



POLITICAL ELITES IN THE ERA OF DEFICIT

International affairs were stuck in a rut in the first half of 2013. There is a sense of emptiness in ideas as well as actions. The key global players are plodding along their pre-determined course. There is no vitality, no verve in their actions. From the art of the possible, politics is rapidly degenerating into a sequence of pointless shamanic rituals.

A task for the diligent researcher is to find an approach that would enable an analysis of the existing international problems in a broad political, social, and economic context. In simple terms, the task is to get the sense of this era's pulse. The state of the political elites is just such a pulse.

In every country, the political elite is the seat of core values, development strategies, and political as well as historical responsibility. The elite enforces the rules of the distribution of power and assets. Right now, there is a clear deficit in the political elites' execution of their key responsibilities to the public.

There is a deficit of ideas. Take almost any aspect of international affairs or international security—everywhere there is a lack of conceptual ideas that look to the future, determine the international worldview, and set our goals. Ideas that serve as the driving force of action have been replaced by illusions and stagnation. This has been the result of the fact that objective reality and changes in that reality are not being properly analyzed and comprehended. The deficit of ideas is also a symptom of a crisis in international affairs research.

There is a deficit of values. Political values are the product of historical experience, and they evolve as history progresses. For their part, values form national interests, as well as views about the politically reasonable and acceptable. Here, too there is a clear erosion of such ideas—and, consequently, an erosion of values. The best example here is Europe, which has essentially abandoned the project of spreading its values, and seems to have reconciled itself to growing ethnic and religious tensions on the continent. Russia, being part of the European tradition, has abandoned the idea of having any values whatsoever in foreign politics, replacing those values with an extreme form of pragmatism.

There is a deficit of responsibility. This is a corollary of the deficit of ideas and values. Decisions are best avoided or postponed until better days—that is the main motto of international affairs these days. It is obvious in every single international problem, including Syria, Iran, North Korea, and the various territorial disputes. Confident, even belligerent rhetoric is not followed up by any real action, and the pantheon of simulacrum in global politics is growing day by day.

There is a deficit of legitimacy. The problem of legitimacy is facing a growing proportion of the political elites, to a greater or lesser extent. In Syria this deficit is glaring. But looking at the recent upheavals in Sweden, Turkey, or Brazil, as well as even tougher border controls on the North Korean border with China, one cannot help but gain the impression that no one is safe from this problem. Nevertheless, the risk is clearly not as great for the elites that have recently passed the election procedure—for example, in the United States and Iran.



There is a deficit of institutional effectiveness. Charges of inefficiency leveled at international institutions have become commonplace in recent years—but the same accusations made against state institutions are another matter. The petty nature of the problems which now preoccupy those institutions has reinforced the argument of sundry libertarians who say that the executive and legislative branches should become much smaller, and that their powers should be curtailed. But what about the government agencies in charge of defense and foreign affairs? This is yet another serious theoretical challenge to scientists and practical specialists all over the world.

Be that as it may, the end result of all this is a deficit of freedom of maneuver in foreign politics, and a lack of freedom to make foreign-policy choices. This can lead to less freedom in domestic politics as well, and less freedom in general. There can be no real freedom in the absence of responsibility and values that make the foreign policy elites enter into a struggle on the global arena.

But it is also clear that the instinct of self-preservation is forcing the political elites to seek stability in the economic and military sphere. The attempt to create comprehensible material foundations for foreign politics in an incomprehensible world was only to be expected. In a sense, that attempt draws on the classical Marxist dictum about the economic foundation and the political construct on top of it. But it also draws from the much earlier theory of mercantilism, whereby a full treasury was seen as the main criterion of a ruler's success, and exorbitantly expensive cannon bore the inscription *ultima ratio regum*.


There is a difference in behavior between the political elites of authoritarian and democratic countries. Amid the deficit of ideas, values, and responsibility, authoritarian political elites tend to pursue a conservative foreign-policy course. The democratic elites, however, try to address the deficit by various means. As a result, they are better prepared for inevitable change. Nevertheless, neither of these two strategies guarantees a successful outcome.

At the same time, there is a striking similarity between the authoritarian and democratic political elites inasmuch as both are becoming stale. Even in the countries that have gone through the Arab Spring, the influx of fresh blood into politics has stopped very rapidly. The process is obvious not only on the national level, but in some regions as well. The dangers it poses for global politics are a subject for deep philosophical deliberations.

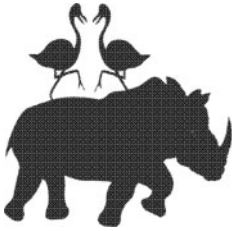
That is exactly why the role of political elites in international relations, and the effects of the choices being made by those elites on international security are the common thread strung through all the articles in this issue of the *Security Index*.

An analysis by Andrey Baklitsky reflects the economic priorities in the nations' foreign policies. It continues a series of articles on the nuclear energy industry, with a spotlight on the Middle East and Russia's interests in the region.

Vladimir Shubin focuses on another topical subject, BRICS, looking at its new member South Africa. The political elite of that African republic, which many analysts say is in for a period of decline, is trying to strengthen its positions and sell its remaining clout on the continent to the highest bidder among the rising global powers.

The situation whereby the political elites are suffering from a deficit of ideas and values has been in the making for more than just a few months, and a resolution is nowhere in sight. But the multitude of questions raised by this problem require serious efforts today, without any further delay. 

Pavel Luzin
Assistant to Editor-in-Chief



Anatoly Antonov

RUSSIA FORCED TO DEVELOP GLOBAL PROMPT STRIKE WEAPONS

Global prompt strike weapons (GPSW), or strategic offensive arms in non-nuclear configuration, are emerging as a new factor of strategic stability. Their development and potential deployment are important issues to discuss not only within the framework of Russian–U.S. negotiations, but also in the context of other nuclear weapon countries joining the negotiations on strategic limitations. However, the United States and Russia, which possess the largest strategic potentials, are responsible for starting discussion on the issue of GPSW.

What are the Russian and U.S. approaches to the issue of GPSW? For what purposes are such weapons being developed? What threats and challenges do they bring to international security? How is the GPSW issue connected to problems of missile defense, outer space militarization, or conventional arms? Would it be possible for conventional weapons to replace all nuclear weapons as a means of strategic stability?

We have put these questions to Amb. Anatoly Antonov, the Deputy Minister of Defense of the Russian Federation.¹

SECURITY INDEX: What is the place of the issue of global prompt strike weapons (GPSW) in the relations between the United States and Russia?

ANTONOV: One of the burning issues during the United States and Russian negotiations of the New START treaty was the issue of non-nuclear strategic offensive arms, which we sometimes call strategic offensive arms in non-nuclear configuration. In our work, we are going to adhere to the interpretation of these arms as provided for the new treaty. What does this mean? Any kind of ballistic missile—missiles, ICBMs, submarine-launched ballistic missiles (SLBMs)—with non-nuclear warheads. Although considered strategic offensive arms, heavy bombers do not pose such a serious threat in the context of the issues under consideration due to a number of peculiarities in their use.

It would be wrong to say that the issue of GPSW came as a surprise for Russian negotiators during work on the New START treaty, for it had not been there before. It is important to point out that the New START treaty, as well as START I, is a treaty on the reduction and limitation of strategic offensive arms. It is not a coincidence that the word “nuclear” is not here. It is not an omission on the part of the delegations, but the result of an uneasy compromise with the United States that has always tended to have new arrangements which would not relate to so-called conventional arms nor cover GPSW, but would apply only to nuclear weapons.

On the contrary, the Russian side insisted that the new treaty cover all strategic offensive arms. We are constantly emphasizing that it is unacceptable to compensate for nuclear reductions by building up conventional strategic systems. This is not an equal

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exchange. The thing is that the destructive capabilities of GPSW are increasingly getting closer to those of nuclear weapons. The Russian side closely traces plans related to advanced conventional strategic missile technologies. The incoming information unequivocally testifies to the fact that the United States is looking for a considerable new segment of its strategic arsenal capable of solving a wide range of tasks that used to be assigned exclusively to strategic nuclear weapons.

SECURITY INDEX: For what purposes is the United States developing this kind of weapons?

ANTONOV: This work is carried out in the framework of the so-called Prompt Global Strike concept. Let us remember that the United States started to develop this concept in the late 1980s–early 1990s. Its bottom line is the achievement by the United States of America of global full-spectrum dominance, including by designing new, effective, non-nuclear strategic weapons while preserving its nuclear deterrent arsenal.

Should the Prompt Global Strike concept be successfully implemented, the United States will have the power to carry out conventional strikes against targets anywhere in the world within one hour of making the decision. The changing nature of possible threats to the United States coming from not only Russia or, for example, China, but also from so-called rogue states, terrorists, and extremist groups was also taken into account, while the use of nuclear weapons against them was considered counterproductive. In essence, the issue is the transformation of the United States' military potential to better suit future conflicts.

Those who advocate for such plans believe that GPSW will be the best deterrent against aggressive enemies on the regional level, in so far as their use is more probable. It is the suitability of high-precision long-range conventional strikes that makes the potential use of such arms against a possible aggressor more acceptable and thus improves its deterrent effect against state and non-state actors. If the deterrent does not work, targeted long-range non-nuclear strikes may be the only way to prevent an attack with weapons of mass destruction or further attacks after such an act of aggression.

Good range, speed, damage, and efficiency characteristics, together with a prompt reaction capacity, will enable the armed forces to implement virtually the same tasks as with the use of nuclear weapons. The American military men believe that GPSW will help make a swift shift to planning and carrying out strikes against targets thousands of miles away in the case that the United States president makes such a decision based on operational intelligence data. They claim that for a prompt strike to be possible, the data collection, decision-making, and its implementation should be provided in no more than several minutes.

Another advantage of GPSW, according to U.S. experts, is that they are relatively cheap in comparison with the incalculable costs of the use of weapons of mass destruction.

I would like now to critically examine these arguments. The United States continues to state that it is necessary to solve individual tasks in the framework of the war on terrorism. At the same time, when speaking about possible particular cases of the use of such missiles, the United States primarily cites possible strikes against bases, places where terrorists gather or where their leaders meet. However, the indicated type of weapons does not seem to be very effective for such purposes.

First, such gatherings and meetings rarely take place in isolated areas, so the use of such weapons, due their high-damage capabilities, would lead to many victims among civilians.

Second, such targets are quite mobile. The long flight time of ICBMs, as well as the time necessary for the preparation and authorization of similar launches, would hardly guarantee the destruction of moving-point targets. It is enough to look at the situation with the use of unmanned aerial vehicles (UAVs) in Afghanistan against Taliban troops. In spite of their incomparably small size, low management efficiency, and limited firing power, the so-called collateral effects of the use of UAVs including use of weapons among civilians are quite considerable. What would be the consequences of the use of strategic missile systems to carry out targeted lethal strikes? However, the humanitarian aspects of the use of such weapons for targeted destruction of militants and terrorists raises huge doubts. What would be the price of a possible intelligence mistake?

Third, the United States already has its military forces here and Navy close by. This allows them to carry out a powerful strike against the enemy with the use of high-precision weapons in the case of a crisis. Therefore, it can be stated with a high degree of certainty that the probability of a situation in which the United States will have to resort to GPSW is extremely low, especially if compared with possible side effects in terms of strategic stability. The cost efficiency of the development and creation of such expensive weapons systems just to eliminate terrorist leaders raises serious doubts too. Therefore, the United States' arguments in support of the production and deployment of such weapons do not seem convincing.

SECURITY INDEX: What is in reality behind the United States' plans to build GPSW? What is the United States expecting to have?

ANTONOV: It seems evident that in the case of successful Prompt Global Strike implementation, based largely on GPSW, the United States Armed Forces will be strengthened by powerful, modern offensive arms as a solid foundation to enable them to perform global missions at sea, on land, or in space. Due to their good characteristics, such missile systems will be capable of performing tasks that today are supposed to be carried out by strategic nuclear arms.

At the same time, the level of decision-making on the use of GPSW could be lowered significantly in comparison with nuclear deterrent systems. We would like especially to emphasize the fact that in the case that GPSW are accepted, the key factor of the so-called nuclear uncertainty and unpredictability will remain. It is necessary to point out that all the United States' declared global strike-related targets are located in immediate proximity to the Russian and Chinese borders.

This is why any launch of non-nuclear ICBMs and SLBMs in the direction of the territory of the Russian Federation or China might be viewed as a missile attack, thus dramatically raising the risk of the launch of a counterattack strike. We believe that the American military experts understand well that it is impossible to identify the real arming of an ICBM or SLBM, both nuclear and non-nuclear, after launch.

SECURITY INDEX: How will the Russian side act in the case of detection of such a ballistic missile launch?

ANTONOV: The Russian missile warning system is designed in such a way as to ensure maximum decision-making time for the military and governmental authorities. That is why the system facilities are located as close as possible to the national borders, and their zone of action covers the air of several thousand kilometers away from the stand point. Taking into account that most dangerous terrorist regions are adjacent to Russian territory, any end-point launches of missiles in those regions will be detected by Russian means and considered, as a rule, as offensive. This is dictated by the physics and geography of the missile launch detection.

When taking the decision to respond, the Russian military men will act on the assumption that the missile carries a nuclear warhead. Moreover, under the condition of the obvious lack of time to make a comprehensive assessment of the operational situation, the basic response actions will be carried out under the automatic regime. A legitimate question then arises. Does everybody fully understand the disastrous nature of the risk posed by such unidentifiable warheads?

In the context of problems, serious questions remain as to the consequences of partial equipment of launches on American ballistic missile submarines (SSBNs) with non-nuclear SLBMs. In this case, the problem remains of how to prevent accidental and unauthorized launches of SLBMs equipped with nuclear front sections during combat patrolling of SSBNs equipped with missiles of mixed configuration. The repeatedly duplicated launch and launch implementation of authorizations are already needed. Whether this is possible from a technical point of view, frankly, I don't know. It also remains unclear how to notify other states about the launches of ballistic missiles over their territory, as well as about the areas where missile stages drop. This brings excessive conflict potential and tensions in international regulations.



SECURITY INDEX: What are the possible methods of compromise between Russia and the United States concerning the issue of GPSW?

ANTONOV: One of the potential options to reduce Russian concerns with regard to GPSW for the Americans is to consider the possibility of basing ICBMs in non-nuclear configuration in places located away from the nuclear bases of such missiles. For example, Vandenberg or Cape Canaveral, or maybe another place.

It goes without saying that non-nuclear ICBMs should have a distinctive feature to distinguish them from their nuclear brothers and be subject to inspection or demonstrations. However, such verification procedures do not give a full guarantee that under certain circumstances these non-nuclear ICBMs will not be reconverted to carry nuclear warheads.

Besides, there is an impression that no transparency measures will be sufficient in the case of very limited timelines, or lack of comprehensive information in the case of conflict when the United States makes the political decision to deliver a non-nuclear strike using GPSW.

Many ways of advancing the Russian side's concerns relating to non-nuclear ICBMs are not applicable to SLBMs. For example, non-nuclear SLBMs are supposed to be mounted on SSBNs carrying nuclear missiles. Therefore, the possibility of separate basing, as in the case of ICBMs, gets lost.

SECURITY INDEX: So, the strategic stability situation at any case changes with the emergence of GPSW. Is that correct?

ANTONOV: If we have a broader look at the situation regarding strategic stability, a rather unfavorable picture emerges from the point of view of Russian security. The implementation of global BMD-related plans, outstanding CFE programs and obvious imbalance in relation to conventional arms within NATO and Russia, the ambiguous intentions of the United States in relation to placement of an arms race in outer space, the dramatic take-off in the development of military information technologies, the prospects of implementation of the Prompt Global Strike with the use of GPSW, with further reductions of Russia's and the United States' nuclear arsenals, can undercut strategic stability and can make Russian defensive capabilities vulnerable. Such an evolution does not correspond, of course, to Russian national interests.

The reference by the United States to the new quality of bilateral relations that do not suppose military conflict between our countries cannot address our concerns either. The Russian side has repeatedly noted that the military arts should take into account first and foremost the real potential and not the intentions of the parties that can change over time, including depending on existing military capabilities.

The U.S. plans to create GPSW can serve as a serious impetus to missile proliferation. What if other missile countries are tempted to move forward and develop and improve their strategic missile armaments? We know the missile proliferation situation, we know of some countries that are capable of producing such missiles. For example, on the territory of the former Soviet Union, I can name Belarus, Ukraine, and Kazakhstan. You can look at a map and see how many other countries can develop such armaments. Therefore, we are talking about the possible launch of a dangerous new turn in the arms race based on the most advanced technologies. At the same time, there are no internationally recognized restrictions on such weapons. It is not hard either to imagine how such plans of the United States can affect missile programs of the countries that possess military and space capabilities.

Taking into account the above-stated, we believe it is absolutely possible to consider as reasonable all the concerns of reliable experts in relation to the development and improvement of conventional high-precision strategic missile systems, which, especially along with the improvement of ballistic missile defense systems, can not only freeze the reduction of nuclear armaments, but reverse it. It's hardly possible that such a scenario corresponds to the interests of the international community.

The development of GPSW can give a start to the strategic arms race on parallel tracks, that is, nuclear and non-nuclear. Moreover, the research and development efforts in both directions can be mutually complemented and fuelled. It is illustrative that the United States builds scientific and

technical capacities related to the design of high-precision missile systems for delivery of conventional military equipment to the intercontinental range, which can also be used to develop high-precision nuclear combat blocks, or ICBMs and SLBMs.

It can be stated that strategic missile systems in non-nuclear configuration are capable of having a serious negative impact on international security and can really undermine strategic stability. Their use can not only impede the soonest conflict resolution the American developers are thinking about so much, but vice versa can aggravate the international situation by increasing the possibility of the use of weapons of mass destruction due to the incorrect perception by Russia or China of the objectives of the launch of GPSW.

SECURITY INDEX: Does Russia currently invest in non-nuclear strategic weapons? Were the United States and Russia to decide that it would make sense to limit developments, what types of arms control approaches might be suitable?

ANTONOV: The initial position of Russia on this issue was prohibition of such weapons, because we don't want to start an arms race. The United States pushed us, and we are forced to start such an arms race in the future. I don't know what kind of agreement on this type of missiles would be possible. But the best way of course is to prohibit such types of weapons.

We offered to the United States to fix this idea in our agreement, but the United States refused. And then we decided to use the experience which we got from START-I, where we consider all launchers as launchers that could carry nuclear weapons. So, they are included in the ceilings of the new treaty. I don't know when the next treaty will be, but I would like to make it clear that for us there is no option. One of our demands will be that all such weapons are included in future ceilings.

SECURITY INDEX: How many launchers and warheads would be enough to guarantee Russia's security, even in the context of the GPSW development by the United States?

ANTONOV: At this stage, Russia needs 1550 warheads plus 700 deployed launchers. At the next round of discussions and conversations with our American friends, and with other P5 members, we will sit together and we will look at the situation and our military experts will say how many warheads they need. Don't forget that we just celebrated the third anniversary of the New START. We have seven more years, and our task with the United States is to honestly fulfill our obligations under this treaty.

It's not possible today to realize what kind of situation there should be in the future, taking into account just one parameter—the nuclear balance between the United States and Russia. Our life is richer; we have some other problems on which to take up discussion. For example, the United States as well as other countries such as Germany is raising the question of non-strategic nuclear weapons, and non-deployed warheads.

SECURITY INDEX: What problems are to be solved at first to make our positions close and to start the next round of Russian–U.S. negotiations on strategic arms?

ANTONOV: First of all, it's missile defense. If you look, for example, at our treaty, you will see how many times we made reference to missile defense. In the preamble, we agreed that the current status of missile defense does not create any problems for Russian nuclear deterrence. In the body of the treaty, we mention that all missiles at Vandenberg, which were converted to implement non-nuclear missions, were under strict control, and at the end of our treaty, the Russian side made a statement—if in the future there are some changes regarding missile defense and we understand that these changes could undercut Russian deterrence capability, then we will have the right to withdraw from the treaty.

Second is strategic stability in the context of GPSW. If you look at the bilateral document from 2009 signed by our two presidents, you will find this problem in one sentence. GPSW is a problem which we had to solve. There was no reference to what kind of effect for strategic stability we see from these arms.



Third is the situation with France and the UK regarding their nuclear arsenals. Of course, my colleagues can say that they possess only a few hundred warheads and delivery systems. But the reality is that there is a lack of confidence and trust between us, between NATO countries and the Russian Federation. We have a lot to do to become real partners in various spheres. That's why we are looking at the potential capability of France and the UK from the point of view that they are in one alliance. And that's why we are insisting that the next round of negotiations should be multilateral; at least we have to take into account the capabilities of the UK and France. The problem is an imbalance in conventional arms. We must also take these elements into account for future negotiations.

The fifth problem is outer space. Now it is not clear whether the United States is thinking about the possibility of deploying weapons, or has decided not to do it for a civil future. There is a lack of predictability here. Mostly all decisions taken by the United States depend on who leads the White House. That is why Russia needs legally binding assurances.

I hope that very soon we can return to the discussion table. But a lot of work has to be done before the next round of negotiations. During the New START negotiations I offered to the United States team to continue our discussions on real problems, and not to stop our negotiations. At that time, the United States didn't support me. I hope that the United States will support me now.

SECURITY INDEX: What is the potential for greater threat assessment, or at least an exchange of views on the current threats that Russia and the NATO countries face together?

ANTONOV: I remember some bilateral documents within the United States and Russia on threat assessment. In 2009, the two presidents signed a bilateral statement. There are three parts. First message—the United States and other NATO countries plus Russia have to sit at the table to make a threat assessment. Second—experts must review what kind of tools we have to tackle this problem. Third—experts have to provide other means and tools to deal with this issue. Excellent statement!

If we look at the UN SC Resolution 1540, we can find the main threat to NATO and to Russia. It's a nexus between terrorism and weapons of mass destruction. Together with NATO countries, and together with non-aligned countries, we must do a lot to protect ourselves. Nevertheless, it's impossible to strengthen my security at the expense of UK security, for instance. Everything has to be done taking into account principle of indivisible security.

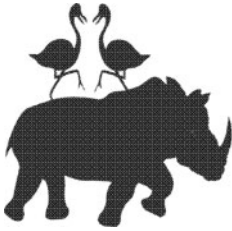
Another forthcoming threat (or challenge) is the situation on the territory of Afghanistan. Our colleagues from NATO are looking at the situation in Afghanistan from the south. We offered to look at the situation from the north, from Tajikistan, from Kyrgyzstan, from the point of view of our allies. If we combine our capabilities and our efforts, especially after 2014, it will be in the interests of the security of all European countries, as well as the Russian Federation.

As to the proliferation of missiles, of course all the parties are very concerned. Russia prefers political, diplomatic means and tools to deal with this issue. I am against the creation of such a defense that could create a problem for the United States. And I know how difficult it is to find a consensus in NATO on this issue. However, we have to forget that we were enemies in the past. Today we are partners.



NOTE

¹ The interview is based on Amb. Anatoly Antonov's speech at a joint meeting of members of the *Centre russe d'études politiques* and the *Trialogue Club International* organized by the PIR Center in Geneva, on April 24, 2013.



Cornel Feruta

NGOs PLAY A PIVOTAL ROLE IN THE NPT REGIME

The 2nd NPT Preparatory Committee (PrepCom) in advance of the 2015 NPT Review Conference took place in Geneva from April 22 to May 3, 2013. What new developments did the 2013 PrepCom bring to the NPT review process? What new issues to discuss appeared on the agenda in 2013? Was the work on the Middle East WMD-Free Zone at the PrepCom effective? Does the Oslo process impact the NPT review process? How can the participation of NGOs in the review process be evaluated?

We have put our questions to the Chair-designate of the 2013 NPT Preparatory Committee, Director General of the Romanian Ministry of Foreign Affairs, Romania's Resident Representative to the IAEA and UN organizations in Vienna, Amb. Cornel Feruta.

SECURITY INDEX: At the PIR Center seminar on April 19, 2013 ahead of the PrepCom you said, "I was told when I started preparations that the second PrepCom is the easiest one. So I started to believe it. And I think I believed it for some time. But then I realized that other people would tell me: 'Be careful with that because this is a toughest part.'" Looking back now, what would you say about it?

FERUTA: I would say that both opinions are correct. The meeting in Geneva benefited a lot from an already agreed agenda—and this is the easy part. Therefore, energy and resources that are normally invested in agreeing this could be used to discuss its substance. For the more unpredictable developments, I recall that the climate before and during the session was considered to be challenging, with a certain negative potential. This is what I suspect the other colleagues meant.

The PrepComs are not decisional forums but it is clear for me that what was discussed in Geneva in 2013 will impact on the development of the 3rd PrepCom and of the Review Conference itself. This is the key through which the 2nd PrepCom should be assessed—many issues surfaced on the agenda, issues that will be dealt with in 2015 in New York. The 2nd PrepCom has the merit of paving the way with the aim of maintaining and strengthening the NPT regime.

SECURITY INDEX: Do you see the second Preparatory Committee as a success? Did you accomplish all of your plans as the Chair?

FERUTA: I have not yet discovered the magic wand that could measure success. If success means having a by-now traditional outcome in the form of a Chair's summary that documents where we are in the NPT implementation process, then I would say it was a successful PrepCom. If success is meant as actual progress in implementation of the Treaty, as well as the 2010 Action Plan, then I believe we need to be realistic. In my mind, more concrete results are needed in order to call a PrepCom a successful meeting.

My objective was not to identify definitive solutions to all the delicate issues on the agenda. This would not be realistic for a meeting that is part of a review cycle and is at the center of the effort that states parties are developing. My aim was, rather, to create a context that would allow states to tackle all these issues in a non-divisive way. To a certain extent I think this objective has been fulfilled. The good news is the language used in the Chair's summary and I think that all the states



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parties like the forward-looking approach because the 2013 language serves as a turning point in building the 2015 language.

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SECURITY INDEX: Did you foresee the decision of the Egyptian delegation to leave the meeting? How did the Egyptian boycott affect the work of the PrepCom?

FERUTA: Before the 2nd PrepCom started, there were indications that some Arab states were disappointed by the manner in which the subject of the Helsinki Conference was dealt with. I was thus aware of the possibility. The decision taken by our Egyptian colleagues was a political option, not followed by other Arab delegations, which is, in turn, a political signal that they are ready to address the Middle East issue, leaving a door open to dialogue and compromise. It is not for me to comment on a decision taken by a sovereign State party to the NPT. I was always of the opinion that however delicate the issues on the agenda, the NPT offers the platform to deal with all of them, in a spirit of dialogue. The Egyptian delegation made an important contribution to this session—it took part in more than half of the sessions, which included most of the debates, with the exception of the third cluster and special issues under that specific cluster.

SECURITY INDEX: Would you categorize the work on the Middle East WMD-Free Zone at the PrepCom as effective?

FERUTA: The effectiveness of the work of these preparatory committees must be judged in the context of the review process as well as in the context of the concrete results. The Middle East WMD-Free Zone has, since the 2010 RevCon outcome, entered into a specific logic that does not pertain to the PrepCom per se. The PrepCom was informed about activities and preparations for the ME NWFZ Conference, but again, not being a decisional forum, it is difficult to say that the works of the PrepCom have been effective with regard to the actual establishment of the zone. The meeting in Geneva could have not interfered with the process that is being managed by the facilitator and the conveners but I certainly hope that the PrepCom was effective in drawing attention to all states parties on how important this issue is and will continue to be for the entire review cycle and especially for a successful Review Conference in 2015.

SECURITY INDEX: Does the Chair’s draft summary represent the views of the majority of delegations? Is there a particular reason you chose to write a summary report instead of seeking, say, a consensus document?

FERUTA: The Chair’s Summary is a document that the Chairman is responsible for. I certainly hope that the summary reflects to the largest extent possible the widest range of themes and opinions voiced by the states parties during the meeting. I wouldn’t characterize the summary as a majority opinion. There is no precise measure to correctly quantify the opinions of all states parties regarding the NPT regime.

The main drive in drafting the Chair’s summary was to reflect the views expressed by states parties and to strike a balance between the three pillars and relevance of all issues to all NPT states parties. I tried to offer an encompassing summary, acknowledging that the NPT community of states shares common goals. The current form of the Chair’s summary is confirmation that the NPT is not locked into a technical discussion, but it is rather prone to political negotiation. And as a diplomat, I felt that for 2013 it is best to avoid any significant controversy. In my opinion, the summary offers a very correct reflection of the complexity and sensitiveness of the context we are still in.

SECURITY INDEX: How would you estimate the participation of various formal and informal groups of countries (P5, the Non-Aligned Movement [NAM], the New Agenda Coalition [NAC], the Non-Proliferation and Disarmament Initiative [NPDI]) in the review process? Did you as Chair work with those groups as single entities or pay more attention to individual member-states?

FERUTA: I was very pleased by the extent of cooperation that I was granted by all the groupings inside the NPT regime. Coming from a country that values compromise and dialogue like Romania, I felt that it was necessary to find ways and means to engage as many delegations as possible. The spirit of my consultations was comprehensive and I worked closely with all the regional and political groups such as Eastern European Group (EEG), the Western European and Others Group (WEOG), NPDI, NAC, NAM, the EU, etc.

It is easier to meet and discuss difficult issues with only a few representatives and it is more time- and energy-consuming to meet the groups as such. But it is also more rewarding to give everybody an equal chance for participation in backroom discussions. Everybody has the possibility to voice their concerns not just in a formal setting, such as the PrepCom, but also informally. I think it was helpful for me but also for the delegations to make the effort and meet the regional groups several times, not only during the pre-session phase but also during the PrepCom itself.

If I were to take your question further, I would say it is not an overstatement to qualify the civil society present in Geneva as one informal group that proved to bring substance to the debates.

SECURITY INDEX: 80 NPT states parties (some 75 percent of the participating delegations) have co-sponsored the “Joint Statement on the Humanitarian Impact of Nuclear Weapons”. How do you explain this growing unanimity? Does the Oslo process impact the NPT review process?

FERUTA: The Oslo process, as you correctly infer, is a parallel process to the NPT review process. The way the former will impact the latter is up to states parties to decide. The humanitarian approach has been clearly gaining support during the last few years. There is a generous thinking behind it and its future will most probably depend on how the states involved in the Oslo process will carry it on, and how they will manage to formulate and bring forward concrete policy proposals that will indeed push the NPT process further. As Chair, I tried to reflect as accurately as possible, but at the same time as constructively as possible, an issue that is being looked at from different and diverging angles by states.

SECURITY INDEX: In 2014, the P5 will have to present their achievements in implementing disarmament measures from the 2010 Action Plan. Do you see any significant progress in this field? If the plan is not implemented 100 percent, how are the non-nuclear weapon states most likely to react? What do you think these states would consider as the bare minimum marker of successful implementation?

FERUTA: I cannot foresee the future but I expect that the P5 will come to the 2014 PrepCom prepared to deliver. I believe they are fully aware of the importance placed by all states parties on the fulfillment of the Action plan with regard to nuclear disarmament. Some action items are difficult to measure very precisely when it comes to the implementation part but this will not stop the states evaluating the depth and sustainability of actions that were and will be undertaken by the nuclear-weapons states. There is hope shared by many states parties that the now regular P5 meetings will produce some concrete results and its membership will continue to be firm in its determination to achieve them as soon as possible.

SECURITY INDEX: How do you evaluate the participation of NGOs in the review process? What is your opinion of the side-events of the PrepCom and particularly the presentation of the PIR Center’s White Paper “Ten Steps towards a Middle East Weapons of Mass Destruction-Free Zone?”

FERUTA: I considered myself one of the main beneficiaries of the NGOs’ activities, before and during the PrepCom. Many landmark seminars, conferences, and events are being organized regularly by very dedicated civil society organizations. They are one of the main drivers behind the much needed encounters of governmental experts and decision-making actors with the NGOs and academic representatives in order to take stock of the latest developments or lack thereof, but also to promote innovative thinking and creative solutions for further advancements.

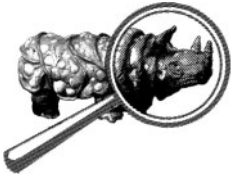
I truly believe the NGOs play a pivotal role in the NPT regime; they are the link between a relatively small community of governmental experts and the interests and desires of the wider society. I attended as many side-events as I could during the PrepCom and each of them caught my attention, either through a new perspective and the spin they brought to the discussion or the active involvement and the advocacy work they do. The PIR Center’s event was a very timely one since the Middle East Conference was on everyone’s mind. It allowed for a close encounter with the main players—Egypt, the United States, the Arab League, the Russian Federation—and for a good glimpse at each one’s approaches and perspectives regarding the process.

SECURITY INDEX: In 2013 for the first time during the review process, the delegation of the Netherlands emphasized cybersecurity among the new threats and challenges. Do you have any comments on this? What new issues to discuss appeared on the PrepCom agenda?



FERUTA: In the context of the latest developments and estimates regarding the expansion of capabilities of waging cyber-war, it was just a question of time until states parties would bring the issue of cyber security into the discussion. This is an issue that is gaining momentum in security-related debates, but it is not really part of the core items on the PrepCom's agenda. I am not sure that the states parties have the benefit of true expertise on this matter within their NPT PrepCom delegations. Of course, states parties are sovereign in identifying the threats and challenges the regime is facing, and it might find its way into larger debates related to nuclear security.





Oleg Shakirov

CONVENTIONAL ARMS CONTROL IN EUROPE:
OLD PROBLEMS, NEW SOLUTIONS

The definition of conventional arms control in Europe (CACE) remains a subject of debate. For one thing, how should the borders of “Europe” be defined? Is it a matter of politics or geography? Should the area covered by CACE arrangements be contiguous, or can there be exceptions? Should it expand, or stay within its historical borders?

Another area of debate is the weapons categories that should fall under CACE arrangements. What should the procedure be for revising or amending the list of controlled weapons to make sure that the CACE regime is effective and up to date? There are also important questions about the purpose of such controls and their precise mechanisms.

This paper offers an analysis of the complexities facing any future CACE regime. It also looks at the proposals being made by various international players, with a special emphasis on the political aspects, including Russian policy in this field.



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THE EVOLUTION AND CRISIS OF THE CACE REGIME

Speaking of the milestones that have led us to the current state of the CACE regime, the first thing to mention is several rounds of talks on Mutual and Balanced Force Reductions (MBFR) between NATO and the Warsaw Pact. The talks began in 1973, during a period when international tensions seemed to subside, and were initially aimed at conventional forces reductions only in Central Europe.

The Conventional Forces in Europe (CFE) Treaty, a cornerstone of European security, was signed on November 19, 1990, and entered into force two years later. In the 1970s the participants in the talks discussed only reductions in the numerical strength of the armed forces. The CFE Treaty, however, introduced ceilings on the numbers of conventional weaponry in several different categories, including main battle tanks, armored vehicles, artillery systems with a caliber of 100mm or more, combat aircraft, and attack helicopters. The primary goal of the CFE Treaty was to eliminate “the capability for launching surprise attack and for initiating large-scale offensive action in Europe.”¹

The break-up of the Soviet Union and the emergence of the new independent states necessitated an adjustment of the CFE provisions. Changes were made to the area of application of the treaty: the Baltic states refused to join the CFE Treaty after gaining independence. Also, in order to redistribute the rights and responsibilities of the former Soviet Union under the treaty, in 1992 eight post-Soviet states, including Russia, signed the Tashkent Agreement on the principles and procedures for implementing the CFE Treaty. The agreement distributed the Soviet Union’s maximum national levels of holding under the CFE Treaty between the eight states.

Changes in Europe resulting from the dissolution of the Warsaw Pact, the break-up of the Soviet Union, and the beginning of NATO’s eastward enlargement also made it necessary to adapt the CFE to the new situation. In 1996 the parties signed the Flank Agreement to the CFE Treaty at the first CFE Review Conference; the document changed the size of the flank regions under the treaty

(i.e. the areas subject to the strictest limits on weapons holdings). The conference also agreed that “the State Parties will consider measures and adaptations with the aim of promoting the objectives of the Treaty and enhancing its viability and effectiveness.”² The resulting negotiations eventually led to the signing of the Agreement on Adaptation of the CFE Treaty in 1999.

The Adapted CFE reflected the end of the confrontation between NATO and the now-defunct Warsaw Pact. Instead of maximum levels of holdings for the two military blocs, the document introduced national and territorial ceilings for each individual state party. Article XVIII of the treaty also stipulated that any OSCE member-state whose territory falls under the treaty’s area of application could join the Adapted CFE.

But the Agreement on Adaptation never entered into force. Only four state parties—Belarus, Kazakhstan, Russia and Ukraine—ratified the document (although Ukraine has yet to submit the ratification certificates to the depositary). Moldova, Georgia, and the NATO countries refused to begin the ratification process, insisting that Russia should first pull out its troops from Moldovan and Georgian territory in accordance with the political commitments Moscow undertook in Istanbul in 1999.

In the end, attempts to link CACE issues with regional conflicts in Europe—attempts Russia saw as wrongful—became one of the obstacles to further evolution of the CFE Treaty. The process was obviously dragging on without any meaningful progress for far too long. That was especially obvious against the backdrop of new waves of NATO’s enlargement, and energetic new efforts to station elements of the U.S. missile defense system in Europe. In Russia such trends were seen as a threat to national security. Moscow also insisted that even the adapted version of the CFE Treaty had already become obsolete, and that measures were required to update it and ensure its entry into force.

As a result, in 2007 President Vladimir Putin issued a decree suspending Russia’s observance of the CFE and all related international agreements.³ The decision was made after an extraordinary conference of CFE state parties, which was convened on Russia’s initiative, failed to yield any results. For their part, in November 2011 the United States, other NATO participants of the CFE, and Georgia refused to continue providing Russia with any information about their armed forces in accordance with the CFE requirements.

There has been no discernible progress at the talks on the future of the CFE Treaty; as a channel of information exchange between Russia and the NATO countries, the treaty has essentially ceased to exist. This has increased the importance of such mechanisms as the Vienna Document on confidence- and security-building measures, and the Treaty on Open Skies.

