

per Concordiam

Journal of European Security and Defense Issues

■ CYBER PROTECTION

Defending critical energy infrastructure

■ AFGHANISTAN PIPELINE

Transporting Turkmenistan's gas

■ THE CASE FOR CULTURE

A strategic view of Islam

■ POLAND TAKES CHARGE

Warsaw's cooperative approach

PLUS

European multiculturalism

EU smart defense

Frozen conflicts



SECURING ENERGY RESOURCES

Europe's Quest for Reliable Supplies



Table of Contents

features

ON THE COVER

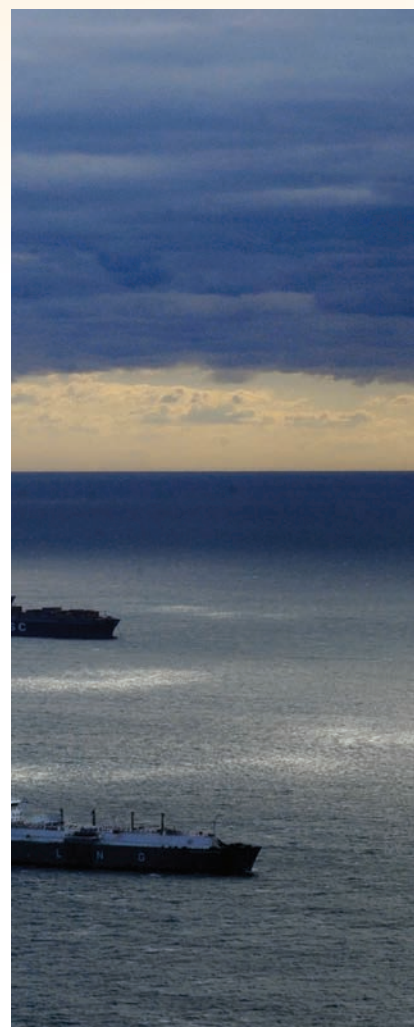


PER CONCORDIAM ILLUSTRATION

To achieve a brighter energy future, Europe must avoid dependence on unreliable energy producers. Securing enough electricity, gas and oil to power the continent will need to be a cooperative effort.



18



12 The Cyber Security Dimension of Critical Energy Infrastructure

By Vytautas Butrimas, chief advisor for cyber security, Lithuanian Ministry of National Defense, and Audrius Brūzga, director of the Energy Security Center, Lithuanian Ministry of Foreign Affairs

Improved information technology can defend against power plant shutdowns.

18 Ukraine at a Crossroads

By Viacheslav Kniashnytskyi, independent energy expert, Ukraine

The country faces a stark choice between energy security and energy dependence.

26 Re-energizing the Baltic

By Dr. Gregory Gleason, Marshall Center

Lithuania offers nuclear power to create a regional electrical network.

30 Declaring European Energy Independence

By Maj. Bailey W. Brown, U.S. Army, Marshall Center

The continent's fragmented energy market leaves it strategically vulnerable.

36 Channeling Change

By per Concordiam Staff

The TAPI pipeline would be a boon for Afghanistan and its neighbors.

departments

COOPERATION

38 Partnering with Poland

The nation strives to become a model of multinational cooperation.

42 Post-Soviet Frozen Conflicts

Regional standoffs in Southeast Europe and the Caucasus require peaceful settlements.

SECURITY

48 Adopting "Smart Defense"

By Dr. Leonard Demi, chairman of the National Security Committee, Albanian Parliament, and Col. (ret.) Thimi Hudhra, chief of the Center for Defence Analysis of Albania

Balkan militaries and security forces must combine efforts and share resources.

52 Culture Shapes Security

By K. Ashequl Haque, Bangladesh, Marshall Center alumnus

A sensitivity to cultural differences is a prerequisite for sound security.

POLICY

58 European Integration

The European Union should encourage an integration strategy that stresses employment and citizenship for immigrants.

in every issue

- 4 DIRECTOR'S LETTER
- 5 CONTRIBUTORS
- 6 IN THIS ISSUE
- 7 LETTERS TO THE EDITOR
- 8 VIEWPOINT
- 64 BOOK REVIEW
- 66 CALENDAR



30



38



52



GEORGE C. MARSHALL
EUROPEAN CENTER FOR SECURITY STUDIES

Welcome to the 12th issue of *per Concordiam*. This issue addresses the vital role that energy plays in international security and international cooperation. Energy policy has many dimensions – environmental, economic, political and technological – and the Marshall Center appreciates its importance. Modern societies depend upon reliable energy that is free from disruptions, ranging from piracy to geopolitical manipulation. Energy deficiencies and vulnerabilities, in terms of dependence on imports or critical infrastructure, often entail both commercial and geopolitical considerations. As a consequence, energy security may sometimes involve direct commercial and even political competition, just as it may sometimes involve mutually beneficial international relationships. It is critical to find ways to enhance international energy security through cooperative relationships. The Marshall Center addresses energy with the hope of illuminating means that contribute to enhancing security through cooperation.

The following are just two of the overarching strategic security and defense issues that influence policy in relation to energy security:

Energy Diversification. Energy security begins at the source. The greater the number of energy sources, the less likely supplies will be interrupted for political or piratical goals. A coordinated framework of national energy strategies should encourage the diversification of energy suppliers and energy sources, ranging from oil and gas to nuclear power and renewables such as solar and wind. Policies should be sufficiently agile to adjust to changes in technology, market environments and the political landscape. This will contribute to ensuring efficient, equitable and environmentally sustainable energy resources. Energy diversification policies need not be aimed at specific countries; diversification is aimed at satisfying the values and objectives of all countries.

Addressing Vulnerabilities in Advance. A country's ability to produce energy contributes to its security. A nation unable to meet its energy needs has a significant national security vulnerability. Countries will initially focus on ways to prevent supply disruptions that can hobble an economy and leave citizens in the cold. But in the longer term, societies must confront other energy challenges successfully. The demand for energy will likely continue to grow as large numbers of people seek the benefits that come from electrification and modern transportation. Increased demand can be met for a time by new extraction technologies such as those that have recently expanded the amount of usable hydrocarbon reserves, the source of most of our energy in the past. But technological solutions are only one facet. Economic tools such as those used to hedge risk may offer another, although the countries that could benefit the most might be the least able to afford them. Political or economic alliances may offer another solution, providing the benefits of shared strength to offset individual vulnerabilities. Whichever tools are used, addressing vulnerabilities in advance will surely be a significant part of energy policy for any country.

I hope this issue increases dialogue on this complicated but important topic. We welcome your comments and perspectives on this subject. We can include your responses in our next two editions. The first will center on the theme of countering violent extremism, the second on the future of NATO and the challenges of European security. Please feel free to contact us at editor@perconcordiam.org

Sincerely,

Keith W. Dayton
Director



Keith W. Dayton

Director, George C. Marshall European
Center for Security Studies

Keith W. Dayton retired as a Lieutenant General from the U.S. Army in late 2010 after more than 40 years of service. His last assignment on active duty was as U.S. Security Coordinator to Israel and the Palestinian Authority in Jerusalem. An artillery officer by training, he also has served as politico-military staff officer for the Army in Washington, D.C., and U.S. defense attaché in Russia. He worked as director of the Iraqi Survey Group for Operation Iraqi Freedom in Iraq. He earned a Senior Service College Fellowship to Harvard University and served as the Senior Army Fellow on the Council on Foreign Relations in New York. Gen. Dayton has a bachelor's degree in history from the College of William and Mary, a master's degree in history from Cambridge University and another in international relations from the University of Southern California.

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Audrius Brūzga is director of the Energy Security Center under the Lithuanian Ministry of Foreign Affairs. From 2007 to 2010, he was ambassador extraordinary and plenipotentiary of the Republic of Lithuania to the United States and Mexico, a title he also held from 2002 to 2007 in Finland. He also served Lithuania as a diplomat in Israel and the United Kingdom. Ambassador Brūzga earned a degree in English language and literature from Vilnius University and continued his education with courses at Union College in the U.S. and Leeds University in the UK. He is a 1998 graduate of the Marshall Center's Senior Executive Seminar.



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Leonard Demi is a member of the Albanian Parliament, where he is the chairman of the National Security Committee. Mr. Demi lectures at the University of Tirana and the Defense Academy of Albania. He graduated with a degree in Albanian philology from the University of Tirana and studied foreign and security policy at Hebrew University, Jerusalem. He also studied at George Washington University and later focused on security studies at the Naval Postgraduate School. He holds a doctorate in security studies.



Dr. Gregory Gleason is professor of security studies at the Marshall Center, where he also serves as director of the Central Asia Program. Before joining the Marshall Center in 2007, Gleason taught courses for several years at the State University of New York, the University of Miami and the University of New Mexico. His research has been sponsored by the National Science Foundation and the National Academy of Sciences. In addition to academic work, Gleason has been consultant to Lawrence Livermore National Laboratory, Sandia National Laboratories, USAID and the U.S. Department of State.

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Thimi Hudhra is a retired colonel who served in the Albanian Armed Forces for more than 30 years. His current position is chief of the Center for Defence Analysis of Albania. Among other positions, he worked as plans and policy director (J5) in the Albanian Ministry of Defense and defense advisor to the prime minister. He has represented Albania in negotiations in NATO's Planning and Review Process and the Membership Action Plan process. He helped develop the National Security Strategy, Military Strategy, Long Term Development Plan, and most recently, the Strategic Defence Review for Albania. Col. Hudhra is a lecturer at the Defence Academy of Albania, where he is pursuing a doctorate, and he is a graduate of the Marshall Center's 1998 Executive Program and 2001 Senior Executive Seminar.

Viacheslav Kniazhnytskyi is currently an independent energy expert. From 2009 to 2011 he served as ambassador-at-large for energy security at the Ministry for Foreign Affairs, Ukraine. From 2004 to 2009, he served on Ukraine's mission to the EU in Brussels, where he specialized in energy, nuclear safety and the environment. Before that he served the ministry in the field of energy diversification and security of supply and was counselor to the international organizations in Vienna, many of them dealing with nuclear energy and nonproliferation. He graduated with distinction from the Marshall Center's Executive Program in 1996 and earned a degree from Kyiv State University in 1972.



Günther Oettinger has been the European Union's Commissioner for Energy since February 2010, a position in which he has helped shape Europe's energy policy. From 2005 to 2010 he was minister-president for the German state of Baden-Württemberg and served in the state Parliament from 1984 to 2010. Since 2005, Mr. Oettinger has sat on the governing board and federal executive committee of the Christian Democratic Union. He studied law and economics at Tübingen University and worked for many years as a lawyer and chief executive officer of a tax consulting company.

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Energy Security

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The George C. Marshall European Center for Security Studies is a German-American partnership founded in 1993. The center promotes dialogue and understanding between European, Eurasian, North American and other nations. The theme of its resident courses and outreach events: Most 21st century security challenges require international, interagency and interdisciplinary response and cooperation.

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per Concordiam is a professional journal published quarterly by the George C. Marshall European Center for Security Studies that addresses defense and security issues in Europe and Eurasia for military and security practitioners and experts. Opinions expressed in this journal do not necessarily represent the policies or points of view of this institution or of any other agency of the German or United States governments. All articles are written by *per Concordiam* staff unless otherwise noted. Opinions expressed in articles written by contributors represent those of the author only. The secretary of defense determined that publication of this journal is necessary for conducting public business as required of the U.S. Department of Defense by law.

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Energy security has been a running topic here at the Marshall Center and especially in *per Concordiam*. Our inaugural issue focused on energy security and was titled “Could Energy Politics Leave Europe in the Cold?” In our current issue, we hope to continue this much needed dialogue and aim to enlighten and encourage our readers on this complex topic that is rich with technological, economic, environmental and political implications. Key to these implications are the themes of energy diversification and vulnerability. This edition of *per Concordiam* aims to highlight contributing factors that impact the energy security environment and hopes to promote an atmosphere of cooperation.

The issue leads with a viewpoint article by European Union Commissioner for Energy Günther Oettinger. From his high-level perspective, he describes the current energy environment and suggests European energy security will ultimately be determined by the deliberate establishment of a Europeanwide energy market. Furthermore, Mr. Oettinger urges the implementation of effective European energy policies that promote cooperation to assure that energy supply meets energy demand.

Our first feature article, “The Cyber Security Dimension of Critical Energy Infrastructure,” is written by Ambassador Audrius Brūzga, director of Lithuania’s Energy Security Center, and Vytautas Butrimas, chief advisor for Lithuanian cyber security. Both are Marshall Center alumni. The piece provides a fresh understanding of how cyber security affects energy security. The article invokes critical thought about Europe’s need for a common approach to cyber threats.

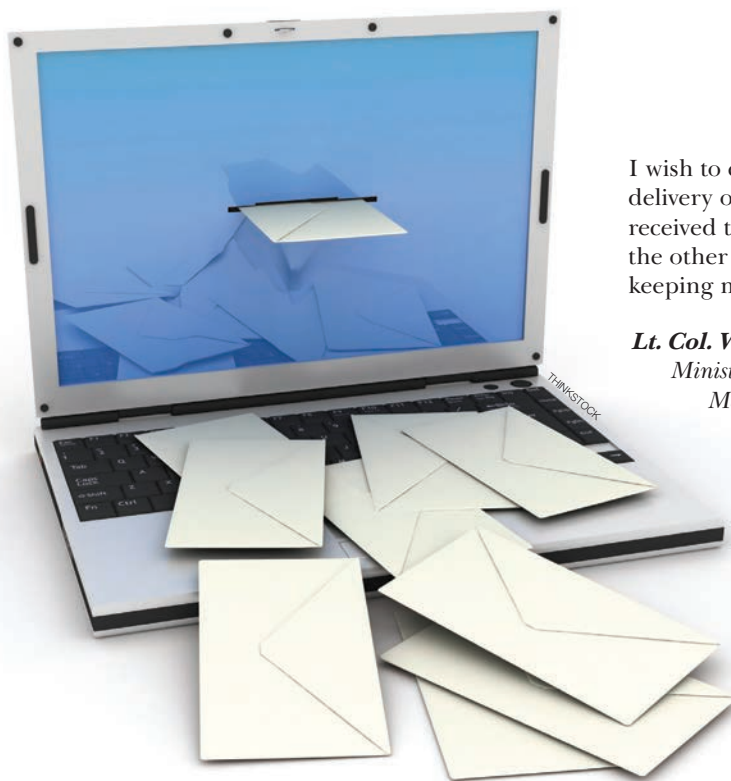
In the next article, Marshall Center alumnus Viacheslav Kniazhnytskyi presents the Ukrainian perspective on energy security in “Ukraine at a Crossroads.” Mr. Kniazhnytskyi highlights the political implications inherent in Ukraine’s energy situation and articulates the key issues directed at this critical juncture of the country’s energy future.

We are fortunate once again to include the expertise of Dr. Gregory Gleason of the Marshall Center in a subsequent piece titled “Re-energizing the Baltic.” Dr. Gleason takes a comprehensive look at the energy environment in the Baltic States. Starting with a discussion of the newly established NATO Energy Security Centre of Excellence in Lithuania, he delves into the topics of nuclear power generation, nuclear reactor decommissioning and growing concerns over energy security in the Baltic region.

To conclude, the Marshall Center’s Judge Advocate General Attorney Bailey W. Brown, a U.S. Army major, offers opinions designed to initiate dialogue on the strategic importance of energy. Maj. Brown emphasizes the historical perspectives of Europe and Russia and suggests ways to build stable and bilateral energy cooperation.

The next issue of *per Concordiam* will examine different perspectives on countering violent extremism, followed by an edition that studies the future of NATO. We invite you to submit articles on these themes to enhance discussion of issues addressed in *per Concordiam*. We encourage your feedback and look forward to emails in this ongoing dialogue on important security issues. Each issue is available online at the Marshall Center Web site: <http://www.marshallcenter.org/mcpublicweb/en/nav-main-ap-publications.html>

— *per Concordiam* editorial staff



I wish to extend my appreciation for the continued delivery of issues of *per Concordiam*. I have just received the latest issues, one on migration and the other on corruption. I'm grateful. Thanks for keeping me in touch with current global issues.

Lt. Col. W. Muhabuzi

*Ministry of Defense, Republic of Uganda
Marshall Center alumnus*

Send feedback via email to: editor@perconcordiam.org

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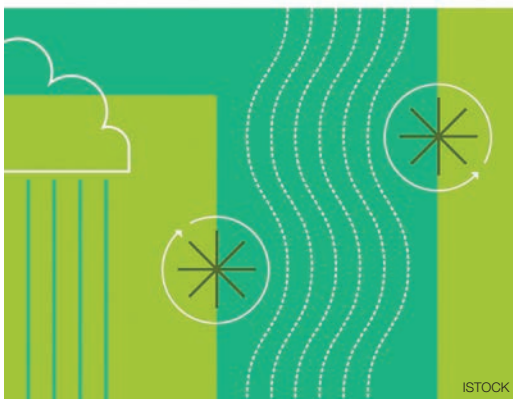
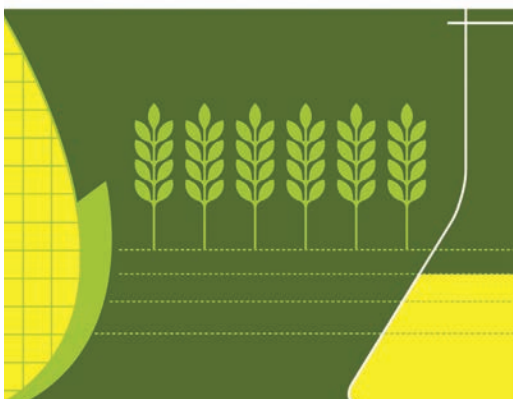
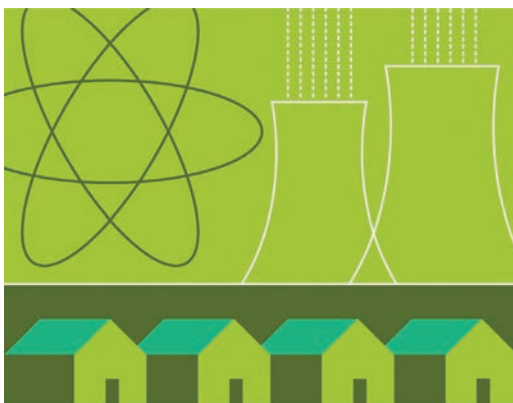
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First, email your story idea to editor@perconcordiam.org in an outline form or as a short description. If we like the idea, we can offer feedback before you start writing. We accept articles as original contributions. If your article or similar version is under consideration by another publication or was published elsewhere, please tell us when submitting the article. If you have a manuscript to submit but are not sure it's right for the quarterly, email us to see if we're interested.

As you're writing your article, please remember:

- **Offer fresh ideas.** We are looking for articles with a unique perspective from the region. We likely will not publish articles on topics already heavily covered in other security and foreign policy journals.
- **Connect the dots.** We'll publish an article on a single country if the subject is relevant to the region or the world.
- **Do not assume a U.S. audience.** The vast majority of *per Concordiam* readers are from Europe and Eurasia. We're less likely to publish articles that cater to a U.S. audience. Our mission is to generate candid discussion of relevant security and defense topics, not to strictly reiterate U.S. foreign policy.
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Defending Europe's Energy Interests

The European Union must speak with one voice to guarantee energy supplies

By Günther Oettinger, EU Commissioner for Energy

Today we witness profound changes in the world's energy markets. Various major purchasers of oil and gas have become more dependent than ever on politically unstable regions of the world. The political revolutions in some of the main oil and gas producing countries have a direct impact on our energy security. Along with the growing demand for energy, there is also an increasing threat of climate change becoming irreversible. There is a threat of desertification, water scarcity and social upheaval.

That raises the question: Are we moving toward the militarization of energy security?

So far, energy security has been considered a form of defense against supply disruptions and unstable prices. Maintaining continuity and predictability of supply used to be of paramount importance. The United States has deployed warships in the Gulf region, not least in order to safeguard its national energy interests. However, now this type of policy is under close scrutiny. In addition, we are faced with a changing world order. China is increasingly becoming the most important player in the Asian-Pacific region and may turn into a new global superpower. Regarding energy procurement and possibilities for diversification, Europe and China have focused their attention on Central Asia and Russia. Among politicians and the general public, the widespread impression is that the European Union and China may well compete for oil and gas from these regions in the future. An important indicator of this is then Russian President Dmitri Medvedev's visit to China in September 2010, which resulted in a vital agreement on natural gas supplies.

Until recently, Central Asia has not been a part of the EU's economic sphere, and the EU has taken rather little interest in the region in terms of energy, compared to its interest in the Organization of Petroleum Exporting Countries and the Gulf states. In the meantime, however, this region has become increasingly important for European energy security. European military intervention in Afghanistan, the events in Uzbekistan, the violent change of power in Kyrgyzstan – all of these bear witness to the high level of instability in the region.

Securing the supply of low-carbon energy at affordable prices, while at the same time maintaining peace, constitutes one of the greatest challenges today. This requires a strategy for managing the dynamics of the global energy markets without jeopardizing the cause of energy security. The EU must act as one voice to defend its energy security by way of developing a strategy based on political consensus, market integration and mutual solidarity.

Securing the European energy future

Thanks to the Lisbon Treaty, which contains a chapter on energy that was received very favorably and serves as a good basis for further energy integration, the EU is now equipped with a set of tools to assert and defend its energy interests. The EU's arsenal for energy security comprises the following four weapons:

1. A resilient and secure European energy market with political backing;
 2. A diversified supply base, including the support of low-carbon technologies and energy efficiency;
 3. Emergency reaction mechanisms and storage;
 4. A common external voice and message.
- Our future energy security will be determined

by the extent to which we establish a smoothly operating and efficient European energy market. Some parts of the EU are still not connected to their neighbors or other regions of the EU, including the Baltic States, the Iberian Peninsula and Ireland. Furthermore, in the next decade our energy system will have to undergo profound changes with respect to the way we produce, transmit, distribute and consume energy. This applies in particular to the electricity sector. Tomorrow's energy security will depend on us developing secure, smart and sustainable energy networks today.

Solidarity and regional cooperation: These are the guiding principles affecting supply security of European gas and electricity markets. The European Council has called upon the European Commission to finish market integration by 2014 by completely implementing the law on the internal energy market and expanding existing infrastructure.

