a popular anti-hero of the Soviet and Russian media in the late 1990s and early 2000s. A staunch American neocon, he had a terrible reputation in the Soviet Union— which, if anything, became even worse in post-Soviet Russia.

Perle rose to prominence when he served as an advisor to Senator Henry Jackson. The senator, who is no longer with us, made a career as a staunch critic of the first U.S.–Russian strategic arms reduction agreements. He was also a coauthor of the notorious Jackson–Vanik amendment, which was rescinded only recently. Later on, after his appointment as assistant secretary of defense for international security, Perle led a propaganda campaign on the subject of missile defense. He tried to persuade everyone that the wording of the Anti-Ballistic Missile Treaty (ABM) actually allowed the development and testing of space-based missile defense systems. Such creative interpretation of the treaty opened the way for the 1983 Strategic Defense Initiative, which was aimed at undermining the negotiated restrictions in that area.

Richard Perle espouses an ideologically blinkered and strongly anti-Communist brand of neocconservatism, similar to the creed advocated by Robert Strauss-Hupe or James Burnham, two prominent post-World War II political scientists. That is perhaps why U.S. journalists have given Perle the macabre moniker Prince of Darkness.

A DUEL WITH THE PRINCE OF DARKNESS

In early 1987, when I was serving as deputy head of the Soviet delegation at the U.S.–Russian talks on nuclear and space weapons in Geneva, I was also asked to lead the talks on setting up Nuclear Threat Reduction Centers (NTRCs) in Moscow and Washington. In a way, those talks were held as part of the broader nuclear and space weapons talks.

At the time I had no idea how difficult my U.S. counterpart at the talks was going to be. When Washington announced that Richard Perle would lead the U.S. delegation, the Russian Foreign Ministry understood it as a clear sign that the United States did not want the talks to succeed. The same, incidentally, was true of the nuclear and space weapons negotiations, which were making no discernible progress.

Still, there was no time for despondent thoughts, and we were expected to deliver results. I reckoned that there was no point in despairing. After all, the talks were not about human rights (a subject that had always been very difficult and often led to bust-ups), but about a very specific and largely technical subject.

The first people to voice the idea of establishing the NTRCs were the U.S. senators Sam Nunn and John Warner. Presidents Mikhail Gorbachev and Ronald Reagan agreed at their meeting in Geneva in November 1985 that the two countries’ experts should look into the
proposal. In November 1986 Russia and the United States said at the summit in Reykjavik that good progress had been made on the subject, and agreed to launch formal talks.

The NTRCs are essentially a confidence-building measure. The reason for setting them up was to help dispel the atmosphere of suspicion and hostility, two key ingredients of the Cold War multiplied by the threat of mutual destruction.

Reliable and multiple channels of communication between Moscow and Washington did not come into being all at once after World War II. It took a lot of intellectual and psychological efforts on both sides to start overcoming the prejudices of confrontation and to identify solutions that were dictated by common sense and the survival instinct. Besides, nuclear weapons do not really fit into the von Clausewitz dictum that war is an extension of politics. The need to maintain stability amid an arms race based on the concept of assured mutual destruction made a reliable and fast system of information exchange an obvious necessity. Such a system was set up after the 1962 Cuban missile crisis.

In later years the Soviet Union and the United States agreed to make serious upgrades to their telephone hotline as part of an agreement signed on September 30, 1971 and a separate memorandum signed on July 17, 1984.

The NTRCs were meant to radically expand cooperation between the two countries in this area without making any changes to the already existing systems of bilateral communication. Nevertheless, although the top leadership in both countries favored the idea, not everyone in Moscow was very enthusiastic about it. Critics believed that the time for implementing such a system had not yet come, because in early 1987 there were still no clear prospects for signing the Strategic Arms Reduction Treaties (START) or the Intermediate and Shorter Range Nuclear Forces Treaty (INF).

In essence, the critics repeated an old mantra of the Soviet disarmament concept: first there must be specific nuclear arms reduction and limitation measures, and only then can the two countries agree confidence-building measures and set up information exchange channels and procedures. The argument in favor of such an approach was this: you can tangle Soviet and American missiles in telephone cables all you like, and exchange data about these weapons to your heart’s content—but that is not going to reduce the actual nuclear threat that is hanging over our entire planet.

Such an argument was very straightforward, but not flawless. The practical uses of confidence-building measures, including the telephone cables, are quite obvious, especially when clarifications must be made in an unforeseen crisis situation in order to defuse tensions and prevent events from taking the worst imaginable course. The availability of the telephone hotline is an important instrument for ensuring peace of mind as well as strategic stability.

The need to include the issue of NTRCs on the agenda of bilateral talks between the two superpowers was, of course, a different matter. In 1987 that agenda was dominated by the INF and strategic arms reduction talks. Some argued that discussing NTRCs would only distract the negotiators from more important issues, and that progress on NTRCs would merely be used to sweep under the rug any failures in far more important areas.

Eventually the argument was won by those who believed that lack of progress on nuclear arms limitation must not block progress on confidence-building measures, including the NTRCs. A successful outcome of the talks on these centers would clearly be a step in the right direction. And, in diplomacy, even an inch of progress can eventually lead to major breakthroughs on crucial issues.

The strategic objective was therefore clear: the NTRC talks must be launched without waiting for an agreement on INF or strategic arms reductions—but also without any detriment to efforts in these two crucial areas.

We met the delegation led by Richard Perle in January 1987 in Geneva. The wishes expressed by Perle and his deputy Robert Linhard, who was the U.S. president’s special aide, with regard to the format of the discussions did not contradict our own intentions. The Americans proposed that we hold the negotiations in Geneva in short sessions lasting only a day or two. This meant that the bulk of the work would be done during the periods between the sessions, when the two sides would draft their proposals in an effort to reach compromise solutions. We accepted the tight and energetic schedule proposed by our
U.S. colleagues; after all, there was a huge package of problems related to nuclear and space weapons talks looming on the horizon.

When the Soviet delegation was drafting its presentation outlining our position during the first round, we wanted to emphasize the notion that since the goal is to reduce the nuclear threat we should prioritize those arrangements that would have to be agreed as part of the nuclear and space weapons talks (i.e. negotiations on strategic nuclear reductions and compliance with the ABM treaty). Essentially, we proposed that the agreement on the NTRCs should formalize the linkage between practical arms limitation steps and confidence-building measures. Such a proposal also addressed the concerns of the skeptics who argued that trying to tangle intercontinental ballistic missiles in telephone cables would be pointless.

The reaction of our U.S. colleagues was predictable. They argued that there should be no link between the NTRC talks on the one hand, and the negotiations on strategic nuclear reductions and the INF treaty on the other. Their proposal was for us to focus just on information exchange, including in those areas where such an exchange was already happening.

The January round of the NTRC talks lasted for only one working day. The two sides outlined their initial positions. It turned out that there were no difficulties with the purely technical aspects of the proposed agreement—but the political part was more complicated. After exchanging our opinions we realized that the NTRC issue cannot be completely isolated from the broader disarmament context—but it would be counterproductive to try to use the kind of wording that would link it directly to other issues discussed at the nuclear and space weapons talks.

Meanwhile, during a pause in preparations for the INF talks, diplomats in Moscow found time to adjust the Russian position on the NTRCs. After the adjustments were agreed with the leadership of the Foreign Ministry, the Defense Ministry, and the KGB, we drafted the text of our statement to be made at the second meeting with the U.S. delegation.

Speaking in February 1987 at an event unrelated to the talks, Richard Perle once again showed his talents as a public politician. In his speech at a conference in Munich he attacked the idea of a world free of nuclear weapons, and lambasted those Western politicians who welcomed Soviet disarmament initiatives. He insisted that most of the proponents of disarmament wanted an agreement for the sake of an agreement, i.e. saw any such deal as an end in itself.

In other words, Perle once again confirmed his reputation as a hawk. It remained to be seen how that would affect his position at the negotiating table, and whether the U.S. position would be informed by trying to reach a mutually acceptable compromise or by demonstrating a tough stance.

The second round of the NTRC talks was held in Geneva on May 4–5, 1987. We tried to make the wording of our presentation as close as we could to the wording of the possible draft of the agreement. Based on the results of our dialogue that began in January, we proposed that the preamble of the draft should include the purpose of establishing the centers: to make a step towards a reduction and eventual elimination of the risk of nuclear war, including a war that could break out due to misinterpretation, error, or accident.

We argued that the preamble should reiterate our mutual understanding that there can be no winner in a nuclear war, and that such a war must be completely ruled out. We also said it would be useful to state that an agreement on measures to reduce the risk of a nuclear war breaking out would serve to strengthen world peace and security.

We believed that the issue of the nature of the data to be exchanged via the centers should be covered in a separate protocol to the agreement. More specifically, such data could include information concerning ballistic missile launches in accordance with Article IV of the September 30, 1971 Soviet–U.S. agreement on reducing the risk of an outbreak of nuclear war, and with Article VI, Paragraph 1 of the May 25, 1972 Soviet–U.S. agreement on preventing incidents in the open sea and in the airspace over open sea. In the latter case we referred to issuing notifications and warnings to ships at least three to five days ahead of the event, and to issuing notifications of any actions in the open sea that could potentially jeopardize shipping and air traffic.
We also proposed that there should be a possibility of changing the list of notifications relayed via the NTRCs at some point in the future, based on mutual consent and depending on any new agreements being reached. In the end, a clause to that effect was introduced in Article II of the agreement on establishing the NTRCs, which made a great contribution to making that agreement viable and useful to both parties. This was despite the fact that the issue of a relationship between the NTRC agreements and future agreements on nuclear arms reduction and limitation appeared to be the main stumbling block at the negotiations.

