Global Security

The Risks of Strategic Surprise

His Excellency Gérard Longuet, Minister of Defense of France
The Honorable William J. Lynn III, United States Deputy Secretary of Defense
Keynote Speakers

Dr. Roger Weissinger-Baylon
Workshop Chairman

Anne D. Baylon
Editor

Global Security
The Risks of Strategic Surprise

His Excellency Gérard Longuet, Minister of Defense of France
The Honorable William J. Lynn III, United States Deputy Secretary of Defense
Keynote Speakers

Dr. Roger Weissinger-Baylon
Workshop Chairman

Anne D. Baylon
Editor

His Excellency Gérard Longuet
French Minister of Defense
Workshop Patron and Opening Keynote Speaker

The Honorable William J. Lynn III
United States Deputy Secretary of Defense
and Keynote Speaker

Mr. Louis Gallois
CEO, European Aeronautic Defence and Space Company (EADS)

Admiral Edouard Guillaud
Chief of General Staff of France

Vice Admiral Richard Laborde
Director, Institut des hautes études de défense nationale
(Institute of Higher National Defense Studies)

As Director of the Institut des hautes études de défense nationale (the Institute of Higher National Defense Studies), it is a great honor as well as a great pleasure to welcome you here in Paris for this International Workshop on Global Security.

In co-organizing this 28th edition of the workshop with the Center for Strategic Decision Research, the Institute of Higher National Defense Studies that I lead under the authority of the Prime Minister is true to its vocation, which is to stimulate the strategic debate and help disseminate defense issues in France and in a larger context as well. In this respect, the current security situation seems rather new and highly destabilizing. It radically alters the philosophy of war and renders cold war patterns obsolete. In fact, it can only generate debate and careful consideration.

The approximately forty nations that are represented here today at this workshop show that our common ambition is already a success. For this opening address and these two days of work on topics that will range from cyber defense to the situation in the Balkans, Afghanistan, Pakistan, Libya, and more generally in Africa, it is an honor for us to welcome the Minister of Defense and Veterans Affairs, Mr. Gérard Longuet. I would like to thank him for agreeing to open this high-level workshop.

Ingénieur Général Robert Ranquet, Deputy Director, Institut des hautes études de défense nationale (IHEDN) *(l)* and Vice Admiral Richard Laborde, Director, IHEDN *(r)* at Hôtel de la Marine.

The *28th international Workshop on Global Security* is presented by the *Center for Strategic Decision Research* with the sponsorship of the following governments and organizations:

U.S. DEPARTMENT OF DEFENSE
Under Secretary of Defense (AT&L)
National Defense University
Net Assessment

PRINCIPAL SPONSORS

EADS   CISCO   Microsoft

NORTHROP GRUMMAN   McAfee (intel)

MAJOR SPONSORS

THALES   WISekey   MITRE   GENERAL DYNAMICS

URS   SYPRIS   THE UNIVERSITY of TENNESSEE UT
NATIONAL DEFENSE BUSINESS INSTITUTE

University of Maryland University College   ERNST & YOUNG

ACKNOWLEDGEMENTS OF PAST HOST AND SPONSORING GOVERNMENTS

Czech Republic	Kingdom of the Netherlands	Ministry of Defense of France
Kingdom of Denmark	Kingdom of Norway	Ministry of Defense of Italy
Federal Republic of Germany	Republic of Poland	Ministry of Defense of Turkey
Republic of Greece	Republic of Portugal	Canadian Armed Forces
Republic of Hungary	Ministry of Defense of Austria	Russian Ministry of Industry, Science, and Technology

Table of Contents

Part One

Defense in an Ultra Competitive Environment   **15**

His Excellency Pieter De Crem, Minister of Defense of Belgium

Threats and Challenges to Euro-Atlantic Security: A Polish Perspective   **19**

His Excellency Bogdan Klich, Minister of Defense of Poland

Pooling and Sharing—Doing More with Less   **23**

His Excellency Sten Tolgfors, Minister of Defense of Sweden

The Economic Crisis and the Challenges It Has Created for Security Reform   **25**

His Excellency Dr. Artis Pabriks, Deputy Prime Minister of Latvia and Minister of Defense

Global Security—A Finnish Perspective   **27**

Lieutenant General Arto Räty, Permanent Secretary, Ministry of Defence of Finland

Part Two

Cyber Security: Asymmetry, Internationalization, and Fear   109

Mr. John Stewart, Chief Information Security Officer, Cisco

Part Four

How the Defense Industry Can Assist   113

Mr. Alfred Volkman, Office of the U.S. Under Secretary of Defense

A View from Industry   115

Mr. Thomas Homberg, EADS Corporate Vice President, Head of EADS Strategic Coordination

The Benefits and Challenges of Information Technologies in Current Operations   117

Mr. William Ennis, Director, International Business Development, Northrop Grumman

A New Age of Pragmatism in Global Security: The Implications for Industry   121

Dr. Edgar Buckley, Senior Vice President, Thales Group

Experience with the NATO C3 Agency   123

Mr. Kevin Scheid, Deputy General Manager, NATO C3 Agency

Industry's Role in Supporting Operations 127

Lieutenant General Ulrich Wolf, former Director of NATO CIS Agency

Part Five

South America: A New Doctrine for a New Zone of Peace 131

Ambassador Jorge Argüello, Permanent Representative of Argentina to the United Nations

Three Pillars 133

Ambassador Linas Linkevicius, Ambassador of Lithuania to NATO

Considerations for NATO in Future Contingency Operations 135

David W. Swindle, Jr., P.E.; Executive Vice President, URS Federal Services

The International Security Environment and Implications for the Defense Posture 139

Ambassador Carsten Sondergaard, Permanent Representative of Denmark to NATO

Contributors

His Excellency Jaak Aaviksoo
Minister of Education and Research of Estonia, former Minister of Defense

Dr. Susan Aldridge
President, University of Maryland University College

His Excellency Anyu Angelov
Minister of Defense of Bulgaria

Ambassador Ertuğrul Apakan
Permanent Representative of Turkey to the United Nations

Ambassador Jorge Argüello
Permanent Representative of Argentina to the United Nations

Prof. Hüseyin Bagci
Chairman, Department of International Relations, Middle East Technical University

His Excellency Giorgi Baramidze
Vice Prime Minister of Georgia, State Minister for European and Euro-Atlantic Integration

Mrs. Rebecca Bash
Office of the Director, Net Assessment

Mr. Eyal Bavli
National Security Leader for the European market, Cisco

Rear Admiral (Ret.) Jon Bayless
Sypris Electronics

Ms. Anne D. Baylon
Co-Director, Center for Strategic Decision Research

Mr. Lutz Bertling
President and CEO, Eurocopter

Admiral Jean Betermier
Senior Advisor, EADS

Mr. Tim Bloechl
Senior Vice President, Global Public Sector, WISeKey

Mr. Yordan Bozhilov
Chief of Political Cabinet, office of the Minister of Defense of Bulgaria

His Excellency Dr. Davor Božinović
Minister of Defense of Croatia

Ms. Ieva Briede
Advisor to the Minister of Defense of Latvia

Brigadier General Gregory Brundidge
Headquarters U.S. European Command

Dr. Edgar Buckley
Senior Vice President for NATO, UN, and EU, Thales

Mr. Robert J. Butler
U.S. Deputy Assistant Secretary of Defense for Cyber Policy

Ambassador Vladimir Chizhov
Ambassador of the Russian Federation to the European Union

His Excellency Selmo Cikotić
Minister of Defense of Bosnia and Herzegovina

Dr. Lisa A. Costa
Executive Director, MITRE

His Excellency Pieter De Crem
Minister of Defense of Belgium

Mr. Scott Culp
Principal Cyber Security Architect, Microsoft Corporation

Mr. Thomas F. Darcy
Vice President of Defence Electronics and Systems, EADS North America

Mr. François Desprairies
Director, Public Affairs France, EADS

Mr. Dave DeWalt
CEO, McAfee

Captain Thomas Doell
Office of COS, Supreme Headquarters Allied Powers, Europe (SHAPE)

Ambassador Sorin Dumitru Ducaru
Permanent Representative of Romania to NATO

Général de Division Jean-Marc Duquesne
Deputy Director of Strategic Affairs, French Ministry of Defense

Mr. Bill Egerton
General Dynamics

Mr. William Ennis
Director, International Programs, Northrop Grumman Aerospace Systems

Mr. Stephen Ewell
Headquarters U.S. European Command

Ambassador Hael Al Fahoum
Head of the Mission of Palestine to France

Mr. Richard Ford
Defence Equipment Attaché, Ministry of Defence of the United Kingdom

Admiral Pierre-François Forissier
Chief of Staff of the French Navy

Prof. Michel Foucher
Director of Studies and Research, Institut des hautes études de défense nationale (IHEDN)

Mr. Jacques Francoeur
Senior Advisor, Ernst & Young

Mr. Louis Gallois
CEO, EADS

Ms. Patricia Gamble
Deputy for International Affairs, Office of the U.S. Assistant Secretary of Defense (NII)

Mr. Thomas Gann
Vice President, Government Relations, McAfee|Intel

Ambassador Vesko Garčević
Permanent Representative of Montenegro to NATO

Ms. Marina Garzinova
Media Advisor to the Minister of Defense of Bulgaria

Mr. Senahid Godinjak
Chief of Cabinet, Office of the Minister of Defense of Bosnia and Herzegovina

Ambassador Peter Gottwald
Commissioner of the Federal Government for Arms Control and Disarmament, German Federal Foreign Office

Admiral Edouard Guillaud
Chief of General Staff of France

Mr. Hervé Guillou
CEO, Cassidian Systems

Mr. Ilan Halevi
Political Advisor, Delegation of Palestine to Germany

Mr. Raymond Haller
Senior Vice President and Director, MITRE Corporation

Ms. Melissa Hathaway
President, Hathaway Global Strategies

Mr. Lewis Hawk
Northrop Grumman Electronic Systems

Ms. Charlotta Herrstrom
Political Advisor to the Minister of Defense of Sweden

Mr. Thomas Homberg
Corporate Vice President, Head of EADS Strategic Coordination

Mr. Paul Huynen
Office of the Diplomatic Advisor of the Defense Minister of Belgium

Mr. Erick Jan-Vareschard
Regional Sales Manager, Central Government and Defense, Cisco

Her Excellency Dr. Ljubica Jelušič
Minister of Defense of Slovenia

Mr. JIANG Weiqing
Research Fellow, China Institute for International Strategic Studies

General George Joulwan
Former Supreme Allied Commander Europe (SACEUR)

Mr. Sasa Jovanovic
Head of International Cooperation Section, Ministry of Defense of Montenegro

Dr. Glenn Kelly
Private Secretary to the Minister for Defence Equipment, Support, and Technology of the United Kingdom

Dr. Christopher Kirchhoff
Office of the U.S. Deputy Secretary of Defense

His Excellency Bogdan Klich
Minister of Defense of Poland

Lieutenant Colonel (Ret.) Robert Kosla
Director, National Security and Defense, Microsoft

Ambassador István Kovács
Permanent Representative of Hungary to NATO

Captain (RNLN) Iemke Kuijper
Military Representative of the Netherlands to NATO

Ambassador Artur Kuko
Permanent Representative of Albania to NATO

Mr. Janne Kuusela
Defense Policy Advisor of Finland

Mr. Jaakko Laajava
Under Secretary of State, Ministry for Foreign Affairs of Finland

Vice Admiral Richard Laborde
Director, Institut des hautes études de défense nationale (IHEDN)

General Manfred Lange
Chief of Staff, Supreme Headquarters Allied Powers, Europe (SHAPE)

Mr. Robert Lentz
Former U.S. Deputy Assistant Secretary of Defense (Cyber, Information, and Identity Assurance)

Ambassador LI Baodong
Permanent Representative of China to the United Nations

Ambassador Linas Linkevičius
Permanent Representative of Lithuania to NATO, former Minister of Defense

Maj. Gen. (Ret.) LIU Pei
Vice Chairman, China Institute for International Strategic Studies (CIISS)

His Excellency Gérard Longuet
Minister of Defense of France

Mr. Dragan Lozancic
Director, Defense Policy Department of Croatia

Mr. Peter Luff, MP
Minister for Defence Equipment, Support, and Technology of the United Kingdom

Ambassador Jüri Luik
Permanent Representative of Estonia to NATO

The Honorable William J. Lynn III
Deputy Secretary of Defense of the United States

Lieutenant General (Ret.) Mike McDuffie
Vice President, Americas Services Sales and Business Development, Microsoft

Lieutenant Colonel Michael Mensching
Military Assistant, Supreme Headquarters Allied Powers, Europe (SHAPE)

Ambassador Vincent Mertens de Wilmars
Diplomatic Advisor to the Minister of Defense of Belgium

Ambassador João Mira Gomes
Permanent Representative of Portugal to NATO

Mr. Terrence Morgan
Director, Network Centric Strategy for Global Government Solutions, Cisco

Commander Johan Norlen
Military Attaché to the Minister of Defense of Sweden

Mrs. Stasa Novak
Advisor, Ministry of Defense of Slovenia

Ambassador Jaromír Novotný
Former Czech Ambassador to Japan

Mr. Michael Ostlund
Press Secretary of the Minister of Defense of Sweden

His Excellency Dr. Artis Pabriks
Minister of Defense of Latvia and Deputy Prime Minister

Mr. David Patterson
Executive Director, National Defense Business Institute, University of Tennessee

Ambassador Marc Perrin de Brichambaut
Secretary General, Organization for Security and Cooperation in Europe (OSCE)

Ambassador Igor Pokaz
Permanent Representative of Croatia to NATO

Mr. Don Proctor
Senior Vice President, Office of the President and CEO, Cisco

Mr. Johan Raeder
Director General for Political Affairs, Ministry of Defense of Sweden

Mr. Bruno Rambaud
Regional Managing Director, Cassidian

Ingénieur Général Robert Ranquet
Deputy Director, Institut des hautes études de défense nationale (IHEDN)

Lieutenant General Arto Räty
Permanent Secretary, Ministry of Defense of Finland

Lieutenant General Gian Piero Ristori
Military Representative of Italy to NATO

Mrs. Hélène de Rochefort
Secretary General, Association France Amériques

Mr. Robert D. Rodriguez
Chairman, Security Innovation Network

Mr. Rene Roersma
Director, Global Public Sector, Europe, McAfee|Intel

Mr. Clifford Kent Rounds
Vice President, Global Defense/Central Government, McAfee|Intel

General Patrick de Rousiers
Inspector General of the French Armed Forces

Ambassador Omar Samad
Permanent Representative of Afghanistan to France

Vice Admiral Ferdinando Sanfelice di Monteforte
Former Military Representative of Italy to NATO

Mr. Kevin J. Scheid
Deputy General Manager, NATO C3 Agency

Mr. G.J. Schenk
President, EMEA, McAfee

Mr. Howard A. Schmidt
White House Cyber Security Coordinator

General Rainer Schuwirth
Former Chief of Staff, Supreme Headquarters Allied Powers, Europe (SHAPE)

Mr. Henri Serres
Ingénieur Général des Mines, General Secretariat of France

Mrs. Salome Shapakidze
Head of NATO Department, Ministry of European and Euro-Atlantic Integration of Georgia

Mr. Ales Sila
Head of the Public Affairs Office, Ministry of Defense of Slovenia

Mr. Don Sinclair
Director General, Department of Foreign Affairs and International Trade of Canada

Ms. Jill E. Sinclair
Assistant Deputy Minister, Department of National Defence of Canada

Lieutenant General (Ret.) P. K. Singh, PVSM, AVSM
Director, United Service Institution of India

Mr. Martin Slijkhuis
Public Safety and National Security WE, Microsoft

Ambassador Carsten Søndergaard
Permanent Representative of Denmark to NATO

Mr. Fred Spivey
Defense Consultant

Dr. Ditmar Staffelt
Head of Political Affairs Germany, EADS

Ambassador Thrasyvoulos Stamatopoulos
Permanent Representative of the Hellenic Republic to NATO

Ambassador Stefano Stefanini
Diplomatic Advisor to the President of Italy

Mrs. Ulrike Steinhorst
CEO's Chief of Staff, EADS

Mr. John Stewart
Chief Security Officer, Cisco

Mr. Michael Stokes
Managing Director, Sypris Europe

Mr. David Swindle
Executive Vice President, URS Federal Services

State Secretary Andris Teikmanis
Ministry of Foreign Affairs of Latvia

Colonel Marek Terlecki
Defense Attaché to the Ministry of Defense of Poland

His Excellency Sten Tolgfors
Minister of Defense of Sweden

Ms. Smjezama Tomic
Chief of Protocol of the Defense Minister of Croatia

Brigadier General Christine Turner
Former Deputy Assistant Chief of Staff, Defence Planning ACT, Staff Element Europe

Lieutenant General Ton van Loon
Commander, 1 (G/N Corps)

Ambassador Ranko Vilović
Permanent Representative of Croatia to the United Nations.

Mr. Alfred Volkman
Director for International Cooperation, Office of the U.S. Under Secretary of Defense (AT&L)

His Excellency Boro Vučinić
Minister of Defense of Montenegro

Dr. Roger Weissinger-Baylon
Workshop Chairman and Founder; Co-Director, Center for Strategic Decision Research

Ambassador Boguslaw W. Winid
Permanent Representative of Poland to NATO

Lieutenant General (Ret.) Ulrich Wolf
Former Director, NATO Communication and Information Systems Services Agency (NCSA)

Admiral (Ret.) Luciano Zappata
Former NATO Deputy Supreme Allied Commander

Embassy Representatives
Colonel Collier Slade, Head, Office of Defense Cooperation, U.S. Embassy
Colonel Bruce Sweeney, U.S. Defense Attaché
Colonel Marek Terlecki, Polish Defense Attaché

Key Dinner Address

Mr. Louis Gallois
CEO, EADS

INTRODUCTION

It is a great honour for me to speak in front of such a distinguished audience with an extremely high level of expertise in defense and security issues. EADS has been supporting the International Workshop on Global Security for many years. I am proud that so many of you have gathered here in Paris this year again to continue our important dialogue on global security and defense. This year's workshop could not have taken place at a more appropriate time. The financial crisis has changed more than the world economy and politics:

- Within the Eurozone you can see challenging discrepancies. Some countries like Germany or the Netherlands are recovering well from the crisis while the weaker countries are struggling and need to be rescued.
- The momentum of growth is shifting away from Europe and the U.S. toward the emerging countries. Economic dynamism is on their side as the recovery of the world economy has proven.

The crisis has had tremendous consequences for defense and security. Public budget cuts all over Europe put increasing pressure on defense programs. The Defence Treaty between France and the United Kingdom is just one consequence we can witness. It is heavily discussed, especially since Germany is not part of the treaty. The new security environment around the Mediterranean Sea, with Syria, Egypt, the Maghreb, certainly indirectly Israel and an unresolved situation in Libya, presents further challenges. I think it is no exaggeration to say that European defense and security is at a crossroads.

That is why it is important that we talk, address questions and mutual concerns, and discuss upcoming threats and challenges. This evening, I would like to share some thoughts with you about two topics: First, how to manage defense budget constraints in Europe from an industry point of view and, second, cyber security.

DEFENSE BUDGET CONSTRAINTS

We feel defense budget constraints in Europe. It is not a surprise when we see huge budget deficits, but it is widening the gap between Europe and the other continents regarding defense efforts. The defense industry is at a crossroads: Will we be able to keep our technology capacity in such an environment? Are we, at least, able to protect ourselves in the future? In addition, we see that budget cuts are leading countries to develop national policies in an already very fragmented Europe. Except for the Franco-British association to develop some equipment in common—which still needs to materialize—we do not see one single major European program emerging.

May I propose thoughts to deal with this very uncomfortable situation, in particular for my company, which has been built around European cooperation?

- First, to keep our technology capacity, there is no miracle: Research programs are mandatory. In the present era of tighter budgets and with the pressure of operations, priority is naturally given to ordering already developed equipment. For industry, it is easier and less dangerous to adapt to a stretched or lower level of equipment orders than to a lack of research support. When technology capacity is lost, it takes years to rebuild it, if it is even possible. For that, I am pleading for some protection of research support when countries have to choose which credits they have to cut.
- Second, I also want to plead for European cooperation. Certainly, cooperation is not easy. Sometimes it can be costly and countries are tempted to protect their own industry with their own money. But we must be clear: Most of the programs can no longer be developed on a national basis. The only way for Europe to develop at least part of its own equipment and not to be totally dependent on other countries regarding defense is through cooperation. Some people say: We have to cooperate but only on a bilateral basis because it is too complicated when there are more than two partners. I can understand that on some programs and I am not at all pleading for programs associating all 27 countries of the European Union! But in particular, on Medium Altitude Long Endurance (MALE) Drones, if a program involving only France and the U.K. is launched, there is a big risk that a second program, for the same equipment, could be launched by countries left aside and having the same requirement. We could have a remake of the Eurofighter–Rafale story and

Europe will pay for two development programs and will compete in export markets with two products.

• Third, as money is scarce, industry has to reorganize. It was the case in the 1990s in the U.S. after the famous "Last Supper." In Europe, EADS was created and has become a true success. I do not think it is the end of the story. A lot remains to be done to reorganize European industry in a much more efficient way. I will give you some examples out of my competence areas: Do we think that military naval industry or land industry organization cannot be improved? I am sure that we can make a lot of progress by better integrating the European defense industry.

CYBER SECURITY

Over the past months and years we saw increasingly sophisticated and effective cyber attacks on governments like Estonia and Georgia, or on critical infrastructure such as transport networks, utility grids, and industrial plants (for example, the Stuxnet virus). In March 2011, as EU leaders prepared to gather in Brussels to discuss the situation in Libya, the EU Commission suffered a serious cyber attack. And the attacks on Lockheed Martin and Sony recently were just the latest attacks on companies which were made public. You do not have to be a prophet to say that more will come. Finally, cyber security has entered the political agenda and has gained momentum. Now it is time to correctly address the problem. The EU has acknowledged the importance of cyber security and many European countries such as France, Germany, and the U.K. have presented their cyber security strategies. NATO adopted the concept of "in-depth cyber defense" at the Lisbon Summit. What we need now is a coherent European approach to securing Europe's networks. For me, cyber security is the challenge not only for joint European cooperation but also for transatlantic cooperation. The United States brought the fight against cyber warfare to the next level by announcing that any cyber attack can be declared an act of war—resulting in conventional military force.

This move makes it clear to me that the U.S. is getting serious on cyber security. Europe should seize the possibilities and enhance its cooperation across the Atlantic.

• In April, the EU and the U.S. renewed their shared commitment to deepening cooperation to address the increasing threats. I welcome that.

• A working group was established at the EU-U.S. Summit in November 2010. The group is tasked with developing collaborative approaches to a wide range of cyber security and cyber crime issues. I hope that first results will be announced at the next EU-U.S. Summit in late 2011.

For a joint cooperation on cyber security, we have to develop a new mindset—a new understanding regarding information and how to secure it. Wikileaks demonstrated that we have entered into a period where hardly anything can be kept secret. Internal information from governments but also from companies is increasingly available on the internet. And we all know that information is power. One the one hand, this transparency and the open architecture of the internet should be welcomed—as the so called "Facebook revolutions" in Egypt and Tunisia showed. On the other hand, we have to find solutions to protect information and personal data when it comes to everyone's privacy, business secrets, and national security. These aspects present new challenges, not only for society and politics, but especially for industry.