The Vienna Document is a set of confidence- and security-building measures (CSBM) agreed at the CSCE/OSCE level; it is a politically binding document signed by 56 states in Europe, Central Asia, and North America. In November 2011 the OSCE Forum for Security Cooperation (FSC) adopted a new revision of the Vienna Document, the first such update in 12 years, containing new and enhanced security and confidence-building measures on top of the arrangements agreed in the previous documents, including the Stockholm Conference document of 1986, and the Vienna Documents of 1990, 1992, 1994, and 1999.

In terms of CACE modernization, the key innovation introduced in the 2011 Vienna Document (VD) was a clause stipulating its regular updates. Any FSC decisions to make changes to the document are now designated as VD Plus, and enter into force on the day of adoption by default, unless specifically agreed otherwise. All these changes are then incorporated into the latest VD revision, to be adopted at least once every five years.⁴

In the opinion of Steven Pifer, since Russia continues to comply with its VD-2011 commitments despite suspending its observance of the CFE Treaty, “one possible way forward would be to set aside equipment limits for the time being and focus on expanding the Vienna Document CSBMs to include some of the transparency and observation provisions of the CFE Treaty.”⁵

From Russia’s point of view, stepping up efforts to update the 2011 Vienna Document could help to restore balance in the OSCE’s work through greater focus on the *first basket* (the military-political aspects of security); Moscow has long been concerned by what it sees as a lack of attention to that basket. For example, speaking in 2006 at a meeting of the OSCE Ministerial Council, Russian Foreign Minister Sergey Lavrov said that “on the military-political track, work programs are getting weaker every year, and increasingly being confined to minor subjects.”⁶

Another element of the CSBM system in Europe is the Treaty on Open Skies (TOS), which entered into force in 2002. The treaty currently includes 34 OSCE state parties, but it is open for signature by other countries as well. It enables the participants to conduct surveillance flights over each other's territory; in addition, imagery collected during such missions must be made available to any state party upon request.

On the whole, the Russian Foreign Ministry appreciates the role of the TOS in augmenting the transparency of military activities. Nevertheless, Russia has noted that the effectiveness of the treaty has been reduced by the decision of the NATO countries not to conduct surveillance flights over each other's territory. As a result, Russia is unable to obtain the aerial imagery that would have been produced by such flights.⁷

Moscow is even more concerned by Georgia's decision to suspend its observance of TOS requirements with regard to Russia in 2012. The situation has resulted from differences between the two countries over the status of Abkhazia and South Ossetia; the Georgian decision came after Russia restricted flights over its territory along the Abkhazian and South Ossetian borders.

To summarize, the conventional arms control regime in Europe is currently in a state of uncertainty, and its effectiveness is fairly limited.

POSITIONS OF THE KEY PLAYERS ON CACE MODERNIZATION

In Russia's view, the nature of the problem is that even though state parties are supposed to participate in the adapted CFE Treaty on an individual basis (maximum national and territorial holding levels have been agreed for each individual state regardless of its membership of any defense alliances), the NATO members still act as a single bloc on all CACE-related issues. Russian Foreign Minister Sergey Lavrov had this to say on the matter: "We are confident that membership of military-political alliances should not be the decisive factor for participation of individual European states in CACE talks and in any new CACE arrangements."⁸

There is also an important military consideration to take into account. The 22 NATO members that participate in the CFE have a massive superiority over Russia in all weapons categories covered by the treaty. They have approximately 220 percent more tanks, 130 percent more armored personnel carriers, 190 percent more artillery systems; 110 percent more combat aircraft; and 170 percent more attack helicopters.⁹

Of course, since confrontation between the two military blocs has long ended, there is no reason to seek parity between Russia (plus its allies) and NATO. But the problem of eliminating excessive weapons stockpiles and reducing the maximum levels of holdings has yet to be fully resolved. Wolfgang Zeller, deputy director of the Institute for Peace Research and Security Policy at the University of Hamburg, believes that "as the holdings of most NATO states are substantially lower than their ceilings, they could decrease their ceilings without difficulties."¹⁰

Russia's perception of the existing imbalance as a problem has not remained unnoticed in the West. The Western capitals are concerned that if the CFE Treaty cannot become an effective mechanism once again, "Russia will increase its reliance on tactical nuclear weapons to defend itself from what Moscow now sees as NATO's conventional superiority in Europe."¹¹

Clearly, the problem of equality is relevant not only for the CACE situation but also for broader relations between Russia and NATO, as well as for the process of making collective decisions on strengthening European security. Moscow has repeatedly stressed that all countries' interests must be taken into account in this area—and that is something that could not be achieved in the CFE framework. It appears that the Russian leadership is very pessimistic about the outlook for resurrecting the CFE Treaty. In May 2013 the Russian defense minister said, for example, that the mechanism was essentially dead in the water.¹²

Russia's growing unhappiness over inequality in various multilateral formats has resulted in its increasingly obvious preference for more predictable bilateral arrangements with individual states. Sergey Koshchev, head of the MoD's main directorate for international military cooperation, believes that pursuing military and technical cooperation between Russia and such individual NATO members as France, Germany, and Italy is now the preferred Russian approach. This approach is based on the notion that a country that plans to wage war on some putative adversary would never buy weapons systems from that very adversary.¹³



One of the reasons why talks on ways of modernizing the CACE arrangements have ground to a halt is that most players no longer perceive conventional weapons as a major threat. Rose Gottemoeller, acting under-secretary of state for arms control and international security, had this to say on the matter: “Today, for the most part, quantities of conventional armaments across the continent are far below the negotiated ceilings, and are likely to continue to drop.”¹⁴

According to Sergey Koshelev, at present “most countries are moving away from the concept of developing heavy armed forces armed with tanks, armored vehicles and attack helicopters.”¹⁵ The pullout of the last American tanks from Europe in March 2013 has been a symbolic milestone in that regard.¹⁶ The situation with conventional armaments in Europe is not really causing any major concerns in most of the capitals (with the exception of those directly engaged in armed conflicts). It would therefore be problematic to reach a consensus about the dangers of the degradation of the CACE regime. Moscow, for example, has proposed a joint discussion of conventional weapons-related threats facing Russia and NATO, but the proposal was not supported by the alliance.¹⁷

At the same time, individual European states have their own distinct positions on the issue. The French believe that the degradation of the CACE regime can trigger a new arms race.¹⁸ The Czech Republic worries that the erosion of mutual commitments in this area can lead to an uncontrolled accumulation of conventional weapons stockpiles, especially in the areas of protracted unresolved conflicts.¹⁹ The Italians are not really concerned about the risk of armed aggression; they think the main question is whether Europe can actually adjust itself to the new situation.²⁰ German diplomats have aired similar thoughts.²¹

The CFE crisis, which culminated in Russia’s suspension of its observance of the CFE Treaty, has demonstrated that the CACE regime needs radical modernization, which must not be limited to simply reducing the ceilings and holdings.

PROBLEMS FACING THE CACE REGIME

Any future agreement must aim to produce an equitable, coordinated, and mutually acceptable approach to making important decisions on European security and overcoming the lack of trust between the participants, as opposed to merely preventing a large-scale military offensive.

Deliberately or not, by suspending its observance of the CFE Treaty, Russia has shifted the focus of the dialogue towards mutual transparency. That is why any attempts to improve the CFE Treaty itself or achieve its ratification would probably be unproductive. This dialogue is tied to numerous political issues; it will probably continue for face-saving reasons, but it is unlikely to yield any results in the medium time frame.

The issues that will need to be addressed in the near future include conventional arms control in regional conflict zones. This has been a particular stumbling block for Russia and the West. A longer-term goal is to increase the scope of controls to cover new types of weapons that are not currently limited by the existing regime. One possible advantage of pursuing this path is that it is not encumbered by political differences, so any progress in this area can demonstrate that CACE talks can actually yield tangible results.

At the same time, the only party interested in new limitations would probably be the one that currently has the lesser capability, i.e. Russia—and its initiatives will not necessarily be backed by its partners. Another important question is the format of any future discussions.

POSSIBLE CACE TRANSPARENCY MEASURES

Speaking of military information exchange, one productive area for further CACE talks would be to restore the level of openness that existed before Russia suspended its observance of the CFE Treaty, and before the NATO states and other CFE Treaty members took their steps in response. Vladimir Baranovsky, deputy head of the IMEMO Institute of the Russian Academy of Sciences, believes that Europe would be very appreciative of a unilateral Russian move to restore CFE transparency and a comprehensive controls regime.²² But according to Foreign Minister Lavrov, Russia cannot agree to such measures, which would essentially mean a resumption of Russian observance of the CFE Treaty.²³

Without the resumption of Russia's participation in the Treaty, however, it would not be realistic to expect any new measures to increase transparency. The Russian Foreign Ministry has lost interest in inspections because the process has essentially become a one-sided inspection of Russia following NATO members' decision not to inspect each other.

Moscow recognizes that in this particular regard the mechanism based on the Vienna Document 2011 is preferable because "The Vienna Document is more about cooperation than controls."²⁴ Some experts say that lack of progress in the CFE talks can be compensated for by making changes to the 2011 Vienna Document—but any such changes are unlikely to strengthen the control mechanisms. In fact, Russia seems more comfortable with the current situation whereby its armed forces are subject to much less stringent controls.

It would be useful if any future transparency measures were to include an increased presence of foreign observers at military exercises. Russia is ready for greater openness in that regard, as suggested by its invitation for several foreign countries to send their military attaches to the Caucasus 2012 drills,²⁵ even though the event was below the notification and foreign observation threshold agreed in the 2011 Vienna Document.

NATO has been sending similar signals. For example, it intends to hold briefings for Russian military officials about the Steadfast Jazz 2013 exercise scheduled for November 2013.²⁶ Also, according to a NATO military officer, Russian officials will be invited to attend parts of the exercise to see what is going on.²⁷

Despite occasional recriminations, the parties are ready to invite observers to medium-level exercises. They could therefore discuss lowering the threshold of the military events that require prior notification and the invitation of observers. At Russia's initiative, the Forum for Security Cooperation has adopted the VD Plus decision. According to that decision, "In the absence of any notifiable military exercise or military activity in a calendar year, the participating States will provide notification of one major military exercise or military activity...held on their national territory in the zone of application for CSBM..."²⁸ which is below the threshold levels.

To make sure that CACE inspections are held in a spirit of equality and facilitate cooperation instead of stoking up divisions, it would be useful to develop a mechanism whereby the inspection teams are formed on a multilateral basis, and with a more even distribution of inspections across the states. With such an approach, inspections will be perceived as collective rather than discriminatory measures. In addition, this will reduce spending on inspections by some individual states. Rose Gottemoeller has voiced a similar proposal concerning the joint use of equipment under the Treaty on Open Skies in order to cut costs.²⁹

CACE AND REGIONAL CONFLICTS

Russia is vehemently opposed to linking regional conflict settlement with CACE problems; it regards such an approach as wrongful and counterproductive. The decision by most of the CFE Treaty participants to drag their heels on the ratification of the Agreement of Adaptation under the pretext of Russia's non-compliance with some of its regional conflicts-related Istanbul commitments has brought the talks to a deadlock.

It is safe to say, however, that after a period of time some of Russia's partners have recognized the failure of this approach. Speaking of the CFE Treaty, Rose Gottemoeller has said that international agreements on arms control are not supposed to resolve every single bilateral problem or other problems, such as frozen conflicts. She believes, however, that such agreements can build trust between their participants and thereby improve security in conflict zones.³⁰

The European countries have different approaches to this problem. German officials say, for example, that frozen conflicts cannot be dropped from the agenda of the CACE talks.³¹ But an Italian diplomat recognized in a personal interview with the present author that using the CFE Treaty to resolve political problems is not the right approach.³² A representative of the French embassy in Moscow voiced a similar view. Since the policy of linking conflict settlement and arms control has been unproductive so far, it can be assumed that in the medium term the issue will at the very least become less of a problem, although it will still be the main stumbling block.



During talks, one of the aspects of this problem was a debate about the wording that must be chosen for the principle of *consent of the accepting party* for the stationing of foreign troops on its territory. Georgia and Moldova insist that this is admissible only within internationally recognized borders; the United States backs their position. For Russia, such an approach is unacceptable because it has recognized South Ossetia and Abkhazia, which host Russian troops, as sovereign nations that are not part of Georgia.³³

One of the proposed alternatives is a status-neutral approach, which essentially boils down to not making any linkage between political settlement and conventional arms control. As Wolfgang Zellner puts it, “the link between arms control and subregional conflicts should be replaced by political efforts to resolve these conflicts, on the one hand, and status-neutral solutions for arms control, on the other.”³⁴

A successful example of such an approach in Russian–Georgian relations is the settlement of issues related to WTO accession, in which Switzerland acted as mediator. The trade corridors between Russian and Georgia were delineated using geographic coordinates so as to avoid any mention of Abkhazia and South Ossetia.³⁵

Such settlement would be more difficult to achieve in security-related areas for various foreign and domestic policy reasons; there is also the sensitive issue of mediation. For example, speaking of the former Soviet countries, any intervention by Western representatives in resolving regional problems is seen in Russia as prejudicial and causes a lot of irritation. In order to avoid this, one of the regional states could be chosen for the role of mediator. One promising candidate is Ukraine; it is not aligned with any bloc, and can therefore act as an impartial mediator.

In a personal interview, a U.S. diplomat spoke of the need to develop a status-neutral solution of the CACE problem with regard to Abkhazia and South Ossetia. He believes such a solution would be entirely realistic. “If there are approaches whereby Russia can fulfill existing CFE commitments regarding the transparency of its forces stationed in these territories, without insisting on a solution that recognizes their independence, that could be a basis for further steps,” the diplomat said.³⁶

Russia’s own position on the transparency of its armed forces stationed in Abkhazia and South Ossetia is as follows: the MoD can provide information, but no more than that.³⁷ Any visits to Russian military bases by foreign inspectors must be discussed with the leadership of Abkhazia and South Ossetia, not with Moscow.

In actual fact, completely separating arms control problems from the issue of regional conflicts is impossible. After all, the greatest need for arms control measures is precisely in those places where armed conflicts continue or can flare up again. But that must not be a pretext for exerting political pressure during a multilateral negotiating process; such attempts have proved unproductive.

An appropriate response to such challenges would be to develop sub-regional mechanisms involving only the direct participants of the conflict in question. If these participants are really interested in achieving results, the advantage of such an approach is greater political equality and a more result-oriented nature of the talks.

FUTURE APPROACHES TO CACE DEVELOPMENT

The emergence of new types of conventional weapons that facilitate the phenomenon of contactless war³⁸ has already become an irreversible trend. In order to stay relevant for the cause of strengthening security, in the future the CACE regime will have to cover these new types of weapons, which are currently outside the scope of the CFE Treaty.

Various specialists and diplomats believe that these new weapons categories must include unmanned aerial vehicles,^{39,40} Aegis ships,⁴¹ high-precision weapons systems, and weapons based on new physical principles.⁴² Carrier-based aircraft and cruise missiles have also become an important part of modern warfare. At the same time, many experts agree that counting tanks no longer makes much sense. Nevertheless, any attempts to expand the scope of CACE arrangements so as to include new weapons categories would face obvious difficulties; the talks required to agree such a step would be very complicated.⁴³

For the purposes of control over some weapons categories, it might make sense to consider the possibility of signing separate agreements as opposed to making these issues part of the negotiating process already encumbered by all the CFE problems.

Ukraine, which assumed the rotating OSCE presidency in 2013, proposed a promising initiative in this area. It has called for an FSC dialogue “to discuss the role conventional arms control can play in the present and future architecture of European security.”⁴⁴

Ukraine emphasizes the importance of such dialogue for the countries that are not aligned with any military-political blocs; the Russian position is very similar.

Reaching an understanding about future CACE arrangements will be impossible without cooperation in the Russia–NATO format because both sides have undertaken commitments in that regard.⁴⁵ Another reason for the concerns Russia had voiced prior to suspending its observance of the CFE Treaty was that Albania, Latvia, Lithuania, Slovenia, Croatia, and Estonia were not members of the Treaty. These countries were seen as grey zones in the arms control arrangements.⁴⁶

This problem was taken into account during informal consultations on modernizing the CACE regime in the 36 format (i.e. all CFE Treaty members plus the six aforementioned states). But in the autumn of 2011 those consultations were suspended. Moscow also believes that successful talks would require NATO members to withdraw any preconditions for entering into such talks.⁴⁷ Such an approach could be effective if the parties were willing to seek a compromise—but so far, there are no signs of such willingness.

There are various opinions as to what the main aim of the talks should be. Some believe the CFE Treaty should be resurrected and adapted to the existing conditions; others advocate the signing of a new agreement. In the opinion of German representatives⁴⁸ the CFE Treaty has become obsolete and needs to be replaced by a new document. They also believe that such a document should avoid general declarations, focusing instead on smaller but more effective steps.

Special attention should be paid to CACE cooperation on the sub-regional level. A pan-European consensus on some contentious issues can be difficult to achieve—but limiting the number of participants can facilitate progress at the talks.⁴⁹ For example, one Italian diplomat said in a personal interview with the present author⁵⁰ that the problem of restrictions on the movement of weapons and hardware in the south and north of Russia (i.e. the flank regions) can be resolved by developing sub-regional verification mechanisms between the interested parties.

The Agreement on Sub-Regional Arms Control,⁵¹ the fulfillment of which many describe as exemplary⁵², demonstrates the effectiveness of sub-regional mechanisms. An important role here is played by voluntary steps by the member states to further reduce weapons stockpiles and conduct additional inspections.⁵³

On the whole, a sub-regional approach allows a greater focus on specific problems which are not being resolved—or which are being totally ignored—in a broader circle of participants. A successful outcome in this format could give a fresh impetus to the entire CACE negotiating process.

CONCLUSIONS AND RECOMMENDATIONS

As part of the modernization of the CACE regime, Russia wants to achieve equal rights with the other participants, which is part of its overall strategy of shared and indivisible security in Europe. Moscow prefers those formats of cooperation on arms control in which its partners act individually rather than collectively. That explains its decision to suspend its observance of the CFE Treaty, as well as differences with the NATO members over further negotiations. It also explains Moscow’s interest in achieving a greater degree of predictability through bilateral cooperation.


Since the stockpiles of conventional weapons on the European continent have been going down, most of the European states are much less inclined to see those stockpiles as a serious threat. They prefer to focus on transparency measures as opposed to further reductions. Meanwhile, new types of weapons that do not fall under any of the previous agreements are becoming an important factor to take into account.

One of the remaining unresolved issues is the application of the CACE regime in regional conflict zones, where there are political differences between the actual parties involved as well as outside



actors. Lack of progress at the talks on modernizing the CACE regime makes it necessary to search for other suitable formats.

This paper has looked at possible ways of addressing all these problems, and proposed the following steps:

- ❑ new updates of the Vienna Document, including a lower threshold for military activity subject to prior notification and observation;
- ❑ developing mechanisms for inspections held on a multilateral basis, possibly involving the establishment of a multilateral inspection body in order to ensure the absence of any discrimination during inspections, and also to reduce the cost of such inspections for individual countries;
- ❑ supporting efforts to find status-neutral approaches to conventional arms control in regional conflict zones. This could be a real opportunity to avoid any linkage between CACE problems and various political differences. This task requires active involvement of the expert community, including Russian experts, to develop and analyze such ideas;
- ❑ intergovernmental discussions on the future of controls over new types of weapons as part of the existing agreements or any new arrangements;
- ❑ supporting the initiative of Ukraine, the current rotating OSCE chairman, to launch a dialogue at the FSC regarding the role of conventional arms control and CSBM in the European security architecture;
- ❑ Using sub-regional arms control agreements in those cases where such agreements can help to resolve individual local problems. 

NOTES

¹ The Treaty on Conventional Armed Forces in Europe. 1990, <<http://www.osce.org/ru/library/14091>>, last accessed December 14, 2012.

² Final Document of the first CFE Review Conference and of the final act of the numerical strength talks, 1996, <<http://www.osce.org/ru/library/14103>>, last accessed December 14, 2012.

³ Russian Presidential Decree No 872 of July 13, 2007, "On the Suspension of the Russian Observance of the Treaty on Conventional Armed Forces in Europe and all Related International Agreements", <<http://www.rg.ru/2007/07/17/dovse-dok.html>>, last accessed May 14, 2013.

⁴ The 2011 Vienna Document on confidence and security-building measures. OSCE, 2011, <<http://www.osce.org/ru/fsc/86600>>, last accessed May 14, 2013.

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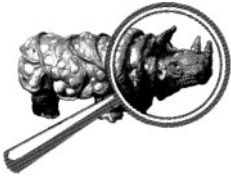
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Andrey Baklitsky

NUCLEAR ENERGY IN THE MIDDLE EAST: RUSSIA'S INTERESTS AND ROLE

In April 2008 the UAE government announced plans to hold a tender for the construction of the country's first nuclear power plant. Abu Dhabi's energetic activity culminated in the signing of a contract with South Korea's *KEPCO*. This has been a clear indication that nuclear energy in the Middle East¹ is becoming a highly profitable industry, rather than merely a source of risks and nuclear proliferation threats.

In the intervening five years the world had plunged into a deep economic crisis, which has now entered a chronic phase. Several Middle Eastern countries have gone through the Arab Spring. Japan has suffered a major nuclear accident at the Fukushima nuclear power plant; some have already proclaimed that the idea of a nuclear renaissance is dead in the water. It turns out, however, that the nuclear energy industry is still very much alive and kicking.

THE BALANCE OF POWER

The Middle Eastern nuclear energy landscape has changed beyond recognition. The region's first nuclear power plant, the Bushehr NPP in Iran, which was built by Russia's Rosatom corporation, is up and running. Contracts have already been signed for another two plants. The one in Turkey's Akkuyu will be built by Rosatom, and the Barakah NPP in the UAE by the Korea Electric Power Corporation (KEPCO). The latest deal was signed between Japan and Turkey in May 2013. A Franco-Japanese consortium of GDF Suez and Mitsubishi Heavy Industries will build another NPP in Sinop.

There is no need to explain why countries in the Middle East want to develop a nuclear energy industry. The ones that are rich in hydrocarbons want to free up the oil and gas currently being used for power generation in order to increase their exports and diversify their economies. The energy importers, on the other hand, want to reduce their reliance on oil, gas and electricity imports. Energy consumption is growing steadily in both groups of countries (at an annual rate of 8 percent in Saudi Arabia, and 7 percent in Egypt).² Speaking at a press conference in April 2013, the Turkish finance minister, Mehmet Simsek, said that in 2012 his country imported 60 billion dollars' worth of energy, and that the launch of a nuclear power plant would reduce Turkey's balance of payments deficit by about 3 billion dollars.³

The outlook for nuclear industry development in the region is therefore very promising. The tender for an NPP construction in Jordan is still open. After the completion of talks on the Sinop NPP, the Turkish government plans to select a site for the country's third nuclear power plant. Saudi Arabia has expressed interest in building 16 nuclear energy reactors. Iran has voiced its aspiration to build more NPPs on several occasions. The Middle Eastern nuclear energy market is therefore here to stay. Being a young regional market, it is interesting not just in and of itself, but also as a model for analysis of the trends which are gaining momentum in the global nuclear energy industry. Some conclusions can already be drawn.

To begin with, it is clear that the Western companies (i.e. the European, Canadian, American and Japanese corporations) are losing the competitive struggle in the Middle Eastern market to new



rivals. The NPP in Bushehr was built by Russia's Rosatom, which has also signed a contract to build four reactors of Turkey's Akkuyu NPP. This, in fact, was the first time Rosatom and Western companies had entered into direct competition for an NPP project. Meanwhile, South Korea's KEPCO, which has never built a nuclear power plant in another country, has won the UAE tender, beating French and American competition. It was only in May 2013 that France's GDF Suez and Japan's Mitsubishi Heavy Industries won the Turkish contract to build the Sinop NPP. That was the first large contract won by Tokyo and Paris since the Fukushima accident. At the same time, the Franco-Japanese offer was not the most competitive. Turkey had to make some concessions and sign a deal with Japan only because the Chinese contractors, who also expressed interest in the project, are not yet ready to build the latest-generation NPPs abroad.

As for the Jordanian tender, the Western companies do not seem to be in a good position to win that either. Areva and Mitsubishi have come out as the winners in Turkey. Amman, however, is currently facing financial difficulties, and may require greater investment commitments from the successful bidder. Incidentally, Rosatom, which is also taking part in the tender, offers very attractive financing options.

It is still too early to make any predictions about the future Saudi Arabian or Turkish tenders; it is clear, however, that Western companies will continue to face growing competition.

Against that backdrop, Rosatom's achievements seem especially impressive. Apart from building the region's first NPP in Iran and securing a large Turkish contract, the Russian state-owned corporation will also supply some of the fuel for the NPPs in the United Arab Emirates. Canada's Uranium One, which is owned by Rosatom, will supply some of the natural uranium, while half of the enriched uranium product will be sourced from Tenex.

For the Russian companies taking part in the UAE project, a share of the fuel supply contract is merely a welcome extra source of income. But Areva, which will also enrich uranium for the Barakah NPP, can hardly be satisfied with such an outcome. Finally, due to the international situation with Iran's nuclear program, Rosatom will almost certainly secure any new contracts for NPPs in Iran.

RUSSIAN KNOW-HOW

One of the key advantages of the Russian companies (and their only absolute advantage) is that unlike the other players on the nuclear energy market, Russia removes spent nuclear fuel of Russian origin back to its own territory. The only other player that offers the same kind of service is France, which removes spent nuclear fuel of French origin from seven European countries and from Japan.

A global solution for the spent nuclear fuel (SNF) problem has yet to be found. The half life of some of the radioactive isotopes contained in SNF can reach tens of thousands of years (Pu-239) and even millions of years (Np-237). No country is reprocessing SNF on a large scale, and geological repositories where radioactive waste could be brought for permanent burial have yet to be launched. As a result, nuclear waste storage is a heavy burden for the recipient state, both financially and environmentally. Russia is also one of the very few countries (along with France and Britain) which reprocess spent nuclear fuel.

Another important competitive advantage is the financing options offered by Russian contractors. The oil- and gas-producing Middle Eastern states can afford to finance the construction of NPPs. The countries which are not rich in hydrocarbons have an obvious need for nuclear energy as a means of reducing their reliance on oil, gas, and electricity imports—but they do not have the money for such projects. The cost of building a nuclear power plant varies; one of the latest, the Belene plant in Bulgaria, had a price tag of about 9 billion dollars.⁴ Given that Jordan's entire GDP is only about 40 billion dollars, it is clear that the country can hardly afford to spend a quarter of its gross national product on a nuclear power plant.

There are many countries in the Middle East that do not have the necessary funds to build nuclear power plants; they need either to take out large loans (and then pay interest on them, ranging from 2.9 percent for the UAE to 4.1 percent for Jordan⁵) or attract foreign investment. Rosatom, however, offers not only loans, but also the Build-Own-Operate (BOO) mechanism, whereby the contractor that builds the NPP is also the investor. It owns the NPP it has built, and recoups the investment by selling the electricity produced by the plant.

An alternative option is the Build-Own-Operate-Transfer mechanism (BOOT)⁶, under which the power plant is transferred or sold to the host country after a certain period of time specified in the contract.

BOOT is often used in large infrastructure projects. Examples include the railway branch between Adelaide and Darwin in Australia and the Shajiao coal-fired power plant in China, which are to be transferred to the ownership of the host country in 50 and 10 years' time, respectively. In the nuclear industry, however, such examples are very few. One of them is the NPP contract in the United Arab Emirates, awarded to a Korean consortium led by KEPCO.⁷

For now, the only project which makes use of the BOO arrangement is the Akkuyu NPP in Turkey. But Rosatom is energetically marketing that option to other countries—for example, in 2009 it was offered to Bulgaria. The company has also established a separate division to focus on such projects.

Speaking of the Akkuyu plant, Moscow and Ankara have agreed that Turkey will buy 70 percent of the electricity produced by the first two reactors for a period of 15 years, or until 2030, and 30 percent of the electricity produced by the third and fourth reactors, also for a 15-year period. The tariff has been fixed at 12.35 U.S. cents per kWh.⁸ That tariff was a product of a serious compromise between Rosatom and the Turkish government; it is lower than the figure originally proposed by the Russian corporation.

In the end, the fixed tariff has proved to be more of a hindrance than assurance for the Russian contractor. Speaking in an interview in August 2012, the head of the Akkuyu power generation company, Aleksandr Superfin, had this to say:

The fixed tariff will be applied only to 50 percent of the output. The other 50 percent will be sold at market rates from day one of the NPP's operation. Of course, if we had to sell all our output at 12.35 cents per kWh, the entire project would have been much less profitable. But by selling half of the electricity at a market rate, we can achieve the necessary level of profitability.⁹

The ownership structure of the Akkuyu NPP will be as follows. The plant will be built and operated by a firm called the Akkuyu NPP Power Generation Joint-Stock Company, registered in Turkey. The company will be 100-percent Russian-owned. Atomstroyexport will hold a 3.5-percent stake, INTER RAO YeES 3.5 percent, Rosenergoatom 93 percent, Atomtekhnenergo 0.1 percent, and Atomenergoremont 0.1 percent. The joint stock company will retain a minimum controlling stake throughout the life of the project.¹⁰ Up to 49 percent of the shares can be sold to foreign investors at any stage of the NPP's construction. For example, in May 6, 2013 the Rosatom deputy head, Nikolay Spasskiy, said that the company was ready to invite France's EDF and Areva to take part in the Akkuyu project.¹¹

Of course, Russia does not have a monopoly on using the BOO arrangement to build NPPs; any of the large global companies could do the same. For example, China's CGNPC has made a similar proposal with regard to the Sinop NPP. Nevertheless, Rosatom's willingness to pursue BOO contracts is a clear competitive advantage.

Yet another advantage is that the Rosatom corporation is owned directly by the Russian state and has a monopoly on nuclear technologies in Russia. As a result, the company enjoys the full support of the Russian state, and is in a good position to combine commercial activities with furthering Russian interests abroad.

Private-sector companies such as General Electric or Hitachi also have the support of their respective governments—but not nearly on the same scale. In addition, Rosatom's monopoly on the domestic Russian market enables the company to concentrate all the available resources (including administrative clout). The situation is very different in other countries, such as France, where the two state-owned energy giants, Electricité de France and Areva, are competitors.

For its part, the Russian Federation has a reputation as a reliable partner in nuclear projects. The country is willing and able to build NPPs in the face of opposition from the international community (especially the West), provided that such projects are not in violation of Russia's international commitments. Examples include the Kudankulam NPP.

Finally, Russia is an easy partner to deal with from a purely technical point of view. Unlike the United States, for example, it does not require that governments relinquish their right to enrich uranium or ratify the Additional Protocol to the IAEA Safeguards Agreement as a precondition for



signing nuclear cooperation deals. Besides, the ratification of such bilateral documents in the Russian parliament is a matter of routine.

The role of the Russian companies in the Middle East can be illustrated by the bilateral agreements and memorandums Russia has signed with countries in the region, as well as by the number of signed NPP contracts. More specifically, Russia has the intergovernmental agreements necessary for the construction of nuclear power plants with five Middle Eastern states (see Table 1); memorandums with another four; and two signed NPP contracts. The list essentially includes all the most promising Middle Eastern markets, with the exception of Saudi Arabia; negotiations on an intergovernmental agreement with Riyadh are still under way.

Another major problem facing the Middle Eastern states is the deficit of fresh water. The rich oil-producing states have addressed that problem by building desalination plants (about 70 percent of the global desalination capacity is in the Middle East, primarily in Saudi Arabia, Kuwait, the UEA, Qatar and Bahrain). Poorer nations such as Yemen and Jordan cannot afford such a solution and are facing major water shortages.

Water desalination requires a lot of energy, which is why combining nuclear electricity generation and desalination is a sound engineering approach. The countries with the largest installed nuclear desalination capacity include India and Japan. Kazakhstan has shut down its own desalination plant.¹² Similar plants continue to operate in Pakistan and China.¹³

Russia is in a good position to compete on the Middle Eastern market for nuclear desalination plants.

ROSATOM'S COMPETITORS

French companies traditionally have a strong presence in North Africa and in the Middle East. Nevertheless, neither Areva nor EDF has managed to overcome problems with the new European Pressurized Reactor (EPR) design. Areva is currently building such a reactor at Block 3 of the Olkiluoto NPP in Finland; its launch was initially scheduled for 2009, but has now been postponed until 2016, and the project's budget has nearly doubled. The EDF project to build the Flamanville-3 NPP in France's Lower Normandy (also based on the EPR design) has run into trouble as well. In December 2012 EDF said that the cost of the project had gone up once again to 8.5 billion euro

Table 1. Legal Framework of Cooperation between Rosatom and the Middle Eastern states

| Country | Document |
|--------------|---|
| Bahrain | Memorandum on peaceful nuclear energy cooperation |
| Egypt | Intergovernmental agreement on peaceful nuclear energy cooperation |
| Israel | Insignificant (or no) cooperation |
| Jordan | Intergovernmental agreement on peaceful nuclear energy cooperation |
| Iraq | Insignificant (or no) cooperation |
| Iran | Intergovernmental agreement on peaceful nuclear energy cooperation Agreement on the construction of the Bushehr NPP |
| Yemen | Insignificant (or no) cooperation |
| Qatar | Memorandum on peaceful nuclear energy cooperation |
| Kuwait | Memorandum on peaceful nuclear energy cooperation |
| Lebanon | Insignificant (or no) cooperation |
| UAE | Intergovernmental agreement on peaceful nuclear energy cooperation |
| Oman | Memorandum on peaceful nuclear energy cooperation |
| Saudi Arabia | Intergovernmental agreement on peaceful nuclear energy cooperation being negotiated |
| Syria | Insignificant (or no) cooperation |
| Sudan | Insignificant (or no) cooperation |
| Turkey | Intergovernmental agreement on peaceful nuclear energy cooperation (August 6, 2009) Agreement on the construction and operation of the Akkuyu NPP (May 15, 2010) |

Source: PIR Center, 2013, <http://www.pircenter.org>

(from the initial 3.3 billion), and the launch date was pushed back to 2016 (from the initial 2012 deadline). The projects to build two EPR reactors in France, also led by EDF, remain on schedule for now. Nevertheless, it would be reasonable to assume that the nuclear newcomer countries will prefer tried and tested technology to completely new designs.

Besides, France has contrived completely to ruin its relations with Turkey, one of the most promising partners in the region, by passing a law that makes denial of the genocide of Armenians a criminal offense. Although in February 2012 the controversial bill was struck down by the country's Constitutional Council, there have been attempts to push a new version of it through parliament, stoking up tensions between Ankara and Paris.

In March 2013 France's GDF Suez formed a consortium with Japan's Mitsubishi and Itochu to build the Sinop NPP. The reactor design chosen for the Sinop project is ATMEA1, developed by Areva in partnership with Mitsubishi. It has a lower output compared with the EPR design, but there are no operational reactors of that type anywhere in the world; GDF Suez wanted to build such a reactor in France in 2011, but the French government refused to back the proposal. Still, unlike EPR, the ATMEA1 design is not burdened by a history of delays and cost overruns. GDF Suez, which runs seven nuclear reactors in Belgium, was chosen as the operator of the Sinop NPP. In May 2013 the Franco-Japanese project secured the approval of the Turkish government. That was the first large nuclear contract secured by a French company since the accident at the Fukushima NPP.

The French will probably try to score another win through cooperation with foreign (especially Japanese) partners.

The U.S. companies General Electric and Westinghouse (which is owned by Japan's Toshiba but based in the United States) are not in a very good competitive position. Article 123 of the 1954 Atomic Energy Act requires that the United States sign a special agreement with the government of the recipient country before it can transfer any fissile materials, nuclear technology or related equipment. In practice this means that U.S. companies (or companies which rely on U.S. technology and equipment) cannot work in countries that have not signed the so-called 123 Agreement. The signing of such an agreement is something of a clearance, which puts the country in question on the U.S. nuclear white list of nations that American companies are allowed to do business with. There are three Middle Eastern nations which have already signed the 123 Agreement: Egypt, Turkey, and the UAE, plus the North African state of Morocco. The nuclear energy markets of all the other countries in the region—including Jordan and Saudi Arabia—remain off limits for U.S. companies.

The reasons why the list does not contain more Middle Eastern states boil down to the fact that all peaceful nuclear energy cooperation agreements signed by the United States require Congressional approval. As a result, the entry of these agreements into force can be delayed (in the case of Russia, the agreement entered into force almost three years after signature) or derailed altogether. At present, the U.S. Congress makes its approval of such agreements conditional on the country in question undertaking a legally binding commitment not to develop an independent nuclear fuel cycle. Many countries in the region are reluctant to make such a commitment, and it does not look as though a solution acceptable to all the parties involved will be found any time soon.

The United States does not seem to be determined to secure a share of the Middle Eastern market regardless of the cost. In 2013 the Turkish government approached Washington with an invitation to take part in the Sinop NPP project. But according to the Turkish energy minister, Taner Yildiz, the Americans said the project was not commercially attractive.¹⁴ Nevertheless, Westinghouse will supply circulation pumps, reactor components, control systems and engineering services for the Barakah NPP project.

The Japanese nuclear contractors (Toshiba, Hitachi, Mitsubishi Heavy Industries, TEPCO, and others) are also finding themselves in a difficult situation. On the one hand, their reputation has suffered following the Fukushima accident (Toshiba built the third and fifth reactors of the Fukushima NPP, and Hitachi the fourth); international confidence in the reliability of Japanese-built NPPs has been undermined. On the other hand, even though Japan's new Liberal Democratic Party government does not share the previous cabinet's opposition to nuclear energy, the future of the Japanese nuclear industry remains in question. According to the latest surveys, more than 60 percent of the Japanese continue to support a gradual retirement of all nuclear power plants in the country. It seems premature to suggest that the Japanese corporations will follow the example set by Siemens and abandon nuclear energy projects altogether. It is reasonable to assume, however, that the Japanese government's support for such projects will be scaled down.