Diversification and energy efficiency

The two strategies, Europe 2020 and Energy 2020, adopted in 2010, clearly prioritize the effort to increase the share of low-carbon and renewable energy, as well as energy efficiency, precisely according to the 20-20-20 targets. Achieving the ambitious target of reducing greenhouse gas emissions by 2050 by at least 80 percent (relative to 1990 levels) will lead to significantly less dependence on fossil fuels in the long term.¹

The share of renewables in the electricity sector could increase from today's 19.5 percent to approximately 35 percent by 2020. Renewable energy such as wind and solar power, which are subject to production fluctuations, could account for roughly half of this 35 percent. In the field of offshore wind power



Turkish Prime Minister Recep Tayyip Erdogan, right, and Azerbaijan President Ilham Aliyev speak after agreeing in June 2012 to build a pipeline to transport Azeri gas to Europe through Turkey.

alone, an additional 40 gigawatts of installed capacity are foreseen, predominantly in the North and Baltic seas.² This could bring unprecedented challenges for the grid and pose major risks for the economy as a whole.


Crisis management

The gas crisis of January 2009 has shown the importance of gas storage facilities and reverse flow options for immediate reaction during emergencies. Furthermore, it has demonstrated that it is indispensable for member states to react to supply disruptions with coordination.

According to the new regulation regarding the security of the natural gas supply, investments in the necessary infrastructure have to be made within four years and member states are required to strive for

EU and its member states to ensure continuity and coherence. Now the time has come to translate this into action. To guarantee European security of supply, it is vitally important to engage in a dialogue with the energy partners of the EU, either bilaterally or multilaterally, as with the G20.

In talking to all its partners – consumers and producers, industrialized and developing countries – the EU has to take a stand for regulated, open and competitive international energy markets and at the same time promote cooperation in the energy sector. We have to further expand and strengthen the global role of the EU in supporting the fundamental principles of energy security, namely good governance, market rules instead of direct state control of



The two strategies, Europe 2020 and Energy 2020, adopted in 2010, clearly prioritize the effort to increase the share of low-carbon and renewable energy as well as energy efficiency, precisely according to the 20-20-20 targets. Achieving the ambitious target of reducing greenhouse gas emissions by 2050 by at least 80 percent (relative to 1990 levels) will lead to significantly less dependence on fossil fuels in the long term.

better coordination among themselves in terms of crisis prevention and management. For the first time, member states are committing to act jointly in a spirit of solidarity for the sake of energy security.

Besides, the commission has paved the way, when it comes to ensuring the highest possible safety standards, both within the EU and globally, for tapping new sources of energy, drilling for crude oil and natural gas, and disposing of radioactive waste.

A common external voice

The common internal progress should actually make it possible for the EU to speak with one voice to the rest of the world. Although this has been the EU's declared objective since 2007, it has not been achieved as of 2012.

One of the crucial responsibilities resides at the internal level of the EU, and consists of persuading member states to weigh pan-European interests when discussing energy issues with third countries. By "Europeanizing" our internal energy matters, we prepare ourselves to speak with one voice externally.

The heads of state and government of the EU have repeatedly urged better coordination between the

resources, climate-friendly energy policy, low-emission energy technologies and renewables technologies and energy efficiency. And we still have to become more effective in promoting low-carbon energy, legally binding standards concerning nuclear safety, security and nonproliferation, and the highest possible global safety and security standards for the production and transport of energy, including offshore drilling.

Toward a common approach

We have to consider how to translate the "soft," legally nonbinding approach toward third countries into a stricter and legally binding one. At its meeting February 4, 2011, the European Council requested that the commission prepare and establish new energy partnerships with our main partners in the field of energy supply and transmission. It also called upon the new High Representative/Vice President of the Commission to take into account the energy dimension in her daily work. The fundamental elements are to be found in all agreements and memorandums of understanding; now the question is how they can be turned into legally binding instruments.



Workers repair a pipeline in July 2012 next to the Armenian town of Meghri, where the borders of Armenia, Azerbaijan and Turkey meet. The region is increasingly valuable as a corridor for oil and gas.

To achieve balanced and mutually beneficial agreements for all parties involved, it is necessary to analyze the key interests of the EU vis-à-vis individual external energy partners as well as the respective scope of influence on the part of the EU. One of the possibilities to exert influence, for instance, is proactive donor coordination to support crucial energy infrastructure projects in return for pledges to create open and transparent markets that offer planning security and attractive conditions for investment.

Conclusion

A safe, secure, sustainable and affordable energy supply is essential for Europe's economic and strategic interests as a "global player." In today's times of crisis, when the events in Libya put the rest of the world on alert, we need prompt and determined EU leadership to safeguard energy security.

It has become obvious that no country can defend its energy interests on its own. The EU is the forum for energy negotiations to take place. Our weapon of choice is called integration of the EU, put into practice by establishing an internal energy market.

A lot is at stake. For 50 years, we have been achieving our objectives by political means, and we need to continue along these lines. However, this will only be possible if EU member states realize that in a global market they are collectively strong if they pursue common objectives by common strategies and speak with one voice. The conclusions of the European Council of February 2011 made it possible to take another step in this direction. Now it is up to EU member states and institutions to face up to this challenge. □

1. These are a 20 percent reduction of greenhouse gas emissions compared with 1990, a 20 percent share of renewables in the energy mix and a 20 percent increase in energy efficiency/energy savings.
2. Source: European Wind Energy Association.



ISTOCK

THE CYBER SECURITY DIMENSION OF CRITICAL ENERGY INFRASTRUCTURE

By **Vytautas Butrimas**, Chief Advisor for Cyber Security, Lithuanian Ministry of National Defense, and **Audrius Brūzga**, Director of the Energy Security Center, Lithuanian Ministry of Foreign Affairs

AMB. BRŪZGA AND MR. BUTRIMAS ARE BOTH GRADUATES OF A MARSHALL CENTER SENIOR EXECUTIVE SEMINAR. THEY HAVE JOINED FORCES TO CREATE THIS ARTICLE ABOUT ENERGY SECURITY. AMB. BRŪZGA'S WORK HAS BEEN PIVOTAL IN THE CREATION OF A NEW NATO CENTER OF EXCELLENCE IN LITHUANIA, AND MR. BUTRIMAS WAS INSTRUMENTAL IN THE PROCESS THAT LED TO THE ESTABLISHMENT OF A COMPUTER EMERGENCY RESPONSE TEAM (CERT) AT THE LITHUANIAN MINISTRY OF NATIONAL DEFENSE (MOND). HE CHAIRED THE MOND TASK FORCE THAT PREPARED THE FIRST MOND CYBER SECURITY STRATEGY IN 2009.

March 11, 2011, was a bad day in the history of critical energy infrastructure. Many were shocked and deeply moved by the earthquake and tsunami that hit the coastline of Japan resulting in great destruction and loss of life. The magnitude-9.0 earthquake also produced a perfect storm of cascading events leading to a station blackout of the nuclear power facility at Fukushima. The facility's backup power sources, consisting of the sites' other reactors, diesel backup generators, switching and control systems, and switches to Japan's national power grid, all failed after the last on-site batteries quickly drained. Nuclear plant operators had no lights on their control panels, giving them little

capability to assess the situation (examine telemetry on the state of vital equipment) or to completely execute steps to protect the plant. Sensors and their links to automated safety systems failed to react to rising reactor temperatures. No power was available to operate emergency valves or coolant pumping systems.

As Fukushima personnel worked heroically to save the plant, the first analyses of Stuxnet were coming out.¹ Something troubling had appeared in cyberspace: a new and highly sophisticated form of malware capable of operating undetected while executing targeted attacks against industrial control systems resulting in destruction of

equipment. Stuxnet was a watershed event that changed the cyber security landscape.² This malware was programmed specifically to destroy supervisory control and data acquisition (SCADA) and programmable logic controller systems that met certain criteria. If the criteria were met, Stuxnet would then take over industrial control systems and cause the targeted equipment to malfunction and destruct. While performing the attack, it sent incorrect data to safety sensors and automated safety systems to inform that machines were running normally when they were not. Machines were being destroyed yet monitors indicated all was normal. One could not help asking the questions: Could a Stuxnet type of attack cause similar cascading failures leading to a total plant shutdown of an energy producing facility, or even a whole sector of critical infrastructure? Is plant security or critical infrastructure security just about physical security (building thicker and higher walls, raising backup generators higher above sea level, etc.),³ or is there a significant cyber dimension that must be taken into account? Does the energy sector form part of a nation's critical infrastructure? If so, is a cyber attack on this infrastructure also a threat to national security? This article aims to explore these questions and propose solutions to reduce the risk of a "Cyber Fukushima" event in the energy sector.

THE SHAPE OF THE CYBER THREAT

International experts⁴ and opinion leaders⁵ in the Industrial Control Systems (ICS) field have sought answers to these questions, along with four operators in Lithuania's energy sector (two electrical grid operators, LITGRID and LESTO, the national natural gas pipeline Lietuvos Dujos and the Center for Technology and Innovation). Regarding the question of cyber security and the appearance of Stuxnet type malware, operators responded that since their control and data networks were isolated from the Internet they did not see this as a serious or imminent threat. When it was suggested that a malware attack like Stuxnet could use internal and isolated networks (via USB sticks or maintenance/engineering personnel with laptops, not to mention disgruntled employees using insider knowledge), they paused to think. They corrected themselves by adding that attacks were possible but downplayed the threat. Preparing for such an attack would require a great deal of detailed information that energy operators do not openly make available.⁶

The next question concerned interdependence. Were their operations reliant upon the health of other national critical infrastructures? The answer was yes. Both the electrical and natural gas pipeline operators depend to some extent on the telecommunications sector for their control and data networks. A failure of telecommunications would affect their ability to control and manage systems remotely. In addition, the natural gas operator's equipment was dependent on electricity from the national and regional power grid. Electrical failure would affect pipeline operations.

It also slowly became clear that the information technology and ICS worlds looked at cyber security differently. For example, an IT security person believes in strong password

policies. Passwords must be complex, securely protected from disclosure and changed periodically. The goal is to ensure confidentiality, integrity and availability of information. ICS security priorities are nearly the opposite. Availability is the top priority, followed by integrity and confidentiality. ICS need to be available, reliable and safe. The priority for ICS was availability of critical processes and services. In an emergency, a critical infrastructure operator needs to respond quickly to ensure that critical processes and vital services continue without interruption or damage and loss of life. Default passwords are often used and they are even hard-wired into the system. In the ICS world, an operator trying to access a particular black box (program logic controller that is part of a very large SCADA system) does not, in a moment of crisis – if telemetry tells the operator that pressure, temperature or spin rates are beyond accepted norms – have time to waste searching for a password. ICS systems were not initially designed with the kind of security that IT security practitioners have in mind. They were designed with minimal hardware requirements (weak CPU's, low memory, and low bandwidth, simpler protocols) to safely and reliably perform simple automated tasks. Few ICS designers assumed that one day the networked Wintel (Microsoft Windows/Intel based computers) world of IT security specialists and the bad guys, who try to attack them, would someday enter their "world."

Furthermore, unintentional incidents can occur from poorly thought out applications of IT security policies on ICS.⁷ Such applications can actually cause denial of services or damage to critical systems because of a lack of advanced testing and understanding of the effects of implementing IT security policies on very large and complex systems. In fact, it may be that in the ICS world there are more unintentional or accidental cyber incidents than intentional ones. This is a very complex and difficult issue to understand and address if one relies solely on IT specialist expertise without consulting ICS specialists.⁸ One must remember, regardless of how these incidents happen, a potential attacker can use this knowledge with the intention of preparing and executing an attack.

THE EU PERSPECTIVE

As can be seen by visits to Lithuanian electrical and natural gas pipeline operators, a clear need to address the cyber dimension of critical energy infrastructure (CEI) protection has emerged. If European Union member states are to become more widely interconnected through increased market liberalization (particularly in the electricity and gas sectors), privatization of state-owned infrastructure operators and the emergence of new regulations, their critical energy infrastructures must be able to continue to function under severe conditions, since their breakdown could have catastrophic consequences for other EU nations. The November 4, 2006, electricity blackout in Germany provides an illustration. The blackout started in Germany but ended up affecting 11 countries, including Austria, Belgium, France, the Netherlands, Portugal, Spain and Morocco. In total, 15 million people were affected for three days. If the

potential problem is ignored, a cyber-caused, Fukushima-like disaster affecting various countries in Europe and its neighborhood is possible. It has become clear that increased European interdependency, resulting from cross-linking energy networks and infrastructure, has inevitably led to higher vulnerability for the entire energy system. And given the high dependence on the telecommunications sector for operational processes, control, data and security, the growing cyber dimension of CEI must be given priority.

CEI broadly includes the production, storage, refining, processing and distribution of fossil fuels. But what exactly constitutes critical energy infrastructure in the EU? Although it varies within different member states and its protection falls under national jurisdictions, the European Commission (EC) has defined critical infrastructure as “an asset, system or part thereof located in Member States which is essential for the maintenance of vital societal functions, health, safety, security, economic or social well-being of people, and the disruption or destruction of which would have a significant impact in a Member State as a result of the failure to maintain those functions.”⁹ If the disruption or destruction of this kind of critical infrastructure would have a significant impact on at least two member states, it is referred to as “European critical infrastructure.”¹⁰ The EC Directive that includes these definitions specifically concentrates on the energy and transport sectors, the former addressing the extraction, storage, pipelines and dispatching centers associated with gas and oil, as well as power plants, transmission and distribution networks, dispatching centers, nuclear fuel cycles and hydroelectric power associated with electricity generation and transmission.

NATURAL GAS

But most vulnerable to cyber threats is the European natural gas supply chain, since it is overwhelmingly based on

inflexible pipeline systems (which create dependencies, risks and vulnerabilities as seen during the Ukrainian gas crises of 2006 and 2009, the last of which affected 18 European countries).¹¹ The increasing number of gas interconnection systems, and their dependence on ICT systems to support control centers, compressor stations, storage sites, metering stations, pressure control systems and export stations, makes them especially vulnerable. To quote Frank Umbach and Uwe Nerlich on gas supplies: “asset security in pipeline systems is an important requirement, in many cases much more so than protection of pipes themselves [...] effective control centers and other critical assets remain an indispensable means of crisis management.”¹²

The EU has taken some steps at the national and EU-level to protect CEI. The first legal instrument on the subject of critical infrastructure protection was the 2008 European Council Directive on the identification and designation of European critical infrastructure and the assessment of the need to improve its protection. The European Commission Directorate-General for Energy also established a network of critical energy infrastructure operators from the electricity, gas and oil sectors (the TNCEIP Network) to exchange experience on security-related issues. The most significant effort in CEI protection, however, has been the 2006 European Commission Program for Critical Infrastructure Protection, which established the framework for protecting critical infrastructure – be it national or European – in the EU, and led to the 2008 directive. The overall challenges to critical infrastructure in the EU are identified as:¹³ The growing links between critical infrastructures (namely energy infrastructure and information and communication infrastructure), which can lead to dependencies and risks that might not be apparent until a crisis occurs; and the expansion of regional networks across national boundaries, which leads to increased vulnerabilities of the entire system.

THE SCOPE OF THE THREAT

Is there a credible cyber threat to energy infrastructure? Though rare, and even more rarely publicized for obvious reasons, incidents of cyber attacks on energy infrastructure have occurred.¹⁴ Russian hackers apparently attacked a nuclear power plant near St. Petersburg in May 2008. Although plant operations were unaffected, its website was taken offline inhibiting communication between the plant and Rosatom (the state nuclear corporation) for several hours. Simultaneously, rumors of “radioactive emissions” were circulated, causing panic among nearby residents. There is also evidence of a concerted attack by Russian hackers on Georgian government websites in August of 2008, accompanying the military attacks that followed. The cyber attacks infiltrated the Baku-Tbilisi-Ceyhan pipeline, but did not disrupt the flow of gas. They did, however, signal Russian willingness to use cyber warfare to achieve its goals. The CIA has numerous reports of incidents that have been attributed to cyber attacks. Although these reports do not name any specific countries, the power outages in Brazil in 2005, 2007 and 2009 seem to point to disruptions in SCADA systems achieved through hostile intrusion via the Internet.



NATO Secretary-General Anders Fogh Rasmussen meets with President of Lithuania Dalia Grybauskaitė in January 2012. Vilnius, Lithuania, will be the site of new NATO Energy Security Centre of Excellence.

NATO



A view of the No. 4 reactor building at the Fukushima nuclear power plant in May 2012

Furthermore, evidence of cyber spies infiltrating U.S. electrical grids has surfaced. In theory, the software left behind in the process could disrupt the flow of electricity.

To fight cyber security threats, it is necessary to evaluate the threat level, possible losses, chances of a breach and other parameters crucial to preventative or response measures. Furthermore, operative security of any activity – including that of critical energy infrastructure – depends on information and cyber security. On the national level, the U.S. has paid an increasing amount of attention to neutralizing cyber threats and has employed rather effective response mechanisms to do so. In 2009, the U.S. Cyber Command was created; its mission to defend the information security environment and protect the country from external cyber attacks. The U.S. Center for Strategic and International Studies has also established a Commission on Cyber Security to advise the president on the creation and maintenance of a comprehensive cyber security strategy. Furthermore, the White House has assigned an official to the National Security Council responsible for coordinating the country's activities in the field of cyber security.

NATO'S VIEWS

In NATO, cyber defense and energy security both belong to the Emerging Security Challenges Division. During the recent Chicago Summit, NATO reaffirmed its commitments to the cyber defense initiatives it agreed to at the Lisbon Summit – namely, the Cyber Defense Concept, Policy, and Action Plan. NATO has also undertaken steps to provide the required resources and reforms necessary to bring all the critical elements of NATO bodies under centralized cyber protection. Along these lines, the NATO Computer Incident

Response Capability Full Operational Capability, including protection of most sites and users, should be in place by the end of 2012. NATO has also set out to develop its ability to prevent, detect, defend against and recover from cyber attacks by “further [integrating] cyber defense measures into Alliance structures and procedures and, as individual nations, [remaining] committed to identifying and delivering national cyber defense capabilities that strengthen Alliance collaboration and interoperability, including through NATO defense planning processes.”¹⁵ Along with the EU, the Council of Europe, the UN, and the Organization for Security and Co-operation in Europe, the Cooperative Cyber Defense Centre of Excellence in Estonia is listed as a relevant partner in addressing growing cyber security threats.

In terms of energy security, NATO noted in its Chicago Summit Declaration that, while issues pertaining to this sector are primarily the responsibility of national governments and international organizations, NATO will continue to “integrate, as appropriate, energy security considerations in NATO's policies and activities.” The Alliance expressed support for the establishment of a NATO-accredited Energy Security Centre of Excellence in Lithuania, reflecting the growing importance of the field. The fact that both the NATO Energy Security Centre and the Cooperative Cyber Defense Centre of Excellence are located in the Baltic Sea region points towards the emergence of regional expertise. The contribution of the Baltic states to training and education could be instrumental in addressing the growing cyber dimension of critical energy infrastructure protection in Europe and employing the idea behind NATO's Smart Defense concept. These centers could develop best practices by providing doctrines and

The 1999 Olympic Pipeline accident in the United States was caused in part by misapplication of IT security on an Industrial Control System.



concepts for the Alliance in this emerging field; hosting and conducting training for NATO countries, courses, and exercises; conducting research and development activities; studying past or ongoing attacks and drawing up lessons learned; and providing advice during ongoing attacks.¹⁶

NATO's Industrial Resources and Communication Services Group (IRCSG) has also carried out reports on the protection of critical energy infrastructure in electricity, gas and oil sectors and offered best practices and recommendations. A Draft Concept Paper on Energy CIP was created in 2011.

CONCLUSIONS

Cyber attacks or unintentional incidents inside CEI, while difficult to diagnose and expose, are likely to have been visible and consequential. One can conclude that cyber threats are an issue for ICS, on whose foundations rest our critical energy infrastructures. A cyber security incident can occur unintentionally¹⁷ because of a lack of information about the system and the unintended consequences of initiating a new process or implementing poorly thought out IT security policy. Knowledgeable attackers can intentionally cause the same to occur. Both possibilities can lead to major cascading failures in critical infrastructure resulting in danger to national security.

What can be done to reduce the risks of cyber incidents or cyber attacks on CEI? First, attention to physical security of sites and equipment is not enough. A Fukushima disaster variant could have been achieved with a Stuxnet style attack, yet in preliminary reports about Fukushima there is little mention of any cyber security recommendations.¹⁸ Second, risk needs to be understood with an appreciation for the peculiarities in security practices found in the IT and ICS realms. IT and ICS security practitioners need to formulate policies to address risks and threats and those policies must

be approved by management. The bottom line is that time and effort must be dedicated to training system designers in IT, cyber security and engineering.

At the national level, IT and ICS security professionals and operators (both public and private) need to start discussing the way ahead. Vulnerabilities need to be understood, dependencies recognized and effective measures developed to reduce the risk of accidental and intentional actions leading to major failures in critical infrastructures.¹⁹ Few incidents are analyzed and made public. Awareness should be increased and a better business case built to encourage security professionals to take steps to secure ICS. In addition to Computer Emergency Response Teams (CERT) for the IT world, there also needs to be a CERT for the ICS²⁰ world that would collect (with confidentiality assured) information about incidents and distribute analyses and data to ICS managers. With this information, a business case for investing in training and security equipment designed for the particular requirements of ICS can be made.

International cooperation is key to reducing risks from cyber threats. Much attention is being given to combating cyber crime and terrorists' use of the Internet. However, very little has been accomplished in restraining states from taking advantage of the "cloak of invisibility" cyberspace provides for engaging in malicious cyber activities against critical infrastructures of other states. There is no room in this article to discuss how these activities could affect international relations.²¹ However, states should consider taking action on concerns in their common interest:

- Agreements to refrain from directing malicious cyber activities (MCA) at CEI²² of other states.
- Agreements for states to take some responsibility for acting on reported MCAs in their cyber jurisdictions.
- Agreements to set up a coalition of willing institutions and experts to monitor, analyze and report on violations of the first two agreements.