For industry the challenges offer incredible business opportunities—take EADS for example. Our evaluation at EADS, but we are not alone, is that the cyber security market will grow from approximately $8 billion in 2009 to $27 billion in 2018. We think that industry and governments have to work in close cooperation on this new topic. Industry can bring solutions when problems and needs are clearly identified. In addition, as we are also victims, we can bring our own experiences and indicate our constraints. In a nutshell, close dialogue between governments and industry will be mutually beneficial.

CONCLUSION

Europe's defense and security is facing numerous challenges—new and old. Defense budget cuts, worries about the stability of the Eurozone, a new security environment in North Africa, and new security threats coming from the realms of cyberspace put additional pressure on Europe's defense and security. Important questions have to be discussed and I think this workshop is an excellent forum for that. I suggest that we keep the debate as open and free as possible. I wish you all fruitful and inspiring discussions during the next two days and look forward to your questions.

Global Security Overview:

Dealing with Strategic Surprise—The Arab Spring, Post bin Laden Afghanistan, Cyber Attacks, and an Artificial Financial Crisis

Dr. Roger Weissinger-Baylon
Workshop Chairman

A TIME OF UNEXPECTED EVENTS AND CRITICAL TRANSITIONS

The Arab Spring, Post bin Laden Afghanistan, and an Artificial Financial Crisis

Addressing the opening session of the 28th International Workshop on Global Security in his role as Patron and Keynote Speaker, French Defense Minister Gérard Longuet remarked that the workshop was "…taking place in a unique international context"—with the Arab Spring uprisings spreading in North Africa and the Middle East just as Afghanistan was entering a critical period of transition. In a subsequent workshop address, the U.K.'s Minister for Defence Equipment, Support and Technology, Peter Luff, MP, emphasized the completely unpredictable and unexpected nature of some of these events:

> Cast your minds back to Christmas:
>
> Who would have predicted that Osama bin Laden would have finally been tracked down and killed, or that the long arm of international law would finally catch up with Ratko Mladić?
>
> Who then would have predicted that the leaders of Tunisia and Egypt would be swept away on a tide of old fashioned street uprisings, supported and spread by the new technology of texts and tweets?
>
> Who would have predicted that NATO would be leading the effort to uphold U.N. resolutions in Libya and protect the Libyan people from the brutality of their own government?
>
> Who would have predicted that this demand for change would spread across the Middle East?

An artificial financial crisis. To this list of unexpected events, it might have been appropriate to add another unexpected one. In the views of many leading economists including Nobel Prize winners, governments and international organizations are aggravating the current financial crisis instead of turning it around. In an important *New York Times* editorial, the newspaper's former Executive Editor Bill Keller summarizes the classic steps that governments should take to restore prosperity:

> There really is a textbook way to fix our current mess. Short-term stimulus works to help an economy recover from a recession. Some kinds of stimulus pay off more quickly than others. Once the economic heart is pumping again, we need to get our deficits under control…The way to do that is a balance of spending cuts, increased tax revenues and entitlement reforms…the basic formula is not only common sense, it is mainstream economic science, tested many times in the real world.

Instead of taking this "common sense" and "mainstream" approach, European countries and the U.S. as well are cutting budgets including defense investments and thereby tipping their economies into what is likely to be a prolonged period of slow growth or recession. The security implications of these defense budget cuts are among the main themes described below by defense ministers, industry leaders, and other experts.

Budget Pressures Are Putting European Defense at a Crossroads

Concurrently with the Arab Spring and the beginning of the transition out of Afghanistan, a spreading and deepening financial crisis was beginning to severely impact the ability of even large European countries—in particular, France, the

U.K., and Germany—to provide for the investments in defense capabilities that are and will be needed to address such challenges. In his opening dinner keynote, EADS CEO Louis Gallois warned that, "Public budget cuts all over Europe put increasing pressure on defense programs." Sweden's Defense Minister Sten Tolgfors described the atmosphere of a recent meeting on budget issues of European defense ministers, "It is fair to say that the general mood of the discussion was best described as a dark nuance of black." According to Minister Tolgfors:

> Different countries mentioned cuts from 5 to 45 percent. Only a handful of EU member states seemed able to continue with unchanged or slightly increased defence budgets. Many countries were clearly strained by international operations, not least in Afghanistan, while the demand for international crisis management contributions seemed to be constantly increasing.

Moreover, in a striking and highly publicized "testament" that he delivered to his colleagues at the Brussels meeting of NATO defense ministers, outgoing U.S. Defense Secretary Robert Gates strongly emphasized the vital need to increase— rather than cut—European defense investments. In the words of Louis Gallois, the budget shortfall means that "European defense is at a crossroads." Moreover, the shortfall in European defense investment is aggravated by an additional major factor, as pointed out by France's Chief of Defense Staff Admiral Edouard Guillaud, namely that Europe will need to become more and more self-reliant and depend less and less for its security on the United States given:

> The conjunction of the U.S. looking towards the Pacific with the lack of progress of a cacophonous or voiceless Europe, unable to see itself as a global power on the international stage. The Libyan crisis exposed the European failure and EU's divisions on the very concept of power.

Croatia's Defense Minister Dr. Davor Bozinovic warns that the damaging effects of the economic crisis on defense expenditures are not limited to Western Europe but also affect the Balkan and Black Sea region. He calls for "Smart Defense" as the best way to respond:

> The economic crisis has had a devastating impact on defense spending across the region, including on the budgets of affluent countries of Western Europe. When the NATO defense ministers met in Brussels last week, one of the things we talked about at great length was how to respond to contracting defense expenditures by exploring the potential benefits of innovative and multinational solutions—the NATO Secretary General calls it *Smart Defence.*

Or, as Latvia's Vice Prime Minister and Defense Minister Dr. Artis Pabriks puts it, "...while diplomacy can sometimes succeed with discussions, in military affairs, discussions are not enough: Action is required and it also requires a lot of money."

THE RISK OF STRATEGIC SURPRISE

In this context of such immensely important events that would be nearly impossible to predict, Minister Longuet argues that the "risk of strategic surprise" must be a key concern of government leaders. While he does not see that "…this new international environment is more dangerous than the one in which our elders lived," he does argue that it is "much more unpredictable"—and therefore much harder to plan for. Of course, "strategic surprise" is not a new phenomenon. In fact, Belgium's Defense Minister Pieter De Crem cites not only the Arab Spring and the new threat to cyber security but also the fall of the Berlin Wall until the collapse of the Soviet Empire:

> No one was able to foresee the Arab Spring either or the fall of the Berlin Wall or that of the Soviet Empire. No one, or only a few people, are aware of the cyber threat that hangs over our heads.

Minister De Crem believes it is impossible to ignore or fail to support events such as the Arab Spring since "the Mediterranean shores…are part of our natural zone of influence" and it is "…citizens' expectations of their leaders that led to the Arab Spring." In his view:

> To me, this is the rightful order of things and we must quickly find the means to help both leaders and populations of countries that are "on the move" to find a new balance in their progress towards democracy, the exercise of their full collective and individual rights, and economic and social development.

Sources of "Strategic Surprise"

Many of these situations arise as a direct result of "globalization" which creates interdependence among nearly all countries and regions "…with the effect that there is no system—whether economic or industrial—that can be sheltered from risk." According to Minister Longuet, this means that the risks of "strategic surprise" come not only from such frequently cited challenges as dealing with frozen conflicts, asymmetric warfare, non-state actors, etc., but also from new threats that are emerging regularly, ranging from tsunamis and the threat of volcanic ash to "drug terrorism" in North American countries including Mexico. And while the new global economy depends on the secure flow of goods and information, exchanges of goods are threatened by piracy off the coast of Somalia and information exchange is hindered by cyber attacks.

Although events leading up to "strategic surprise" are—by definition—hard to predict, Poland's Defense Minister Bogdan Klich warns about the danger of missile proliferation, especially since it is occurring in some of "the most unstable parts of the world":

> More and more countries are acquiring the necessary expertise and technologies to advance missile programs. In some cases, their intentions remain unclear. What is especially worrisome is the fact that this process is taking place in the most unstable regions of the world. While the probability of using nuclear weapons is still considered very low, what drives our policy is the fact that the consequences could be tremendous.

On this important issue of missile defense, Bulgarian Defense Minister Anyu Angelov emphasizes the importance of involving Russia in any solution:

> We support the common NATO/Russia approach to the development of a missile defense shield with two interacting but separate systems, based on transparency and constructive dialogue with Russia. We are ready to discuss all options for building the Missile Defense, including the geographical footprint of its elements. And if it is up to our government to make a decision, the decision will be taken in Sofia and nowhere else.

Another risk is cyber security. U.S. Deputy Secretary of Defense William Lynn III says that cyber security is also one of the emerging threats that must be addressed if we are to avoid "strategic surprise" in this area. According to Secretary Lynn:

> We must also look ahead to emerging threats and the dynamics that are likely to shape the future strategic environment. One of the most consequential aspects of our present and future security environment is the threat posed by computer network attacks…
> Information technologies have revolutionized how our militaries organize, train, and equip. They are at the core of our most important military capabilities—communications, command and control, navigation, and intelligence, surveillance, and reconnaissance. But for all the military capability that information technology enables, it also introduces vulnerabilities.

DEALING WITH THE CYBER SECURITY RISK

Experience with the Cyber Attack on Estonia

Estonia is generally considered as the first country to have actually suffered a cyber attack. At the time, Jaak Aaviksoo—now the Minister of Education and Research—was just beginning his term as Defense Minister. He describes the Estonian experience as follows:

> Four years ago and three weeks into my functions as defense minister, a decision was made to begin excavations on a Soviet military memorial. There was a protest that evolved into street riots and then calls to attack Estonian institutions in cyber space. These calls were answered, there was a broad attack—you may call it a voluntary public response—in the form of overflooding of some of the news agencies, government offices, and also Estonian financial institutions. This attack brought down for several hours almost all of the electronic bank services and news agencies. Several of the government websites were also out of order because of denial of service attacks. Within this broad attack background, there were many sophisticated, well-targeted operations against specific websites. It was a complex phenomenon but this is not important. What is important is how this was perceived by people in my country. It was perceived as a massive attack against their way of life and security. This is, I believe, the reason why it is perceived today as the first case of a cyber attack that posed a national security threat.

In order to reduce such risks, Minister Aaviksoo and others have called for an international coalition including international organizations, governments, and industry, which will certainly require new organizational structures, technologies, and even laws or treaties.

Achieving Cyber Security: The Broad Overall Goals

Since cyber targets might be military in nature and could even be launched by state actors (as may have been the case in Estonia and Georgia too), there is a strong inclination to prepare for a military response or even develop cyber attack capabilities.

One of those who have argued the strongest against the temptation to prepare for cyber war is the former U.S. Deputy Assistant Secretary of Defense for Information Assurance, Robert Lentz. While he agrees that a possible cyber war should also be considered "in a worst case scenario," he believes that what matters most is protecting information:

> Although I do understand the importance of talking about…a possible cyber war in a worst case scenario, I think it is very important that…we understand that it all comes down to information, how we manage information, and how we make information available to create opportunities and permit the innovation that we have going on right now in the information age.

Speaking along the same lines—protecting information while creating opportunities through innovation—the United States' Special Assistant to the President and Cyber Security Coordinator Howard Schmidt emphasized that the communiqué of the very recent G8 Deauville Summit produced an international consensus based on four key points:

> …what we saw in Deauville was a long time coming. It was a big and important step towards an international consensus that is building around a few simple and powerful ideas:
>
> That the Internet should remain OPEN to innovation;
> That it should be INTEROPERABLE the world over;
> That it should be SECURE enough to earn people's trust,
> And that it should be RELIABLE enough to support their work.

In other words, President Obama's strategy is emphasizing not just "…the risk alone, but focusing our agenda on all the good these technologies bring us."

The Underlying Forces and Influences: Where Do the Threats Come from?

In order to explain the phenomena underlying these concerns, Cisco's Senior Vice President Don Proctor sees four sources of disruption: Technology disruption, economic disruption, geopolitical disruption, and demographic disruption.

- *The technology disruption.* "We are living in a world in which the number of connected devices is absolutely exploding. Last year for the first time, there were more mobile devices than people on the planet."
- *The economic disruption.* "In the cloud, we have the 'miracle of marginal cost.' Because asset utilization in the virtualized ICT world is so much higher than in the traditional ICT world, the incremental cost of providing services for each new user rapidly approaches zero."
- *The geopolitical disruption.* "Who is responsible for the quality of products produced overseas, where local laws may be different? And how do businesses prevent their products from being copied by unscrupulous suppliers who may not be subject to familiar intellectual property laws? Globalization requires that governments adopt globally-accepted standards for assuring the integrity and safety of the ICT products they purchase."
- *The demographic disruption.* "We are now in an environment in which a large number of our workers and soldiers belong to the millennial generation…they are our children and they operate differently than we do in many cases. They are digital natives."

Given his slightly different perspective as CEO of McAfee/Intel, one of the largest industry firms focused on cyber security, Dave DeWalt sees "four vectors of influence," namely: the pace of innovation, the complexity of the IT environment, the explosion of threats, and finally the lack of governance models. According to Dave DeWalt:

- *The pace of innovation.* There is an explosion in the number of devices connected to the internet, and with "the movement from…IPV4, which is the internet protocol that most of the internet is based on, to what is now called IPV6, we are moving from billions of devices connected on the internet to literally a trillion."
- *The complexity of the IT environment.* "The complexity of the IT environment has gone up exponentially as well…

We basically use a worldwide supply chain and that worldwide supply chain is only as good as the weakest link in that supply chain."

- *The explosion of threats.* The threats have also exploded. According to Dave DeWalt, "Every day at the McAfee labs we receive somewhere around two hundred thousand bad pieces of content or files. We receive about fifty thousand unique brand new ones every day. We now track about sixty million active bad files in the world. These are viruses, trojans, all types of threats…An incredible capitalistic ecosystem has been created. We can essentially buy these bad files online, on eBay, on commercial sites, and we can buy them for very low amounts of money. An entire industry is being created to develop kits to disrupt networks, to steal money, to cause havoc, hacktivism, or other types of activities in the world."
- *The lack of governance models.* "…On average, we get two million bad websites every month…two million new websites [are] created every single month that are essentially built and designed for one activity: Malicious activity. Why is that? That is because the mechanisms that we have for registering domains…for building a site online are not governed very effectively. Bad guys can buy a domain for five dollars, they can buy ten thousand of those domains, create a phishing attack against your network within seconds, and change domains tens of thousands of times in order to hide themselves anonymously."

The Steps to Be Taken: Views from Government and Industry

In order to address these issues—and in particular Dave DeWalt's concern for a "lack of governance models," Cyber Security Coordinator Howard Schmidt proposes three parallel efforts as key to the U.S. cyber security strategy: diplomacy, defense, and development. In particular, he makes the following suggestions:

Diplomacy is about strengthening our partnerships, and building new ones. Diplomatically, our goal is to create incentives for, and build consensus around, an international environment in which states work together and act as responsible stakeholders…

Defense is about dissuading and deterring. In a similar vein, we are committed in the political-military space, as well, joining with other nations to encourage responsible behavior, and oppose those who would seek to disrupt networks and systems. To do so, we will dissuade malicious actors by denying them the ability to do serious harm, but also reserve the right to defend these vital national assets as necessary and appropriate. Now that is an idea that has been misconstrued in recent weeks. The United States is not asserting some new right to respond kinetically to cyber incidents. We are acknowledging, as we have for a decade, that a major attack in cyberspace—one that has effects that seriously threaten our or our partners' national security—could force us to respond with force. This would be a measured decision. It would not be taken lightly….

Our final pillar is development; often overlooked but crucially important. On this point, President Obama has taken a clear stand: The virtues of cyberspace should be more available than they are today…the United States is committed to ensuring others benefit from our technical resources and expertise.

In moving forward to these goals, he suggests beginning with effective international agreements, which should be based on the following principles: "(a) States should respect fundamental freedoms of expression and association, (b) States should respect intellectual property (IP) rights, and not steal IP for their own gain, and (c) States should value privacy, protect citizens from crime, and seek to prevent armed conflict."

Cisco's Chief Information Security Officer John Stewart brings a valuable perspective since he is a former hacker. He offers an analysis of the current cyber security situation in terms of "Asymmetry, International, and Fear."

- *Asymmetry.* It costs "…less to break into a system than it costs to deter or protect those very same systems." Moreover, three new challenges are increasing the challenge of asymmetry, namely "virtualization and collaboration and the cloud."
- *International.* Increasingly, countries are "…beginning to impose national standards on technological development. For example, the United Kingdom developed what is called 'PEPUS' a new certification regime on technology that is very different in common criteria in some ways and yet is by deliberate choice an advantage only to the U.K.'s national infrastructure." As John Stewart points out, the U.S., Russia, India, China and other countries are doing the same—or will soon do so. In other words, "…we seem to be marching along somewhat blindly, bumping our way through this without necessarily making progress by a fixed date."
- *Fear.* Like Bob Lentz, John Stewart says, "I get nervous when we start using the word war and cyber…it gets very disturbing to think about the concept of using fear as the way by which countries start to up-level the rhetoric versus de-escalate the rhetoric…most of the threats that we are facing today are essentially just…unchecked and mostly undeterred."

Also speaking from an industry standpoint, Microsoft's Principal Cyber Security Architect Scott Culp has the following recommendations:

> For cybercrime, existing law enforcement mechanisms provide the right framework, but legal regimes need to be harmonized and enforcement needs to be speeded. When nations refuse to help address these problems, consideration should be given to mechanisms traditionally used to obtain assistance from reluctant countries in other contexts, e.g., international money laundering.

> In the case of economic espionage, some countries believe that their national security depends on their economic security. Consequently, they believe that the government's role is to support indigenous industries, by theft if necessary. Therefore, international diplomacy should focus on codifying norms via international agreements, as has been done in other trade areas.

> On the other hand, military espionage is unlikely to be deterred, as nations always reserve the right to act in their best interests and espionage does occupy a useful niche as an option short of war.

> In the case of cyberwar, there is a need for rules of war that protect non-combatants, akin to the existing Geneva Convention rules in physical warfare.

From his perspective as Greece's Ambassador to NATO, Terry Stamatopoulos has summarized his personal view of the cyber security challenges: (a) exponential growth of malware, including technologies that "can be used or even bought by malevolent users"; (b) asymmetry "between cost of offense versus cost of defense"; (c) a technology race "to get ahead of the bad guys"; (d) a "need for governance, which is lacking"; (e) a need for better arrangements to recognize legitimate users (any system that works); and (f) attribution, which is the "key element". Above all, the greatest problem is deterrence—which depends on attribution. According to Ambassador Stamatopoulos: "While cyber defense is of increasing importance, our specific problem is with deterrence. How can we deter against something whose provenance is unclear?"

THE COMPLEX TRANSITION SITUATION IN AFGHANISTAN AND PAKISTAN

The Need for Cooperation between Afghanistan, Pakistan, and Other Regional Players

As mentioned by Defense Minister Longuet, the very complex and delicate transition situation in Afghanistan, Pakistan, and the nearby region is one of the principal challenges confronting the international defense community. Since NATO is one of the key actors in the region, it was appropriate that the workshop discussions on Afghanistan-Pakistan were opened by German four-star General Manfred Lange in his role as Chief of Staff at SHAPE, the military headquarters of NATO in Belgium. He began by posing these questions to the other speakers:

> How can we find this level of cooperation between Afghanistan and Pakistan to address the common insurgency? I will listen intently to the views of our panelists on this vital issue.

> How can we forge a level of regional cooperation to reinforce this bilateral cooperation? Also, how can the international community work together to help nations in the region achieve this common goal?

Concerning the Afghanistan-Pakistan cooperation mentioned by General Lange, Minister Longuet highlighted its importance, stating that "Through our long experience with countries' internal conflict situations, we know that no civil strife can last without external support for reasons that at first are unnoticed but today are obvious to all."

Motivations of the Taliban and Prospects for Resolving the Conflict: An Afghan Perspective

In his own response to General Lange, Afghanistan's Ambassador to France Omar Samad described his own view of the "insurgency's motivations and the unfortunate growth of violence" as it has developed over the last ten years:

> First, if this militancy is part of an international Jihadist agenda fed by proponents of a clash of civilizations as espoused by groups such as Al-Qaeda, then it would have to be fought on many fronts globally.

> Second, if the insurgency is an ideological warfare with a local scope, it would have to either agree to become part of the political order or continue to use violence as a preferred choice. This has been the case for what we call the Afghan Taliban and the Pakistani Taliban.

Third, if the nature of this conflict has strategic and regional implications and such groups are used as proxy assets, then the main stakeholders need to either come to terms at some point or fight it out until fatigue sets in or one side backs down…

Fourth, if the main reasoning behind this insurgency is internal to Afghanistan, i.e., for political, tribal, financial, judicial, or even narco-driven reasons, and it is seen as less ideological, less influenced by international terrorism, we would need a strategy to address those issues at that level and neighboring countries would not have to meddle or exert themselves into a solution that would inherently have to be an Afghan one.

Given this complex underlying situation with Al-Qaeda and the Taliban, the degree of cooperation between Afghanistan and Pakistan and other regional players may be the single most important factor in a successful resolution of the conflict. According to Ambassador Samad's description:

As part of the 11 June Islamabad declaration, the Afghan side expressed hope and optimism that they had agreed with the Pakistani side to share data and realistic views on common concerns;…From the Afghan government perspective, this means that we are committed to push for a reconciliation policy that would somehow incorporate the Taliban, at least those who are willing, able and reconcilable, in the political process. In this regard, the Afghans once again encouraged the Pakistani authorities to play a more constructive role. In return, it is the Afghan's view that we would all reap the benefits of a peace dividend in the form of stability, of course, and a path to regional and global economic prosperity…

The Situation in Afghanistan-Pakistan as Viewed from China

While the situation in Afghanistan-Pakistan remains complex and the future is uncertain, General LIU Pei, Vice Chairman of the China Institute for International Strategic Studies, says that "The event of bin Laden's death is considered a milestone in the fight against global terrorism. Al-Qaeda and local insurgents have suffered great setbacks"—although he notes that "some are not so optimistic" as to the positive effects of bin Laden's death. General LIU summarizes the overall situation as follows in a very open and frank manner:

Afghanistan…has made encouraging progress in many fields…we begin to see the emergence of civil society in which regular elections are held and votes cast to hold policymakers accountable. Furthermore, we can see that the living standard of the ordinary people increases as the overall economic situation gets better.

However,…The security situation in some respects is still unstable and fluid, and likely to keep deteriorating. For instance, the number of terrorists' attacks in some areas is on the rise and prevalent, and the Taliban insurgents and extremist forces' activities still run rampant. Corruption, drug trafficking and organized criminal activities in the border areas have also damaged the country's image. Continued militancy and persistent riots have negatively affected the process of economic reconstruction and foreign investment in Afghanistan. The relations among the central government, local governments and various ethnic groups have remained complicated and strained…Draining the huge human, material, and financial resources, the NATO-led ISAF has been mired in the Afghan war for almost ten years. With the rising casualties year after year, it is highly unlikely that the NATO-led ISAF will be able to wipe out the effective strength of the Taliban forces and other insurgents in a very short period of time.