At the same time, failures at home might well motivate Japanese companies to work more energetically abroad. On May 3, 2013 Turkey and Japan signed an intergovernmental agreement on the construction of a nuclear power plant in Sinop province using the Franco-Japanese ATMEA1 reactor design. Korea's KEPCO and Atomic Energy of Canada Ltd. had already withdrawn their bids because they deemed the terms offered by Turkey unacceptable. Only China's Guangdong Nuclear Power Group was still in the running against Japan's Mitsubishi Heavy Industries and Itochu, who have partnered with France's GDF Suez. Japan was essentially left as the only viable contender, and was therefore able to extract certain concessions from Turkey.

In the end, Turkey did not issue any government guarantees for the 22 billion-dollar project (the absence of such guarantees was one of the reasons why Ankara had been unable to sign a contract for the Sinop NPP since 2010). However, the Turkish state-owned energy company Elektrik Uretim A.S. (EUAS) will have to become a partner in the project with a 49 percent stake. The Japanese and French partners will control the remaining 51 percent.¹⁵ According to the Turkish energy minister, at some later point up to half of the shares held by EUAS could be sold off, either directly or via an IPO.

Most of the financing for the project will be provided by Nippon Export and Investment Insurance and the French insurance company Coface, which specializes in foreign economic risks.¹⁶ The Turkish government has said it is willing to buy the electricity produced by the plant at 11.8 U.S. cents per kWh (i.e. 1.5 cents cheaper than the tariff secured by the Russian NPP project).¹⁷ The first reactor of the Sinop NPP is scheduled for launch in 2023, the last in 2028. The plant will have four ATMEA1 reactors with a total rated output of 4,600 MW.

Financing for the project will be provided by Japan and France. ATMEA itself is a Franco-Japanese project and the Sinop NPP will be operated by GDF Suez, in cooperation with a Turkish partner. Nevertheless, the Sinop project is more Japanese than French. Most of the construction work will be done by Mitsubishi and Itochu, and it was the Japanese prime minister, Shinzo Abe, who signed the agreement in Istanbul with his Turkish counterpart, Recep Tayyip Erdogan. The reasons for that include the importance of the nuclear industry for Japan, as well as the ongoing Franco-Turkish tensions.

The mechanism outlined in the agreement between Japan and Turkey looks fairly realistic. Nevertheless, it must be remembered that it had taken Russia and Turkey more than a year after the signing of their own agreement to complete the negotiations and settle on the final electricity tariff to be paid by Turkey. Back in 1985 talks between Ankara and Atomic Energy of Canada Ltd fell through when they were roughly at the same stage because the credit organizations withdrew their financing commitments.¹⁸

For Tokyo, the Turkish project represents a hope that the negative trends of the past several years will finally be reversed. The contract for the construction of the Sinop NPP will be Japan's first since the accident at the Fukushima NPP. It is also quite telling that the Japanese contractor is Mitsubishi Heavy Industries, which was not involved in the construction or operation of the Fukushima plant (unlike Toshiba, Hitachi or TEPCO).

As to South Korean companies, South Korea's KEPCO has established fairly strong positions in the Middle Eastern market. In 2009 a KEPCO-led consortium won the contract to build the four reactors of the UAE's first nuclear power plant, beating a joint bid by Hitachi and General Electric, and by a French consortium which included such giants as EDF, Areva, Total, and *GDF Suez*. The Koreans not only offered a more competitive price, but also undertook to operate the NPP and supply the nuclear fuel at a fixed price. Like Rosatom, KEPCO is a state-owned monopoly; the company enjoys the full support of the South Korean government. The cost of the project is estimated at 30 billion dollars, of which 10 billion will be contributed by Abu Dhabi; the remaining 20 billion will come in the form of loans issued by export credit agencies and banks.¹⁹ In August 2012 the Export-Import Bank of the United States approved a direct loan of 2 billion dollars to pay for the supplies of American hardware and the services of U.S. engineers involved in the project.

South Korea does not have the complete nuclear fuel cycle; the missing stages of that cycle are uranium mining and enrichment. Also, Korean companies continue to work very closely with American partners. The design of the Korean APR-1400 reactors descends from the System 80+ reactor, developed by Westinghouse. As a result, there will be a large number of foreign subcontractors involved in this project. Apart from Westinghouse, uranium supplies and enrichment services will be provided by France's Areva, Russia's Tekhsnabexport and Uranium

One (which is owned by ARMZ), the Anglo-Australian giant Rio Tinto, and America's Converdyn and Urenco.²⁰

In 2010 the Korean Atomic Energy Research Institute and Daewoo Engineering and Construction signed a contract with Jordan for the construction of a research reactor. Much of the financing was to come in the form of Korean loans. The deal was seen as a first step towards signing an NPP contract with Jordan—but KEPCO and the Jordanian government failed to agree on the sources of financing; Amman wanted the contractor to attract all the necessary investment.

In terms of Chinese companies, the Chinese nuclear technology suppliers are still being seen as newcomers, both in the Middle East—where China Guangdong Nuclear Power (CGNPC) competed for a contract to build the Sinop NPP in Turkey with its ACPR1000+ reactor design—and on the global nuclear energy market in general. China has developed a complete nuclear fuel cycle, and Chinese companies (CGNPG, China National Nuclear Corporation (CNNC), and others) have several successful NPP projects under their belt.

Nevertheless, the only foreign NPP contract Chinese companies are currently working on is the Chashma-3 and Chashma-4 reactors in Pakistan, both of which are based on the CNP-300 reactor design. Pakistan is not an NPT member, and rules adopted by the Nuclear Suppliers Group forbid exports of sensitive technologies to that country. China, however, argues that it is acting in accordance with the Sino-Pakistani agreement signed in 2003, before Beijing joined the NSG.

Speaking at a press conference on February 2, 2013, the president of China's State Nuclear Power Technology Corporation, Gu Jun, said that the construction of the first CAP1400 reactor would commence later this year. This is the first modern reactor (based on the Westinghouse AP1000 technology) for which China has all the rights; in theory this means that the reactor can be exported to other countries. China is also working to localize the ACPR1000+ design (based on technology supplied by France's Areva); it is expected that the reactor will be ready for exports by 2014.

China worked very hard to win the Sinop NPP contract. CGNPC was willing to offer Turkey very advantageous terms, including full financing of the project and technology transfer. Nevertheless, judging from how quickly the Franco-Japanese offer was accepted (the bid was submitted on March 5, 2013, and the agreement was signed in early May 2013), Turkey probably did not regard China as a strong bidder due to the latter's lack of experience in such projects. Entering talks with Beijing may have been merely a ploy by Ankara to put pressure on the other bidders. As soon as a suitable offer was received (even though the terms were not as good as those offered by CGNPG) Ankara closed the tender and announced the winner.

Although China has made impressive progress in nuclear energy, Chinese companies are unlikely to win any export contracts in the coming year or two. It is not unprecedented for a new reactor design immediately to win an export contract, but such a scenario is unlikely in China's case. Until these new reactors have been successfully launched in China itself, their reliability will be in doubt. This is doubly important for Middle Eastern projects because countries in the region do not have the necessary experience or nuclear energy expertise, and will largely depend on the foreign contractor. Beijing's reputation as a relative nuclear newcomer will hold back its ambitious plans abroad.

All of these shortcomings could have been negated or even reversed if Chinese corporations were to partner with one of the global nuclear industry leaders in such projects. Such cooperation does not appear outside the realm of possibility; for example, Beijing is already working closely with Westinghouse. Nevertheless, for now there has been no information about any joint projects with Chinese participation in the Middle East.

OUTLOOK FOR THE IMMEDIATE FUTURE

It is highly unlikely that any new nuclear energy markets will emerge in the Middle East in the foreseeable future.

Egypt had ambitious plans to develop a nuclear energy industry prior to the revolution in 2011. The country's new government continued to insist in 2011 that its nuclear plans were still on track—but right now Cairo is preoccupied with other problems. Egypt has already prepared the site for its future NPP, and signed nuclear energy cooperation agreements with Russia, China,



South Korea, and the United States. It also has two research reactors (one supplied by the Soviet Union, the other by Argentina) and a pool of trained specialists. Nevertheless, nuclear energy will not be at the top of the Egyptian government's priorities any time soon. Several other Middle Eastern states (including Qatar, Kuwait, Oman, and others) had also announced their intention to develop a nuclear energy industry prior to the Fukushima accident. But their interest in nuclear energy has waned after a careful analysis of the technology's benefits and risks.

Jordan announced a tender for the construction of its first NPP in July 2011. It has received bids from Atomstroyexport (a Rosatom division); the Franco-Japanese consortium of Areva and Mitsubishi Heavy Industries; and Atomic Energy of Canada Ltd. In April 2012 the Canadian company withdrew its bid. Since then the announcement of the winner has been repeatedly postponed; according to the latest statement by the chairman of the Jordan Atomic Energy Commission, Khaled Tukan, a decision was expected in the spring of 2013, but further delays would not surprise anyone. This is Jordan's second attempt to hold the tender; talks with Korea's KEPCO collapsed in May 2010 after the sides failed to agree on the financing of the project. According to the *Washington Post*, this time round the money for the construction of the NPP is expected to come in the form of a grant from the UAE.

Although Jordan is a longstanding ally of the United States, Amman is not ready to relinquish its right to enrich uranium for the sake of signing a 123 Agreement with Washington. The country has natural uranium deposits, and it is considering the possibility of producing and exporting its own fuel as a source of financing for its nuclear program. Although in May 2012 the lower chamber of the Jordanian parliament voted to shut down all nuclear energy projects in the country, including uranium exploration, the government disagreed with that decision. The absence of a 123 Agreement means that U.S. companies will not be able to participate in any future nuclear projects in Jordan; U.S. financing for such projects also remains out of the question.

From the legal point of view, Jordan cannot build any NPPs on its territory because of the aforementioned decision by the national parliament. Nevertheless, the Jordanian atomic energy commission continues to search for a strategic partner and for a suitable site to build the future NPP. Three sites have already been selected, then rejected. The choice will now have to be made between the Aqaba site on the Red Sea coast; the Khirbet el Samra site east of Amman; and a site in the east of the Badia desert.²¹ The Jordanian leadership appears to believe that the attractive conditions it hopes to receive from one of the potential foreign partners will persuade parliament to reconsider its stance on nuclear energy.

Jordan's eventual choice of contractor between the Russian company and the Franco-Japanese consortium will depend primarily on the financial terms offered by the bidders. It is clear, however, that Rosatom has a number of competitive advantages.

Turkey has officially announced plans to build a third NPP, although the site for the future power plant has yet to be chosen from several options. Mitsubishi and Areva will help Turkey to make that choice. According to plans announced by Ankara, the Turkish energy ministry will begin to work on the third NPP project in earnest once the Sinop NPP deal has been concluded.

Turkey initially said that the companies which have lost the first tender will be able to bid for the second contract. But according to Prime Minister Erdogan, Turkey's own engineers will be in charge of the construction of the next NPP.²² It is difficult to say whether that statement was a reflection of the lack of enthusiasm among the bidders in the previous tender. As of this moment, it does not look as though Turkey is ready to build an NPP using its own expertise, and the country is unlikely to gain that expertise any time soon.

Judging from the current state of affairs, the announcement of the tender can be expected later in 2013 or in 2014. During the first two tenders the Turkish government insisted that the bidders should secure the necessary financing; the bidders themselves did not like that at all. The next time round, Ankara will be facing a choice: it can either provide government guarantees to attract new bidders, or it can try to strike a deal with the countries that are ready to finance the project (i.e. Russia, if Rosatom has some spare resources at its disposal at the time, or China).

In Saudi Arabia, Abdul Ghani Malibari, coordinator for scientific collaboration in the area of nuclear and renewable energy at the King Abdullah Center, said on June 2, 2011 that the country intended to build 16 nuclear reactors by 2030. The cost of the program was estimated at 100 billion dollars. Since then Riyadh has reiterated its commitment to nuclear energy on several occasions. Saudi

Arabia has signed nuclear energy cooperation agreements with France, China, South Korea, and Argentina. Nevertheless, it is unlikely to announce any NPP contracts in the coming months. On the one hand, the country is still in the process of setting up its nuclear regulation agencies. On the other, it has yet to sign nuclear cooperation agreements with several key players, including the United States and Russia.

Another thing to take into account is that the Saudi government (just like the government of Jordan) is not ready to relinquish its right to enrich uranium on its territory. That stance has to do with considerations of prestige, as well as Riyadh's determination to keep up with its main regional rival Iran. As a result, signing a 123 Agreement with the United States could prove very problematic.

Iran has on several occasions expressed interest in building more NPPs. On February 23, 2013 the Atomic Energy Organization of Iran announced that the country had selected 16 suitable sites for future nuclear power plants on the coasts of the Caspian Sea, the Persian Gulf, and the Gulf of Oman, in Khuzestan Province in the southwest of the country, and in the northwest.

In addition to plans for building a new NPP on its own (the proposed 360MW plant near Darkhovin, Khuzestan Province), Tehran has repeatedly expressed its interest in continued cooperation with Russia in building nuclear reactors. On February 12, 2013 the Iranian foreign minister, Ali Akbar Salehi, said that Tehran was hoping to start building the second reactor of the Bushehr NPP in partnership with the Russians. So far, Moscow has not confirmed that any talks with Iran on this issue are under way—but it is obviously willing to consider the idea.

WINDOW OF OPPORTUNITY


Rosatom is now competing in the Middle Eastern nuclear energy market, where it has a clear advantage because it can remove spent nuclear fuel of Russian origin back to Russia. Not a single other country in the world currently offers this kind of service. Other competitive advantages include Rosatom's willingness to finance nuclear energy projects abroad (via BOO and other mechanisms) and the strong support this state-owned monopolist receives from the Russian state. Although the latter factor is by no means unique, many other competitors do not enjoy such support from their respective governments.

The Rosatom competitors that deserve special mention include Chinese companies and South Korea's KEPCO, which have certain similarities to Rosatom in

For more analytics on international nuclear energy cooperation, please, visit the "Development of Russia's Nuclear Exports" project section of the PIR Center website at: atom.eng.pircenter.org

terms of their form of ownership and access to government support. KEPCO has already won a significant share of the Middle Eastern nuclear market—but it has never competed head-to-head with Rosatom. In fact, Russian companies are involved as subcontractors in the KEPCO-led Barakah NPP project. In addition, KEPCO has proved unwilling to provide the financing for NPP projects abroad—that, in fact, is the reason why its talks with Turkey and Jordan have failed.

By taking part in the Turkish tender, Beijing has announced its intention to become a key player in the global market for building nuclear power plants. For the time being, Chinese NPP contractors cannot offer the same kind of quality as their foreign competitors. But the launch of new Chinese reactors, combined with China's financial muscle and possible partnership with the leading technology suppliers from other countries, can change the situation in a very radical way.

While the Chinese nuclear steamroller is still trying to gain momentum, Rosatom retains a very strong competitive position in the Middle Eastern nuclear energy market. It must not waste this window of opportunity. 

NOTES

¹ This article uses the definition of Middle East contained in the 1989 IAEA report: "from Libya in the west to Iran in the east, and from Syria in the north to Yemen in the south"—plus Turkey.



² World Nuclear Association, “Emerging Nuclear Energy Countries,” updated May 2013, <<http://www.world-nuclear.org/info/inf102.html>>, last accessed May 13, 2013.

³ “Rosatom Offers EDF Partnership in Turkey’s First Nuclear Plant,” *Bloomberg*, 2013, May 8, <<http://www.bloomberg.com/news/2013-05-08/Rosatom-offers-edf-partnership-in-turkey-s-first-nuclear-plant.html>>, last accessed May 13, 2013.

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⁵ Chen Kane, “Finance and Nuclear Energy in the Middle East,” *Arms Control and Regional Security for the Middle East*, February 5, 2013, <<http://www.middleeast-armscontrol.com/2013/02/05/finance-and-nuclear-energy-in-the-middle-east/>>, last accessed May 13, 2013.

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⁷ A.M. Kryukov, L.T. Yanko, and V.V. Kukhto, “Modern Forms of Financing Large Investment Projects,” *Effektivnoye antikrizisnoye upravleniye* 61, No. 2 (2010), pp. 52–60.

⁸ World Nuclear Association, “Nuclear Power in Turkey,” <<http://world-nuclear.org/info/Country-Profiles/Countries-T-Z/Turkey/#.UY5pulf9eQQ>>, last accessed May 13, 2013.

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¹⁰ “Akkuyu NPP—18 months on,” presentation by the Akkuyu NPP Electricity Generation Joint Stock Company, *Atomexpo*, June 2012.

¹¹ “Le russe Rosatom pret à plus de coopération avec EDF et Areva,” *Les Echos*, May 6, 2013, <<http://www.lesechos.fr/entreprises-secteurs/energie-environnement/actu/0202733083537-le-russe-Rosatom-pret-a-plus-de-cooperation-avec-edf-et-Areva-564367.php>>, last accessed May 13, 2013.

¹² The former Soviet Union/Kazakhstan has more experience in operating nuclear desalination plants than any other country in the world. In 1972 the Soviet Union built the Shevchenkovskaya NPP (based on the BN-350 reactor design) which used the energy it generated to desalinate water. The plant remained operational until 1997. Unlike the BN-350 reactor, most of the existing nuclear desalination plants produce fresh water for use by the reactor itself.

¹³ World Nuclear Association, “Nuclear Desalination,” updated May 2013, <<http://www.world-nuclear.org/info/inf71.html>>, last accessed May 13, 2013.

¹⁴ “Turkey Dismayed at Lack of US Partnership on Second Nuclear Plant: Minister,” *Hurriyet Daily News*, April 6, 2013, <<http://www.hurriyetdailynews.com/turkey-dismayed-at-lack-of-us-partnership-on-second-nuclear-plant-minister-.aspx?pageID=238&NID=44390&NewsCatID=348>>, last accessed May 13, 2013.

¹⁵ “Power at Turkey’s 2nd Nuclear Plant priced at 11.80 Cents,” *CNBC*, May 6, 2013, <<http://www.cnbc.com/id/100709676>>, last accessed May 13, 2013.

¹⁶ “Mitsubishi, Areva Confirmed for Turkey Nuclear Plant,” *Break Bulk*, May 6, 2013, <<http://www.breakbulk.com/breakbulk-news/industry-sector/epcs-project-owners/confirmed-Mitsubishi-and-Areva-to-build-turkeys-second-nuclear-power-plant/>>, last accessed May 13, 2013.

¹⁷ “Nuclear Plants to help Turkey save \$7.2 bln in Gas Imports,” *Anadolu Agency*, May 6, 2013, <<http://www.aa.com.tr/en/headline/173346-y>>, last accessed May 13, 2013.

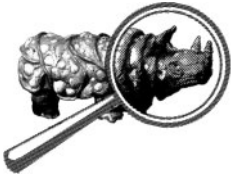
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²¹ “Jordan to Choose Nuclear Power Plant Technology Supplier by mid-May,” *Rosatom*, March 19, 2013, <<http://www.Rosatom.ru/journalist/atomicsphere/8cdf61004ef2214cacf4ef398191de8b>>, last accessed May 13, 2013.

²² “Turkey, Japan Sign \$22 bln Nuclear Power Plant Deal,” *Reuters*, May 3, 2013, <<http://in.reuters.com/article/2013/05/03/turkey-nuclear-deal-idINL6N0DK3A820130503>>, last accessed May 13, 2013.



Vladimir Shubin

WHY SOUTH AFRICA NEEDS BRICS, WHY BRICS NEEDS SOUTH AFRICA

The 5th BRICS summit, held on March 2013 in Durban, South Africa, did not bring any big surprises. It emphasized the BRICS countries' interests in Africa, and kicked off negotiations on establishing a BRICS development bank. For the host country, the summit was another occasion to stake its claim to the role of "the gateway to Africa" and bolster its political weight in its efforts to edge ahead of the other contenders for continental leadership, such as Nigeria. That, essentially, is also why Pretoria has organized the BRICS–Africa dialogue between the heads of state.

It is safe to assert that South Africa has become an integral part of the BRICS bloc rather than a second-class member. It has demonstrated its capability to offer an engaging agenda to other members of the bloc. It was precisely at the Durban summit that the BRICS leaders began to work on several projects that have a genuinely global potential. That is why it is worth taking a closer look at South Africa's role and strategy in the BRICS bloc.

On December 23, 2010 the South African Foreign Minister, Maite Nkoana-Mashabane, received a phone call from her Chinese counterpart, Yang Jiechi. She was told that China, which held the rotating BRIC presidency at the time, and all the other members, i.e. Brazil, Russia, and India, had agreed officially to invite South Africa to join the bloc. Yang also said that Chinese President Hu Jintao was extending an invitation to his South African counterpart, Jacob Zuma, to attend the 3rd BRIC summit in China in April 2011.¹

Many observers believe that the idea of inviting South Africa to join BRIC (thereby turning it into BRICS) was initiated by Beijing. However, the official invitation itself had to come from Beijing, because China held the rotating BRIC presidency at the time. As for the emergence of the BRIC group itself, the term was coined in 2001 by Jim O'Neill, an economist working for Goldman Sachs. But the first step towards establishing a forum of the four countries was made in September 2006, when the Russian president initiated a meeting of Brazilian, Russian, Indian, and Chinese foreign ministers at a General Assembly session in New York. The first ministerial-level BRIC meeting outside New York was held in May 2008 in Russia's Yekaterinburg.²

BRIC, WITHOUT AN "S"

The process which had eventually led to the creation of BRIC was launched by an idea aired by former Russian Prime Minister Evgeny Primakov during a 1998 visit to India, rather than by the term coined in Goldman Sachs. Primakov spoke about establishing the strategic triangle Moscow–Beijing–Delhi. Although the proposal was received with skepticism at the time, it would not be an exaggeration to say that the idea is now at the heart of BRICS, even though the envisaged triangle consisting of Russia, India, and China has now turned into a five-member bloc.

BRIC is not the first (and probably not the last) forum to bring together countries from different continents on an informal basis. But neither would it be an exaggeration to say that BRIC stands out as a special case. Its influence in the international arena is underpinned by the growing economic might of its members, their important (and often indispensable) role in terms of the

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world's human and natural resources, and the permanent membership held by Russia and China at the UN Security Council.

Joining the club of large emerging economies was well in line with South Africa's foreign strategy. An important part of that strategy is taking part in the formation of a nucleus of non-Western nations. In June 2003 the foreign ministers of India, Brazil, and South Africa announced during a meeting in Brasilia their decision to set up the IBSA forum (the acronym consists of the first letters of the three countries' names). Pretoria clearly hoped that the forum would soon acquire new members; two years later a member of the South African cabinet told the present author that the country hoped to persuade China, and then, with Chinese help, Russia as well to join IBSA.³

But when another group, BRIC, held its first summit in Yekaterinburg six years later, two IBSA members—India and Brazil—were taking part, while South Africa was left behind. That caused a lot of disappointment in the South African media, government, and academe. The director-general of the national department for trade and industry, Tshediso Matona, had this to say on the matter: "The department of international relations and cooperation must look into this. We must be in that club." Francis Kornegay, an African-American researcher who had spent many years living in South Africa and working for the country's Institute for Global Dialogue, went even further. "South Africa's marginalization by BRIC means Africa's marginalization in the overall scheme of things having to do with the terms of South–South cooperation and the future of such initiatives along these lines such as the India–Brazil–South Africa (IBSA) Trilateral Forum," Kornegay wrote in a 2009 article. "Indeed, from an African perspective, South Africa's exclusion from BRIC could complicate the nature and dynamics of the whole notion of South–South cooperation to such an extent as to conceptually call it into question as an expression of global South cohesiveness." He even went as far as to accuse Russia of being "the main culprit in this plot," without actually producing any evidence to back that assertion.⁴

If there really was a "culprit," however, South Africa itself seems to be the prime candidate for that role. For more than two years ahead of the first BRIC summit Pretoria was showing next to no interest in that forum. The issue of becoming a member was first raised only after the inauguration of Jacob Zuma as the new president, i.e. three or four weeks ahead of the meeting in Yekaterinburg.⁵ But at that time members of the group probably believed that it was premature to discuss enlargement.

Nevertheless, the South African leadership was determined to become a member; official pronouncements to that effect were made by the president and the foreign minister. Why, then, was Pretoria so eager to join BRIC?

SOUTH AFRICA'S FOREIGN POLICY

To answer that question, let us first look at the principles of the country's foreign policy, and its practical steps in the international arena. These principles were formulated in the Freedom Charter, which was adopted back in 1955 to become the manifesto of the ruling African National Congress party (ANC). The charter proclaimed an aspiration for world peace and friendship; respect for the sovereignty of all nations; a commitment to peace and negotiations as a way of settling all international disputes; and the right of all African peoples to independence and self-governance.

The ANC was banned for three decades between 1960 and 1990. Its leadership remained in exile, which helped it to establish close contacts in other countries. By the early 1990s ANC had more offices abroad than the National Party government in Pretoria.

Shortly before the country's first general election the ANC President, Nelson Mandela, wrote an article in the *Foreign Affairs* journal outlining the key priorities of the future democratic South Africa's foreign policy course.⁶ He emphasized that modern international relations and human rights go beyond pure politics, and include economic, social, and environmental aspects. He also said that a fair and long-term solution of all the problems facing humankind can be achieved only by promulgating democratic principles.

In their relations with each other, countries must be led by the founding principles of international law. Peace is the only goal which the entirety of humankind should aspire to, and any conflicts must be settled only by peaceful means. The interests of the entire African continent must be reflected in South

Africa's foreign policy goals, and the country's economic development depends on growing regional and international cooperation in the modern interdependent world.⁷

South Africa's first democratic government, which came to power in May 1994, set out ambitious foreign policy goals, which were outlined in statements by the country's Foreign Ministry.⁸ They included:

- ❑ transforming the national foreign policy and security ministries and agencies, including the training of foreign-policy specialists to pursue national priorities in the international arena;
- ❑ securing the recognition of South Africa by the international community, and establishing friendly relations with other nations;
- ❑ fostering a positive international image of South Africa;
- ❑ expanding and diversifying trade and economic relations, attracting foreign investment;
- ❑ advocating respect for human rights and democratic values in the international arena;
- ❑ helping to strengthen international security and stability (including prevention of transnational crime);
- ❑ promoting African interests and development priorities;
- ❑ strengthening cooperation between the developing countries, representing their interests in international organizations, and changing the nature of relations between the developed and the developing world.

It follows from the list above that a democratic South Africa's priorities focused on pursuing closer bilateral ties with other African nations, but there was also an emphasis on the developing world as a whole, i.e. the countries representing the global South, including those which later became part of BRIC.

SOUTH AFRICA AND THE GLOBAL SOUTH

India

South Africa has traditionally maintained close ties with India. Both countries were colonies of the British Empire; as a result, there is a large Indian diaspora in South Africa. Many of the members of that diaspora later participated in the anti-apartheid movement. Mahatma Gandhi began his political activity in South Africa. The establishment of an ethnic Indian political organization modeled on the Indian National Congress later influenced the birth of the ANC.

It was back in 1946 that the UN General Assembly first discussed, at India's request, South Africa's discriminatory policies. India was also one of the first countries to impose sanctions on South Africa; in later years Delhi provided energetic support to the ANC. An ANC office opened in the Indian capital in 1967; it was led by Alfred Nzo, who would later become a democratic South Africa's foreign minister.

Diplomatic relations between the two countries resumed in November 1993, when talks on a political settlement in South Africa were in the final stages. Since the end of the apartheid regime, India and South Africa have pursued close relations in many areas, including defense. In particular, the two have cooperated in providing regional security in the Indian Ocean.⁹

Indian representatives advocate closer economic ties with South Africa—but they stress that such relations should be built on an ethical basis, helping to create jobs and give professional skills to local labor.¹⁰

China

The history of South Africa's relations with China is more controversial. The regime in Pretoria established diplomatic relations with Taiwan in 1949 and maintained close relations with Taiwan, a



fellow pariah state. The ANC, on the other hand, established ties with Beijing in the 1950s. In 1961–1962 the first group of ANC representatives took a military training course in China. Later on, however, relations between the ANC and Beijing took a turn for the worse. Amid mounting Soviet–Chinese tensions, the Chinese government decided that the ANC was becoming too close to Moscow. As a result, relations between that organization and Beijing remained frozen for two decades. Nevertheless, judging from numerous reports, China and South Africa maintained trade and economic relations even after it was announced in the 1960s that those relations had been broken off. Beijing resumed cooperation with the ANC only after the organization’s leading role in the South African liberation movement became too obvious to ignore.

As a result of those underlying tensions, it took the two countries quite a while to establish diplomatic relations after the arrival of a new democratic government in Pretoria. Another factor that must have played a role was South Africa’s close economic ties with Taiwan; Taipei gave the ANC significant financial assistance ahead of the elections in 1994. Diplomatic relations between Pretoria and Beijing were resumed only on January 1, 1998; relations between the two countries—especially trade—began to pick up almost immediately. In 1994 bilateral trade stood at only 900 million dollars. In 1998 the figure reached 3 billion dollars, and 59.9 billion in 2012.¹¹

Senior Chinese and South African leaders regularly exchange visits. During the visit by President Zuma to Beijing in 2010 the two countries signed a declaration of comprehensive strategic partnership.

Brazil

South Africa and Brazil established diplomatic relations in 1948, but those relations were fleshed out (initially, in the form of political support for the ANC) only after the Brazilian military dictatorship fell in 1985. They became especially close after President Luiz Inácio Lula da Silva came to power in Brazil in 2003. During his first term of office, he visited South Africa on two separate occasions.

The two countries are pursuing close cooperation in a whole number of areas, including the training of military specialists, the fight against HIV/AIDS, fair trade, and land reform.

SOUTH AFRICA AND RUSSIA

The history of South Africa’s relations with Russia is fairly well known. Let us recall, however, that for three decades the Soviet Union had provided the ANC with various forms of support, which was especially important because few other countries were either willing or able to give such support.¹²

During the last few years of the Gorbachev presidency, and especially during that unfortunate period when Russian diplomacy was led by foreign minister Kozyrev, relations between the two countries sustained serious damage. Moscow made some very hasty and incomprehensible steps to establish closer ties with the political regime in Pretoria when it was perfectly clear that the regime was on its last legs. Without consulting the ANC, in November 1991 Moscow established consular relations with South Africa, followed by full diplomatic relations in February 1992. In June 1992 Boris Yeltsin received Frederik de Klerk instead of Nelson Mandela in the Kremlin; Mandela made his first visit to Russia only seven years later.

Things started to change for the better when it became obvious that the ANC would become the ruling party in a new South Africa. By the time that happened, bilateral relations had become much warmer. In 2000 the two countries initialed a bilateral treaty of friendship and partnership. It then took another six years for the treaty to be signed during President Putin’s visit to Cape Town in 2006.

To summarize, by the time the BRIC forum was created, South Africa had already established friendly relations with all the BRIC nations. As a result, when the South African leadership decided that it must also become a member, it did not take President Jacob Zuma very long to visit all these countries and meet their leaders.

THE CHARM OFFENSIVE

Zuma's tour of the BRIC capitals was dubbed "the charm offensive" by the South African media.¹³ The first of these visits was made to Brazil in April 2010, when the country hosted an IBSA summit. The BRIC summit was held there almost simultaneously, so Zuma was able to meet not only his Brazilian and Indian counterparts, but China's Hu Jintao as well.¹⁴ In July 2010 the Brazilian president paid another visit to South Africa, where his country's football team won the world cup. During the visit the two countries signed a declaration of strategic partnership and a memorandum of understanding on cooperation in intergovernmental relations.¹⁵

After his trip to Brazil, in early June 2010 Zuma arrived for a state visit to India, and in August for an official visit to Moscow. Speaking at a press conference after the talks, Dmitry Medvedev essentially gave his backing to the idea of South Africa joining BRIC. "We understand that in actual fact, South Africa's participation in discussing a whole range of issues which we are now discussing in the BRIC format would be extremely productive, especially since this is a new format," Medvedev said. "It represents rapidly growing economies, and South Africa is just such an economy." The Russian president said, however, that any decision would have to take into account "the opinions and approaches of the other members of that forum."¹⁶

Other BRIC members also backed the idea of South African accession. Speaking on a visit to Beijing in late August 2010, the South African president said he believed that the group would approve his country's application for membership.¹⁷ Zuma and his Chinese counterpart also signed a declaration of comprehensive strategic partnership during the visit.¹⁸

There is no doubt that Zuma made his statement after receiving the necessary assurances from China. Indian representatives also spoke openly of their support for South African accession to BRIC in August 2010.¹⁹ For its part, the Brazilian Foreign Ministry made a statement which read, "South Africa will bring an important contribution to the group because of its economic relevance and its constructive political action, and its commitment to issues concerning Africa and the international agenda."²⁰

Meanwhile, South Africa was pressing ahead with its charm offensive at every level. In 2009 its foreign minister wrote a letter to her BRIC counterparts, in which she raised the issue of her country's membership of the group. Speaking on a visit to Beijing in February 2010, she said that "If you want to build houses, you need more than one BRIC," adding that South Africa could add momentum to the BRIC group.²¹

As a result, by the time the G20 held its November 2010 summit in Seoul, South Africa's BRIC membership had become a foregone conclusion. Speaking at a press conference, Russia's then president Dmitry Medvedev said, "There have been a number of requests asking BRIC to accept new members, including South Africa. Our attitude to such requests is positive." He added that "this is a position shared by all the BRIC members."²²

SOUTH AFRICA'S REASONS FOR JOINING BRIC

Let us now look at the reasons why South Africa was so eager to join this group of developing countries. According to Mandisi Mpahlwa, the South African ambassador to Moscow (and former minister of trade and industry, who later became Zuma's advisor), right from the start his country "saw more in BRIC than most commentators did." Responding to critics who say that South Africa is not big enough to be regarded as one of the "emerging giants"—as the BRIC nations are often described—the ambassador said that "it was never about the size of the economies, populations or landmasses of the BRIC member countries."²³

South African representatives have always stressed that they do not regard BRIC merely as a potential new power that is going to "share centre stage with the leading economic powers." South Africa views BRIC as "an association of like-minded countries with a reputation for being independent and committed to reforming global decision-making structures."

For South Africans, BRIC was not just a group of rapidly growing economies, but also a potential political and moral force for change, a force that can help to create a better world, whose values and aspirations South Africa shares.²⁴



No doubt the South African leadership was also attracted by the fact that BRIC members aspired to maintain good relations with the traditional global powers, and to pursue closer bilateral ties with the United States and the EU countries. That is why becoming a member of the group would not do any damage to South Africa's foreign policy in other areas.

Naturally, there were questions about the compatibility of the country's membership of IBSA with its intention to join BRIC. Commenting on BRIC's invitation for her country to become a member, Minister Nkoana-Mashabane said that IBSA would only become stronger, and that the two groups would successfully coexist. She expressed her confidence that the BRICS and IBSA mandates were entirely compatible.

Ambassador Mpahlwa also spoke about the coexistence of the two organizations: "IBSA is a coming together of what is historically referred to as the 'South', but BRICS—with the presence of Russia as a First World Country—is a bridge between North and South."²⁵ The ambassador's definition of Russia as a "First World Country" raises some questions. The more relevant difference between the two groups is that IBSA was set up several years ahead of BRIC, and has a more developed structure. That is why it would be a mistake for South Africa (as well as for India and Brazil) to dissolve the IBSA forum—at least until BRICS itself has become more mature.

Another important consideration is that all the BRICS nations are the leading economic powers in their respective regions. That fully applies to South Africa as well. Its GDP makes up a quarter of the African total, and its electricity generation more than half. People often forget that the largest investor on the African continent is not the United States, Britain, or China—it is South Africa.

South Africans believe that their membership of BRICS will help to strengthen cooperation between the African continent and the other members of the group. Speaking during his first BRICS summit, Jacob Zuma said that Africa required 480 billion dollars of investment in its infrastructure, and urged companies from the other four countries to pool their efforts with their South African partners in order to speed up African development. South Africa hopes that the BRICS sectoral projects will go hand in hand with the NEPAD (New Partnership for Africa's Development) program, which the country helped to launch.

South Africa also expects stronger coordination between the BRICS nations during talks on various international issues, including reform of the Bretton Woods institutions and a more equitable system of international trade. Synergies between the BRICS countries should enable them to use their individual potential for the common good.

Finally, it would not be a stretch to say that considerations of prestige also figured largely in South Africa's decision to join BRICS. "We are now equal co-architects of a new equitable international system," the South African president said in his comments on the BRICS decision to offer membership to his country. "There is unity of purpose in our diversity and this is what renders this mechanism unique and increasingly influential."²⁶

RESULTS OF SOUTH AFRICAN MEMBERSHIP

South African reaction to the offer of membership was extremely upbeat; the news was received with a certain sense of triumph. Even the national currency rose to a three-year high against the dollar. Nevertheless, there was also a lot of domestic criticism of the decision to join, with many skeptics on opposite sides of the political spectrum.

In January 2011 two South African economists, Mills Soko and Mzukisi Qobo (both hold doctorates from Britain's University of Warwick), published an article headlined "Creating more walls than Brics."²⁷ Their line of reasoning, it must be said, sounds rather strange. For example, they question the inclusion of the "failing Russian state" in BRIC, as if it was not Russia itself that initiated the establishment of the bloc. They also call BRIC "amorphous," and go as far as to declare that South Africa's joy at being accepted as a member is "an affront to our national pride."

These criticisms received a firm rebuttal from Dr. Sehlare Makgetlaneng, senior researcher at the Africa Institute. Detailing the advantages of BRIC membership, he emphasized the political aspects. "Bric is bound to move towards a common position on global issues," he wrote in his article for the *Mail and Guardian*. "This will have serious implications for the global strategy of the United States and its strategic allies, particularly in Africa and the Indian Ocean... Bric is bound,

together with South Africa as an organizational colleague, to increase its collective voice in international relations.^{1,28}

But it is not only Western university graduates who express reservations about South Africa's BRIC membership. One of the 2012 issues of the *Thinker* journal, published by Dr. Essop Pahad (who spent many years as a minister in the South African cabinet and was the right-hand man of President Thabo Mbeki) carried an article by Isaac Mogotsi, a graduate of the Patrice Lumumba University in Moscow.²⁹ The article makes an ambiguous impression. On the one hand, the author says that South African diplomats worked extremely hard to secure the country's BRIC membership, and describes the accession as President Zuma's best diplomatic step. But he also emphasizes serious differences between the members of the bloc. He says that these countries are locked in a bitter struggle for African resources and market share, and opines that China and Russia have an irreconcilable territorial dispute.³⁰ He concludes that squabbles between some BRICS members could have a very negative impact on South African diplomacy.