Therefore, we tried to take into account some of Richard Perle’s objections, but without any detriment to the effectiveness of the future agreement. But then, during the next meeting of our delegations, we had a development that was completely unprecedented in the history of Soviet-U.S. disarmament talks. Perle listened to my presentation, got the gist of the changes compared with the January round of talks, and then, instead of resorting to the traditional tactic of asking questions about the details of the proposals, he said, “I agree with everything you have just said.” That brief, minimalist, and unambiguously positive answer took us all completely by surprise.

Out of caution, which became my second nature during the talks in Geneva with my U.S. colleagues, I did not immediately take Perle’s answer at face value, and decided first to make sure that we had understood each other correctly. Speaking a bit slower, I reiterated all the key points of our statement. Perle did not interrupt, and remained very concise in his response: “I confirm what I have just said about the Soviet position. It is safe to say that we are in agreement on the issue of establishing the NTRCs. All we need to do now is to put that agreement on paper and cross-check the text.” So that’s what we went on to do.

As part of polishing the document, we proposed that the headline of the agreement should avoid the alarmist and fairly pretentious term “the threat of nuclear war,” replacing it with the more suitable term “nuclear threat.” We did not want even to mention war in the title, and Perle had no objections to our proposal. The final name for the centers we agreed upon was Nuclear Threat Reduction Centers.

The two delegations finished their work without champagne celebrations; the prevailing mood was that of puritanical austerity. There was no sparkle in Richard Perle’s eyes, which were black as night. The Prince of Darkness remained impassive.

I had good reason to feel satisfaction. Shortly before that, in late April, we had introduced a new draft of the Intermediate Nuclear Forces treaty at the nuclear and space weapons talks. We could now proceed to discussing the actual text of the proposed treaty. A mutually approved draft of the NTRC agreement added to the sense of accomplishment.

For all his business-like and even austere manner at the talks, Richard Perle did not turn down an invitation for a dinner at a cozy restaurant. We celebrated the completion of the two delegations’ work with a bottle of good French Pinot Noir. Perle studiously avoided the subject of the INF treaty so as not to encroach upon the turf of ambassadors Kampelman and Glitman, so our conversation turned to the general prospects for nuclear disarmament.

Perle averred that in view of the many remaining conflicts in international relations, there was no reason to expect politicians who saw military force as the most useful instrument to stop craving nuclear weapons. For my part, I tried to draw his attention to the global trends that highlighted the need for joint efforts in countering global challenges so as to ensure the survival of human civilization. Sooner or later, confrontation must be replaced by cooperation, and the obstacles to nuclear disarmament will be removed, I said.

Perle insisted, however, that relinquishing nuclear weapons was not a realistic prospect for the time being. He opined that the subject could be put on the agenda in earnest in the second half of the twenty-first century, at the very earliest. Back then, that seemed like a very distant future.

THE INNER WORKINGS OF THE SOVIET DELEGATION

Members of the wider Soviet delegation at the nuclear and space weapons talks were genuinely interested in contacts with Richard Perle. They were very intrigued by the prospect of direct dialogue with such a prominent American neocon.
It would be an exaggeration to say that every single member of the delegation wished us success; people were mainly worrying about their own part of the wider talks. There was also a fair degree of competition between the three main groups within the delegation that were in charge of strategic offensive reductions, INF, and weapons in space; we were a separate subgroup leading the NTRCs talks. Undoubtedly, there were also some people in the Soviet delegation who secretly hoped that Perle would give our group a good thrashing. Such a range of opinions is probably inevitable in any big team, especially when that team includes subgroups working on three parallel but separate strands of talks. There was also, however, one particularly vexing source of annoyance.

In late 1986 the Soviet Foreign Ministry put first deputy minister Yuli Vorontsov in charge of the Soviet delegation. Vorontsov replaced another deputy foreign minister, Viktor Karpov, in that capacity. Due to his numerous other commitments, Vorontsov spent most of his time in Moscow, and delegated the practical side of leading the Soviet team of negotiators to me.

Foreign Minister Eduard Shevardnadze's calculation seemed sound: he did not want to keep the previous head of the delegation in Geneva, away from the hustle and bustle of Moscow, for much longer, because that was starting to cause some unintended consequences. He decided that Karpov's formidable disarmament expertise should be put to better uses in the Soviet capital. But it seems that Shevardnadze had underestimated Karpov's talents as a sophisticated and tireless master of courtly scheming.

Karpov was not strong enough to mount a full frontal attack against Yuli Vorontsov, so he chose me as his direct target. His strategy was probably to engineer his return to Geneva by means of bringing me down.

As part of that strategy, someone started spreading rumors that instead of focusing on nuclear and space weapons problems, the Soviet delegation was spending too much time and effort on the issue of NTRCs. In actual fact, reaching an agreement on NTRCs took us only two rounds of talks, which lasted for a grand total of three working days.

I had neither the time nor the possibility to deflect these rumors, so I had to rely on my sense of humor instead. My only answer was to keep working hard to achieve our goals. But I was unable to call upon the resources and expertise of the directorate for arms limitation and disarmament, which was led by a diplomat who was clearly hostile to our delegation. The situation was clearly abnormal because the directorate played an instrumental role within the Foreign Ministry in supporting the talks. Fortunately, I could still rely on other channels of communication with Moscow, including Yuli Vorontsov and the head of the United States and Canada department, Alexander Bessmertnykh.

I could, of course, simply forgive and forget many things—but not the scheming around the Geneva talks. The delegation in Geneva was already walking a tightrope. With so many problems on our plate, we desperately needed genuine support from our comrades. But, instead of that support, some people were scheming against the leadership of the delegation. It sometimes felt as though we were fighting on two fronts at the same time. Both fronts required a lot of resilience from us.... I am writing about this in so much detail so as to warn readers of the need to avoid any rivalry, let alone outright infighting, within delegations in their own practical work.

The signing of the Soviet-U.S. agreement to establish the Nuclear Threat Reduction Centers took place on September 15, 1987, at a special ceremony on the White House lawn. The ceremony was led by President Reagan. The agreement was signed by Edward Shevardnadze and U.S. Secretary of State George Shultz. Richard Perle had already lost his job as assistant secretary of defense, so he did not honor the ceremony with his presence. It was said that he had retired to California to lick his wounds after his forced departure from the Pentagon. Did he know at the talks in Geneva that he was already on his way out? Was it perhaps the reason why he was in such a hurry to finish the business? Who can say?

When attendees started to leave the signing ceremony, Shevardnadze's assistant Teymuraz Stepanov came up and stationed himself strategically behind my back. A master of catchy one-liners, he said loudly, to make sure I could hear him, "His enemies have been vanquished on the White House lawn!" It turns out that he was well aware of the scheming against our delegation by people in Moscow, and viewed the entire impressive signing ceremony in the United States as the delegation's counterblow against the schemers.
Some time later I met Richard Perle in Moscow, where he came as a member of an official U.S. delegation. When I asked him what he was going to do now, Perle told me a bawdy joke. There was a farmer, he said, who had several breeding bulls. To choose the most promising of them, the farmer decided to see which one of them could jump higher. He set a bar and got the bulls to jump it. He kept raising the bar, and during one of the jumps a veteran bull stumbled and struck the bar very painfully with its manhood, which fell clean off. Since then the veteran bull has been employed at the farm as a consultant.

RICHARD PERLE DISCLOSES HIS PLAN

Our paths have never crossed since them, but it turns out that Richard Perle and I have a common acquaintance, former Danish Foreign Minister Uffe Ellemann-Jensen. When he had already left office, and I was serving as the Russian ambassador to Copenhagen, Uffe gave me a present from Perle. It was a book Perle had written several years previously, a novel called “Hard Line.” It wasn’t really a novel, however; it was more of an autobiography mingled with fiction. The book contains no mention of the Nuclear Threat Reduction Centers, but it has some fairly interesting things to say about two other subjects: the intermediate nuclear forces talks and the Soviet-U.S. summit held in the autumn of 1986.

There are no real names in the book, so one can only guess who the main characters are supposed to be. The dates and the places have also been deliberately altered by the author, but in most cases it is perfectly clear who or what he is hinting at. This is also true of the main protagonist and first-person narrator of the book. The name of the protagonist is Michael Waterman, and he serves as assistant secretary of defense for international security. It is quite obvious that Michael Waterman is Richard Perle himself. This mélange of truth and fiction probably allowed Perle to speak more freely on issues that are sensitive for American diplomacy, and to discuss delicate matters of Washington politics.

In his book, Perle describes in great detail his struggle with the liberals from the Department of State in the complex inter-agency process of coordinating positions for the presidential dossier. Soviet-U.S. arms limitation talks were a key topic of that inter-agency process.

The book makes it clear that Perle, a famous hawk, was disgusted by the liberalism of the Department of State officials advocating a new deterrent in relations with the Soviet Union. He believed that the Soviet-U.S. summit was premature because the Soviet leader had not yet taken any significant steps in response to the U.S. president’s Evil Empire statement.

Speaking through the protagonist, Perle argues that the worst possible course of action for Washington would be to abandon the strategy of putting pressure on the Soviets in all possible areas—including military, ideological, and political—in the hope that the Soviet secretary-general would suddenly turn into a social democrat. Perle also reckoned that on the issue of Soviet non-compliance with international obligations, Department of State officials were acting as Soviet apologists.