The Situation in the Region as Seen from India

In discussing the Afghanistan-Pakistan region, General P.K. Singh, Director of India's United Services Institute (a major think tank of the Indian armed forces), lists the following key elements that must be considered:

The 2014 timeline set by the U.S. Administration is not a mirage. The U.S., ISAF and Afghanistan have endorsed it, and the international community has endorsed it as well. This deadline, which is over three years away, signals that there will neither be a precipitous withdrawal nor a vacuum that could be filled by the Taliban or other opportunistic players. NATO and the U.S. are making strategic arrangements with Afghanistan and will stay beyond 2014. So there are three years during which countries in the region like China and India can think of how they can contribute to peace and stability in Afghanistan after 2014.

Osama bin Laden's killing in Abbottabad has exposed Pakistan's double game of being an ally in the anti-terrorist operations while at the same time providing sanctuary and support to Al-Qaeda, the Taliban, Lashkar-e-Taiba etc. Such duplicity must not be allowed to continue.

The killing of Osama Bin Laden and other senior Al-Qaeda leaders on Pakistani soil should have convinced the Taliban that they can no longer count on the protection and support of Pakistan's Inter-Services Intelligence (ISI) to stage a triumphant re-entry into Kabul. I believe that the Taliban are entering secret talks with the U.S. not because of any change of heart but because they have been weakened militarily by the U.S./ISAF operations. So, we must maintain military pressure on Al-Qaeda, the Taliban etc. and, at the same time, take effective measures to cut the umbilical cord that binds the Pakistan ISI and the Taliban.

The solution to the global war on terror cannot be found in Afghanistan alone. …We will have to address the problem of global terrorism emanating from the Afghanistan-Pakistan region. Therefore, staying the course in Pakistan is as important as staying the course in Afghanistan.

What Lies Ahead for Afghanistan-Pakistan

French Defense Minister Longuet says, "We arrived in Afghanistan with the United States. We will support U.S. efforts together with President Karzai to seek a political solution." He adds that the coalition has a leader, which is the United States, and "we arrived together and we will leave together." According to China's General LIU, "withdrawing from Afghanistan decently without pursuing a sweeping victory will be the best strategic choice for NATO and other foreign militaries." General Singh says that perhaps the key issue is "…terrorism coming from Pakistan and what we can do to convince Pakistan that terrorist organizations can neither be strategic assets nor be used as instruments of state policy."

Ambassador Omar Samad of Afghanistan affirms that his country "…is not a lost cause, that the prospects for change and development over time are promising…that a stable developing and self-governing country can defend itself and finally contribute to regional prosperity and global security. These objectives are achievable, and now is the time to wisely redefine the path ahead, coordinate at all levels, and make decisions based on facts and pragmatic longer term perspectives."

Finally, Ambassador Stefano Stefanini, Diplomatic Advisor to the Italian President, offers some words of caution. Namely, that we often hear something like the following:

> "You know, after all it is not us, it is Pakistan;" or from Pakistan, "It is not the problem of Pakistan, it is India." Until the regional players make the choice to work for the stability of Afghanistan, whatever we have done or whatever the Afghans try to do—and I believe that they are trying to do a lot now—will not be enough.

THE ARAB SPRING

In his key dinner address at the French Navy's Hôtel de la Marine, France's Chief of Defense Staff Admiral Edouard Guillaud described a "crisis arc" stretching from North Africa to Afghanistan: "Pandora's Box was opened by the so-called Arab Spring and its uncertain outcome—be it happy or unhappy." To discuss the important situation in Libya, former Supreme Allied Commander Europe (SACEUR) General George Joulwan led an evening dinner debate at Musée Carnavalet. To stimulate the discussion, General Joulwan raised key questions about the ongoing operation. Some of these questions follow:

- Has Libya "…exposed some weaknesses in the military capabilities and in the thinking of the EU and of NATO?"
- Is "the credibility of both NATO and the EU involved?"
- "How long will this intervention take?"
- "Are there munitions shortages and lack of ISR in the countries involved and will that have an impact on the outcome?"
- "Is there political will to see the operation in Libya through? By NATO? By the EU?"
- "Is the mission regime change? Gaddafi must go, the regime change must take place?"
- What about "reports…that nations—even like France and Britain and others—do not have enough precision munitions and other capabilities to continue to carry this out if it goes to the winter time?"
- "Is capability limited in what we are doing in the air campaign?"
- "What about the other Arab nations that have political protests: Yemen, Syria, Bahrain, and so forth? Even in Lebanon today there is an uprising."
- What about Syria—"if the protestors are being killed in Syria? I heard nothing about any strong effort to try to protect the Syrian protestors. Are we right or wrong? Is it a double standard?"

According to former SHAPE Chief of Staff General Rainer Schuwirth, some of the key issues in Libya are:

> What do we want to achieve or what does NATO and the international community want to achieve in Libya? What is the vision? Who will be the successor, among those who engage there, assuming that Gaddafi will step down? With whom will the international community negotiate with etc.? And this, from my point of view, has no relation to other engagements, whether we have sufficient ammunition or not. It is subordinate to this dominant political question.

In response to General Joulwan's question concerning how NATO, the EU and others should respond and in particular as to whether intervention in Libya amounts to a double standard, one of the workshop participants suggested:

I think that our duty to protect is relevant only in the cases where we actually can do something. And we can do something when it comes to Libya, largely because the Arab countries themselves—after all Gaddafi has tried to kill almost all Arab leaders in one way or the other at different points of his career—simply hate him. There are Arab countries that are part of the coalition…You cannot expect to have a similar situation with other Arab leaders.

HOW CAN THE DEFENSE INDUSTRY RESPOND?

The U.S. Defense Department's Director for International Cooperation, Alfred Volkman, led the workshop discussions on how industry can best respond to the challenges mentioned above. He described concerns about "the willingness and capability of some European members of NATO to wage the wars that we have to wage today," and "the fact that some nations are running out of ammunition in Libya." But the U.S. is also facing serious problems. According to Alfred Volkman:

Secretary Gates…warned that the United States and the European Union face a serious fiscal predicament….As a result, President Obama has promised to reduce defense spending by about four hundred billion dollars over the next ten years or so…At the same time, we need to prevail in the wars that we are fighting now in Afghanistan, Pakistan, and Libya, while investing for the wars that we may have to fight in the future… one thing that the United States and other nations will need to do is to recapitalize our ground forces. In the United States, the Army and the Marines, who are bearing the brunt of the fight at least in Afghanistan and in Iraq, are using up their combat vehicles and their helicopters ….The size of the U.S. Navy is shrinking but the challenges it is facing, especially in the Pacific, are growing, requiring the building of more ships…Again, we [are]…building a new aerial refueling tanker…The joint strike fighter program…is a necessity for air superiority but we will have to bring down the cost of that program…Finally, we must continue to invest in information technology.

According to Northrop Grumman's Bill Ennis, the international defense industry has indeed responded with a remarkable degree of innovation to the wars in Afghanistan and Iraq, in response to the following trends:

Globalization. The collapse…of the former Soviet Union (FSU) contributed to the vast deregulation and promotion of international trade. The technology base supporting scientific and industrial innovation evolved swiftly to a globally distributed phenomena responding to the relentless imperatives of economic and industrial efficiency…

Sources of technology for military applications. Until World War II, military innovation was concentrated in government arsenals. The overpowering demands for industrial production on an unprecedented scale drove the necessity to make the private sector the decisive partner in the development and production of defense products…

Moore's Law…the remarkable regularity and duration with which device performance doubled and costs halved (or more) for several decades has contributed to the creation of an industrial base for microelectronics that has enabled a vast increase in the military functionality and its underlying cost…
[Accuracy is independent of range] and…civil sector capacity for precision navigation and timing (90% of GPS use is in the civil sector) has made it possible for weapons to be delivered with extraordinary precision…

Bandwidth as a substitute for force structure. [There has been]…a vast increase in communications bandwidth to leverage the continuous output of processed sensor data throughout the depth of the theater…making it possible for large-scale campaigns such as Operation Iraqi Freedom (2003) to be conducted with one-third the number of troops required for a similar large scale campaign a dozen years earlier (Operation Desert Storm-1991)…

Networked computers. The impact of digital computers on the economy was marginal until computers began to be networked in the early 1990s… Networked platforms into "systems of systems" have vastly improved the capabilities of military organizations that have adapted to the capabilities networked systems create…

According to EADS Corporate Vice President Thomas Homberg, two other factors are playing an important role in making the defense industry more effective "a) interoperability and b) faster development cycles with, consequently, reduced complexity and cost." He offers the following analysis:

Interoperability…Interoperability led us to harmonization and standardization, not only in training, in procedures, in con-ops, but also in systems and equipment. And as much as standardization is beneficial for seamless operations in a net-centric theater, standardization equally increases the vulnerability of our networks when we face new challenges like cyber…One of the best protection mechanisms nature ever invented against a bacteria or a virus was in its biodiversity because one virus of the same profile cannot erase the entire system…[but] we are working in an increasingly networked and standardized environment with less diversity…I think it is an important question given the increasing number of cyber attacks we face these days. In 2009, the U.S. DOD was reporting over 70,000 incidents; this year, the French Ministry of Finance had to switch off 10,000 computers after a hacker attack…Do not get me wrong, however. I am certainly not suggesting that we should abandon interoperability or standardization. I think both are non-negotiable needs, but...I also think that in times of changed threats, we have to review our positioning.

Faster Development Cycles. My second point refers to faster development cycles with reduced complexity and cost which, I believe, are specifically relevant in times of constrained budgets. Several steps are required and I would like to refer to five of those: First, we have to harmonize and prioritize on the international level to support industrial rationalization...Second, we have to better coordinate and better fund research, specifically given the new cyber threats. Third, we have to foster dual-use to maximize economic profits in research and development and in procurement. Fourth, we have to implement new methods for acquisition because the current processes are simply too long. Fifth, and this applies to me as a representative of industry, we have to improve industrial capabilities in terms of fast upgrading, prototyping, and modifications.

A VISION FOR THE FUTURE

Looking toward the future, the U.S. and its European allies—and the entire global defense community as well—will need to find ways to deal with both the existing challenges and new strategic surprises (which will arrive most certainly with no more advance warning that the fall of the Berlin Wall or the arrival of the Arab Spring). At least in the near term, they will need to do so in a climate of fairly severe budgetary restrictions. In the case of France, Minister Longuet concluded his opening keynote address with the following observation:

> Europe's great advantage is to have a global vision which considers that defense is the simple continuation of a global policy and that defense does not dictate politics. It is this political vision of a balanced world that is open and harmonious and in which democracies would show mutual solidarity and, whenever possible, would proselytize, that drives the European policy that France subscribes to. It does so in the respect of the Atlantic Alliance which makes it possible for us to have information and an indirect presence on all theatres of operations.

Nearly all of the participating ministers of defense emphasized the importance of international cooperation, either with NATO, the EU, or the U.N. Many also emphasized regional cooperation, or cooperation with neighboring countries. Thus, Montenegro's Defense Minister Boro Vucinic says:

> As a small state, Montenegro is aware that it cannot develop all of its defense capabilities by itself and it believes that integration into the Euro-Atlantic, European, and regional communities is the best solution for ensuring stability in the region. Our defense policy is committed to strengthening cooperation with our neighbors by promoting regional initiatives and developing a partnership with NATO with the ultimate goal of becoming a member of the Alliance. This approach to relationships in the region and beyond is part of our efforts to achieve lasting stability and peace in the region and in the world.

Speaking along the same lines, Slovenia's Defense Minister Dr. Ljubica Jelusic describes her long-term vision, for not only her country but the entire region:

> Our long-term vision for the whole region is continued stability, economic development, and prosperity, which can all come to life in the Euro-Atlantic community of nations...We know that we live in tough economic times, which has a sobering effect, but we also know that we will have to work together, cooperate together, and address the security needs of all our countries together.

One of the most profound (and optimistic) observations comes from Bosnia and Herzegovina, a country that has had to surmount great difficulties on the way to integration and stability. Defense Minister Dr. Selmo Cikotic sums up his personal views as follows:

> We all agree that cooperation is always better than confrontation, inclusion is always better than exclusion, and integration is better than fragmentation, especially since our experience with war showed us that the logic of war brought about no advantages to anyone in the region. I am convinced that the Western Balkans have a message to offer and share with the rest of the world. In particular, we want others to be spared the tragic and devastating experience that we had to go through ourselves.

In concluding his workshop address, Georgian Vice Prime Minister Giorgi Baramidze cited NATO Secretary General Anders Fogh Rassmusen's call for democracy across the globe, which is also an appropriate way to end this Overview: "We all live in an independent, global world in which countries—great, medium, and small—should enjoy the same rights and sovereignty."

Preface and Acknowledgments

Anne D. Baylon
Editor
Co-Director, Center for Strategic Decision Research

WORKSHOP SPECIAL ADDRESSES

Patronage of French Defense Minister Gérard Longuet. We are grateful to French Defense Minister Gérard Longuet for his patronage and keynote opening address, as well as Foreign Minister Alain Juppé who initially invited the Workshop to Paris at the suggestion of Prime Minister François Fillon. At the invitation of the French government, this year's 28th International Workshop on Global Security took place in Paris, France, on 16-18 June 2011. It was the third time that the workshop was invited to Paris by the French government. Moreover, we received additional, truly exceptional support this year from the Institut des hautes études de défense nationale (IHEDN) within the French Prime Minister's organization, and in particular from IHEDN's Director, Vice Admiral Richard Laborde, and his Deputy Director, Ing. Général Robert Ranquet. France's General of the Air Force Patrick de Rousiers contributed to the workshop's cyber security dimension.

U.S co-sponsorship and key address by Deputy Secretary William J. Lynn III. Since the workshop was co-sponsored by the U.S. Department of Defense, the personal participation of Deputy Secretary of Defense William J. Lynn III as a key speaker was especially significant and greatly appreciated. Mr. Howard Schmidt, President Obama's Cyber Security Coordinator, gave the cyber security keynote. For facilitating their participation, we are indebted to the Defense Department's Chief Information Officer, Teresa Takai, and Ms. Patricia Gamble; Deputy Assistant Secretary of Defense (Cyber Policy) Robert Butler, as well as Dr. Christopher Kirchhoff and other members of Secretary Lynn's team.

Industry leaders. We would also like to thank the other principal speakers of the workshop, including Mr. Louis Gallois, CEO of EADS, who gave the opening key dinner address. Equally important were the major industry presentations by McAfee|Intel's CEO Dave DeWalt and Microsoft's Scott Culp, the company's Principal Cyber Security Architect.

Defense ministers and other high officials. We greatly appreciate the presentations by a large number of government leaders including Belgian Defense Minister Pieter De Crem, Swedish Defense Minister Sten Tolgfors, Polish Defense Minister Bogdan Klich, Estonia's Minister for Education and Research (and former Defense Minister) Jaak Aaviksoo, Latvian Defense Minister and Vice Prime Minister Dr. Artis Pabriks, and Finland's Permanent Secretary in the Ministry of Defense, Lieutenant General Arto Räty. Minister Peter Luff MP, United Kingdom Minister for Defense Equipment, Support, and Technology represented the British Secretary of State.

Croatian Defense Minister Dr. Davor Božinović, Slovenian Defense Minister Dr. Ljubica Jelušič, Bulgarian Defense Minister Anyu Angelov, Bosnia and Herzegovina's Defense Minister Dr. Selmo Cikotić, Montenegrin Defense Minister Boro Vučinić, and Georgian Vice Prime Minister Giorgi Baramidze gave key presentations that deepened our understanding of the issues facing the Balkans and Black Sea region, including the recent Russia-Georgia conflict.

NATO's important participation. We are very grateful as well for the remarkable contributions of senior NATO officials and especially to General Manfred Lange, Chief of Staff, Supreme Headquarters Allied Powers Europe (SHAPE), who gave his personal assessment of the future challenges in Afghanistan. Admiral Luciano Zappata, just recently retired, contributed his experience as the former Deputy Supreme Allied Commander Transformation.

United Nations and the OSCE. From the United Nations in New York, we greatly appreciated the participation of China's Ambassador LI Baodong, Turkey's Ambassador Ertuğrul Apakan, Argentina's Ambassador Jorge Argüello, and Croatia's Ambassador Ranko Vilović. OSCE Secretary General Marc Perrin de Brichambaut led a key panel on the Balkan and Black Sea region.

WORKSHOP VENUES

Musée de Cluny. For participants who arrived early, on 15 June, a private visit and reception was held at the Musée de Cluny, also known as the Musée National du Moyen Âge (or the French National Museum of the Middle Ages). The museum was originally a Roman bath. In the Renaissance period, it was converted to a luxurious town residence for the Abbots of the wealthy order of Cluny and is considered the most important surviving example of Renaissance residential

architecture in Paris. It is famous for its collections, including the "Lady and the Unicorn" tapestry.

The Hôtel de la Marine. The Hôtel de la Marine, constructed in 1774 on the Place de la Concorde, has been the headquarters of the Chief of Staff of the French Navy for more than 200 years. We are grateful for the invitation and warm welcome of Admiral Pierre-François Forissier, Chief of General Staff of the French Navy, who was our host for the evening, as well as the keynote dinner address by Admiral Edouard Guillaud, Chief of the French Defense Staff. A quartet of the Garde Républicaine, the ceremonial guard of the French Republic, welcomed the participants.

Musée Carnavalet. On the workshop's final evening, former Supreme Allied Commander Europe (SACEUR) General George Joulwan led a dinner debate on Libya and the Arab Spring in the Musée Carnavalet. The museum, which is dedicated to the history of Paris, is housed in two vast mansions. This famous renaissance structure was originally built in 1548 for the president of the parliament of Paris.

Pullman Hotel Paris. The opening dinner addresses by EADS CEO Louis Gallois and Belgian Defense Minister Pieter De Crem were held on the Pullman Hotel's rooftop dining room overlooking the adjacent Eiffel Tower. All of the workshop sessions were held at the Pullman Hotel Paris, and we thank the hotel team, especially Ms. Catherine Dorr and the hotel's general manager René Angoujard, for their excellent support.

PRINCIPAL SPONSORS

We extend our gratitude to the principal sponsors of the 28th International Workshop who, through their sponsorship and efforts, made this workshop possible:

- The French Ministry of Defense
- The United States Department of Defense (Under Secretary of Defense for Acquisition, Technology, and Logistics; Office of the Director of Net Assessment in the Office of the Secretary of Defense; National Defense University)
- European Aeronautic Defence and Space Company (EADS)
- Cisco
- McAfee|Intel
- Microsoft Corporation
- Northrop Grumman

French Ministry of Defense, including the Institut des hautes études de défense nationale (IHEDN).

Under Secretary of Defense for Acquisition, Technology, and Logistics. Again this year, Alfred Volkman, Director of International Cooperation in the Office of the Under Secretary of Defense for AT&L, took the lead in developing a session on how industry can contribute to handling the challenges in Afghanistan and Pakistan while coping with shrinking defense resources. Mary Miller and Andrew Gilmour provided important support.

Office of the Director of Net Assessment. Since the very beginning of this workshop series, Andrew Marshall, Director of Net Assessment in the Office of the Secretary of Defense, has provided sponsorship and guidance. We are extremely grateful for his strong support. For many years now, Rebecca Bash has ably overseen the administration of this project.

Defense Threat Reduction Agency. DTRA has been a very important workshop sponsor for a quarter century, and Colonel Robert Dickey, Senior Strategic Planner-Operations Enterprise, has worked with great diligence to ensure smooth coordination with the agency.

European Aeronautic Defence and Space Company. As CEO of EADS, Louis Gallois pointed out during his opening key dinner address that EADS has been supporting the International Workshop on Global Security for many years. We truly appreciate EADS's sponsorship and were delighted by the strong support from Thomas Homberg, Corporate Vice President and Head of EADS Strategic Coordination; Dr. Ditmar Staffelt, Senior Vice President, EADS; Professor Dr. Holger Mey, Advanced Concepts, CASSIDIAN; Dr. Bernhard Rabert, Vice President of Defence and Security Affairs; as well as Thomas Darcy, Vice President, Defense and Electronic Systems, EADS North America. At EADS Headquarters in Paris, we appreciated the contributions of Mrs. Ulrike Steinhorst, CEO's Chief of Staff, and François Desprairies, Director of Public Affairs, France. Jean-Christophe Hénoux, in Strategic Coordination, also provided very useful advice during the planning of the workshop.

Cisco. We are fortunate that, three years ago, Cisco joined the workshop as a sponsor, and we thank Brad Boston, Senior Vice President; Don Proctor, Senior Vice President, Office of the President and CEO; John Stewart, Chief Security Officer; Eyal Bavli, Cisco Systems, National Security Leader for Europe; and Erick Jan-Vareschard, Regional Sales Manager, Central Government and Defense, for their interest and support. We appreciate Brad Boston's agreement to join the workshop advisory board. Terry Morgan also participated on behalf of Cisco.

McAfee|Intel. We were delighted that McAfee|Intel is now a Principal Sponsor, and appreciate the support of Dave DeWalt, CEO; Kent Rounds, Vice President, Global Defense/Central Government; Thomas Gann, Vice President for Government Relations; Mike Carpenter, Senior Vice President, Public Sector; Rene Roersma, Director for Global Public Sector, Europe; and Hans-Peter Bauer, Vice President, EMEA.

Microsoft Corporation. Since he joined Microsoft after serving in the U.S. Department of Defense, Tim Bloechl has been a great workshop advocate as well as a leader in developing the workshop's IT dimension; Microsoft became a principal sponsor of the workshop six years ago. We are pleased that Lieutenant General Mike McDuffie, Vice President, Americas Services, Sales and Business Development; Martin Slijkhuis, Public Safety and National Security WE; Robert Kosla, Director, National Security and Defense; David Pollington, Director of International Relations; and Microsoft keynote luncheon speaker and Principal Cyber Security Architect Scott Culp participated.

Northrop Grumman. Our association with Northrop Grumman goes back a long way, and, eight years ago, Northrop Grumman became a principal sponsor. We are delighted that William Ennis, Director, International Programs, and Lewis Hawk, Northrop Grumman Electronic Systems International Inc., were able to represent their company at the workshop.

MAJOR SPONSORS

WISeKey. Tim Bloechl, Senior Vice President, has recently joined WISeKey after a long period of workshop support within the U.S. Department of Defense and most recently at Microsoft.

Thales. It is a pleasure to acknowledge Thales's long-term support of the workshop and the participation and excellent contributions to workshop sessions of its Senior Vice President, Dr. Edgar Buckley.

URS Federal Services. URS Federal Services, formerly URS Corporation, EG&G Division, became a sponsor of the workshop two years ago. We thank David Swindle, Executive Vice President, for participating again this year.

The MITRE Corporation. MITRE has been a supporter and sponsor of the workshop for over 20 years. Our thanks go to Raymond Haller, Senior Vice President and Director, DoD C3I FFRDC, for his many years of participation as well as Dr. Lisa Costa.

General Dynamics. Mr. Bill Egerton, from the United Kingdom, represented General Dynamics.