Criticisms of South African membership of BRICS have also been voiced from the far left end of the political spectrum. For example, Patrick Bond, professor at the KwaZulu-Natal University, labels members of the forum as "Brics sub-imperialists," among which he now counts South Africa as well.³¹

BRIC MEMBERS' REASONS FOR INVITING SOUTH AFRICA

News of South Africa's upcoming accession to BRIC was met with an ambiguous response in the international expert community. Some experts believed that the next nation to be invited should have been Indonesia, which is a larger country than South Africa, with a rapidly growing economy.³² Turkey and Mexico were also named among potential candidates, but the resource-rich African continent drew more attention.

When asked whether South Africa should become a member of the group, the already mentioned Jim O'Neill, who coined the term BRIC more than a decade ago, answered in the negative.³³ He said that the country was simply not big enough to be a BRIC member³⁴—adding that Nigeria, on the other hand, had real potential.³⁵ He went on to say that the invitation to join the bloc was clearly good news for South Africa itself, but it was not obvious why the other BRIC countries had decided to invite it. Speaking about their possible reasons, he said, however, that South Africa rightly regarded itself as an emerging economy, which could explain the motives of the four BRIC members.

Speaking of the economy, South Africa is one of the richest countries in Africa, with the continent's highest GDP of 408 billion dollars.³⁶ But Russian GDP, at 2,100 billion dollars, is five times the South African figure. Indian GDP is about the same as the Russian. The size of Brazil's economy is estimated at 2,600 billion dollars, and China's at over 7,700 billion.³⁷ Neither does South African GDP compare favorably with the economies of other potential BRIC candidates, including Indonesia (847 billion), Mexico (1,155 billion), Turkey (773 billion) or South Korea (1,116 billion).³⁸

Clearly, the size of GDP was not the main criterion for inviting South Africa to join BRIC. It appears that one of the key motives was the BRIC nations' desire to eliminate the geographical divide, i.e. to have members on every continent. There is now little doubt that Africa is not a black hole, and that human progress is impossible without Africa's participation. What is more, it is becoming increasingly obvious that it is not just about the continent's natural resources, but also its human resources of over 1 billion people, and its ability to embrace change.

South Africa is undoubtedly the leading country of the African continent. It has a highly developed economy; it has also made a major contribution to peace and security in Africa by allocating troops for peacekeeping operations and acting as mediator during various conflict settlement talks.

Another advantage offered by South Africa is that its excellent infrastructure makes it an ideal gateway to Africa for goods and investment coming to the continent from other parts of the globe. Last but not least, now that the country has rid itself of apartheid and become a true democracy, it has a great deal of moral authority on the international scene.



Yet another important aspect boils down to matters of defense. For now, this is not being highlighted in BRICS documents, with the exception of meetings between senior security officials. Nevertheless, its potential importance is hard to overestimate. Writing in the article “From BRIC to BRICS and South Africa’s Military,” Anton Kruger, a consultant at the Institute for Security Studies in Pretoria, argues that South Africa needs to increase its defense spending in order to catch up (though not in absolute terms, obviously) with the other members of the group. In addition to South Africa’s peacekeeping commitments as part of the African Union, Kruger emphasizes the country’s unique location “on 3 essential shipping routes from West to East.” In his opinion, this fact and South Africa’s resources will “allow BRIC to better compete with the G7 in global issues.”³⁹

South African representatives took part in the 4th BRICS summit in Delhi on March 29, 2012, as well as several preceding sectoral meetings and a forum of expert centers. Speaking after the summit, Jacob Zuma stressed that his country represented the whole of Africa at BRICS. He also said that BRICS is a place where “Africa is treated with respect.” “Our views are treated equally among the partners. There is no feeling that some people are looking down on the continent of Africa.”⁴⁰

SUMMIT IN DURBAN

The BRICS leaders agreed in Delhi that their next summit would be held on March 26–27, 2013 in Durban, the capital of President Zuma’s home province of KwaZulu-Natal.

This article has already discussed South Africa’s aspiration to engage the other BRICS nations in closer cooperation with African countries, and to emphasize its own role as a gateway to Africa. At the initiative of the South African leadership, the summit in Durban was held under the slogan, “BRICS and AFRICA: Partnership for Development, Integration and Industrialization.” The summit adopted not only the eThekweni Declaration and Action Plan (eThekweni is the name of the metropolitan municipality which includes Durban), but also a number of other documents, including co-financing agreements for African infrastructure projects. The leaders also agreed to set up the BRICS Business Council, and announced the creation of the BRICS consortium of expert centers.⁴¹

At South Africa’s initiative the BRICS leaders also met several African heads of state and leaders of African continental and regional organizations, including the chairperson of the African Union Commission, Nkosazana Dlamini-Zuma (who hails from South Africa).

On the whole, the results of the latest BRICS summit in Durban can be regarded as satisfactory, as far as the organization’s strategy is concerned.

Economically, the summit has been fairly successful, especially in the opinion of South African business leaders. It appears that South Africa would have no problem using the Chinese yuan as a reserve currency; the country’s bankers are supportive of the idea.⁴² They believe the move would be justified, given the rapidly growing trade with China. The South Africans are also well aware that Nigeria, their main rival on the continent, has already begun to use the yuan in its banking system.

South African business leaders have also been very enthusiastic about the results achieved in terms of economic cooperation. One of their priorities is construction and infrastructure. In South Africa, annual investment in construction is estimated at 30 billion dollars, whereas in Russia the figure is 100 billion dollars, in India 150 billion, in Brazil 160 billion, and in China a record-breaking 930 billion dollars.⁴³ In other words, the country wants to use BRICS as an engine of economic growth and development. It is also eager to use cooperation with BRICS to increase its exports to other African countries, which will, incidentally, translate into greater political clout.

As far as politics is concerned, assessments of the results of the BRICS summit in Durban have been less enthusiastic. The final declaration can hardly be described as a challenge to the Western neo-liberal model, as Britain’s *Guardian* newspaper seems to believe.⁴⁴ It would be more accurate to say that the document is the product of a compromise between the BRICS nations based on a more or less shared vision of the problems facing them.

On the African continent, South Africa and the rest of the BRICS members will have to address the existing imbalance whereby their bilateral relations with African countries are stronger than their coordinated approach to affairs on the continent.⁴⁵

Second, according to Memory Dube, senior researcher at the South African Institute for International Affairs, the BRICS nations need to agree a common set of approaches in the international arena.⁴⁶ This problem is recognized by all the members of the bloc. Furthermore, their declared commitment to the UN principles in their foreign policy is in itself a substantial piece of evidence pointing to the shared political worldview of the BRICS states.

Third, there are domestic problems in South Africa itself which make effective coordination with the other BRICS members more difficult. The skeptics are absolutely right to point out that the country's stifling bureaucracy is preventing its leaders from implementing effective strategies—although sweet dreams about the very existence of such strategies are another matter.⁴⁷

Nevertheless, South Africa's accession to BRICS should help to address all these problems. For their part, the other BRICS nations need a predictable partner they can rely on in Africa—and South Africa is probably the only country on the continent that can be just such a partner.

RUSSIAN OBJECTIVES

An event that was just as important as South Africa's participation in the BRICS summit was a visit to that country (albeit very brief) by Russian President Vladimir Putin in March 2013, just ahead of the summit itself. The trip signaled a new era in bilateral relations between Russia and South Africa.

The two countries adopted a joint declaration which described the nature of their relations as a comprehensive and strategic partnership. That partnership includes certain mutual political commitments (including regular consultations on regional and international security issues, and coordination in the international arena) as well as scientific, technical, and economic cooperation.⁴⁸

The declaration and other documents signed during the meeting will give a new impetus to bilateral ties—especially since they outline specific areas of cooperation and concrete steps to put the aspirations into practice.

The African infrastructure projects are opening up great opportunities for Russian companies. They can leverage a unique combination of Russia's technological capability, its positive image on the African continent, and its detailed knowledge of the situation on the ground.

Another important priority is to deepen political cooperation and find common ground on the most pressing international problems. During the crisis in Libya, South Africa initially adopted a position that ran counter to the position of the other BRICS members. Later, however, its leadership—and especially President Zuma—made great efforts to achieve a political settlement in Libya.

What is more, in May 2013 the South African president paid a visit to Sochi, where he and Vladimir Putin discussed coordination of the two countries' efforts to settle the Syrian crisis at the UN Security Council. Even more importantly for the South African foreign strategy, Jacob Zuma secured Putin's consent to invite to the G20 summit in St Petersburg various African representatives who are South Africa's partners at the AU and the NEPAD.⁴⁹

It appears, however, that even though South Africa's accession to BRICS will stimulate closer relations between the two countries, significant progress will be impossible without learning more about each other and establishing information exchange. On the whole, there are reasons to believe that the meeting held in Durban will help to achieve a better understanding in Russia of the importance of BRICS and its new member, South Africa. Let us hope that Russia will now pay closer attention to that friendly country and to the role it plays in the international arena. Unfortunately, there is still much room for improvement in this area.

To give just one example, the *Vedomosti* newspaper recently published an interview with a Brazilian scientist working in the United States. The headline of the interview is interesting in itself: "Russia must not be expelled from BRIC." The introduction to the interview, written by the newspaper's journalists, raises even more questions. It says that "the strength of the BRIC term... has been somewhat undermined," and blames it on "South Africa trying to join the group consisting of Brazil, Russia, India and China."⁵⁰ The weird thing is that the article was written a whole year after South Africa had become a member of BRICS!



On the other hand, people in South Africa know about modern Russia even less than vice versa—and Russia has not done very much to address that problem. Suffice it to say that even though it has been 19 years since the arrival of a democratic government in that country, Russia has yet to open its cultural center there.

Nevertheless, South Africa's interest in Russia is growing. One of the reasons for that, undoubtedly, is that the two countries are now in the same BRICS boat. For example, *The Thinker* magazine recently published an article⁵¹ by Yazini April, a researcher with the Africa Institute in South Africa, about Russia's interests in BRICS and the effects of those interests on South African diplomacy. The article offers a positive but at the same time realistic assessment of Russia's potential, as well as specific proposals on strengthening bilateral ties. Meanwhile, the South African International Relations Institute, in cooperation with scientists of the Russian Academy of Sciences' Africa Institute, is pursuing an interesting project which aims to study Russia's policy in Africa. Finally, in a recent interview with the present author, South African Deputy President Kgalema Motlanthe spoke about the importance of knowing each other much better than is the case now.⁵²

RIGHT WORDS AND ACTUAL DEEDS

The establishment of the BRIC forum was in line with South Africa's foreign policy goals. Although initially that country was not a member, its leadership worked hard to secure membership. The other four countries' leaders welcomed South Africa's membership application because they realized that by turning itself into BRICS, the group would become truly global, with members on every continent. Another important consideration was South Africa's leading role on the African continent, and its moral authority on the international stage.

It does not seem likely that BRICS will accept any new members in the foreseeable future, even though several countries have expressed their wish to join. The existing members will probably focus on gradual institutionalization of the group, especially in terms of developing its long-term strategy—naturally, with South Africa's active involvement.

It has to be recognized, however, that previously, exchanges of visits by Russian and African leaders were not always followed by the implementation of the plans they discussed or even of the documents they signed. There was a clear lack of proper coordination between government agencies, and especially between the government and commercial organizations. In simple terms, the former clearly failed to exercise proper controls over the latter.

Let us hope that this time round, all the right words will be followed by actual deeds.



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INTERNATIONAL INFORMATION SECURITY AND GLOBAL INTERNET GOVERNANCE: A VIEW FROM GENEVA

The first 12 years of the twenty-first century were marked by revolutionary changes stemming from meteoric development of information and communication technologies and the internet in particular. These changes affected practically all spheres of social life and international relations from the social and political transformations in the Arab world (the so-called Arab Spring) to an unprecedented rise of hacktivism, cyberespionage, and global concern over the issues of preventing (or victoriously conducting) cyberwars, with the internet and its evolution lying at the core of all these processes. Due to the trans-border nature of the Global Net the implications of its transformation are also transnational. In particular it is true for international security, which is becoming heavily dependent on the security of cyberspace. Multiple witnesses to the latter include the establishment of military (or quasi-military) cyberunits in a number of states worldwide, the adoption of U.S. cyberstrategies in 2011 treating cyberspace as a new operational domain for armed forces, and the revelation of a number of extremely sophisticated cyberespionage and cybersabotage tools including Flame and Stuxnet malwares in the Middle East networks.

Apart from the military and strategic security dimension, the whole architecture of global internet governance has also been in the process of major transformations in recent years. The explosive growth in the number of physical devices led to a boost in communications, alongside an increase in the number and range of communication channels at the physical level, which made possible a mobile revolution on the internet, pushing the PC into second place. Other radical changes are coming at the level of IP addresses with a global migration to the new version of IP protocol (from IPv4 to IPv6) under way. A distinct revolution has been unfolding on the third level of network architecture—in the space of DNS names. A separate issue is the regulation of cross-border social networks, a true potential of which has been realized during the events of the Arab Spring and last year's riots in London. Yet, none of these issues for the moment has been settled within the framework of universal, harmonized, and comprehensive international regulation—or at least transnational cooperation efficient enough to close all blank spots and overcome challenges arising in this particular area.

However, broad international expertise is required to analyze these fundamental trends from the angle of a joint and balanced approach by the international community. Russia, as one of the world's fastest-growing internet markets and one of the major cyberpowers, is highly interested in international expert dialogue on these issues both on governmental and nongovernmental levels. The PIR Center, being one of the leading nongovernmental think tanks in Russia specialized in international security, has been paying increasing attention to the issues of information security and international dialogue in this area. With its Geneva-based European branch Centre russe d'études politiques, the PIR Center has a brilliant opportunity to initiate a discussion that would bring together top Russian and international experts in this field in order to bridge positions among expert communities and elaborate a non-governmental vision for a Russian and European joint agenda in this area. An attempt to launch such international discussion was made by the PIR Center in 2012.



On April 26, 2012 in Geneva, Switzerland, the joint extended meeting of the PIR Center's Trialogue Club International and the PIR Center's European branch Centre russe d'études politiques was held in the format of a round table dedicated to the issues of international information security and global internet governance. The event was opened by the President of the PIR Center, Vladimir Orlov; the keynote report was presented by the Chairman of the PIR Center Executive Board, Mikhail Yakushev. The list of participants in the discussion also included the Deputy Permanent Representative of the Russian Federation to the United Nations Office and other International Organizations in Geneva, Viktor Vasilyev; the Deputy Permanent Representative of the United States to the Conference on Disarmament, Walter Reid; the Vice-President of the Internet Society (ISOC), Markus Kummer, and the Director of Public Policy at ISOC, Ms. Constance Bommelaer; the Head of Section for Caucasian, Central Asian, and Eastern European Countries, Division for Certain Countries in Europe and Asia at the World Intellectual Property Organization, Alexander Matveev; the Strategy and Policy Advisor at the Corporate Strategy Division of International Telecommunication Union, Jaroslaw Ponder; and the Programme Lead of Emerging Security Threats Programme at the United Nations Institute for Disarmament Research, Ben Baseley-Walker. One of the leading European researchers and theorists of information technologies, Professor for Civil, Commercial and European Law at the University of Zurich, Rolf Weber, gave a commentary on the keynote speech by Mikhail Yakushev.

VLADIMIR ORLOV (PIR CENTER): Currently the PIR Center is in the process of developing the project on global internet governance and international information security as it is seen in Russia. There are quite a few problematic areas in this regard such as cloud computing and cloud technology security, identification in the internet, and the use of social networks. Sometimes I feel that we are overwhelmed by a number of topics which are packed in that one title of the project. Of course there are many legal issues resulting from Russia's nonparticipation in the Budapest convention and other instruments of hard and soft law aimed at effective countering of transborder cybercrime. So our ambition at the PIR Center is to embrace all this multilayer subject field—from the legal to the technical dimension and further to a practical policy level.

The PIR Center is interested in the whole complex, but the major issue is of course the *policy*—how the policy is influenced; how the policy may or should be changed to adjust to realities and to keep in mind the global development. So this is what we had in mind when we started the project. So let us get started with the very first large meeting within this project. Key issues I would like to discuss today are including changes in the principles of internet architecture and global internet governance, a new agenda of international cybersecurity regulation and key challenges emerging in cyberspace—and, of course, the role of Russia in all these issues.

INTERNET ARCHITECTURE AND LEVELS OF INTERNET GOVERNANCE

MIKHAIL YAKUSHEV (PIR CENTER): First of all I should point out the difference in definitions and wordings of what we are talking about. In the Russian language and Russian diplomacy they prefer to use different words from the widely accepted terms of “internet governance” and “cyber security,” introducing instead the Russian concept of “information security,” which is much more common internally in our country. However, we are talking about the same problems and the same issues—probably in different words. Ultimately, we should try to understand each other and try to speak the same language.

Internet governance has a lot of aspects, just like any other complex aspect of international security. When we talk about outer space exploration and its legal and political implications, we should bear in mind the principles of outer space activities, as well as the principle of liability, rights, and obligations of launching states, the legal status of the Moon and other celestial bodies, etc. When we deal with nuclear power, we have to keep attention on the issues of arms control, nonproliferation, the military and peaceful use of nuclear materials, liability of nuclear operators, etc. The same happens with the internet—it is not possible to give a short and precise answer in terms of what should be done in the sphere of internet governance, who is responsible for it, and what kind of legal treaty or a convention should be developed in order to fill the gaps and to answer all the questions. In fact when we are talking about the internet we are sometimes talking about totally different things that altogether constitute what we call the internet. The

technical infrastructure, telecommunication channels, and various types of equipment which provides access to the network can be mentioned here. The network infrastructure is totally different from what we had in the age of traditional telecommunications like the telegraph or telephone. Finally, talking about the application level we should keep in mind that the internet has become so important and particularly due to tremendous developments on this level. But even on the level of infrastructure we have different sub-levels regulated by different bodies and with different principles. Infrastructure means fiber optics, satellite channels, radio spectrum, etc. It also includes all the issues with the last-mile access, different types of access equipment, user equipment, and customer premises equipment, the regulation of which is totally different in the case of satellite stations, for example.

The same feature is also relevant when we are talking about network architecture itself—which is quite heterogeneous and remarkably diversified in a technical, organizational, and regulatory sense. In the network architecture we should differentiate between the level of the root servers—the famous 13 root servers that are the core basis of the internet located in different countries of the world. We should understand the issues of IP-addressing and now we have a wonderful picture of the transformation of the previous version of IP-addressers from IPv4 to IPv6, which changes very significantly the overall image of the internet. Now the internet is being converted from a network of persons to the internet of things, with our refrigerators, cars, and various types of electronic equipment receiving their own IP addresses and becoming able to communicate with each other. The third level of the network architecture is the domain name system, which is related to geopolitics. By now we have a number of so-called country-code top-level domains which somehow correspond to the principle of sovereignty of states. However, this year we also have a transformation to the system whereby the top-level domains will increase in number up to several hundreds or even thousands—e.g. .microsoft, .facebook, .google, .religion, .luckilyman—everything is possible under such brilliant change—and many people do not yet understand what changes should be introduced soon and what their influence will be on all of us.

Finally, on the application level there are a lot of websites—billions of them already—regulated in different ways and in different jurisdictions—but with the help of such websites we understand what happens on the internet, and exactly what the internet is used for. But the website per se must be regulated by specialized web services, just like the mass media. The mass media are regulated in different countries irrespective of whether they are online or offline and this is a very important source of information dissemination and mass communication. Soon it will not be a problem at all to find any information on the internet without using the domain name system—with the help of advanced search engines like Google—or Yandex in Russia. For example, if you would like to check what the Centre russe d'études politiques is (which organized our meeting today), it is not necessary to remember the name of this organization in the Swiss domain.ch. It is enough just to put the name of this organization—or any other organization—into Google or Yandex or the Microsoft website—and with 100 percent certainty you will be delivered to the exact location of the web resource without paying attention to where this resource is located.

Social networks are the internet of today, providing fantastic opportunities partially because social networks are not regulated at all. Most social networks are cross-border and transnational—for example the population of Facebook has recently exceeded 900 million people, which can be viewed as the third in the world after China and India. So the question is who should regulate the activities of Facebook users and what kind of body or authority this social network should have in terms of global security. A new dimension which is being actively developed right now is mobile system space. In many countries—and Russia is not an exclusion here—many people have access to the internet not through computer systems as they used to do traditionally but through mobile phones, tablet computers, and portable devices, and this also changes the landscape of the internet very significantly because there are already applications that cannot be used through a desktop computer—they are adapted for the portable devices while being useless for traditional desktops. Thus we should also talk about integration of mobile networks and computer networks on the internet, so the internet of today would be quite different from that of 2020, as well as the internet of today being quite different from what we had 15 or even 10 years ago. So this was also a kind of introduction to show you the variety of issues and dimensions we should analyze when checking what happens in the field of internet governance.

ROLF WEBER (UNIVERSITY OF ZURICH): No doubt infrastructures are important; we also realize that we have different infrastructures—it is not sufficient just to look at telecommunications networks: we have satellites, we have radio spectrum, we have more and more mobile phones. As



far as Russia is concerned, as Mikhail has said, the use of mobile phones in Russia is true as well for many other countries in the world. I am quite often located in East Asia and in many East Asian countries the mobile phone is really the way to connect to the internet, and not really a computer network. So the new technologies of course also address new security issues, which we have to take into account. Now, I think I would like to go back to the history for a short moment. Why do we have the internet? The main driver was the Department of Defense, the military services in the United States; I would just like to recall the ARPANET, which has been moved more and more to the civil or private sector and military services have stepped out. Somehow I have the impression it is almost a little bit of a surprise that the more discussions are held on defense, security-oriented issues, the more they lose in importance. They have not been so crucial anymore as they were at the beginning of the age of the internet when the internet, or the technical infrastructure of the internet, was invented.

INTERNATIONAL REGULATION OF CYBERSECURITY AND INTERNET GOVERNANCE

YAKUSHEV: There are some very interesting discussions on the principle of sovereignty. Does the state still conserve its sovereignty in the epoch of the internet, or is there something that changes the concept of political sovereignty making it just a notion, modifying it for example to the concept of shared sovereignty? This is a really difficult question to answer or to analyze because there is a wide international recognition that there should not be any interference or any intervention into the internal political affairs of any country and, for example, no one objects to the right of China, of Iran, or of Arab countries to impose certain limits on the internet, on access to the internet, on the distribution of certain information within such countries. However, we also see the examples of Libya or Syria where there are so-called interests of humanitarian intervention, where their violation of human rights is just an explanation for why certain countries, or why certain international organizations are interested to restore the situation and to stop such kinds of violations of human rights. We also see the appearance of different international documents, national documents with international coverage, like the United States Strategy for Cyberspace (2011), which describes and fixes the principles of American behavior in cyberspace, and this provoked fierce discussions worldwide. We also see the proposals of the Russian Federation, which I will cover a little bit later. But now, unfortunately, even with all the discussions within the United Nations, we do not see the possibility of a compromise. Unfortunately, all such issues are highly politicized, and the Arab Spring, the developments in different countries, the restrictions on freedom of speech etc. do not allow us to talk about the possibility to develop a document, an international document, an international legal instrument to fill the gaps and to answer all the questions. However, it is obvious that there are a number of issues of common interest that require solution now, and that we should not wait until these problems will somehow be solved in the future.

I would like to draw your attention to the activity which was undertaken by the Council of Europe, which unites almost all countries of the European Continent and whose documents are usually respected not only by European countries, but also by the transatlantic, American, African, and Asian countries as well. In September 2011, the Committee of Ministers of the Council of Europe adopted a number of very important documents, and these documents should be considered as part of the so-called “information security soft law.” It is not a treaty, it is not a resolution of the United Nations, it is not a resolution of the Security Council of the United Nations. However, as Russia and most of the European countries are members of the Council of Europe, such recommendations, and such soft legal documents, are an excellent example of the possible compromise on certain issues related to internet governance, namely cross-border harm and the cross-border consequences of the activities of the states. So the Council of Europe adopted the declaration by the Committee of Ministers on Internet Governance Principles and the recommendation of the Committee of Ministers to member states on protection and promotion of the universality, integrity, and openness of the internet. They are available online.

There are 10 principles of internet governance that are commonly accepted by all European countries, member-states of the Council of Europe, like protection of all fundamental rights and freedoms. This is the introduction of multi-stakeholder governance: there are now five groups of such stakeholders—governments, the private sector, civil society, the technical community, plus the internet users. There is a principle of the responsibility of states. Internet governance very often means the rights of the states. For the first time, the Council of Europe imposed responsibility in terms of prevention of any cross-border harm, if such harm can occur as a

result of the adoption of certain internal laws or regulations. There are a number of cases where internal acts did cause certain harm in other countries. For example, last year a Georgian lady managed to cut a fiber-optic cable somewhere in her village and this fiber-optic cable interrupted the connectivity to the internet of the state of Armenia. What should be done to prevent such cases in the future? I do not want to just enumerate all 10 principles, just maybe mention one of them. The ninth principle states that we should prevent any traffic measures, for example giving priority to certain types of traffic and limiting access to another type of resources for political or other reasons, if such measures do not meet the requirements of international law on the protection of freedom of expression and access to information. And the tenth principle is also very important: it is cultural and linguistic diversity.

There were different attempts to elaborate a kind of international document that would answer at least some of the open questions. Here in Geneva in 2005 a number of sessions of the Working Group on Internet Governance (WGIG) were arranged by the former UN Under Secretary General Kofi Annan. All Working Group members were appointed by the UN Secretary General. The final report of the Working Group was published in 2005 and it did contain certain solutions, explanations, and provisions that really tried to answer open questions of that moment and what we managed to elaborate on in our final report which is now being further discussed in the sessions of the International Governance Forums that are held annually.

In other proposals of countries like the United States or Russia the fundamental principles of international law should be implemented in all such proposals, because otherwise it will be very difficult to protect the main ideas of such documents. For example, if we are trying to prevent a cyber-war, we should prevent illegal activities of the internet users against the state (like a cyber-terrorism war, illegal actions of internet users against themselves, which is a cybercrime). The question is whether we should also prevent illegal activities of governments against internet users.

WEBER: Definitely, one of the key questions is, to what extent do we need regulations? At the very beginning, in 1996, John Perry Barlow said in his very famous manifesto that we do not need any regulations whatsoever; the cyber world is a completely different world which does not have to look to governments or to the private sector. Obviously this has changed very much. This process has led, as has been very nicely and extensively said by Mikhail, to the definition of multi-stakeholder governance. We do now have three pillars—the governments, the private sector, and the civil society—but we also now have the phenomenon that the private sector and civil society are looking more at aspects such as the domain name system, privacy, human rights, and censorship. If you look at the topics discussed during the Internet Governance Forums (IGFs) over the last six years, we only have very remote discussions on things like cyber-terrorism and cybercrime. I am not saying that there are no virtues at all, but cyber-terrorism and cybercrime are certainly not at the core of the IGFs, at least not for the first four IGFs. This is also not so much of a surprise because things like cyber-terrorism and especially cyberwars are largely the domain of governments while the participants of IGFs come more from the civil society sector. So perhaps for these people cybercrimes might play a certain role, but they still have other crucial concerns; that is why, for example, discussions about the Cybercrime Convention of the Council of Europe were embedded into the agenda of the IGFs only after a long time. Obviously, at the ICANN [Internet Corporation for Assigned Names and Numbers] meetings these aspects did not play any role whatsoever. As a consequence we seem to be going in the direction of some kind of compromise. Mikhail mentioned the attempt by the Council of Europe to come to terms as far as internet governance problems are concerned. A couple of other governments, for example the government of Brazil and other parties, have also worked on internet governance principles. We do have attempts to come to some kind of bill of human rights in the internet. Surprisingly enough, although now such an initiative is supported by Google through an institute in Berlin with quite large resources, I do not really see a lot of emphasis in the field of local and international security, and in my opinion this would really be a field which merits further attention and which should be tackled in the near future, and in principle I would say it should be tackled before it is too late. In other words, emphasis should now also be put on security measures. I would only like to mention that there are of course a couple of documents which could be used as a basic framework for discussions. For example, the OECD, which of course is not a worldwide organization, but has some 40 member-states mainly from the developed countries, has already published guidelines on information security in the year 2002, so it is a 10-year-old document that could be used as basis for further discussions.



CONSTANCE BOMMELAER (INTERNET SOCIETY): I would like to add to what Prof. Weber mentioned earlier. There are already some efforts going on at the international level; Interpol announced recently that it was creating a global sourcing system, so this would provide rapid identification of any authors of criminal acts in cyberspace. I do not know how much publicity is going on around these initiatives, but I do believe that some initial steps have been taken in terms of international cooperation. Of course, these initiatives need to be balanced by the fact that there are some privacy concerns, so it is important that any effort in this direction be taken cautiously. I think some efforts are starting and we can hope that some good things will come out of it.

ALEXANDER MATVEEV (WORLD INTELLECTUAL PROPERTY ORGANIZATION): One element to which I would like to draw your attention, since I see representatives of various state organizations here, is probably a problem that we experience in international organizations today, with ICANN for instance, and the lack of protection given by ICANN to international and inter-governmental organizations. Unfortunately, since last year, all the attempts we have tried have not been successful, and ICANN agreed to provide protection only to the International Red Cross and to the International Olympic Committee; something is being done with UNICEF, but for the rest of the United Nations family, unfortunately we might face a problem, a real problem, once these first-level names were introduced and I would think that it is a matter for governments, and a matter for the public at large to consider this issue and probably to make their own contribution to its solution.

WEBER: When I tried to anticipate what he would say, I thought maybe he would look at the most recent security problem which has occurred within ICANN. I would like to try at least to react to a couple of statements and thoughts made by Mikhail. Probably, we should start with the question: What should we really do if we look at internet regulation? Is there any reason to regulate at all? Who should set the rules? Whose interests are to be covered by rules, and do we need special mechanisms? If we look back at the last 15 years since ICANN has been established and since a large community has in fact been a position to participate in the cyber world, we see some remarkable developments. We see the development from private-centered regulation to state interests and to a multi-stakeholder approach.

Apart from that, and perhaps then coming a little bit more back to the aspects which I wanted to discuss with you originally, I also do think that we need a better structured ICANN. In connection with the applications for the new DNS system there was a major security problem and apparently it was possible for applicants to get data from other applicants who had already loaded their information. The way that ICANN has reacted was not really professional in my assessment. ICANN basically said that they were doing what they could to solve this problem with security. However, there was no clear guidance on how this should have been done, or who was responsible within ICANN. There was not even a clear allocation of powers, and finally it was completely opened up to an extent that liability rules could be not applied because nobody knew what kind of damage had been caused by this security leakage. So, there is also an additional need to look into global security aspects within the whole framework of ICANN. My proposal in this light was to try come to a strong constitutional framework which should govern ICANN, since legitimacy questions cannot any longer be overlooked. I have submitted a couple of ideas as to how the weaknesses of the present system could be overcome. I am not saying we should replace ICANN, but in my opinion ICANN should become some kind of a more public interest corrector and as a lawyer I cannot come around the observation that we do not even have a legal appeal system which merits the name. The structure we need to balance the system is by far not something that could be called a court, but still we are talking about some kind of an independent review body.

JAROSLAW PONDER (INTERNATIONAL TELECOMMUNICATION UNION): Cyber security is one of the integral parts of the outcomes of the Geneva Plan of Action and the Tunis Agenda, where the mechanism for implementation has been proposed. The ITU is making the necessary efforts in order to ensure that the Global Cybersecurity Agenda (launched already in 2007 in the multi-stakeholder set up) brings fruitful effects at the global level. In fact we are entering the phase of a world review of these processes: what was expected from the summit and what the countries would like to see beyond 2015 in terms of global actions, and what we did not know earlier that we might be confronted with. That is why the contribution from the multi-stakeholder community has an extremely huge value in this and many of those issues that have been mentioned today and which will be the subject of many sessions during the World Summit on the Information Society Forum.

The forum is not only a talk-show; it is targeted at actual implementation. Listening to today's discussion, I am happy that there are concrete proposals, and we hope that they will be tabled during that week. The Global Cybersecurity Agenda (GCA) proposes the framework, but there is a lot of ongoing work with the countries in order to ensure that the global response to national, regional, and global threats is there and no civilian is scared to open their mobile or computer. One particular direction within this broad framework is the international multilateral partnership against cyber threats. One hundred and forty countries have already joined this global initiative, and several countries are being assisted via the ITU to create computer incident response teams at the national level. Sometimes the task is to create the center from scratch, and we are happy that so many countries are committed to putting this at the top of their agenda. I think this is the moment to join forces and to discuss cooperation within the framework of the GCA at each level: of course at high level, but also at the operational level in order to ensure the global response can be effective.

MULTI-STAKEHOLDER APPROACH TO INTERNET GOVERNANCE

YAKUSHEV: The most important issue introduced in the final report of the Working Group on Internet Governance is the necessity of the so-called multi-stakeholder approach—the necessity to provide and include equal participation of at least three groups of stakeholders. There are three groups of stakeholders: the government, the private sector or business, and the civil society have prospective roles. This is the fundamental principle that should be used when talking about the future development of internet regulation and internet governance, as the specific nature of the internet already brings together millions and billions of users. We have to use the knowledge, experience, and power not only of sovereign states but also that of private-sector businesses that develop the technical standards of the internet, and the civil society which is interested in multiple issues such as human rights, consumer rights, etc. Now we have a system of organizations engaged in internet governance. The list includes among others ITU and ICANN. The latter could be hardly described in terms of whether it is an international organization or a public organization. It is a non-for-profit corporation based in California but its activities have a very global magnitude, and it is ICANN that introduces new top-level domains and regulates very important aspects of internet governance.

There are a number of common problems that require joint solutions and cooperation. First, the multi-stakeholder approach is a must in all aspects of developing and implementing legal norms on internet governance and information security. We see the same story in outer space exploration, maybe even in the participation of private companies in nuclear power or in operating nuclear power sources. So a multi-stakeholder approach for internet governance is really a must.

MARKUS KUMMER (INTERNET SOCIETY): I was very pleased and very interested to see the emphasis on multi-stakeholder cooperation; this is something we as the Internet Society very much believe in. But yes, one correction, or addition: you both refer to the three stakeholder groups, but in Tunis we actually added a fourth stakeholder group, the academic and technical communities. ISOC feels part of the academic and technical communities.

BEN BASELEY-WALKER (UN INSTITUTE FOR DISARMAMENT RESEARCH): Just a few points I wanted to comment on. I love the idea of multi-stakeholders; my colleagues enjoy events that involve conversations on the global drollness of cyber comments, how we are going to govern it, how we are going to write up policies at the national and international level. I find that 99 percent of the time you put industry, academe, policy-makers, and business in the same room you have three very interesting conferences all taking place at the same time, and there is very little effective dialogue between those stakeholders, especially when it comes to the work, the area that Mr Vasilyev and I work in, which is specifically international security dynamic. I would also say the international security community, especially at the diplomatic level, is not used to dealing with nongovernment and with industry. When the issues of nuclear weapons are in focus, there is not such a necessity to engage nongovernmental actors in the process of negotiations and establishment of a new regime—however, the situation is completely different when we speak about the international information security and global Internet governance. It is important to emphasize how much of the internet is in private hands. There is no real effective mechanism for taking people who have grown up despising government in Silicon Valley and suddenly putting them in a room full of diplomats and saying, hey, how's this going to work out? So, I think that is something to bear in mind, to look at what sort of processes are going to be affected.



WEBER: I would like to come back to the term “multi-stakeholderism.” I think multi-stakeholderism cannot mean living without a legal framework. We need something which is legally stable, which is legally resilient; I am just drawing now from the terms which are usually used by technicians. Most likely, the only source from which we can draw some kind of legal principles is international customary law. In this field we also have a couple of ISOC principles which are generally accepted in a very broad legal community.

Mikhail mentioned the outer space treaty. It is a multilateral document, but the key principles contained in this treaty would also apply to other fields. We have certain laws governing traffic on the sea. We have laws for water courses (it has been accepted for much more than a hundred years now that somebody at the source of a water course does not have a right to poison the water course with detriment to a state adjacent to the water course at a later stage). So, most likely, if we look for future projects in national security law, we would have to go through international customary law to see what kind of principles are generally accepted. There is no more or less generally accepted cross-border harm or precautionary principle stated in the Rio Declaration on Environment and Development 1992, or in certain documents of the Council of Europe or any other international bodies. Starting from such kinds of principles we could try, somehow, to discuss a debate. What could be further developed? And what could flow into some kind of new international document? Most likely it would not be a treaty because I am not so optimistic as to believe the governments all over the world would agree on such a treaty, but we could perhaps think of soft law instruments, such as, I think, principles.

WALTER REID (PERMANENT MISSION OF THE UNITED STATES TO THE CONFERENCE ON DISARMAMENT): During discussions and negotiations on confidence-building measures (CBMs) with Russia and some other countries (despite whether or not we have the perfectly agreed legal definition in common) we have found many cases where there is no definition. Measures that we can undertake in this respect in the cyber sphere are often enabled by public–private partnerships. Mr Yakushev has obviously run into this. It is certainly the case in the US cyber-world; we cannot do a lot before we talk with private stakeholders and private actors (who respond on a collaborative, voluntary basis) and try and find real-world solutions. I think this situation will prevail in the next 10, 15, 20 years, and that’s really where the predominant amount of activity is going to be. Given the absolute necessity of the multi-stakeholder model, this is a very healthy thing, and it is good that governments are reminded of that on a regular basis. So we look forward in the international community to engaging in these discussions, and particularly in the security portion.