According to the novel, Waterman/Perle is a man of action who prefers practical steps to endless deliberations. Incidentally, was it not that inclination to taking lightning-fast decisions, without diplomatic procrastinations, that Perle had demonstrated during the NTRC talks in Geneva?

Waterman/Perle is convinced of professional diplomacy’s fundamental weakness:

If you listen to diplomats, you are bound to come away with a distorted view of the world. For one thing they live and breathe in international affairs. They can be moved to tears by the sight of the well-crafted demarche, to despair by a clumsy departure from protocol. Because they are involved daily with international affairs, with the position of governments and parties and factions, with drafting of communiqués and official statements, with seminars and congresses, committees and consultations, they believe wrongly that the world turns on a diplomatic axis, so that the slightest frustration will bring it to a halt.

In other words, Perle sees diplomats as weaklings who are timid where one needs to be strong and bold. Always eager for ostentatious offensive action, he describes the difference in approaches between the Department of Defense and the Department of State in the following way: “You’ll settle for a draw.... I want to win.”

134 NUCLEAR THREAT REDUCTION AND PULP FICTION BY RICHARD PERLE
In terms of its confrontational tone, Perle’s fiction is a perfect example of modern neoconservatism, which marches forth under the banners of nationalism, chauvinism, and complete intolerance of opposing views. In that sense, I believe neocons are an international phenomenon.

The narrator/protagonist in Perle’s novel is bursting with pride over his authorship of the zero option, which was formulated in 1981 with regard to the intermediate nuclear forces talks.

Perle especially highlights the propaganda effect of the global zero. Even before the deployment of American missiles in Europe, he saw an opportunity to direct the thrust of the zero option propaganda effort in two directions at once: against the anti-war movement in Western Europe, thereby seizing the initiative from that movement, and against the Soviet Union, to which a global zero was obviously unacceptable. It was unacceptable because the Soviet Union would have to destroy its already deployed missiles, whereas the United States was only just preparing its Pershing ballistic missiles and cruise missiles for deployment in Europe.

It is therefore quite obvious that the zero option, which Washington proposed in 1981, was not aimed at achieving an agreement. Its real aim was to bring the negotiations to a deadlock, giving Washington the political and propaganda cover to prepare for the deployment of its missiles and for their actual deployment.

Perle probably does not exaggerate too much when he writes in his novel that the chief of the Pentagon scribbled the following resolution on Waterman/Perle’s proposal regarding the zero option: “You would certainly be nominated for, and very likely be awarded the Nobel Peace Prize, if this proposal is accepted.”

Another character in the novel, whose role is to be a target for Perle’s vitriol, is Moor, a grizzled ambassador, who is obviously supposed to represent Paul Nitze. This is no longer about the author’s attacks against the liberals from the Department of State; this is a real tussle within the neocons’ own camp.

Perle fulminates about Moor/Nitze’s behavior during his summer (1982) walks with Soviet ambassador Rogov (the novel version of Kvitsinsky) in a forest not far from Geneva. He is particularly angry about the fact that only a year after the announcement of the zero option by the U.S. president, Ambassador Moor/Nitze had the temerity to discuss an option whereby Washington would abandon plans to deploy Pershing-2 missiles, while maintaining medium-range cruise missiles in Europe, in exchange for a reduction in the numbers of deployed Soviet SS-20 (25) missiles.

In the novel version of his confrontation with Nitze, the author lambasts the ambassador not for allowing the possibility of a revision of the zero option concept, but for even contemplating the prospect of Washington abandoning its plans to deploy missiles in Europe. In other words, he did not really oppose the halfway option, or the so-called Zero+ option. He was angry at the formula of cuts proposed by Paul Nitze. The halfway option became part of the U.S. strategy because, over time, many in Washington came to see as unfavorable for the United States the possibility of completely abandoning plans to deploy American intermediate-range missiles in Europe, which was part of the zero option.

The criticisms of Paul Nitze contained in Perle’s novel illustrate how Washington was gradually abandoning the global zero in favor of the halfway option so as to secure Moscow’s acceptance of the deployment of at least some of the missiles the United States wanted to bring to Europe. It must be said that Richard Perle was not the only figure in Washington who severely criticized Nitze’s diplomatic efforts.

According to a book by Strobe Talbott about Paul Nitze’s diplomatic career, assistant U.S. Secretary of State Richard Burt was furious about some of Nitze’s proposals made during the walks in the forest. He described Nitze’s position, which accepted the possibility of abandoning plans to deploy Pershing-2 missiles, as panicky. According to Talbott, those proposals were not authorized by Secretary of State Shultz or President Reagan.

As a result, in March 1983 the U.S. administration, on the initiative of Richard Burt, put forward the halfway proposal. The zero option was still the goal of the negotiations, but in the meantime the United States would reduce the level of deployment of various weapons in the NATO framework, while maintaining Pershing-2 missiles as a component of those forces, in
return for global reductions of SS-20 missiles by the Soviet Union. According to the novel, Paul Nitze put out feelers but failed to get a positive response from Moscow. Having learned about this, Waterman/Perle breathed a sigh of relief.

PAUL NITZE'S UNFINISHED GAME

Meanwhile, the real negotiations in Geneva, rather than their fictionalized version in the novel, unfolded in the following way. The delegations failed to reach an agreement on intermediate nuclear missiles in the time that remained until the end of 1983. In November the United States began to deploy its missiles in Western Europe. In response, the Soviet Union slammed the door and walked out of the talks. The discussions resumed only in 1985 as part of the negotiations on nuclear and space weapons.

This is probably a good time to recall some of our assessments of the evolution of American policy with regard to the zero option. Gen. Viktor Starodubov, a veteran of Soviet-U.S. nuclear weapons talks, argues in his research that when Ronald Reagan introduced the zero option proposal, he was merely putting up an act for the benefit of the Western European public, and secretly hoped that the Soviet Union would not agree even to discuss that proposal. The calculation was simple: Reagan and his team believed that the stratagem would enable them to deploy missiles in Europe while at the same time accusing the Soviet Union of unwillingness to pursue arms reductions.

The whole world realized that the U.S. initiative was a PR stunt only several years later, when Moscow put forward almost exactly the same proposal. But Washington responded by diplomatic maneuvering in order to get Moscow to agree to the halfway option, whereby the United States would be able to keep at least some of its intermediate-range missiles in Europe.

In his research, G. M. Korniyenko tracks the step-by-step emergence of a Soviet-U.S. consensus on a genuine zero option, which later became the foundation of the INF treaty. While recognizing the propagandist nature of the first U.S. proposals in this area, he says that an important step forward was made towards an eventual agreement when the Soviet Union withdrew its demand for British and French nuclear weapons also to be taken into account during the summit in Reykjavik between Mikhail Gorbachev and Ronald Reagan. That step forced the Americans to make some real concessions of their own.

As the Soviet approach became ever more flexible, the United States started to lose interest in the zero option. As G. M. Korniyenko writes:

You should have seen Washington fighting tooth and claw against the zero option when the Soviet Union made it part of its own arsenal. The Americans began to pressure us into accepting the halfway option, which would have enabled the United States to keep at least some of its intermediate-range missiles in Western Europe. Washington eventually accepted the zero option only thanks to the determined Soviet stance and the pressure of the Western (including American) public opinion.

Memoirs by Yuli Kvititsinskiy clearly express sorrow at the fact that the channel of trust that seemed to emerge via negotiations with Paul Nitze was not put to good use in order to reach a compromise. In the end, those who distrusted Nitze gained the upper hand. Commenting on the situation, Alexander Gromyko said, "Look at what we have come to! Even Nitze is being criticized, even though he is more conservative than the greatest conservatives, and doesn't want any kind of deal at all!"

Interestingly, the social democrats in West Germany initially believed the Soviet Union when it insisted that the zero option would be absolutely unacceptable to Moscow for security reasons. But after Moscow became an advocate of the zero option, the Germans said that never again would they take at face value any Soviet position at the negotiations, and that they would always rely instead on their own assessment of the situation. Yuli Kvititsinskiy has this to say on the matter: "During the negotiations I opposed Reagan's zero option, and argued that the British and French arsenals should also be taken into account. Had I suddenly begun to advocate another position, nobody would have believed me..."

Kvititsinskiy also believes that Paul Nitze's willingness to compromise (which Richard Perle and Richard Burt were so angry about) was due to the fact that Nitze was 75 years old.
Nicknamed “the Grandfather” by the other negotiators in Geneva, Nitze probably did not want the last negotiations of his career to end in failure. That was seen as inexcusable sentimentality for such a Cold War knight.

It appears that Yuli Kvitinskiy had spent too much energy trying to find a solution during lively exchanges with Paul Nitze in 1983, ahead of the deployment of American missiles in Europe. The ambassador reports Nitze as saying much later, in 1985, that Washington was willing to limit the deployment of its cruise missiles to only Britain and Sicily, but the Soviets walked away from the talks unexpectedly early.

In early 1987 I received a phone call from Kvitinskiy; he was serving as the Soviet ambassador to Bonn at the time. He asked me whether there were any lingering elements of the walk in the forest in our current stance on the INF. I replied that there was no halfway option philosophy in the Soviet position.

There was a clearly superfluous number of nuclear warheads at the center of Europe at the time. This was a product of rivalry between the Warsaw Pact and NATO. The military confrontation was getting out of control. Marshal Akhromeyev once said that planners at the Soviet Ministry of Defense were having difficulty finding decent targets for all the Soviet nuclear missiles available at the time. All the important targets in Western Europe had already been covered.