Sypris. Michael Stokes and Rear Admiral (Ret.) Jon Bayless represented Sypris, which sponsored the workshop for the first time this year.

University of Tennessee, National Defense Business Institute. As a workshop sponsor for the third year, the University of Tennessee was represented by J. David Patterson, Executive Director, National Defense Business Institute.

University of Maryland, University College. Dr. Susan Aldridge, President, represented the University of Maryland, University College, a recognized leader in cyber security education.

Ernst & Young. Through Jacques Francoeur, Ernst & Young sponsored the workshop for the first time this year.

PATRONS, ADVISORS, AND PARTICIPANTS

Workshop Patrons, Honorary Chairmen, and Keynote Speakers. We gratefully acknowledge the support of our past and present workshop patrons and general chairmen:

His Excellency Gérard Longuet, Minister of Defense of France (Patron and Keynote Speaker, 2011)
The Honorable William J. Lynn III, Deputy Secretary of Defense of the United States (Keynote Speaker, 2011)
Mr. Louis Gallois, CEO, EADS (Opening Key Address, 2010, 2011)
State Secretary Rüdiger Wolf, German Federal Ministry of Defense (Keynote Speaker, 2010)
His Excellency Sali Berisha, Prime Minister of Albania (Keynote Dinner Speaker, 2010)
His Excellency Vecdi Gönül, Minister of Defense of Turkey (Patron, 2009; Keynote Speaker, 2009, 2008, 2004)
His Excellency Ignazio La Russa, Minister of Defense of Italy (Workshop Patron, Keynote Speaker, 2008)
His Excellency Hervé Morin, Minister of Defense of France (Workshop Patron, 2007)
His Excellency Franz Josef Jung, Minister of Defense of Germany (Workshop Patron, Keynote Speaker, 2006)
Her Excellency Michèle Alliot-Marie, Minister of Defense of France (Workshop Patron, 2005, 2007; Keynote, 2005)
His Excellency Peter Struck, Minister of Defense of Germany (Keynote Speaker, 2004)
His Excellency Rudolf Scharping, Minister of Defense of Germany (Workshop Patron, Keynote Speaker, 2002, 2000)
His Excellency Jan Trøjborg, Minister of Defense of Denmark (Workshop Patron, 2001)

His Excellency Arpád Göncz, President of Hungary (Workshop Patron, Keynote Speaker, 1999)
His Excellency Dr. Werner Fasslabend, Minister of Defense of Austria (Workshop Patron, Keynote Speaker, 1998)
His Excellency Václav Havel, President of the Czech Republic (Workshop Patron, 1997; Keynote Speaker, 1997, 1996)
His Excellency Aleksander Kwaniewski, President of Poland (Patron, 1996; Keynote, 2002, 2000, 1998, 1997, 1996)
His Excellency Volker Rühe, Minister of Defense of Germany (Workshop Patron, 1995)
Admiral Giampaolo Di Paola, Chairman of NATO Military Committee (Honorary Chairman, Keynote Speaker, 2008)
General Vincenzo Camporini, Chief of General Staff of Italy (Honorary Chairman, Keynote Speaker, 2008)
General James Jones, Supreme Allied Commander Europe (Keynote Speaker, 2007, 2006, 2004)
General Henri Bentégeat, Chair of EU Military Committee, former Chief of General Staff of France (Keynote, 2007)
General George Joulwan, Supreme Allied Commander Europe (Honorary General Chairman, 1997, 1996, 1995, 1994)
General John Shalikashvili, Supreme Allied Commander Europe (Keynote Speaker, 1993)

Advisory Board. Our Board of Advisors, which has provided excellent input in developing the workshop agenda over the years, includes:

His Excellency Jaak Aaviksoo, Minister of Education and Research of Estonia, former Minister of Defense
His Excellency Valdas Adamkus, former President of Lithuania
Ing. Giovanni Bertolone, CEO, Alenia Aeronautica S.p.A.
Admiral Jean Betermier, Senior Advisor to the CEO, EADS
Mr. Tim Bloechl, Senior Vice President, WISeKey
Mr. Brad Boston, Senior Vice President, Cisco
Admiral Giampaolo Di Paola, Minister of Defense of Italy
Sir Stewart Eldon KCMG OBE, Former United Kingdom Permanent Representative on the North Atlantic Council
His Excellency Dr. Werner Fasslabend, Former Minister of Defense of Austria
His Excellency Vecdi Gönül, Minister of Defense of Turkey
General George A. Joulwan (Ret.), Former Supreme Allied Commander, Europe
Ambassador Jaromir Novotný, Former Ambassador of the Czech Republic to Japan
Ambassador Marc Perrin de Brichambaut, Secretary General, OSCE
Ing. Général Robert Ranquet, Directeur Adjoint, IHEDN
Vice Admiral Sanfelice di Monteforte, Former Italian Military Representative to NATO
His Excellency Borys Tarasyuk, Former Minister of Foreign Affairs of Ukraine
His Excellency Boro Vučinić, Minister of Defense of Montenegro
Ing. Dr. Giorgio Zappa, COO of Finmeccanica and Chairman, Alenia Aeronautica

CSDR TEAM

Workshop International Staff. As in previous years, the Center for Strategic Decision Research (CSDR) was fortunate to have a truly international team. Ania Garlitski, M.D., a binational American and Polish cardiologist and Assistant Professor at Tufts-New England Medical Center, started working with CSDR when she was a Stanford University student in 1995.

Jean Lee became our graphic designer and photographer shortly after graduating from Stanford University in 1995; Jean worked on all the workshop graphics and was the lead photographer. Grace Wong, an American journalist with degrees from the University of Michigan and Stanford University, is based in London and returned to the workshop for the third year. Mika Shiozawa, a French, American, and Japanese national who lives in Paris, also joined us for the third time as a photographer; Mika and Jean were responsible for all the workshop photographs. Caroline Baylon, a binational French and American graduate of Stanford University and Balliol College, University of Oxford, has been a workshop staff member for over 14 years; she led the team in Paris as staff director. Anne D. Baylon, CSDR Co-Director and a University of Paris Law School and Stanford University graduate, handled the coordination of the workshop as a whole. Joining for the first time were Emilie Chassagnard, who is now working for an NGO in Afghanistan, Suzanne Lavender, a graduate of The Queen's College, University of Oxford, and Sebastian Haug, who is now working on a Master's degree at Oxford.

Workshop Publications. As Head of Publications, Anne D. Baylon was responsible for the editing of these proceedings, as well as transcribing and translating. She appreciates the contributions of Jean Lee and Caroline Baylon, who provided very helpful assistance.

Part One

His Excellency Gérard Longuet
Minister of Defense of France

The Honorable William J. Lynn III
United States Deputy Secretary of Defense

Minister Peter Luff
United Kingdom Minister for Defence Equipment, Support and Technology

His Excellency Pieter De Crem
Minister of Defense of Belgium

His Excellency Bogdan Klich
Minister of Defense of Poland

His Excellency Sten Tolgfors
Minister of Defense of Sweden

His Excellency Dr. Artis Pabriks
Deputy Prime Minister and Defense Minister of Latvia

Lieutenant General Arto Räty
Permanent Secretary, Ministry of Defense of Finland

His Excellency Dr. Davor Bozinovic
Minister of Defense of Croatia

Her Excellency Dr. Ljubica Jelusic
Minister of Defense of Slovenia

His Excellency Boro Vucinic
Minister of Defense of Montenegro

His Excellency Selmo Cikotic
Minister of Defense of Bosnia and Herzegovina

Ambassador Marc Perrin de Brichambaut
Secretary General, Organization for Security and Cooperation in Europe

His Excellency Anyu Angelov
Minister of Defense of Bulgaria

His Excellency Giorgi Baramidze
Vice Prime Minister of Georgia

Ambassador Vladimir Chizhov
Russian Federation Ambassador to the European Union

Chapter 1

Key Opening Address of the 28th International Workshop

His Excellency Gérard Longuet
Minister of Defense of France

(Translation by Anne D. Baylon)

Dear Chairman Roger Weissinger-Baylon, it is a real pleasure and also a responsibility for me to give the opening address of your *28th International Workshop on Global Security*. Alain Juppé, my predecessor as defense minister, invited you and you kindly accepted his invitation. As you mentioned earlier, this workshop is being held in Paris for the third time. For the French, for those of us who have a passion for defense, it is a great opportunity to hear the assessments of your participants—be they from government, from the upper echelons of the military, from industry, or from the diplomatic or academic worlds. It is somewhat odd for someone like me, who loves new ideas, to open a workshop without having yet heard the propositions that will be presented, and a little disrespectful to leave the session after my presentation without having a chance to argue my points with the audience. But rest assured that the minister is only one man; he has a team, and this team will participate throughout the workshop and will further support, perhaps more competently than I would myself, the various points that I will have presented and suggested. The presence of Admiral Laborde, who represents the IHEDN, shows the deep intellectual cooperation that we are seeking and my short visit is solely intended as a symbolic expression of the French government's interest in your work. So, please consider that I am more of a symbol than an added value; the added value comes from all those who are present here today.

Nonetheless, I would like to address several issues at this meeting, which is taking place in a very unique international context. First, there is the huge question mark on what the media call the Arab Spring. To this day, we can neither evaluate its long-term consequences nor its more probable short-term and mid-term scenarios. For our old Europe, in which France participates actively, this question mark is obviously a great source of concern and it has led us to adopt a number of common positions. Even though this seminar has a global dimension to it, the emphasis today on European and North American defense strategies—the transatlantic relationship—leads us to bring up a few questions of common interest. They are: The start of the transition period in Afghanistan with the calendar that has been proposed and that we all know and the reform of the Atlantic Alliance. At a recent meeting in Brussels, Robert Gates gave us a kind of testament in which he reminded the NATO partners of their responsibilities. For large European countries—I speak of those I know the best, which are France, the U.K., and Germany—it is the issue of their respective capabilities to finance a long-lasting defense effort. My two colleagues, Thomas de Maizière and Liam Fox, are currently working on reorganization studies that are remarkably similar to that which the French government implemented about three years ago with the adoption of the law on military programming that followed the publication of the 2008 White Paper on Defense and National Security.

A FRENCH DEFENSE MINISTER'S PERSPECTIVE

My first observation on the international environment, from my point of view as the French defense minister, is to wonder whether this new international environment is more dangerous than the one in which our elders lived. I do not believe so. On the other hand, this environment is much more unpredictable. Building a defense policy against a perfectly identified enemy is difficult but there is a logic, a consistency, a predictability to it, and if the systems that existed during the Cold War were evolving systems, they had at least the advantage of a certain predictability. Today, the origins of world conflicts can be extremely different: Cultural or religious assertions, the emergence of new conflicts that are highly asymmetric, and, in addition to conflicts between states, the arrival on the scene of non-state actors that are often impossible to identify or widely scattered. An example would be what we can call "drug terrorism," a problem that plagues major North American countries such as Mexico. Moreover, there is a constant strategic redistribution in economic and demographic terms and globalization is based on exchanges of goods or information that are not necessarily secure. Exchanges of goods

are hindered by the insecurity of some seas, exchanges of information are hindered by cyber attacks, and all kinds of attacks on computer systems. In 2008, when we wrote the White Paper on French Defense, we tackled a problem that we did not fully master but at least we addressed it—what we called at the time the "risk of strategic surprise." In a world whose dangers are not directly identified in the manner of the Cold War era but are largely unpredictable, those of us who exercise governmental responsibilities have the imperative duty to look out for new kinds of threats. This is the first element of my global analysis.

The second element of this global analysis is that we are all interdependent. Sometimes, we may believe that each one of these threats is a problem for our neighbor, for another part of the world, or that it is directed at types of countries that do not concern us. The truth is that globalization creates a situation of extreme interdependence (although not fragility), with the effect that there is no system—whether economic or industrial—that can be sheltered from risk. Let's take the example of nuclear energy. In France, nuclear energy is a solution that is clearly recognized and accepted by our fellow citizens. Therefore, the control of the full range of security in countries that produce minerals and raw materials, or transport raw materials, becomes positively indispensable. In this interdependent world caused by globalization, we are in "de facto" solidarity with conflict theatres whose distance and nature originally would never have led us to think that we would be directly concerned. It is exactly the opposite. We are in a situation of complete interdependence and each crisis in the world must be assessed by considering, in addition to the actors that are directly concerned, the unavoidable consequences that can result from this crisis. Here is a simple example: When disorder arose in Somalia, most of my fellow citizens were totally unaware of the existence of Somalia or of the potential consequences of this disorder. Lack of control along Somalia's coasts certainly made it possible for piracy to develop around a major axis of globalization, which is the circulation of container ships between Asia and Europe. So here, a small cause, which is a domestic disorder in a little-known country, results in destabilization, or at least, concern about a major flux in the globalization system. Interdependence is an unavoidable consequence of the close relationships generated by the global system.

THE REFORM OF THE ATLANTIC ALLIANCE

In this international environment, let me state that France bases its risk analysis on the reaffirmation of the transatlantic link. I am saying this out of respect and friendship for our North American friends—here I would like to welcome Deputy Secretary Lynn—and also because it is our firm conviction. Our belief is that these two blocs, North America (primarily the United States but other countries as well) and Europe, have an essential role to play. As you know, our government, of which I am honored to be a member of the majority coalition or, in any case, have chosen to be a member, supported the reintegration of France into the decision structures within the NATO military system. This is because we want to participate in this institution and strengthen it. At the same time, we are Europeans at heart and are aware of the fact that the United States has both an Atlantic side and a Pacific side. By this I mean that the U.S. is oriented toward the Pacific Ocean and may have responsibilities that do not coincide exactly with our own priorities. Moreover, the Atlantic Alliance was created in response to a military threat; it has a military defense purpose and does not have the civil mission of the European Union. For this reason, we believe that we must build our defense policy on what exists, i.e., the Atlantic Alliance, and fully participate in its renovation while devising ways to make the construction of the European Policy of Security and Defense plausible, something that we should recognize is not widely acknowledged yet.

We participate in the reform of the Atlantic Alliance and I will not go into great detail about it. You are familiar with what the Atlantic jargon calls the Defense Posture Review which, in simpler French words, is the Defense Doctrine, which appears to me totally legitimate, and the efforts made to optimize its resources. Since the historic NATO 2009 Strasbourg/Kehl Summit and the adoption of the strategic orientations at the 2010 Lisbon Summit, we are going in a direction that we completely subscribe to. Although some NATO members may not fully realize the consequences of this direction, the concept of collective defense embodied in Article 5 of the Washington Treaty is the direction which guides us, naturally.

Are there issues in this reform of the Atlantic Alliance that might be a source of opposition or division on the part of France? The answer is no, even on the historically difficult nuclear posture issue. We completely agree with this NATO effort, especially with the establishment of a working committee for defense against ballistic missiles. We believe that all of us can contribute to it, and we are also firmly convinced that NATO cannot remain silent on the extension of the protection against ballistic missiles, that is, from merely theatres of operations to the whole countries and populations. I wanted to make that clear.

I will not inflict on you a detailed list of the reforms that have been carried out. Let me simply say that we must take into account the economic and financial environment, the optimization of resources, and agree to reconfigure accordingly

all the military staffs and agencies so that the costs are bearable for member nations over the long term.

Let me make a last remark about NATO strategic partnerships. Being Europeans, we must concern ourselves with security along Europe's immediate vicinity. Of course, there is the Mediterranean region, there is Eastern Europe, and there is the complicated strategic partnership with Russia. Although I am not a leading expert on the subject, this strategic partnership between NATO and Russia seems like an obvious long-term imperative since General de Gaulle's citation of a "united Europe from the Atlantic to the Urals" is becoming more of a reality every day and the security of this new Europe calls for a global response that incorporates the NATO/Russia partnership.

THE ROLE OF THE EUROPEAN UNION

What is the role of the European Union today considering that many solutions have been found even before the EU wondered about its responsibility in defense and security matters? I will simply cite two obvious facts: Despite its complex decision making process, the European Union is and has been able to launch specific, rapid response operations that European Union members viewed as clearly necessary. I am told that there have been 24 of these civil and military international operations. We are learning how to work together. It would be fair to say that the European Union's real strength on defense today is to be able to answer this haunting question: What shall we do on "the day after"? The "day after" is this moment when it becomes clear that the military solution must give way to the political solution because the military solution has reached its immediate goal and for the long term, a political solution is required. By way of anecdote, I was mentioning earlier the NATO ministers' meeting in Brussels last week. We have undertaken operations in the Libyan theatre under conditions defined by U.N. Resolution 1973, namely external and air operations. Yet my partners around the table were already wondering more about the "day after" question than about completing the resolution's objectives. This proves that they are perhaps more optimistic than I am because for now, I believe that we are still in an implementation phase to protect civilian populations, something that we have been successful at in the Cyrenaïca region and in Benghazi, Misratah, and Djebel Nafusa. However, we have not yet been able to create the same security for populations who live in the Tripoli area. These populations are under the direct control of Gadhafi forces who rarely give the people a chance to express themselves. For me, this is a partial result but NATO already wonders about the "day after," and the European Union seems more equipped to bring a response to the "day after."

CHALLENGES ON EUROPE'S BORDERS

Finally we have the role of Europe with a number of regional challenges on Europe's periphery, understood in its largest sense. I will address them very quickly without touching on issues that specifically concern Eastern Europe: I am thinking for example of Moldova and Transnistria, the Armenian territory, or Muslim Karabakh.

So let me identify these challenges that are of concern to us. In my introduction I evoked the first challenge, which is to accompany the Arab world through its transformations, and I will not go back over it. I do believe however that in the theatres where we assumed responsibilities under authorization from the U.N. Security Council, we must distinguish between the role of force, which makes it possible for freedom to develop, and the political solution, which is the prerogative of the local populations and theirs alone. This is why I welcome the political recognition of the Libyan National Transitional Council by an increasingly large number of nations. These are strong signals to Libyans from the international community to urge them to build urgently something new, something different, something that matches the longing for freedom they expressed in February and March but, sadly, was met with unacceptable military repression.

For the other Arab countries, I must admit that extreme modesty, extreme attention, and a great deal of solidarity with all existing goodwill initiatives are required and we have no way of knowing at the moment to which side the balance will tip. There are a number of goodwill initiatives, but will they be sufficient? It is my hope for Egypt and for Tunisia. In Syria, I note that the international community is totally paralyzed; in fact, we are witnessing in Syria what would have happened in Libya if the U.N. Security Council had not taken the initiative to stop the hand that was ready to strike. We do not stop this hand in Syria because we have no international mandate. Perhaps it is more difficult to issue one. In any case, since there is no international mandate, this unfortunate country is condemned to a form of civil war that we partially avoided in Libya and that luckily did not take place in Tunisia or Egypt.

The second regional challenge, which is further away, is the Afghan crisis. With regard to Afghanistan, the French position is extremely clear: We arrived in Afghanistan with the United States. We will support U.S. efforts together with President Karzai to seek a political solution, but we arrived together and we will leave together. This is our plan. Even

though our military forces on the ground, in particular in Surobi and Kapisa, wish to turn over at least the Surobi region to the Afghan Transitional authority, this is not because they want to give up on their responsibilities; on the contrary, they feel that they assumed them and deserve to pass them on directly to the Afghan authorities. Today, it is clear that all of the governments in the coalition are aware of and sensitive to the regional dimension (understood in a broad sense) of the Afghan crisis. In this coalition, there is a leader. We are paying great attention to the lessons that our coalition leader will derive from the pool of information now available after the fortunate elimination of Bin Laden. This information will make it possible to figure out the role played by the different actors surrounding Afghanistan. Through our long experience with countries' internal conflict situations, we know that no civil strife can last without external support for reasons that at first are unnoticed but today are obvious to all. This is why we hope that the initiatives taken by the countries in the region, the United States, Karzai, and Pakistan will help clarify the Afghan crisis.

My next-to-last issues of concern, Iran and North Korea, are challenges for our available capabilities but there too, we are in total support of our Atlantic partner. Iran's nuclear ambitions and its ballistic missile program pose grave threats to peace and international security. France embraces and supports all strategies of firmness, which are the only possible responses to this country's initiative to build a nuclear force and long-range ballistic missiles in defiance of international agreements and against common sense. Similarly, we equally condemn Pyongyang's ballistic missile and nuclear proliferation activities in North Korea. We are not in a context of tolerance, but in a context of extreme solidarity. Leading nations have assumed their responsibilities and they are widely shared with the rest of the world. It is worth pointing out that we will neither accept proliferation nor its accompanying menace, especially when they concern intercontinental ballistic vectors.

My last topic, which is at the heart of French preoccupations, is the need to contribute to the African continent's stability, at least in the regions where France has historic ties which ultimately result in cooperation agreements. We welcome each time one of our partners—the U.S. and especially Canada—takes interest in Africa. We want to help the African Union get organized so that it can achieve an intervention capability for what I would call international gendarmerie operations within Africa. While we are waiting for this to happen out of our two anchors in Djibouti and Libreville—we are prepared to implement cooperation agreements with the hope that we will not have to mobilize resources but, on the contrary, enjoy a long-term cooperation with governments that rely on the legitimacy of democracy, thus allowing them to consolidate the rule of law by using their own internal forces. We therefore have large and heavy responsibilities and trust that we can share them with international organizations whose ways of thinking are familiar to us, such as the U.N. Security Council, of which France is a permanent member. In this permanent member capacity, France seeks to maintain an intervention force that can be made available for the international operations it is involved in, provided that these operations are legitimate and have a clearly-defined mandate. Being a member of the U.N. Security Council requires such resources. This is what I explain to my parliamentarians and they usually end up voting the budget. We have reintegrated our forces in NATO and want to play our role while respecting NATO's internal rules and sharing the burden which, as Robert Gates said, must be as balanced as possible and should not be unilateral.

Finally, on the European construction of a Defense and Security Policy, we must admit that it is sometimes easier to work bilaterally with countries with which we share a common culture for historical reasons. I am thinking in particular of the U.K. with which my predecessor signed an accord on 2 November; our two countries often find themselves together on peri-European theatres—those that are on the very edge of Europe—because we share a common vision of the tragic aspect of international relations that sometimes requires taking action instead of sitting back and doing nothing. Nonetheless, the building of the European Union in which I have participated as a politician since I was a young member of Parliament is slow but assured. It works like a ratchet, somewhat like old mountain railways. Although we move forward slowly, each step forward is almost irreversible and we realize over time that a number of solidarity and community approaches that we share become completely unquestionable. Concerning defense, I do admit that there is still a long slope to climb, but we have started the climb and our country wishes to contribute to this responsibility of ensuring the security and defense of Europe. This is because Europe's great advantage is to have a vision which considers that defense is the simple continuation of a global policy and that defense does not dictate politics. It is this political vision of a balanced world that is open and harmonious and in which democracies would show mutual solidarity and, whenever possible, would proselytize that drives the European policy that France subscribes to. It does so in the respect of the Atlantic Alliance which makes it possible for us to have information and an indirect presence in all theatres of operation.

I would have liked to participate in your working sessions because you can gauge from what I just said that I still have a lot to learn and the added value of your gathering here would have been of great benefit to me. But I am leaving behind the most outstanding French general officers to listen to your contributions and provide me with a faithful account of what I will then be able to bring to the 29th workshop if you are kind enough to present it in France.