The importance of exercises to test procedures, resilience and robustness of systems cannot be overstated. In recognition of the cyber threat to critical infrastructure, NATO for the first time will combine its traditional crisis management exercise (CMX 12) with its cyber exercise (Cyber Coalition 12). One of the scenarios will be a cyber attack against critical infrastructure. In addition to international exercises, it may be even more important for nations to conduct national exercises to discover capabilities and shortcomings.²³

In trying to comprehend cyberspace, several models or paradigms have been used. At first (late 1980s and late 1990s), medicine and history seemed to be a good model (viruses and use of anti-virus software to ensure immunity from Trojan horses). Later (early 2000s), horror movie terminology was popular. New words appeared such as "zombie" computer and robot networks, or "botnets." In 2007, military terminology entered the vocabulary. During a NATO meeting,²⁴ an Estonian announced to the audience that his country was under [cyber] "attack." The arrival of Stuxnet took the military tack further with talk of cyber "weapons." Today, this issue is even more complicated and



A view of the Gazelle high-pressure pipeline station in Brandov, Czech Republic, which helps diversify Europe's natural gas supply

perhaps “religion” could be of help. Speakers at cyber security conferences have introduced themselves as cyber security “evangelists.” There are cyber war “true believers” and cyber war “skeptics.” There are even different “doctrines” of thought, especially regarding “attribution” and the usefulness of treaties. Sometimes, when one speaks about cyber security to an audience, one can appreciate what it must have been like to have been a Christian missionary speaking to a pagan audience about why it should take this new “unseen power” seriously.

Regardless of terminology, this is a critical time for leaders and citizens to reach an understanding of the threats emerging in cyberspace, for the threat to critical energy infrastructure concerns us all. We need to understand this if we are to make any headway in fostering consensus among ourselves and nations for reducing threats represented by this new unsettling trend. □

1. For a more detailed analysis of STUXNET see: http://www.ted.com/talks/ralph_langner_cracking_stuxnet_a_21st_century_cyberweapon.html
2. “An Unsettling Trend,” *per Concordiam*, Vol. 2, Issue 2; pp. 10-15.
3. Steps suggested after early analysis of Fukushima disaster by TEPKO: http://www.tepco.co.jp/en/press/corp-com/release/betu11_e/images/111202e13.pdf
4. Special thanks to the ICS industry professionals and readers of the SCADSEC newsletter. For more information on this and other critical infrastructure newsletters see: <http://news.infracritical.com/mailman/listinfo> or specifically about SCADSEC see: <http://news.infracritical.com/mailman/listinfo/scadsec>
5. Special thanks to Joseph Weiss (for graciously answering a phone call from Vilnius nine time zones away), Jacob Brodsky, Bob Radvanovsky and Joe St. Sauver.
6. Much industrial control system information such as the default passwords of equipment is available online. Even the US-CERT working to protect these systems publishes this information. Look at: <http://www.kb.cert.org/vuls/id/889195> or <http://arstechnica.com/business/news/2012/04/backdoor-in-mission-critical-hardware-threatens-power-traffic-control-systems.ars>
7. A good report to read on the San Diego blackout of 2011 <http://www.ferc.gov/D791C849-C62F-495A-90B2-2B63F0D10C78/ForceRequestingFullContent/>

- D791C849-C62F-495A-90B2-2B63F0D10C78/legal/staff-reports/04-27-2012-ferc-nerc-report.pdf
8. See Joseph Weiss's book, *Protecting Industrial Control Systems from Electronic Threats*, 2010, Momentum Press at <http://www.momentumpress.net/authors/joe-weiss>
9. COUNCIL DIRECTIVE 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection.
10. Ibid.
11. <http://www.reuters.com/article/2009/01/07/uk-russia-ukraine-gas-factbox-idUKTRE5062Q520090107?sp=true>
12. Umbach, Frank and Uwe Nerlich. “Asset Criticality in European Gas Pipeline Systems – Increasing Challenges for NATO, its Member States and Industrial Protection of Critical Energy Infrastructure” in *Energy Security: International and Local Issues, Theoretical Perspectives, and Critical Energy Infrastructures (NATO Science for Peace and Security Series C: Environmental Security)*.
13. Ibid.
14. All examples are listed in the SAFE Intelligence Report of January 2010. http://www.secureenergy.org/sites/default/files/1111_SAFEIntelligenceReport3120100120.pdf
15. Chicago Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Chicago on 20 May 2012. Press Release (2012) 062, Issued on 20 May 2012.
16. Based on Lord Jopling's recommendations: 157 CDS 08 E rev 1 - Energy Security: Co-operating to Enhance the Protection of Critical Energy Infrastructures. <http://www.nato-pa.int/default.asp?SHORTCUT=1478>
17. Human errors in following procedures, lack of training, poorly programmed automated safety equipment, and not looking at the control panels at the right time led to a major power failure in the US in September 2011. http://www.nytimes.com/2012/05/02/science/earth/power-failure-in-west-is-tied-to-combination-of-errors.html?_r=1
18. For example, no mention of cyber precautions in TEPKO interim report <https://netfiles.uiuc.edu/mragheb/www/NPRE%20402%20ME%20405%20Nuclear%20Power%20Engineering/Fukushima%20Earthquake%20and%20Tsunami%20Station%20Blackout%20Accident.pdf> and http://www.tepco.co.jp/en/press/corp-com/release/betu11_e/images/111202e13.pdf
19. Two excellent works on this topic are Joseph Weiss's *Protecting Industrial Control Systems from Electronic Threats* and Ralph Langner's *Robust Control System Networks: How to Achieve Reliable Control After Stuxnet*.
20. The US has already done this http://www.us-cert.gov/control_systems/ics-cert/
21. Discussed in depth at http://www.ted.com/talks/guy_philippe_goldstein_how_cyber-attacks_threaten_real_world_peace.html
22. Worth to consider adding to the list to include not only CEI but financial and telecommunications infrastructures.
23. If anything, exercises should point out who is in charge, who do you call, and who needs to participate in responding.
24. Witnessed this myself at a NATO Cybersecurity Workshop held at Microsoft in Redmond, Washington, late April 2007 – V.Butrimas.

UKRAINE AT A CROSSROADS

Employees work at the Yamal-Europe gas transfer station in Belarus in January 2009 when Russian gas deliveries via Ukraine halted. Energy experts warn European officials to curb dependence on Russian gas.



AFP/GETTY IMAGES

THE COUNTRY MUST CHOOSE BETWEEN ENERGY SECURITY AND ENERGY DEPENDENCE IN ITS RELATIONS WITH THE EU AND RUSSIA

By Viacheslav Kniazhnytskyi

independent energy expert, Ukraine, and Marshall Center alumnus

Ukrainian and international experts strongly advise the Ukrainian government that harmonizing energy laws with European Union legislation is the foundation of energy sector reform. Energy sector reform would send a clear signal to international investors and financial institutions to invest in Ukraine in a way that would help modernize the country's energy sector. Ukraine's energy sector reform will involve energy but it will also involve politics. The use of "crossroads" in the title of this article presupposes that Ukraine has options, while the "energy security and energy dependence" phrase invokes an uneasy connotation that these are the only alternatives. But to what extent does this duality match the realities in the Ukrainian energy sector today?

Many were hopeful in December 2005, when the "Memorandum of Understanding (MoU) on Co-operation in the Field of Energy Between the European Union and Ukraine" was signed. This agreement included provisions outlining a clear strategy for Ukraine to reform its internal energy market. The two sides planned to bring their energy markets closer together so that, among other things, their electricity and gas markets could be integrated. To date, it is worth assessing the progress and recognizing the missed opportunities in terms of Ukrainian commitments to cooperate with the EU. It's no less important to look at other international cooperation that best serves the interests of Ukrainian energy security, and to describe threats to the country's energy independence.

UKRAINE/EU COOPERATION

There are four key documents that constitute the basis of energy cooperation between Ukraine and the EU:

- Energy Charter Treaty (ratified by Ukraine in 1998);
- Memorandum of Understanding on Energy Co-operation in the Field of Energy Between the European Union and Ukraine (December 1, 2005; a legally nonbinding instrument);
- Joint Declaration of the Joint EU–Ukraine International Investment Conference on the Modernization of Ukraine’s Gas Transit System (March 23, 2009, Brussels; a legally nonbinding instrument);
- Treaty Establishing the Energy Community (ratified by Ukraine in December 2010; effective as of February 1, 2011).

Ukraine and the EU also completed bilateral negotiations on a deep and comprehensive free trade area as part of the Association Agreement on October 20, 2011, in Brussels. The two sides expect that after ratification, the energy package contained in both instruments will enhance energy security in Europe.

The MoU establishes a joint strategy towards the progressive integration of the Ukrainian energy market with that of the EU and consists of road maps covering:

- Nuclear safety
- Integration of electricity and gas markets
- Security of energy supplies and the transit of hydrocarbons
- The coal sector
- Energy efficiency and renewable energy

Both sides agreed there would be annual joint progress reports on the implementation of the MoU submitted to EU–Ukraine summits. There have been six joint implementation reports so far. Surprisingly, the sixth joint implementation report was signed not within the margins of the Ukraine–EU summit, held on December 19, 2011, in Kiev, but on March 22, 2012. The delay was explained by the fact that the two sides had been painstakingly trying to agree on the progress of reforms in the energy sector in the context of the Ukrainian commitments under the Energy Community Treaty (ECT).

This was a sensitive issue for Ukraine because the progress of reforms had to be judged against the implementation of a number of Ukrainian commitments, with deadlines set for January 1, 2012, in the “Protocol Concerning the Accession of Ukraine to the Treaty Establishing the Energy Community of September 24, 2010 (Protocol).”

That it touches on the acute problem of the gas market, in the context of the implementation of the MoU road map on “Integration of Electricity and Gas Markets,” makes such an assessment important to the Ukrainian energy expert community. In its turn, the progress there immediately indicates whether the road map on “Security of Energy Supplies and the Transit of Hydrocarbons” can be successfully implemented. This very road map deals with the implementation of the Brussels Declaration of March 23, 2009.

These two road maps do not override the importance of the remaining three. But to talk about successful implementation of the road maps on the “Coal Sector” and “Energy Efficiency and Renewable Energies,” much directly depends on Ukrainian Government policy and will in forming an internal single market for electricity and gas. The reason for this dependence on government policy is that adopting alternative energy sources to replace gas is less about Ukraine’s energy sustainability than about big Ukrainian business interests closely tied to Russia. For years, financial feasibility and market tools promoting alternative energy sources, in the context of energy sector reforms in Ukraine, have been held “hostage” by dependence on Russian gas imports.

At first glance, the road map on “Nuclear Safety” may seem less market oriented, but its successful implementation is directly linked with the Ukrainian government’s plans to boost electricity exports to the EU. Plans to further develop the Ukrainian nuclear sector would depend on a transparent and investor-friendly climate to form a single market for electricity and gas.

To date, Ukraine’s energy sector is best described as one that is far removed from market rules and principles. The government’s policy to subsidize a number of energy subsectors has been eroding the desire to develop domestic hydrocarbons, raise energy efficiency and stimulate energy savings. These have been very crucial and fundamental problems for Ukraine’s economy since the collapse of the Soviet Union, but it became absolutely urgent and demanding to find an immediate solution after the two gas crises masterminded in 2006 and 2009.

In contrast, the energy cooperation offered by the EU to Ukraine relies on transparent rules and principles based on the harmonization of energy legislation. Moreover, after the 2006 gas crisis, the EU recognized it could not build energy security independently without enhancing energy cooperation with non-EU countries. To this end, the importance of Ukraine for the EU can hardly be overestimated. Ukrainian gas and oil transit infrastructure has been the route by which Russia supplies Europe, providing stability and energy security to the region. In effect, Ukrainian infrastructure became part of the EU’s economic space long ago.

To the credit of the European Commission, it has given its best effort since 2005 to promote cooperation with Ukraine in the energy sector so that Ukraine can become a member of the Energy Community. The European Commission adopted a communication on security of energy supply and international cooperation on September 7, 2011, in which its energy agenda stressed the importance of relations with third countries once again.

At the time of adoption, Commissioner for Energy Günther Oettinger said the EU and its member states must speak with “one voice” on energy matters: “The EU energy policy has made real progress over the last several years. Now, the EU must extend the achievements of its large internal energy market beyond its borders to ensure the security of energy supplies to Europe and foster international energy partnerships. Therefore, the Commission



German Federal Economy and Technology Minister Philipp Rösler, left, and Norwegian Minister of Petroleum and Energy Ola Borten Moe visit the Sleipner gas platform in the North Sea in 2011. Norwegian gas has been critical to Europe's energy security.

proposes today a coherent approach in the energy relations with third countries.”

Ukraine must urgently define its position with respect to commitments made under a number of concluded instruments on energy cooperation with the EU. Time is running out. The EU is going to open its single market of electricity and gas on January 1, 2015. Therefore, this issue isn't one of idle curiosity for Ukrainians, but rather one of energy sustainability: Shall we or shall we not be a responsible and committed participant in this market?

QUO VADIS, UKRAINE?

The issues mentioned above evoke questions directly related to Ukrainian national interests:

- How will the reforms affect the domestic Ukrainian energy market?
- Can the reforms ensure the energy security and consequently the energy sustainability of Ukraine?
- Will our consumers benefit from the reforms?

These questions relate to a number of looming challenges that must be addressed:

- Objectives to be accomplished to best fit the market and economic environment in the country.
- An energy cost-effective approach based on the transformation of pricing policy leading to the smooth and gradual introduction of cost recovery tariffs for domestic electricity and gas consumers.
- The restructuring of the “Naftogaz Ukrainy” company.
- Full revision of governance in the energy sector that decisively severs corrosive links between businesses and government officials.
- Introduction of a competitive market for all energy sources.
- Introduction of an independent energy regulator.

It is absolutely evident that substantive answers to these questions presuppose transparency and desire on the part of the Ukrainian government to establish and maintain dialogue with civil society. Regrettably, since the Party of Regions came to power in 2010, that is no longer the case. That is why the

one year after it became a member. Ukraine's obligations under the treaty are of paramount importance for energy sector reforms. If Ukraine had complied successfully, it could resolve some fundamental problems, first of all in establishing gas and electricity markets but also granting full independence to the National Energy Regulatory Commission of Ukraine (NERC).

In particular, these obligations refer to the adaptation of EU directives by Ukraine into its internal energy legislation by January 1, 2012:

- Directive 2003/55/EC concerning common rules for the internal market in natural gas;
- Regulation No. 1775/2005 on conditions for access to the natural gas transmission networks;
- Directive 2003/54/EC concerning common rules for the internal market in electricity;
- Regulation No. 1228/2003 on conditions for access to the network for cross-border exchanges in electricity.

The protocol set a deadline for eight documents in total, but these four are the most important because their implementation sets the pace for the elaboration of further legislation supporting reforms in the energy sector at large.

To date, one must recognize that much more could have been done since Ukraine became a member of the ECT on February 1, 2011. Nothing prevented the Ukrainian government in early 2011 from launching initiatives by presenting a comprehensive energy package to adopt relevant laws before the end of that year. At this stage, adequate energy legislation is the only prerequisite for reform.

Unfortunately, the Ministry of Energy and Coal Industry of Ukraine cannot report much progress because it has no strategic vision in this area. Its only substantive achievement deals with adoption of the July 2010 law, “On the Principles of Functioning of the Natural Gas Market,” in compliance with the EU Directive 2003/55.

Meanwhile the EC keeps urging Ukraine to agree as soon as possible with the Energy Community Secretariat on an action plan and road map for implementation of EU energy legislation under the ECT.

The Ministry of Energy and Coal Industry of Ukraine has seemed reluctant to push forward with the draft laws “On Principles of Electricity Market Operation in Ukraine” and “On State Regulation in the Energy Sector of Ukraine,” adoption of which is long overdue. The delay in the adoption of the electricity law

Many renowned analysts agree on one point – if Ukraine does not reduce dependence on Russian gas there will be no energy sustainability and independence for the country at all.

Ukrainian energy expert community was looking forward to the conclusions of the MoU sixth implementation report for 2011, expecting the EC to provide its unbiased and objective assessment on the integration of electricity and gas markets.

But that did not happen. Instead, the report refers to past achievements and urges Ukraine to comply with its commitments, but carefully avoids the sensitive subject of whether Ukraine is fulfilling its obligations under the ECT

proves by default that Ukraine has failed to comply with its obligation to ensure that all nonhousehold customers become eligible within the meaning of EC Directive 2003/54/EC from January 1, 2012. “On State Regulation in the Energy Sector of Ukraine” has been in preparation since 2007. Adoption has taken so long because no Ukrainian government, regardless of political affiliation, is ready to defend open market principles in which a fully independent regulator defines pricing

and controls services provided by and to companies, ensuring a balance of interests between producers, transport/transit operators, consumers and the state. For bureaucrats, the worst that can happen is allowing NERC to become independent. An independent NERC could guarantee fair prices to consumers, penalize manipulation through tariffs and transport fees, and secure diversified access to energy for everyone without giving benefits or preferences to a particular supplier.

The EC stresses in the sixth MoU implementation report that “the effective independence of NERC is long overdue and an important requirement in order to fulfill Ukraine’s Energy Community obligations.” This is more than true. Without a fully independent regulator, Ukraine cannot fulfill its obligations under the ECT with regards to EC Directives 2003/54/EC and 2003/55/EC, which require that Kiev implement the EU’s second energy package, i.e., to unbundle functions of energy suppliers and network operators.

But on June 13, 2012, three months after the joint implementation report, came the Decision of the Cabinet of Ministers of Ukraine, No. 360-p “On the reorganization of subsidiary companies of Naftogaz Ukrainy,” a move that stunned independent energy experts. The decision notes that Ukrtransgas (system gas operator) and

Ukrgezvydobuvannya (gas producer and supplier) shall be separated from their mother company, Naftogaz Ukrainy, making them public limited companies (PLC). As far as PLC Ukrtransgas is concerned, the change made it compliant with the EU Directive 2003/55/EC, i.e., the unbundling of Naftogaz Ukrainy. That technically made it fall under the EU’s second energy package. But a surprise emerges a few lines below, where the decision notes that the newly “independent” PLCs will be managed by Naftogaz Ukrainy upon agreement with the Ministry of Energy and Coal Industry. The decision indirectly proves that without a fully independent energy regulator there can be no independent energy operator. In short, reforms in the energy sector of Ukraine cannot be effective unless they are firmly rooted in an adequate legal system.

WHAT IS AT STAKE?

Energy security in Ukraine requires the supremacy of law ensuring transparency, a favorable investment climate for market participants and financial institutions, and consumer protection against market manipulation and distortions. There is little alternative to the EU agenda. To go the other way would mean sacrificing national economic interests to benefit big business and corrupt government officials. Such a dilemma is absolutely



EU Commissioner for Energy Günther Oettinger, right, and Ukrainian Energy Minister Yuriy Boyko address the media after meeting at the Commission headquarters in Brussels in May 2010.

THE ASSOCIATED PRESS

unacceptable for Ukraine because it offers nothing but energy dependence. The core of the problem is gas, namely imported Russian gas.

Many renowned analysts agree on one point – if Ukraine does not reduce dependence on Russian gas there will be no energy sustainability and independence for the country at all. This problem is aggravated by the fact that Russians persistently link gas supplies to the EU with Ukrainian consumption of imported Russian gas. It is not the purpose of this article to analyze Ukrainian–Russian relations, but one cannot avoid assessing the overall impact of this state of affairs on the progress of energy sector reforms, the key component of which is restructuring Naftogaz Ukrainy.

To restructure the company in compliance with Ukrainian commitments under the ECT means to apply provisions of the EU Second energy package. Moreover, the 9th Energy Community Ministerial Council, by its decision of October 6, 2011, invited Ukraine “to expedite the internal procedure of approval” to amend the ECT with the EU directives and regulations promoting the third internal energy market package. But Ukraine has not yet responded positively, seemingly taking time out because the current government is still relying on the possibility of

achieving progress with Russia in reducing prices for gas imports. But the pace of these “renegotiations” is sluggish and a solution elusive.

Russia’s Gazprom has been trying for years to reach a deal with Ukraine to take over its Gas Transport System (GTS) and underground gas storage facilities. But if the second and third energy packages come into force consecutively in Ukraine, it would be illegal for Gazprom to manage Ukrainian GTS in any capacity. In fact, Russian ownership has been forbidden since 2010 in accordance with the law, “On the Principles of Functioning of the Natural Gas Market.” By adopting the third energy package, the EU has made a revolutionary step – to refocus its energy policy away from companies in favor of consumers.

Gazprom cannot bear such changes. Its notorious reaction to the application of the third energy package in the EU has already demonstrated how removed the Russians are from market principles and rules. Instead, Russians are trying to exercise political instruments in their energy policy, especially in relation to countries most dependent on their gas and oil supplies. Russia is very pragmatic in its final objectives – an economic “divide and conquer” strategy aided by local plutocrats.



A Russian oil platform towers over a shipyard in 2011. The platform will serve the Korchagin oil field in the Caspian Sea, a major source of Europe’s energy.

AFP/GETTY IMAGES

Where are we now? Brussels repeatedly insists on Ukraine being faithful to its commitments after concluding the bilateral deals. The Ukrainian government is trying to make a gas price reduction deal with Russia but remains dependent on the Kremlin's whims. This long process of negotiations without results proves that gas prices are not the issue. The issue for Russia is to dominate Ukraine politically. Moscow keeps saying that the Ukrainian economy is stagnating and that only Russia can help save Ukrainian gas infrastructure from collapse by acquiring its assets. But at what price? Regrettably, the Ukrainian government has walked into this well-laid trap by inviting a foreign company to evaluate the GTS.

The current Ukrainian government strongly believes that after the evaluation of the GTS it would be possible to propose a tripartite consortium to manage the system with the participation of Gazprom and European companies. Are government officials unaware of the second energy package provisions contained in "On the Principles of Functioning of the Natural Gas Market"? Gazprom certainly is. It has already indicated that if it assumes management of the Ukrainian GTS no other partners are needed. In their turn, European companies are unlikely to join the management of the GTS to make a partnership with a gas monopoly of shocking reputation.

A NEW APPROACH

The evaluation of the GTS is a waste of money. Instead, there should be a fully independent Ukrainian gas operator that will decide what type of corporate partnerships it needs. Its functions have nothing to do with the price of gas to be transitted or transported. Gas supply contracts with Gazprom can no longer be linked with the transit obligations of the Ukrainian independent gas operator. If the EU third package is applied in Ukraine, it would open the possibility of European companies buying Russian gas on the Ukrainian–Russian border. That opens up an absolutely new dimension for the participation of European companies and international financial institutions in the modernization of the Ukrainian GTS in the context of the Brussels Declaration of March 23, 2009.