In December 1987 Moscow and Washington signed the INF treaty, which was based on a genuine commitment to the zero option, as opposed to propagandist maneuvering. The deal resolved the issue of American missile deployment in Europe—that process was halted and reversed. The two sides had thereby eliminated a source of intense nuclear confrontation at the heart of the Old World. This had major beneficial effects on the international situation, and essentially paved the way for the signing of the START treaty.

**POSTSCRIPT: NTRCs AS THE HAWKS’ LEGACY**

On December 14, 1987 the Communist Party and the Council of Ministers issued a resolution authorizing the establishment of a Nuclear Threat Reduction Center in our country. Soon after the signing of the agreement on the Centers I had a meeting with the foreign minister. During our conversation I delicately raised the idea of holding some kind of celebration to mark that small success in the ongoing efforts to defuse tensions and end the policy of confrontation. But Minister Shevardnadze dismissed that idea out of hand. “That’s a trifling thing,” he said.

Concluding the INF negotiations was at the top of the agenda at the time. But it soon turned out that without the NTRC mechanisms it would have been very difficult, if not completely impossible, to fulfill our commitments under the INF (as well as other disarmament treaties) in an organized and diligent fashion because of the huge amounts of information that we needed to exchange. The NTRC channels proved indispensable.

The relevance of the NTRCs was highlighted during the talks between Mikhail Gorbachev and Ronald Reagan in Moscow in May–June 1988. Initially, under the Protocol to the September 15, 1987 agreement, the remit of the centers was limited to exchanging early notifications of ballistic missile launches. But later on, as stipulated in the Agreement, the two parties also began to use the centers to facilitate the implementation of arms limitation agreements. The first such document, the INF treaty, was signed on December 9, 1987.

The remit of the Russian NTRC currently includes monitoring the implementation of and compliance with more than 15 international treaties and agreements on arms reductions and confidence-building measures. That number includes the START treaty, the INF treaty, the CFE treaty, the 1999 Vienna document on confidence- and security-building measures in Europe, the Treaty on Open Skies, and agreements with China on mutual reductions of armed forces stationed along the border and on military confidence-building measures.

In addition, the NTRC exchanges notifications under a number of agreements, including agreements covering ICBM and SLBM launches, large strategic exercises, limitations on underground nuclear weapons tests and underground nuclear explosions, the ban on the
development, manufacture, stockpiling and use of chemical weapons, chemical weapons disposal, etc.  

The emerging system of arms control agreements, which gradually chipped away at the policy of confrontation, was bound to produce effective mechanisms for monitoring compliance. These mechanisms have proved very relevant, and their workload remains impressive. For example, under the INF treaty the Russian NTRC has prepared and conducted more than 440 inspection visits to U.S. facilities in the United States and Western Europe. It has also provided support for more than 770 U.S. inspection visits to Soviet and Russian facilities. More than 7,000 specialists have been trained to make all that work possible.

An impressive amount of inspection work was also completed under the START-I treaty. For example, in accordance with the treaty’s provisions on the exchange of telemetry data, the center has provided the United States with telemetry information from 175 missile launches. It has processed and analyzed the telemetry data from the same number of launches of U.S. strategic missiles. These are only some of the tasks being performed by the NTRC. This is why I believe that even incorrigible skeptics would not describe the Russian and U.S. NTRCs as a “trifling thing” these days.

In April 2011 Washington hosted a global Russian forum, with the participants debating various issues on the agenda of the Russian-U.S. Reset. According to media reports, the discussion was rather heated. Russian representatives accused Washington of creating obstacles to the development of bilateral relations. The U.S. participants—which included Richard Perle, who spoke in his capacity as a leading expert with the American Enterprise Institute—levelled similar charges at Moscow.

Perle expressed his opinion that arms control is the only area where any notable achievements have been made in Russian-U.S. bilateral relations. He accused Moscow of excessive centralization of power, lack of press freecom, and the absence of the rule of law. He cited the Khodorkovsky and Magnitsky cases as examples. He also spoke against the cancellation of the Jackson-Vanik amendment. Perle believes that after several energy wars, which he says have affected not only Ukraine but also Eastern European countries, it would be stupid to rely on Russian energy supplies. In other words, there was a lot of rhetoric that approached the Cold War level of vitriol.

The fact that one of the most prominent American hawks became a co-author of the agreement on the Nuclear Threat Reduction Centers demonstrates that international confidence-building measures are in high demand. Strict diplomatic practice forces even the most ideology-driven politicians to rein in their emotions and act according to their instructions.

It appeared in recent years that the Nuclear Threat Reduction Centers had become lost in the flow of information on international politics. But their profile rose once again after talks between Vladimir Putin and Barack Obama at the G8 meeting in Northern Ireland in June 2013. Russia and the United States have expanded the remit of the NTRCs by adding another function: namely, exchange of information necessary to counter attacks in cyberspace.

An official report, “On Russian-U.S. Agreement on Confidence-building Measures in the Area of IT,” of June 18, 2013 says that the two countries have agreed to set up new communication lines for exchanging information regarding computer incidents on several levels. One of these levels will be a communication line between the Russian and U.S. military operated by the national NTRCs. The purpose of the exchange is mutual notification of attacks against critical information infrastructure facilities.

These new arrangements are forming a comprehensive system of confidence-building measures between Russia and the United States in the information space. The report also states that “the establishment of direct contacts between specific agencies and officials in Moscow and Washington will facilitate a rapid response to attacks, and help to prevent potential conflicts in the information sphere.”

The decision to conclude the agreement on NTRCs in Moscow and Washington in September 1987 has proved to be a visionary step on both sides.
NOTES

1 Krasnaya Zvezda, February 4, 1987, No. 28 (19215), p. 3.
5 Ibid., p. 36.
6 Ibid., p. 40.
7 Ibid., p. 51.
8 Ibid., p. 164.
9 Ibid., p. 126.
10 Ibid., p. 109.
11 Ibid., p. 109.
16 Ibid., p. 302.
17 Ibid.
19 Ibid., p. 391.
20 Ibid., p. 468.
21 Ibid., p. 371.
22 Ibid., p. 436.
24 The Russian National Nuclear Threat Reduction Center: 20 Years, a collective of authors (Moscow, 2007), p. 7.
The monograph by Dr Dmitry Evstafiev is billed as academic hooliganism. That is obviously true, but only to a certain extent.

In modern science, which is prone to postmodernist twists and turns, hooliganism is defined more as form than substance. In this particular case, the author certainly indulges in hooliganism inasmuch as he provokes a discussion and an argument, as well as resorting to old turns of phrase which the scientific community has already begun to forget. As political and social scientists, or simply as people with an informed interest in these scientists, we have become too accustomed to reading huge volumes that do not give rise to any emotions, let alone trigger academic debates.

This book has indisputable value, if only because it is the first serious piece of research that substantiates and formulates the very term “integrated communications.” We often hear these words, and we often use them ourselves, without quite understanding what they actually mean. We can argue, amend, or adjust the author’s definition and interpretation of that term—but there is no denying the solid scientific foundation that underpins that interpretation.

The book by Dr Evstafiev is not light reading meant to kill time during the daily commute. Its central ideas, which invite questions and objections, and its language, which is academically dense and sometimes ostentatiously intricate, require the reader to plunge in completely—especially if that reader is professionally involved in communications.

For me, as a person who keeps an eye on international politics, one of the attractions of this book is that it organically places communications in the context of the geopolitical changes we have all observed over the past 25–30 years. The author’s view of communications—and I completely agree with that view—is not as an abstract sphere, but as a very tangible applied subject. Its concrete essence is tightly intertwined with other spheres of human activity, such as politics, social relations, and technology.

I think that the section of the book that focuses on the geopolitical origins of integrated communications contains quite a few original and interesting ideas, observations, and conclusions that should be studied by experts in international politics.

The author’s interpretation of relations between the creative class and the new middle class, and its implications for communications, is very absorbing and fairly contentious. I have no doubt that such an interpretation will give rise to many objections, but that will only add to the book’s attraction and satisfy the author’s ego by causing many people to rise to that bait (one of many in this voluminous tome). Other readers will be drawn by the attractive prospect of demolishing the logic of such an experienced debater as Dr Evstafiev. One of his central points is that integrated communications are an instrument of exploitation and a carrier of ideology; that is a contentious but attractive headline argument.
It is obvious from this monograph that its author has a wealth of practical experience in the information sphere. This adds to the book's value and makes it much more than just another attempt at constructing fanciful theories on the subject of communication institutions. It is for a good reason that the author makes such a clear distinction between communication and action; that particular point, however, would also make an excellent subject for debate.

Therefore, my advice to political, social, and international relations scientists is this: read this book, reflect on it...disagree, and argue.
THE NPT REVCON 2015: TIME TO BE MORE AMBITIOUS
Reviewed by Tariq Rauf

The non-governmental White Paper prepared by the PIR Center was the focus of a discussion organized at the margins of the 2014 NPT PrepCom in New York in May 2014.

The objective of the White Paper as it appears from its text is to remind the NPT States Parties of their collective and individual obligations pursuant to Article VI of the NPT. Over the years, a universal consensus among NPT States has emerged that the Treaty is the cornerstone of the nuclear arms control and disarmament system. At the 2000 NPT Review Conference the States Parties agreed on “practical steps for the systematic and progressive efforts to implement Article VI” and paragraphs 3 and 4(c) of the 1995 Decision on Principles and Objectives (the 13 Steps), including an unequivocal undertaking by the nuclear-weapon states (NWS) to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all states parties are committed under Article VI.