Chapter 2

The Growing Cyber Threat to International Security

The Honorable William J. Lynn III
United States Deputy Secretary of Defense

I t is a pleasure to be here in Europe and have so many of our closest allies and defense partners here with us today. I would like to acknowledge French Defense Minister Gérard Longuet and U.K. Minister Peter Luff, and all of the other speakers who will join us. This gathering of leading defense thinkers is itself an important affirmation of the strong ties our nations share. I would like to thank Dr. Weissinger-Baylon, Admiral Laborde, and the French Ministry of Defense for hosting us.

Our conversation on the global security environment is a timely one. We meet as an unprecedented coalition effort over Libya is underway, and as the mission in Afghanistan is entering a pivotal new phase. We also meet during a period of fiscal austerity that is affecting defense budgets worldwide. These topics and others will make this year's gathering a particularly relevant meeting place for national security policymakers.

Even as we discuss and debate the security challenges that dominate the present, we must also look ahead, to emerging threats and the dynamics that are likely to shape the future strategic environment. One of the most consequential aspects of our present and future security environment is the threat posed by computer network attacks. Today, I would like to address this development and its implications for international security.

THE THREAT POSED BY ATTACKS ON COMPUTER NETWORKS

Information technologies have revolutionized how our militaries organize, train, and equip. They are at the core of our most important military capabilities—communications, command and control, navigation, and intelligence, surveillance and reconnaissance. But for all the military capability that information technology enables, it also introduces vulnerabilities. We learned this lesson in 2008 when a foreign intelligence agency used a thumb drive to penetrate our classified computer systems—something we thought was impossible. It was our worst fear: A rogue program operating silently on our system, poised to deliver operational plans into the hands of an enemy.

Vulnerabilities

Exploitation of our Networks. The cyber threat continues to grow, posing new dangers to our security that far exceed the 2008 breach of our classified systems. To date, the most prevalent cyber threat has been exploitation of our networks. By that, I mean the theft of data from both government and commercial networks. On the government side, foreign intelligence services have exfiltrated military plans and weapons systems designs. Commercially, valuable source code and intellectual property has likewise been stolen from businesses and universities. The recent intrusions at the International Monetary Fund, the U.S. defense contractor Lockheed Martin, and Citibank join those that occurred in the oil and gas sector, at NASDAQ, and at Google as further, troubling instances of a widespread and serious phenomenon. Even some companies employing sophisticated commercial defenses have fallen victim to intrusions that have compromised services and stolen intellectual property.

Many of those in this room have first-hand experience with the cyber threat. The French Finance Ministry and the European Commission are two institutions here on the continent to have suffered major intrusions in recent months. This kind of cyber exploitation does not have the dramatic impact of a conventional military attack, but over the long term it has a corrosive effect that in some ways is more damaging. It blunts our edge in military technology and saps our competitiveness in the global economy.

Disruption of our Networks. More recently, a second cyber threat has emerged—and that is disruption of our networks. In this type of attack intruders seek to deny or degrade the use of important government or commercial networks. The denial of service attacks against Estonia in 2007 and against Georgia in 2008 are examples of this kind of threat. Along similar lines, the hacker group Anonymous targeted eBay and PayPal. Up to this point, the disruptive attacks we have seen are relatively unsophisticated in nature, largely reversible, and short in duration. But in the future, more capable adversaries could potentially immobilize networks on an even wider scale, for longer periods of time.

Destruction of our Networks. The third and most dangerous cyber threat is destruction, where cyber tools are used to cause physical damage. This development—which would mark a strategic shift in the cyber threat—is only just emerging. But when you look at what tools are available, it is clear that this capability exists. It is possible to imagine attacks on military networks or on critical infrastructure—like the transportation system and energy sector—that would cause severe economic damage, physical destruction, or even loss of life. Of course, it is possible that destructive cyber attacks will never be launched. Regrettably, however, few weapons in the history of warfare, once created, have gone unused. For this reason, we must have the capability to defend ourselves against the full range of cyber threats. In short, the cyber threat is moving up a ladder of escalation from exploitation to disruption, and ultimately, to destruction.

The Groups behind Cyber Attacks

Nation States. As this threat continues to escalate, the groups that possess these capabilities are also likely to expand in dangerous directions. Today, the highest levels of cyber capabilities reside almost entirely in sophisticated nation states. Thus far, nation states have primarily deployed their capabilities to exploit and occasionally disrupt networks, rather than to destroy them. Many foreign intelligence agencies have attempted intrusions on U.S. networks, but these intrusions are largely limited to exploitation. Although we cannot dismiss the threat of a rogue state lashing out, most nations have no more interest in conducting a destructive cyber attack against us than they do a conventional military attack. The risk for them is too great. Our military power provides a strong deterrent. So even though nation-states are the most capable actors, they are not the most likely to initiate a catastrophic attack, at least in current circumstances. We nevertheless must prepare for the likelihood that cyber attacks will be part of any future conventional conflict. We need cyber capabilities that will allow us to deter and to defend against the most skilled nation-state.

Terrorists. But perhaps the greater and more immediate concern is the threat of a terrorist group gaining disruptive or destructive cyber capabilities. Al-Qaeda, which has vowed to unleash cyber attacks, has not yet done so. But it is possible for a terrorist group to develop cyber attack tools on their own or to buy them on the black market. The nature of cyber is that a couple dozen talented programmers, using off the shelf equipment, can inflict a lot of damage. Moreover, with few tangible assets to lose in a confrontation, terrorist groups are very difficult to deter. We have to assume that in cyber as in other areas, if terrorists have the means to strike, they will do so.

HOW CAN WE PROTECT OUR NETWORKS?

So we stand at an important crossroads in the development of cyber threats. More destructive tools are being developed, but they have not yet been used. And the most malicious actors have not yet acquired the most harmful capabilities. This situation will not hold forever. Terrorist organizations or rogue states could obtain and use destructive cyber capabilities. We need to develop stronger defenses before this occurs. We have a window of opportunity—of uncertain length—in which to protect our networks against more perilous threats.

To ensure we can prevail against the spectrum of threats that cyber poses, we should pursue three avenues of action:

- *Better Protect our Government and Military Networks.* First, we must raise the level of protection in government and military networks. We must ready our defense institution to confront cyber threats, because it is clear that any future conflict will have a cyber dimension. Future adversaries will seek to use our reliance on information technology against us. We must be prepared to defend our networks effectively. Accordingly, the U.S. Defense Department is moving aggressively to counter the cyber threat. As a doctrinal matter, we must be able to defend and operate freely in cyberspace. Over the past two years, we have deployed specialized active defenses to protect military networks and we have established the U.S. Cyber Command to operate and defend them. And we are developing a comprehensive cyber strategy that will guide how each military service trains, equips, and commands its forces for the cyber mission.

- *Work with our Allies on Collective Cyber Defense.* As we prepare our own forces to face the cyber challenge, we must pursue a second avenue of action—working with our allies and partners on collective cyber defenses. We must

strengthen our collective ability to monitor and respond to intrusions. In cyberspace, the more attack signatures you can see, and the more intrusions you can trace, the better your defense will be. In this way the Cold War construct of shared warning has applications to cyberspace today. Just as our air and space defenses are linked with those of our allies to provide warning of airborne and missile attacks, so too can we cooperatively monitor our computer networks for cyber intrusions. In the past year the Department of Defense has worked with NATO nations and other partners to strengthen our cyber engagements. Last month, the Obama Administration released the U.S. International Strategy for Cyberspace. White House Cyber Security Coordinator Howard Schmidt will speak tomorrow about what this new strategy means for our friends and allies, and how it will help foster a more free, reliable, and secure global internet. For the Department of Defense, the international strategy provides a framework for our contribution to an effort that has many facets, from internet freedom and e-commerce to cybercrime law enforcement and international norms of behavior. Ultimately, this strategy will help us build a coalition of nations whose mutual interest in securing cyberspace will ensure the benefits we derive from it flow uninterrupted. A consensus for action on cyber security is emerging in Europe. NATO is unanimous in acknowledging the need to elevate its treatment of network security. The new Strategic Concept names cyber security as a leading priority for NATO in the 21st century. The Alliance made a high level commitment to cyber security at the Lisbon Summit last year. As a result, upgrades are underway to enable NATO to better defend its networks. The commitment to take NATO's Cyber Incident Response Center to full operating capability by 2012 is a significant step in the right direction. And at last week's ministerial, NATO ministers approved final cyber policy guidance. The European Union is also moving rapidly to address cyber security. Through the U.S.-EU cyber dialogue, Secretary of Homeland Security Janet Napolitano has met with the EU Home Affairs Commissioner. I have conferred with the EU High Representative. And a joint cyber exercise slated for later this year will help establish how our computer incident response centers can work in partnership with the EU's new cyber security unit.

* *Public-Private Partnerships with the Operators of Critical Infrastructure.* The third avenue of action is to form public-private partnerships with the operators of critical infrastructure. We need to work with industry to raise the level of network defenses in industrial sectors that are crucial to our economy and to the functioning of our militaries. This is in many ways the most consequential to the security of our societies. The threats we face in cyberspace target much more than military systems. Cyber intruders have already probed many U.S. government networks, our electrical grid, and our financial system. The failure of any one of these could cause massive physical damage and economic disruption. This is noteworthy because protecting our nation's critical infrastructure is not only essential to the functioning of daily life, it is also crucial to national security. In the U.S., as in Europe, our military bases and installations are part of—and not separate from—the civilian infrastructure that supports our towns and cities. Ninety-nine percent of the electricity the U.S. military uses comes from civilian sources. Ninety percent of U.S. military voice and internet communications travel over the same private networks that service homes and offices. We also rely on the nation's transportation system to move military freight, we rely on commercial refineries to provide fuel, and we rely on the financial industry to pay our bills. Disruptions to any one of these sectors would significantly impact defense operations. A cyber attack against more than one could be devastating. In short, secure military networks will matter little if the power grid goes down or the rest of government stops functioning. Protecting the networks that undergird critical infrastructure must be part of our national security and homeland defense missions.

Making this part of our mission will require a strong partnership with agencies who have jurisdiction over systems critical to military effectiveness. In the United States, the Department of Homeland Security has responsibility for protecting the ".gov" domain and for leading government efforts to protect critical infrastructure in the ".com" domain. In the past year, we have signed a memorandum of agreement with the Department of Homeland Security that codifies our commitment to seamlessly coordinating cyber security efforts. We have established a joint planning capability and exchange of personnel in our cyber watch centers. And we are helping Homeland Security deploy advanced defensive technologies on our government networks.

The critical infrastructure upon which our defense establishment depends also extends to the private companies that produce military equipment and weapons. Our defense industrial base is critical to our military effectiveness. Their networks hold valuable information about our weapons systems and their capabilities. The theft of design data and engineering information from within these networks greatly undermines the technological edge we hold over potential adversaries. Current countermeasures have slowed but not stopped the continued exploitation of U.S. defense industry networks. We need to do more to guard these vital storehouses of design innovation. Toward that end, last month, the Department of Defense, in partnership with the Department of Homeland Security, established a pilot program with a handful of defense

companies to provide more robust protection for their networks. In this Defense Industrial Base—or DIB—Cyber Pilot, the Defense Department is sharing classified threat intelligence with defense contractors or their commercial internet service providers along with the know-how to employ it in network defense. By furnishing network administrators with this threat intelligence, we will be able to strengthen the existing cyber defenses at defense companies.

In the DIB Cyber Pilot, the U.S. government will not be monitoring, intercepting, or storing any private sector communications. Rather, threat intelligence provided by the government is helping the companies themselves, or the internet service providers working on their behalf, to identify and stop malicious activity within their networks. The pilot is voluntary for all participants. Although this pilot breaks new ground on several fronts, we have a long way to go, and a lot of work to do, before our critical infrastructure will be fully secure. But by establishing a lawful and effective framework for the government to help operators of one critical infrastructure sector defend their networks, we hope the DIB Cyber Pilot can be the beginning of something bigger. It could serve as a model that can be transported to other critical infrastructure sectors, under the leadership of the Department of Homeland Security.

The Importance of Collective Action. Without question, developments in cyberspace have redefined the front lines of national security. Within a few short years, information technology has transitioned from a support function to a strategic element of power in its own right. As a result, future conflicts will unquestionably have a cyber dimension. The doctrine, organizational structure, and resource allocation of our defense ministries must change to reflect this new reality. But our efforts cannot end there. The challenges we face in cyberspace are not amenable to narrow solutions. No single agency can tackle the required issues. No one nation can devise or enforce a sustainable solution. And no combination of nations can succeed without partnering with private sector companies. The range of actions necessary to enhance cyber security will require engagement in our defense institutions, across our governments, between our nations, and between the public and private sectors.

In short, we must work together, as everyone—from ordinary citizens, to the owners and operators of critical infrastructure, to our warfighters on the front lines—has a stake in cyber security. Like other security challenges that galvanize like-minded nations, cyber threats can be more ably defeated through collective action. And just as we have for the last 60 years, I am confident that we can act collectively against this threat, and make the investments in capability and interoperability necessary for us to prevail.

Chapter 3

The Strategic Importance of International Partnership

Minister Peter Luff MP
U.K. Minister for Defence Equipment, Support and Technology

It is a privilege to be part of this opening session with my colleagues, French Defence Minister Gérard Longuet and U.S. Deputy Secretary of Defence William Lynn. Our aim in Paris is not to identify the broad challenges and threats we face in this interconnected and volatile world—there is a strong and growing consensus on what these are. Our aim is to be clear about how we will tackle them. Today, my aim is to offer a British perspective:

- First, on the kind of Armed Forces that will be required if we are to protect national security and maintain international stability,
- Second, on the relevance and structure of international security architectures, and,
- Third, on the compelling case for greater international collaboration, not least in my own ministerial portfolio of equipment, support, and technology.

RECENT DEVELOPMENTS IN THE ARAB WORLD

Before I do, let me reflect on recent events. Developments in the Arab world are a wake-up call to those who have failed to acknowledge the volatility of the world we live in and the pace of change we need to be prepared for, and for those who have not fully appreciated the implications of both. Cast your minds back to Christmas:

- Who would have predicted that Osama bin Laden would have finally been tracked down and killed, or that the long arm of international law would finally catch up with Ratko Mladić?
- Who then would have predicted that the leaders of Tunisia and Egypt would be swept away on a tide of old fashioned street uprisings, supported and spread by the new technology of texts and tweets?
- Who would have predicted that NATO would be leading the effort to uphold U.N. resolutions in Libya and protect the Libyan people from the brutality of their own government?
- Who would have predicted that this demand for change would spread across the Middle East?

The Arab Spring is a direct challenge to those who claimed that the only choice for the Arab world was between feudalism, authoritarianism, or Islamic fundamentalism. It is proof, if we ever needed it, that representative government is a universal urge, not just a cultural expression of the West. It is proof, if we ever needed it, that the pursuit of our national and collective security cannot be confined to the Euro-Atlantic zone.

A MULTI-POLAR AND MULTI-POWERED WORLD

The world is now multi-polar and multi-powered. And the world is not just a geographic entity anymore—it is networked and virtual. Recent cyber attacks on diverse organisations like Lockheed Martin and the International Monetary Fund tell of a future that has already arrived. As Bill Lynn so effectively and chillingly reminded us, theft of data often unnoticed is already of immense concern, and the consequences of other threats cannot be underestimated. So we face a volatile future of diverse and unpredictable threats. This is no longer academic, no longer a matter for think tanks and think pieces. It is real. It is here. And we must respond. That is why Secretary Gates' speech last week was as refreshing as it was uncomfortable for the rest of the Alliance. It was a clinical warning from an experienced man. He used his opportunity wisely—to speak truth unto power.

The Imbalance in NATO Must Be Taken Seriously

Many Europeans have neglected to take the imbalance in NATO seriously, and have dismissed the danger this poses to the Alliance. Well, we can do that no more. If there was ever a 'peace dividend' from the end of the Cold War, it has been well and truly cashed. It is not just that the U.S., like many of us, faces the serious pressure of balancing budgets in a time of austerity. It is not just that asking the U.S. Congress to fund the majority of NATO military spending becomes yearly more difficult to achieve. Cold hard facts are drawing American eyes irresistibly to the Pacific. For example, China's recent display of their new aircraft carrier, and of course their new stealth fighter, has concentrated many American minds.

In the U.K. we are clear: NATO remains the bedrock of Britain's security. It is a national priority for us that this, the world's greatest military alliance, remains viable and powerful. NATO has agreed targets for defence spending and deployability—which Britain meets—but as my Secretary of State Liam Fox has said, "these targets seem more honoured in the breach than the observance" by most countries. Twenty-three out of 28 Allies do not meet the long standing NATO target for defence spending reconfirmed by all as recently as March. And this isn't just about money; it is equally about deployability and the political will to deploy a combination, which only the U.S. and a few of the more capable and willing Allies can offer.

In a world in which the U.S. cannot afford to police "sans limites," no-one in Europe can afford to be sanguine about the U.S. producing security for those who merely consume it, and give perhaps too little in return. All of us must be willing and capable of accepting and funding our fair share of the burden and risk of Alliance membership, only then of reaping the associated benefits. And we must demonstrate the political will required to commit to missions of collective security. In austere times, it's tempting to defer the cost, pass on the burden, and recoil from change.

Why Britain and NATO Must Remain in the Premier League of Military Powers

But in Britain, when we undertook our Strategic Defence and Security Review last year, we rejected the timid approach of accepting a diminished role in the world. We rejected the notion of strategic shrinkage for the United Kingdom. And we rejected the notion of strategic shrinkage for NATO. We decided on an adaptable posture and flexible forces, maximising deployability, emphasising reach. We have had to take difficult decisions to manage this change in times of constrained budgets. And incidentally those decisions enable us to increase spending in some areas, notably cyber defence. We have been clear that we will have to work ever more closely with our allies to meet the needs of national and collective security. But we have chosen to remain in the premier league of military powers, meeting the NATO 2% target throughout our current spending period.

Recent events have validated this approach. What is happening in Libya is a very different operation from that in Afghanistan, yet both offer perspectives on the changing character of conflict. And as important as NATO's Article 5 is—the very embodiment of NATO's core collective defence mission—Afghanistan and Libya have, in very different ways, reinforced the message that European security today means much more than sitting at home, waiting to repel attacks. This was agreed in NATO's Strategic Concept, and is consistent with our own SDSR. That's why over 150,000 brave men and women are committed to NATO-commanded operations on three continents. That is also why many non-NATO countries have come on board these operations of their own volition. And when the U.N. Security Council swiftly passed Resolution 1973, it was to NATO that everyone looked as the only practical instrument of choice for internationally agreed military operations.

What Counts Is What Works

In today's world, what counts is what works, which means maximising co-operation through tried and tested methods. It makes no sense to talk of spending scarce resources constructing alternative, parallel, bureaucratic structures. Of course we should pursue a more effective relationship between NATO and the EU, including in crisis management. Indeed, just last month, Britain and France were signatories to a letter signed by 15 European Foreign Ministers of EU and NATO nations seeking just that.

But we must ensure that that we are able to deal with threats appropriately and in a timely manner. While European allies must be able and willing to participate in high intensity operations, primarily through NATO, we see the principal role of the EU as an institution at the softer end of the scale. Talking up the EU as an alternative route does not address diminishing defence budgets, or lack of capability, deployability and political will. We remain profoundly sceptical of the

need for additional structures and institutions for the Common Security and Defence Policy. As Liam Fox has observed, "Double hatting doesn't increase capacity or capability. It doesn't create one more bullet, one more gun, one more plane."

That's emphatically not to say that NATO is perfect and should be exempted from reform; as we showed at last week's NATO Defence Ministers' meeting this is certainly not the case. What is truly impressive is how the Alliance has used recent events and the financial pressures on all of us to demonstrate the power and benefits of genuine reform. Reform means that the Command Structure will reduce in size yet offer better value for money. Reform means focusing scarce resources on things we really need. Reform means fixing, not avoiding, the vexed issue of common funding.

INTERNATIONAL PARTNERSHIP IS THE BEST OPPORTUNITY FOR TRANSFORMATION

But where I see the greatest opportunity for transformation is international partnership. In today's world, the case for partnership and collaboration is compelling. We in Britain will continue to deepen our bilateral defence relationships and broaden them to reflect today's threats. For example, the depth and breadth of the U.K.'s defence trade relationship with the U.S. allows for lower barriers and higher ambitions. So we welcome the U.S. Administration's commitment to reform of their export control system and are delighted that Congress ratified the U.S.-U.K. Defence Trade Co-operation Treaty last year. A number of detailed arrangements are required to be in place before the Treaty can be brought into force, and we plan to run trials to ensure that these are robust and working effectively. We all hope and expect that the Treaty will deliver capability and interoperability more quickly to the front line, as well as benefits to industry by reducing bureaucracy on both sides of the Atlantic.

British-French Collaboration as a Strategic Imperative

The U.S. have long argued that Europe as a whole needs more effective, operationally viable forces. I agree, and with my ministerial responsibilities I can clearly see that this necessarily involves improved access to U.S. technology, and research and development. In Europe, Britain and France are the two major defence powers, with Armed Forces of comparable size and capability, actively engaged in operations around the world—and willing to act when required. The political and military leadership which Britain and France have shown over Libya is further testament to our alignment—taking the lead role in coalition operations and operating together.

Our collaboration is a strategic imperative, as natural as it is necessary. That is why we signed our bilateral Defence Co-operation Treaty last year. Let me clear up any misconceptions too. The Anglo-French Treaty is not Saint Malo version 2. Nor is it incompatible with what Britain and France continue to plan to be able to do—alone if necessary, or with other capable and willing countries. Our Treaty with France—a bilateral agreement between sovereign nations—is intended to complement our engagement with NATO and the EU. It is not a zero sum game with respect to other partners. It is about making things happen at a practical level.

Take the ongoing development of a U.K.-France Combined Joint Expeditionary Force. This will give us the ability to field an early entry force that can undertake complex combat and high intensity operations. We are working towards full operational capability in 2016. We are already training together. Headquarters 7th Armoured Brigade will deploy to France on Exercise FLANDRES later this month, working with a French brigade headquarters under French divisional command.

We should all strive to do more of this, not just Britain and France. Indeed we strongly hope that our example will encourage other partners to seek better value for money and improve capability through co-operation with each other. And it is no good saying, for example, that it doesn't make sense to have multiple shipyards or armoured vehicle manufacturers in Europe unless the one saying it is clear about what capability their country is prepared to give up or collaborate on.

Clear-headed inter-dependency extends to equipment capability too. This is exactly the issue I have been discussing with my French counterpart earlier today at one of our regular meetings to maintain momentum in this key area. Complementarity amongst Europeans, and between Europe and the North American Allies, must be the name of the game if the Alliance is to remain credible and effective. So I welcome NATO's continuing efforts to both remove unnecessary duplication from Allied inventories and highlight the worrying capability gaps across Europe which are being created as a result of budget reductions in almost every country.