Given what is mentioned above, it's worth noting that the root cause of the 2006 and 2009 Russian–Ukrainian gas crises was the simple and legitimate wish of Naftogaz Ukrainy to conclude gas supply contracts not linked to the price of oil and transit fees. Disagreements with Russia over gas prices were effectively turned by Gazprom into problems with the alleged failure of Ukraine to comply with its transit obligations. Once applied in Ukraine, the EU third energy package will eliminate this problem.

It is clear that the key object of Ukrainian energy sector reform is Naftogaz Ukrainy. The Ukrainian energy sector is riddled with problems, but the worst are subsidies, cross-subsidies and nonmarket pricing policies in the gas subsector. All three are detrimental to the Ukrainian economy because they subsidize imports of Russian gas, thereby penalizing domestic production of hydrocarbons. Paradoxically, this is

why the big, corrupt Ukrainian gas business is amenable to high Russian gas prices – state subsidies and cross-subsidies will always secure its profits, unlike open markets.

On the other hand, reforms will compel the government to spend more money. But where will the money come from? The only answer is the redistribution of gas subsidies that have been injurious to the state budget. The government should provide a compensatory social safeguard only for the most vulnerable energy consumers. Ukrainian experts estimate this new arrangement would cost the government three times less than continuing its annual subsidies to Naftogaz Ukrainy.

The EU is ready to grant Ukraine access to its energy market by assisting with expertise and funding the most promising integration project to date – the Synchronous Interconnection of the Ukrainian and Moldovan Power Systems with the European Network of Transmission System Operators for Electricity. If the modernization of the GTS goes well, a project to synchronize the Ukrainian GTS with the European Network of Transmission System Operators for Gas would follow. The two projects are the first to lay a true foundation for a Ukrainian energy independence that would also add to Europe's energy security. The only preconditions for success are legal protection for companies and investors and the adoption of free market principles in Ukraine.

The synchronous exchange of electricity and gas creates a real opportunity for the diversification of energy supplies so that the EU could supply Ukraine in a reversed mode of operation. The Ukrainian government's diversification measures include launching a domestic liquefied natural gas project; granting concessions to Shell and Chevron to develop nonconventional natural gas resources, including shale gas; and signing a memorandum of cooperation with the German company RWE to buy gas from the European spot market via Slovakia.

These diversification projects do not eliminate the necessity of establishing a solid legal foundation in Ukraine for investors and international companies. Successful reforms will only facilitate the consolidation of market principles. Keeping in mind the prospective synchronization and diversification projects, one should hope that Ukraine does not set aside the EU offer for energy market integration. Two more years remain before the EU inaugurates its single market for electricity and gas. Perhaps that's too little time for Ukraine to complete fundamental reforms, but it is definitely possible within this period to provide the necessary framework for international companies and investors.

The Ukrainian government claims that the country is not at a crossroads between energy security and energy dependence. The results of parliamentary elections in October 2012 and Russia's intent to start building the notorious South Stream pipeline in December 2012 may determine the validity of that claim. Europe can't afford another gas crisis emanating from Moscow. □

Information current as of September 2012.

RE-ENERGIZING **THE BALTIC**

Lithuania and its neighbors explore energy
independence through nuclear power

By Dr. Gregory Gleason, Marshall Center



The official opening in July 2012 of NATO's Energy Security Centre of Excellence in the Lithuanian capital of Vilnius marks an important milestone for the North Atlantic community and the Baltic countries in particular. The Baltic countries' high dependence on imported energy has long made them vulnerable to supply disruption and price volatility. The NATO Summit in Riga in 2006 recognized the growing importance of energy security, advancing energy issues to a high priority in the NATO agenda.

The Lithuanian government in 2010 established the Lithuanian Energy Security Center as an aspect of the country's National Energy Strategy. The transformation of the Lithuanian energy center to a NATO Energy Security Centre of Excellence, as Lithuanian President Dalia Grybauskaitė explained at the NATO Summit in Chicago in May 2012, "is a practical contribution to NATO's efforts in the field of energy security and smart defense."¹ As a NATO Centre of Excellence, it is designed to provide analysis, assessments, recommendations and proposals for efficient energy solutions designed to support military, scientific, technical and academic analysis.

Lithuania stands out as an exceptionally industrious and innovative country in addressing the many aspects of contemporary energy challenges. The Lithuanian government has strived to achieve greater energy economy, stressing conservation, efficiency and prospects for carbon sequestration. The Lithuanian Energy Security Center has devoted special attention to find ways to engage the public sector, industry and the academic community in a search for solutions to reduce the dependence of Lithuania's military on fossil fuels and to find energy substitutes during military operations and exercises. Lithuania has joined the other Baltic countries in developing plans for a Baltic energy security community, closely linking the three Baltic States to

pursue energy interconnections with Poland and Sweden. Two new liquefied natural gas plants, one in Estonia and one in Lithuania (Klaipeda) are being developed. Polish authorities have announced plans to scrap their coal-fired generation export capacity in compliance with environmental regulations, opening opportunities for greater regional cooperation with the Baltic states.

The NATO Energy Security Centre of Excellence will be primarily concerned with advancing security capacity with respect to vulnerabilities, particularly concerning energy interruption from either intentional or accidental causes. The NATO center is devoted to developing advanced knowledge and best practices with respect to NATO security interests. Assessment of energy fuel vulnerabilities will very likely include analysis of aggregate data on energy supply, demand and transit. A secondary but nevertheless important concern of the NATO center concerns nuclear power throughout the Baltic region.

This is a complex issue, involving not only technical questions of capacity and the political commitment to nuclear energy but also the very complex and politically charged issue of competition over markets, energy vulnerabilities and national strategic priorities. Some Lithuanians oppose nuclear power as a source of energy – a national referendum has been scheduled for October 14, 2012, to put the reconstruction of the Lithuanian nuclear power plant at Visaginas to a public vote. But even if Lithuanian voters endorse the plan to construct a new nuclear power plant to replace the electricity previously supplied by a Soviet-era plant that was closed in 2009, competition has emerged over Baltic and East European power markets. It is a commercial competition but has clear geopolitical implications.

BACKGROUND: BALTIC NUCLEAR POWER

For many years the Baltic region relied on power supplied by the Ignalina power plant. The Soviet-era nuclear plant went

Technicians stand near a nuclear reactor head at the Ignalina nuclear power plant, which Lithuania took off line at the end of 2009.



AFP/GETTY IMAGES

on line in 1983, powered by two RBMK-1500 MWe water-cooled graphite-moderated, channel-type power reactors. These reactors were similar in design to those of the Chernobyl power plant. After the disintegration of the Soviet Union in 1991, these plants raised qualms among West Europeans who were otherwise anxious to welcome the Baltic countries to the European community. In accordance with the provisions of the European Union accession agreement, Lithuania agreed to decommission the Ignalina's reactors. As the nuclear power plant went offline in 2009, Lithuania shifted to relying on the Elektrėnai Power Plant (EPP), a thermal power facility, for 70 percent of the country's electricity. A European Bank for Reconstruction and Development-financed upgrade improved the EPP. But the natural gas to fuel the plant has been purchased primarily from Gazprom, Russia's national gas producer.

In June 2007, the Lithuanian parliament passed legislation to build a new nuclear power complex near the old Ignalina plant at Visaginas. This facility would assure electricity not only for Lithuania but for other countries in the region. Lietuvos Energija concluded agreements with Latvia's AS Latvenergo, Estonian Eesti Energia and Poland's Polskie Sieci Elektroenergetyczne SA in which all the partners indicated an interest in taking part in the project. Lithuania signed a concession agreement on March 30, 2012, with GE-Hitachi to construct a 1,350-MW advanced boiling water reactor. The agreement provided the general framework for the Visaginas nuclear power plant, including provisions for the rights of the project company to design, construct, operate and

decommission the plant as well as for investor rights and obligations. However, the commercial viability of this new plant was based on the assumption of an electric power market throughout the Baltic States as well as electricity sales to Poland.

Meanwhile, outside Lithuania, decisions affecting power markets in the region having to do with environmental risks have been taken independent of Lithuanian priorities. Russia's electric nuclear power company, Rosenergoatom, announced plans to build a nuclear power plant in Russia's Kaliningrad province. The 2300-MW Baltic Nuclear Power Plant was scheduled to be constructed in the town of Nemen on the province's eastern border with Lithuania. At the same time, Rosenergoatom announced plans to build a similar nuclear power station in Belarus. It identified a construction site in Astravets in the Hrodno Region, a town located only 50 kilometers from Lithuania's capital of Vilnius.

The Belarusian Nuclear Power Plant (NPP) is regarded by many, in the words of Lithuanian Foreign Minister Audronius Azubalis, as a "provocation."² The Lithuanian Ministry of Foreign Affairs sent a diplomatic note of objection to the Belarusian Ministry of Foreign Affairs. The diplomatic note included a Lithuanian Environmental Impact Assessment of the proposed Belarusian NPP. The Belarusian Ministry of Foreign Affairs did not respond.

ENERGY SECURITY AND THE NUCLEAR FUTURE

The nuclear power plants being discussed in the Baltic region are still at a stage where decisions are not yet final.



AGENCE FRANCE-PRESSE

Russian leaders stand near a model of the nuclear power plant they plan to build in the Kaliningrad region. The plant represents a commercial challenge to Lithuania's nuclear industry, which is trying to provide greater energy independence for the Baltic region.

But nuclear power decisions are long-term decisions. When the decisions are taken they can be expected to have consequences that will endure for decades. The startup of a power generation project is preceded by a planning period devoted to determining commercial viability. The assessment includes investment analysis designed to determine capital budgeting projections. The appraisal must include a market analysis, an assessment of the expected rate of return and a calculation of the payback period based on an amortization plan. The future is always uncertain, hence assessments are not based on facts; they are based on reasonable assumptions regarding profitability given the overall state of the economy, market demand, generation revenue, expenditures, accident risk and insurance, borrowing interest rates, currency risk, management costs and other prognostications. Technical market analysis is based on forecasting given assumptions regarding the movement of future prices through the study of past market data, primarily price and volume.

Nuclear power generation is a low-risk, high-consequence technology. In the wake of the Chernobyl and Fukushima accidents, as well as some other "near misses," nuclear power generation bears the additional insurance risk associated with the potential for catastrophic accidents as well as the significant cost of decommissioning and long-term spent fuel storage. Nuclear decommissioning is defined as the dismantling of a nuclear power plant and decontamination of the site to a state no longer requiring protection from radiation for the general public.

The first generation of nuclear power reactors had an expected operational life of 25 to 30 years. Newer generation reactors are expected to last 40 to 60 years. Decommissioning involves administrative and technical actions, including all cleanup of radioactivity, dismantlement of the site and securing hazardous materials. Once a facility is decommissioned, there should no longer be a danger of a radioactive hazard and the facility is released from regulatory oversight. Decommissioning is likely to become big business in Europe, and Lithuanian nuclear technicians and engineers may have a distinct advantage in this competitive arena.

The security issues related to national energy policies, political implications of commercial energy competition, as well as the issues relating to nuclear decommissioning and nuclear nonproliferation, are of considerable significance for European energy security. It is fitting that the NATO Centre of Excellence will be located on the facilities of the Military Academy of Lithuania and that the center's international staff will consist of representatives of all countries engaged in the activities of the center of excellence. Studies and evaluations conducted at the NATO center will surely affect energy security vulnerabilities throughout Europe in significant ways for the foreseeable future. □

1. Remarks by H.E. Dalia Grybauskaitė, President of the Republic of Lithuania, at the NATO Summit/North Atlantic Council Meeting (May 21, 2012). http://www.president.lt/en/activities/speeches/remarks_by_h_e_dalia_grybauskaitė_president_of_the_republic_of_lithuania_at_the_nato_summit_north_atlantic_council_meeting.html (Accessed July 15, 2012).

2. "Azubalis calls Belarusian NPP construction site a 'provocation.'" Charter 97 (April 8, 2011). <http://www.charter97.eu/en/news/2011/4/8/37545/>



View of oil tankers waiting offshore near the French city of Marseille. Energy security includes developing a more diversified supply of petroleum imports.



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— DECLARING EUROPEAN — ENERGY INDEPENDENCE

A DEPENDENCE ON UNRELIABLE RUSSIAN GAS WEAKENS EU POLICYMAKERS

By Maj. Bailey W. Brown, U.S. Army, Marshall Center

European dependence on foreign energy creates unacceptable long term strategic vulnerabilities for Europe and Russia. Russia's encouragement of European energy dependence has yielded significant influence over policy outcomes, but at the cost of economic dependency on unequal partners in Europe's energy sector. European vulnerability to Russian energy policy is, in part, a function of Europe's highly fractured, national-level energy policy. Russia can act with a singularity of purpose to influence individual European nations without directly jeopardizing its European Union-wide energy market.

As a single policy actor, Russia has successfully balanced its energy influence and vulnerabilities. Policymakers in individual European countries, by contrast, tend to view energy policy in terms of small scale engagements with Russia and other energy exporters. European energy agreements primarily arise in the form of technical economic agreements at the national level, rather than as coordinated EU efforts. The strategic cost of Europe's current energy model can carry adverse consequences for Europe and Russia.

Europe now faces critical economic challenges about whether Greece, or maybe even Spain, will remain in the EU or eurozone. News of bailout funds, political speculation and demonstrations over benefits and austerity dominates the European political stage. These are pressing matters whose outcomes will shape the future. Solutions will be complex, multidisciplinary and require cooperation among many European countries. Energy security plays a critical role in these solutions.

European security is threatened when European countries are vulnerable to having their electrical and gas supplies severed at any time. Long term economic recovery requires jobs, but job growth is unsustainable in the face of high or unpredictable energy costs. Energy is the foundation of economic productivity, and such productivity is the core issue facing European economies and the eurozone. More than that, energy is the foundation of national power. Without energy independence, there is no strategic depth in military or political endeavors. A country dependent on outsiders to keep the lights on must toe the line drawn by whoever holds the switch.

It is easy to mistake military force for the currency of national power.¹ A substantial body of international law has developed around just war,² the just conduct of war³ and the general use of force. Many treaties address rights and obligations concerning the use of force. Historically, the projection of military force in the form of armies and navies contributed directly to a nation's perceived might and its diplomatic influence. Experience of the Cold War arms race in Europe, Russia and the United States reinforces the notion of detente through superior firepower.

The notion of military force as the key to national power works best in a world of peace and war – a world we no longer inhabit. From the Algerian insurgency to the Cold War, Lebanon to Kosovo, Iraq, Afghanistan, Libya and Syria, the spectrum and complexity of conflict have increased by an order of magnitude. As a result, military strategists have adjusted their ideas of the role of military operations to address the full spectrum of conflict. Military force might now take the form of peaceful patrols akin to police work in one location and combined arms operations in another.

In addition to its dilution in response to a spectrum of challenges, the use of military force in obtaining a decision in a dispute between states increasingly yields to other forms of power. Public accountability through technology,⁴ the potential for world-ending nuclear escalation⁵ and stark lessons in the limits of maneuver warfare⁶ have greatly eroded the role of traditional military force in security strategy. Recent efforts to develop “whole of government” approaches to international challenges illustrate that many military strategists are aware of the need to bring other forms of power into national security analysis.⁷ The events of the Arab Spring convincingly demonstrate the dispositive impact of forces outside traditional norms of military power.

A common aphorism among soldiers is that amateurs talk about tactics, while professionals talk about logistics. It is now time for European defense strategists to start talking about energy the same way they talk about Eurofighters and the nuclear shield. Especially in Europe, energy is a critical currency of national power. Economies depend on it. Jobs depend on it. Standards of living depend on it. It is not only proximity of combat formations that will contribute to peace, stability, and regional cooperation – it is access to the energy resources necessary to sustain economic growth and prosperity.

Russia is ahead of Europe in appreciating the geopolitical and strategic value of energy. Russia has already predicated a significant portion of its national policy on this strategic reality, while Europe continues to treat energy as a matter of economics and technical arrangements between government and industry.⁸ Europe has placed itself in a precarious geopolitical position by falling behind Russia in its treatment of energy as a strategic asset.

Europe is massively dependent on foreign energy sources. As of 2009, the EU imported 53 percent of its energy needs and rising.⁹ As a result of various EU countries' national-level efforts to reduce the use of nuclear and fossil fuel energies,¹⁰ much of the imported energy now comes from Russia, Algeria and Norway.¹¹ Russian natural gas plays a particularly prominent role. Germany has officially renounced nuclear energy in favor of Russian natural gas,¹² and Russia plans to increase its exports of natural gas to the EU by an additional 30 to 50 percent by 2030.¹³ Europe also imports Russian and Middle Eastern oil extensively. Although Europe's energy market is complex and involves both imports and exports, a preponderance of energy imports comes from Russia.¹⁴

Efforts are under way to secure additional sources and transit routes in the interests of broader European and Eurasian interdependence. However, realization of those efforts remains years away and, in many cases, years behind schedule and massively over budget.¹⁵ Efforts such as the Nord Stream pipeline to Germany and the South Stream pipeline to Italy achieve only more efficient and reliable delivery of Russian natural gas, deepening rather than alleviating European dependence on Russian energy. Russia supports these developments not only for economic reasons, but for strategic ones.¹⁶ The Russian state gas firm Gazprom specifically identifies them as part of the “Gazprom strategy to diversify the Russian natural gas supply routes.”¹⁷

The pattern of ever increasing energy importation, particularly from Russia, places Europe in a precarious position of significant dependency on Russian cooperation.¹⁸ Russian cooperation, in turn, depends upon Russian consent to European policies – including defense policies. To the extent that Russian and European political objectives diverge, resulting frictions can lead to higher energy prices, destabilize markets and undermine regional stability. This potential for economic and political instability undermines both Russian and European security interests.

Knowledge among European leaders that Russia can unilaterally cut off approximately half of Europe's oil and gas will inevitably influence European national policies. The ability to unilaterally strangle individual European countries provides Russia not just with an economic tool, but with powerful diplomatic and military influence. European countries that fail to comply with Russian policy objectives “will be punished by denial of energy deliveries, while friendly powers will be rewarded.”¹⁹ In 2006, 2008 and 2009, because of conflicts with Ukraine over prices and transit fees, Russia cut natural gas supplies to Ukraine and

Europe. Each incident triggered a crisis in European energy markets and untold suffering as hundreds of thousands of people in Europe lost heat.²⁰ The threat of unheated cities in the cold of winter is soft power in its hardest form.

While there are limits to the use of energy as a tool of national power, the threat of energy coercion remains unacceptably high for Europe. Some argue that “energy can be used as a hard power resource only when it is combined with the other tools at Russia’s disposal, including military capacity and diplomatic bargaining,”²¹ and that Russia’s very codependence on the market for its natural gas makes it equally vulnerable to its trading partners, if not more so.²² This may be true against large trading blocks, but Europe’s fragmented energy policy makes each individual member of the EU far more vulnerable to Russian energy coercion than Russia is susceptible to the cost of withholding energy from a few European countries. This high degree of national level vulnerability across the EU compels European powers to consider their continued access to the Russian energy lifeline in every major strategic decision.²³

Russian leadership is aware of the strategic advantages and perils of leveraging European energy supplies. Russian President Vladimir Putin wrote his doctoral thesis on energy strategy, in which he argues that natural resource planning can help solve “any problem associated with national objectives abroad.”²⁴ Russia’s “[g]eopolitical influence is served by controlling the majority of Eurasian gas and oil export pipelines, enabling the Russian government simultaneously to exert influence over Central Asian energy producers and European energy consumers.”²⁵ This shows an awareness of the importance of energy in an integrated national security strategy – an awareness upon which the EU has yet to act.

It should be noted that the use of this power is not without risks. As European energy imports increase, Russia becomes increasingly vulnerable to European economic performance. European energy consumption drives a substantial part of the Russian economy, as “Russia is the EU’s third biggest trade partner, with Russian supplies of oil and gas making up a large percentage of Russia’s exports to Europe.”²⁶ A broad economic collapse in the eurozone could have profound consequences for stability in Russia and its energy exporting neighbors in Central Asia. As Yegor Gaidar, acting prime minister of Russia, observed in Washington in November 2006, “[t]he collapse of the Soviet Union should serve as a lesson to those who construct policy based on the assumption that oil prices will remain perpetually high.”²⁷

Russia’s perspective on energy is informed by the long term context of Europe-Russia relations. Since the end of the Cold War, Russia and Europe have created a normative environment of civility, economic cooperation and a semblance of trust.²⁸ It is tempting for European and American strategists to view security policy in a context of cooperation – there is even a partnership agreement between Russia and the EU member states.²⁹ Yet Russia has a long memory, and some argue that the “period of the Cold War has strengthened the traditional Russian view of the

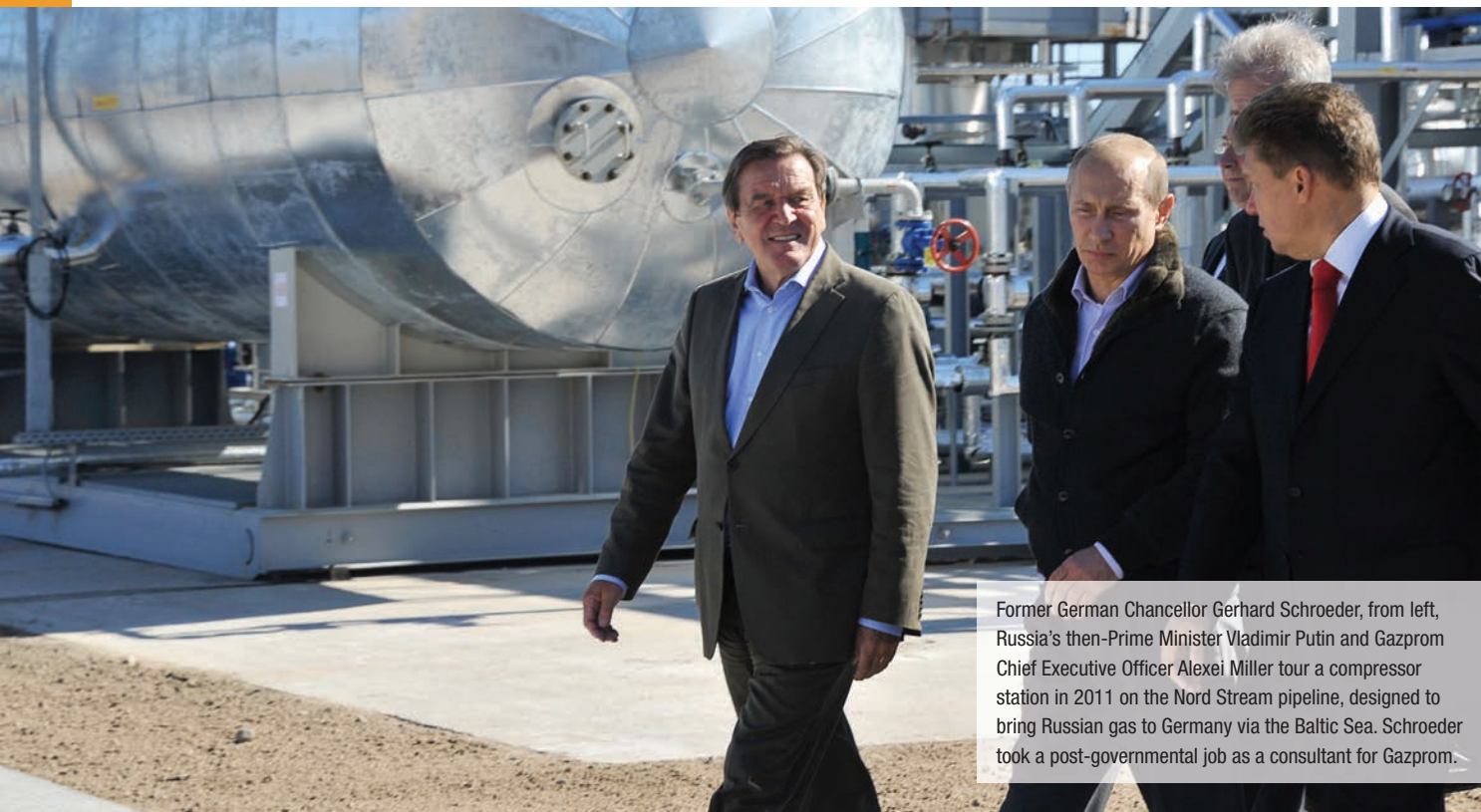
Storks tend a nest near the EnBW nuclear power plant in Phillipsburg, Germany. Phillipsburg is among the nuclear power plants the country has announced it will close in coming decades over fears of radiological disaster.