In 2010, the States Parties agreed to “Conclusions and Recommendations for Follow-on Actions” to the Treaty, taking into account the 1995 NPT Review and Extension Conference decisions and resolution—64 actions in all. However, many of those actions are not really “actions” per se, including an “action plan on nuclear disarmament which includes concrete steps for the total elimination of nuclear weapons.”

Though noble in intent, as the Mexican delegate recalled, citing the UN Secretary General Dag Hammarskjold, the 2010 Action Plan “does not take us to heaven, but distances us from hell—the hell of nuclear catastrophe.” There are 64 actions in all across the three pillars of the Treaty, but there is no discrete cohesive “Action Plan on Disarmament.” Indeed, there are some 22 “actions” listed under Section I on Nuclear Disarmament—a mix of “principles”, “objectives”, exhortations, and “actions”—which reflects the confusion prevailing at the 2010 Review Conference and the hasty cobbling together of the excellent reports of the Chairs on the Subsidiary Bodies to the Main Committees into the Final Document.

Thus, it is no surprise that the non-nuclear-weapon states (NNWS) are deeply disappointed at the lack of implementation of the actions agreed in 2010. Just as the 1995 “Principles and Objectives” were not fully implemented, nor were the “practical steps” agreed in 2000, the 2010 “actions” have fallen by the wayside—unfortunately.

What lessons can be learned? First, and most important of all, it should be abundantly clear that the NWS simply would not implement the agreements reached at NPT Review Conferences. Their strategic dynamics and calculus are different; the NWS have shown already that they will negotiate and implement nuclear reductions in forums other than the NPT. They will agree to seemingly far-reaching steps, undertakings, or actions at the NPT Conferences, with difficulty, albeit to secure commitments from the NNWS on the non-proliferation and verification pillar, and on nuclear safety and nuclear security.

Hence, once again, at the next NPT Review Conference, the NNWS will berate the NWS on their failings and will strive to push the nuclear disarmament benchmarks even further. In 2015, the Humanitarian Initiative on the Consequences of Nuclear Weapon Detonations will dominate on the agenda, alongside Middle East nuclear/WMD-free zone issues and the new
tensions between the West and Russia. It is unlikely that much progress could be achieved in 2015 or that the NWS will undertake to fulfill their existing commitments, let alone take on new ones.

The PIR Center’s White Paper, benefiting from the views of well-known experts, provides a mixed score card on the implementation of the 2000 and 2010 commitments on nuclear disarmament. The report includes a useful tally of the actions implemented in part or in full, or not implemented, by the NWS and the four other nuclear-weapon possessor states.

The White Paper attempts to provide a good news picture of The P5 and NPT Article VI. It seems that it really should be retitled “The NWS and NPT Article VI,” since P5 is not a term recognized or sanctioned by the NPT. This assessment shows that the NWS have signed up to some global treaties, including the CTBT and the Outer Space Treaty, but does not include other global treaties such as the Partial Nuclear Test Ban Treaty (PTBT) of 1963, the Seabed Arms Control Treaty of 1971, and the Moon Treaty of 1979. It includes the bilateral Russian–U.S. treaties and the Presidential Nuclear Initiatives (PNIs), as well as the unilateral reductions by France and the UK. All this is quite useful. What would be also useful for the 2015 Review Conference is a detailed accounting of the reductions between 2010 and 2015, and 1995 and 2010. While the NWS finally agreed to a common reporting framework and submitted reports at the 2014 NPT PrepCom, the data provided in the reports are insufficient and not clearly presented. A hypothetical update of the PIR Center’s White Paper for 2015 should take these issues into account, as well as the meager results of the work of the Open-Ended Working Group (OEWG) on launching multilateral nuclear disarmament negotiations, as well as of the Group of Governmental Experts on a Fissile Material Treaty (FMT).

The White Paper concludes with an ambitious list of “12 Steps Towards Launching Multilateral Nuclear Disarmament.” Among the four steps to be taken by 2015, only the first one—on recommitment to the NPT—could be done at the 2015 Review Conference. Under the present circumstances, the remaining four steps are unlikely to be concluded. This has spillover effects on the four steps slated for 2016–2018, unless Russia’s relations with the United States and the West improve and return to normalcy quite soon.

It is also clear that the USA will be unable to move on ratification of the CTBT until at least 2018. By that time there will be no complete clarity on whether the CTBT will still be viable if the Democratic People’s Republic of Korea and other nuclear-weapon possessor states carry out additional nuclear tests. Postponing discussion on a common strategic language or terminology on nuclear weapons to 2025 is likely to push the goal of multilateral nuclear disarmament to beyond the middle of this century—thus indirectly enabling the continuation of nuclear weapon systems to at least the end of the twenty-first century. Such a scenario rather lends truth to President Obama’s lament of “not in my lifetime.”

The PIR Center could be more ambitious in its revision and update of the White Paper for the 2015 NPT Review Conference. It might usefully examine somewhat shorter timelines even though the dark clouds of a new Cold war might be gathering on the distant horizon. But it is the responsibility of civil society to show hope and light the beacon to strengthen weakening diplomacy.

NOTE

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear colleagues!

Please accept my wholehearted congratulations on the occasion of PIR Center’s 20th anniversary.

I regret not being able to be there in person to congratulate you as I am currently away on a work trip. Over the past 20 years, your organization has earned a solid reputation as a leading Russian intellectual center specializing in nuclear nonproliferation and international security. The international community shares such an assessment.

As head of the International Security Center at IMEMO RAN and head of the Nonproliferation Program at the Moscow Carnegie Center, I am grateful for the opportunity to cooperate so fruitfully with PIR Center over the years. It is for a good reason that your and our achievements are exciting a certain sense of jealousy in some research organizations and persons who are unable to compete with us on a professional basis, and therefore sometimes stoop to lowly methods to get the better of us. Nevertheless, we will continue to do our job, led by our understanding of genuine Russian and international security interests.

I wish PIR Center great achievements in its research, and I wish its team good health and success in all their endeavors.

Sincerely yours

Aleksei Arbatov
Director
International Security Center
Institute of World Economy and International Relations at the Russian Academy of Sciences
23 Profsoyuznaya St., GSP-7
Moscow, 117997, Russia

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Volodya,

I congratulate you for your outstanding, pioneering efforts over 20 years to build a first-rate institution, all the more impressive because the PIR Center was and remains a unique kind of institution in the Russian policy research environment.
You have been a public policy entrepreneur without peer and have put the PIR Center on the world map.

Sincerely,

Robert Einhorn
Senior Associate
Brookings Institution
1775 Massachusetts Ave, NW

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov,

On behalf of Nowa Debata Foundation I wish to extend our heartiest congratulations to the PIR Center for completing 20 glorious years of hard work and continuous success.

The spirit, drive, and the hard work of your team made the PIR Center the widely known quality brand that it is today. The landmark research and educational projects that you conduct have earned deserved recognition and allowed you to join the ranks of most established think-tanks in Russia focusing on the issues of international security and Russian foreign policy.

We immensely appreciate the opportunity to take part in your educational project—the International Summer School on Global Security—that we enjoyed in 2012. Since the mission of the Nowa Debata Foundation is to raise awareness and stimulate debate on globally important issues, we fully support and share your interest in the issues of arms control and nonproliferation of weapons of mass destruction.

We wish you all success for many more years to come.

Best regards,

Aleksandra Kowalczuk
President
Nowa Debata Foundation
65/1 Trawowa str.
Wroclaw, 54-614, Poland

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov,

The Department of International Relations at Saint Petersburg State University sincerely congratulates PIR Center on its 20th anniversary. PIR Center is one of the best non-governmental expert-analytical organizations not only in Russia, but also abroad. Many of our graduates have attended the Summer Schools, as well as internships at PIR Center. Our graduates stressed the high professionalism of your organization’s specialists, as well as your effective training of new specialists in the field of international security and nuclear non-proliferation.

We wish all of our colleagues at PIR Center further success in this important and necessary work, and we hope that cooperation between our organizations develops further.
Sincerely,

Irina Novikova  
Dean  
Department of International Relations  
Saint Petersburg State University  
7/9 Universitetskaya nabershnaya  
Saint-Petersburg, 119034, Russia

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov,

I am pleased to congratulate the PIR Center, you in person and all your colleagues on the 20th anniversary of your professional activities!

I wish you continuous success in the difficult daily work of promoting Russia’s national interests in the global arena. As for the PIR Center’s team, I wish them courage, a clear mind, backbone, and insistency in pursuing their goals and an endless flow of positive energy.

Sincerely,

Ilya Sachkov  
CEO  
Group-IB  
14 Mazhorov lane  
Moscow, 107023, Russia

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov,

My warmest wishes to the PIR Center on this jubilee, and to you personally as head of that reputable nongovernmental organization. PIR Center makes a notable contribution to the Russian and international debates on arms control, WMD nonproliferation, nuclear energy development, and international information security.

As the PIR Center research efforts branch into new areas, including regional security in East and Southeast Asia, its cooperation with other expert groups becomes all the more important. The ASEAN Center values the opportunity to work together with such a great partner as the PIR Center, and is looking forward to new joint projects.

We wish you and the entire PIR Center team new achievements and productive, inspired work over the coming years.

Warm regards,

Victor Sumsky  
Director  
ASEAN Center  
Moscow State Institute of International Relations (MGIMO-University) of the Ministry of Foreign Affairs of the Russian Federation
TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov! Dear colleagues!

Please accept my heartfelt congratulations on behalf of the Moscow Carnegie Center on the occasion of the PIR Center’s 20th anniversary. Over the past two decades PIR Center has become one of Russia’s most respected think-tanks. It holds a prominent place among the international research organizations specializing in international security. The PIR Center’s publications are well known for their professionalism, impartiality, and unbiased assessments. Events organized by the PIR Center often become highlights of Moscow’s intellectual life. You have created a platform for debate where even the most complex issues can be freely discussed.