Multi-layered Security Built on Shared Interests

Talleyrand remarked, "La parole nous a été donnée pour déguiser notre pensée"—"We were given speech to hide our thoughts." Today I have tried to make Britain's priorities crystal clear. Britain will continue to be a global player. As we maintain that commitment, we do so knowing that, in the U.S. and France, Britain has no closer defence and security relationships. But we do so knowing that the strength of our friendships and collaboration within NATO, the EU and with other partners far and wide is not diminished by this closeness, but strengthened. The successful pursuit of multi-layered security, built on shared interests, built on improved capability, built on improved deployability, is our goal. And we are clear that NATO stands at the heart of what we must do to achieve that goal.

Chapter 4

Defense in an Ultra Competitive Environment

His Excellency Pieter De Crem
Minister of Defense of Belgium

My position is a little bit particular: I am the Defense Minister in a caretaker government. "Caretaking" for English speakers is like "running affairs" for us. In the current circumstances, I cannot help but view this as an advantage: The world around us and the challenges it entails evolve so rapidly that having the ability to "run affairs" significantly increases our ability to meet them.

I would like to point out that, after the Paris Conference organized by President Sarkozy, which Prime Minister Leterme attended, our Parliament, both in commission and in plenary session, unanimously approved our active participation in the Libya operations, that is, with only one abstention! It is a huge paradox—and this is an understatement—since the Foreign Minister and myself were the two most hesitant participants in that discussion. "R2P" or "Responsibility to Protect" is a rather nice and magnanimous principle about which a lot of reflexion is still needed in our academia. For our foreign and defense policy it is certainly not, at least at this stage, an instrument of pragmatism and realpolitik. Still, I cannot recall a single case, either during my political career or that of our parents, where the start of a military operation was voted in this fashion.

We could argue that the Mediterranean shores (Mare Nostrum) are part of our natural zone of influence. This is indeed the case and both the European Union and NATO strive to develop a good neighborly policy which includes all policies that concern their citizens. These policies are necessary and useful but we must admit that the citizens' expectations of their own leaders is what led to the Arab Spring. To me, this is the rightful order of things and we must quickly find the means to help both leaders and populations of countries that are "on the move" to find a new balance in their progress towards democracy, the exercise of their full collective and individual rights, and economic and social development.

Let me go back to my speech and say a few words about our financial and economic situation, about the transformation of defense and its completion, and finally some observations on our most recent EU and NATO meetings.

THE CREDIT CRUNCH AND THE SWELLING DEBT

There are a few things with which I disagree. Starting with the fall of the Berlin Wall, then continuing on with the dissolution of the Soviet empire, some critics have considered that the Alliance was an anachronism; we could and should do without it. I did not and still do not agree! The absence of a common and external enemy inevitably brought up the question of the unifying element, of the essence of our organization. Certainly, this was an important question but not an existential one. Somewhat provocatively a diplomat said that "NATO is like marriage, anyone who is in, wants to be out. And anyone who is out, wants to be in." The enduring reality is that there is no alternative to NATO as the cornerstone for the defense and for the security of its member states. If such an alternative exists, it has yet to be found and tested!

We can see with our very eyes that the fatal attraction of NATO is not waning when we observe the great appeal that NATO still holds for new or would-be members and the success of the different partnerships. This is an important quality that NATO shares with the European Union. The key question is: Why a defense? What ideas, what values still deserve the use of military means? We can count on our academicians to make a list of events or accidents that can be interpreted as an "armed attack against our vital interests;" yet tomorrow's reality is unlikely to be part of that list.

"Life is what happens to you while you're planning." This clever remark by John Lennon is indeed one with which we are all likely to agree. Nobody could have imagined what would happen in New York on 11 September 2001, nor that such an attack would justify the sole and unique invocation of Article 5 of the Washington Treaty. On this account, please allow me to digress slightly: The fight against terrorism, for the establishment of stability and security in Afghanistan is not close

to ending yet. President Obama is strictly complying with what he had announced when he came into office. At the time, he considerably strengthened U.S. forces in Afghanistan with an additional 30,000 men—this was the "surge" that was announced as "temporary." As promised, he will now begin to reduce this reinforcement but this is certainly not "the kill."

No one was able to foresee the Arab Spring either or the fall of the Berlin Wall or that of the Soviet Empire. No one, or only a few people, are aware of the cyber threat that hangs over our heads. Our Baltic friends were practically the first ones to experience it. Our friends in the Pentagon and at NATO Headquarters can talk about it from experience and more and more companies like Nintendo, Sony, or a great many others can do so as well.

The conclusions you will draw will probably be similar to mine: We no longer need to protect ourselves against an invasion of tanks or missiles and shells raining down on us. The key term today is complementarity-flexibility. We can no longer afford to invest in large reserve stocks or in equipment that is "nice to have, in case of." NATO does not have the means to police the world and never dreamed of doing so. The theological debate of "global" versus "regional" was never true to life. What shall we invest in then, what will be the means that our governments and voters will give us for defending the vital interests that we will define by mutual agreement?

The credit and banking crisis as well as the economic crisis had equally positive effects. During our European Presidency, the second one under the new Lisbon Treaty and therefore under the direction of the High Representative, these crises helped me channel our thoughts on future action in the direction of new forms of military cooperation that would combine a high level of ambition with a high level of integration. We called this the "Ghent Framework." Since that time, it is also what NATO has called "Smart Defences" for its own action in the same direction.

Some nations look to more international cooperation to solve their defense budget problems. Although I advocate a more ambitious cooperation, I cannot agree. Cooperation on acquisition, maintenance, and the use of capabilities is only a partial solution. Such cooperation does not always make it possible to achieve savings in our budgets; it is mostly a way to multiply the efforts and means that will still be available to us. The other element of the solution will require a significant dose of political will. The idea that a reinforced cooperation will force countries who spend less on military spending to contribute more is taking root both in NATO and the EU. However, when general budgets are prepared, the social agenda always takes precedence over anything else, in particular military expenditures. How do we solve this paradox that requires us to do more with less? What will be the easiest solution: Additional financial resources or a new political will?

BEYOND THE TRANSFORMATION

In late May, I held a conference at the Royal Higher Institute for Defence in Brussels on "The Role of Belgian Defense in an Ultra Competitive Environment." This gave me a chance to look at the results of the transformation of Belgian defence, something that you can treat yourself to after spending almost four years as head of a department. When I arrived there, the Belgian Army counted approximately 42,000 men and women but could barely deploy 850 people at peak times. Personnel costs consumed 66% of a budget that had decreased over a period of 15 years. In addition, as a result of orders that had already been placed, I was carrying a debt that approximated between 224 and 350 million euros annually until 2011, a cumulative burden that almost equaled the annual budget of the department. The units were never fully formed and the infrastructure was still the Cold War one. Those were the symptoms I found: A defense with an acute need for a new impetus and transformation.

I planned this transformation with my cabinet and the general staff. Sometimes we had to pull out all the plugs. But the transformation is a reality. Today it is irreversible and day to day matters do not slow down its implementation, far from it. We focused on the "core business" which is the participation in peace operations and taking on our share of responsability and costs within the organizations that are essential to our defense and security. With that goal in mind, I cut back on staff numbers, modified the organizational structure, and rationalized the infrastructure. I also freed up the means to start investing again. The point of no-return has been reached and we can now look again towards the future.

Of course, this was not that simple, but I must admit that I never felt I would meet the same fate as Sisyphus. Certainly, there was somewhat of a conservative reaction but, all in all, it was rather insignificant and quite manageable. The army itself, public opinion, and the political circles were aware that restructuring was needed and there was a desire for clarity and direction. I believe that this time is definitely behind us and that this new stage is a source of great satisfaction.

This does not mean that my successor will be idle. Future recruitment will remain a challenge, just like the battle against attrition and the declining size of the reserves will remain. We will need to continue investing and fighting for the necessary means to participate fairly in the peace operations. We will also need to lay the foundations for reinforced cooperation—a key condition for maintaining and improving the acquisition process—and the maintenance and utilization of the capabili-

ties we will require. In the coming weeks, I am hoping to lay the groundwork for reinforced cooperation with the Benelux countries. First and foremost, I wanted to send a positive message about transformation at a time when nearly all the countries that border Belgium face similar questions and challenges. The correct implementation of this transformation is also a key condition for the development of international or multilateral cooperation, whether in the EU's "Ghent Initiative Framework" or in the NATO "Smart Defence" one.

THE LATEST MINISTERIAL MEETING ON DEFENSE

Finally, I would like to briefly come back to the recent EU and NATO Ministerial Meetings on defense and distill a few of their elements, including Defense Secretary Gates's address, which was tough but also kind.

These two meetings could not have been more different. The EU one was brief and abysmally superficial. We discussed some of the operations that the EU is currently involved in or in which it is likely to have a major involvement—I mean Libya—and we assessed the work that would be required to move forward on "Pooling and Sharing." At about the same time, NATO was focusing on the Libya operations and especially on what the other institutions, mostly the U.N. and the EU, must do to give meaning to our military operations and monitor them. NATO has also carried out its own transformation—an important step that we should not underestimate.

It is quite striking that Defense Secretary Gates chose that moment and chose Brussels to make a major policy statement. Of course, it was a kind of testament from a minister who has had a lot of experience and a long career in which he served his country under two presidents. The circumstances, the moment, and the place were right for his rather severe message. Let me highlight three points that I view as the center of gravity of his intervention and that will undoubtedly require further thoughts, consideration, and subsequent action. I am pretty sure that they will be part of the discussions here today and tomorrow.

There was the harsh but realistic analysis of the defense efforts in the Alliance, the lack of investment on this side of the Atlantic, as well as an obvious acceptance of inadequate and insufficient defense efforts. For most of the Cold War, the U.S. covered 50% of the defense spending while its share today in the (enlarged!) Alliance is 75%. Undoubtedly, something is "rotten" (to use Shakespearean language). The operations in Afghanistan and Libya further illustrate this imbalance between the two sides of the Atlantic and also between "European" Allies.

There was a serious warning that the perception of the Alliance might dramatically evolve in the American Congress and in American politics in general. We might not be willing to see that evolution but it should not come as a surprise since we can observe more or less the same phenomenon in Europe towards NATO and the EU. But the problem turns out to be more serious when the money lenders or sponsors throw it up. The concept of "fair share" should be kept vividly in mind, beyond the mere department of defense.

Finally, there was a plea for reversing the declining trend in defense capabilities. In this context, the Defense Secretary mentioned NATO and Europe and its defense institutions twice. Hearing this reference to the EU, to the second and indispensable pillar of our security and defense architecture, is to me really encouraging. This underscores that the United States recognizes the real potential that lies in what we are now calling "the Ghent Framework" or "Pooling and Sharing" and the fact that our efforts in one organization also reinforce the other organization. Together with "Smart Defence," the NATO word for the same effort, we should be able to reverse the trend that Defense Secretary Gates rightly criticized. If he believes in it, should we not be more motivated and ambitious in moving forward on a Common Foreign and Security Policy (CFSP) and a Common Security and Defence Policy (CSDP)? We, ministers of defense, but also our colleagues in the External Relations Council, should listen to his message and make it their own.

Chapter 5

Threats and Challenges to Euro-Atlantic Security:
A Polish Perspective

His Excellency Bogdan Klich
Minister of Defense of Poland

Thank you very much for this opportunity to share some thoughts concerning our perception of not only Euro-Atlantic but also European issues connected with security. I underline European because we are on the eve of the Polish presidency within the European Union so, it may be important for you to know a little bit more about our contributions during the second half of this year. I will concentrate on those economic and security issues that are important for both NATO and the European Union, although they are important for the United Nations too.

Without any doubt, our societies and economies are interlinked, and development over the last two decades shows that these connections are getting stronger. If something endangers the security of our neighbor, there is no justification to stay relaxed. That is why we should approach the challenges of the future in a comprehensive manner. This view can be found in the new NATO Strategic Concept—you know that there was a decade between the former Strategic Concept of the Alliance and the current Strategic Concept that was adopted during the last Lisbon Summit. Yet during this decade, many things changed in the area of security—new threats emerged, new challenges occurred. So, I am sure that the response that we adopted during the Lisbon Summit last November is the right one. This is at least the position of the Polish government. We are satisfied with the new NATO Strategic Concept that was adopted in Lisbon.

I will start with some observations about the threats and challenges; then I will move to relations between the traditional and so-called new challenges that are actually not so new; and I will conclude with the issues of international cooperation, especially between NATO and the European Union.

THREATS AND CHALLENGES

Proliferation of Missile Technologies. To start, let me briefly go over the threats and challenges that are a source of concern. One is the proliferation of missile technologies, both conventional ones and those related to weapons of mass destruction. More and more countries are acquiring the necessary expertise and technologies to advance missile programs. In some cases, their intentions remain unclear. What is especially worrisome is the fact that this process is taking place in the most unstable regions of the world. While the probability of using nuclear weapons is still considered very low, what drives our policy is the fact that the consequences could be tremendous.

Proliferation of Terrorist Groups. Equally disturbing is the growing number of terrorist groups. Here in this room we know the important differences between old and new terrorism. By old terrorism, I mean the terrorism that we witnessed during the Sixties and Seventies. By new terrorism, I mean the Al-Qaeda type that began in the Nineties with such dramatic consequences in the current decade.

Over the past few years, the international community has had unquestioned success in fighting terrorism. There are new legal frameworks, national as well as international, that are taking into consideration all the steps taken by the European Commission and the European Parliament that introduced into the European Union a new legal framework against terrorism. One of them is the "Solidarity Clause," not yet used because the Treaty of Lisbon has just entered into force. Nevertheless, we should expect that terrorist groups, although weakened and fragmented, will continue to threaten the societies of the Euro-Atlantic community.

Frozen Conflicts in Europe and its Vicinity. What is more, there are still so-called frozen conflicts in Europe and in our neighborhood. At first sight, the situation often looks calm but, in many places, there are still unresolved disputes or unful-

filled promises and high expectations. The reconciliation process in the Western Balkans and the Southern Caucasus has a long history of successes and failures. One example of those failures is the lack of a final decision concerning the structure of the mission of the European Union in Bosnia and Herzegovina. I do remember all the ministerials that took place during the last four years and all of our discussions among ministers of defense of the EU concerning the future of our engagement in Bosnia and Herzegovina. During this process, it was France, it was Spain, and then it was Poland that decided to withdraw combat elements from this mission but the final decision about the shape of this mission has not been taken.

Poland's Eastern neighbors are still seeking the most suitable form of political, social, and economic organization. From the perspective of Warsaw, this generates tensions, most visibly in Belarus where the legitimate aspirations of the people are brutally suppressed by the authorities. Such instabilities generate organized crime and trafficking in arms and people.

Cyberspace. The new area in which threats to our security can occur is cyber space. Last week, during the ministerial meeting of NATO defense ministers, we decided to adopt the Action Plan for countering cyber attacks and it will lead us, I hope, to better coordination of our efforts in the member states and better technologies to do so. The new NATO Strategic Concept noted that incidents generated by actions performed in cyberspace today can reach a threshold that would threaten national or Euro-Atlantic security. This was the reason for introducing cyber security as one of the responsibilities of the Alliance. It is even more complicated since such activities may be taken up by specialized state institutions, civilian or military, non-state actors, including terrorist or criminal organizations, as well as individuals. The attribution of responsibility for cyber incidents remains a difficult and politically risky task.

Access to Energy. Our societies are now dependent not only on the flow of information but also on stable access to energy. The instability of distribution has been demonstrated many times by the problems that we experienced in the proximity of Belarus or Ukraine. The security of major maritime supply routes is another source of concern. The situation in the Horn of Africa is a clear example, and the current presence of the European Union mission and the NATO operation in the region show the importance of energy supply routes for the Western world.

RELATIONS BETWEEN THE TRADITIONAL AND
THE SO-CALLED NEW CHALLENGES

Each of the nations belonging to the Euro-Atlantic community is vulnerable to the threats I have mentioned to a different degree. Some are situated closer to unstable regions, while others are more likely to be infiltrated by terrorist organizations, are particularly exposed to cyber attacks, or are within the range of foreign missiles.

Whenever and wherever these threats occur, their potential consequences are not regionally limited. So let me reiterate one of my initial statements that we are interlinked, not only countries, but also regions, and international organizations as well. That is why a similar update of the strategic documents should be considered also by the European Union. Both in Poland and in the forum of the European Parliament, I expressed several times my opinion that the European Security Strategy (ESS) adopted in 2003 was one of the most visionary strategic documents that I have read. It was at the time much better than many national security doctrines. It was a much more future-oriented document than for example the 1999 Strategic Concept of the Alliance. And it was a good idea to review this security strategy of the European Union in 2008. But I am pretty sure that we could begin work on a new doctrine, on a new European security strategy. The current one assumes the mutual commitment of the EU institutions, member states, and partners to deal with a broad range of disputes through cooperation. As a pre-condition, the cooperation requires well-defined goals and agreed upon execution tools. Therefore, progressively created rules to deal with these threats are not just a matter of choice but a necessity in order to react in a timely and adequate way.

Drawing lessons from the Libya planning process, we should now wonder whether the EU is sufficiently united politically to act and whether it has sufficient mechanisms to this end. My personal opinion is that we have within the European Union a broad range of good instruments, mechanisms, and tools but we do not know what to do with them because they were created during a discussion on the Constitutional Treaty, then discussed during the re-creation of a new treaty following some troubles with the Constitutional Treaty. These mechanisms exist. For example, we have a permanent structure for cooperation but we do not know how to use this permanent cooperation structure for the benefit of the member states of the EU. We mentioned the solidarity clause earlier but we do not know if the solidarity clause should be limited as it is in the Treaty of Lisbon only to terrorist threats and terrorist attacks or if it should be extended to something similar to Article 5 for the European Union.

Most of the challenges I have mentioned so far are often described as new or emerging, but focusing solely on them would be reckless. Let us not forget that there is always much continuity in international relations. Even though we are do-

ing everything we can to break negative attitudes, build confidence with our partners, and open up new levels of transparency, there is still some traditional thinking among the leaders and militaries of many nations. Many regions are witnessing substantial growth in modern military capabilities. At present, our assessment is that the threat of a conventional attack in Europe continues to be very low. This view has been expressed both in the NATO Strategic Concept and also in several national strategic documents—the Polish security strategy from 2007 is one of them. But in the longer term, this threat does exist. This makes Article 5 still valid. NATO was originally meant for traditional threats. They are reduced now but it does not mean that we can avoid maintaining the necessary capabilities to deal with such threats. I am personally in favor of a balance between the so-called territorial and expeditionary capabilities and missions of the Alliance.

My country is committed to fulfilling our obligations arising from the collective defense clause because we believe that solidarity remains the main core of the Alliance and should be continued. That is why many member states of the Alliance decided to contribute to the Afghan mission, to the International Security Assistance Force (ISAF) mission, even if those countries have no interests in Central Asia, particularly in Afghanistan. The solidarity of the Alliance is one of Afghanistan's aspects that we can present to our citizens as a main argument for contributing to the ISAF mission and in my country we are trying to do so.

It is also necessary to modernize our forces. We need to make them more deployable and prepare them for rotations in the NATO Response Force. Modern defense, as indicated in the very title of the new Strategic Concept, requires NATO nations to be ready, even now, when we are coping with the aftermath of the global financial crisis. Resigning from traditional capabilities cannot be an option. We must improve our abilities and capabilities to be better equipped for expeditionary missions.

INTERNATIONAL COOPERATION

Global security is indivisible. Therefore we need stronger cooperation between all of the stakeholders, but first of all among the United Nations, NATO, and the European Union. Once again, let me concentrate on the relationship between NATO and the EU. The coordination of the international response to the Libyan crisis is a promising sign. It might be worthwhile to compare the involvement of Western countries, including the intervention of NATO as an organization, with the lack of such needed interventions during the Balkan crisis—I mean in Bosnia-Herzegovina, especially in the second half of the Nineties. Comparing the lack of political will to intervene in the Balkans with the engagement of an initial coalition of the willing followed by NATO's action in Libya, we can see a promising difference. Although I am pretty sure that the European Union as an organization was not and is not prepared for such missions, we could imagine that such crisis-management missions could be led by the European Union. Libya is one of those examples.

Last week, NATO decided to sustain Operation Unified Protector until the end of September, but it is already time to prepare for the day after the conflict and describe the roles of the appropriate organizations, for example the specific roles of NATO and the EU on the ground.

Let's discuss the current legal framework for cooperation between the EU and NATO. We do have at our disposal the so-called Berlin Plus agreement from 2003. It exists but does not create enough regulations for good cooperation between both organizations on the battlefield. And because of the lack of political will (and frankly speaking, the conflict between Turkey and Cyprus), neither organization is able to overcome this barrier and update the Berlin Plus agreement to a so-called extended Berlin Plus agreement that would better regulate the cooperation between both organizations at least on the ground, and especially in regions where both organizations are represented like Kosovo or Afghanistan.

In this context, cooperation between NATO and the EU requires our special attention. There are some easy tasks to take up, for example the strengthening of the working relationship linking Allied Command Transformation (ACT) and the European Defence Agency (EDA). They do not have a legal framework for cooperation. They do it, they exchange views, they try to coordinate projects that they propose to the member-states of both organizations, but there is no legal framework for cooperation between ACT and EDA. This is one of the paradoxes.

There are also difficult tasks, but we should not shy away from tackling them—The conclusion of the security agreement between Turkey and the EU and agreement on the participation of Cyprus in the NATO partnership programs are among them. There is much to be done on the side of the EU that would make the organization better able to cooperate with other partners. I am absolutely convinced that the past decade has been a success for the Common Security and Defence Policy of the EU because it began in 1998. We now have about 20 operations in the history of CSDP such as the legal framework that I discussed, the European Security Strategy and the European Defense Agency. These are important achievements of the last decade but we should go forward.

From this point of view, after consultations with the majority of our partners within the European Union, the Polish presidency decided to propose four priorities regarding security and common defense:

- First, we would like to move forward with capability development and increase the usability and flexibility of battle groups. Poland has engaged in initiatives regarding this issue, hoping to obtain the best possible value for money through multinational cooperation, especially under today's economic conditions. Capabilities are important, not only for the military Alliance but also for economic and political organizations with elements of security and responsibility, and by this I mean the European Union. After the review that is currently taking place in the European Union of the so-called Pooling and Sharing projects, I hope that at the end of our presidency we will be able to put on the table a catalogue of the programs that were accepted by the member nations. As to battle groups, there has been ongoing discussion over the last four years about what to do in practice with the battle groups that we have at our disposal. I do remember a meeting in Göteborg where we discussed this issue. It was not the first time that the ministers of defense discussed the usability of the battle groups. Nonetheless, we do not have the results of this discussion yet. We did not come to any agreement that, for example, the battle groups could be used as an initial entry force or else used as strategic reserve in our operations. My country is in favor of both. That is why, in the so-called Weimar letter signed by both the foreign and defense ministers from Poland, France, and Germany in December last year, we decided to put our Weimar Battle Group that will be ready in the first half of 2013 at the disposal of the European Union to be used in operations of the European Union as required.

- Second, we seek to improve the arrangements for the EU planning and conduct of operations. This discussion also has a long history. The previous government in my country was against creating any new institutions that would be in charge for operational or planning purposes. Even a small military cell was rejected but, since 2007, the current Polish government is in favor of creating such capabilities for the European Union. But we are realistic, we are pragmatic, and we know that there are still countries that are against creating new institutions. That is why it is necessary at least to make the cooperation between the military and civilian dimensions of the European Union work better. This is a necessity. These are our goals and we will try to push ahead on these decisions.