AFP/GETTY IMAGES

Western Europe as the source of vital threat.[sic]” History and experience “have produced an effect on both Russian thinking and Russian strategy, leading to deep mistrust, suspicion and hostility.”³⁰ Today, issues surrounding missile defense, Libya, Syria and Iran continue to erode Russia’s trust in Western intentions.³¹ Despite efforts to convince Europe that Russia’s proper role is that of a strategic partner in matters of defense policy, Russia can sometimes view NATO as “a hostile alliance that is meddling in its backyard.”³² Russia finds itself in the difficult position of supplying energy to a Europe whose intentions it does not fully trust, while at the same time unable to fully leverage that energy supply because of its own vulnerability to European economies. This delicate balance means that Russia needs the EU to remain politically and economically secure, but not so secure that it can ignore Russian priorities. In short, Russia has Europe on a leash but still struggles to influence Europe’s direction.

It would benefit European military and foreign policy leaders to recognize that, as military might has declined in



Former German Chancellor Gerhard Schröder, from left, Russia's then-Prime Minister Vladimir Putin and Gazprom Chief Executive Officer Alexei Miller tour a compressor station in 2011 on the Nord Stream pipeline, designed to bring Russian gas to Germany via the Baltic Sea. Schröder took a post-governmental job as a consultant for Gazprom.

AFP/GETTY IMAGES

importance on the international stage, energy has emerged as a new currency of national power. Energy should assume in security strategy an importance once reserved for the emplacement of military divisions. Europe can look to the Russian model for an instructive integration of military, diplomatic and energy policy in achieving national objectives. European leaders should seek ways to develop a similarly unified EU energy policy. With unified policy guidelines, Europe can pursue physical energy independence and become an equal partner with Russia in the energy trade. This EU energy policy and its resulting capabilities should be incorporated, and funded, as a key part of EU security strategy.

The mechanism to achieve this unity is not an EU convention on energy policy, nor is it a set of agreements to be negotiated between sessions on euro lending and debt defaults. The solution to European energy vulnerability is to connect strategic security doctrine with existing EU energy institutions to channel military expenditures into energy infrastructure. Specifically, NATO should engage energy policymakers to develop a strategic model for energy independence.

Nuclear power represents one actionable energy option pending development of viable alternative energy technologies. With effective investment administered by existing nuclear regulatory and industry regimes, Europe could already leverage nuclear power to meet or exceed the projected additional 170 gigawatts of nuclear power required to maintain the 2011 balance of energy sources through 2050.³³ This would require approximately 11

billion euros in investment per year – a lot of money by industry standards, but a modest amount by EU defense standards.³⁴

The necessary regulatory and physical infrastructure is already in an advanced stage of development in the form of the Single Electricity Market project. Through this initiative, European heads of state and governments have pledged to create an internal market for electricity by 2014. Throughout the EU, national electricity markets are being reviewed to align with a common European “target model” for cross-border capacity allocation and congestion management upon which the Internal Electricity Market is to be founded. Detailed rules that give legal effect to this target model will be binding on all EU internal borders by 2014.³⁵

The target model provides detailed trading and regulatory guidance for a single, integrated European energy market and links national energy capacities across borders to form a flexible whole that responds efficiently to market demands. Critically, the Single Electricity Market also establishes and regulates the infrastructure necessary to maintain the physical interconnectedness of the EU power grid.³⁶ Existing European private sector energy concerns have already contemplated the standards necessary to integrate nuclear energy and other energy sources into this EU-wide network. The challenges are primarily regulatory, rather than technical.³⁷ The tools for broad European energy independence are already in place. Implementation is a matter only of political will.

Developing unified energy policies as part of a regional security strategy goes back to the founding of

the EU. The EU descends from the European Coal and Steel Community – an early effort to alleviate European economic vulnerabilities by unifying markets. Energy policy gave birth to the EU, and it should guide EU strategy going forward. This approach makes long term economic sense because consolidation of EU member states' purchasing power can exact concessions from sellers and enhance market cooperation among the EU, Russia and other regional actors.³⁸ This approach makes political sense because only a consolidated EU effort could appropriately integrate security objectives and national-level energy policies. Finally, this approach makes strategic sense because it offers a unique opportunity to create stable, bilateral energy cooperation between the EU and Russia as equal partners. □

The views expressed in this report are those of the author and do not necessarily reflect the official policy or position of the Department of the Army, the Department of Defense or the U.S. government.

1. War is often taught as "merely a continuation of diplomacy by other means," as stated in Carl von Clausewitz's *On War*. See Clausewitz, Carl von (1984) [1832]. Howard, Michael; Paret, Peter. eds. *On War* [Vom Krieg] (Indexed ed.). New Jersey: Princeton University Press. p. 87.
2. Traditionally known as *Jus ad Bellum* (Latin for "right to war") and enshrined in the UN Charter, the London Charter and the Kellogg-Briand Pact.
3. Traditionally, *Jus in Bello* (justice in war), enshrined in the Hague Conventions.
4. Witness the Arab Spring uprising, in which public frustration at regime policies triggered widespread and collective action that undermined the sovereignty and perceived legitimacy of several seemingly entrenched leaders.
5. Nuclear detente remains U.S. policy. See, e.g., "Nuclear Posture Review Report," Department of Defense, April, 2010, p. iv, stating that, while "facing the increasingly urgent threats of nuclear terrorism and nuclear proliferation, the United States must continue to address the more familiar challenge of ensuring strategic stability with existing nuclear powers – most notably Russia and China."
6. Defense strategists can argue that the Korean, Arab-Israeli, Falkland, and first Gulf wars demonstrated conclusively the superiority of first-world military forces on conventional battlefields, forcing poorer combatants to employ an "evolved form of insurgency" using "all available networks – political, economic, social, and military, to convince the enemies political decision makers" to capitulate. Thomas X. Hammes, *The Sling and the Stone: On War in the 21st Century*, Zenith Press, St. Paul, Minnesota, 2004, p. 2.
7. Walter Pincus, "Pentagon Recommends 'Whole-of-Government' National Security Plans," Washington Post, February 2, 2009, retrievable at <http://www.washingtonpost.com/wp-dyn/content/article/2009/02/01/AR2009020101964.html>
8. European Nuclear Energy Forum, Bratislava – Prague, Working Group Report, "Innovative Financing for Deployment of Nuclear Power Plants and Development of Next Generation," dated April 4, 2011, retrievable at https://docs.google.com/viewer?a=v&q&cache:IVw2PSWvaw0J:ec.europa.eu/energy/nuclear/forum/opportunities/doc/financing_models/enef_-_financing_report_final.pdf&hl=en&gl=us&pid=bl&srcid=ADGE-EShduF62ZrOioBBcTn8OtRKXBBWtPSiliUV4pSDMjIYsy2JbF4HvAF6py-LjZAqdADHcM4xUKOQYW65DeSwBO608NuR-D7MNYOU0866XoKVUC_JIECaFZ_qbSd3lV8eUa-NB-o&sig=AHIEtbRRx0onJEpsQqkiwYvP57TZY88wQ, which makes no mention of nuclear energy as an appropriate vehicle for defense expenditures.
9. European Commission, EUROSTAT, Statistics Explained, Energy Production and Imports; retrieved from http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Energy_production_and_imports#Further_Eurostat_information
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CHANNELING CHANGE

THE TAPI PIPELINE PROMISES ENERGY SECURITY AND ECONOMIC BENEFITS FOR AFGHANISTAN AND ITS NEIGHBORS

By per Concordiam Staff

Machines shut down and the lights go dark when the power goes out at Bashir Printing, a textile factory in Faisalabad, Pakistan. Restarting after one outage is hard enough. But electricity shortages interrupt operations about four times a day, wreaking havoc on production.

“The textile industry of Punjab is doomed,” the exasperated chief executive of Bashir Printing, Shabbir Ahmed, told *The Economist* in October 2011.

Power outages like this are cutting into Pakistan’s economy, eliminating 3 to 4 percent of the country’s gross domestic product. Blackouts also complicate everyday life: Food rots in refrigerators. Electric water pumps shut down. Entire cities are left in the dark.

But there is reason to hope in towns like Faisalabad and others in South Asia — a region hit hard by energy shortages.

Following an ancient trade route that once connected Central and South Asia, a pipeline to stream natural gas from Turkmenistan to Afghanistan, Pakistan and India is in the works. Named for each of the four participating countries, the TAPI pipeline will provide critical energy resources and fuel economic growth for each participant.

“The pipeline between Turkmenistan, Afghanistan, Pakistan and India will be a weighty contribution to the positive cooperation on this continent,” Turkmen President Gurbanguly Berdimuhamedov predicted in a report published by the *Journal of Energy Security*.

Backed by the Asian Development Bank, the pipeline has been in development since the mid-1990s. But the project was stalled by security concerns over its route through Taliban strongholds in Afghanistan. When the extremist regime crumbled in 2001, however, leaders began to revive the \$7.6 billion (6 billion euros) project. On April 25, 2008, the four nations signed the Gas Pipeline Framework Agreement. Construction should start in 2013, and the pipeline is expected to be operational by 2017.

The project will create a strong financial link among the countries, “and in the long term, the economic profits will create a security ring,” political analyst Nasrullah Stanikzai of Kabul University told Pajhwok Afghan News in 2011. “With the launch of this project, all the countries involved, especially Pakistan and India, will gain economic benefits, and eventually political stability will be achieved and this will improve the security in Afghanistan.”

Once under way, the pipeline will carry 33 billion cubic meters of gas per year from Turkmenistan’s Dauletabad natural gas field. Afghanistan, Pakistan and India are still





Cars queue to pick up compressed natural gas in Islamabad in January 2012. Once completed, the TAPI pipeline will help alleviate severe energy shortages in Pakistan and India and strengthen the economies of Turkmenistan and Afghanistan.

AFP/GETTY IMAGES

negotiating how much will go to each country. Initial figures indicate Pakistan and India will each purchase nearly half the gas that travels through the pipeline.

Countries along the route can keep the gas for domestic use or sell it for export. They will also collect transit fees on natural gas that moves through their nation en route to other customers. Afghanistan alone expects to collect about \$300 million (235 million euros) in fees annually.

Turkmenistan has the fourth-largest natural gas reserves in the world, holding about 4.3 percent of the global supply, according to the June 2011 “BP Statistical Review of World Energy.” Saudi Arabia has nearly the same amount. Others in the region with significant natural gas resources include Qatar (13.5 percent), the United Arab Emirates (3.2 percent), Iraq (1.7 percent) and Egypt (1.2 percent).

Turkmenistan also exports natural gas to Russia and China. The TAPI pipeline provides the former Soviet state with an alternative way to profit from its supply and strengthen its economy. Because Pakistan and India depend heavily on imported energy, the TAPI pipeline will help them address their growing energy gaps. Natural gas accounts for about 44 percent of Pakistan’s energy use, followed by oil and coal, according to Pakistan’s Center for Research & Security Studies (CRSS).

“Energy shortage, particularly due to the scarcity of gas, has become an importunate menace for Pakistan,” wrote CRSS research assistant Ayesha Bint-e-Rafique in February 2012.

As the population grows, the gap between the country’s natural gas supply and its increasing demand grows wider, creating a nationwide shortage that results in intermittent electricity outages. These blackouts are “crippling daily life across the country and [are] leading towards the closure

of hundreds of industrial units, leaving millions of people, directly or indirectly attached to the textile manufacturing trade, unemployed,” Bint-e-Rafique explained.

By 2014, it’s estimated that the country will be short 70.7 million cubic meters of natural gas per day. The TAPI pipeline will help fill this gap and create other opportunities for Pakistan’s growing economy.

The 1,680-kilometer (1,050-mile) pipeline will go from Central to South Asia, winding through Herat, Helmand and Kandahar provinces in Afghanistan; into Quetta and Multan in Pakistan; and finally to Fazilka in India. For the pipeline to be a success, however, the entire route must be secured.

Afghan President Hamid Karzai has promised to “put in efforts to ensure security both during construction and after completing the project,” Radio Free Europe/Radio Liberty reported in 2010. The 1.4-meter (56-inch) diameter pipeline will be buried as deep as two meters (6.5 feet) underground, making it harder for extremists to target.

About 5,000 to 7,000 local security forces will be employed to protect the route, explained Afghan Mines and Industry Minister Wahidullah Shahrani. He expects the project to gain community support because the pipeline brings jobs, along with a power source. It will ultimately play a large role in the reconstruction of Afghanistan.

“We have every reason to believe that the situation in the areas of Afghanistan and Pakistan that the pipeline will run through will stabilize before 2014,” Turkmen Petroleum and Mineral Resources Ministry economist Amankeldy Osiyev told Central Asia Online. “Our ministries’ experts are now looking into protective systems used in Saudi Arabia, Mexico and Europe. Yes, such systems plus military security will be costly, but we are not going to be the first to use them. Such practices are used even in more peaceful regions.” □

Partnering with Poland

The country's pro-democratic, pro-free market multinationalism has become a model for post-Soviet Eurasia

By per Concordiam Staff



Less than an hour after Polish commandos stormed a beach in Florida in a tactical demonstration before representatives from more than 50 countries, their commander, Brig. Gen. Piotr Patalong, announced that his goal was nothing less than making his special operations troops the best in Europe.

Poland has been making many such strides in its bid to be a model of multinational military, political and economic cooperation. It has one of the fastest growing economies in Eastern Europe, remains an eager candidate for euro-zone membership and successfully completed the rotating presidency of the European Union. And its commitment to security doesn't stop with special operations forces. The

country will deploy a key component of NATO's ballistic missile defense system, along with Romania and Turkey, and has been a perennial contributor to the International Security Assistance Force (ISAF) in Afghanistan.

Parliamentary elections in 2011 established another benchmark for a democracy that emerged from communist control a little more than 20 years ago. The selection of Donald Tusk as president last year represented the first time since the demise of the Warsaw Pact that a Polish government has been re-elected. The country's EU partners considered it a sign of political maturity, signaling Poland's readiness for greater integration.

"The country sees itself as a pioneer and role model for the 'others' in the East. It wants to become a power in Europe and for Europe, thereby assuming what it has always believed to be its rightful place in the world," *Der Spiegel* wrote in May 2012.

Embracing NATO

For many nations in post-Communist Europe, NATO membership served as a steppingstone for eventual EU membership. In Poland's case, the commitment to the Alliance didn't wane once the EU came calling. Poland not only hosts NATO's Joint Force Training Centre in the city of Bydgoszcz, but has agreed to open a Military Police Centre of Excellence in 2013.

An even bolder step was the country's decision to accommodate ballistic missile defense "interceptor" platforms near the Baltic Sea to protect Europe from airborne weapons of mass destruction launched from possible rogue states. The deployment of the ground-based interceptors is timed for 2018 as part of NATO's Phased Adaptive Approach to European missile defense.

Thousands of Polish soldiers have served in Afghanistan since joining ISAF in 2002-03. A joint Polish-American provincial reconstruction team operated in Ghazni province. Polish troops and civilians built irrigation dams, roads and a sewage plant. They contributed office equipment and cameras to sustain Afghan journalists operating in the province. Polish special operations forces have helped train their Afghan counterparts, earning kudos from other Allies for their high performance.

Polish Foreign Minister Radosław Sikorski, speaking on a visit to Chicago during the May 2012 NATO summit, emphasized how valuable his country views the Alliance that acted as a beacon of freedom during the communist era. He said NATO was not just a military grouping but a security community that has spread cooperation around the globe.

"Poland's joining NATO in 1999 at the summit in Washington was our coming home," Sikorski said. "Our shared transatlantic trading and security area now has 800 million people, accounting for half the world's GDP, a third of world trade and more than \$2 trillion in two-way investment. We can and should build on this achievement."



A Polish soldier (right) discusses a mission with Azerbaijani colleagues during a training exercise at U.S. Army Europe's Joint Multinational Readiness Center in Hohenfels, Germany, in September 2012. The Azerbaijanis are wearing Afghan uniforms to replicate the security environment in that country for training purposes.

U.S. ARMY PFC. JAMES STOKES

Economic integration

Poland's decision after the fall of communism to embark on a "crash course" in economic liberalization, including shedding inefficient state firms or parceling them out to private investors, appears to have paid off. Multinational corporations such as Volkswagen and Kraft have pumped capital into what used to be state-run enterprises or established entirely new factories. Poland was the only country in the EU to have avoided a recession during the 2009 financial crisis and has weathered the storm with higher-than-average growth rates, emerging as the EU's sixth largest economy.

Financed in part by EU subsidies, construction has transformed the landscape. By the summer of 2012, in time for the UEFA European Football Championship held in Poland and Ukraine, the country had completed nearly the entire four-lane highway from the German border to the capital of Warsaw, the country's first modern connection to the super highways of Western Europe. "The clichéd western view of Poland – bogged down by communist inefficiency and rusting tractors – is long gone," *The Observer*, a British newspaper, wrote in 2012.

Even as Poles were granted the legal right in 2011 to work across most of Europe, a fulfillment of the EU's promise of full labor mobility, the country's growing economic strength was keeping more and more Poles at home. "In the border region, Polish workers are no longer the only ones crossing the border for cleaning jobs and to cut asparagus. Germans are now searching for more attractive jobs on the Polish side," *Der Spiegel* noted. "Leszek Balcerowicz, one of the fathers of the Warsaw reforms, says self-confidently that his country should set itself a new goal: 'To overtake Germany.'"

And in a bid for energy independence, exploration for natural gas, particularly those pockets of methane trapped deep underground in shale deposits, has become a Warsaw fixation. Initial reports that Poland possessed 300 years' worth of gas seem exaggerated, but Piotr Wozniak, Poland's deputy environmental minister, told news agencies that the country could hold the third biggest deposits in Europe, behind Norway and the Netherlands.

That would be enough to last the country for decades and would lessen dependence on foreign, and sometimes





The inside of a turbine factory in Elblag, Poland, owned by French energy giant Alstom. The country has attracted multinational companies looking for stable investments.

AFP/GETTY IMAGES



Polish workers assemble Fiat Pandas at a plant in Tychy. The country has attracted multinational companies looking for stable investments.

AFP/GETTY IMAGES

hostile, energy producers. Though the country can mine enough coal to meet domestic needs, gas is a much cleaner burning fuel, a fact not lost upon environmentalists. “Poland is arguably the biggest focus for shale gas in all of Europe,” Deputy Prime Minister Beata Selmach told CNN in 2012. “But it is not at all clear how many reserves there are ... that won’t be known for another three to five years.”

Other Polish leaders caution that the country still has a long way to go, pointing to the national unemployment rate of more than 10 percent. Exxon, one of the largest companies in the world, pulled out of efforts to drill for gas in Poland in 2012, citing bureaucratic interference and inefficiency. Despite official enthusiasm for euro membership, a majority of the population, observing turmoil in places like Greece, has a negative view of the common currency. Some economists warn Poland and its neighbors to take care lest too many regulations dampen the very entrepreneurial innovation the region will need to emerge fully from the historic shadow of Marxism.

A regional role model

Poland’s completion of the rotating EU presidency in early 2012 wasn’t the only sign that it was assuming a greater leadership role in Europe. At the forefront of the EU’s eastern policy, Poland plays a vital role in helping stabilize former Soviet republics to the east. Its foreign ministry regards Ukraine as its most important partner outside the EU and NATO and has promised further reconciliation with Russia. In June 2012, Foreign Minister Sikorski announced that Poland was “ready to support [Ukraine] if it definitively chooses a European destiny.” In light of its position on the EU’s frontier, it came as little surprise that Brussels headquartered Frontex, its border control agency, in Warsaw. Frontex expects to assume a larger role in policing Europe’s passport-free Schengen zone.

Regional military cooperation is another way Poland has taken on a larger role. It’s a regular participant in Jackal Stone exercises meant to train special operations forces in Europe. Poland and its close historical neighbor Lithuania hosted the exercise as recently as 2010. Its Air Force is a founding member of a multinational air transport wing based in Pápa, Hungary. In the spring of 2012, Polish flyers also took charge of NATO’s Baltic Air Policing operation and sent jets to Šiauliai Air Base in Lithuania. The country played a leading role at an international special operations forces conference in Florida in May 2012, performing military feats aboard boats and helicopters with commandos from countries such as Brazil, Thailand, the United Arab Emirates and the United States.