The PIR Center’s 20th anniversary has coincided with momentous changes in Russian foreign policy and international relations. Demand for earnest and honest dialogue on international politics is now greater than ever. There is an urgent need for close contacts with trusted partners in an effort to reduce the level of confrontation and find worthy solutions to conflicts. Today’s situation represents a major challenge for international security professionals, and analysts must rush to the aid of decision-makers.

My colleagues and I are confident that you, Dr Orlov, and the entire the PIR Center team will rise to this challenge and continue to make a contribution to strengthening international peace and cooperation. We wish you all good health, and personal as well as team achievements. We also hope that PIR Center will always remain at the center of developments, both nationally and globally. We are proud to be your partners.

Dmitry Trenin
Director
Moscow Carnegie Center
16/2 Tverskaya Street
Moscow 125009, Russia

TO THE PIR CENTER PRESIDENT, DEAR DR ORLOV!

Dear Volodya,

It is not for the first time over the past five years that I have had to regretfully, even sorrowfully, decline your invitation to take part in various PIR Center events. Only once has my visit to Moscow coincided with the PIR Center’s Midweek Brainstorming session, followed by a boisterous party. I cannot describe how much joy it gave me to immerse myself in new ideas and conversations with my old friends and colleagues! Now you are celebrating a jubilee, but alas, I cannot be there on this occasion, either....

I began my research career specializing in legal aspects of international security and arms control, but then the focus of my research shifted onto other legal topics. To me, PIR Center is therefore not only a chance to get a breath of fresh air and re-energize myself; it is also a living link with my first serious academic pursuit. It turns out that there is no such thing as a former disarmament specialist; in another proof of that dictum (I know you will forgive my boasting), last summer I was invited to read lectures on the subject to The Hague Academy of International Law. I drew heavily on materials from the Security Index journal and the PIR Center’s Nuclear Nonproliferation Encyclopedia during my preparations.

This may sound like a truism, but the PIR Center’s success and stellar reputation are based on the people who work for it and with it. I would like to express my particular esteem for Ambassador Roland Timerbaev, who brought me to PIR Center many years ago. Before we met in New York in the spring of 1987, I heard a lot of good things about him from my father, who studied at MGIMO University at the same time as Dr Roland Timerbaev, but was one year his junior. It is my honor, privilege and luck to know him.

My sincere congratulations to PIR Center and every person on the PIR Center’s team. I wish you creative verve and productive vigor.

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Bakhtiyar Tuzmukhamedov  
Judge of the Appeals Chamber  
The International Criminal Tribunals of the United Nations for Rwanda and former Yugoslavia  
1 Churchillplein, 2517  
The Hague, 2501 EW, Netherlands

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov,

We congratulate the PIR Center on its 20th anniversary.

Over the last two decades the landscape of international security has fundamentally changed, not to the least extent because of the skyrocketing development of digital technologies and resulting expansion of threats and challenges related to cyberspace.

We believe that today these issues gain importance comparable with the role of WMD nonproliferation and arms control on the international security agenda.

These factors stress the necessity and relevance of the PIR Center’s contribution to the promotion of the international dialogue, research, and training activities in the field of information security and global internet governance.

Exploration of the new dimensions of the global processes and in-depth research of the global security issues in the digital age are strong evidence of the PIR Center’s plentiful dynamism, intellectual flexibility, and scientific open-mindedness.

We thank you for a longstanding collaboration and wish you and the organization that you have been leading continuous success in the future.

Respectfully,

Andrey Yarnykh  
Head of Strategic Projects  
Kaspersky Lab  
39a Leningradskoe avenue  
Moscow, 123060, Russia

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear friends!

Please accept my sincere congratulations on this glorious anniversary.

The PIR Center is famous not only for its independent and high-quality, world-class expertise, its international Summer Schools, the Security Index journal, or information bulletins, but also for its remarkable people.

The PIR Center’s team and the entire PIR Center community are a real intellectual elite, professionals of the highest caliber, and genuine patriots. You have shaped the Russian community of international security experts, and you can be deservedly proud of it.

Keep up the good work!

SECURITY INDEX Nos. 3–4 (108–109), Volume 20
Best regards,

Igor Zevelev
Director
Moscow branch of the John D. and Catherine T. MacArthur Foundation
8 Khlebnyy lane
Moscow 121069, Russ

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear colleagues! Dear PIR Center!

We are so very grateful for your work, and for the chance to meet with you, to learn, and to teach side by side with you. Now, under your influence, we are working to improve the culture of education, the nuclear culture of our own Russian students, students from Vietnam, Turkey, Bangladesh, Mongolia, and Belarus, as well as our own leadership and our veterans.

We have set up the International Committee of Nuclear Energy and Industry Veterans to pass on valuable expertise and experience to the new generation of specialists, so as to prevent them from repeating our mistakes and help ensure the competence of our managers.

Only knowledge and education can help to resolve the problems facing nuclear industry development, especially the key problem of nuclear nonproliferation.

Viktor Murogov
Director
International Center of Nuclear Education
MEPHI National Nuclear Research University
Kashirskoye avenue, 31
Moscow, 115409, Russian Federation

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear Vladimir,

My sincere congratulations on this jubilee! I hope that many memorable events are yet to come.

I wish you creative longevity, achievements, joy, and lots of good friends!

Viktor Vasilyev
Plenipotentiary Representative of the Russian Federation
Collective Security Treaty Organization
3/2 Sverchkov Alley
Moscow, 101000, Russi

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear Dr Orlov! Dear friends!

Although I could not be there in person as I am away from Moscow, in my heart I am celebrating PIR Center’s jubilee together with you.
As I have already written in my contribution to PIRogue, work at the PIR Center was my first professional experience in the area of international security and nuclear cooperation. In many ways, it set the course for my future professional growth.

Having gone through the PIR Center boot camp, I gained skills that enabled me to handle all kinds of projects, regardless of their complexity. I am confident that there are many more PIR Center jubilees yet to come, and I hope that the troubled period you are currently going through will soon go away like a bad dream.

With deep respect to you personally and the entire PIR Center team,

NikitaPerfiliev
Associate External Relations Officer
CTBTO Preparatory Commission
Vienna International Centre, PO Box 1200
Vienna, 1400, Austria

TO PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear colleagues!

Even more importantly, dear friends!

Unfortunately, for various reasons I could not be there in person to celebrate the 20th anniversary of the PIR Center, which I deeply love and respect. I would therefore like to convey my most sincere congratulations in this message. It would not be an exaggeration to say that PIR Center has played a very special role in the lives of all its graduates. PIR Center is not just a material place, it is also a very unique spirit. It is a spirit of research, discovery, learning, new ideas, and achievements. It is a spirit that stays with us forever, a spirit that has turned us into real fighters.

The PIR Center is a great team of like-minded people who give each other staunch support as well as honest criticism. It is a team of people who help each other become professionals. The PIR Center has been a momentous stage in our lives, a stage of growing up and joining the world of professionals, a stage of first independent research, a stage of challenge, struggle, and victory that has made us all stronger.

Some of us may have left the PIR Center, but part of us will always remain with PIR Center. We are moving on using all the skills and experience we have gained while working for the PIR Center, and the memories of our mistakes and our victories are always with us. All of us, the entire PIR Center community, remain friends and support each other, even as years go by. My sincere wish is that PIR Center will continue its great work for many more years to come, bringing together talents, opening up opportunities, and making people friends.

My heartfelt thanks go to the entire PIR Center team and to each individual member of that team. And thank you, Dr Orlov, for making this jubilee possible.

With warmest regards and hoping to see you all very soon,

Svetlana Klyuchanskaya,
Lead specialist in training process organization,
Russian-U.S. Program
Novosibirsk State University of Economics and Management
52/1 Kamenskaya Street
Novosibirsk 630099, Russia
TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Greetings!

We at the Ural Federal University would like to convey our heartfelt congratulations on this 20th anniversary of our valued partner, PIR Center.

This jubilee coincides with the launch of the international politics course at our university. Right from the start, PIR Center’s work has always been of great value to our education process.

Six of our own teachers have graduated from PIR Center internship programs. Tens of PIR Center graduates are working for various Russian and international organizations. Joint projects with PIR Center have helped our university to launch new research in such areas as international security, regional security, and nonproliferation.

To make sure that this is not a one-way street, we have delegated several of our graduates to work for the PIR Center over the years, including Albert Zulkharneev and Andrey Baklitskiy, and we are proud of their achievements.

Ever since its foundation, PIR Center has been staunchly defending national interests on various international platforms. It is a leading Russian think-tank and expert community specializing in topical international problems, especially security and nuclear proliferation. It maintains extensive and close contacts with leading Russian and foreign research centers, governmental organizations, and nongovernmental outfits.

We wish the PIR Center team great achievements, creative longevity, and many successful projects.

Dmitry Bugrov
First Vice Rector
Ural Federal University
19 Mira street
Yekaterinburg, 620002, Russia

TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV AND THE PIR CENTER TEAM

Dear colleagues!

Please accept our congratulations on your 20th anniversary. We greatly value your successful work as a leading Russian NGO specializing in international security, nuclear nonproliferation, and disarmament research and education.

Twenty years ago PIR Center began as a small group of enthusiasts. Now it is a reputable and highly authoritative team that has earned recognition both here in Russia and internationally.