- Third, we want to bring the EU's Eastern partners closer to the CSDP activities. We remain convinced that the visibility and effectiveness of the conduct of the CSDP also requires a balanced regional approach. Therefore it is necessary to broaden cooperation and deepen the security dialogue between the EU and Eastern partners. By Eastern partners, I mean not only partners from Eastern Europe. Eastern Europe includes the region of the South Caucasus—we were talking about that with the Minister of Euro-Atlantic and European Integration of Georgia. So the Eastern neighborhood is one of the most important factors for our cooperation, and I am pretty sure that there is no paradox in concentrating our attention and efforts on the Mediterranean region while at the same time pushing forward on cooperation with our Eastern neighbors. This is because both Southern and Eastern neighbors of the European Union need new instruments, new tools, and new mechanisms for cooperation.

- Fourth, we must try to improve EU and NATO relations. Both institutions face the same political challenges on this path. During our presidency, we aim to bring the positions of NATO member states and their European Union partners closer on some practical aspects of cooperation such as the further development of capabilities that should be developed simultaneously but without duplication. That is necessary. Within NATO and within the European Union, we are aware that we must improve our capabilities, for example, against Improvised Explosive Devices (IED). A counter IED program is being implemented by both NATO and the European Union. So those programs should be continued without duplication. We have the same convictions concerning medical support or CBRN. These processes within NATO and the EU—Smart Defence in NATO and Pooling and Sharing in the European Union—should be coordinated to avoid duplication. I will repeat it once again!

The aspects listed above fall into four separate categories, but they are strongly inter-related, as you can see, and constitute a single project that tackles vital values and principles of the member-states of the European Union. It is the intention of our presidency to promote a set of initiatives and to inspire the High Representative, Lady Ashton, to go ahead. This would be, in my opinion, the added value that the Polish presidency can bring to the EU family in 2011, of course with consultation and permanent dialogue with the other member states and the other European institutions.

Chapter 6

Pooling and Sharing—Doing More with Less

His Excellency Sten Tolgfors
Minister of Defense of Sweden

DEFENCE CAPABILITY DEVELOPMENT IS FACING MULTIPLE CHALLENGES

In September of last year, the EU defence ministers met in Ghent, under the Belgian presidency, to informally discuss defence capability development. It is fair to say that the general mood of the discussion was best described as a dark nuance of black. With its severe impact on defence budgets all around Europe, the financial crisis provided the background to our discussions. Different countries mentioned cuts from 5 to 45 percent. Only a handful of EU member states seemed able to continue with unchanged or slightly increased defence budgets. Many countries were clearly strained by international operations, not least in Afghanistan, while the demand for international crisis management contributions seemed to be constantly increasing. In addition, many countries were involved in the ongoing or imminent restructuring and reform of their armed forces. Defence reform is very difficult to do even in the best of times, but it is of course much harder when a country is forced to reduce spending and is being stretched in operations at the same time.

These three major challenges added to the already well known challenge of increasing investments and operational costs. Many states declared that they were facing a tough challenge in trying to balance security ambitions with available resources and actually were at risk of losing operational capabilities. Consequently, it might be hard for Europe to achieve the capability it would need to act in a timely manner during crises. This dark picture might also have reflected a perceived standstill in the development of the Common Security and Defence Policy, which would explain what is perceived to be somewhat of an EU hesitancy or lack of capacity to engage in military operations.

This troublesome situation came at a time when the redistribution of global power was increasing, and when the U.S. military resources were heavily occupied in Afghanistan. Moreover, it almost coincided with the turmoil and uprising in Northern Africa—countries in our own proximity—offering the possibility of more freedom and democracy in our close surroundings, but also demanding our commitment and engagement in the management of possible civil and military crises.

ENHANCING COOPERATION THROUGH POOLING AND SHARING

Last fall, it became evident to many that something had to be done to improve EU cooperation in order to achieve greater effect with available resources. One answer to our challenge was enhanced cooperation for capability development, as well as in missions. Following the discussion in Ghent, my German colleague and I decided to launch an initiative for increased defence cooperation in Europe. Based on national analysis, our initiative aimed at achieving efficient pooling, sharing, and task sharing among European states. At the same time, France and Great Britain announced a historic bilateral cooperation agreement. Moreover, the Weimar letter called for, among other things, increased cooperation on military capability development.

In these initiatives we might find the embryo of a new, deepened, and revitalized cooperation. We have seen political will to endorse different initiatives. Now we need strong political will to implement them practically. By pooling and sharing our resources, including training establishments, command structures, as well as logistics and transport, there are great gains to be made. This is not only a way to cover for cuts caused by the financial crisis: Changing how we carry out national force production also allows for long-term effectiveness, and increased interoperability. For some countries, this helps in maintaining capabilities, otherwise endangered for financial reasons. For others, this helps in building new capabilities in an efficient manner. In sum, it could make Europe better equipped to meet common challenges.

The Swedish-German Ghent Initiative is capital-driven. It is not limited to members of the European Union, even though it could use EU institutions as facilitators. National analyses in three steps were carried out during this past spring in which all member states participated, asking:

- Which capabilities need to be kept nationally in order to secure national defence?
- Which capabilities could be pooled and shared?
- Which capabilities do we find unnecessary for all countries to maintain, and which, instead, could be entrusted to specfic European countries to maintain?

The national analyses resulted in more than 300 suggestions for cooperation. The next step will be to transform these initial findings into concrete and substantial actions. It is up to member states to look at suggested projects and identify interesting partners and cooperation projects.

The initiative allows for the flexible realisation of cooperation. Cooperation could be set up within the EU, but also within other organisations, or by nations themselves either bilaterally or regionally. Cooperation should be carried out at the most rational level—be it bilateral, multilateral, or at the EU or NATO level. Personally, I believe that a regional approach often is rational. What we suggested for the EU level is inspired by the Nordic Defence Cooperation—the NORDEFCO. NORDEFCO includes all aspects of defence and security policy—from policy discussions to the common development and acquisition of defence materiel to cooperation in international operations. Similar challenges, shared geographical proximity, and similar fundamentals for the armed forces provide a natural basis for broad cooperation. Nordic cooperation includes strategic cooperation in all steps of force production. The Nordic countries have different organisational memberships. This does not hamper cooperation at all. On the contrary, our respective characteristics add to our collective strength.

COOPERATION MAKES US BETTER

Let me present some recent examples on capability development:

- ARCHER – the joint procurement of the Swedish-Norwegian artillery system, which has resulted in savings of 40 million Euros for Sweden alone in acquisition and life cycle costs.
- The SUCBAS – an operative and very successful cooperation effort in maritime surveillance in the Baltic Sea, which started as a bilateral cooperation between Sweden and Finland, and now has grown to include eight Baltic Sea States. Our national cost is 20,000 Euros a year.
- Continuous cross-border training – helping us to conduct large scale exercises and unit training, including the use of each other's training facilities.
- Cooperation in crises management – the establishment of the Nordic Battle Group and the very close cooperation in Afghanistan where, among other things, we cooperate on logistics. Moreover, Sweden and Finland work together in the Swedish-led PRT in Mazar-e-Sharif.

We do not cooperate because shrinking defence budgets force us to. The Swedish defence budget has not been cut, despite the financial crisis. We cooperate because it makes us better. On the other hand, it is evident that some cooperation must be carried out on a different level. The SAC—the Strategic Airlift Capability within the NATO context—is a great example. Joint acquisition and managing, between both EU and NATO members, of three Boeing C-17s have secured access to a capability that we could not otherwise have.

The demand for EU action externally is likely to increase—so we must maintain our ability to deliver effect, in order to safeguard the EU's role as a trustworthy security provider. We need to address the European challenge of having hundreds of thousands of men in registers and force catalogues while still facing major challenges in force generations. For example, the force generation for the mission in Chad took five force generation conferences and six months to declare Initial Capability to Act.

We still have major resources to draw from. But we need to use them better to meet current challenges and demands. Cooperation can help preserve and enhance national operational capabilities, thereby helping to safeguard the EU's ability to stay able and ready to act when needed. Cooperation means increasing the effect of operational capabilities—through improved interoperability and capabilities of acting together. It allows us to gain capabilities we could otherwise not afford—by acquiring them together. Sweden learned from our Nordic cooperation that cooperation first and foremost is a mindset to bring to our national planning processes.

Chapter 7

The Economic Crisis and the Challenges
It Has Created for Security Reform

His Excellency Dr. Artis Pabriks
Deputy Prime Minister of Latvia and Minister of Defense

S ince I do not represent the United States or even France or Britain—Latvia is a small country—my remarks on global, European, and national issues will be from the perspective of a small country, from the perspective of the Baltic Sea Region, or from that of Northern Europe.

GLOBAL ISSUES

Globally, we are facing a number of threats around the world despite the fact that the Cold War is over. Small countries such as Latvia have always benefited from international cooperation because they cannot succeed on their own in carrying through their policies in the same way that medium or large countries can. Small countries can only do it if they sit at the common table like we are doing today. This is where they can be heard and where they can express their opinions.

For hundreds of years, there have been a number of diplomatic occasions where we have been sitting at the same table but, militarily, we do not have such a long history of cooperation. Moreover, while diplomacy can sometimes succeed with discussions, in military affairs, discussions are not enough: Action is required and it also requires a lot of money.

If we look at the current situation in Europe and without repeating one of my colleague's latest predictions that NATO might turn into a "collective Alliance of inability," we can observe that Europe and NATO are going through what I would call a structural disarmament. By structural disarmament I mean first a decrease in our economic resources because there are only five countries or so that spend two percent of their GDP on their military. Public opinion is another important factor behind this structural disarmament. Now that the Cold War is over, it is more difficult to convince our citizens that they need to spend money on military issues. If you ask people in countries such as Latvia or Lithuania or other countries around us, they would say: The Cold War is over and it is unlikely that Russia will attack us, at least not like they did sixty or seventy years ago. So what is the threat? What else is coming? Why do we have to spend money?

Is this actually true? I would say no, because I think that we can see all sorts of threatening issues around us starting with ecology, with our way of life, and with energy. Globally, we can also see challenges in the Middle East, in Libya, Iran, and Afghanistan, and we can see what is happening in the Far East with countries like China or Vietnam. And anyone looking at larger countries like France, Britain, or the United States would say that these countries are overstretched militarily. If they are overstretched, however, how could smaller countries possibly be more engaged?

Looking at our Baltic history, which has been marked by many wars, we are blessed with our region but not during times of war; everyone always wants to occupy our region and we cannot be a neutral country. With this perspective in mind, we see a dangerous trend in what is currently happening in the NATO-EU relations and in the Europe-U.S. relations. This is because we understand that the American public cannot be convinced to spend four or five percent of their GDP on military expenditures if Europe does not do the same. Why should Americans spend money on Europeans if Europeans are rich enough to do so themselves? This is a very legitimate question on the American side. What is our answer? We believe that overcoming this structural disarmament on the European continent is a necessity for the same reason that the European Union must change because these NATO and EU issues need to be viewed together.

What is the European vision for the next decade, or the next two decades? After World War II, the European Union was created in order to avoid war between European powers and to create some kind of sustainable development and welfare system. Today, Europe is actually fighting about its global role. Can Europe in ten or fifteen or twenty years be as influential

as it was twenty years ago? If this is what we really want, we must have some military backbone to sit at the global table in the same way that Latvia wants to sit at the NATO or EU table. We must also spend money, and be capable of acting and avoiding the threats. So our citizens must be convinced that we need to overcome this structural disarmament.

REGIONAL AND NATIONAL ISSUES

Let me talk briefly about regional and national issues. I will dare to brag and say that there are some things that other European countries can learn from the Baltic States and the Baltic Sea Region in general. Militarily, our three Baltic countries are probably the most integrated countries within NATO. Why did that happen? It happened because, during the Nineties, we had the common goal of joining the EU and NATO. Since we could not reach our goals alone, we had to cooperate. We established the common Defense Academy. We have a common air policing system which, at this moment of course, is a NATO one, but the surveillance system is ours and it is common for our three countries. We have our sea forces under a united command. We are also going ahead with common military planning and further integration.

If people asked me if I am in favor of further Baltic States' cooperation for military and other matters, my response would be no. Why am I against cooperation? It is because I am in favor of integration. We have to reach this next stage of the Baltic States' military integration, which is a response to what General Secretary Rasmussen was saying about Smart Defence. Being smart, pooling and sharing, is exactly what we are doing because we cannot do otherwise. For our countries, this also opens new gates for cooperation with our Nordic neighbors—Denmark, Norway, and eventually Finland and Sweden too—because I believe that, over the next decade, the attitude of these two countries towards NATO might change as well, especially in Finland. I do not want to offend any of my Finnish colleagues who are present here but I think that this is the direction in which we are going.

In addition, this kind of mutual integration leads us to something which is defined by a term that you may not like to hear, that is, multi-speed NATO. By multi-speed NATO, I do not mean that we are splitting apart from each other but I mean internal regional cooperation. The only danger in using this term is that it might scare America away. They might one day tell us that we are smart enough and integrated enough in our region to deal with our threats ourselves. This is of course not true. We hope that the U.S. will remain but, if we want NATO to prosper and be stronger, we have to increase regional integration within NATO and then contribute to the common cause of raising our economies, raising our military budgets, and overcoming public skepticism about unseen threats that surround us.

Finally, I want to say that today, only one out of our three Baltic countries spends two percent of its GDP on its military but we are politically very determined—Latvia especially—to consider increasing our military budget as soon as we are able to overcome our economic crisis. Despite the general global situation which makes us dependent on larger nations because we are small, there is some hope because we expect an approximately four percent growth in our GDP this year. If this becomes a sustainable development, there will be hope, of course, for our military and for our small industries. Currently, none of the smaller countries, whether they are Latvia or even Denmark or Norway, can really sustain any kind of military industry independently but they can have a future if these countries cooperate.

In addition to regional cooperation, we can also cooperate with countries from another region within NATO or within the European Union in the same way that we are participating in international operations. For instance, we work with Lithuanians in special operation forces in Kandahar to build up helicopter teams in Afghanistan; we work with Norwegians in Faryab; and we just finished a mission with Americans next to the Pakistani border. This is the way we can contribute and repay the benefits that we get from the NATO Pooling and Sharing system like air policing, because air policing could not be sustainable for countries like ours if we had to pay for it ourselves.

Chapter 8

Global Security—A Finnish Perspective

Lieutenant General Arto Räty
Permanent Secretary, Ministry of Defence of Finland

Let me first spend a moment to look at the strategic developments in the field of defence, as seen from Europe's Northeastern corner. The most significant trend affecting us is of course the shifting global constellation of power. This is creating a more complex and uncertain political order. As the power transition is taking place against the background of the global economic recession, it is also creating a harsher and more competitive economic environment. While the Western hemisphere is battling with finances and the perspective of emerging threats, the strategic vision seems rather different in other parts of the globe where some regional and global powers are investing more in modernizing their militaries.

Where does this leave the EU and NATO communities? I do not want to play the devil's advocate here, but at least when observing from the Northeastern frontier of the EU, the situation at hand seems like a balancing act between two somewhat different world views. Let us next stop for a moment to reflect on what kind of ambitions we have set for ourselves.

THE SECURITY STRATEGIES OF THE EU AND NATO AND THE CHALLENGES OF IMPLEMENTATION

In the latest revision of the EU's Security Strategy, I found the following quote concerning the EU's strategic ambitions: "The European Union carries greater responsibilities than at any time in its history…To ensure our security and meet the expectations of our citizens, we must be ready to shape events. That means becoming more strategic in our thinking, and more effective and visible around the world."

The NATO nations, for their part, have stated the Alliance's ambition in the Strategic Concept as follows: "The citizens of our countries rely on NATO to defend Allied nations, to deploy robust military forces where and when required for our security, and to help promote common security with our partners around the globe."

These are indeed demanding objectives. The need for ever increasing and tighter cooperation has become clear at least in principle, but how are we doing with the implementation? Here I would like to raise three issues as examples:
- Need for deeper EU-NATO cooperation;
- Need for deeper cooperation in developing and sustaining capabilities; and
- Need for a deeper comprehensive approach in civil-military cooperation.

These issues are not news to anyone in this audience. Their importance has been stated time and again in meetings, seminars, and workshops. This is not an exhaustive list either—there certainly are a whole lot of other issues that merit our attention. But yet these three examples are illustrative of the very challenges and problems which we face when trying to adapt to changes in the global security agenda.

I would like to emphasize that I am not attempting to preach or play the Pope's role here. On the contrary, I am afraid that my own country's record in implementing these issues has not been much better than the results of other countries. I just want to vent a bit of frustration as a bureaucrat who has been observing these issues for most of his professional life.
- *First, let us take EU-NATO cooperation.* It is true that a lot has taken place on the ground in operations and between the two bureaucracies in Brussels and elsewhere. But in the larger frame, the EU and NATO have not been able to engage in the "strategic partnership" which is so often claimed. It is of course we member states who have to look in the mirror here. We lose opportunities to get our act together, be more efficient, and save money and resources.
- *Secondly, there is a clear need to cooperate more in the field of military capabilities.* Efforts to develop capabilities in a multinational context have been around in NATO already for quite a while. They have also become a more and more fashionable subject within the EU, where the buzzword now is "Pooling and Sharing." Some very promising steps

have been taken here, no doubt about it. A good example is the bilateral cooperation between France and the United Kingdom and why not also mention the well-functioning Nordic Defence Cooperation. There are a few other smaller examples of success, but we still fall short of making a real difference.

- *Thirdly, we have the well-known idea of the "comprehensive approach."* Again, some very useful steps have been taken in the field by pragmatic people, who have been trying to get their jobs done in demanding operations. And hopefully we have been able to tear down at least some of the long-standing suspicions, which tend to surface when speaking about civil-military cooperation.But we are still far away from having a genuinely "government-wide" approach, which encompasses writing the mandate as well as planning and executing operations. And yet, it is exactly the wide range of military and civilian capabilities that should be our societies' comparative advantage in dealing with crises around the world.

It is not just the challenge of bringing peace and stability to conflict areas that requires a comprehensive approach. Other 21st century challenges such as terrorism, proliferation of weapons and dangerous materials, the threat of cyber warfare, threats to energy supplies and to international transport routes are some examples of the new threats affecting not only the defense domain but the whole of society, and therefore can only be met with a combination of military and civilian instruments.

Especially for a small country like Finland it is essential to join forces and use limited resources for the benefit of the whole society. Over the decades, cooperation with other authorities and institutions has become our standard way of operating and we have a solid and functioning framework for it. Cyber security is a very good example of comprehensiveness. We have recently launched an inter-agency process in order to draft a national cyber security strategy. All the key ministries and agencies are involved in this joint effort. International cooperation will also be an essential element in drafting the strategy.

WHAT IS THE WAY AHEAD?

What is the way ahead, then? My answer is that we simply must go on pushing for closer EU-NATO cooperation. We must engage in productive multinational networking for developing, deploying, and sustaining capabilities. And we must further promote the ideal of the comprehensive approach. All too often we focus on what we CANNOT do together instead of looking at what we CAN do together and HOW to get it done.

When it comes to the EU-NATO issue, we should exploit the opportunities and momentum created by the EU's Lisbon Treaty and NATO's new Strategic Concept. A mutually reinforcing strategic partnership between these two organisations, with each playing to its own particular strengths, must be made reality. I firmly believe that more can be done there, but only if genuine political will exists. Statements about strengthened strategic partnership, enhanced practical cooperation, broadened political consultation, and better cooperation in capability development will ring hollow as long as full cooperation remains blocked. We should stop debating whether one organization is duplicating the other, or whether one is moving into another's area. Instead, each member state should focus on its own capabilities and strive to make them more effective. And we should work more together. Ultimately, this will benefit both organizations.

Secondly, what about capabilities? For many member states having to cut their defence budgets, it is unavoidable that the armed forces will lose some of their combat power and that deployability and sustainability will be reduced. In these circumstances, every European government that is a member of the EU or NATO knows exactly what should be done. We have a great deal to gain by pooling and sharing our resources. However, it is understandable that nations think twice before engaging in deeper interdependencies with key capabilities. One must be able to trust that, when needed, those pooled or shared capabilities will also be available for operations. In other words, we are speaking about mutual trust and confidence in chosen partners.

While NATO's new Strategic Concept was being prepared, we followed the discussion among NATO nations concerning the need to strike the right balance between Article 5 and non-Article 5 missions, or between homeland defence and crisis management operations further away. From Finland's perspective, there is a mutually reinforcing relationship between the two missions: Success in crisis management operations is built on the credibility of our core mission, the defence of Finland. It is our ability to meet potential threats against our own territory and population in a robust manner, which makes it possible for us to train, equip, and sustain forces in demanding crisis management operations beyond our borders.

Finally, what can be said about the future of the "comprehensive approach"? If Afghanistan today is an indication of tomorrow's operational environments, it is safe to say that delivering a truly effective comprehensive approach is not going to be easy in the future either. More than any further conceptualization, the comprehensive approach requires better imple-

mentation. In an ideal world, different actors present in the theatre should of course establish common goals that would enable them to carry out their tasks effectively. Cooperation between organisations should be the norm already at the planning stage of any operation. It would also make us stronger in crisis prevention, if we had a broader coordinated approach to troubles emerging on the horizon. But we also know that making these things happen is much more complicated than it sounds. It will take time and money and no easy fixes exist. Besides the arrangements within the EU and NATO, it is even more urgent to leverage the commitment and contributions of others, such as the U.N., regional organizations, and the NGO community. It will mean the meeting of different, often opposing, institutional cultures.

CONCLUDING REMARKS

What I have tried to argue in my brief remarks is that strong multinational and inter-organizational connections have become even more essential than before. It may well be the only way for the Euro-Atlantic community to fulfill the strategic ambitions and commitments which we have so boldly proclaimed. The current state of national budgets is forcing governments to take far-reaching measures. In most cases, the defence sector will not be spared in this respect and there is a need to make structural cuts. Most of us are facing rather brutal decisions. The point is how to work together towards smart cost savings in order to cut fat and not muscle.

While we are learning lessons from Afghanistan, we should be careful about letting the conflicts of today dominate our thinking about the future too much. However, in the coming decades, I have no doubt that our forces will be called upon to protect our mutual interests, often in distant places. Most likely we will be facing asymmetrical methods. Most likely this will take place in complex political and security environments, requiring an integrated strategy utilizing both military and civilian components. And winning hearts and minds will have a major impact on any military campaign. Strategic communications are likely to increase in importance and complexity, thanks to the information revolution and the diversification of news and social media.

In short, we will have to be ready to act, but we are likely to find it a frustrating experience. At the end of the day, achieving success is going to depend upon military and civilian capabilities that can be deployed, the political will to use them, and the determination to stay on the course.

Chapter 9

The "Unfinished Business" in Southeast Europe

His Excellency Dr. Davor Bozinovic
Minister of Defense of Croatia

Current events in Libya and Afghanistan, waves of protest across North Africa and the Middle East, as well as transnational challenges such as terrorism, WMD proliferation, cyber threats, energy security and climate change tend to dominate the global security agenda. Yet our panel today on the Western Balkans is a reminder to Euro-Atlantic stakeholders that there is still some unfinished business and work to be done in Southeast Europe.