In Switzerland there is an operation to promote a public–private partnership between the private business community and the police, called MELANI (Reporting and Analysis Centre). It is a cooperative venture, a safe space between parts of the policy community and parts of the business community most affected by cyber-crime and cyber-abuse. It is probably not going to rectify what happened to you already, but it is going to help you develop an understanding of what is going on, how to protect yourself further, and involve you in a broader user community. It has elements of public and private buy-in, it is not an official government entity that may allow you to develop a deterrent so that this doesn’t happen to you in the future, and this is going on at a provincial level, and at the municipal level in many countries around the world. In the United States we see this popping up as well, in Canada too, usually at the state municipal and the sub-national level. It is an ongoing experiment in the Swiss case, but it may be an opportunity for other states including Russia.

RUSSIA AND ITS PLACE IN CYBERSECURITY REGULATION AND INTERNET GOVERNANCE

YAKUSHEV: A few words will be said about Russia’s position—what are the behavior, proposals, and possibilities for cooperation—and some conclusions which could be further discussed during our interactive communication.

Unfortunately, Russia has a so-called bad-credit history. It is a perception that with the censorship, and with the political limitations that are enforced Russia should not make any proposals or be active in any way in the field of cyber-security and internet governance. The cyber-attacks against Estonia, Georgia, and later against opposition internet sites in Russia have provoked many questions, and a large number of those questions are still unanswered.

However, not being a Russian official but an independent research expert, I would say that all such perceptions and rumors have nothing to do with reality. In fact, Russia has a very free system and very free regulation on the internet, especially compared with Kazakhstan, China, Iran, or Turkmenistan. There are no restrictions on the flow of information; there is no censorship in internet transactions, which can of course be different from what we have in TV broadcasting or radio broadcasting in Russia. In Russia the internet really is a zone of freedom. There are no restrictions, so in these terms Russia has a very good credit history when it comes to information security and internet governance. Moreover, political declarations of our leaders have also confirmed the readiness of the government not to impose any restrictions on the freedom of the internet, which is good because certain attempts to promote the ideas of such restrictions were discussed at a high political level.

There were no regulations, no restrictions, no laws that would in any case harm the principle of the free flow of information.

However, there are certain proposals made by the Russian government that are not unanimously supported in the world, namely the document called “The Concept of a Convention on International Information Security” and the proposed “Code of Conduct of States in Cyberspace.” They are sometimes considered somehow as a response to the American concepts and strategies of the last year, but if we study and analyze the document called “The Concept of a Convention on International Information Security,” I would say there is nothing really dangerous or strange or unacceptable in such proposals. “The Concept of a Convention” has a number of definitions: what a cyber war is, or, better said, information war, information weapons, information system, etc. Russians avoid using the word “cyber,” they prefer to say “information.” “The Concept of a Convention” enumerates many threats to international peace and security including destructive actions in the information sphere, subversive actions, psychological wars, and information expansion. Sometimes maybe it reminds us of the rhetoric of the Cold War, when we had a famous definition of ideological war, which Americans waged against the Soviet Union. Nowadays it is slightly different, but it is in the list of main threats. There are principles on international information law. The main principle is sovereignty over its national infrastructure. It means that everything that is technically and physically located within the Russian boundaries should be bound to Russian law and this is how Russia—or other countries—is ready to exercise its sovereignty over its own cyber-space or information space. There are also measures to prevent military conflicts, information wars, measures to counter terrorism in cyberspace, and measures to counter cybercrimes, including criminal and other legal measures.

Unfortunately, such proposals were not met optimistically or favorably by many states and many experts. What are the reasons for such a negative approach? Reason number one is the lack of a multi-stakeholder approach in both the very process of initiation and preparation of such proposals and also in the format in which they are discussed on the international level. The Russian internet community was not invited to participate in developing such proposals, and that is why there are certain mistakes, certain gaps, maybe even bad wording in terms of the legal purity of such proposals, which of course prevents people from the Russian expert community from supporting such ideas. However, I would like to stress once again that there is nothing substantially bad in what Russia proposes.

As for the sovereignty of Russia over technical infrastructure in its information space, further theoretical examination is required in order to understand whether such sovereignty should be absolute. For example, the Olympic Games is a totally a non-government activity which has a multibillion financial input for the economies of many countries. But if the Olympic Games are held in a country like Russia in Sochi in two years, people will use the infrastructure in Russia, and all technical equipment will be based in Russia. However, the rules of the games cannot be established by the Russian FSB [Federal Security Service] or even by the Russian government; they are established by the international Olympic Committee and all countries, including Russia, do recognize that there are certain rules of certain activities which cannot be subject to national law—otherwise such activities cannot be carried out at all.

Of course such kinds of proposals require discussions. We need to discuss the Russian proposals, maybe we need to discuss them in connection with the U.S. proposals on their national strategy for cyberspace. But there is also a very important question of whether such Russian proposals should be seen as a replacement or as a proposal to replace the Budapest Convention on Cybercrime, neither signed nor ratified by Russia. How could these documents



survive together; will they compete or will they add certain value to each other? This is an open question.

ORLOV: One of the points mentioned in Mikhail's keynote speech was about the balance of government and NGO discussions in Russia over the role of the internet, over the future of the Runet, and over information security. Of course, there are some wonderful Russian authors who suggest that in 20–30 years from now there will be no internet in Russia, there will be only “inter-da,” or “inter-yes,” which would only approve the governmental decisions. One of those authors is Vladimir Sorokin; he wrote brilliantly about that. From what we hear it does not seem like that gloomy picture, obviously. I would even put another sweetener here, mentioning that the Russian authorities and the Russian government now do quite a lot to listen to the views of the Russian NGO community. It is those who are knowledgeable and to a certain extent try to learn from their findings. Mikhail was modest enough not to mention that he participated in a four-hour meeting with then President Dmitry Medvedev on these issues, an exchange which you can find on the presidential website. For me it was very interesting reading: the president uses a lot of English words, because he cannot find the relevant Russian ones. There are also a lot of clashes which I would say were positive clashes.

VIKTOR VASILYEV (PERMANENT MISSION OF RUSSIA TO THE UNITED NATIONS): I have the right not to share some of the views that have been expressed previously. One of those is actually that Russia has a bad record on information security. I would claim that we have a good record on information security; it was Russia who raised the issue of information security in the international arena to solve it, and we were from that time co-sponsoring the resolution on information security in the General Assembly of the United Nations. Of course, we will have good discussions and our participants have already shared their views and we understand that the views may differ on various aspects, because the issues are very broad.

Of course, there is also a question of freedom of speech, freedom of information and so on and so forth. What is behind the Russian position is the attempt to initiate a discussion on those issues, even despite the fact that the Western states may not share the Russian positions stated in those two documents—the conception of a Convention and the draft Code of Conduct. So now Russia and its partners are laying grounds for such a discussion, presenting the Russian position on some of those issues, and we are co-sponsoring this discussion. We are also giving some money to UNIDIR [United Nations Institute for Disarmament Research] which will hold a group of governmental experts study meeting this year and will present their views to the General Assembly next year, held to address the issues of information security.

I believe the bigger issue must be to find the areas and to identify those areas of mutual concern. Of course, we will definitely disagree on some of those areas as a result of legal differences, logical differences etc., but there are areas on which we all can agree: terrorism, criminal use of the internet, and problems with credit cards. We have to establish those areas where we can cooperate on the international balance, where we can establish norms to prevent those cases from happening, and to help the broader discussion of those broad issues about the red button, and so on and so forth, within the international arena and in order to do so we need to have a forum. And we also need to look and to consider what forums will be the most appropriate ones, be it the United Nations, UNIDIR, the International Telecommunication Union, and WIPO, who are also discussing different elements of information security. Let's do it, let's think it over, and let's establish those areas where we can cooperate.

BASELEY-WALKER: I would like to refer to the comment by Mr Vasilyev that there is nothing substantially bad in the Russian conception of an Information Security Convention. I would not necessarily want to say that the Russian proposal is either good or bad, but I am pretty sure that the position of the American government and the position of the Russian government are vastly different from each other on a very basic conceptual level. When we try to examine this fact, we see two fundamentally different in their nature answers to the question as to whether information is a weapon or not. And what I would also stress is Victor's point, and that may be the case in today's conditions—unless you take off the table an issue like the Russian project for a global legally binding UN act regulating cyberspace, agreement is unlikely. There are still many specific things where agreement can be reached, and I think it is very important not to let certain major political questions dominate the whole set of potential options for soft law, CBMs, or codes of conduct.

REID: To pick up on what Mr Baseley-Walker just said, from the U.S. standpoint, I would mention the following points: certainly we come at a lot of security issues, we come at a lot of the cyber issues, we use a different term—information and communication technologies versus cyber—but I very much endorse the idea that different terminology or even conceptual understanding should not halt our cooperation. We welcome this conversation and we very much appreciate that the Russians brought the issue of global UN-based information security regulation over a decade ago to the UN agenda. That’s something that we engaged in very happily at once. It is an area that has ballooned in U.S.–Russia bilateral relations—and this area has developed in the form of CBMs’ discussion in our bilateral relationship. I think the spirit in which the United States is engaging with Moscow now should be not to let any terminological contradictions and discussions that could drag on for decades actually prevent us from coming to very real-world understanding of each other’s intentions, of how to contact each other, about how to work in a lot of areas where we have mutual goals. That’s why CBMs are, from my point of view, the step that we are looking at; it is where we hope that the G2G can support us—and it is certainly in our bilateral contacts that we see a very promising opportunity to work together.

CYBER THREATS AND CHALLENGES

YAKUSHEV: International forums on internet governance are held annually. There is a network of regional, local, and national internet governance forums which are held in different locations of the world, also in Russia. So let us just concentrate on one aspect of global internet governance—internet security. There are three or maybe four levels which should be regulated in different ways and have different implications when we are talking about global information security:

- The level of so-called *cyber wars*. Prevention of such cyber wars is at the level of international and intergovernmental relations and international public law.
- *Cyberterrorism* and countering attacks against the governments and public administrations with certain political motivations and reasoning.
- *Cyber-crimes*—crimes committed against ordinary citizens and internet users, including all illegal actions like fraud, identity theft, etc. which unfortunately are also a very specific feature of the present-day internet.

There are a number of developments that have already been noticed on the global internet over the last five years. We also see a necessity to do something to counter illegal use of the internet and to prevent the way the internet could be used to harm global security. In most cases people start talking about such issues as the cyber-attacks in Estonia which took place five years ago where a number of critical infrastructure objects and resources were damaged and shut down. There was an understanding that the attack came from outside so it was some kind of external intervention. The Estonians were suspicious that all these attacks were arranged by the Russian government.

BASELEY-WALKER: I support the breakdown to cyber-war, cyber-terrorism, and cyber-crime. However I think what both of the previous presentations demonstrated is that they all got mixed up. It is very easy to make these clear categories, but when we actually sit down to address these things, the boundaries become very blurred. That is certainly something that the international community is struggling with substantially, that is, where do you draw these lines? How does that translate into effective regulation and effective diplomatic interaction? How do we draw the line between a state-sponsored attack and terrorism, where legal regimes would necessarily come into play, and how do you differentiate between the two? All of these questions are still very unclear.

WEBER: I think we really should discuss common topics which are of interest to many countries. The difficulty is of course that everybody is saying we have to combat cyber-terrorism. Most likely I won’t find anybody who would say: “Yes, cyber-terrorism is a good thing.” But it becomes very difficult as soon as we ask “What is a terrorist?” because the notion of terrorism is of course very different in different countries. The difficulty is in the discussion’s very beginning.

ORLOV: Let me draw your attention to the Olympic Games, Sochi. This is definitely something very high on the agenda both for the President-elect Mr Putin, but also here for the Swiss



companies which are very closely engaged in business preparations for the Olympics. This is an interesting question, whether it is a non-government, inter-government, or whatever activity, but there is already now a war around the Olympic Games going on. The official Russian website for the Olympics was attacked and paralyzed for a few days. It was a clear sign that, closer to the games, the cyber-war will be even hotter.

I want to send a message to our Swiss colleagues here who so successfully mediated the Russia–Georgia relationship. In cyberspace it is not that easy to actually mediate. How do we prevent those DDoS attacks, who owns those magic systems, magic walls against those attacks? I found out it is just one company, which is an American company, very closely linked to the Department of Defense, that really has the solution. Hopefully we will see more developments in Russia also for prevention such types of cyber-attacks.

The correlation between cyber-security and other types of security threats deserves some attention as well. What I have in mind is nuclear security and attacks on nuclear infrastructure in Iran that have taken place already and were very successful. The attacks scared Iranians and made Israelis feel proud of the result of the Stuxnet attack. Then a series of problems echoed from the Iranian nuclear infrastructure to Russian facilities; or at least the risk of proliferation from those attacks and of course the missile facilities of Iran also face significant challenges, not physically, but through cyberspace. This is only one example which is close to me and my own research, but for me it indicates the seriousness of that combination of cyber-war and nuclear security.

WEBER: It's easy to find an IP address. The question is whether you can gain access to the person responsible for the IP address. At least, according to Swiss legislation, this is quite difficult; this is only possible if a criminal investigation is conducted. There are court decisions from the Supreme Court and from the Court of Appeals of the Canton of Bern stating that private organizations collecting data about IP addresses are basically not entitled to divulge these addresses for any reasons to other private organizations because this would be a violation of our data-protection rules. Under a criminal investigation this impediment can be put aside; the prosecutor/general attorney is allowed to try to get the person behind the address. But, frankly speaking, it is very difficult to make a decision regarding with whom you have to file a complaint. Would it be the canton of Geneva in Switzerland, would it be the federal general attorney, would eventually the foreign prosecutor be the appropriate person? When I know which authority is competent, then the next obstacle comes: would it really be Swiss law that applies? Difficult to say. Would it be the law of the nationality of the person?

There is a very large variety of questions and therefore it is not possible to find an easy answer. In the field of international criminal law we also lack binding international treaties with the exception of the Cybercrime Convention of the Council of Europe, which is applicable not only in Central Europe, but also in Eastern Europe, Central Asia, and even a couple of countries on other continents. But ultimately we have more problems than solutions in this field.

THE RED BUTTON PROBLEM—SWITCHING OFF THE INTERNET

YAKUSHEV: We also take into consideration the example of the Arab Spring where social networks played a certain role in bringing people onto the street and organizing actions which finally ended in a change of political regimes in these countries and political change. The Egyptian case raised once again the famous so-called problem of the red button.

How can the internet be disconnected? Can it be disconnected on a global level or are there possibilities to do it step by step on a national level? What are the legal, technical, and organizational levels to disconnect a country from the internet? Can fundamental human rights principles be applied in cyberspace? What kinds of activities should not be carried out? How can relevant regulation be made that takes into account the basic rules on fundamental human rights, for example freedom of speech, freedom of information flows, and freedom to access information and to access the internet? I would like to put these questions up for discussion.

VASILYEV: The problem of what Mikhail called the “red button approach” is who controls this red button, whether it is possible to push this red button or not, and under what conditions someone is pushing this red button. What is the threshold for this red button? If you have no political slogans like “be independent,” that human rights and so on supports, you cannot press this button. Is it

only hooligans against whom you have a right to press this button? This subject is a big discussion.

While Prof. Weber raised the issue of access from cellphones to the internet, it just so happens that in many countries there is no need to control the connectivity between cellphones and website providers. But let's take Russia as an example, where terrorist attacks in the Caucasus happen more or less on a daily basis and where during the subway explosions in the Moscow subway our security service had to shut down access from mobile services to the internet only to prevent further explosions (some of those explosion devices had been initiated via cellphones).

WEBER: Perhaps only a very short comment on the very interesting intervention by the ambassador. I do not think that I ever mentioned any particular comparison between different countries, because I am well aware that it should not be the case that an expert is pointing to this country or another country. Still, as I am teaching in East Asia, I would like to comment to draw your attention to the situation with the red button in this region. I am usually saying, of course, generally it is China that is trying to push red button quite often. On the other hand, Singapore is also pushing the red button very often, and Singapore is not known to be a communist country. So, we have to be really careful with this kind of comparative assessment. Technologically it is easier to disconnect mobile phones than to disconnect traditional networks, at least if businesses are interested to cooperate with the government, as was the case in Egypt where the internet was disconnected because it was invited by the government at a certain time to disconnect.


YAKUSHEV: As for the red button, of course it is a fiction. I visited the headquarters of ICANN September 2011 and I tried to enter all the rooms of this headquarters; there are no red buttons for sure. People say that it is located in the Washington office, so maybe I was in the wrong office then—this was in California. As for the red button in Russia, I am sincerely very proud to live in a country where such technologies and such techniques have never been used, so there is no censorship and there is freedom of the internet in our country and we should be proud of this.

KUMMER: There was an interesting discussion on the red button and I think both Rolf and Vladimir gave the answer. We also refer to it as the “killer switch,” and this is how technical experts looked at why it was possible in Egypt to turn off the internet so quickly. Basically the internet was badly built: it was too centralized. If the internet is built properly, it is very well distributed and it proves to be very resilient. In fact, that comes back to the very original mission the engineers had, to build a resilient network to withstand nuclear attack. We have seen in cases adjusted to the tsunami in Japan or the earthquake in Haiti that the internet was the only functioning communication infrastructure; all other infrastructures went down, but the internet was still up and running and people could connect via the internet. So, if the internet is built properly there is no killer switch.

Cooperation is essential. We have to cooperate, we have to discuss. The problem is, again, just as with terrorism: there is no universally accepted definition on what terrorism is and the same goes for child pornography. We do not have a universally accepted definition concerning these problems. The Internet Governance Forum is the forum to discuss problems and definitions; it is under the flags of the United Nations, it is convened under the authority of the Secretary General of the United Nations and it is multi-stakeholder and it is important when addressing these issues to listen to all the stakeholders. Governments are not in the forefront of dealing with security concerns, but it is important for governments to listen to what civil society has to say; they usually have very strong human rights concerns and it is, of course, also important to discuss with the technical community whether proposed solutions are technically feasible, and obviously all stakeholders need to work and act together.

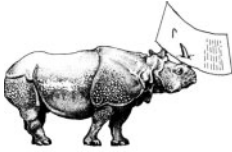
ORLOV: We would like to join forces and engage in further broad international discussion on the principal issues of cyber security and internet governance in the future. Several issues already touched upon here today require a rapid and well-elaborated contribution from the non-governmental community (including the PIR Center) in order to provide a sound analytical background for Russian policy-makers. Thus, national policy in the area of critical infrastructure protection is still to gain systemic ground—and it is still to be decided which approach should be adopted in this field. Besides, concerns over the rapidly expanding cyber-security market in Russia are also growing with the increasing sophistication, number, and scale of criminal activities both within and outside national networks. Here, as was mentioned by speakers and commentators, Russia needs to suggest its own approach towards effective transnational cooperation in countering cybercrime, as the Budapest Convention seems not to be treated as



an optimal basis for Russian participation in such activities. During this round table we have gained a very detailed and comprehensive snapshot of strategic discussions concerning intergovernmental information security regulation and Russia and the SCO's proposals in this area. What is even more important, we surprisingly came to a very clear common understanding of what should be done in order to prompt cooperation between Russia and its Western partners even with certain contradictions remaining unresolved for some time. Transparency and confidence-building measures, step-by-step multi- and bilateral give-and-take, information sharing, and permanent intensive discussions with broad engagement of NGOs and expert communities are not a panacea but still they are a recipe that works. And here we are today to make it work. Now our ambition is to continue this positive process and I hope this discussion is an initial step in a long and systemic process bringing together Russian, Western, and many other experts and decision-makers for a safer cyberspace and hampered dissemination of advantages of information technologies all over the globe. 

For more analytics on information security, please, visit the section "International Information Security and Global Internet Governance" of the PIR Center website:

net.eng.pircenter.org



Evgeny Buzhinsky

THE OUTLOOK FOR UAV RESEARCH AND DEVELOPMENT

Unmanned aerial vehicles (UAVs) are currently regarded as one of the key instruments for bolstering the fighting ability of combat units and formations in various armed services. The vast majority of experts believe that in future wars and military conflicts of the twenty-first century all militarily advanced countries will base their strategies on the use of UAVs, which tend to be relatively cheap. The cost of losing manned aircraft, along with their pilots, is becoming too high. An advanced manned plane can have a price tag of up to 50–60 million dollars. Training a highly professional pilot costs another 10 million. Meanwhile, many of the tasks currently performed by manned aircraft can be done very successfully by reconnaissance or combat UAVs, which cost a lot less. For example, America's Predator drone costs only about 4.5 million dollars.

It must be recognized, however, that advocates of manned aircraft also have several strong arguments which suggest that UAVs are not going completely to replace the traditional planes and helicopters. If the UAV operator loses control of the aircraft, the consequences could be very serious, whereas a manned airplane has more flexibility. In addition, UAVs are vulnerable to electronic jamming, and to a direct attack on the communications satellite. Unlike UAVs, pilots can react to threats and undertake evasive maneuvers. The American UAVs working in Iraq, Afghanistan, Yemen, or Somali are fairly safe because they are not facing any serious threats in those places. But when UAVs were used over Bosnia and Serbia many were lost to the Serbian air defenses, which operated Soviet and Russian-made AA missiles and artillery.¹ UAVs also have another major flaw: if communication between the aircraft and its operator is lost, the current automation and software systems cannot guarantee successful autonomous operation in every situation. That flaw came to light when the Iranians seized the American RQ-170 Sentinel drone:

Back in 2003 the U.S. Army conducted a comparative study of the capabilities of UAVs and the RAH-66 Comanche, a future army reconnaissance helicopter. The study found that the UAVs could successfully perform only 67 percent of reconnaissance tasks in the combat theater; 50 percent of the tasks which involve guarding and protecting the troops; and 25 percent of the tasks which require destroying a target. As a result, the Americans reached the conclusion that UAVs cannot completely replace army aviation attack helicopters; they can only be viewed as complementary.²

Yet another problem the Americans are facing—though it has nothing to do with the UAVs themselves—is the deficit of qualified UAV pilots. The United States can build more UAVs, but there are simply not enough pilots to operate all of them. Each Predator drone, for example, requires two operators, who work eight-hour shifts. According to U.S. Air Force representatives, they are facing a 50 percent deficit of trained personnel. In other words, the United States could have twice as many drones over Iraq and Afghanistan as it does now, if only it had more operators.

Nevertheless, UAVs are certainly here to stay. Economically advanced nations are leading the trend of replacing manned aircraft with UAVs, but that trend is gradually spreading to other countries as well. U.S. drones in Iraq and Afghanistan have clocked up more than a million flight hours over the past decade:

In several countries, the reconnaissance fleet already consists solely of UAVs. The range of drones that can be used for these purposes is potentially very broad, from micro- and mini-UAVs to hypersonic



C O M M E N T A R Y

orbital craft, as well as subsonic stratospheric drones, which can stay aloft for months or even years at a time. Some of these ideas have yet to be implemented, but R&D is making rapid progress. It is also clear that almost any reconnaissance UAV can be used, with some modifications, as an offensive weapon. That is true even of small UAVs. The hypersonic orbital attack UAVs are a perfect fit for the Prompt Global Strike concept—and unlike ICBMs or SLBMs, they are reusable.³

Former U.S. defense secretary Robert Gates may well have been right when he said back in 2009 that the new F-35 fighter could turn out to be the last manned American attack aircraft.

ROLE OF UNMANNED AIRCRAFT IN PRESENT CONDITIONS

In order to understand the role of UAVs, one must first understand the model of combat operations in the twenty-first century. The world's most advanced armies use UAVs as an integral part of a comprehensive centralized reconnaissance system. Simply discovering the targets is no longer enough. Their coordinates must be determined with sufficient precision to enable the use of modern weapons systems. This is why reconnaissance systems are evolving into reconnaissance-and-attack systems. The ongoing R&D process also involves the development of comprehensive automated reconnaissance, communication, and target designation systems.

The main uses which UAVs are currently being put to include optical-electronic, radar, and combined reconnaissance (monitoring); delivering cargos; relaying communication signals; and attacking targets. In particular, UAVs have proved much more suitable than manned aircraft for such tasks as comprehensive reconnaissance, optical-electronic reconnaissance, signal relay, mine detection, target designation, and pipeline and railway diagnostics. In addition, UAVs can illuminate the target with lasers for laser-guided artillery projectiles; help assess the damage; search and destroy individual targets, etc.

One of the biggest advantages offered by UAVs is that they do not require special airfields with expensive infrastructure. Also, the loss of a UAV does not mean losing the pilot, which is almost inevitably the case with traditional aircraft. Finally, lengthy and complex UAV missions are not affected by such a serious factor as pilot fatigue.

To summarize, there are several important advantages offered by UAVs compared with manned aircraft. The loss of a UAV never leads to the loss of its crew, which is especially important during limited and local conflicts; UAVs can achieve the same objectives at a fraction of the cost of traditional aircraft; they are less easy to spot; they are more maneuverable, and they have better survivability:

At the same time, for all the advantages of using UAV to support ground troops, they have certain limitations. If all the sides of the conflict were to start using large numbers of UAVs, this could partially or even completely disorganize air traffic control over the combat theater. The complexities of coordinating UAV missions between the different armed services and agencies will be further compounded if the enemy also begins to use its own UAVs, which will turn into a kind of flying mines. If we also take into account the adversary's measures against UAV control systems, including attempts to take control of those systems, either covertly or openly, the consequences could be unpredictable.⁴

The countries which have achieved the most advanced UAV capability include the United States, Israel, France, Germany, Britain, and China. More than 250 UAV systems are currently being developed in 32 countries. As of mid-2012, the armed forces of the world's most advanced countries included about 3,200 weapons complexes equipped with 10,200 tactical, operational and strategic UAVs. Under the Pentagon's plans for the next three decades, the number of UAVs in service with the U.S. armed forces is expected to quadruple to 28,000. Currently, the most popular UAVs are as follows:

- in the 25km range tactical category: the U.S.-made Dragon Eye and RQ-11 Raven, and Israel's Bird Eye and Sky Lark;
- in the 100km range tactical category: the U.S.-made Scan Eagle, MQ-8B Fire Scout, and Israel's I-VIEW;
- in the 500km range operational category: the American RQ-1 Predator and Israel's Heron-TP and Searcher;
- in the strategic category: the RQ-4 Global Hawk (USA).

The world's most mass-produced UAV is the Predator. It can achieve a speed of 120km/h at an altitude of 3km to 8km, and stay aloft for 24 hours at a time. It can transmit high-resolution imagery in real time. The Predator can be equipped with Hellfire missiles to destroy individual targets, including buildings, fortifications, cars, and groups of people.

RUSSIAN UAVS

In recent years the Russian leadership has come to regard UAV research and development as an important priority. It must be recognized that Russia has lost its world leadership in unmanned aviation over the past 20 years. In the 1960s to 1980s the Soviet Union had some of the world's most advanced UAVs. In the period between 1976 and 1989 it had produced 950 Tu-143 unmanned aircraft, which still remains an unbeaten world record. But Soviet interest in UAVs began to wane in the late 1980s, when the Stroy R&D program was all but frozen. Nevertheless, the Russian industry has retained some capability in this area, and the financing being allocated by the government to defense procurement, as well as growing civilian uses of UAVs, can generate sufficient demand in the coming years. In addition, Russia has already put in place the necessary organizational, planning, and regulatory framework to facilitate UAV research and development. That framework includes the Inter-agency Concept of Developing Future UAV Systems by 2025.

According to existing documents, the demand of the Russian armed forces for UAVs is estimated at 2,000 long-range (over 500km), medium-range (up to 500km), shorter-range (up to 100km), and short-range (up to 25km) UAVs. Meeting that demand will require more than 300 billion roubles to be spent by 2025.

At present, the Russian armed forces operate the following UAVs: Strekoza and Grusha in the short range; Tipchak, Orlan-10, Eleron-10, and Stroy-PD in the shorter range. In many ways, these systems are not just equal but actually superior to foreign competition. Part of the reason for that, incidentally, is that Russian engineers are very good at finding simple and effective solutions to complex technical and organizational problems.

The main difficulties the Russian UAV developers are currently facing mostly have to do with the fact that many of the necessary parts and components are not produced in Russia. This includes compact optical-electronic reconnaissance sensors, high-performance electronic components, high-capacity autonomous power sources, and piston engines in the 100–200hp range. The best way to address that problem would be for the government to develop and approve national programs in those areas.

In the past few years the Russian armed forces have also begun to buy imported UAVs. To be fair, there has been less talk of buying foreign-made drones in bulk since the change of leadership at the Ministry of Defense (MoD) in November 2012. What is more, the new MoD leadership has designated the development of Russia's own UAVs as an important priority and set up a special ministry division in charge of innovative R&D.

In fact, foreign-made UAVs, which have been designed for a certain range of climates, sometimes cannot be reliably operated in the Russian climate. For example, Israeli UAVs, which are very popular with international customers thanks to their good electronics and software, have acquitted themselves very well in southern latitudes. But they are unlikely to work so well in the cold Russian climate. Another important consideration is that foreign suppliers equip the systems destined for Russia only with optical observation systems. They are reluctant to sell us their radars, radio-electronic reconnaissance, and electronic jamming systems used on military drones. Optical systems alone tend to be of little use in Russia's northern latitudes, where clouds, rain, and snow are the rule rather than an exception. This is why UAVs equipped only with optical reconnaissance systems would be a lot less useful in Russia than they are in the Persian Gulf.

Meanwhile, the Russian developers of non-military drones have their own factors to consider. Many applications, such as Earth imaging, monitoring borders and communications, and signal registration, can be performed by UAVs at a fraction of the cost of traditional aircraft or satellite systems. The development of non-military systems is also being facilitated by the miniaturization and falling prices of electronics.



Nevertheless, three key obstacles still remain in this area. The technical problem is that potential customers are interested not in UAVs as such—even if these drones have excellent specifications—but complete systems which can perform certain functions without requiring complicated and expensive maintenance. The second problem is structural, though it is related to the first. Most of the commercial customers would prefer to buy services (for example, flight hours) from a specialized company rather than buy and operate the drones themselves. Clearly, the first and the second obstacle can both be overcome as large industrial companies that have the necessary resources and expertise expand into civilian drones. The third problem facing commercial drones is a lot more difficult. It boils down to the absence of the necessary laws and regulations to obtain certification for civilian UAVs and integrate them into the existing air traffic control systems. This particular problem has not been fully resolved anywhere in the world, although significant efforts are being made to identify possible solutions. There are two alternative concepts for integrating UAVs into air traffic control systems. The first is to agree that drones should comply with all the requirements for traditional aircraft, including, for example, identification and collision-avoidance systems. The second is to allocate special zones for UAV flights. Many experts believe that the first concept will eventually prevail, making life more difficult for UAV makers. In any event, unhindered development of civilian (as well as military) drones will require certain changes to be made to the Air Code of the Russian Federation, as well as all the rules and regulations governing the use of Russian airspace.

Meanwhile, many uniformed and law-enforcement agencies, and not just the MoD, are already buying large numbers of drones, without waiting for the necessary laws and regulations to be put in place. These agencies include the Federal Security Service of the Russian Federation (FSB) (including its special task forces and the border service) and the Emergencies Ministry; both of them need drones to perform some critically important tasks. The procurement policy of non-military customers is different from the MoD's policy. These customers tend to prefer cheap and reliable systems that are easy to operate.

OUTLOOK FOR UNMANNED AVIATION

In the future, new UAV models are expected to have lower radar, optical, and infrared visibility; greater range and autonomy; improved payload capacity, and more compact size for miniature drones.

Developers are focusing their efforts on several UAV categories. The most important of them is attack drones:

The priorities here include developing a reliable system of target identification in autonomous flight mode; developing a jamming-resilient system of communications between manned aircraft and drones; and creating an onboard information processing system. This type of drones will mainly be used for conducting aerial reconnaissance operations and delivering air strikes against stationary objects, especially air defense systems. At some later point these drones can be improved to give them the ability to take out mobile targets on the ground.⁵

The Americans have been using their Predator drones in the Middle East for more than a decade. These UAVs have killed hundreds of Al-Qaeda and Taliban fighters. The Predator's range and payload, however, are very limited, so the drone is only suitable for counterinsurgency warfare.

The MQ-9 Reaper, which has recently entered into service, is a much more capable system. The most advanced drone currently being developed is the X-47B, which incorporates stealth technologies and will not be far behind traditional combat aircraft in terms of its performance characteristics.

This UAV has several important distinctions. First, it can operate in a fully autonomous mode, without the assistance of a human operator. It relies on its own artificial intelligence to adjust its route and build new flight trajectories. The human operator only needs to designate the target, and the drone then chooses its own route to it using satellite navigation. Second, since the drone is carrier-based, there is no need to seek other countries' permission to use their airfields. Third, the drone has low radar visibility, similarly to the F-35C carrier-based fifth-generation fighter. As a result, it can operate in areas heavily protected by the adversary's air defenses.

Work on the X-47B project began in May 2010, when the U.S. Navy resumed the development of a stealth reconnaissance and attack system. By the end of 2018 the system will be capable of

working in coordination with manned carrier-based aircraft as part of an aircraft carrier squadron. Carriers such as the USS Nimitz or the USS Gerald R. Ford will be quipped with four to six drones of this type, which will be able to operate autonomously and stay aloft for 11–14 hours without refueling. The drones will also be able to refuel in mid-air. They are being designed to work in areas heavily protected by the adversary's air defenses, which means that they will have low radar visibility, similar to the carrier-based version of the F-35S fifth-generation fighter.

Finally, the United States is also developing the T-RAM attack micro-UAV, a non-reusable craft which will carry a 40mm grenade.

The U.S. attack drones program is being closely watched by the leading European aerospace companies. No one in Europe wants the United States to acquire too great an edge in the latest technologies that will shape future warfare. The Europeans also regard UAVs as a good replacement for their traditional combat aircraft; the European fleets of such aircraft continue to shrink, while losses of aircraft and pilots are becoming increasingly unacceptable. For counter-insurgency operations and small classical wars (such as the one in Libya) drones could prove the most suitable weapon, and it is very unlikely that Europe will ever wage a full-scale war on its own. Germany is currently developing its own tactical attack UAV called Barracuda; the drone is expected to become the European equivalent of the Predator. The French are also developing an attack drone. On December 1, 2012 they tested a demonstrator prototype of the nEUROn, a European stealth attack UAV, at the Istres testing range. The drone is being positioned as Europe's primary attack UAV, and is roughly similar to the X-47B in terms of its capability. Some experts say, however, that the project may never reach mass production because it is too complex and expensive.

In addition to the nEUROn program, France's Dassault Aviation and Britain's BAE Systems are looking into the possibility of developing a future Anglo-French attack UAV, as well as a medium-altitude drone capable of staying aloft for long periods of time:

Naturally, China has also joined the UAV race. It is already far ahead of Europe in that regard, and gaining rapidly on the United States and Israel. In addition to reconnaissance UAVs, the Chinese are also developing attack drones, possibly in an effort to compensate for the remaining gap between China and the leading military powers in traditional aircraft capability. The Chinese WJ-600 attack drone is truly unique in many respects; even the United States and Israel do not have anything similar. The UAV is designed to gather intelligence, wage radio-electronic warfare, and attack targets on the ground. It can carry at least two air-to-surface missiles. Another Chinese drone, which is much smaller than the WJ-600, is the Ilong (the Pterodactyl). Judging from its outward appearance, the craft is an exact copy of the Predator, although the Americans have not granted a production license for the Predator even to their closest allies, let alone China. The Chinese also have the CH-3, a smaller attack drone with an impressive payload capability of 640 kg. As for reconnaissance UAVs, China unveiled a strategic drone similar to the Global Hawk back in 2009. Four years previously the Chinese also demonstrated the Anjian UAV at an air show in Zhuhai. The drone was described as a supersonic (or even hypersonic) unmanned fighter.⁶

It must be said that China is perfectly aware of the need to integrate its reconnaissance UAVs with offensive weapons systems:

In particular, the WS-2 multiple launch rocket system (which has the longest range in the world) includes drones which provide the batteries with reconnaissance data. There have also been reports that a future Chinese main battle tank will be equipped with its "personal" drone. It would be a veritable breakthrough in UAV technology if a proper unmanned fighter aircraft were to be developed; such a weapon would largely devalue all the manned fifth-generation fighters.⁷

The Russian armed forces' requirement for attack drones in the period until 2025 is estimated at about 50 units. In 2011 the Vega Radio Technology Concern, which has been designated as Russia's main developer of UAVs, demonstrated a prototype of a medium-range reconnaissance and attack UAV developed by the Luch design bureau, a Vega division based in Rybinsk. The most important part in the development of UAV systems is processing the information gathered by the drone and supplying it to the end user rather than building the robotic carrier itself. This is why Vega regards training specialist operators who perform all these tasks as an important priority. Also, in 2011 the MoD signed a contract for the development and manufacture of reconnaissance and attack drones with the Sokol design bureau (based in Kazan) and Tranzas (St Petersburg). First tests of the new UAVs are expected in 2014. Sukhoi, a leading Russian designer of fighter jets, is also involved in the development of a future heavy attack UAV. NPK Irkut (one of the manufacturers of Sukhoi jets) is developing a prototype which should be ready in 2015.



Another important priority in the development of UAVs is:

... to develop new-generation unmanned reconnaissance and attack systems capable of defeating the adversary's air defenses. The preferred solution here is to have large numbers of stealth reconnaissance drones which can stay aloft for days at a time, conduct reconnaissance missions in all weather conditions, and relay communication signals. The communication channels used for these UAVs must have sufficient bandwidth to transmit high-definition imagery and guide high-precision ammunition carried by the attack drones. The future high-altitude UAVs should also be able to stay aloft for more than 24 hours. Using drones at altitudes of over 12–15km offers a number of advantages, including the ability to monitor large areas and maintain communication via direct line of sight. Besides, there is no contrail at such altitudes, which makes the drone more difficult to spot. Finally, there is less of a chance of accidents (since the drones remain above weather fronts), collisions (most other aircraft fly far below), and destruction of the craft by the adversary's air defenses.⁸

The United States has the most advanced R&D programs in this area. One of the next-generation multirole UAVs currently being developed there is the MQ-X, which will replace the MQ-1 Predator and the MQ-9 Reaper.