We look up to your achievements and hope to emulate them here in Siberia. Students, graduates, postgraduates, and teachers from Tomsk and other Siberian cities are actively involved in PIR Center projects and events.

We are confident that your expert opinion will continue to hold great sway all over the world, including Siberia.

We hope to continue our productive cooperation,

Savely Volkson
Head of the International Relations section
Faculty of History
Tomsk State University
TO THE PIR CENTER PRESIDENT DR VLADIMIR ORLOV

Dear Dr Orlov,

On behalf of the International Relations and Regional Studies Department of the Novosibirsk State University of Technology, please accept our sincere congratulations on the 20th anniversary of your organization.

PIR Center is widely recognized as Russia’s leading nongovernmental think-tank specializing in international security, nuclear weapons proliferation, and disarmament, with a heavy emphasis on various education projects. For the past several years our graduates have participated in PIR Center summer schools and internship programs. This has been of particular benefit for students specializing in foreign regional studies.

We wish you great new achievements, especially in the area of education, and hope to continue our productive cooperation.

Olga Zinevich
Deputy Head
International Relations and Regional Studies Department
Novosibirsk State University of Technology
20 Karl Marx avenue,
Novosibirsk, 630073, Russia

TO THE PIR CENTER TEAM

Dear friends!

We would like to convey our warm congratulations on this jubilee! After two decades of steady growth and development, PIR Center has turned into one of the most recognized and reputable Russian research centers in the area of foreign politics and international security.

We are very glad that several graduates of the Tomsk Summer Schools on nuclear nonproliferation have, over the years, become members of the PIR Center team, thereby helping to strengthen our cooperation and professional as well as personal ties.

We are confident that a great future awaits your remarkable team! We wish you new opportunities and great achievements.

Nina Rozhanovskaya
Denis Shvedov
Heads
Siberian Inter-University Youth Center of Security and Nuclear Nonproliferation Studies
49 Lenin avenue
Tomsk, 634050, Russia

Larisa Deriglazova
Deputy Head
International Politics Department
Tomsk State University
49 Lenin avenue
Tomsk, 634050, Russia
ABOUT THE AUTHORS

Baklitisky, Andrey is Director of the Program “Russia and Nuclear Nonproliferation” at PIR Center. Graduated from the Faculty of the International Relations of the Urals Federal University. Holds specialist degree in regional studies and Simultaneous Interpreter diploma. In 2008–2009 took a course at the University of Seville (Spain). In May–July, 2011 made an internship at PIR Center. In 2011–2013 PIR Center Internet Project Director, Information Program Director since 2013. Took part in the sessions of the NPT Preparatory Committee in 2013–2014. Editor of PIR Center White Paper “Ten Steps toward a Weapons of Mass Destruction-Free Zone in the Middle East”. The sphere of research interests includes international security, greater Middle East, nuclear energy sector and nonproliferation. Email: baklitisky@pircenter.org.


Demidov, Oleg is the Director of the Program “International Information Security and Global Internet Governance” at PIR Center and a Ph.D student at the Faculty of Political Science at Moscow State Institute of International Relations (MGIMO-University). In 2011–2012 held the position of Project Coordinator at Center for Political and International Studies (CIPS) under the International Federation for Peace and Conciliation. From 2012 has been an expert at the Commission on Information Security and Cybercrime in the Russian Association for Electronic Communications (RAEC). From 2013 has been the member of the Research Advisory Network (RAN) under the Global Commission on Internet Governance (GCIG). E-mail address: demidov@pircenter.org.

Fedorov, Yury, Dr., is an Associate Fellow in the Chatham House – The Royal Institute of International Affairs (London, UK). Security Index Editorial Board member. Graduated from the Moscow State University’s Physics Department. Worked at the Sociological Research Institute of the USSR Academy of Sciences, and headed the section on disarmament issues at the Institute for International Economy and International Relations (IMEMO) RAS. Also worked in the international division of the Soviet Communist Party Central Committee, after which, in 1991, took the post of Deputy Head of the political science department at MGIMO. In 1998 became section head, and in 2000 head of the division on military policy research at the U.S. and Canada Institute RAS. In 2001–2002 served as the PIR Center Deputy Director. In 2002–2003 was Deputy Director of the Institute of Applied International Research. Author of a monograph entitled “Substrategic Nuclear Weapons and Russian Security Interests” (2001). E-mail address: Fedorov.yury@yahoo.com.
Gasimov, Kamal is Research Associate at the Center for Strategic Studies under the President of the Republic of Azerbaijan. Graduated with distinction from undergraduate studies (in 2006) and master courses of the Faculty of Oriental Studies at Baku State University. In 2007–2008 completed studies at Kuwait University. Participant of the international seminar “Islamic Education and Islamic Studies: Between Religious Education and Scientific Research” (2013), the 4-th Think Tanks Forum of the Organization of Islamic Cooperation (OIC) Countries sponsored by the Prime Minister of Egypt; and the international conference “On the Way toward Regional Security” (2013). The sphere of research interests includes the history and historiography of “classical” Islam, Muslim philosophy, the epistemology of the Muslim scientists, theory and methodology of the Islamic law and Islamic legal and political concepts. Speaks Azerbaijani, Russian, English, Arabic, Persian and Turkish. Email: kamal.t.gasimov@gmail.com.

Kalinina, Natalia, Dr., Prof., is a Senior Research Fellow, Head of the group on unconventional threats to security in the Center for International Security Studies at the Institute of World Economy and International Relations (IMEMO), Russia Academy of Sciences. One of the leading experts in the field of chemical and biological disarmament. Experienced scientist, auditor, multilateral person, whose researches in biologics, chemistry, policy, economy are of invaluable contribution to the science and for further research perspectives. From 1994 to 2007 worked for central organs of political departments of the Russian Federation, including the post of Assistant to the Chairman of the Government of the Russian Federation in 2003–2004 and Deputy head of the inspection of the Accounts Chamber of the Russian Federation in 2005–2007. PIR Center Advisory Board member. Email: kalinina@imemo.ru.

Kozyulin, Vadim, Dr., is Senior Research Fellow at PIR Center and Professor at the Academy of Military Science. In 1990 graduated from Moscow State Institute of International Relations (MGIMO-University) under the Russian MFA. Former officer of the Soviet/Russian Ministry of Foreign Affairs. Worked at Moscow News Review, later was a representative of the Republic State Enterprise Kazspetexport in Russia. In 2000–2002 accomplished the Management of Military and Technical Cooperation Program in the Russian Academy for Foreign Trade and defended a thesis on Military Technical Cooperation as a Mechanism of Regional Stability in Central Asia. Maintains close contacts with the CIS and foreign export companies. Research interests include Arms Trade Treaty, Russia’s military and technical cooperation with foreign countries, stability in Central Asia and Afghanistan. PIR Center Research Fellow since 1994. Email: kozyulin@pircenter.org.


Obukhov, Alexey, Dr., is the Head of the Russian delegation at the Russian-Latvian Commission on the border issues, and Co-Chairman to the Joint Latvia-Russia Demarcation commission set up in accordance with Article 5 of the Treaty between the Republic of Latvia and the Russian Federation on the State Border of Latvia and Russia. Born in 1937, in 1961 graduated from the Moscow State Institute of International Relations (MGIMO University), in 1965 completed postdoc studies at MGIMO. Since 1965 has served in the diplomatic staff. Took the post of a sector leader and deputy head of the USA Department at the Ministry of Foreign Affairs of the USSR. In 1989–1990 served as the Head of Directorate of the USA and Canada at the USSR MFA; from 1989–1992 held the position of the Deputy Foreign Minister. In 1992, was appointed to the post of Ambassador of the Russian Federation to Denmark and occupied the post until 1996. In 1969-1991 participated in U.S.-Soviet/Russian negotiations strategic offensive arms. In 1987–91, was deputy head of the Soviet delegation at the U.S.–Soviet negotiations on nuclear arms in outer space. Author of multiple publications; awarded with two Orders of the Red Banner of Labour.
Orlov, Vladimir, Dr., is the founder and the President of the PIR Center – the Russian Center for Policy Studies and the Editor-in-Chief of the Security Index journal. Graduated from the Moscow State Institute of International Affairs (MGIMO). Member of the Public Board at the Ministry of Defense of the Russian Federation, a member of the Russian Pugwash Committee under the Presidium of the Russian Academy of Sciences, a member of the Russian National Committee for BRICS Studies Research Council, a member of the Monterey Non-Proliferation Strategy Group, a member of the International Nuclear Energy Academy (INEA), a member and the founder (1993) of the Triologue Club International, and member of the Washington Quarterly Editorial Board. Currently serves as the Associate Research Fellow at the Geneva Center for Security Policy (GCSP). In 2001–2002 served as the UN consultant on disarmament and nonproliferation education by appointment of the UN Secretary General. During the 2010 NPT Review Conference served as a member of the official delegation of the Russian Federation. Regularly publishes his views in Russian and foreign periodicals and has edited more than a dozen books on international security issues, published both in Russia and abroad. Continues to teach on a regular basis, giving lectures on Russian foreign policy and WMD nonproliferation. E-mail address: orlov@pircenter.org.


Sanaei, Mehdi, Dr., Ambassador Extraordinary and Plenipotentiary of the Islamic Republic of Iran to the Russian Federation. Previously-Head of the Iranian Center for Research on Russia, Central Asia and Caucasus, Professor of Tehran University, Tehran, Iran. Head of Russian and Eastern Europe Studies Department of World Studies Institute, Tehran University (since 2005), Member of Parliament of IRI (since 2008). Member of the Valdai Discussion Club. Previous positions: Visiting professor (permanent member) at Moscow Humanities University, Political Sciences Faculty (1999–2004), The Head of Institute of Culture of ECO Regional Organization (2005–2006), Cultural attaché at the Embassy of IRI in Russia (1999–2003), Cultural attaché at the Embassy of IRI in Kazakhstan (1995–1998). Author of eight books in Persian and Russian. Member of PIR Center International Expert Group since 2011.