The country’s experience in Afghanistan as part of ISAF encapsulated what Poland’s leaders have tried to accomplish in multinational cooperation. Polish forces’ guiding principle wasn’t just Afghanistan reconstruction but ultimately Poland’s reputation among its NATO and multinational partners. Sikorski made such a point in a recent Afghan visit to thank his troops: “Now Poland is a big-league member of NATO with a substantial say in its affairs.” □



Soldiers from the breakaway province of Nagorno-Karabakh patrol trenches at the frontline with Azerbaijan in July 2012.


Post-Soviet Frozen Conflicts

The world continues to seek peaceful settlements of regional stalemates

By *per Concordiam* Staff

As the presidents of Azerbaijan and Armenia prepared to meet in Kazan, Russia, there was cautious optimism that real peace might finally be within reach for the breakaway province of Nagorno-Karabakh. After a round of friendly handshakes and photos for the press, summit host and then Russian President Dmitry Medvedev led Armenian President Serzh Sargsian and Azerbaijani President Ilham Aliyev into the conference room. It was June 25, 2011 – 23 years after fighting between ethnic Armenian separatists and Azerbaijani forces began in the waning years of the Soviet Union – and expectations soared that parties would take their first substantial steps toward a peaceful resolution of the Nagorno-Karabakh conflict. But a few hours later, the delegates re-emerged with no agreement. The conflict drags on, unresolved, as do similar conflicts in Moldova and Georgia.

As the Soviet Union disintegrated from 1989 to 1992, several small wars broke out among ethnic minority populations demanding independence from states newly independent of Moscow. Some historians have noted that no large empire had ever broken up with as little bloodshed as the USSR, but in these hot spots, there was more than a little bloodshed. Professor Charles King of Georgetown University in Washington, D.C., dubbed the conflicts “the war of Soviet succession.”



In addition to Nagorno-Karabakh, Moldova's region of Transnistria and two Georgian provinces, Abkhazia and South Ossetia, remain locked in a state of "frozen conflict" with the post-Soviet countries under whose nominal sovereignty they fall. To most of the world, Nagorno-Karabakh, Transnistria, Abkhazia and South Ossetia remain recognized territories of Azerbaijan, Moldova and Georgia, respectively. But each has declared its independence and established de-facto elected governments, though all remain at least partially dependent on support from foreign sources, mostly Russia. "The existing status quo of 'no peace, no war' permits the consolidation of the separatist regimes, encouraging their transformation into effectively independent state-like structures," says Cescav Ciobanu, a former Moldovan deputy foreign minister, who acted as an envoy for former Soviet leader Mikhail Gorbachev in the early days of the Transnistria and Nagorno-Karabakh conflicts.

Weak governments and corruption have allowed traffickers of weapons, drugs and humans to make safe havens in parts of these separatist territories. In 2008, Yulia Latynina, a columnist for Russian newspaper *Novaya Gazeta* noted: "South Ossetia is not a territory, not a country, not a regime. It is a joint venture of *siloviki* [slang for Russian security services] generals and Ossetian bandits for making money in a conflict with Georgia." The territories will continue to be more vulnerable to organized crime activities until the conflicts are settled, allowing for the establishment of international security standards and governance based on the rule of law.

Joseph Stalin: Map-maker

All of the conflicts are rooted in Soviet nationalities policy from the Stalin era. Artificial borders were drawn, splitting ethnic groups and combining some with others. In some cases, entire ethnic populations were forcibly transferred to Siberia or Central Asia and not allowed to return until Nikita Khrushchev overturned the deportation orders following Stalin's death. The policy was meant to weaken nationalist and ethnic ties and foster loyalty to the multinational Soviet state. Mikhail Gorbachev's *perestroika* and *glasnost* reforms merely broke the seal on long existing conflicts without creating the means to resolve them peacefully. In addition to these frozen conflicts, Soviet era border drawing is responsible for tensions between Russia and Ukraine over the Crimean Peninsula and part of eastern Ukraine, and the nationalities policy also led to separatist conflicts within the Russian Federation's North Caucasus republics.

Russia helped negotiate the cease-fires and deployed "peacekeeping" troops to Transnistria, Abkhazia and South Ossetia in 1992-93, though Moldova and Georgia have long considered their presence an occupation of their sovereign territory. Russia still holds the key to peaceful resolution of the conflicts, even if unable to

enforce resolution. The separatist regimes in Transnistria, Abkhazia and South Ossetia rely heavily on Russian economic and military support. Armenia fills this role for Nagorno-Karabakh, but relies heavily itself on its military alliance with Russia as a deterrent to a renewal of hostilities by Azerbaijan. The cease-fires have held, but there has been scant progress towards resolving the conflicts. As Dmitri Trenin, director of Carnegie Moscow Center, wrote in his book *Post-Imperium*: "With regard to Transnistria, as in the case of Georgia and in Ukraine ... Moscow was using the frozen conflicts as obstacles to NATO enlargement (for Georgia and Ukraine) or absorption by a NATO country (Romania, in the case of Moldova)." In the meantime, entrenched interests and nationalist sentiment have hardened on all sides, making even peace negotiations politically risky at times, and the separatist regimes are increasingly reluctant to surrender their growing independence, even to their patrons in Moscow.

Nagorno-Karabakh

The Nagorno-Karabakh conflict was the first, the longest and the bloodiest of the ethnic/separatist conflicts of the Soviet break-up, with an estimated death toll ranging from 15,000 to 30,000, depending on the source, and hundreds of thousands more displaced. The region's predominantly Armenian population demanded unification with Armenia and armed conflict began in 1988 – three years before the USSR's final death throes – when the region's parliament voted to secede from Azerbaijan. Soviet authorities struggled to contain the fighting, and when Azerbaijan became independent with the breakup of the Soviet Union in 1991, Nagorno-Karabakh declared its independence. In an interview with Russian news agency RIA Novosti, Armenian President Sargsian opined that the outbreak of hostilities in Nagorno-Karabakh triggered the disintegration of the Soviet Union, even if it wasn't the cause.

The conflict escalated as both sides acquired heavy weapons from Soviet army depots. By mid-1993, Armenian and Karabakh forces had driven Azeri forces out of Nagorno-Karabakh and all or parts of seven adjacent Azeri districts, creating a buffer zone linking Karabakh to Armenia. Russia brokered a cease-fire in 1994. It has held, though there have been frequent and deadly cease-fire violations by both sides over the years.

Attempts to establish lasting peace have been led by the Organization for Security and Co-operation in Europe's (OSCE) Minsk Group, co-chaired by France, Russia and the United States, but have so far failed. Nagorno-Karabakh says it wants to maintain de-facto independence, but most ethnic Armenians in Nagorno-Karabakh and Armenia proper hope for eventual unification. Azerbaijan won't offer more than autonomy. Ciobanu noted that in 1987, before fighting began, both sides were open to a territorial exchange that could have headed off conflict. But Soviet

Four Post-Soviet Frozen Conflicts

Population

Moldova	3.56 million*
Transnistria.....	523,000**
Georgia	4.49 million*
Abkhazia	216,000**
South Ossetia	70,000**
Azerbaijan.....	9.02 million*
Nagorno-Karabakh....	145,000**
Armenia	3.1 million*

*2011 World Bank estimate

**2011 UNHCR Freedom in the World Report

Moldova, Georgia and Azerbaijan population estimates are without breakaway territories.



Contested Area

PER CONCORDIAM ILLUSTRATION



authorities refused to consider any change of republic borders, seeing it as pandering to nationalism, which they feared would lead to the disintegration of the Soviet Union.

Early 2012 saw an escalation in deadly cease-fire violations along the “line of contact” and Azerbaijan has been spending heavily from its newfound energy wealth to upgrade its military. Periodic aggressive statements out of Baku do little to reassure, as demonstrated by the June 2012 claim of Azerbaijani Deputy Prime Minister Ali Gasanov that the armed forces “are ready to clear Nagorno-Karabakh of its ‘Armenian occupiers’ anytime.”

The failure of the Kazan peace initiative, where Azerbaijan declined to sign even a prearranged agreement forswearing the use of force, worries international observers. Lawrence Sheets of the International Crisis Group says the status quo is not an option and the opposing forces will need to reach a compromise or face “more intense violence, raising the danger of dragging in regional heavyweights” Russia, Turkey and Iran. Armenian and Azerbaijani foreign ministers met again in June 2012, under the auspices of the Minsk Group, but agreed only to keep negotiating.

Transnistria

The territory of Transnistria occupies a thin, 100-kilometer-long strip of land that runs along the left bank of the

Dniester River, separating it from the rest of Moldova. Transnistria literally means “land across the Dniester.” The region declared independence from Moldova in 1990 in response to increased Moldovan nationalism and fears by the primarily Russian and Ukrainian inhabitants that ethnic Romanian Moldova would break from the Soviet Union and reunite with Romania, from which it was separated by the Soviets following World War II. Transnistria, previously part of Ukraine, was attached to the post-war Moldovan Soviet Socialist Republic.

Small scale fighting broke out in 1991 when local militias seized control of state institutions and escalated when the newly formed Moldovan army tried to retake control by force in 1992. Soviet troops stationed in the region intervened and quickly ended the fighting, solidifying the position of the separatists. Russian troops continue to enforce a demilitarized buffer zone. The death toll was light compared to other conflicts, with 300 to 700 people killed.

Despite the ethnic aspect of the separation, Ciobanu said Transnistria is unique among the frozen conflicts, as it “from the very beginning was of a political and not of an ethnic character.” Economics was the primary reason Moldovan leaders couldn’t bear to part with Transnistria. The region was highly industrialized during the Soviet era, and accounted for a huge part of Moldova’s economy. The separatists’ primary motivation was to remain within the



Soviet Union. Transnistria has remained so firmly rooted in Soviet identity that it has been referred to as an open-air museum of the Soviet Union. Soviet history and geography are taught in its schools and the national flag and symbols still bear the hammer and sickle.

Resolution of the Transnistria conflict has been painstaking. In April 2012, both sides agreed to “principles and procedures” for further negotiations, scheduled for July at the next regular OSCE meeting. The talks are under the auspices of the “5 + 2 Group,” consisting of Moldova, Transnistria, Russia, Ukraine and the OSCE, with the U.S. and European Union as observers. Progress may be attributed to the election of pro-European reformer Vlad Filat as prime minister of Moldova and the December 2011 election of reformer Yevgeny Shevchuk as president of Transnistria, replacing the 20-year, Soviet-style rule of Igor Smirnov, though Shevchuk remains a strong supporter of Transnistrian independence and close integration with Russia.

In contrast to Nagorno-Karabakh, the Transnistria conflict has fewer flashpoints. While there have been minor confrontations, and each side still controls territory claimed by the other, these have not escalated into violence. As Moldova looks to move toward greater European integration, the recent progress may eventually result in a peaceful resolution.

Abkhazia

Fighting began in Abkhazia in 1992 following the breakup of the Soviet Union. Abkhazia had not voted for independence yet, and the majority of its population at the time was ethnic Georgians, but the Abkhaz and Russian population was increasingly vociferous about breaking away from Georgia. Georgia’s newly independent – and nationalistic – government sent security forces to establish their authority. After heavy fighting, Georgian forces were driven from the region by the end of 1993. The fighting cost an estimated 10,000 to 15,000 lives. A formal declaration of independence came in 1999. The conflict remained frozen, with frequent contact between the parties and an agreement forswearing the use of force, until the Russia-Georgia war of August 2008, when Abkhaz forces, backed by Russia, took advantage of the conflict over South Ossetia to push remaining Georgian forces out of Abkhazia.

Georgia’s historical claims on Abkhazia are based on Abkhazia having been part of an ancient Georgian kingdom, and more recently, Abkhazia’s inclusion in the short-lived Georgian Democratic Republic (1918-1921) before it was conquered by the Bolsheviks. Georgia has offered Abkhazia wide autonomy in a unified federal state, but the Abkhaz insist on maintaining de-facto independence. In June 2012, Abkhazia accused Georgia of instigating “terrorist activities” inside Abkhazia.

A commission counts ballots for Abkhazia's presidential elections in Machara in August 2011. Georgia considers the election illegitimate.

AFP/GETTY IMAGES





Georgian soldiers hold flags honoring colleagues who died fighting in South Ossetia.

EPA

Russia recognized Abkhaz independence following the 2008 war and maintains military peacekeepers in the region, as well as providing extensive economic support. Like in Transnistria and South Ossetia, Russia attempts to influence the politics and lobbies strongly for its favored politicians. However, unlike the other regions, Abkhazia has resisted too much Russian interference as a violation of sovereignty. Given the recent hostilities and Abkhazia's determination to remain independent, most observers see little chance of Abkhaz reintegration into Georgia in the near future.

South Ossetia

The first ethnic violence in South Ossetia broke out in 1989 as Georgians, angry that South Ossetia had asked the Soviet government to change its status to a Soviet Republic separate from Georgia, clashed with Ossetian nationalists. The violence escalated in 1991 and continued for a year until a cease-fire was signed by Russian President Boris Yeltsin and Georgian President Eduard Shevardnadze after the deaths of more than 1,000. In 1992, South Ossetia voted to secede from Georgia and requested integration into the Russian Federation and union with the Russian republic of North Ossetia. The cease-fire generally held until 2004, when hostilities erupted briefly after new Georgian President Mikheil Saakashvili undermined the South Ossetian de-facto government in an attempt to force resolution of the conflict and bring the province back into Georgia. A new cease-fire ended the fighting, which generally held until the Russia-Georgia war of 2008.

This frozen conflict flared up most recently when Georgian forces entered South Ossetia in August 2008. Russia responded quickly and forcefully, driving the Georgians from the province and even threatening the Georgian capital, Tbilisi. Georgia claimed it took action to thwart attacks against their forces by South Ossetian militia, but these claims were judged to be unsubstantiated by an international commission assigned by the Council of Europe. Several hundred Georgians, Ossetians and Russian soldiers were killed in the five-day war.

As with Abkhazia, Russia (and four other states) recognized South Ossetia as an independent nation

following the war. Russia has deployed a large peacekeeping force and allocated millions of euros for rebuilding and economic development. Russia has substantial political influence, and most South Ossetians favor eventual integration into Russia.

The price of peace

More than 20 years after the breakup of the Soviet Union, these four conflicts remain unresolved and all could erupt into armed conflict, as the 2008 war in South Ossetia demonstrated. Some of the regions are more stable than others. Transnistria and Moldova, for example, appear to be making real progress toward peace. Alternately, trenches full of soldiers surround Nagorno-Karabakh, and sporadic but frequent clashes could explode into outright war. Continuation of frozen conflicts hampers regional development, trade and economic growth, making losers of all parties.

Russia has always been best positioned to help resolve the conflicts peacefully. However, some accuse Russia of encouraging and supporting separatists for geopolitical gain, especially in Georgia and Moldova. Russia's position is complicated by its own running separatist conflicts in the North Caucasus. International observers wonder how Russia can support independence for Abkhazia or Transnistria if the same principles don't apply to Chechnya or Dagestan.

The international community has maintained a policy of territorial integrity, but also adheres to the democratic principle of self-determination. In these breakaway provinces, these two important principles of international law don't always mesh, especially when borders were drawn by a totalitarian state as part of a "divide and rule" philosophy. To find peace, regional leaders and international facilitators, including the EU, Russia and the U.S., will need to compromise to find a balance acceptable to all parties. As Albert Einstein once said: "Peace cannot be kept by force; it can only be achieved by understanding." □

The topic of frozen conflicts was previously addressed in per Concordiam Vol. 1 Issue 2.



MASTER SGT. SCOTT WAGERS/US AIR FORCE

Adopting “Smart Defense”

The Balkans must come together to reduce the cost and boost the effectiveness of military and security forces

By Dr. Leonard Demi, chairman of the National Security Committee, Albanian Parliament, and Col. (ret.) Thimi Hudhra, chief of the Center for Defence Analysis of Albania

The origin of the “smart defense” concept is linked with the preparation of the NATO New Strategic Concept of Lisbon, November 2010. NATO Secretary-General Anders Fogh Rasmussen, advised by the “Wise Men Group” led by Madeleine Albright, supported a substantial change in the way the Alliance does business. He further elaborated his vision in a speech at the European Policy Centre in Brussels on September 30, 2011:

“I know that in an age of austerity, we cannot spend more. But neither should we spend less. So the answer is to spend better. And to get better value for money. To help

nations to preserve capabilities and to deliver new ones. This means we must prioritize, we must specialize, and we must seek multinational solutions. Taken together, this is what I call Smart Defense.”

Later, smart defense was one of four key topics on the agenda of the NATO summit of May 2012. The Chicago Summit opened a new way for the practical implementation of the concept. Allied Command for Transformation (ACT) was tasked to provide ways and approaches for a smart defense in this summit. Prioritize, specialize and provide multinational solutions on collective defense:

Multinational airmen take part in a ceremony to inaugurate the joint Heavy Airlift Wing initiative in Pápa, Hungary. Twelve nations operate C-17 transport planes in support of NATO, the EU and the UN.

Those were the three key points for discussions before, during and after the Chicago Summit.

Perceptions vary about smart defense. Some proponents are ambitious; others are skeptical. Some say it might be important for NATO as a whole, others say it is relevant only for big NATO countries, while still others say it might be effective for all allied countries, whatever their size. The authors of this article are aligned with the third group.

In the Balkan region, frankly speaking, smart defense is in its early stage. The region can offer very few “smart” examples at a regional level. Other countries have already developed several tools of smart cooperation, such as the France-UK Cooperation, the Baltic Experience, the Visegrád Group country cooperation, the battle groups, the NATO Centres of Excellence and other best practices. This article is particularly focused on how to apply smart defense to the Balkans, especially the community of A5 Adriatic Charter countries.

The Balkans is a region of small countries with a total of about 550,000 square kilometers and a population of more than 50 million people. In our opinion, smart defense in our region may require a specific approach. We initiated regional cooperation with the Vilnius Group after the Washington summit. Later came the A3 Initiative with the U.S. in May 2003 involving three countries (Albania, Croatia and Macedonia). Since October 2008, our group has grown to five, together with Montenegro and Bosnia and Herzegovina. We expect to grow more. In this new regional framework, we should not act in isolation; we should wisely build our multinational and regional approaches in the interest of our peoples.

Based on this experience and others, the time is right to identify specific options for our countries – bilaterally, multilaterally and regionally. In this evolutionary effort, we have to overcome some historic barriers linked to the traditional development of security services and the armed forces and adopt new approaches based on the Lisbon Strategic Concept and Chicago messages.

Today and in the future, each country in the region will face budgetary pressure from which the defense budget cannot be excluded. There is an urgent need for new solutions. How does a country develop more capabilities with fewer financial resources? This is the smart question that requires smart answers.

National and regional approach

To be more practical, we have employed a “food for thought” approach below to some of the priority areas that we can use in connection with the application of smart defense in Albania and the Balkan region/A5 community.

In our opinion, we should further extend smart defense to a broader “smart security” agenda at the national and regional level. We believe security and defense are

interrelated topics that cannot be separated. This approach will better promote the armed forces as one of the instruments of national security and serve the taxpayers as well. Some key issues:

First, we need a smart defense at the national level. When building national capabilities, we should avoid parallel capabilities in the armed forces, police, information services, border control units, customs services, etc. We cannot develop a bit of everything everywhere – we need to prioritize. And under smart defense, we need to further prioritize. There are still duplications of national capabilities among security institutions covering tasks in land, air and maritime areas. Small countries of the region cannot afford to maintain or build national capabilities with the same mission in different national security institutions. There are many areas in which to employ dual-use technology, such as civil and military. Using the Pashaliman naval facility in Albania to build civilian and military ships can be one such area. Other areas are those related to maritime and airspace management systems, communication equipment, maintenance and logistic facilities, training and education institutions, and integrated procurement.

To promote the right capabilities for security and defense as a NATO country, Albania is currently conducting a Strategic Security and Defense Review (SSDR). We are working also to develop a new Security and Military Strategy, which will consider elements of the smart security and defense concept.

Second, smart defense is about development of the most critical capabilities through elimination of surpluses, obsolete capabilities or units of low frequency use. The concept of usability is a primary test for future forces. Again, we cannot afford to develop and maintain military units that belong to the past and do not rise to existing or expected security requirements. SSDR is the right tool to identify the surpluses and shortages of smart defense.

As Secretary Rasmussen rightly argues: “Our guiding principle should be to cut fat, and build up muscle. Rather than spending on fixed infrastructure and soldiers, who are essentially stuck in their barracks, we should redirect our investments towards more flexible, mobile and modern armed forces – armed forces that we can actually use, against the challenges we actually face.”¹

Third, we need the development of a smart defense concept at the regional level. Together we should build a new mentality for better cooperation in the area of joint and common capabilities needed to face common threats and risks to the region. In the emerging security situation, no country in the region can develop all of the capabilities required to deal with the full spectrum of threats we face today and tomorrow. Where necessary, regionalization of some defense capabilities, based on NATO standards, is a smarter choice. The best security is shared security, Rasmussen said.²

Fourth, we need smart defense for the development of collective defense capabilities of the NATO Defence Planning Process. This smart defense has to do with the implementation of the Capability Targets or Partnership Targets package of our countries. Capability Targets/Partnership Targets are an important area for cooperation. NATO is in the transition phase of the New Defense Planning Process, and we should take advantage of this period to develop the capabilities we need for Article 5 or Non-Article 5 contributions. To build more and spend less, we can develop a regional framework for the development of specific Capability Targets/Partnership Targets. As ACT Commander, General Stéphane Abrial said: “I do believe that by working together we can achieve surprising results. We all know the old maxim that necessity is the mother of invention. I also subscribe to the belief that financial adversity can also be the mother of invention or of new ways to achieve the most from what we have available.”³

For the successful implementation of a smart defense, the Alliance will strive to act as the “honest broker and ... facilitator,” enabling nations to work better, more effectively and efficiently together.⁴ And, as a centerpiece of NATO’s smart defense initiative, ACT presented a platform for multinational collaborations at the Chicago Summit, with a final report with more than 150 ideas, a dozen of which are already in place, especially in the maintenance, logistics, and training and education fields.

Development of the concept of a “Single Set of Forces” for NATO Force Structure, such as the SEEBRIG type or EU Battlegroups (especially the Balkan Battlegroup) and UN Pool of Forces is a rational type of smart defense for the countries of the region. We cannot afford the development of specific forces/capabilities for each international

organization. Furthermore, all forces assigned for international operations should be available any time to support national operations as well.