Another interesting new area of drone R&D is UAVs designed to search and destroy other UAVs. Unmanned aerial vehicles are currently being developed in many countries all round the world. This is why back in the mid-2000s the Pentagon's DARPA agency launched the Peregrine UAV Killer project. The team working on the project is aiming to produce a small, cheap, and resilient craft capable of destroying all types of the adversary's UAVs:

Yet another promising area is ultra-light flying robots. Such UAVs are all but invulnerable in mid-flight because a small airplane flying at an altitude of just a few hundred meters is almost impossible to destroy. It can be destroyed by a bullet fired from a pistol, but actually hitting it is next to impossible even using a sniper rifle. The smallest of the existing UAVs is a 33cm U.S. drone called WASP. It weighs only 200 grams, and can be launched into the air manually, just like a toy plane. The drone is equipped with two tiny video cameras which can transmit imagery to the operator in real time. The craft is controlled by an on-board computer using a GPS signal. It is propelled by an electric motor fed by a small battery, which is recharged in mid-flight using solar panels.⁹

Israel is also developing similar UAVs. The Israeli armed forces are already using the Skylark drone, which is launched into the air manually. Despite its small size, the drone can monitor a territory of up to 10km² and stay aloft for up to 90 minutes. The imagery it transmits is good enough to discern individual people from an altitude of several hundred meters. Russian developers are also conducting projects in this area.

Meanwhile, American UAV programs also include the development of an unmanned helicopter. The project is led by Boeing, which decided to use the existing design of the AH-6J Little Bird helicopter as a starting point rather than designing a new drone from scratch. A similar project to refit an existing helicopter into an unmanned craft is the UH-1 Huey, which will be equipped with the Advanced Precision Kill Weapon System (APKWS).

In Russia, the Vertolety Rossii (Russian Helicopters) holding company is working on a defense procurement contract to develop several helicopter-type UAVs in different range categories.


The capabilities and features of unmanned aerial vehicles in the longer term are unclear. Obviously, the current trends—i.e. miniaturization of the drones and their weaponry, intellectualization, and the development of the theory and practice of group action—will continue into the foreseeable future. It is important that there are no fundamental physical barriers on that path.

The first important point is that the size of a manned craft is ultimately determined by the size of the pilot. An unmanned vehicle can be made as small as technology allows. At some point, the size of such vehicles could reach the nanometer range.

The second point is that the effectiveness of a weapon system benefits more from greater precision than from greater firepower. If a target can be hit with an accuracy of several centimeters, large amounts of explosives could become unnecessary. Of course, there will still be protected targets, such as underground bunkers, and they will require special ammunition to take them out. But some of the targets could be destroyed by using the kinetic energy of the projectile, or disabled by impact on their vulnerable critical parts.

Third, there are no obvious limits to the intellectual capacity of unmanned systems, since there are no fundamental limits to the productivity of IT systems. Sustainable progress is being made in such crucial areas as image recognition and learning systems.

Fourth, in recent years researchers have been working hard on the theory and practice of military network super-systems as a means of creating distributed intelligence.

To summarize, air defense systems will sooner or later have to face aggressive, well-armed, and resilient groups of drones. Thanks to their collective distributed intelligence, these groups will act as parts of a single whole. They will be able to analyze the situation to the same standard of accuracy as humans, only faster. Human operators may be part of their control systems, adding an element of creativity and unpredictability. It is also obvious that cost efficiency will be an important requirement for all future UAVs, so developers will gradually abandon unnecessarily stringent requirements relating to the drones' payload capacity and the length of time they can stay in the air. 

NOTES

¹ "USA: The Future Belongs to Unmanned Aviation," <<http://newsland.com/news/detail/id/803512>>, last accessed June 9, 2013.

² "The Fashion for Drones Over the Battlefield—One's Own and The Enemy's," <<http://ruvsa.com/reports/moda/>>, last accessed June 9, 2013.

³ "UAVs from the MQ-9 Reaper to the WJ-600 Herald a New Era," <<http://ruvsa.com/reports/mq9/>>, last accessed June 9, 2013.

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⁵ Y. Blinkov, "Prospects for the Development of Unmanned Aviation in the Leading NATO Countries," *Zarubezhnoye Voennoye Obozreniye*, No. 12, 2012.

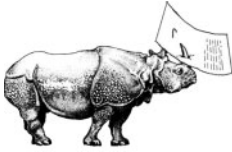
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⁸ Y. Blinkov, "Prospects for the Development of Unmanned Aviation in the Leading NATO Countries."

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Oleg Demidov

CYBERWARFARE AND RUSSIAN STYLE OF CYBERDEFENSE

A clash of nations on a virtual battlefield—in cyberspace—is no longer a fantasy. It is a tangible reality. Cyberespionage, cybersabotage, and other hostile cyberoperations have become a fact of life. They have recently been exemplified by the outbreaks of the Stuxnet, Red October and Flame malware, which mainly targeted Iran, as well as a recent wave of DDoS attacks against U.S. financial institutions. Cyberwars are knocking on the doors of a growing number of countries—but the cyberspace itself still remains a battlefield without rules or restrictions. Being proactive on that battlefield is one of the main preconditions of survival. No wonder, then, that the dictum “Offense is the best defense” is becoming the leading strategy in cyber-confrontations.

Unless they want to fall victim to cybercrime, all the nations on the planet must undertake cybersecurity measures. Russia is not immune to these global trends; it has been undertaking energetic steps to bolster its national cyber-potential, including military-strategic capability in cyberspace, and to build an effective security infrastructure in the IT sphere.

MODERN CYBERWARS: A GAME OF BOOMERANG WITH A NON-ZERO SUM?

The IT systems and online services of several U.S. financial institutions came under massive and sustained DDoS attacks in September 2012–January 2013. The list of victims includes such giants as Bank of America, Citigroup, Wells Fargo, U.S. Bancorp, and Capital One. All of them were forced to spend thousands of man-hours and tens of thousands of dollars to fend off the attacks and to deal with their aftermath. That wave of attacks, along with the discovery by Kaspersky Lab of a giant cyberespionage network called Red October, remain the central issue on the cybersecurity agenda. Nevertheless, these attacks are hardly unprecedented in terms of their underlying technology, scale, or consequences. DDoS attacks are almost as old as the Internet itself, and banks have long been a favorite target of cybercriminals.

The unusual thing about these attacks is that the alleged perpetrators are not some hacker groups, and not even the usual suspects, i.e. China or Russia. This time round, all U.S. experts are pointing the finger of blame at Iran—and they are probably right. Although Tehran vehemently disclaims any responsibility, the politically motivated rather than purely criminal nature of the attacks is hard to ignore.

To begin with, the perpetrators did not even try to steal any money from the banks they attacked. The attacks themselves were prolonged and sustained; in other words, the aim was to inflict maximum financial and reputational damage on the banks. Further, the banks' IT security services faced a very advanced and unusual kind of DDoS attacks, with the volume of DDoS traffic reaching an astounding 70Gbps. Generating such an amount of DDoS requests usually requires a network of hundreds of thousands of infected computers.

Another notable circumstance is that the attacks commenced only about six months after Iran was disconnected from SWIFT, the largest international payment system used by the world's banks, pushing the country even closer to a financial crisis. Finally, the attacks targeted only U.S. banks. Such a targeted approach is not usually a feature of botnet attacks. National boundaries are



blurred in cyberspace, and U.S. banks tend to have strong IT security systems, so they are not easy prey. Taking all these considerations into account, it does not really matter that responsibility for the attacks has been assumed by a little-known outfit called Cyber fighters of Izz ad-din Al qassam, which said its motive was to punish the U.S. Government for refusing to take down various anti-Islamic materials posted on the Internet. Such statements cannot be confirmed or denied; besides, large series of attacks are seldom perpetrated by a single team of hackers.

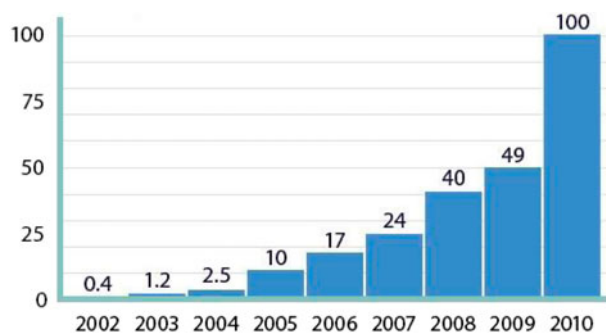
It is far more important that the White House has every reason to view the latest series of attacks as a kind of boomerang. That boomerang was launched at Iran by the George W. Bush administration in an effort to find a non-military solution to the Iranian nuclear crisis—and now it has returned to strike at the United States itself. According to several recent leaks in the media, extremely complex instruments of cyberespionage (Flame, Gauss, Duqu, and others) and cybersabotage (Stuxnet) were implanted into Middle Eastern computer networks in recent years as part of an operation called Olympic Games. The operation was approved under George W. Bush in 2006 and conducted during the first Obama administration. Its results are believed to include a panic among Iranian specialists; a threat to the launch of the nuclear power plant in Bushehr; the loss of more than 1,000 centrifuges at the enrichment plant in Natanz; other losses worth millions of dollars; and a significant delay in the progress of the Iranian nuclear program. All that has been achieved without a single shot fired, even before we take into account the effects of sanctions against Iran.

The problem is, boomerangs always return. The Iranians have learned well to copy their high-tech adversary. In 2012 they managed to take control of an American RQ-170 Sentinel drone flying over Iran, and to copy extremely sensitive technologies contained in that unmanned aerial vehicle (UAV). It appears that the ayatollahs are now ready to fight back in cyberspace, where Washington used to reign supreme. That is not to say that we should expect news of U.S. nuclear or military infrastructure being hit by Iranian malware comparable to Stuxnet in terms of its sophistication. For the next few years, such complex instruments will remain beyond the reach of Iranian hackers or military specialists.

But it is not actually necessary to hit nuclear or military infrastructure to inflict a lot of damage. Attacking the U.S. economy can also be very effective, and such attacks can be pulled off using the good old DDoS method (see Figure 1), which is widely available. The size of the losses the U.S. banks have sustained during the recent wave of attacks has not been disclosed, but the figure is probably in the millions of dollars. Online trade, electronic banking, and other rapidly growing segments of the online economy constitute potential targets for DDoS attacks. Guaranteed protection from such attacks remains out of reach so long as there are careless users who allow their computers to become part of botnets.

DDoS attacks are also fairly cheap to organize. The complete development cycle of the Stuxnet worm is estimated to have taken a team of highly professional specialists from six to 24 months. It must have cost several million dollars, and required agents on the ground in Iran to infect the computer system of the Natanz facility. In contrast, a DDoS attack is something that even a teenager can pull off. The market for Trojans and other malware used to create botnets, which are the instrument of DDoS attacks, is growing every year, and the malware on offer is becoming

Figure 1. Global DDoS Traffic, Gbps



Source: Arbor Networks' 2010 Infrastructure Security Report.

cheaper. Tehran does not have Washington's financial muscle, but it can certainly spare 30,000–40,000 dollars to rent a botnet consisting of hundreds of thousands of infected computers. It is safe to assume that Iran will continue to use such instruments, regarding them as its own asymmetric response to hostile cyber action against its own networks.

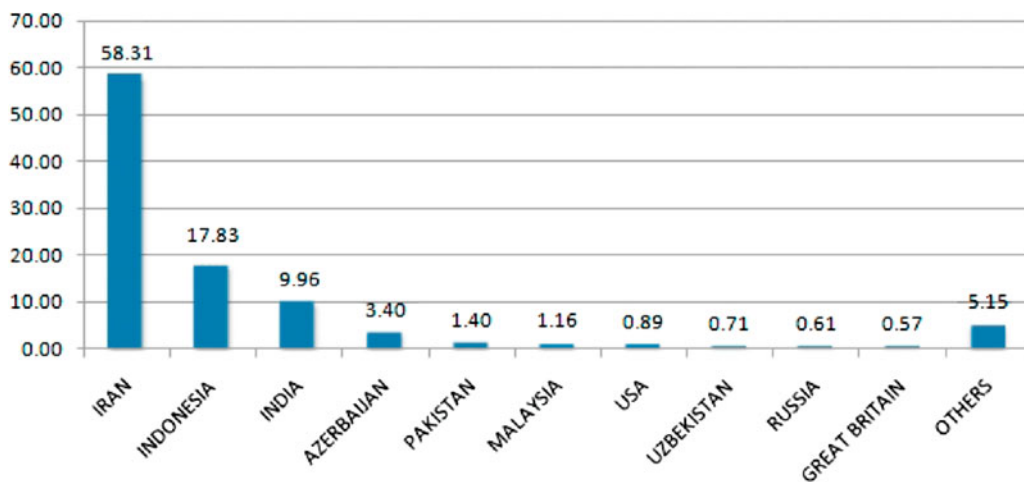
There is a certain logic to such an approach. DDoS attacks are not going to put the White House on its knees. They cannot secure the Iranian nuclear program against attacks from abroad; nor can they secure Iran itself from a military strike. But they have a significant PR effect; in addition, painful retaliatory strikes can force Washington and Tel Aviv to weigh the risks more carefully when assessing the possible consequences of another attack against Iranian networks. Also, by choosing banks rather than government agencies as the target of their attack, the Iranians are trying to make the U.S. private sector and its customers—i.e. the electorate—feel the downside of trying to stop the Iranian nuclear program. Meanwhile, the risks for Iran itself are negligible. The technical complexity of identifying the perpetrators of such attacks and the lack of effective international legislation make it impossible to bring any individual nation to account for malicious activity in cyberspace.

CYBERSPACE: A BATTLEFIELD WITHOUT RULES OF ENGAGEMENT?

The second conclusion from the recent wave of attacks on American financial institutions is just as obvious. Cyberspace is increasingly being perceived across the world—especially in countries which have been the targets of cyberattacks—as a field of battle where no holds are barred. The Iranians probably see their asymmetric response as just a small part of their right and proper retribution for the cyberwar waged against them over the past few years. The organizers of cyberattacks against the Iranian networks have essentially opened up a new front in the ongoing confrontation—but the Iranians are now striking back. It must be remembered, after all, that Tehran adopted the strategy of confrontation in cyberspace with Washington only after being attacked with weapons such as Stuxnet (see Figure 2) and its various successors.

Anyone who unleashes new means of and instruments for waging conflicts, unfettered by technology or international law, will sooner or later be attacked using the very same weapons. Once unleashed, the genie of new military technology and tactics will be extremely difficult to drive back into the bottle; this is amply demonstrated by the situation with WMD disarmament and nonproliferation. All of these considerations are especially valid when talking about a conflict that has been asymmetric right from the start. When nations are attacked in cyberspace, they respond offensively rather than defensively. As a result, we are not even talking about a zero-sum game; this is rather a lose–lose game.

Figure 2. **Distribution of Stuxnet Attacks by Country, %.**



Source: Symantec.



RUSSIAN RESPONSE: A NATIONAL CYBERSECURITY SYSTEM

So how will Russia, the old proponent of cyberpeace, respond to these challenges? The Kremlin has long been expressing concern at the uncontrolled use of various software for purposes (and in ways) which clearly go beyond the usual cybercrime. The approach Russia adopted back in 1998 boiled down to negotiating an international treaty or a UN convention that would ban nations from developing and using cyberweapons against other nations in order to achieve military-political goals. It has now become obvious, however, that such an approach would be extremely difficult to implement. It has been more than a year since Russia proposed a key initiative in this area—namely, the concept of a convention on international information security. But for now, the efforts being undertaken by Russia and its partners (China and several Central Asian states) are facing one fundamental obstacle. The essence of that obstacle is demonstrated by the already discussed DDoS attack of Iranian style. Anyone can wage a cyberwar, and there is no risk of being caught red-handed. The law of shield and sword does not work well in cyberspace because defensive technologies are always lagging behind new methods of attack.

By 2012 the Russian leadership had reached the realization that even as it continued to seek an agreement to build a better cyberworld at the UN, it had to work hard and without any delay to prepare for the worst. Defending against cyberthreats must be included in the list of priority tasks of the Russian armed forces. Russia needs a comprehensive national cybersecurity system; it must protect its critical infrastructure, and strengthen its own capability in cyberspace. In 2012 and 2013 we have seen a whole range of new technical, legislative, and other measures in all these areas.

The Russian armed forces have radically stepped up their efforts to counter cyberthreats, which was probably the only important area not touched by the military reform launched several years ago by former Russian Defense Minister Anatoly Serdyukov. In January 2012 the MoD released a report entitled “Conceptual Views on the Activity of the Russian Armed Forces in Cyberspace.” That document is essentially an early draft of the Russian army’s doctrine on information warfare. It reflects, in particular, the painful experience of the war with Georgia in 2008, and sets out the priorities of information coverage and support of various conflicts. It also outlines the priorities of the armed forces’ interaction with the media and the public in general.

That document, however, was just the beginning. In March 2012 Dmitry Rogozin, the Deputy Prime Minister in charge of the Russian defense industry, announced plans to set up the Russian Cyber Command. The new outfit will be modeled on the U.S. CYBERCOM, which signals a stark departure from two important trends observed in recent years.

The first of those two trends essentially boiled down to attaching greater importance to socio-political aspects of information warfare (i.e. threats posed by information and content as such), as opposed to cybersecurity in the narrow sense of protecting computer networks. The second trend was expressed in the fact that information security was viewed as an almost exclusive domain of the Russian secret services (the Federal Security Service of the Russian Federation [FSB], the Federal Protection Service, and the Federal Service for Technology and Export Control).

In yet another demonstration of its determination to strengthen the Russian military-strategic capability in cyberspace, the government has set up the Advanced Research Foundation, a non-profit organization that will facilitate highly innovative and advanced defense R&D. Rogozin has described the foundation as a “technological predator” and, even more tellingly, a “Russian DARPA.” The comparison to DARPA (famous for its role in creating the Internet) and the appointment of Andrey Grigoryev, who used to work for the Federal Service for Technology and Export Control, as head of the foundation illustrate the importance of cybersecurity in the new organization’s list of priorities. The decision to set up the foundation was announced in January 2012; the government then approved its organizational structure, allocated money for its annual budget (up to 3 billion rubles) and appointed its chairman in the space of just one year, which is very quick by Russian standards.

Against the backdrop of all these developments, another important event has gone almost unnoticed. On October 17, 2012 the Ministry of Defense (MoD), in cooperation with the Agency for Strategic Initiatives, the Education and Science Ministry, and the Moscow Bauman University of Technology (the country’s leading IT school) announced a large R&D project entitled “Methods and Instruments of Circumventing Anti-Virus Systems, Network Protection Systems, and Operating System Defenses.” Judging from the name of the project and from comments by

Russian experts, the aims of the project may include the development of offensive viruses designed to defeat the cyber-defenses of potential adversaries.

This new approach is a stark departure from the purely defensive strategy of information warfare outlined in the Russian Military Doctrine of 2010, as well as various Russian foreign policy initiatives. Another piece of evidence pointing to a shift towards a more proactive stance is Russia's recent decision to set up new secret or semi-secret information security outfits within the MoD. On February 13, 2013 the government announced that such an outfit had been established as part of the Russian General Staff.

Nevertheless, despite the MoD's growing focus on military-strategic cyberthreats, the main role in developing an overarching and comprehensive Russian cybersecurity system is still being played by the three aforementioned security services. On January 15, 2013, only a few days after Kaspersky Lab discovered the Red October cyberespionage network, Vladimir Putin signed Decree No 31s, which designates the FSB as the government agency in charge of creating a national system of comprehensive measures to prevent and counter cyberattacks, especially those targeting critical infrastructure. Several prominent Russian experts regard this somewhat unexpected decision as a turning point in Russian information security policy.

A RUSSIAN CYBERCOM

The idea of establishing a Russian equivalent of the U.S. CYBERCOM has turned out to be very popular in the Russian MoD. It is one of the very few projects launched under the previous minister, Anatoly Serdyukov, to have received the full support of his successor, Sergey Shoygu. In mid-February 2013 it was reported that the new cybersecurity department within the MoD would be set up by this summer. It was also said that the department would probably have the status of a main MoD directorate or armed service command (along with the Strategic Missile Troops Command or the Airborne Troops Command).

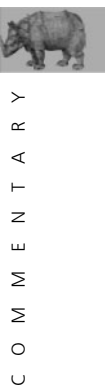
The experience of the world's leading cyber-power, the United States, suggests that the cybersecurity functions related to secret services and the armed forces should be performed by separate agencies and structures. The U.S. CYBERCOM (which is not the sole agency in charge of cybersecurity even within the Pentagon) shares its cybersecurity remit with the CIA, the Department of Homeland Security, the National Security Agency, and several other government agencies. Nevertheless, synergies between the MoD and the secret services are an important requirement for a successful war on cyberthreats.

On the whole, 2013 and 2014 will probably be a decisive period for shaping the Russian cybersecurity strategy. That is when the government will probably put in place the outlines and the doctrinal foundations of a new national policy, and launch new long-term programs and projects. We are entering a period of transformation of Russian national policy on information security, with cybersecurity increasingly being viewed as an important independent priority. That opens up a window of opportunity for Russia's foreign partners and all other parties who want Russia's future policy in cyberspace to be in line with their own interests. For Russia itself, meanwhile, this time will also be a period of vulnerability, when the lack of established practices in responding to constantly changing cyberthreats will pose significant risks to national and public security.

To summarize, the Russian policy on cybersecurity is entering a period of growing pains. This dangerous stage is a natural part of a generally positive process which could not be delayed any longer. As the recent bout of cyber-confrontation between Iran and the United States has demonstrated, cyberwars are knocking on the doors of an increasing number of states, and it is past time that Russia equips itself to face such threats.



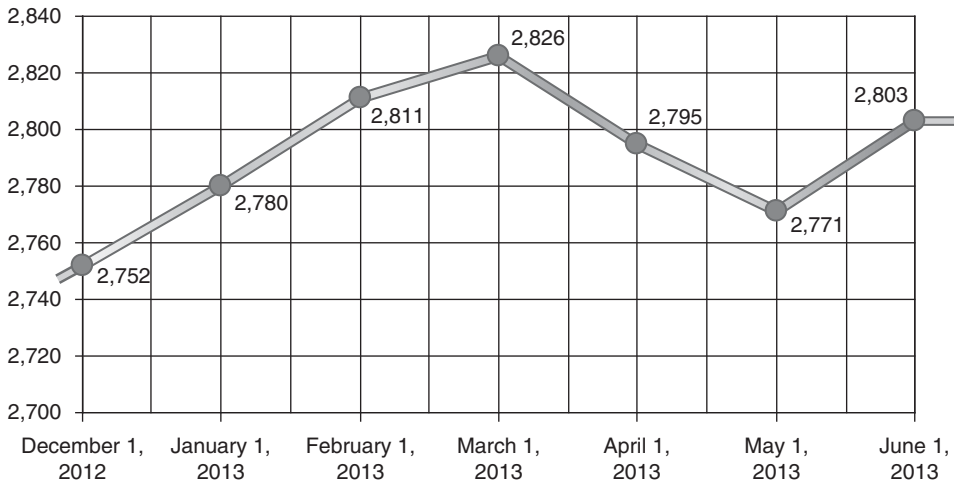
For more analytics on information security, please, visit the section "International Information Security and Global Internet Governance" of the PIR Center website: net.eng.pircenter.org






REVIEW OF RECENT WORLD EVENTS:
JANUARY–MAY 2013

Figure 1. The International Security Index (iSi) in January–May 2013



CHAOTIC VOLATILITY

The changes in the International Security Index (iSi) reflect the beginning of the formation of statehood in countries that have gone through the so-called Arab Spring. In Egypt, the Islamist Mohamed Morsi has been elected president. Liberal forces won the majority of the seats in a parliamentary election in Libya. These events have brought a relative degree of stability to the Middle East and North Africa. The iSi index has also benefited from the re-election of Barack Obama as U.S. president and the election of Xi Jinping as the new Chinese leader. In January 2013 the index rose to **2811** points and then to **2826** points in February. In March it fell to **2795** due to mounting tensions on the Korean peninsula. The index continued its decline in April, to reflect growing instability in Syria, Egypt, Mali, and Iraq, a terrorist attack during the Boston Marathon in the United States, and the banking crisis in Cyprus. On May 1, 2013 the index stood at **2771** points.

 The iSi index is calculated weekly and monthly. The results with the brief comments explaining Index fluctuations are published at the PIR Center website: www.pircenter.org

 **Andrey Kortunov (Russia)**, Director General of the Russian Council on Foreign Affairs – by phone from Moscow: The international security situation has deteriorated. The main reason for that is new tensions on the Korean peninsula, and the threat of a new war between the North and the South. Another factor of global instability is the crisis in Syria and the international community’s inability to facilitate a resolution. Yet another significant negative factor in the recent period is the Iranian nuclear program and lack of progress in the talks between Tehran and the six international mediators. International security has also been affected by the terrorist attacks in the United States. The situation will continue to deteriorate. It is quite likely that there is going to be a new flare-up in several Middle Eastern states.



R E V I E W O F W O R L D E V E N T S

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- ❑ **Africa and the Middle East.** The main threat to regional security in the Middle East is the confrontation between the government and the opposition in **Syria**. There was bitter fighting between the army and the rebels in Damascus, Idlib, Hama, Homs, and Nairab in the summer and spring of 2013. On January 6 Syrian President Bashar Assad proposed a phased plan for ending the crisis, which included the creation of a new government and a general amnesty.



Evgeny **Satanovsky (Russia)**, President of the Institute of Middle East Studies – *by phone from Moscow*: The international security situation is rapidly deteriorating. The situation in Syria demonstrates that a resolution is nowhere in sight. There have been rumors in the media about possible talks between the government in Damascus and the opposition. Those rumors are nothing more than a cover story whose only purpose is to play for time. Such talks would yield nothing and produce no effect whatsoever. The civil war in Syria will continue to spiral towards an irreversible phase, with a real threat of spreading to neighboring countries.

Meanwhile, the opposition used chemical weapons in Aleppo; the government called for a UN investigation of the incident. There were mounting tensions on the Syrian border with Turkey, Israel, and Lebanon, and bitter clashes between the Kurds and fighters of the extremist Jabhat al-Nusra group on the Syrian–Turkish border. On March 4 the Israeli Air Force mounted an airstrike against Syrian military facilities on the Syrian–Lebanese border. During a summit in Doha on March 27 the Arab League agreed to provide support to the Syrian opposition. U.S. President Barack Obama recognized the National Coalition for Syrian Opposition and Revolutionary Forces as the legitimate representative of the Syrian people.

In **Lebanon** there were clashes between the Sunni and Alawite Muslims over the conflict in Syria. The Army had to intervene in order to stop intertribal fighting. In January the Lebanese opposition walked out of a decisive round of national dialogue and demanded the resignation of the Najib Mikati cabinet. On March 23 Prime Minister Mikati resigned after differences over the procedure for holding parliamentary elections later in 2013.

In **Egypt** the second anniversary of the revolution against former president Hosni Mubarak was marked by mass opposition protests against the country's new Islamist government. Fierce clashes broke out in Port Said after the sentencing of the football fans who staged a riot at a football stadium in February 2012. On February 21 President Morsi signed a decree to hold a parliamentary election in late April, but the country's Administrative Court struck the decree down because it had not passed the Constitutional Court's vetting. The president complied with the court's decision and postponed the date of the vote by six months. The opposition continued to stage protests against the Islamist government's policies throughout the spring. There were also religious clashes between Christians and Muslims.

Iran and its nuclear program remained the focus of international attention in the winter and spring of 2013. On February 14 Tehran hosted another round of talks between the IAEA and Iranian officials, but no agreement was reached regarding access to Iranian nuclear facilities. On February 21 the IAEA released a report which said that Iran had installed new centrifuges at the nuclear facility in Natanz. Talks between the Group of Six and Iran were held in Almaty in February and April, with no apparent results.

Israel and Palestine. There were clashes in the West Bank between the Palestinians and the Israelis after the death of a Palestinian prisoner in Israel. The Israeli Air Force responded by mounting an airstrike in Gaza.

On January 23 Israel held early parliamentary elections. Prime Minister Benjamin **Netanyahu's Likud-Beiteinu** bloc came out the winner.

Israel and Turkey reached an agreement in March to normalize bilateral relations after Benjamin Netanyahu apologized to his Turkish counterpart **Erdogan** for the incident with the Freedom Flotilla in 2010. The two had a conversation during U.S. President Barack **Obama's** visit to Israel.

On March 23 the Kurdistan Workers Party, the PKK, announced a ceasefire in its struggle with the Turkish government. The move was urged by PKK leader Abdullah **Ocalan**.

Meanwhile, there were clashes in the southeast of **Turkey** on April 11 between the Kurds and Turkish Islamists.



Halil Karaveli (Turkey-Sweden) – Senior Fellow with the Central Asia-Caucasus Institute at the Johns Hopkins University – by e-mail from Stockholm: the ongoing peaceful process between Turkey and the PKK remains the only positive trend in the Middle East. Turkey wants to achieve a peaceful settlement of the conflict with the Kurds. By neutralizing the PKK, Ankara has made it impossible for Iran to use the Kurds as a weapon against Turkey. A ceasefire with the Kurds means that Turkey now has a chance to forge closer ties with the self-governing Kurds in the north of Iraq. This means that having defused tensions over the Kurdish issue, the Turkish government has made an important step towards improving its national as well as regional security. It appears, however, that Iran wants to find a way of derailing the peace process between the Turks and the Kurds because it can change the regional balance of power in Turkey's favor.

In **Tunisia** mass protests broke out in February after the murder of opposition leader Chokri Belaid. The crisis forced Prime Minister Hamadi **Jebali** to dissolve the government of moderate Islamists and announce the formation of an interim cabinet.

In **Iraq** there were violent clashes in April between Sunni militants and the police; several people were killed. **Bahrain** saw protests by Shi'a Muslims demanding greater rights in the Sunni-controlled country. In **Libya** there were more tribal clashes. In **Yemen**, protests by southern secessionists degenerated into clashes with the police.

In **Mali** there was fierce fighting between the army and Al Qaida rebels in the winter of 2013. France began a military operation on January 15 to free the north of the country from Islamists. Nigeria and Chad agreed to send troops to Mali to take part in the operation; Algeria and Morocco opened their airspace to French Air Force planes taking part in the Mali operation. In the spring the French troops and the Malian army wrested control of the towns of Kidal, Tessalit, and Timbuktu from the Islamists.



Sehlar Makgetlaneng (South Africa), Head of the Governance and Democracy Research Program at the Africa Institute of South Africa – by e-mail from Pretoria: Internal and external factors will have a decisive influence on the state of security on the African continent in the summer of 2013. The situation in Mali, Algeria and Congo will be the leading factor. France's determination regarding the situation in Mali raises another question: is the African Union capable of dealing with any problems on the continent whatsoever without relying on Western support? Central and southern Africa is also feeling negative effects of the situation in Congo. The conflict between the government troops of DR Congo and the rebel March 23 Movement can deteriorate into a serious regional war that will involve external forces.

In **Algeria** terrorists took hostage more than 40 foreign gas industry workers on January 16. They demanded the pullout of French troops from Mali and the release of terrorists from Algerian prisons. The terrorists were destroyed in a special operation by the Algerian forces; 23 hostages were also killed.

The **Central African Republic** saw a military coup in March; power in the country has been seized by the opposition Seleka movement; its leader Michel **Djotodia** has proclaimed himself president. In **Sudan**, the government signed a peace treaty with Darfur rebels on April 7. **South Africa** hosted a BRICS summit; the leaders agreed to set up a currency fund of 100 billion dollars to combat currency crises.

- ❑ **The Korean peninsula.** **North Korea** conducted another nuclear test on February 12, 2013. On March 7 the UN Security Council passed a resolution imposing tougher sanctions on Pyongyang. In response North Korea cancelled almost all agreements on non-



aggression and denuclearization of the Korean peninsula with **South Korea**, and said it was ready to go to war with the South in the event of continued provocations (see Figure 2).

The North Korean government issued advice to foreign diplomats to leave the country, saying that it would not be able to guarantee their safety if a war broke out. Meanwhile, on March 16 the United States said it had abandoned plans to deploy the fourth phase of the European missile defense system so as to concentrate on strengthening missile defenses in the Pacific in view of the threats coming out of Pyongyang. South Korea launched military exercises, fearing new provocations by the North. On April 18 Pyongyang said it was ready to begin dialogue with South Korea, making it conditional on the lifting of sanctions.

- ❑ **Afghanistan–Pakistan.** In Afghanistan the Taliban announced the launch of a spring offensive to topple the Karzai government. President Karzai himself banned the use of NATO aviation for the provision of air support to Afghan security forces. Meanwhile, the United States said that it intended to have nine military bases left in Afghanistan after the troop withdrawal in 2014 as a precondition for the signing of a security agreement between the two countries.



Farhad Tolipov (Uzbekistan)– head of the *Bilim karvoni (Knowledge Caravan)* non-governmental science and education establishment – by phone from Tashkent: After the pullout of international coalition forces from Afghanistan in 2014 the Karzai government will not be able to keep the situation in the country under control on its own. Incidentally, the same applies not just to Karzai; no Afghan power can keep the situation in the country under control without foreign assistance.

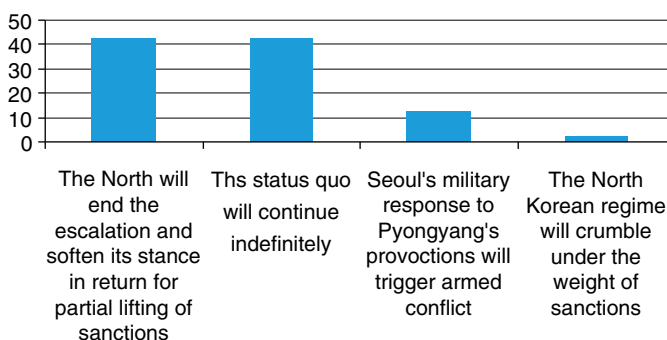
In Pakistan mass protests broke out in January; the protestors called for the government’s resignation and radical reforms. In February there were clashes between several extremist groups; 62 militants were killed. On February 15, Islamabad tested the Hatf-2 ballistic missile, which is capable of carrying a nuclear payload. On May 12 the country held a parliamentary election, which was won by former prime minister Nawaz Sharif’s Pakistan Muslim League party.

There was an exchange of fire between Pakistani and Indian soldiers in the disputed region of Kashmir.



Dayan Jayatileka (Sri Lanka) – Sri Lanka’s Ambassador to France and Permanent Delegate to UNESCO – by e-mail from Paris: The security situation in South Asia has deteriorated. The killing of Indian soldiers on the line of control in Kashmir was an extremely worrying and negative event for regional security. It is believed that the Pakistani military were behind the killing. The situation is being compounded by India’s promise of retaliation.

Figure 2. What Will Be the Outcome of Ongoing Tensions on the Korean Peninsula? (%)



Source: Opinion poll on PIR Center website (<http://www.pircenter.org>) on February 12–May 31, 2013

❑ **East and Southeast Asia.** In **Bangladesh**, opposition protests against the military tribunal's death sentence on Muslim preacher Delwar Hossain Sayeedi turned into clashes with the police; several people were killed. In **Myanmar**, over 40 people were killed in religious clashes; an emergency situation was declared in the town of Meiktila. **China** officially completed the transfer of power; Xi Jinping has been appointed as the country's new president.

❑ **The European Union.** The EU summit in Brussels on February 8 approved cuts to spending plans for 2014–2020.

Cyprus had a banking crisis in March; all bank deposits over 100,000 euros were frozen to save the country's banking sector from bankruptcy. The EU agreed to give Cyprus 10 billion euros to recapitalize its banks on the condition that the country secures the remainder of the necessary funds on its own.

In **Italy**, Prime Minister Mario Monti resigned after parliament failed to approve the 2013 budget. On April 20 President Giorgio Napolitano was reelected for a second term of office to help resolve the country's political crisis. Bulgaria saw mass protests in February over high utility tariffs, triggering a government crisis; the Cabinet led by Boyko Borisov had to resign.

Spain, Germany and Greece saw protests against their governments' economic policies. There were clashes in **Northern Ireland** in January between the loyalists and nationalists. On January the **UK** parliament approved a bill granting Scotland the right to hold an independence referendum. **Serbia** and **Kosovo** approved a plan to normalize relations on April 22. Serbs of Kosovo held a protest against the plan.

❑ **Strategic stability and nuclear security.** On March 16 the United States said it had abandoned plans for deploying the fourth phase of the European missile defense system in order to focus its resources on strengthening missile defenses in the Pacific. On April 15 President Barack Obama sent a message to Vladimir Putin containing new initiatives on missile defense. One of them was to develop a legally binding agreement on transparency that would include an exchange of information to confirm that the missile defense system does not pose any threat to the two countries' deterrents. In mid-May President Putin sent his reply to Washington, in which he dealt with the missile defense issue and cooperation between the U.S. and Russian secret services.

A NATO-Russia summit at the level of foreign ministers was held in Brussels on April 23. The main outcome of the meeting was the decision to expand the trust fund for the maintenance of Russian helicopters in Afghanistan, as well as to deepen cooperation between Moscow and NATO in fighting terrorism. No agreement was reached on missile defense.



Evgeny Buzhinsky (Russia), Lieutenant General, PIR Center Senior Vice-President – by phone from Moscow: One of the important events of this period was Washington's decision to abandon plans for the fourth phase of its European missile defense system in order to focus on missile defenses in the Pacific in view of the threats coming out of Pyongyang. The Americans' decision to adjust their plans for the European segment of their global missile defense system is a very clear signal that Washington is ready to search for a compromise with Russia. Essentially, the main cause of Russia's concerns was the SM-3 Block IIB interceptors that were to be stationed in Poland, with a capability to intercept ICBMs.

❑ **Natural and man-made disasters.** The **Philippines** was hit by Typhoon Bopha in December; more than 200 people were killed. A fire at a nightclub in **Brazil** killed more than 200 people on January 27. A large meteorite fell in **Russia's** Chelyabinsk Region on February 15; more than 1,000 people were injured. More than 33 spectators were hurt in an accident at a racing circuit in the **United States**. Some 47 metric tons of radioactive water leaked from a storage facility at the Fukushima-1 nuclear power plant in **Japan** in April. A powerful earthquake hit **Iran**, killing more than 20 people. A clothes factory building collapsed in **Bangladesh**, killing more than 1,000 people.