Serbin, Elliot is an Intern at the Nuclear Age Peace Foundation and since 2011, student at Stanford University, USA with parallel specializations in Political Science and Philosophy. In 2013, made an internship at the PIR Center and conducted a research on Lethal Autonomous Robotic systems (LARs). From 2013 to 2014 occupied the position of Research Assistant at Stanford University. Field of research interests encompasses nuclear nonproliferation and challenges of advanced warfare to the international law and international security. Email: eserbin@stanford.edu.

Tuan, Hoang Anh, Dr., is Executive General Director of Vietnam Atomic Energy Agency (VAEA) under the Ministry of Science and Technology (MOST), and standing member of the National Atomic Energy Council (NAEC), to which the VAEA serves as the standing organization. Also occupies the position of Deputy Head of the Sub-committee for the Human Resource Development and Public Information under the State Steering Committee for Ninh Thuan Nuclear Power Project. In 1981, graduated from Hanoi University of Technology, majoring in Nuclear Engineering; successfully gained his Ph.D. in Physics in 2001 at Hanoi University of Technology, Vietnam. Email: hatuan@most.gov.vn.
Andrey A. Bakhitskiy, Internet Project Director
Evgeny P. Buzhinsky, Lieutenant General, Senior Vice President, PIR Center Executive Board Chairman
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(as of August 25, 2014)

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International Affairs, journal, Moscow, Russia (since 2010)
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MEPhI National Research Nuclear University, Moscow, Russia (since 1994)

Moscow State Institute of International Relations (MGIMO University) of the Ministry of Foreign Affairs of the Russian Federation, Moscow, Russia (since 1994)

Mueller Harald, Dr., Prof., Director, Peace Research Institute, Frankfurt-am-Main, Germany (since 1997)

Murogov Viktor, Dr., Prof., State Technical University of Nuclear Power, Obninsk, Russia (since 2009)

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Myasnikov Evgeny, Dr., Director, Center for Arms Control, Energy and Environmental Studies, Dolgoprudy, Russia (since 2011)

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Nikitin Alexander, Dr., Prof., Director, Center for Political and International Studies, Moscow, Russia (since 1994)

Nonproliferation for Global Security Foundation (NPSGlobal), Buenos Aires, Argentina (since 2010)

Novikov Vladimir, Dr., Deputy Director, Defense Research Center, Russian Institute for Strategic Studies, Moscow, Russia (since 1994)

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Parkhalina Tatyana, Dr., Deputy Director, Institute of Scientific Information on Social Sciences (INION); Director, Center for European Security Studies, INION, Moscow, Russia (since 2002)

Ponomarev-Stepnov Nikolai, Academic, Russian Academy of Sciences (RAS), Moscow, Russia (since 2002)

Potter William, Dr., Prof., Founder and Director, James Martin Center for Nonproliferation Studies, Monterey Institute of International Studies, Monterey, USA (since 2014)

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Rogachev Ilya, Director, Department of New Challenges and Threats Issues, Ministry of Foreign Affairs, Moscow, Russia (since 2011)

Rybachenkov Vladimir, Dr., Leading Research Associate, Center for Arms Control, Energy and Environmental Studies, Dolgoprudny, Russia (since 2000)

Ryzhov Yury, Dr., Acad., Russian Academy of Sciences, President, International Engineering University, Moscow, Russia (since 2014)

Sachkov Ilya, CEO, Group-IB, Moscow, Russia (since 2014)

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Savelyev Alexander, Dr., Head, Strategic Studies Department, Center for International Security, Institute of World Economy and International Relations (IMEMO), Moscow, Russia (since 2002)

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Sinaysky Alexander, Dr., Prof., Secretary, Council of Defense Ministers of the CIS Countries, Moscow, Russia (since 2014)

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Timerbaev Roland, Amb., Dr., Prof., Moscow, Russia (since 2010)

Toloraya Georgy, Executive Director, Russian National Research Committee on BRICS, Moscow, Russia (since 2013)

Trenin Dmitry, Dr., Director, Carnegie Moscow Center, Moscow, Russia (since 2002)

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Zababakhin All-Russian Scientific Research Institute of Technical Physics (VNIITF), Federal Nuclear Center, Snezhinsk, Russia (since 1999)

Ubeev Alexey, Dr., Senior Nuclear Security Officer, Department of Nuclear Safety and Security, International Atomic Energy Agency, Vienna, Austria (since 2009)

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Yesin Viktor, Dr., Prof., Col.-Gen. (ret.), Advisor to the Commander-in-Chief, Strategic Missile Forces, Ministry of Defense, Moscow, Russia (since 2002)

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Yakushkin Dmitri, Communications Director, Russdragmet Management Company, Moscow, Russia (since 2014)

Zagorski Andrei, Director, Department of Disarmament and Conflicts Regulation, Institute of World Economy and International Relations (IMEMO), Moscow, Russia (since 2014)

ADVISORY BOARD’S WORKING GROUP ON INTERNATIONAL COOPERATION IN NON-PROLIFERATION AND NUCLEAR SECURITY

Aben Dauren, Senior Research Associate, Kazakhstan Institute for Strategic Studies under the President of the Republic of Kazakhstan, Almaty, Kazakhstan (since 2012)

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Ubeev Alexey, Dr., Senior Nuclear Security Officer, Department of Nuclear Safety and Security, International Atomic Energy Agency, Vienna, Austria (since 2012)

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Fedorov Alexander, Dr., Expert, Russian Foreign Intelligence Service, Moscow, Russia (since 2012)

**Kabernik Vitaly**, Head, Department of Innovation Development, Moscow State Institute of International Relations (MGIMO University) of the Ministry of Foreign Affairs of the Russian Federation, Moscow, Russia (since 2012)

Kasenova Madina, Professor, Department of Private International Law, Diplomatic Academy of the Russian Ministry of Foreign Affairs, Moscow, Russia (since 2013)

Levova Irina, Head, Strategic Studies Department, Russian Association of Electronic Communications, Moscow, Russia (since 2012)

Lukatsky Alexey, Business Consultant on Information Security, Cisco, Moscow, Russia (since 2013)

Piskunova Natalia, Project Manager, International Forum on Nuclear Insurance, Moscow, Russia (since 2013)

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Todorov Leonid, Deputy Director for Government and International Relations, Coordination Center for TLD RU, Moscow, Russia (since 2012)

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Zinina Ulana, Law and Regulations Development Advisor, Microsoft Russia, Moscow, Russia (since 2012)

Zinovyeva Elena, Senior Professor, Department of World Political Processes, Moscow State Institute of International Relations (MGIMO University) of the Ministry of Foreign Affairs of the Russian Federation, Moscow, Russia (since 2012)

**PIR CENTER’S INTERNATIONAL EXPERT GROUP (INTEG)**

Arguello Irma, Founder and Chair, Nonproliferation for Global Security Foundation (NPSGlobal), Buenos Aires, Argentina (since 2010)

Buzhinsky Evgeny, Lt-Gen, Chairman, Executive Board, PIR Center, Moscow, Russia (since 2010)

Duarte Sergio, Amb., High Representative, Office for Disarmament Affairs, United Nations (2007–2012), Belo Horizonte, Brazil (since 2006)

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Fetouri Mustafa, Independent Academic, Journalist, Tripoli, Libya (since 2013)

Jayatilleka Dayan, Amb., Prof., University of Colombo, Colombo, Sri Lanka (since 2008)

Karaveli Halil, Senior Associate, Central Asia-Caucasus Institute and Silk Road Studies Program Joint Center, Johns Hopkins University Ankara, Turkey (since 2010)

Kortunov Andrey, Dr., Director General, Russian International Affairs Council, Moscow, Russia (since 2006)

Makgetlaneng Sehlaire, Dr., Head, Governance and Democracy Research Program, Africa Institute of South Africa, Pretoria, South Africa (since 2012)

Sager Abdulaziz, Dr., Chairman and Founder, Gulf Research Center, President, Sager Group Holding, Jeddah, UAE (since 2006)

Sanadi Mehdi, Dr., H.E. Ambassador Extraordinary and Plenipotentiary, Embassy of the Islamic Republic of Iran in the Russian Federation (since 2011)
Satanovsky Yevgeny, Dr., Prof., President, Institute of Middle East Studies, Moscow, Russia (since 2006)

Tian Chun-Seng, Prof., Deputy Director, China Association for Economic Studies on Russia and Central and Eastern Europe, Beijing, China (since 2011)

Tolipov Farkhod, Dr., Director, Bylim Karvoni Nongovernmental Research and Training Center, Tashkent, Uzbekistan (since 2010)

Unnikrishnan Nandan, Vice President, Observer Research Foundation, Delhi, India (since 2010)

Zlobin Nikolay, President, Center on Global Interests, Washington DC, USA (since 2014)
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LORENZO:

The man that hath no music in himself,  
Nor is not moved with concord of sweet sounds,  
Is fit for treasons, stratagems and spoils;  
The motions of his spirit are dull as night  
And his affections dark as Erebus:  
Let no such man be trusted. Mark the music.

"The Taming of the Shrew", William Shakespeare

'Dissonance' by Franz Stuck, 1910