Fifth, we need a smart defense with regard to joint participation in NATO, European Union, UN or coalition led missions. Joint participation in NATO led operations, based on the experience of A3 countries’ medical teams and the current POMLT case in International Security Assistance Force, is a good example of how much better and cheaper joint operations are than going it alone. This is an area of great interest.

Sixth, we need a smart defense with special focus on the development of specialized niche capabilities. All of our countries have traditional units and specialties, for which NATO is in real need. Today, NATO and the EU need not mechanized nor motorized battalions from our countries, but EOD, C-IED, MP, OMLT, POMLT, CIMIC, PRT teams and other small specialized capabilities that smaller nations can better provide.

Seventh, we need a smarter defense with regard to civil emergencies. Civil emergencies should be the primary area for cooperation and development of joint capabilities. Albania had a flooding crisis in December 2010 and received help from other countries in the region. We are committed to do the same, and we should continue this approach of helping each other when in need.

Eighth, we need a smart defense through applying a “pooling and sharing” approach at the bilateral, multinational and regional level, where possible. Pooling and sharing could be a better way to develop capabilities that exceed the possibilities of our individual nations, such as a regional airspace management or regional air policing system. Also, our countries are not able to develop strategic airlift, reconnaissance or other highly expensive capabilities, but we can work on alternative approaches based at the national, regional or collective level.

Ninth, we need a smart defense in support of education and training, infrastructure and maintenance. There is a large area of research on how to use our precious available resources effectively at the local or regional level. Pooling and sharing some of the national training and educational institutions, where necessary, is an efficient tool to help unify regional armed forces and save considerable money. The efforts made so far in this area are to be appreciated, but the renewed promotion of a regional cooperation framework on training and education capabilities under the smart defense concept is worthy of support. Among other capabilities, Albania has made available a Senior Regional Course on Security and Defense, and it has been successful so far.

Pooling and sharing can be further extended when building and using the capabilities of existing and future regional centers of excellence or facilities for training and exercises in individual countries. Albania is working to finish the Biza Training Center that can be used by countries in the region and beyond. We appreciate the capabilities provided by other regional countries in this direction. This is a very important area to be further explored our regional experts.



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U.S. President Barack Obama stands with NATO Secretary-General Anders Fogh Rasmussen, right, and Albanian Prime Minister Sali Berisha at the NATO Summit in Chicago in May 2012.



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Using infrastructure, maintenance and logistics capabilities of countries in the region, or at a multinational level, is an area of smart cooperation deserving further exploration. For example, for a small region such as the Balkans, instead of having separate capabilities in all countries, we can share excess ammunition destruction sites, repair and maintenance factories, shipbuilding and shipyard facilities and many other services. Communication is another area of interest to promote interoperability of our forces, provided the appropriate legal arrangements are made.

Tenth, but not least, smart defense will not be complete without a research and development element. We cannot find smart solutions without research and development in our defense institutions. Smart solutions require smart people and smart institutions based on knowledge and innovation. The Albanian Ministry of Defense is using the full intellectual potential of the Defense Academy and the Center for Defense Analyses to bring smart defense solutions to the national and international security agenda. In our opinion, research and development in the security and defense area should become a new item on the region's agenda for cooperation.

Conclusions

We identified 10 ideas to facilitate initiation of a smart defense approach in our region. Of course, there may be many others to explore. They should be discussed at roundtables based on a top-down or bottom-up approach, depending on the situation. After Chicago, the way ahead is open for debates and discussions for the good of our countries, which we should be open-minded and promote.

Small countries like those in the Balkans cannot develop all required capabilities on their own. Being flexible and

Albanian commandos gather at Tirana Airport before leaving on a peacekeeping mission to Chad in 2008. Multinational missions are a way for European nations to avoid duplication of resources.

pragmatic, rather than conformist and traditional, is part of a smart defense. A new vision should be developed, a new mentality articulated, and a new era of cooperation initiated. Capabilities unaffordable at a national level can be developed together. The successful approach of the Baltic countries is a good example to follow.

Smart defense may require short-, mid- and long-term solutions. It depends on using existing capabilities and building new ones. As concerns existing capabilities, smart defense requires only their identification and common use. But building new capabilities requires an initial common vision and good will, followed by short-, mid- and long-term planning and ultimately implementation.

Application of smart defense requires, first of all, strong political will at the national and regional level. It will require new legal arrangements from all countries, either current or aspiring NATO and EU members. The new changes should be reflected in the national security and military strategies of our countries. Security and defense can no longer be viewed in isolation. We have common challenges and regional and transnational risks and threats that must be managed through regional approaches, capabilities and solutions. □

The ideas in this article are those of the authors and do not necessarily represent the positions of the institutions to which they belong.

1. Secretary Rasmussen, Munich Security Conference, 4-6 February 2011.
2. Secretary Rasmussen, speech at the European Policy Centre in Brussels, 30 September 2011.
3. General Stéphane Abrial, ACT Commander Speech at Defense Ministerial meeting in Brussels, 5-6 October 2011.
4. ACT Industry Newsletter, August 2011, Issue 4.



CULTURE

S H A P E S S E C U R I T Y

A broad knowledge of the values and traditions
of other societies can help promote peace

By K. Ashequl Haque, Bangladesh, Marshall Center alumnus

Culture within the context of security studies has been discussed and debated since classical antiquity (Baylis, Wirtz, & Gray, 2010, p. 86), but often the influence of culture in matters of security has been underappreciated. The culture of a nation shapes its strategy. Just as culture orients and influences individual citizens, in the same manner culture orients the views of a nation, influences judgments and prescribes the actions to pursue. Security professionals, be they members of the local police force, the military, the intelligence community or in ministries of government such as interior or defense, can benefit from utilizing cultural knowledge and incorporating a cultural approach towards a range of security challenges faced today. Those challenges include the Arab Spring, global environmental degradation, Iraq and Afghanistan, and activities of violent extremist organizations.

THE IMPORTANCE OF CULTURAL KNOWLEDGE

Culture has various meanings and manifestations. Culture is complex and dynamic, is cognitive and tangible, has power to influence, and can be produced and consumed. A definition of culture used widely by academia was provided by the late anthropologist Clifford Geertz. According to Geertz, culture is “a historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic form by means of which men communicate, perpetuate, and develop their knowledge about and attitude towards life” (Baylis, Wirtz, & Gray, 2010, p. 86). Described in this way, culture grows and spreads over time, has specific contents associated with it, and leads to emotional and cognitive actions among its followers.

A view of the Qal'a-e Ikhtiyar al-Din palace in Herat, Afghanistan. Germany and the United States donated \$2.4 million to reconstruct this symbol of Afghan culture that dates back to 330 B.C. and Alexander the Great.

AGENCE FRANCE-PRESSE





Afghan women leave the Kart-e-Sakhi shrine in Kabul. Culture can be expressed through religion, dress, music, sports or other customs.

In the world today, cultural knowledge should mean knowledge related to all aspects of culture, not confined only to “the arts.” Cultural knowledge is not only cultural competence, or an understanding of customs and practices at selected social settings, but a broader understanding of the various meanings and manifestations of culture. Cultural knowledge is very important because culture orients human beings, gives them identities and influences their interactions. Responsible use of cultural knowledge can provide advantages to decision makers managing the multidimensional security challenges of the modern world.

SECURITY IN THE WORLD TODAY

Like culture, security is also both physical and metaphysical, and has a broad meaning. Professor Paul Williams argues that “security is most commonly associated with the alleviation of threats to cherished values; especially those which, if left unchecked, threaten the survival of a particular referent object in the near future” (Williams P. D., 2008, p. 5). In today’s world, security comprises a broad range of issues that includes the classical international struggle for power and matters of war and peace, but also the modern concepts of human security. While describing modern day security issues, professor Barry Buzan notes that “in today’s world the national security problem needs to be seen in terms of a general systemic security problem in which individuals, states, and the system all play a part, and in which economic, societal, and environmental factors can be as important as political and military ones” (Sheehan, 2005, pp. 46-47). Security is also a state of mind, a belief, an assurance of

the preservation of the self. It is a social idea. As professor Michael Sheehan points out: “‘Security’ is a socially constructed concept. It has a specific meaning only within a particular social context” (Sheehan, 2005, p. 43).

LINKING CULTURE AND SECURITY

The link between culture and security is a matter of debate. It is not always obvious that there is a link between them. Some may even say that other than security personnel ensuring safety at certain cultural events, there is no link. Professor Andrew Latham has a good observation: “The relationship between culture, identity and international security policy is far from obvious, and debate and terminological confusion are pervasive in both the theoretical and descriptive literatures” (Latham, 1999, p. 131). He’s joined by professor Michael Williams, who notes that “the apparent absence of a concern with culture and identity in traditional conceptions of security needs to be understood as the historical legacy of a conscious attempt to exclude identity concerns from the political realm” (Williams M. C., 2007, p. 10).

The relationship between culture and security from the constructivist paradigm of social science is echoed in the seminal work of Alexander Wendt. Wendt’s discussion on this topic revolves around the concept of “identity.” He describes identity as a “relatively stable, role specific understanding and expectation, about self,” and adds that “actors acquire identities by participating in collective meanings” (Wendt, 1992, p. 397). Sanjoy Banerjee quotes the work of Geertz: “Constructivism views culture as an evolving system of shared meanings that govern perceptions, communications, and



Gen. David Petraeus, center, former commander of the NATO International Security Assistance Force, meets with Afghan special forces troops in Kunar province in eastern Afghanistan in 2011. Petraeus is a strong voice for the importance of cultural knowledge in military operations.

action” (Banerjee, 1997, p. 29). From these two hypotheses one can argue that culture is a shared, collective meaning that gives actors their identities.

Wendt suggests that what actors do is influenced by the identities they take. He writes: “Identities are the basis of interests. Actors do not have a ‘portfolio’ of interests that they carry around independent of social context; instead, they define their interests in the process of defining situations” (Wendt, 1992, p. 398). Banerjee argues that our cultural knowledge informs an event or situation and makes us assess the situation. In a specific situation, culture dictates the expected actions, norms and behaviors to pursue:

“I treat culture as a grammar, as an evolving fund of semantic elements that can be combined in certain ways and not others to define situations, motivate and plan actions, or release emotions. Culture shapes practice in both the short and long term. At the moment of action, culture provides the elements and grammar that define the situation, that reveal motives, and that set forth a strategy for success. If the strategy is successful, that strategy is repeated in similar situations with similar motives. The perception of similarity or situations and motives is a product of the culture. Over historical time, culture distributed among many agents animates and coordinates interdependent practices. Cultures and practices reproduce together” (Banerjee, 1997, p. 29).

Culture characterizes a social group. These characteristics give the group its unique identity. By being a member of a group, an individual adheres to that group’s culture, which in turn becomes a part of the identity of that individual. One individual can have several identities at the same time. And for each of those identities, there is a corresponding culture that guides and governs that identity. Since these identities guide us in interpreting situations and in making decisions as individuals, an amalgamation of all those individual decisions along with the guidelines of national culture, and the strategic, military, and political culture of the state, make the security policies and decisions of that state. On a national or international level, the culture of a country influences the strategy it will adopt. On an individual level, the culture of a person influences the decisions he or she will make.

Professor K.R. Krause looks at three distinct types of culture of a country – diplomatic, political and strategic – and argues that these “various cultural influences could play a role in determining state policies towards security building” (Krause, 1999, p. 14). He explains security culture as “enduring and widely-shared beliefs, traditions, attitudes, and symbols that inform the ways in which a state’s/society’s interests and values with respect to security, stability and peace are perceived, articulated and advanced” (Krause, 1999, p. 15).

Latham elaborately describes this same point in his book:

“It is assumed that security culture (as a sub-set of political, diplomatic, and strategic culture) consists of widely held systems of meaning, expressive symbols, self-understandings and values that inform the way in which a state’s interest with respect to security, stability and peace are constructed and articulated. Security culture also defines a range of appropriate or acceptable behaviors; provides a corpus of widely shared but often tacit social conventions regarding approaches to security building; generates a set of inter-subjective constraints which limit consideration of alternative behaviors to less than the full range of possible options; establishes norms of diplomacy and statecraft; and defines problems and their solutions in ways that might seem irrational, counter-productive or simply cynical to observers from other societies. Understood in this way, it is clear that security culture can be expected to exercise a powerful influence on a state’s non-proliferation, arms control and disarmaments policies and practices” (Latham, 1999, p. 132).

THE IMPORTANCE OF CULTURE FOR SECURITY PROFESSIONALS

Even though culture is very important in our lives and culture means a lot of things, traditionally the realm of culture has been different than the realm of security. Although there have been great kings and emperors who promoted both culture and military conquest during their reigns, security professionals and cultural professionals were traditionally very different kinds of people exhibiting a lot of suspicion towards one another.

But that is just one way of looking at culture, because culture is more than the arts; it is beliefs, customs, rituals and practices. Looked at from this angle, there ought not to be a confrontational or suspicious relationship between the two groups. In fact, security professionals can benefit from understanding culture and by acquiring cultural knowledge.

Baylis, Wirtz, and Gray discuss the use of a cultural analysis to address security problems of the current world:

“Many consider that culture has a profound impact on strategic decision-making, and in recent years there has been renewed academic and policy interest in exploring its role in international security. Scholars and practitioners have begun to study issues like democratic consolidation in Iraq, European security cooperation, the United States’ relations with countries such as China, Russia, and Iran, counter-terrorism policies and weapons of mass destruction (WMD) proliferation through the lens of strategic culture” (Baylis, Wirtz, & Gray, 2010, p. 85).

Understanding culture is important for security professionals, especially strategists and policymakers, because cultural analysis provides a deeper understanding of the beliefs, values, motivations and practices of another nation. As Latham points out, “in addition to ‘explaining why particular decisions resulting in a specific course of action were made,’ we need to pay close attention to understanding ‘how the subjects, objects, and interpretative dispositions

were socially constructed such that certain practices were made possible’ ” (Latham, 1999, p. 131).

Michael Williams adds to this argument by observing that “rationalism and materialism are cultural practices, practices with the question of identity and the politics of security at their very core” (Williams M. C., 2007, p. 10). Baylis, Wirtz, and Gray add that “all cultures condition their members to think certain ways, while at the same time providing preset responses to given situations. Thus culture bounds our perceptions and the range of options we have for responding to events” (Baylis, Wirtz, & Gray, 2010, p. 85).

In the traditional military defense of a country, culture plays an important role in understanding the other side, and in comprehending the methods the other side may employ. Jing-Dong Yuan observes that:

“Strategic culture as a ‘system of symbols’ reflects a state’s views on war and peace, threat perceptions, assumptions about the nature of the enemy/conflicts, and about the efficacy of the use of violence/force in resolving inter-state conflicts. It draws on accumulated historical, social and cultural experiences and informs the ways in which ‘a state’s/ society’s interest and values, with respect to security, stability and peace, are perceived, articulated and advanced by political actors and elites.’ More narrowly, strategic culture can be regarded as a ‘set of attitudes and beliefs held within a military establishment concerning the political objective of war and the most effective strategy and operational method of achieving it’ ” (Yuan, 1999, p. 87).

AN OLD CONCEPT FOR NEW TIMES

The concept of culture shaping security strategy or policy of a country is not a new one. According to Baylis, Wirtz, and Gray, “The idea that culture could influence strategic outcomes was first captured in classic works, including the writings of Thucydides and Sun Tzu. In the nineteenth century, Prussian military strategist Carl von Clausewitz developed this idea by identifying war and war-fighting strategy as ‘a test of moral and physical force’ ” (Baylis, Wirtz, & Gray, 2010, p. 86). It can also be argued that Sun Tzu had advised strategists and military leaders to analyze the culture of the opponent through his famous advice of “know your enemy.” Scholars showed that in the 20th century the strategic cultures of the United States, China, Japan, the Nordic countries, Germany, Russia, and India have influenced and shaped their respective security policies (Baylis, Wirtz, & Gray, 2010, pp. 93-94).

Sheila Jager and Jiyul Kim of the U.S. Army War College argue extensively about the importance of cultural knowledge in the battlefields of the 21st century (Jager, 2007) & (Kim, 2009). Jager writes: “The wide-spread recognition of the need for cultural knowledge in counterinsurgency has been noted and actively promoted recently by the [U.S.] Department of Defense (DOD)” (Jager, 2007, p. v). She continues: “Faced with a brutal civil war and insurgency in Iraq, the many complex political and social issues confronted by U.S. military commanders on the ground

have given rise to a new awareness that a cultural understanding of an adversary society is imperative if counterinsurgency is to succeed" (Jager, 2007, p. 1).

Jager suggests that the U.S. military needs three types of cultural knowledge – cultural knowledge for strategy; cultural knowledge for operations and tactics; and cultural knowledge for national strategy and policy (Jager, 2007, pp. 5, 9, and 19). She argues that the practical application type of empirical cultural knowledge needed for operations and tactics on the ground is different from the abstract notions of cultural knowledge needed for an overarching strategy and policy, but maintains that even though the three forms of cultural knowledge are distinct, they are all interrelated and complementary (Jager, 2007, p. 4).

Jager states that Gen. David Petraeus, former commanding general of the Multi-National Forces-Iraq and ISAF, was at the vanguard of the effort to increase cultural knowledge in the military and quotes him on its importance:

"Knowledge of the cultural terrain can be as important as, and sometimes even more important than, the knowledge of the geographical terrain. This observation acknowledges that the people are, in many respects, the decisive terrain, and that we must study that terrain in the same way that we have always studied the geographical terrain" (Jager, 2007, p. 1).

Jager's arguments and Petraeus' comment provide an important insight into the changes taking place inside the U.S. defense establishment towards an increasing awareness of cultural knowledge.

The deeper understanding of "the other" that cultural knowledge provides can be the essential element for victory in modern day warfare. Indeed, enhanced cultural knowledge can assist not just individual soldiers on the ground but strategists at headquarters. For soldiers on the ground, knowing the culture of the population they are working in increases the possibility of winning the ever-so-popular concept of "hearts and minds." Banerjee suggests that "[i]t is through culture that anything we might call 'interests' is constructed" (Banerjee, 1997, p. 29). With cultural knowledge soldiers can harness the opportunities provided by this understanding of the interests of "the other" and thus benefit on the battlefield. For strategists, understanding the strategic culture of "the other" can enhance the capabilities to predict their opponents' behavior. This argument is echoed in the observation of Baylis, Wirtz, and Gray, who point out that "strategic culture is the 'ideational milieu that limits behavioral choices,' from which 'one could derive specific predictions about strategic choice'" (Baylis, Wirtz, & Gray, 2010, p. 88).

BUILDING TRUST THROUGH KNOWLEDGE

Cultural knowledge is especially important in trust building, be it in a hostile territory with an unsupportive population or among the allies and partners in planning meetings and discussions. Trust is increased when two parties find commonalities within their values, norms and practices. Alliances grow stronger with increased appreciation of the cultural traits allies share. Cultural knowledge assists people

in exploring these commonalities. In the 21st century, a time in which a global financial crisis is reducing the capabilities of countries to face many security challenges, increased trust and cooperation among allies and partners is critical.

Culture is a resource that generates products. After all, culture can be produced and culture is consumed (Yudice, 2003, pp. 9-25). The idea that culture can nurture and reinforce good things – desired values, norms, and practices – has both internal and international implications. Deeper understanding of culture can help in the counterterrorism, counterinsurgency, counterradicalization, and counterrecruitment efforts of states. Culture can be important in curbing extremism in society. Most importantly, it can be useful for increasing social cohesion, and thus in curbing the enabling environment for extremism that leads to terrorism. Within society, culture can be used for value generation or reinforcement of the cherished values of the society. Societies can reinforce all the desired and good things of a culture to make the society resilient to the unwanted narratives of the extremists.

Furthermore, culture is not always limited to geographical borders. Many aspects of a specific country's culture can travel across the globe and influence others. The international implications of culture in a globalized world are important. The performance of the New York Philharmonic in North Korea was not simply a generous gesture (Wakin, 2008). Cultural exchanges throughout history have influenced other societies and opened up pathways to change. Through the use of culture, similar values can be grown in other countries that can increase trust among those countries and decrease the threat of conflict. Michael Williams presents a hypothesis that argues that:

"Particular articulations of the relationships between culture and security have been and continue to be crucial forms of power in the production of security practices. Exemplified in claims that democracy and peace are inextricably connected, and in policies that seek to maintain, build and extend self-declared 'democratic security communities' such as NATO, these forms of power were essential to the construction of security relations in the aftermath of the Cold War, and continue to play important roles in security politics today" (Williams M. C., 2007, p. 2).

CONCLUSIONS

Culture is a complex, dynamic, and constantly changing concept that resides in both the metaphysical, cognitive domain and in the tangible, physical domain. Culture lives within human beings, and each person adheres to many cultures either simultaneously or contextually. As members of social structures, we all interact with the cultures of societies and are guided by them. In the same manner, a nation is guided and influenced by its culture.

Culture influences security by the virtue of its influence over people in generating values, in interpreting situations, in creating expectations of the other and in making decisions. As Sheehan quotes Peter Katzenstein: "Indeed,



Young Afghan musicians perform in February 2012 at the second annual Afghanistan Winter Music Academy in Kabul. The Afghanistan National Institute of Music revived with the fall of the Taliban, which banned the playing of instruments under its strict interpretation of Islam.

the construction of security generally is crucially influenced by national and regional culture, because these help shape the way actors understand security and the threats they believe exist, and also shape their particular responses to these understandings” (Sheehan, 2005, p. 7).

Cultural knowledge is essential among security professionals in the world today. They can benefit from this knowledge in tactics, operations and strategies in the field, and in national strategies at home. But a cultural approach to improve security for a group or country is not a magic bullet. It would not solve all the problems, and it should not be expected to do so. Not everyone or every situation will equally benefit from this approach. Still, it should be considered whenever security is a matter of concern. If nothing else, a cultural approach can help us better understand each other. □

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The author originally wrote this article as part of an Independent Research Project (IRP) while attending the Marshall Center's Program in Advanced Security Studies (PASS) in 2011.



Silvio Berlusconi Boahene, 5, holds a newspaper bearing a picture of former Italian Prime Minister Silvio Berlusconi in Modena, Italy, in 2010. Boahene's father, a Ghanaian metalworker, named his son after the prime minister in gratitude for the residency permit he received from Berlusconi's government.