- ❑ There were **deadly terrorist attacks** in Pakistan, Iraq, Afghanistan, Syria, Israel, Greece, Mali, Turkey, Yemen, Libya, and Croatia. A twin explosion near the finishing line at the Boston Marathon in the United States killed three and injured more than 140 on April 15. Two days later there was a new explosion at a chemical factory in Texas; 14 people died.
- ❑ **Venezuelan** President Hugo Chavez died on March 5.



Irma Arguello (Argentina), Founder and Chair of the Nonproliferation for Global Security Foundation – by e-mail from Buenos Aires: It appears that the uncertainty that persisted in Venezuela amid President Hugo Chavez's long treatment in Cuba has been resolved. But the unexpected illness of the former Venezuelan leader, his treatment and his death leave many questions unanswered. At the same time, Venezuela is unlikely to avoid an institutional crisis over the continuity of government in the country.

An early presidential election was held on April 14. It was won by Nicolas Maduro, Chavez's preferred successor. The opposition was unhappy with the outcome of the vote, and held protests across the country calling for a recount.

Galiya Ibragimova 



Yury Fedorov

THE PSYCHOPATHOLOGY OF INTERNATIONAL RELATIONS

“The Psychopathology of Everyday Life,” a book by Sigmund Freud, is one of the science classics of the twentieth century. Reviews of international affairs, no matter how good, are unlikely ever to be put into the same category. But the term “psychopathology” is an entirely accurate description of the current state of international politics. Two manifestations of that psychopathology seem especially prominent. The first is an exaggerated perception of one’s own abilities—including the conviction of national leaders regarding the greatness of their countries. That is often a mechanism by which they compensate for their own insecurities, with an unfortunate corollary: such compensation prevents them from searching for new solutions. The second is to avoid any difficulties and complications at all cost. In both cases the subject is unable to make use of past experience, and refuses to perceive the world as it really is. Instead, he or she relies on a psychological defensive mechanism: their perception of reality is distorted so as not to have to face their own fears, weaknesses, and inability to abandon obsolete but comfortable patterns of behavior. In the end, reality is displaced by figments of the subject’s own imagination. That leads to prolonged but not always successful courses of psychiatric treatment. In the international arena, the consequences can be even worse: they include a total failure of the country’s strategic course and sometimes the collapse of the country itself. That is exactly the plight that befell the Soviet Union. But enough about that for now—let us return to world events in recent months.

THE UNITED STATES: NEW FOREIGN POLICY PRIORITIES

The re-election of Barack Obama for a second term of office has been the most important event of the past few months. The second most important development is a review of the U.S. foreign policy course. That is unsurprising. During almost the entire first term of the Obama administration U.S. foreign policy focused mainly on problems inherited from the previous administration. As these problems are gradually being resolved, it is only logical to focus on new challenges.

The foreign-policy results of President Obama’s first term are ambiguous. There have been some major achievements, such as the weakening of Al-Qaeda, including the killing of Bin Laden. Washington has also pulled its troops out of Iraq, and its preparing for an Afghan pullout. This is clearly a victory for the Obama administration, even though it has yet to be announced how many U.S. soldiers will remain in the country after 2014, and what exactly they will be doing there. Involvement in Iraq and Afghanistan was costing the United States vast amounts of money and restricting its freedom of maneuver in the international arena.

The attempt to improve relations with Russia has proved less successful. Washington has abandoned plans to deploy its missile defense sites in Europe, but Moscow has not made any reciprocal concessions. The New START treaty has very little practical value from the military point of view. It is not at all certain that Russia will be able to increase its strategic arsenals to the new ceiling by the end of this decade. The United States, meanwhile, is proceeding apace with the implementation of its own reduction program, treaty or no treaty.

Finally, the U.S. strategy in the Middle East has proved unsuccessful. To be fair to Washington, none of the other Western countries has managed to come up with any sensible response to the events unfolding in the region.

Be that as it may, it had become clear by early 2013 that the United States was beginning to focus mainly on its own domestic issues. Defense spending will be cut, and Washington will aim not to get embroiled in any international or internal conflicts abroad. One of the reasons for that is the ongoing conflict between the Obama administration and the Republican majority in the Congress over budget, which led to a budget sequester in March 2013.

Washington is confident that the center of gravity of the global economy and politics has shifted to the Asia Pacific, where the United States is in for a confrontation with China, which is aspiring to



R E V I E W O F W O R L D E V E N T S

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regional hegemony. This is why Washington is focusing its political and military resources on Asia, whereas Europe and the Middle East will gradually be relegated down the list of American priorities (even though this is being officially denied). This shift will be made easier by the growing production of shale gas and oil in the United States, which is reducing the country's dependence on Middle Eastern hydrocarbons. Another factor which calls for such a shift is the latest nuclear test in North Korea, which has added urgency to the military-political situation in East Asia.

With its new priorities in East Asia, Washington would like to distance itself from the Middle East. That, however, will only become possible if the Syrian crisis is settled, and if the parties concerned begin a constructive search for a solution of the Iranian nuclear problem. To achieve those goals, the United States will probably want to engage Russia: Washington appears to believe that Moscow still has some means of exerting influence on Damascus and Tehran.

Finally, the Obama administration wants to reach an agreement with Russia on further nuclear arms reductions. The list of targets which the U.S. strategic systems will need to take out in the event of a conflict—including targets on Russian territory—is growing shorter. Some of the goals which could previously be accomplished only by using nuclear weapons can now be achieved by conventional means. As a result, the present size of the American nuclear arsenal is becoming redundant. New agreements on nuclear weapons reductions could be used as a demonstration of the success of Washington's foreign policy.

Some of the expected changes in the U.S. foreign policy course seem entirely logical; others raise doubts. But the real question is whether these changes can actually be implemented. That will largely depend on whether the military-political situation in the Middle East can be stabilized in the foreseeable future.

THE MIDDLE EASTERN TURBULENCE ZONE

Events in recent months have once again confirmed that the Greater Middle East, i.e. the belt of Islamic states stretching from Mauritania to Afghanistan, has become a political and military turbulence zone. So far, the outlook for overcoming that turbulence is not encouraging at all. On the contrary, we have had new crises, including armed clashes in Mali, which have required French intervention; the civil war in Syria; an upsurge of political confrontation in Egypt, which has led to mass disturbances; a complication of the situation in Tunisia in the run-up to the March 2013 parliamentary elections; further progress by Iran towards the acquisition of nuclear weapons; and, finally, regular acts of provocation or terrorist attacks against Israel by Palestinian groups. All these events are part of an increasingly worrying trend in the region. So the question is, are there any realistic chances of finding some means of stabilizing the situation in the Middle East, or at least parts of it?

So far, no such means have been identified, and it is not at all certain that they will be identified any time soon. The moderate secular regimes, such as those that existed in Tunisia and Egypt, were once seen as capable of propping up internal and international stability—but their time is swiftly coming to an end. Authoritarian rulers are being replaced by a mind-boggling mix of Islamists, leftists, nationalists, and pro-Western liberals. By its very nature, that mix cannot avoid bitter infighting. In the Sunni monarchies of the Gulf all is not well, either. The first unmistakable sign came in the form of clashes between Shia protesters and government forces in Bahrain. Now the situation is becoming increasingly worrying in Saudi Arabia, with its looming succession crisis.

The civil in Syria is of particular concern. The humanitarian catastrophe caused by that war is making international public opinion, especially in Europe and the United States, very uneasy. According to the International Committee of the Red Cross, 70,000 people have been killed in the country since March 2011; two million have been displaced; about 750,000 of them have fled to Libya, Jordan, Turkey, and other countries. The UN reckons that the number of refugees will top one million by the middle of this year. That, however, is just one of the aspects of the chaotic and tightly intertwined processes taking place in Syria.

The Syrian opposition remains fractious. The Syrian National Council, which aspired to become the main coordinating center, has proved unable to play that role. In November 2012 it was replaced by the National Coalition of Syrian Revolutionary and Opposition Forces, led by the former imam of the Umayyad Mosque in Damascus, Moaz al-Khatib. It is not clear, however,

whether the new coalition can become an effective political body representing the opposition forces, or at least a substantial part of them.

Meanwhile, extremist Islamist groups are gaining influence in the country. They oppose not only the Assad regime but also the “moderate” opposition movements which cooperate with the aforementioned Coalition. In December 2012 Islamists set up the Syrian Islamic Front, which unites 11 extremist groups. So far, it remains unclear whether the new body is a rival of the Al-Qaeda-linked Al-Nusra Front, or whether it represents an attempt to unite Islamist forces under a new organization controlled by Al-Nusra. In early 2012 Islamists won several important victories. In particular, they seized two large military bases, one in Idlib Governorate, another near Aleppo. Both bases contained large amounts of heavy weaponry. In February–March 2013 Islamists crushed the government’s 113th Brigade and seized the capital of the Deir-ez-Zur Governorate, which borders on Iraq.

On the whole, the situation in Syria can be described as a typical military-political deadlock. Although they have suffered some serious defeats, government troops remain in control of the main Syrian cities and transport links—but they have proved unable to defeat the rebels. The rebels themselves are unable to achieve an outright military victory, either. They lack weapons, especially man-portable anti-tank and anti-aircraft systems; there is also little to no coordination between the separate armed groups.

The prospects for a political settlement are hard to discern. There is no unity of opinion among the opposition about entering into talks with the government. Some opposition groups believe that talks would be possible if Assad and his clique were to step down. The idea is to form a transitional government led by a political figure who would be acceptable to the opposition as well as to the bureaucrats and army officers who have not tarnished themselves by involvement in mass killings and reprisals. But there is also another part of the opposition, which counts on a military victory. Meanwhile, Assad and his entourage are prepared to discuss a ceasefire only if they can retain real power in the country. That group, as well as the loyal part of the officer corps and of the secret services, plus the Alawite minority, is aware that the fall of the regime would have grave consequences for them personally. Propaganda materials circulated by the information centers of Islamist extremists say that the enemies of Syria who must be destroyed include not only the supporters of the ruling regime (called Assadites) but also the entire Alawite minority.

In such a situation the United States, Britain, and France will probably be forced to provide serious assistance in the form of weapons and money to the National Coalition (or, if the coalition collapses, another body representing religiously “moderate” opposition). Their purpose will be to neutralize the influence of Islamist radicals and to step up military pressure on the Assad regime. This, essentially, is the only remaining way of preventing the appearance on Syrian territory of large enclaves controlled by extremists—and, in the longer term, of preventing Syria from becoming something akin to Afghanistan under Taliban rule.

Naturally, this strategy is causing great anger in Moscow. Russian diplomacy is insisting on two key points. First, there must be a politically negotiated settlement in Syria, and second, weapons supplies to the opposition would be a violation of international law and must not be allowed because the weapons would end up in the hands of extremists. Hardly anyone requires persuading that talks are better than fighting. But in this particular case the exhortations to begin talks are pointless because there is simply no basis for a political settlement, which would only become feasible if Assad were to step down.

Further, it has been officially recognized that Russia “continues deliveries under defense contracts with Syria.” A statement to this effect was made on February 13, 2013, by Anatoly Isaykin, head of the Russian defense export intermediary Rosoboronexport.¹ It is not clear how these continued deliveries can be in accord with international law. Russia insists that it continues to supply only defensive weapons. But the line between offensive and defensive weaponry can be a matter of opinion. Tanks, for example, can be used for offense as well as defense. And tank spare parts, which Russia has been caught supplying to Syria, are not classed as weapons at all—but without those spare parts Syrian tanks would grind to a halt.

The larger problem, however, is that Russian diplomats continue to turn a blind eye to the key element of the Western proposals: namely, the fact that assistance to “moderate” opposition forces would be provided precisely to prevent the extremists from gaining the upper hand. The longer the conflict in Syria continues, the weaker the Free Syrian Army—which is part of the



National Coalition—will become, thereby increasing the chances of Islamist fanatics coming to power in Syria or some parts of it.

Meanwhile, the civil war in Syria is drawing attention away from the Iranian nuclear program, which is the key source of instability in the Middle East. The Iranian economy has been hit hard by sanctions introduced by the United States and the EU. Oil export revenues have fallen by 40 percent; inflation is running at 36 percent. The number of unemployed has increased by half. The budget deficit is 44 billion dollars, which represents 60 percent of the entire Iranian exports. Iranian GDP is contracting, for the first time in many years.² In February 2013 President Akhmadinezhad was forced to recognize the dire state of the country's economy; he announced his intention "to compensate for the fall in budget revenues from oil exports by reducing government spending and raising taxes."³

Nevertheless, Iran's economic woes have not forced it to shut down its nuclear program. On the contrary, Tehran has announced plans to increase production of enriched uranium and speed up the launch of the nuclear reactor in Arak, which will produce plutonium. Iranian specialists have installed 180 new-generation centrifuges (the IR-2m model) at the uranium enrichment facility in Fordow. According to the Israeli Prime Minister, Benjamin Netanyahu, the new centrifuges will cut the time it will take Tehran to acquire nuclear weapons by a third. The IAEA chief, Yukiya Amano, has once again recognized the military nature of the Iranian nuclear program. "The agency cannot conclude that all the nuclear materials in Iran are being used for peaceful purposes," he said in February 2013.⁴

Still, the pressure of sanctions has forced Tehran to launch a new round of diplomatic maneuvering in order to win time and try to lift some of the sanctions, or at the very least to avoid new ones. As a result, the P5+1 Group and Iran held a fresh round of talks in Almaty in February 2013. Speaking ahead of the meeting, Iranian representatives hinted at the possibility of some new compromise, and proposed superficially attractive ideas which they knew could never be accepted. They said, for example, that Iran could stop enriching uranium to 20 percent if all the sanctions imposed by the UN Security Council were to be lifted. If media reports are to be believed, the P5+1 group said some of the sanctions could be lifted if Tehran were to shut down its uranium enrichment program completely. As expected, the only result yielded by the meeting in Almaty was a decision to hold more talks, which was unanimously hailed as a "positive outcome."

The position of the Western P5+1 members is easy to understand. They are using every means possible to prevent, or at the very least delay, a military resolution of the Iranian problem. Such a resolution would be very costly, and probably cause a spike in oil prices. The political consequences of the downfall of the Iranian regime are also very difficult to predict. Besides, it is clear that if Tehran and the West were to reach an acceptable compromise on nuclear issues this would open up the prospect of a rapprochement between Iran and the European countries, as well as the United States. That could have major repercussions for the geostrategic situation in the Middle East. For the West, a cooperative Shia-dominated Iran could become an important counterbalance to the fundamentalist monarchies of the Gulf (which are, essentially, deeply hostile to the West) and help to contain the activity of terrorist organizations. Tehran is well aware of these Western aspirations, and is using them very skillfully, hinting from time to time at the possibility of reaching a deal. Russian diplomacy obviously would not welcome such an outcome. One of its main goals is to draw Europe and America's attention and resources away from the former Soviet territories, as well as from the Black Sea and the Baltic Sea regions, by stoking up tensions in the Persian Gulf (as well as in Syria).

But let us look once again at the results of the meeting in Almaty. The talks continue without any clear indication that a lack of meaningful progress would lead to tougher sanctions and, eventually, a military solution. That enables Tehran to win time in the hope of taking its nuclear program to a level where trying to stop it by force would become too risky. Two other considerations are also being ignored.

First, Israel is convinced that economic sanctions have proved ineffective—which is true enough—and that they must be augmented by the threat of force. If Iran crosses the "red line," Israel will mount a strike against the Iranian nuclear facilities. The "red line" probably means the accumulation of a sufficient quantity of enriched uranium to start building nuclear weapons. Israel, however, is unlikely to be able fully to destroy the Iranian nuclear weapons-making potential. Tehran, for its part, would have to make a choice. It could either limit itself to

propaganda and acts of terrorism against Israel, the United States, and Europe—or undertake military action in the Persian Gulf. The latter would automatically cause the United States to join the war, with obvious consequences.

Second, many politicians and experts mistakenly believe in the possibility of reaching some kind of a deal with Iran, whereby Tehran would renounce nuclear weapons in return for security assurances, economic and political concessions, etc. The problem is, Iran views the acquisition of nuclear weapons as a key precondition for achieving its main strategic goal: becoming a dominant power in the Persian Gulf, and in the longer time frame in the entire eastern part of the Greater Middle East, from the Suez Canal to Xinjiang.

Finally, the looming succession crisis in Saudi Arabia is another threat to stability in the Middle East. The reigning king, Abdullah bin Abdul Aziz, is 88 or 90 years old.⁵ He is gravely ill, and has all but lost the ability to govern his kingdom. Two of his brothers who were next in line to the throne have died in quick succession. Prince Sultan bin Abdul Aziz, who served as defense minister and was one of the most influential people in the kingdom, had been the presumed successor since 2006—but he died in October 2011. The next presumed successor was Prince Nayef bin Abdul Aziz, who had spent 37 years serving as the interior minister. But he too died suddenly in June 2012. His death was followed by a series of chaotic reshuffles in the Saudi government. Prince Salman bin Abdul Aziz, a 77-year-old brother to the king, was appointed first deputy prime minister (the position of prime minister is held by the monarch himself). He had served as head of the central Riyadh province for 47 years. Another of the king's brothers, Prince Akhmed bin Abdul Aziz, became the interior minister. In November 2012 he was replaced by Prince Mohammed bin Nayef, son of the former Crown Prince Nayef. The 70-year-old Prince Muqrin bin Abdul Aziz, the youngest son of the founder of the dynasty who served as head of intelligence, was suddenly sacked in July 2012. He was replaced by the former ambassador to the United States, Prince Bandar bin Sultan; according to Western news agencies, Prince Bandar has essentially become the king's national security advisor. Finally, on February 1, 2013 it was announced that the aforementioned Prince Muqrin had been appointed as second deputy prime minister. This means that the prince is now second in line to the throne after his brother Salman—who is rumored to be suffering from senile dementia.

All these reshuffles probably mean that Saudi Arabia is in the throes of a bitter power struggle, but the king and his entourage are trying to restore the balance of power and avoid a succession crisis. Prince Muqrin has been promoted to become the presumed heir, but he is far from certain to succeed the reigning monarch. In 2007 King Abdullah introduced a new rule whereby the new king must be elected by the newly established Allegiance Council, which includes 35 senior members of the royal family. There is no guarantee that the council will approve Prince Muqrin's candidacy. The prince's mother was born in Yemen, which is considered among the Saudi princes to be a major shortcoming. Other contenders for the throne may and probably will appear.

When Abdul Aziz bin Saud was creating his kingdom in the 1920s, he strongly relied on the instrument of dynastic marriages, marrying the daughters of provincial rulers and tribal chiefs. As a result, the royal family is now divided into clans, which descend on the female side from the various tribes and regional groupings. The looming succession crisis could degenerate into a bitter confrontation between those clans, which will be compounded by mounting social, economic, and political problems, including growing unemployment, especially among the young people; a conflict between the traditionalists and supporters of limited modernization; discontent among the Shia population in the east of the country; and financial constraints resulting from growth in domestic energy consumption, which is reducing the amount of oil available for exports.

RUSSIAN–U.S. RELATIONS: A NEW RESET?

Skeptics began to predict a crisis of the Reset policy shortly after the signing of the New START treaty. Even at the time it was already quite clear that the positive agenda in Russian–U.S. relations had been exhausted, with the exception of some Afghanistan-related issues. But for all its importance, the problem of Afghanistan could never become a foundation for deep and comprehensive Russian–U.S. cooperation. Relations between the two countries remained frozen for about two years—and then took a sharp turn for the worse in the second half of 2012. It began with President Putin's refusal to attend the G8 summit, and culminated with the "war of bills," a suspension of one of the groups of the Presidential Commission, a dissolution of the agreement



on cooperation in fighting crime and drug trafficking, and a hysterical anti-American campaign in the Russian media and political circles.

Nevertheless, speaking in early 2013 at the Munich Conference, U.S. Vice-President Biden said that Washington still saw opportunities for partnership between Russia and the United States, adding that such a partnership would be in the security interests of the two countries and of the international community. He said that partnership could include areas such as safeguarding and reducing nuclear arsenals, boosting trade and investment, and “working collaboratively to advance freedom of navigation in the Arctic while preserving access to natural resources.”⁶ He added, however, that the United States would not recognize Abkhazia and South Ossetia as independent states, and would not accept the formation of a Russian sphere of influence in the former Soviet territories. He also listed the main areas of contention between Russia and the United States, including Syria, missile defense, NATO enlargement, and democracy and human rights issues.

It appears that Washington has decided once again to seek partnership with Russia using nuclear reductions as a starting point. There have been media reports claiming that Washington had proposed—or was ready to propose—large new strategic nuclear arms reductions of about 30 percent, with a new ceiling at 1,000–1,100 warheads (using the New START counting rules). Such a proposal, if indeed it has been made, is entirely in Russia’s interests. The Russian strategic arsenal is in any case shrinking very rapidly. As of September 1, 2012 it consisted of 491 deployed strategic delivery systems with 1,499 warheads. These figures are well below the New START ceilings and the current U.S. levels. As of the same date, the United States had 806 deployed delivery systems with 1,722 warheads.⁷

By the end of this decade Russia will have to decommission about 200 Topol, SS-19, and SS-18 ICBMs that were still in service in 2012; these missiles had a total of about 1,170 warheads mounted on them. The service life of the missiles in question has already been extended more than once, and it would be impossible to keep them in service after 2020. As a result, of all the ICBMs Russia had in 2012, only 70 Topol-M mobile and silo-based missiles (each carrying a single warhead) and six Yars missiles (with three warheads apiece) will remain after 2019–2020. There will be a total of only 88 warheads mounted on those missiles. Russia will also have to decommission three Delta-III nuclear missile submarines, which currently carry a total of 144 warheads. The Russian Navy will probably continue to operate six Delta-IV nuclear missile subs, carrying a total of 384 missiles. Other delivery systems remaining in service after 2020 will include 60–65 Tu-160 and Tu-95 heavy bombers with the latest modifications.⁸

To summarize, of the 1,500 or so deployed warheads Russia had in 2012, only 430–435 will be left by 2020. This means that in order to bring its strategic arsenal up to the New START ceiling, Russia will have to produce and deploy a sufficient number of delivery systems for just over 1,100 warheads. Russia is already making monumental efforts and spending vast amounts of money to achieve that goal. It is in the process of deploying the Yars ICBMs, each carrying three warheads, and the new Borei-class nuclear missile submarines carrying the new Bulava submarine-launched ballistic missile (SLBM). Moscow has also approved the decision to develop and manufacture a new heavy missile. Nevertheless, it is not at all certain that Moscow will be able to increase its strategic arsenal to the ceiling allowed under the New START treaty by 2017–2020.

In accordance with the latest State Armament Program, eight Borei-class nuclear missile subs are to be built and entered into service with the Russian Navy by 2020. There are serious doubts that the ambition is realistic; submarines of this class take several years to build.

Some 16 years had elapsed between the time the first Borei sub was built and the time it finally entered into service with the Russian Navy. Each of the next two submarines in the series, the *Aleksandr Nevskiy* and the *Vladimir Monomakh*, took six years to complete. Neither of the two subs has entered into service. Normally, the long time it takes to build such submarines is explained by the lack of financing. Officials say that if financing were to be ramped up, the plans announced by the government could be implemented within the expected time frame. It is true that lack of funds was one of the reasons why the first Borei subs took so long to complete. But another major factor which determines the time it takes to build each sub is the industry’s ability to supply the required numbers of parts and components. That, in fact, is the main reason why each sub takes several years to build (see Figure 1).

Still, even if all eight of the new submarines can be built by 2020, Russia is still unlikely to be able to bring the number of warheads mounted on strategic delivery systems to 1,550. This is largely

Figure 1. State of the Borei Submarine Program (as of January 2013)¹

| SUBMARINE | LAID DOWN | LAUNCHED | CURRENT STATE |
|--------------------------|----------------------|----------|---|
| <i>Yuriy Dolgoruki</i> | 11/1996 | 02/2006 | Entered into service in January 2013 |
| <i>Aleksandr Nevskiy</i> | 03/2004 | 12/2010 | Sea trials |
| <i>Vladimir Monomakh</i> | 03/2006 | 12/2012 | Dockside trials |
| <i>Knyaz Vladimir</i> | 07/2012 | | Under construction |
| <i>Aleksandr Suvorov</i> | 07/2013 ^a | | |
| <i>Mikhail Kutuzov</i> | 11/2013 ^a | | |

Notes: ¹“The *Vladimir Monomakh* begins Trials in Severodvinsk,” Lenta.ru, January 18, 2013, <<http://lenta.ru/news/2013/01/18/trials/>>, last accessed June 15, 2013; “The First Nuclear Missile Submarine of the Borei Series begins Sea Trials,” Lenta.ru, October 24, 2011, <<http://lenta.ru/news/2011/10/24/borealis>>, last accessed June 15, 2013 >; “The *Vladimir Monomakh* Preparing for Launch,” Sevmas, December 26, 2012, <<http://www.sevmash.ru/rus/index.php>>, last accessed June 15, 2013; “The Fourth Submarine of the *Borei* Series laid down in Severodvinsk,” Lenta.ru, July 30, 2012, <<http://lenta.ru/news/2012/07/30/vladimir/>>, last accessed June 15, 2013. ^aProjection.

due to the relatively low throw weight of the Bulava SLBM, which stands at 1,150kg. Warheads normally make up no more than half of the throw weight, so mounting as many as six on a single Bulava missile is hardly possible, regardless of what Russian defense officials say. To fit six warheads on a single SLBM, each will have to weigh no more than 100kg. It is known, however, that the most advanced U.S. warheads, the W-87 and the W-88, which are used with the Minuteman-III ICBM and the Trident-II SLBM, weigh from 200 to 360kg.⁹ It is not realistic to expect that the Russian warheads built for a similar purpose can weigh as little as half or even a third of their American equivalents. Another important consideration is that the ballistic missiles with a throw weight of 1,150–1,200kg, such as the Topol-M, the Yars, or the Minuteman-III, are currently fitted with a maximum of three warheads.

As a result, assuming that by the end of this decade Russia can build and enter into service all eight of the Borei-class subs, and keep in service six Delta-IV subs, 60 heavy bombers, and 70 Topol-M missiles, it will also have to build and deploy 187–188 Yars ICBMs and 136 Bulava SLBMs in order to reach the 1,550 warheads ceiling. In other words, 324 new missiles will have to be built at the Votkinskiy plant and entered into service with the Russian nuclear forces by 2020. That will require the plant’s current annual output of missiles to be increased fourfold or even fivefold. Such a feat is hardly a realistic possibility.

If Moscow and Washington were to negotiate a lower ceiling compared with the New START figures, Russia could maintain strategic parity with the United States at lower levels. Such an agreement would save large amounts of money. Most importantly, Russia is a lot more likely to be able to achieve the level of 1,000–1,100 strategic warheads. It will be sufficient to build only four Borei-class subs instead of eight, plus 100 Yars and 72 Bulava missiles.

Moscow’s reaction to the U.S. proposals to lower the strategic ceilings was, however, entirely predictable. The Russian General Staff and the Foreign Ministry declared that, without an agreement on missile defense, any further strategic reductions are out of the question. What is more, a Foreign Ministry representative has opined that before the two countries discuss new cuts they must first fulfill the terms of the New START treaty. The Russian logic, or lack thereof, is



astounding: essentially, Moscow first wants to bring the size of its strategic arsenal up to the ceiling mandated by the New START, and only then discuss bringing it down again to a lower ceiling. Additionally, Russia would like the scope of new agreement also to include non-nuclear strategic weapons, and to reduce the existing imbalances in conventional weapons.¹⁰

In other words, Russian diplomats and defense officials have given their traditional response: if Washington wants to discuss further strategic reductions, it must, at the very least, accept Russian demands on missile defense and other contentious military-political problems. An article in the *Kommersant* daily has been especially interesting in this context. Citing “diplomatic sources” in Moscow and Washington, this normally well-informed newspaper said that Russia and the United States had agreed to resolve the missile defense problem by signing an agreement which can be enacted by a presidential executive order in the United States.¹¹ The agreement will reportedly contain commitments not to deploy sea-based missile defense elements in several areas of the northern seas, as well as confidence-building measures, etc.¹² Normally, *Kommersant* does not publish such sensitive information without verifying its accuracy. But the Russian foreign minister, Sergey Lavrov, then went on to say that “there is no basis for any such reports.”¹³ It appears that the option described by *Kommersant* really was discussed at one point, but then Moscow rejected it at the last moment in an effort to extract more concessions from Washington.

In March 2013 the new U.S. defense secretary, Chuck Hagel, made an important statement. He said that the United States would deploy an additional 14 GBI heavy interceptors in Alaska, bringing the total number to 44. He also announced a “restructuring” of the SM-3 IIB interceptor program, saying that “the timeline for deploying this program had been delayed to at least 2022 due to cuts in congressional funding.”¹⁴ In other words, rather than abandon the fourth phase of the missile defense system in Europe altogether, Washington has merely postponed its rollout. Let us recall that by the end of the third phase in 2018 the United States plans to have 32 ships in seas around Europe equipped with the SM-3 Block IIA interceptors. Each ship will carry a SPY-1 radar and 24 SM-3 Block IIA missiles. The plan for the fourth phase was to replace those missiles with the more advanced SM-3 Block IIB version.¹⁵ The new interceptor is expected to have a higher maximum velocity and better resilience to interference.¹⁶

Although no radical changes have been made to Washington’s European missile defense program, the decision to postpone its fourth phase is a serious attempt to meet Russia halfway. It is a demonstration of Washington’s willingness to seek a compromise on the missile defense problem. Importantly, Moscow believes (although there are no good reasons for it) that the SM-3 Block IIB will be the first U.S. interceptor capable of taking out strategic Russian missiles. Nevertheless, the Russian reaction to Hagel’s statement was predictable. Deputy Foreign Minister Ryabkov has pronounced that “the U.S. decision not only fails to address previous Russian concerns, but actually raises new ones.”¹⁷ He did not specify, however, what the “new concerns” might be. It appears that the Foreign Ministry and the General Staff need more time to invent them.

The logic of the Russian position is clear. So long as Washington refuses to accept legally binding restrictions on the capability of its missile defense system and on the location of its deployment sites, Moscow will use that refusal to justify its own programs for ramping up strategic arsenals. It will also use that refusal to discredit Washington in the eyes of those Americans and Europeans who question the whole missile defense program, believing that it will not be effective enough to be worth the effort. Russian diplomats will continue to portray Washington’s unyielding stance on missile defense as proof that the United States is blocking any further nuclear arms reduction and limitation.

Meanwhile, Washington’s own logic raises some questions. Let us assume that it can actually engage Russia in negotiations on further strategic reductions. Negotiations do not necessarily lead to a successful outcome. Moscow is likely to continue to demand restrictions on non-nuclear strategic systems and conventional weapons in Europe. It may also demand some restrictions on the scope of the American naval presence in the seas surrounding Europe. In that case Washington will either have to make a major concession to Russia on a matter of principle by even agreeing to discuss such demands, or assume responsibility for the failure of the talks.


More importantly, it is not impossible that after grueling talks Moscow will accept new strategic ceilings without linking them to other military-strategic problems. As a result, Russia will save large amounts of money that can be spent on strengthening the Russian military capability in other ways. It is not clear how the United States is going to benefit from that. First, as we have

already established, it is far from certain that Russia can increase its arsenal to the 1,550 deployed warheads ceiling by the end of this decade. Second, the United States is going to implement its own strategic reductions primarily by removing some of the warheads currently mounted on ballistic missiles rather than destroying the missiles themselves.¹⁸ That will enable Washington quickly to ramp up its strategic nuclear capability if the need arises.

In view of all this, many regard Washington's attempts to improve relations with Russia, whatever the cost, as a sign of political weakness. This raises further doubts—especially in Asian countries—about the reliability of American commitments to its allies. Asians are especially sensitive to what they regard as loss of face, and the opinion of the Asian elites is becoming particularly important to Washington in view of the ongoing reorientation of its foreign policy.

THE NORM AND THE PATHOLOGY . . .

In this postmodernist era, philosophers and journalists of a philosophical bent often proclaim that the line between the normal and the abnormal is not only fluid, but disappearing altogether. What was previously thought of as the norm is becoming an abnormality, and vice versa. The latter part of that statement is actually true. In pre-historic societies things like cannibalism were regarded as the norm—but over the last several hundred years they have not only been frowned upon but have also attracted stiff criminal penalties. The political principles and norms, including the norms of international politics, are also evolving, albeit at a slower rate than views about the acceptability of cannibalism or promiscuity.

Another important consideration is that things viewed as the norm by the Euro-Atlantic civilization are sometimes regarded as abnormal in Asia—or, at the very least, they are seen as a weakness that must be exploited. As Rudyard Kipling, a poet of British imperialism and a very intelligent man used to say, the Ten Commandments do not exist east of Suez.¹⁹ His famous poem “Mandalay” also has another poignant line: “An’ the dawn comes up like thunder outer China.” The line seems prophetic; the sky is indeed becoming crimson in the East. 

NOTES

¹ “Rosoboronexport reports Growing Global Sales, including Deliveries to Syria and Mali,” February 13, 2013, <<http://newsru.com/russia/13feb2013/rosoboron.html>>, last accessed June 15, 2013.

² Ilgar Velizade, “Akhmadinezhad Leaving,” *Nezavisimaya gazeta*, January 30, 2013.

³ Sergey Strokan, “Iranian Atom Growing Stronger,” *Kommersant*, February 25, 2013.

⁴ Benjamin Netanyahu: “Only Military Threat can Stop Iran,” *Euronews*, March 5, 2013, <<http://ru.euronews.com/2013/03/05/israel-sharpens-its-tone-towards-iran>>, last accessed June 15, 2013.

⁵ The precise age of the members of the Saudi royal family is often unknown. In the 1930s and 1940s, when the sons of the founder of the dynasty, Abdul Aziz bin Saud, were born, nobody bothered to record the precise birth dates of his children by his numerous wives.

⁶ “Remarks by Vice-President Joe Biden to the Munich Security Conference,” The White House, Office of the Vice President, February 2, 2013, <<http://www.whitehouse.gov/the-press-office/2013/02/02/remarks-vice-president-joe-biden-munich-security-conference-hotel-bayeri>>, last accessed June 15, 2013.

⁷ “New START Treaty Aggregate Numbers of Strategic Offensive Arms,” Fact Sheet, Bureau of Arms Control, Verification and Compliance, US Department of State, November 30, 2012, <<http://www.state.gov/t/avc/r/s/201216.htm>>, last accessed June 15, 2013.

⁸ The figures are from the Russian Strategic Nuclear Forces (<http://www.russianforces.org>) website. They seem entirely plausible; the real size of the Russian strategic arsenal may be slightly different, but all the conclusions still stand.

⁹ Federation of American Scientists, “Complete List of All U.S. Nuclear Weapons,” last changed 14 October 2006, <<http://nuclearweaponarchive.org/Usa/Weapons/Allbombs.html>>, last accessed June 15, 2013.

¹⁰ Elena Chernenko and Ivan Safronov, “Delayed-action Disarmament,” *Kommersant*, February 16, 2013, <<http://www.kommersant.ru/doc/2127445?isSearch=True>>, last accessed June 15, 2013.

¹¹ In the United States, an international agreement can be implemented as a treaty or as an executive agreement. A treaty must be ratified by a two-thirds majority in the Senate. An executive agreement can be



either congressional or presidential. The first is based on bills passed by Congress or on ratified international treaties, and must be ratified by a simple majority in the Congress. The second is signed by the president based on his constitutional prerogatives and does not require ratification. Nevertheless, the Congress can pass a bill instructing the president to submit an executive agreement for ratification. See: Boris Osminin, "Adoption and Implementation of International Agreements by States," Moscow, 2006, p. 222–223.

¹² Elena Chernenko, "A Missile Defense Breakthrough," *Kommersant*, February 26, 2013, <<http://www.kommersant.ru/doc/2135295>>, last accessed June 15, 2013.

¹³ "Lavrov Denies Exchange of Declarations on Missile Defense," Lenta.ru, February 26, 2013, <<http://www.lenta.ru/news/2013/02/26/lavrov/>>, last accessed June 15, 2013.

¹⁴ "We are restructuring the SM-3 IIB program . . . The timeline for deploying this program had been delayed to at least 2022 due to cuts in congressional funding," Missile Defense Announcement as Delivered by Secretary of Defense Chuck Hagel, The Pentagon, March 15, 2013, <<http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1759>>, last accessed June 15, 2013.

¹⁵ Arms Control Association, "The European Phased Adaptive Approach at a Glance," February 2013, <<http://www.armscontrol.org/factsheets/Phasedadaptiveapproach>>, last accessed June 15, 2013.

¹⁶ According to independent U.S. experts, the SM-3 Block IIA interceptors can reach a velocity of 4.5km/sec at the end of the boost phase, whereas the previous SM-3 Block IB version could reach only km/sec. It is assumed—although there has been no official confirmation—that the SM-3 Block IIB interceptors will be able to accelerate to 5.0–5.5km/sec. See: Arms Control Association, "The European Phased Adaptive Approach at a Glance," February 2013, <<http://www.armscontrol.org/factsheets/Phasedadaptiveapproach>>, last accessed June 15, 2013.

¹⁷ Kirill Belyaninov and Elena Chernenko, "The United States Change Missile Defense Registration Address," *Kommersant*, March 18, 2013, <<http://www.kommersant.ru/doc/2148848>>, last accessed June 15, 2013.

¹⁸ Hans M. Kristensen, "Options for Reducing Nuclear Weapons Requirements," FAS Strategic Security Blog, February 11, 2013, <<http://www.fas.org/blog/ssp/2013/02/nukeoptions.php>>, last accessed June 15, 2013.

¹⁹ "Ship me somewhere's east of Suez, where the best is like the worst, where there aren't no Ten Commandments an' a man can raise a thirst". "An' the dawn comes up like thunder outer China 'crost the Bay." Rudyard Kipling, "Mandalay," 1892.



Dmitry Evstafiev

THE CRACKED EDIFICE OF WORLD POLITICS

It has finally become clear that new times have arrived. The fact that the times are indeed new is amply demonstrated by the tag cloud that describes the ongoing global political and economic processes.

Previously, many believed that new times would arrive only as far as politics is concerned, and that they would come only in some distant corners of the globe that are of no particular interest for a classic Euro-man. Indeed, that is how things were, at first. But now the wind of change has spread to economics, including those economic elements that were previously thought of as immutable—elements which used to be viewed as attributes of all respectable people who thought of themselves as businessmen.

BACK TO MARXISM? POLITICS AS A DISTILLED FORM OF ECONOMICS

That is why, as we speak about international security, we will increasingly have to discuss the state of the world economy, which has acquired clear security repercussions. That is a stark and unpleasant departure from the state of affairs in the 1990s and even in the early twenty-first century, when the only thing people used to talk about was humanitarian problems and universal human values. Such a radical change can make even the most cynical commentators slightly nostalgic.

It was a serious mistake to imagine that a global restructuring of the international system would be limited to political cataclysms in some backwater regions of the globe. That mistake was made because people had forgotten a wise dictum: politics is a distilled form of economics. In other words, only a very naive person would fail to guess that if politics is changing, that means that somewhere, somehow the economics has already changed, only no one has bothered to tell us about it. And it would take someone extremely naive not to notice the clear economic reasons for the events in the Middle East over the past two years. Another blindingly obvious thing is that the epicenter of global geopolitical change is no longer somewhere in the Third World—it is now in the direct vicinity of Europe. To be more precise, it is in the Mediterranean. Alas, we are in for some serious upheavals, not only political but also economic. That includes not only the sub-First World countries, the notorious PIGS (Portugal, Ireland/Italy, Greece and Spain), but even the richest First-World economies.

It is, of course, too early to speak about all the main characteristics of the new economic reality. Nevertheless, some things have already become clear:

- ❑ The crisis of the global financial system has entered into an acute phase; where previously there was only some smoke, open fire has broken out over the past six to eight months.
- ❑ There is a limited reindustrialization process in the United States, although, on the whole, the American economy remains post-industrial. That too is a distinctive feature of the situation over the past six months, although for now the only explanation being offered for it is that the economy has returned to growth.
- ❑ Germany has emerged as a key geo-economic power capable of defending its interests, sometimes in the face of previously existing formal or informal realities. In fact, this is the most recent geo-economic trend that has become clear in 2013.
- ❑ Attempts are being made to change the structure of the global fuel and energy market (which has been unchanged since the mid-1980s) by preventing a sharp rise in demand for traditional hydrocarbons.
- ❑ Regional economic blocs have become much more energetic. This particular trend emerged back in early 2012, but it has not received any fresh impetus over recent months.



REVIEW OF RECENT WORLD EVENTS

On the whole, these trends paint a picture of a growing new dynamism in the economy. But, as a result, we can now see more clearly the origins of the dynamism in politics (including use of force for political ends) which emerged in 2011. What is more, it is clear that this new dynamism is not going to wane over the coming years. The economic agenda is dominated by three key processes which are very likely to have political repercussions (including those related to the use of force).

First, the existing global financial system is being dismantled. There may be a change in the currency setup in Europe—in other words, countries may abandon the euro. The existing system of social welfare and pensions in the United States is also being dismantled.

Second, it has become entirely obvious that there are four classes of membership in the EU (with corresponding levels of economic development). It will soon become clear that the voice of Germany or France is not at all equal to the voice of Romania or Bulgaria, let alone a country like Estonia. In fact, does Estonia even have a voice? Cyprus thought that it did, but it has turned out that it does not, and that it probably never really did.

Third, the energy market is no longer an integral part of the free market system; some form of strict international control over that market is on the horizon.

Of course, it is still too early to say that the U.S.-centric global economic system is being dismantled. On the contrary, that system will actually become stronger in the short to medium term, no matter what the Russian geopolitical specialists say. In the current circumstances that merely means, however, that American military strength will remain the main “guarantee of global stability,” and that all the countries that are part of the stability belt will continue to pay a tax for relying on American military strength. Of course, the bloodlettings, which are becoming increasingly copious beyond the stability belt, will continue. But within the U.S.-centric global economic system the balance of power may change very substantially. And it has even become clear who the losers will be. The main loser will be Britain, which Washington will probably have to sacrifice in order to preserve its global hegemony. The next victim that will have to be sacrificed unless the stability belt can be stabilized is probably Saudi Arabia.

CYPRUS AS A FOREBODING

The reasons why the situation in Cyprus has global implications do not boil down to the expropriation of Russian investors’ money. Sooner or later that was bound to happen. Nevertheless, it is worth noting that one of the pillars of the liberal world, the sanctity of private property, has now been revised. This will have long-term effects, as will the precedent of administrative delineation of the limits of prosperity the non-indigenous residents of European cities (i.e. the ones who have arrived over the past 20 years) are allowed to enjoy. It seems that the sanctity of private property was not even the main consideration. It is quite possible that the point was not just about the “white man’s right,” but about the right to determine who qualifies as a white man.

The timing of the decision to expropriate the money of Russian offshore businessmen is also quite telling. It means that our European (especially German) partners do not think very highly at all about Russia’s ability to respond. They are not expecting any retaliatory actions or statements, let alone any steps that can have real effects. Alas, everyone has become accustomed to the idea of Russia being all bark and no bite.

This is all very interesting and telling, but let us return to the topic later on. First, let us discuss the global geopolitical repercussions the Cyprus situation is likely to entail.

The most obvious of them is that increasingly draconian measures are likely to be used in an effort to stabilize the European (and later, perhaps, the global) financial system. It is even more obvious that the Cyprus situation has decisively removed offshore models from the list of internationally acceptable forms of doing business. That will have major implications for the world economy. For good or bad, offshore havens have been an integral, even respectable part of the world economy for over 40 years. In the past two decades they have played a decisive role in giving the United States strict controls over murky financial flows from the former Soviet Union. Such a channel of financial flows will be very difficult to replace.

Finally, and perhaps most importantly, it is clear that Germany will no longer be constrained by the old conventions in its relations with partners. The EU has somehow forgotten where Angela Merkel

comes from (along with several other figures). That is a mistake. In the former East Germany the complex of historical guilt foisted upon the Germans was much less pronounced than in the western part of the formerly divided country. This will have political and perhaps military-political implications. That is why we should prepare for a more aggressive German stance in Europe and farther afield. It is not at all unreasonable to expect a certain crisis in relations between Berlin and the European institutions that only recently imposed their will on Germany during the crisis in Greece, and then in Portugal and Spain. These European institutions do not really have many trump cards up their sleeve. Germany is unlikely to bend to their will once again.

The European Commission, in which East Europeans now have a much stronger presence, could respond by stepping up its activities in the former Soviet Union under the pretext of helping the fledgling democracies. But there is simply not enough money for such a geopolitical move—especially since the elites of the former Soviet states have not become any less voracious, with the possible exception of Moldova. It is clear that Europe can no longer afford any large pan-European or trans-European projects, and such a state of affairs will remain for another decade or so.

Another move, which could be much more effective, would be to revitalize the idea of a European defense identity, which was taken off the agenda about 10 years ago. Violent conflicts on the southern and southeastern fringes of Europe could spread to the European continent at any moment now. In such circumstances focusing on security as the basis of a pan-European agenda would look entirely legitimate. Such a move could win the support of European public opinion. And it would be very interesting to see how the German elite will defend its own interests in such a situation (including financial interests, since the European defense identity will be paid for with German money, even though Germans will not play a significant role in it).

In other words, Russia and its citizens must make energetic preparations for Europe as we have known it for the past 20 years or so ceasing to exist. The decorations will remain the same, but real life will be very different, and there will be new people in charge. That is a serious challenge for Russia, both economically and politically.

THE CRISIS AT GAZPROM AS A CRISIS OF RUSSIAN GEOPOLITICS

Without anyone really noticing, the Russian gas giant has sleepwalked into a crisis. I am not talking about pronouncements by a certain pro-government TV commentator, which are insulting both in their form and in their essence. I am not even talking about the president's strict orders to develop a shale gas strategy—even though in any other country such criticisms would have been followed by the chopping of senior heads in the corresponding companies or government agencies. The real problem is that the world's largest monopoly is not showing any meaningful progress, and is losing its seemingly unassailable economic and geopolitical positions.

Why are we regarding the economic problems of just one of the many Russian companies as the entire country's problem, with national and even international security implications? It is not simply a matter of the taxes that the company pays to the Russian treasury. The real matter is the integrative function played by Gazprom. That is the distinctive feature of the company's relations with the Russian state. Gazprom used to perform a geopolitical function—but now it has ceased to do so because it has proved unable to meet the new geopolitical challenges. Gazprom has supplanted the Russian army, foreign politics, foreign trade, and many other things, including the Russian Football Union. It has almost supplanted the Cabinet, and it was even thinking of supplanting the Russian president—but it had run out of time. The situation has become rather different.

Politics and the current state of Gazprom essentially reflect Russia's vision of its own place in the world, and of its own future. It would not be an exaggeration to say that Gazprom has played a major role in formulating that vision.

It has now turned out, however, that the geopolitical concept which Gazprom relied on has become obsolete, whichever way you look at it.

- It is obsolete as a manifestation of a certain (pro-European) geopolitical choice, which is becoming increasingly difficult to pursue. It is not just a matter of Ukraine gradually becoming a no-man's land; more importantly, Russia itself is rapidly losing its ability to exercise influence in Europe using gas supplies as leverage.



- ❑ It has become obsolete as an indication of the Russian economy's growing dependence on exports of raw materials. It is quite telling that even in the best of times—and unlike the Russian oil companies—Gazprom never even tried to diversify into added-value industries or the high-tech sector.
- ❑ Finally, it has become obsolete as an example of the privileged position of the cosseted state-owned companies in the Russian economy; these companies (or rather, their senior executives) were allowed various liberties in return for performing certain obvious and reasonable functions.

It is quite telling that the geopolitical crisis at Gazprom began precisely at the moment when the EU started to implement very serious changes in its governance system and its entire ideology of development. In other words, it would be wrong to imagine that the crisis was triggered by changes on the market for hydrocarbons caused by the appearance of shale gas. The real reason is the nature of internal relations and of the governance system in the EU, which is Russia's and Gazprom's most important partner. But the European choice has been the foundation of Russian foreign policy since 1991, and all the talk about some kind of strategic partnership with China has been mere rhetoric. So far, that partnership has been limited to imports of Chinese consumer goods (although some positive changes are afoot here) and to arms exports. And it is government officials, not senior Gazprom executives, who have turned Gazprom into the country's main foreign policy instrument (damaging its relations with the former Soviet states in the process, sometimes for no good reason at all).

The ongoing crisis at Gazprom can only be resolved by reviewing the entire Russian geo-economic (and, as a corollary, geopolitical) strategy. Such a review is in any case all but inevitable, given the latest events in Europe, unless Russia is prepared to lose everything it has gained through hard toil.

We must be careful, however, to make sure that Gazprom geopolitics is not merely replaced by Rosneft geopolitics.

HUGO CHAVEZ AS A HARBINGER OF THINGS TO COME

The death of Hugo Chavez has been a major media event; the magnitude of that event was disproportional to Venezuela's role in the world, and to the real significance (as opposed to PR hype) of real economic achievements brought on by the Bolivarian process. The magic of the late Venezuelan president's persona has played a major role in this phenomenon—only the most prejudiced commentators would disagree with that. But this is not the only explanation. The main reason for such keen interest in the fate of the Comandante was the realization that he has become the source of one of the most significant geo-economic initiatives in recent years.

Some say that Chavez's death will radically change the course of the Bolivarian initiative. It is obvious that Nicolas Maduro will hardly be able to assume a leading role in that process, especially after his very narrow election victory.

I believe that the situation is more complex and strategically ambiguous than it seems. After all, Chavez had stopped playing an active role in politics a year before his eventual death, and he was hardly able to exert any major influence on the fate of the processes he had initiated many years ago. Nevertheless, the Bolivarian process was still making progress, even in the face of an obvious crisis in Venezuela's energy sector, on which the country's entire economy depends. I will therefore go out on a limb and make the following three assertions:

- ❑ The main problem that has lately been facing the Bolivarian process is the development crisis. The Bolivarian process clearly needs a new leader and new resources. While Chavez was still alive, the emergence of a new leader was impossible for various reasons. Compared with the Comandante, even the strongest of all the other Latin American leaders looked unimpressive. Now the stage is waiting for a new leader to enter.
- ❑ Chavez was a genius of intuition, and he rightly sensed the region's need for a new form of integration, although that need was not fully realized on the rational level. The Venezuelan president assumed the central role in that process, even though such a role was not entirely justified, given Venezuela's real economic and political weight. Hugo Chavez had sensed the need for such a project but, to be blunt, he was unable to formulate its

economic foundations; he merely focused on energy resources. These resources are undoubtedly important, but they are not the decisive factor.

- The departure of Chavez, with all his histrionics, may enable the Bolivarian project to acquire the gravitas it so clearly lacked. It was Chavez's emotional personality, and his exuberant populism (although there is nothing inherently wrong about listening to public opinion) that made it difficult for so many people to take the project seriously. As a result, cynical as it may sound, the departure of Chavez the man will be, on the whole, a good thing for Chavez the ideologist. From now on, his ideas will not be compromised by his own eccentricities and unbridled radicalism.

As for the United States, Washington has seen off the main irritant which used to stir up public opinion. It will now find it much more difficult to portray Venezuela and the Bolivarian project in a negative light. Bringing its own puppet to power in Caracas is something Washington still wants, but not nearly as urgently as it used to. Besides, smart people in the U.S. capital realize perfectly well that the real economic center of the Bolivarian process has shifted from Caracas (perhaps to Brazil), and that Venezuela remains merely a spiritual center of that process. For all its faults, the United States has never been known to make war on incorporeal spirits.

But we must be realistic: sooner or later, as demand for the region's energy and other resources (not necessarily American demand; China is also showing great interest) reaches a certain point, the Bolivarian initiative will inevitably acquire a real military-political dimension. Once that happens, the initiative will have to become a real geopolitical force—otherwise it will turn into an empty shell or collapse altogether.

Meanwhile, the death of Chavez does not mean that the challenges Washington has been facing in Latin America are going to disappear. Those challenges, incidentally, had emerged back when the American geopolitical hegemony seemed solid as a rock. Any geopolitical maneuvers will remain very risky so long as there is a hostile process in the soft underbelly of the United States, even though that process will be less overt now that Chavez has died. Washington will have to seek real solutions to these challenges; continuing to treat Latin America the same way it used to in the 1960s is no longer an option.

Another important achievement of Chavez worth noting is that he managed to position collectivism as a viable alternative to individualism—first ideologically, and then politically as well. In other words, he spearheaded the victory of the local social group over the Facebook social group, and that victory was based on people's will as opposed to political technologies and scheming. Chavez has proved that a direct line is the shortest path to the goal. That is a good lesson for the Russian elite, which is more afraid of a single blogger than of the population of an average-sized industrial city. The reason for such a situation does not boil down to the fact that the rulers in the Kremlin essentially belong to the Facebook social group, and therefore value the opinion of their own kind. Another important reason is that these rulers simply cannot and will not secure broad grass-roots support for their policies. The example of Hugo Chavez has demonstrated how important that support can be for achieving various goals, including his own political survival.

THE NORTH KOREAN GAMBIT

To all outward appearances, the situation with the North Korean nuclear gambit bears out the assertion that the leadership in Pyongyang lacks style. The idea seemed reasonable enough: use hysterical patriotism to provoke a crisis and eliminate those who disagree with the leader. But its execution was rather slipshod. The steps undertaken by Kim Jong-un were rather crude compared with the fascinatingly cynical and intricate style of his father and grandfather. As a result, he produced too much bark and no bite. He made too many promises that were impossible to keep. Strange as it may seem, the main problem of the North Korean regime has to do with communication and perceptions. Kim Jong-un wants to be seen as a grown-up, but he is simply trying too hard....

In other words, the young leader in Pyongyang has more or less botched his first major policy step—although, domestically, it has not been a failure at all. He has proved that he can mobilize the masses, and he has probably achieved his domestic policy goals. Incidentally, judging from his earnest efforts to provoke a foreign-policy crisis, his domestic situation was rather shaky.



Nevertheless, several important conclusions can be drawn. First, most of Pyongyang's critics had a real scare. The people who were claiming only a couple of weeks previously that the North Korean regime has nothing (apart from its starving population) were forced to recognize that Pyongyang can still make life extremely difficult for South Korea and everyone else who gets in the way. This is an important recognition, which—under certain circumstances—can become the foundation of future stability in the region. Experts differ as to the precise amount of trouble Pyongyang is capable of making—some claim that the whole thing was merely a very persuasive bluff on the part of North Korea. Nevertheless, everyone seems to have recognized that North Korea's military capability has reached a new level—even though some Russian commentators, who were too busy discussing the imminent demise of the communist regime, have been rather taken aback by such a development.

Second—and this is very important—Beijing was actually the first to receive a scare. As a result, China took a number of steps that were politically and practically pointless, which is unusual for the Chinese leadership. In particular, there were significant Chinese troop movements. In other words, even Beijing, which is thought to exercise great influence over North Korea, was not entirely sure about Kim Jong-un's real intentions. So much for the idea that China understands North Korea better than anyone else.

Third, the United States was shamelessly playing along with Kim Jong-un until the very last moment. Were it not for the United States and its professions of deep concern, most of what has happened would have been seen as merely a bad joke. Even Washington's decision to send two semi-stealth planes (the ones that keep having some problems, according to the U.S. media) seemed like an insult—though it is not clear whether the Americans were trying to insult Kim or their own South Korean partners. As for the decision to cancel ballistic missile tests so as not to provoke Pyongyang, that move seemed a clear recognition of the young North Korean leader's global potential. There is little doubt that technical problems with the missile were the real reason, but the choice of the official explanation is very telling.

Fourth, one cannot help feeling really sorry for South Korea. The leadership in Seoul appears to be the only loser in this situation. It has suddenly become perfectly clear to South Koreans that without American support their geopolitical weight is miniscule, and nobody pays them the slightest bit of attention when push comes to shove. The young Kim has got half the world astir with his antics. Seoul could never have pulled off such a feat, even if it were to use all the smartphones and tablets made by South Korean firms. The lesson is that smartphones and tablets do not really amount to much in the end—not in this day and age, anyway.

To conclude this topic, it is safe to assume that the ongoing crisis on the Korean peninsula will not be the last. After all, some people find it easier to become the best of friends only once they have had a good fight. And the two Koreas will eventually have to become friends, in all likelihood.

ONE LAST TIME ABOUT MISSILE DEFENSE

There has been some strange activity on the missile defense front in recent months. It seems to confirm the simple idea that American missile defense in Europe was only a pretext to allow Washington to implement the latest achievements in hard-site and regional missile defense. But the Americans want their missile defense system to protect their own homeland, not someone else's, and they want that system to cost a relatively reasonable amount of money. The latter consideration is especially high on the agenda during this time of austerity. It is hard to imagine that Barack Obama would risk spending money on a project that merely improves the defense capability of some distant allies that an average American congressman could not even pinpoint on the map.

Let us also note how cynically but at the same time how expertly the Americans have extricated themselves from this political bind. That was a masterful stroke of not only American diplomacy but also American foreign-policy propaganda.

As for Russia, it has now become obvious that the unduly agitated Russian response to the ostensible American plans has actually made it easier for Washington to achieve its real goals. The United States is now able to claim that there will not be a fully-fledged missile defense system in Europe because Russia objects, and not because the Americans have never really intended to deploy such a system in Europe in the first place. We Russians seem to have a real knack for

helping others find a way out of tricky situations and landing ourselves in a tricky situation in the process. There is no arguing that Russia's positions on the missile defense issue have never been as weak as they are now. The main weakness is that having obtained an ostensible concession from Washington, Russia has nothing left on which to negotiate. That is despite the fact that deep down we understand a stark truth: if the purpose is to undermine the Russian nuclear deterrence potential (that is, if that potential has not already been undermined by faulty spare parts in Russian missiles), positioning the missile defense sites in Alaska is much more effective than in Poland or even Romania. The point is especially valid if one takes into account the infrastructure the Americans have already deployed in Alaska.

On the other hand, it is also important that, unlike the previous European version, the current format of the U.S. missile defense system gives a clearer idea of Washington's missile defense plans. During its debates with Russia and its ritual dances with East European limitrophes the United States was forced to make public the kind of information about its missile defense program that was unlikely to surface under any other political circumstances. The conclusions are as follows.

First, it probably did not make much of a difference for the United States where to deploy the interceptor component of its missile defense. It was far more important to manufacture that component, deploy it somewhere, and try the whole system in action as opposed to merely testing it.

Second, it appears that the long-awaited technological breakthrough in missile defense, which many Western and Russian specialists (including the present author) have thought likely, has yet to materialize. In other words, missile defense has become more effective, accurate, quick, and resilient—but there has not been any genuine revolution. This is why it does not make much sense to invest too heavily in such a system, since it is inadequate as a foundation of the concept of Fortress America.

Third, austerity is clearly affecting the missile defense program—but the impact is not as great as one might imagine after perusing U.S. media reports on the subject.

Fourth, the strength of the American version of missile defense is that the individual missile defense islands can be merged into a large contiguous space, if Washington is prepared to invest the necessary resources. Of course, such an arrangement cannot fully replace a proper continental missile defense system—but it can perform some of its functions. Most importantly, even such a truncated system will be entirely capable of protecting the United States if only a handful of missiles at a time are launched against its territory.

Fifth, it is obvious that a missile defense system protecting the entire national territory of the United States is impossible to create without deploying a proper space-based component (including space-based interceptors). I believe, however, that the United States has achieved as much as could realistically be achieved within the current technological and especially financial constraints. Washington has not quite fulfilled all of its geopolitical objectives, and Poland has been left sulking—but the United States has clearly won this particular round by points.

To summarize the current situation in missile defense, the United States has the numbers (including a number of new technological solutions), but it has not yet attained a whole new quality. And, without that new quality, building Fortress America is an impossible goal that has to be postponed. In some sense, Russia is in luck. But by the time the United States is ready to transform quantity into quality (and that will probably happen in another four to six years at the very latest), Russia must normalize the situation in its space-rocket industry, and demonstrate that it can actually make new types of missiles as opposed to just talking about them.

SYRIA: THE MEANING OF THE TRAGEDY

The situation in Syria has become an ongoing meat grinder, with next to no chance of political or quasi-political settlement. But neither side is likely to achieve an outright victory, either. The forecast for Syria is global carnage. It is now too late for either side to put down its weapons because too much blood has been spilt. If the opposition gains the upper hand (which is quite likely now), the country will probably be ruled by an Islamist ochlocracy, and a very aggressive one to boot, because by the time it comes to power there will be very little left to plunder in the once-flourishing state. The Syrian political opposition, meanwhile, will likely be left in Paris and London, because in Syria itself these people will not be welcome.



Clearly, the ongoing deadlock is in the interests of the opposition forces, even if they fail to get NATO directly involved in the conflict. By putting up a relatively effective resistance to the authorities, the opposition is demonstrating the government's weakness and ineptitude. In that sense, I am afraid, Bashar Assad is repeating the mistake of Col. Gaddafi, who hoped to tire out the opposition and missed the killer blow as a result. The two opposing sides are roughly equal in strength, and their confrontation is becoming increasingly bitter. In such circumstances, even a relatively weak push may be enough for the seemingly strong government to totter and fall.

Assad made a strategic mistake last summer when he refused to commit all his strength to destroying the opposition enclave in Aleppo. Buoyed by his relative success in the battle for Damascus, he decided instead to restore his control over territories across the entire country. That gave the opposition some breathing space and enabled it to preserve the core of its fighting strength. The lesson of this debacle is this: once your enemy is down, make sure to finish him off very ruthlessly lest he rise up again.

The ideological meaning of the ongoing conflagration in Syria has largely been lost by this point. The opposition is obviously dominated by radical Islamists and Saudi Arabia's puppets, so democracy is clearly off the agenda. The conflagration is being stoked up by regional and European forces for a variety of reasons—including fears that once the Syrian freedom fighters have been thrown out of Syria itself, they will start fighting for freedom in their new home countries. These people are very unlikely to head for Egypt, Pakistan, or Libya—these destinations lack any political or financial attraction. No, they will prefer to go to Europe, or perhaps to Saudi Arabia—especially since many of them already hold European or Saudi citizenship, or have been given leave to stay for whatever reason. The British have already announced this loud and clear, with their characteristic cynicism. The others prefer to keep silent for now. The Americans, however, have made some statements that are at odds with the general propaganda strategy. U.S. government agencies have admitted that the Syrian meat grinder is increasing the threat of Islamic extremism. That is a good reason to worry about the scale of the possible future calamity.

The more pressing question, however, is about who the next sacrificial victim is going to be. One plausible candidate is Saudi Arabia, especially since—as it turns out—there are lots of people in power in the United States and especially in Europe who are willing to grab other people's money. In the event of a serious domestic conflict in Saudi Arabia, this money will forever remain locked in American and European banks or real estate.

There is, however, an alternative candidate: Israel. Incidentally, there have been interesting reports suggesting that Hamas has found new benefactors in Qatar and Saudi Arabia. I fear these reports are not just hearsay.

THE RUSSIAN ARMY: HAS THE BOIL BEEN LANCED?

Many observers breathed an earnest sigh of relief following the almost-dishonorable sacking of former defense minister Anatoly Serdyukov. We could argue whether there was anything at all Serdyukov had managed to do right, or whether he should have been clapped into jail as an object lesson. But the more important thing is that he will no longer have any influence on the situation in the armed forces. Whether he is jailed or not is inconsequential.

The arrival of Sergey Shoygu at the MoD is, on balance, a positive development. The destruction of the army may not be stopped altogether, but at the very least it will take far less eccentric forms, leaving fewer opportunities for serious socio-political destabilization. In addition, Shoygu is less prone to the kind of weird decisions that turn the army into something akin to an office, and soldiers into office rats. Nevertheless, the steps already taken by the new minister seem capable of stabilizing the situation—but not of making progress in the right direction. The new geo-economic situation makes it necessary for Russia to acquire truly effective military potential. It seems that this simple and obvious idea has yet to be fully grasped by the Russian leadership. By the way, judging from the less than enthusiastic reports from an exercise in the Black Sea last March, the event was not quite the stunning success our military and political leaders had expected.

Nevertheless, the departure of Serdyukov opens up real opportunities for a sensible discussion of Russian defense policy. That discussion must be based on new thinking which admits the

possibility of a large regional conflict, such as a conflict with a neighboring state or a trans-regional invasion into Russia. I believe the time has come to recognize that excluding this type of conflict from Russian military planning (which happened in the mid-2000s, and was apparently borne out by the war with Georgia in 2008) was a mistake. If our military-political leadership accepts that simple idea, it will open up the real possibility of developing a new Russian military policy and putting an end to the gyrations of the past seven or eight years.

The debate should focus on four central issues that are fundamental for Russian military strategy. First, Russia must clearly outline the conditions that can trigger the use of military force outside its own territory (including the need to fulfill commitments to allies, etc). Everyone will benefit from clarity and transparency on this issue, especially since there has long been an obvious need for a revision of Russia's military-political commitments to various countries. Clearly explaining what may prompt Russia to use military force will be an important factor for the outside world because such a step will make Russian policy more predictable. It will also be good for Russia's own political elite, because such an approach will get it used to the idea that its words must always have consequences.

Second, there is a need to develop a new Russian nuclear doctrine. That doctrine must outline a radically new role for tactical and sub-strategic nuclear weapons. Russian nuclear weapons must once again become an effective military instrument, and not just a useless political appendage. Such a move would substantially alter the Russian geopolitical situation.

Third, we need an answer to the question about the numerical size of the Russian armed forces for the foreseeable future, and about the optimal proportion of conscripts and professional soldiers. The answer must take mobilization capability into account; there is no longer much confidence in Russia's ability to respond to every possible military challenge using only its peacetime army.

Fourth, can the recently adopted brigade structure of the Russian Army be seen as appropriate? There is nothing intrinsically wrong with such a structure, especially since those brigades are a truly combat-capable component of the armed forces. But in the new geopolitical situation we may well have to face a crisis in which the brigade structure will not be up to the task. There may well be situations in which we are going to need an entire division. Therefore we must begin to restore this potential without delay because the path from brigade to division is a lot more complicated than the path the MoD has already taken under Serdyukov, i.e. from division to brigade. It will take a lot more time and effort; even more importantly, it will take a whole new level of management, governance, and leadership.

Without providing answers to these four questions, it is premature to make lower-level decisions about troop deployment, reorganization of the Air Force, and other measures to which the new MoD leadership is now devoting its energies. Unless these answers are provided, the boil which formed in 2005–2006, and which can be described as a conceptual vacuum in the whole area of Russian security, cannot be lanced. It will continue to fester and poison our country.

Also, without providing the answers to these four questions it is entirely pointless to try to restore order in the arms procurement system. The situation will continue to force the Russian army to buy the weapons that are available as opposed to the weapons it really needs. The next stage of the development of the Russian armed forces will require the speedy development and adoption of a new defense industry policy concept because the current state of affairs in this area can best be described as complete disarray. Such a situation opens up new opportunities for financial irregularities, in addition to the traditional misguided creativity of policy-makers. But a new defense industry policy cannot emerge before the government formulates the outlines of defense policy as such. Until that fundamental policy had been put in place, any new defense industry moves will be merely a repeat of the chaotic vacillations of recent years, compounded by the much more difficult political and economic environment.

POST-NEOCOLONIALISM AS A GEOPOLITICAL REALITY

Hardly anyone would argue with the idea that we are witnessing the emergence of a new geopolitical reality. That reality is based on a combination of military and financial instruments being used in the economic interests of a single country or group of countries, which have dispensed with the legal and political formalities that used to be necessary.



Another thing to note is that the United States and its allies have achieved complete and undisputed dominance in the global communication channels, from the old electronic media to social networks. Those networks, incidentally, are neither social nor networks. They are an extremely effective mechanism for shaping a new socially significant reality, as well as new politics and economics. They are also an important instrument for steering global processes.

This new reality is infinitely far from the ideas on which the formation of a new world order was based in the early 1990s—namely, the “one world” concept, also known as the concept of engagement and enlargement. Neither does the new reality bear much resemblance to the new world order of the early 2000s, which was based on the contraposition of the axis of good and the axis of evil.

It would probably be correct to describe the emerging new system of global politics as postmodernist colonialism, or Imperialism 2.0, because it has all the classic elements of the imperialist system: the periphery, the colonial power at the center, control over the channels of communication, and a policy of foisting the colonial power’s culture on other countries. Nevertheless, the precise nature of these elements and the system of governance has changed in a significant way.


While Moscow (and lately Beijing as well) was discussing a multi-polar world and proposing various concepts, the United States began in earnest to form a multi-polar world. The role of the poles of power in this world will not be claimed by the countries which have long been thought of as the main contenders in view of their economic and political potential. That role will be given to the countries that have found themselves under the American military and financial umbrella, which gives them a solid competitive advantage. Nevertheless, these countries will have to defend their geopolitical interests (within the framework of U.S. interests) using mainly their own resources and their own money.

One classic example of a newly formed “pole of power under the overall master” is France, which several years ago was thought of by many as a spent geopolitical force. But having sacrificed a significant part of its internal integration (France’s political system can no longer produce leaders such as de Gaulle or even Mitterrand) Paris has been given the right to a second geopolitical youth within the sphere of influence circumscribed for it by Washington. It is not clear how all this will end for France in the longer term—especially since Paris no longer claims the right not only to have a strong leader, but also to regulate its own domestic affairs on a national basis. But in the short and possibly medium term, France’s position looks fairly promising.

The key question which I am not sure how to answer with any degree of certainty is this: Has the level of global military threat gone up or down over the past six months in connection with the formation of the aforementioned system? Looking at the situation in Syria, I cannot say that the level of military threat has decreased. Meanwhile, the situation on the Korean peninsula is developing outside the framework of the Imperialism 2.0 system. But it cannot be ruled out that, over time, this system will limit the scale of the use of military force by the poles of power controlled by Washington without the consent of the United States. That will be especially true if the system includes certain commitments, albeit asymmetric, undertaken by the new colonial power to its new praetorian states. The downside is that large-scale bloodlettings will almost certainly be inevitable on the way to that bright future.

In this context, Russia has only two problems, but both of them are very significant. One, its leadership does not have the sense of time, and as a result it continues to rely on old behavioral models. And two, we are increasingly and catastrophically lagging behind in terms of technology and infrastructure. A certain negative role has been played by the excesses of sovereignization, with the restoration of the national government’s control over national politics (which is a welcome fact in itself) often being seen as a solution to all problems and a shield that will protect the country from all external economic impacts.

The ongoing collapse of the Russian gas geopolitics further emphasizes the absence of any clear strategy—as does the essential failure of the latest BRICS summit. The Russian elite has been pursuing a vaunted stability to the exclusion of all else; it probably does not even fully realize what is happening in the outside world.

Neither does it seem to understand that stability without development can be found in one place only: the graveyard. 



QATAR IN BIG POLITICS: HOW SHOULD RUSSIA WORK WITH IT?

To the Editor-in-Chief:

Dear Sir,

Qatar was one of the key initiators of the Arab Spring; this has been quite obvious in Libya and especially Syria. The country is one of the main backers of the spread of radical Islam around the world, including to Russia. The emirate's leadership openly supports terrorist groups working abroad; Qatar's territory has become a safe haven and a convenient base for terrorists. Several years ago that situation resulted in an incident with the liquidation of Zelimkhan Yandarbiyev in Qatar. The country is also the permanent place of residence of the spiritual leader of the Muslim Brotherhood, the famous TV preacher Yusuf Al-Qaradawi, who has long been a staunch enemy of Russia. Apart from issuing several *fatwa* edicts against the Russian leadership and Russia as a whole, he is one of the main organizers of an anti-Russian campaign in the Arabic media.

Qatar is energetically promoting radical Islam on a global scale, and organizing Islamist cells in countries around the world, including Russia and other former Soviet Republics. It has also mounted an energetic and very effective attack against Russia's energy interests, especially in the gas industry. Qatari liquefied natural gas (LNG) exports constitute the greatest threat currently facing Gazprom's efforts to retain its share of the European gas market in the medium term. We are talking about Qatari gas supplies not only to Western Europe, but to the East European markets as well, including the Baltic states (via Poland), Ukraine, and Belarus.

Such policies, which have the backing of Qatar's European and American partners, are a replica of the U.S.–Saudi alliance in the 1980s, when plummeting oil prices essentially bankrupted the Soviet Union. But unlike the 1980s, when the conflict was part of a global confrontation between the superpowers, Qatar is pursuing a covert strategy, and hiding its anti-Russian policies behind the veneer of talks about establishing a "gas OPEC." The Russian leadership is obviously interested in promoting a coordinated policy by gas exporters on the world market. The Qataris have used that interest to implement their own strategy of elbowing Gazprom out of Europe, as well as strengthening their own grip on the LNG markets in South Asia, Southeast Asia, and the Pacific. Russia had regarded many of those markets as possible alternatives to European exports, but Qatar's rapid expansion has made those plans a lot more difficult to pull off, to say the least.

The emirate's political and military alliance with Europe (especially France) and the United States, as well as its cooperation with NATO during the military-terrorist campaigns against Gaddafi in Libya and Assad in Syria, have given the leadership of that small but extremely rich country a feeling of invulnerability. For many years now Qatar has been at or near the top of the world ranking in terms of per-capita GDP. The country also hosts Al Udeid, the largest U.S. military base in the Middle East, which means that any conflict with Qatar automatically turns into a war with the United States. The Al-Jazeera TV channel, based in Qatar, is one of the most effective information resources in the world, and probably the most effective in the Arab and Muslim world. Qatar Airways has turned Doha into a global transit hub. The Qatari sovereign fund and its other investment funds give the country's leadership access to hundreds of billions of dollars in disposable financial resources.



L E T T E R T O T H E E D I T O R

Qatar's wealth is predicated on its vast reserves of natural gas, the third largest in the world after Russia and Iran. That wealth also underpins the emirate's ambitious and aggressive foreign-policy strategies, which are deliberately targeted against Russian interests. Doha's open confrontation with Moscow has been amply demonstrated by the unprecedented beating of Russian ambassador V.E. Titarenko by Qatari police at Doha airport.

All of these considerations only serve to reinforce the importance of the recent article by Eldar Kasayev ("Qatar: Russia's Ambitious Competitor on the Gas Market," *Security Index*, No. 2 (103), Spring 2013, pp. 51–66), which analyzes in great detail the state of Russian–Qatari relations, and makes some pessimistic but important conclusions. The Russian audience will be even more interested in a detailed review of the state of the Qatari gas industry and strategy, as well as the emirate's relations with its foreign partners. In this day and age, economic rivalry is a much more common and dangerous type of confrontation than direct military conflict. That rivalry can be equally dangerous for both parties, even if one of them has massive superiority in all other respects. In the case of Russian–Qatari rivalry, we cannot rule out the David–Goliath scenario.

Even though Russia remains a great power on the gas market, there is a risk of it being defeated by Qatar, which has the support of the West. Russia has already suffered such a defeat in the Arab world. Its strategy of maintaining the existing balance of power and cooperating with its traditional partners in the region has crumbled before the onslaught of Doha and Riyadh, which aim to establish a "new Caliphate" based on Islamist regimes. That expansion will inevitably spread to some former Soviet republics and even to Russian territory. As a result, in the near future the confrontation with Qatar will become just as momentous for Russia as the old balance of power used to be during the Cold War.

Viewed in that light, the article by Eldar Kasayev published in the latest issue of *Security Index* is extremely topical. It is also very important for a proper understanding of the foundations that underpin the influence and strategies of Qatar, a tiny country that has become one of Russia's most dangerous adversaries.


Best regards,

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