THE ASSOCIATED PRESS

European Integration

By *per Concordiam* Staff

Jobs and citizenship are vital to improving opportunities for newcomers

Multitudes relocate to Europe every year to escape political oppression, pursue economic opportunity and flee war zones. But integrating many of these immigrants and refugees into Europe has been difficult, and Europeans express concern that uncontrolled migration could threaten their culture. This mood was reflected in recent speeches by former French President Nicolas Sarkozy, United Kingdom Prime Minister David Cameron and German Chancellor Angela Merkel, all of whom announced the failure of multiculturalism in their countries. Immigration has helped Europe in the past, and experts say it is needed again to supplement the continent's aging workforce. But the European Union is struggling to find the right policy that balances the economic needs of the EU without creating parallel societies of culturally autonomous immigrants.

The EU is developing a common migration policy that strives to provide a foundation for admitting immigrants. Work permits – including “Blue Cards” for vital foreign-born workers – are to be streamlined. Long-term residents of Europe would benefit from more lenient family reunification policies to allow them to take root in their new countries. Increasingly, the EU is stressing the need for language training and the enforcement of anti-discrimination policies. “Successful integration of migrants into the host society is essential to maximize the opportunities afforded by legal migration and to realize the potential that immigration has for EU development,” the European Union’s website announced in reference to the creation of a new immigration policy.

BENEFITS AND CONCERNS

After World War II, large numbers of workers immigrated to France, Belgium and Germany to respond to the economic boom and a manpower shortage caused by years of war. European governments viewed them as temporary guest workers, as did many of the migrants themselves. In the 1970s, when economic growth slowed, many guest workers lost their jobs. Though unemployed, many migrants did not return to their home countries but stayed in Europe. Western European governments responded by discouraging

recruitment of foreign labor. This policy had unexpected consequences. Fearful that the doors to Europe would close forever, migrants hurriedly brought extended family into Europe, exacerbating the issue of integration.

Family reunification changed the character of European immigration. Single workers didn’t worry as much about schooling, health care and place of worship, but families did. Some immigrants separated into ethnic pockets. For example, the Belgian cities of Ghent and Brussels are home to a large community of Turks from the single city of Emirdağ that, according to the *Middle East Quarterly*, live as they do “back home.” Bangladeshis settled in East London boroughs, and large populations of Pakistanis from Punjab and Kashmir call Bradford and Birmingham home. Countless emigrants from Pakistan, Vietnam and Iraq live in Norway. North Africans and Albanians cluster in Italy. Many of the recent arrivals are choosing to retain the customs of their home countries and not reintegrate. Much of their earnings leave the EU in the form of remittances.

Polish people look at a job message board outside a shop in west London. Following admittance to the European Union in 2004, an estimated 350,000 Polish immigrants have come to Great Britain in one of the largest waves of immigration in 300 years.

GETTY IMAGES



For emigrants from Turkey and North Africa, Europe's convenient proximity makes it an immigration hub for those unwilling to make more distant trips to North America or Australia. An estimated 25,000, mostly Tunisians, have migrated from Africa since the Arab Spring began. Approximately 6.5 percent of the EU population consists of foreigners, Eurostat reported in early 2011. And according to Pew Research, Muslims now constitute about 6 percent of Europe's population, up from 4.1 percent in the 1990s. Though that number is small, Europeans increasingly worry that imported customs are displacing traditional European culture. Germany's Friedrich Ebert Foundation think tank released survey results in October 2010 that found that "more than 30 percent believed Germany was 'overrun by foreigners,'" as reported by the BBC.

EMPLOYING NEWCOMERS

An additional criticism of immigrants – even those from other states in the EU – is that they drain government resources. A UK labor report showed that British immigrants suffered from higher unemployment rates than those native born and were less likely to participate in government. The report found that "27 percent of people coming from Bulgaria and Romania had 'low education levels,' while as of 2009, more than 15 percent of them were claiming out

of work benefits," *The Telegraph* reported in September 2011. Additionally, emigrants from Bulgaria and Romania have more children, which the British argue strains the educational system.

But Europe will still need millions of immigrants to help grow its increasingly complex economies, and the EU Blue Card is helping bring highly skilled workers into the bloc. "Economic migration, if correctly managed, could help the European Union face its demographic challenges and reach the objectives set in the EU's Lisbon strategy for growth and jobs," according to EurActiv, a website dedicated to EU policy. Introduced in 2009, the Blue Card is a work permit that allows highly skilled non-EU citizens to work and live in most EU countries. To acquire the card, an applicant must hold professional-level qualifications, have an employment contract for at least one year and earn a gross monthly wage of at least 1.5 times the annual average wage in the member state where he is applying.

Cardholders are eligible for permanent residence after five years of legal, continuous residency, and families of card holders are allowed, after 18 months, to move with the card holder to another EU state for employment. EU Blue Card holders have the same social and labor rights as nationals. With the exception of Denmark, the UK and Ireland, all 27 EU member states accept the card.



PATHS TO CITIZENSHIP

Acquiring citizenship helps immigrants take more of an interest in improving their adopted countries. Many argue that European bureaucracies must simplify what has been an arduous and discouraging process. Some states charge high fees and require applicants to know the language but offer little opportunity for them to learn. A 2011 Migrant Integration Policy Index report produced by the British Council and the Migration Policy Group found that “laws and policies in Europe and North America demonstrate that many countries create as many obstacles as they provide opportunities for full and active citizenship. Only a few confident countries like Portugal and Sweden encourage political participation and access to nationality.”

In Britain, learning the language is the first step to integration. “I believe being able to speak English should be a prerequisite for anyone who wants to settle here,” UK Home Secretary Theresa May said in November 2010. “The new English requirement for spouses will help promote integration, remove cultural barriers and protect public services.”

In 2006, France instituted a similar requirement by which an unemployed person seeking to immigrate must submit a petition for admission conditioned upon knowledge of French. Outside Europe, Canada and Australia also require a language test before admittance. A common language is viewed as vital for participation in school, government and social life.

France has generally taken a hard approach to integration, insisting that immigrants become cultural Frenchmen. In April 2011, it became the first European country to ban Muslim women from wearing a veil to conceal their faces in public. Women wearing a burka or niqab may be fined and asked to enroll in citizenship lessons. A husband caught forcing his wife to cover her face may be fined 25,000 euros (about \$34,700).

SUCCESS STORIES

A new study gives Sweden the highest marks for immigrant integration policies. The British Council and the Migration Policy Group measure European and North American “employment opportunities, access to education and anti-discrimination legislation,” *The Telegraph* reported in March 2011. Also achieving top rankings were Portugal, Canada, Finland and the Netherlands. “Fairness” was a central concern for the authors of the study. “Sweden’s legislation and policies are based on the idea that if you have legal access to the country, you will be treated the same as everyone else, which is beneficial to immigrants,” Thomas Huddleston, a Migration Policy Group analyst, said. At the bottom of the list were Lithuania, Malta, Slovenia and Latvia. The UK tied for 12th with Germany, and the United States ranked ninth.

The Vietnamese community in Germany serves as a largely successful example of migration. Vietnamese families place great value on their children acquiring university educations and take advantage of the plethora

of opportunities Germany presents them, according to a Deutsche Welle program broadcast online in 2011. The appointment of Philip Rösler as vice chancellor of Germany was a first for the country. A native of Vietnam, Rösler was adopted by a German couple as an infant. Muslims, almost all with immigrant backgrounds, have been elected to parliaments in the UK, the Netherlands, Denmark, France and Germany.

Overall, Europe may be showing signs of increasing cultural tolerance toward outsiders. A series of anti-immigrant bills have been squashed across Europe: A French ban on headscarves in day care centers was batted down, the Dutch rejected a bill to ban Islamic animal slaughter and Germany is now allowing Muslim students “equal access to religion courses,” *The New York Times* reported in January 2012.

Integrating immigrants is vital to building strong attachments to the European project. In his speech critical of multiculturalism, British Prime Minister David Cameron stressed that immigrants can simultaneously hold more than one identity, including an affinity for their country of residence. “The key to achieving true cohesion [is] by allowing people to say ‘I am a Muslim, I am a Hindu, I am a Christian, but I am a Londoner, too,’” he said. □



French resident Hind Ahmas shows the fine she paid for wearing an Islamic veil after the practice was banned in April 2011.



Countering Violent Extremism

A Marshall Center seminar tackles the topic at a gathering in Skopje, Macedonia

By Lt. Col. Arne Lossmann, Bundeswehr, Marshall Center, Non-Resident Programs

Violent extremism, always a serious threat to political stability and national security, could trigger unrest and terrorism in Southeast Europe. In response, the George C. Marshall European Center for Security Studies has implemented programs addressing the theme of countering violent extremism. The Marshall Center Non-Resident Programs Division held a seminar on the topic in Skopje, Macedonia, on May 30 and 31, 2012. The Macedonian Ministry of Defense co-sponsored the event.

The 1½-day seminar continued the work of a November 2009 seminar on the same topic, also held in Macedonia, by examining best practices for countering violent extremism that is rooted in political, ethnic and religious intolerance. It also aimed to develop contacts — an international network of professionals — who could exchange best practices and detailed information on emerging threats. Thirty-eight officials from Albania, Bosnia and Herzegovina, Kosovo, Macedonia and Serbia participated, including ministry of defense and ministry of interior officials and intelligence service officers. Macedonian media gave extensive coverage to the conference opening, led by U.S. Ambassador to Macedonia Paul D. Wohlers and German Ambassador to Macedonia Gudrun Steinacker. Macedonian Deputy Minister of the Interior Xhelal Bajrami delivered the keynote address, in which he stressed that developing tolerance is a key point in countering violent extremism.

The seminar provided an overview on countering violent extremism in Southeast Europe, including the motivation of terrorists, religion as a source of extremism, and two case studies on violent extremism, one in the United Kingdom and the other in Germany. It was moderated by Dr. Jay Le Beau, a Marshall Center professor, and offered subject matter experts whose discussion of violent extremism spurred substantial and animated discussions.

Dr. Metodi Hadji-Janev, head of the social science department at the Macedonian Military Academy, stressed that the vacuum of values created by the fall of Yugoslavia and subsequent wars caused anger and social instability that led to corruption and extremism.

A presentation given by Dr. Adam Dolnik of the Marshall Center faculty on the motivation of terrorists explored nine different approaches to understand why individuals become extremists/terrorists.

An examination of religion as a source of extremism was presented by Dr. John Sawicki, assistant professor of political science at Duquesne University in the United States. He emphasized the need to engage disaffected youth, especially in the face of high regional unemployment. Religious and civic organizations, as well as the military, could play a role in this engagement.

Dr. Le Beau and professor James Wither, also a member of the Marshall Center faculty, detailed case studies on recent German and British incidents of violent extremism. They pointed out similarities to the situation in Southeast Europe and stressed that successes in Germany and the United Kingdom resulted from a whole of government approach and international cooperation. The case studies evoked several questions and comments in the closing panel discussion, and participants expressed the need for enhanced regional cooperation in Southeast Europe.

Based on the success of the conference, the Marshall Center will continue to foster a regional approach to cooperation in countering violent extremism. Albania hosts the next regional conference in November 2012, focusing on helping participating countries develop a strategy to counter violent extremism. □



Violent Extremism in the Spotlight

By Jason Tudor, Marshall Center public affairs

In the course of defining a framework to counter violent extremism, 97 participants in a September 2012 seminar on the topic traveled down many paths.

Lectures, panel discussions and more intimate meetings filled the week-long Senior Executive Seminar 12-8 at the George C. Marshall European Center for Security Studies.

Russia. Norway. Afghanistan. Mali. The Middle East. Locations familiar and not so familiar emerged as the participants – generals, parliamentarians, ministers and dignitaries with power to affect change – listened and contributed.

Retired U.S. Army Lt. Gen. Keith W. Dayton, the Marshall Center's director, challenged participants, from 61 countries, to make meaningful contributions. "The topic is so important and there is such a variety of experience that we want to get interaction among you. Each of you has something very important to say about this topic," Gen. Dayton said.

To explore the topic of countering violent extremism, the Marshall Center brought in more than 20 guest speakers from the EU, law enforcement and academia. Among the topics were the causes of extremism and the use of hard- and soft power to combat it. Interpreters were provided in 4 languages: Arabic, English, French and Russian.

German Brig. Gen. Axel Binder, a seminar participant, noted that extremism and terrorism are among the chief security challenges of the century. "A seminar like this, where people gather from all over the world, is the best opportunity to exchange views, to learn from

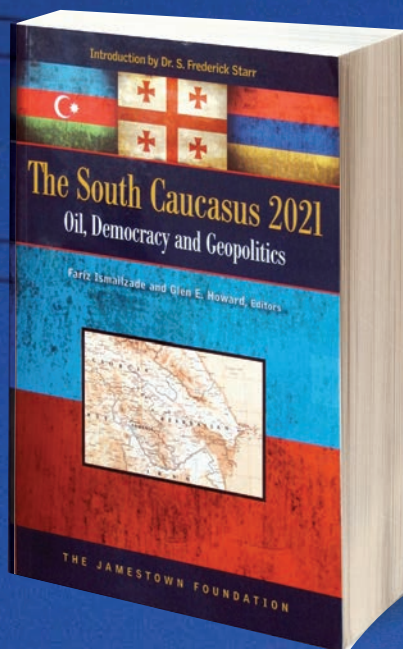
each other and to connect with each other in countering this threat," he said.

The sessions were governed by a nonattribution policy. Professionals were encouraged to give their opinions on the topics and not their countries' official stances. "It usually takes one or two days, but participants begin to open up after they realize they can speak freely and candidly," said U.S. Marine Corps Col. Philip Lark, SES deputy course director.

In one example, the seminar explored the Nigerian Boko Haram movement, a violent jihadist organization based in northeast Nigeria. To discuss the movement, the Marshall Center brought in Dr. Peter Pham of the U.S. Atlantic Council; Prof. Ricardo Laremont from the State University of New York at Binghamton; and Dr. Freedom Onuoha, research fellow at National Defense College in Nigeria.

Onuoha said the seminar was the right place to explore the topic in the context of the greater discussion of violent extremism. "The issues that are being addressed here cut across various countries and are transnational in nature," he said. "We are talking to participants who are actually making the policies that can help their countries."

Adm. James Stavridis, NATO's Supreme Allied Command for Europe, provided an hour-long video teleconference and a briefing titled "21st Century Security." He stressed the need for building bridges among nations that once erected walls to separate one another. "No one of us is as smart as all of us thinking together," Adm. Stavridis told participants. □



The South Caucasus 2021: Oil, Democracy and Geopolitics

Edited by Fariz Ismailzade and Glen E. Howard
Reviewed by *per* Concordiam Staff

It's been more than 20 years since the Soviet Union disintegrated into 15 separate nations. Independence for these countries and their nearly 300 million people came with the promise of freedom and the hope of prosperity. But it also came with fear, uncertainty and, for some, separatist violence spawned by suppressed nationalism. No region suffered more from separatist conflicts than the South Caucasus, where Armenia, Azerbaijan and Georgia still struggle with frozen conflicts. These conflicts have inhibited regional cooperation, strained relations with neighboring powers and slowed progress.

GETTY IMAGES

Despite its problems, the South Caucasus has great potential, primarily as an energy and trade corridor. It lies at the convergence of historical powers Russia, Turkey and Persia, and the region's culture and history has been deeply influenced by all three. The South Caucasus also lies on the rim of the Caspian basin, rich in oil and natural gas. That has drawn the attention of the European Union, the United States and China. As Dr. S. Frederick Starr of the Central Asia-Caucasus Institute at Johns Hopkins University writes in the book's introduction, regional instability risks creating a conflict that could spread outside the region, drawing in one or more regional or outside powers.

The South Caucasus 2021 is a compilation of essays from regional and international experts in energy, economics, security, religion and political science, among other subjects, who seek to analyze the complex geopolitical forces at play in the region. Divided into four thematic sections, the book provides policy suggestions aimed at increasing stability and prosperity in the region.

Part one contains three pieces that take a look at religion and demography in the three countries, reflecting on the common economic foundation the countries inherited with independence. The first piece, by Elmir Guliyev of Azerbaijan's Institute of Strategic Studies of the Caucasus, examines each nation's religious history and policies towards traditional and nontraditional religions. He describes the close relationships between national churches and governments in Armenia and Georgia and Azerbaijan's distrust of nontraditional variants of Islam and Christianity. In a prescription sure to irk proponents of separation of church and state, Guliyev supports "increasing [state] control over the religious sphere."

The following article on demographics compares Azerbaijan's relatively high population growth with the EU-style aging population of Georgia. A third piece, by former Georgian economy minister Vladimir Papava, is an engaging and humorous analysis of regional and post-Soviet economies. Papava suggests that the length of communist rule helped determine a country's later economic success. Where the communist occupation was briefest – in places like Central Europe and the Baltic States – economies recovered more rapidly. But the South Caucasus suffered longer under command economies and is strapped with noncompetitive industries kept alive by state subsidies and corruption. Papava calls them "necroeconomies."

Part two of *The South Caucasus 2021* examines Caspian energy issues, including the importance of this energy to European markets and the geopolitical forces involved in a variety of proposed pipelines to Europe and Asia markets. John Roberts leads off with a piece on Caspian pipeline

politics and how they impact European energy security. Europe is focused on diversifying energy routes, especially after the Russia/Ukraine gas crises of 2006 and 2009. Multiple proposals exist to transport Caspian and Southwest Asian gas to Europe via what is called the "southern corridor." Turkey is the main land route, but the "White Stream" pipeline would traverse the bottom of the Black Sea. Roberts notes the widespread belief among regional officials that Russia opposes development because it "further weakens its own former monopolistic control of Caspian export pipelines."

The second article examines Azerbaijan's role in Euro-Caspian energy security, given its substantial domestic resources and its intermediary position linking Turkmenistan's and Kazakhstan's energy to European markets. The third story heralds a "Golden Age for Gas," given the efficient and carbon-friendly attributes of natural gas as a fuel.

The third part of the book delves into foreign relations and external influences. It leads off with two pieces on Turkey's role in the area, and follows up with a third article examining U.S. interests in the region since the demise of the Soviet Union. The authors point out that U.S. interests in the region are focused mostly on trade and security in support of its European allies. The final piece in this section looks at Azerbaijan from a Middle Eastern context, given its historical and ethnic ties with Turkey, its commercial links with Israel, its Shiite religion shared with its neighbor to the south and the presence of ethnic Azeris over that same border.

Part four of *The South Caucasus 2021* looks at ways to resolve the conflicts that have vexed the region, stunted progress and limited economic growth. The first two chapters look at the troubled post-independence history of the region and propose new initiatives to promote peace. The final chapter delves into the prospects for EU integration and NATO cooperation. Georgia is the most westward looking of the countries and has expressed its desire for EU membership and full NATO integration. But Georgia's Western orientation makes Russia uneasy and contributed to the 2008 Russia-Georgia war over South Ossetia. Armenia, on the other hand, maintains a close alliance with Russia as a way to discourage Azerbaijan from settling the Nagorno-Karabakh dispute militarily.

The South Caucasus 2021, co-published by the Jamestown Foundation and Azerbaijan's Center for Strategic Studies, is a comprehensive compilation of expert opinions and analysis of the South Caucasus, an important and dynamic territory that will likely remain center stage in world affairs. This book provides refreshing insights and alternative viewpoints useful for both new students and seasoned analysts of the region. □

Resident Courses

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Admission

The George C. Marshall European Center for Security Studies cannot accept direct nominations. Nominations for all programs must reach the center through the appropriate ministry and the U.S. or German embassy in the nominee's country. However, the registrar can help applicants start the process. For help, email requests to: registrar@marshallcenter.org

PROGRAM IN ADVANCED SECURITY STUDIES (PASS)

The Marshall Center's flagship course, a 10-week, twice-yearly program, is rigorous and intellectually stimulating and provides graduate-level study in security policy, defense affairs, international relations and related topics. It consists of core studies and

electives, including assigned readings, seminar discussions, debates, panels, role-playing exercises and field studies. Participants must be proficient in one of the two languages in which the program is taught: English or Russian.

PASS 12-9

Sept. 21 –
Nov. 29, 2012

September

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30						

October

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28	29	30	31			

November

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25	26	27	28	29	30	

PROGRAM ON TERRORISM AND SECURITY STUDIES (PTSS)

The five-week, twice-yearly program addresses the different aspects of threats to nations and is for mid- and upper-level management, military, government and police officials in counterterrorism organizations. The focus is on combating terrorism while adhering to the

basic values of a democratic society. The five-module course provides a historical and theoretical overview of terrorism, the vulnerabilities of terrorist groups, the role of law, the financing of terrorism and security cooperation.

PTSS 13-4

March 1 –
Apr. 5, 2013
(Nominations due
Jan. 11, 2013)

March							April						
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10	11	12	13	14	15	16	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28	29	30				
31													



SEMINAR ON REGIONAL SECURITY (SRS)

The three-week Seminar on Regional Security provides national security professionals throughout the world a comprehensive insight into the complex shape of regional conflict patterns, typical traps of crisis management as well as realistic possibilities for constructive crisis response.

SRS 13-2

Feb. 1-22, 2013

(Nominations due

Dec. 28, 2012)

February						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

SEMINAR ON TRANSATLANTIC CIVIL SECURITY (STACS)

The seminar is a three-week, twice-a-year class that provides civil security professionals from Europe, Eurasia and North America an in-depth look at how nations can effectively address domestic security issues with regional and international impact. Organized into four modules — threats and hazards, prepare and protect, response and recover, and a field study — it focuses on the development of core knowledge and skills.

STACS 13-3

Feb. 5-22, 2013

(Nominations due

Dec. 17, 2012)

February						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

SEMINAR ON COMBATING WEAPONS OF MASS DESTRUCTION/TERRORISM (SCWMD/T)

The two-week seminar provides national security professionals a comprehensive look at combating weapons of mass destruction and the challenges posed by chemical, biological, radiological and nuclear threats by examining best practices for ensuring that participating nations have fundamental knowledge about the issue.

SCWMD/T 13-5

March 8-22, 2013

(Nominations due

Jan. 18, 2013)

March						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

THE SENIOR EXECUTIVE SEMINAR (SES)

The seminar is a forum that allows for the in-depth exploration of international security issues. Participants in winter and fall sessions include high-level government officials, general officers, senior diplomats, ambassadors, ministers and parliamentarians. The SES format includes presentations by senior officials and recognized experts followed by discussions in seminar groups.

SES 13-1

Jan. 15-24, 2013

(Nominations due

Nov. 23, 2012)

January						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

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