HISTORICAL BACKGROUND

Over two hundred years ago here in Paris, a unique process of transformation began to spread throughout the continent and laid the foundation for the adoption of a set of ideals and values that would serve to guide and unite the nations of Europe. Often depicted as the "dawn of the modern era," the French Revolution opened the way for the intellectual ideas of the Age of Enlightenment and the principles of citizenship, liberty, and equality. Although countless wars would thereafter still be fought on the continent, the end of World War II led to the establishment of one of the most successful collaborative endeavors in the history of contemporary international relations—a value-based union of democratic states that was predicated on the rule of law, free markets, and civil liberties and cradled within a transatlantic partnership.

These same ideals and values have served as a shining beacon for Croatia's path to a mature democracy and its Euro-Atlantic aspirations. As you may well know, the European Commission just announced that it had completed accession negotiations with Croatia, thus paving the way for our EU membership. Having been directly involved in both Croatia's NATO accession and its EU negotiations, I cannot begin to tell you how personally satisfying it feels to reach milestones of such strategic magnitude.

It has been a long, complex, and arduous process but, I assure you, one well worth the effort. The reforms we have embarked upon are now deep-rooted and irreversible. Croatia's EU accession will also directly contribute to regional security and stability and, as our President and Prime Minister repeatedly emphasize in public, our country will vigorously support the Euro-Atlantic aspirations of all our neighbors. Our individual and common interests are undeniably best served by the region's full integration into the EU.

The instability stemming from the break-up of the former Yugoslavia has adversely mired the region in stagnation and slowed the path to Euro-Atlantic integration. Along with the challenges of political and economic transformation also faced by the rest of Eastern Europe, the countries in our region were additionally burdened by a post-conflict environment that was further exacerbated by a host of unresolved issues. While we have many reasons to be optimistic about the region's future prospects—primarily due to the staunch NATO and EU commitments and a new impetus on the part of indigenous leaders to defuse tensions, enhance reconciliation, and forge capacities to develop regional cooperation—a persistent sense of fragility and precariousness remains. Simply put, self-sustaining, long term regional stability is still elusive because contentious issues of state-building, unresolved borders, and challenges to identity and minority concerns stand in the way of progress.

The role of the EU and NATO continues to be critical. First, both contribute directly to regional security and stability through substantial investments, including troop deployments. Second, it is difficult to imagine transformation, stabilization, or development without the prospect of Euro-Atlantic membership. The allure of joining the Euro-Atlantic structures still has the unmatched ability to convert inert passivity into action. But while both organizations can provide an overarching framework, eventually it is up to the countries in the region to seize the initiative and develop a shared sense of stability and prosperity through a series of cooperative endeavors.

Politically, outstanding and unresolved issues cannot be ignored or postponed indefinitely. At some point, we must bring about an end to the region's territorial, identity, and statehood disputes, including finding the proper modalities for resolving the many minor border-related problems. Solutions can only emerge if the parties involved are willing to engage in serious dialogue. The prospect of EU integration should serve to "de-emphasize" the importance of borders. And although the EU can also play the role of an honest broker and provide a framework for dialogue, political drive, and leverage, it will be up to the states themselves to find a palatable compromise. Reconciliation between former warring sides also goes a long way in building the kind of trust and confidence needed to set the stage for resolving the more politically contentious issues.

Southeast Europe's economic prosperity greatly depends on regional integration and cooperation. In order to achieve its full economic potential, the region needs to consolidate its cumulative advantages. Specifically, issues of trade, energy, transportation, and communication call for a regional approach. And by widening the geographic contours of a single, region-wide market we stand to generate greater foreign investment, which in turn contributes to growth, modernization, and job creation. With EU-backed initiatives such as the Central European Free Trade Agreement (CEFTA) and the Energy Community of Southeast Europe, most of the basic elements are already in place.

DEFENSE COOPERATION

Now, let me focus the rest of my remarks on defense. I think that the potential for meaningful defense cooperation in the region is promising. The economic crisis has had a devastating impact on defense spending across the region, including on the budgets of affluent countries of Western Europe. When the NATO defense ministers met in Brussels last week, one of the things we talked about at great length was how to respond to contracting defense expenditures by exploring the potential benefits of innovative and multinational solutions—the NATO Secretary General calls it "Smart defence." The EU is also encouraging its member states to share and pool defense assets. As allies and partners, the countries in Southeast Europe are well suited to take advantage of regional cooperation through the development of common capabilities, joint acquisition projects, and multinational deployments in peacekeeping and stability operations. We can accomplish so much more if we work together.

A Croatian military police contingent has been involved in the International Security Assistance Force (ISAF) since 2003, accumulating a wealth of experience and valuable lessons learned. Consequently, with our partners in the region, we are establishing a military police school in Afghanistan. By uniting our resources, we were able to provide an important multinational contribution aimed at supporting NATO's transition strategy to build a local Afghan capacity that can ultimately take responsibility for the security of its country. This year, we invited Albania, Bosnia, Macedonia, Montenegro, and Serbia to join us in "Immediate Response 11," a traditionally bilateral exercise with our U.S. partners designed to prepare our forces for ISAF. Not only are we contributing to the stabilization of Afghanistan, but we are also developing trust and promoting confidence within Southeast Europe. The cooperation of our defense industries and pooling of our resources in acquiring high-priced capabilities such as air policing and maritime security could also prove mutually worthwhile. We should explore such possibilities and consider the long-term merits of these multinational efforts. Whether on a functional or geographic basis, such cooperation simply makes sense.

Looking back, our region has truly gone through a remarkable transformation. Yet, full normalization of Southeast Europe requires that we resolve the remaining outstanding issues. For its part, Croatia intends to work within the EU and NATO towards facilitating continued international support and keeping the accession process open to all the countries in the region.

Chapter 10

The Situation in the Western Balkans: A Slovenian Perspective on Events in North Africa and the Middle East

Her Excellency Dr. Ljubica Jelusic
Minister of Defense of Slovenia

I would like to thank Dr. Roger Weissinger-Baylon who, at the International Workshop on Global Security in Istanbul, recognized the need for us, the Balkan countries, to sit together and speak about our security problems, needs, and possible solutions. So, we sat together for the first time last year at the International Workshop in Berlin and I am really happy that we are together again this year in Paris. In addition to the problems that we touched on last year, I am sure that we will all report on the security developments in the Balkans. First, I would like to discuss the importance of the Western Balkans for Euro-Atlantic security and stability and then say a few words about our bilateral and multilateral cooperation, which is a starting point for our cooperation outside the region.

IMPORTANCE OF THE WESTERN BALKANS FOR WESTERN SECURITY

If we recall the situation during the Nineties, the era clearly demonstrated that uncontrolled security challenges and instability in the Western Balkans had an important impact on European security. Today, I must say that none of the Western Balkans countries can successfully face modern security challenges alone. This is why we need membership in the Euro-Atlantic Alliance and why Euro-Atlantic integration is important for us. NATO and the European Union have recognized this situation and the Western Balkans stand in all of their strategic documents as a region and as countries that should benefit from an open door policy to become members of the EU and/or NATO.

Slovenia has been a member of NATO and the EU since 2004. As far as our foreign policy is concerned, whether we come from the foreign or defense policy sectors of our government, we are all favorable to the Euro-Atlantic integration of the Western Balkan countries. Last year, when we finished talks about the new Strategic Concept, we fought to include this "open door policy" phrase in that document. We are proud that it is part of this very important NATO document since it represents Slovenian policy towards the other Balkan countries; we think that their legitimate aims to become NATO members must be respected. So, Slovenia has been very pleased to recognize the aspirations of Montenegro and Bosnia and Herzegovina by extending to them an invitation to enter the Membership Action Plan (MAP) process. We went through this process ourselves and know what an important and indispensable tool it is to bring you up to speed in order to achieve membership in NATO. We really hope that Bosnia and Herzegovina will successfully pass through MAP and gain NATO membership. I am sure that it will also happen with Montenegro, which is a NATO and U.S. friend; we know that, as a NATO and EU aspirant, Montenegro is very successful in confronting challenges and fulfilling obligations. Slovenia and Montenegro have a history of open and fruitful bilateral cooperation, particularly in the defense field. This cooperation gained a new dimension in 2011. In January, Slovenia took over the post of NATO contact point embassy in Podgorica, Montenegro's capital, and in March, we appointed a special defense advisor to Montenegro's Defense Ministry to assist with the Membership Action Plan and other related activities. As you can see, in addition to our mutual cooperation, we are also trying to assist Montenegro in its path towards NATO and the European Union.

Slovenia also welcomes Serbia's engagement in the region, especially its signing of the agreement to have Serbian armed forces participate in EU crisis management operations. We are pleased that the defense agreement between Slovenia and Serbia contains very different and important types of cooperation, including possible future cooperation in international operations and missions. Regarding Macedonia, we strongly hope that next year, a representative from Macedonia will sit with us in forums such as this one. We also hope that a mutually acceptable solution to the name issue will be found as

soon as possible so that Macedonia can take its rightful place in the Euro-Atlantic community as was decided already three years ago at the 2008 NATO Summit in Bucharest.

What is our regional affinity with the other Western Balkan countries? Regional responsibilities are a top priority for Slovenia's foreign and security policy. Our strong commitments were reaffirmed last year with two national strategic documents: A Declaration on the Western Balkans, which was adopted by the Slovenian National Assembly; and Guidelines for a Coordinated Approach to the Western Balkans, which were adopted by the government of Slovenia. Both documents contain important words that I hope are becoming true: Cooperation, assistance, and development. Slovenia supports and promotes a pragmatic approach to regional cooperation. While there can sometimes be a lot of talk in diplomatic and political circles but few practical solutions, regional cooperation in the Western Balkans has led to pragmatic and successful regional projects. A major platform for sharing lessons learned is the Southeast Europe Clearinghouse. This mechanism brought important changes in recent years, especially in the sphere of regional cooperation in security issues. Within this framework, regular regional defense policy directors' meetings take place for the exchange of views on what has happened and what needs to be done within the Western Balkans region and at the global level to ensure security. On their current agenda is the establishment of regional centers in each country of the Western Balkans for the purpose of cooperation, particularly in educational and training issues, in order to prepare our troops for future cooperation in international operations.

There are other regional initiatives like the Southeast European Cooperation Process; the Southeastern Europe Defense Ministerial, which is an annual meeting of defense ministers of Southeastern Europe; the Regional Cooperation Council, which replaced the Stability Pact for Southeastern Europe; and the Regional Arms Control Verification and Implementation Assistance Center, which is based in Croatia and is our regional facility.

In order to stabilize the security situation in our region, we must actively cooperate on a bilateral level. Slovenia has already signed bilateral agreements with all of the countries of the Western Balkans, except for Kosovo, and is currently negotiating a defense agreement with the ministry for the Kosovo Security Force that will hopefully be signed by the end of this year. This means that Slovenia has bilateral ties with all the Western Balkan countries. In terms of numbers, our annual action plans within these defense agreements cover more than one hundred and fifty activities or, on average, over twenty with each country. Our common interests in these activities cover defense reforms, defense planning, the English language, mountaineering courses, NATO standardization and codification, the elaboration of ammunition surpluses, reintegration assistance to redundant military personnel and non-commissioned officer corps cooperation, and also disaster relief—we must take care of our environment and be ready to help each other in case of natural and other disasters.

Slovenia is also contributing to the Western Balkan region within the framework of international operations. We are continuing our cooperation in EUFOR ALTHEA in Bosnia and Herzegovina and in KFOR units in Kosovo. We have policemen in UNMIK and EULEX in Kosovo and civilian experts that work on the Special Security Sector Reform and other issues in Kosovo and Bosnia and Herzegovina. Slovenia also contributed to the NATO Headquarters' command in Skopje when a Slovenian officer was its commander between May 2010 and January 2011. During that period, our personnel helped transform the mission from a strictly military one to a civil-military one. We cooperated with Macedonian authorities and assisted in defense reforms that are leading Macedonia to NATO membership.

CONTRIBUTIONS TO OUT-OF-AREA OPERATIONS AND OUR FUTURE VISION

As I mentioned earlier, we are contributing as a region to the so-called out of area operations, operations outside of the Western Balkans, with all of us contributing instructors to a military police center in Afghanistan. This shows that, in addition to cooperating in defense matters within the Balkans, we can also work together in dangerous areas and participate in international missions as we do in ISAF in Afghanistan.

What is our vision for the future? Our long-term vision for the whole region is continued stability, economic development, and prosperity, which can all come to life in the Euro-Atlantic community of nations. A lot of work has been done and will have to be done by the countries in our region. We know that we live in tough economic times, which has a sobering effect, but we also know that we will have to work together, cooperate together, and address the security needs of all our countries together. We will have to pool and share our common capabilities and develop them together in the future.

Chapter 11

The Situation in the Western Balkans and Security Prospects For North Africa and the Middle East

His Excellency Boro Vucinic
Minister of Defense of Montenegro

MONTENEGRO'S INTERNATIONAL COOPERATION

Dynamic changes in international relations call for different approaches to solving global security problems. First, it is essential to develop overall cooperation between countries if we are to establish peace and security globally. It is clear that current national security concepts need the framework of broader security integration in order to achieve their full capability. The Montenegro region is an example of this need.

As a small state, Montenegro is aware that it cannot develop all of its defense capabilities by itself and it believes that integration into the Euro-Atlantic, European, and regional communities is the best solution for ensuring stability in the region. Our defense policy is committed to strengthening cooperation with our neighbors by promoting regional initiatives and developing a partnership with NATO with the ultimate goal of becoming a member of the Alliance. This approach to relationships in the region and beyond is part of our efforts to achieve lasting stability and peace in the region and in the world.

I would like to tell you about some of Montenegro's most important activities and achievements in the defense field. After our country regained its independence in 2006, the Government of Montenegro defined two strategic foreign policy goals, which were accession to NATO and to the EU. Shortly after being admitted to the Partnership for Peace program in November 2006, Montenegro focused all its defense efforts on defense system reform, with a view of joining NATO. Our activities within the Partnership for Peace program, bilateral cooperation programs, and participation in all regional initiatives made it possible for us to quickly enhance the capacities that we needed to interact within the Euro-Atlantic integration. Montenegro joined the Membership Action Plan (MAP) in December 2009 and the first Annual National Program was adopted in October 2010. We see this as recognition of our achievements in the defense system reform and the successful completion of our obligations towards NATO. By joining the MAP, Montenegro has begun a new stage in relations with the Alliance, with more challenging tasks ahead of us. Montenegro also sent a third troop contingent to the NATO ISAF peacekeeping mission in Afghanistan and participates in the United Nations UNMIL peacekeeping mission in Liberia as well as the European Union ATALANTA peacekeeping operation in the Somalia waters.

REGIONAL COOPERATION

We are also committed to developing regional cooperation, both bilaterally and within regional organizations and initiatives. Regional cooperation strengthens trust, mutual understanding ,and security for countries in the region. It is particularly important in crisis situations, especially in the case of natural disasters, when countries in our region need to cooperate effectively.

During the first half of this year, Montenegro has been chairing the U.S.-Adriatic Charter (A-5) which greatly helps member-states improve and develop their capabilities in order to meet NATO's full membership requirements. Two members of the Charter and also neighbors of ours, Croatia and Albania, have now become full members of the Alliance. Recently we have begun intensive discussions within the A5 initiative—Montenegro, Croatia, Macedonia, Bosnia and Herzegovina, and Albania—also including Slovenia, to jointly participate in the ISAF mission by sending instructors to train the military police of the Afghan National Army. Montenegro strongly supports this initiative and, starting in September

of this year, we expect to be actively involved in this project. This will be our specific contribution to NATO's efforts to gradually and efficiently transfer the responsibility for security in Afghanistan to the Afghan security forces.

Other regional initiatives—the Southeastern Europe Defense Ministerial, Southeastern Europe Clearinghouse, Southeast European Cooperation Process, and the Adriatic-Ionian Initiative—also play an important role in fostering good cooperation between countries in the region. Some of these initiatives organize joint exercises of their member states' armed forces. These efforts help strengthen and modernize military capabilities with a view to achieve interoperability and NATO standards.

In parallel with the political, economic, and cultural cooperation between our countries, the security component is essential for improving Southeast Europe's overall relations. Our region's security is indivisible; it is in the best interests of each of our countries and it is a precondition for economic and all other developments. Of course, the contribution of the Western Balkan countries to security depends on their individual capabilities and also on their degree of cooperation and understanding.

SECURITY PROSPECTS FOR NORTH AFRICA AND THE MIDDLE EAST

The dynamic development of international relations and today's world changes bring new challenges. Yet, global peace and stability are the imperative on which all world democracies must insist. From the perspective of the Western Balkans fifteen years ago and that of the North Africa region and the Middle East today, we can only come to the conclusion that, regardless of the type and cause of conflicts, no country in the world can fight on its own against all security challenges.

Countries in North Africa and the Middle East need a lot of assistance from the international community, of course within the framework of the U.N. resolution, in order for conflicts to stop and for these states to choose peace, stability, prosperity and economic development. We can take the Western Balkans as an example. Thanks to the efforts of the international community, the Western Balkans are slowly turning from a region of conflict and instability into a region of good neighborly relations, understanding, conversation, peace, prosperity, and economic development. Of course, there is still work to do for the entire region to become part of the collective security system. This will be the final chapter in its history, which was marred by conflict and war. Having learnt from our own experience, we firmly believe that the regions of North Africa and the Middle East can overcome problems and conflicts, but they need international assistance in order to do so. Montenegro fully supports all activities by the international community in these two regions to achieve peace and stability. We are deeply convinced that lasting peace and stability in the world will only be achieved through joint efforts and, with such a vision, we are safely walking into the future.

Chapter 12

The Global Balkans and Bosnia and Herzegovina

His Excellency Selmo Cikotic
Minister of Defense of Bosnia and Herzegovina

THE GLOBAL BALKANS

Since I am the last panelist on the Western Balkans session, almost everything has already been said by my distinguished colleagues. However, I would like to add a few comments to their contributions. First, I am glad to report that I agree with everything they said, which might not have been the case five or ten years ago. At that time, when a similar group of ministers would discuss a difficult issue, they would tend to disagree rather than share common points of view. The Balkan region has a sort of global relevance: Even today, we heard the term "Balkanization" and more than a decade ago when Zbigniew Brzezinski was trying to characterize the area starting from the Caucasus, across the Middle East and ending in the northern part of Africa, the term he used was "Global Balkans." The so-called Arab Spring is now taking place in the Global Balkans and we strongly believe that our very specific geo-political, geo-economic, and geo-cultural position has global relevance. Instead of being a burden for Europe and the international community, it can be a source of opportunity. I will say a few words about this later.

We share in all aspects of global security and, while interdependence is a jey feature of international relations, I believe that interdependence is even more important for our Western Balkan countries. Speed of change, which is relevant globally, is governing the course of events in our part of the world, although we would like some areas to move faster and other areas to move a little bit more slowly. Due to the specific characteristics of the countries in our region, we believe that a country's strength should not be measured by its size, population, or economy, but rather by the level of its integration into the network and family of international relationships. Some positive and negative aspects of our experience in Bosnia and Herzegovina can illustrate that belief.

The Dayton Accords highlighted the global dimension of our position. The United States, as the host for the negotiations, NATO, the United Nations, the EU, the OSCE and the Organization of Islamic Countries were all present at the negotiations, underscoring the level and complexity of the problems that Bosnia and Herzegovina had to deal with in the region prior to these negotiations. The international community, whatever that term means, still has a role to play. It has a pretty comfortable position of authority without responsibility, but history will not judge the international community's contributions throughout the world based on legal or administrative aspects; it will judge it by the results it has produced in this part of the world, assuming that, in addition to being part of the Western Balkans, it is also part of Europe and of the wider global community altogether.

BOSNIA AND HERZEGOVINA TODAY

Now, I would like to make a few remarks about the current situation in Bosnia and Herzegovina. We had elections eight months ago in early October 2010. At the level of cantons and other entities, all the governments have been formed, and at the state level, Parliament was formed in May and June of this year. The Presidency has nominated the candidate for the post of Chairman of the Council of Ministers and I cannot predict whether the new Council of Ministers—the new government of our country—will take office in late July or rather in September or October. But in order to illustrate the complexity of that process, I will say that, in the aftermath of the Dayton Accords and the war in Bosnia and Herzegovina, we are in a situation that can be characterized as "Clausewitz turned upside down." In Bosnia today, we have some politics that are an extension of the war by other means and we also have some politics that are pretending to implement some

wartime goals that were not reached by combat activities.

Yet those kinds of disagreements and quarrels are pretty much inherent features of our situation, which exists not only in Bosnia and Herzegovina but in our whole region as well. Despite our disagreements, nonetheless, we fully recognize our European identity and Euro-Atlantic future. The defense reform in Bosnia and Herzegovina, which was viewed as impossible ten years ago, is a real success and it shows that we can rapidly make important changes if there is a good "orchestration" of our political will and if our resources and instruments are combined with the proper motivation. The U.S. government supported the defense reform and the defense reform was associated with our NATO accession. So in a fairly short period of time, we collected the necessary political will through consultations and compromise, we reached a consensus, and then moved forward quickly and decisively. This defense reform is so important that it represents in a way a constitutional reform of our country and it also acts as a role model for a large number of other reforms we must make in order to move the country towards its European and Euro-Atlantic future and destiny.

I do believe that we can provide a similar consensus and unity of efforts in the future. If we manage to reach this high level of unity and common ground, we will be able to turn a number of our deficiencies into competitive advantages. We already have many cooperation projects in place among the countries represented around this table and, given the special communication and networking capabilities in our region, we have the potential to establish even stronger cooperation links prior to extending this cooperation to the larger world.

CONCLUSION

I will conclude my remarks on an optimistic note: Our regional cooperation is becoming stronger and will continue to strengthen over time. We all agree that cooperation is always better than confrontation, inclusion is always better than exclusion, and integration is better than fragmentation, especially since our experience with war showed us that the logic of war brought about no advantages to anyone in the region. I am convinced that the Western Balkans have a message to offer and share with the rest of the world. In particular, we want others to be spared the tragic and devastating experience that we had to go through ourselves.

Chapter 13

Security Developments in the Black Sea Region:
A Unique Combination of Factors

Ambassador Marc Perrin de Brichambaut
Secretary General, Organization for Security and Cooperation in Europe

The beauty of this workshop is that it combines the different dimensions of security—the geo-political, the diplomatic, and the technological dimensions in many ways—and this is what makes it very unique. In our discussions today, we are now moving eastwards towards the Black Sea where there is indeed a very unique combination of factors affecting security. This is not only due to its crucial geographic position but also due to the fact that this is an area where we are still feeling the aftershocks of the great transformations which have affected the late twentieth century: The demise of the Soviet Union, and the demise of Yugoslavia. And the tectonic plates are still moving. They have not quite settled down yet.

THE BLACK SEA'S KEY ROLE IN ENERGY AND IN THE GREAT TRANSFORMATIONS IN NEARBY REGIONS

We all remember that on 6 August 2008, we had a conflict between Russia and Georgia which was sharp and intense. The conflict is still a very lively and sore issue in relationships among greater European countries.May I also mention that an issue like the participation of Turkey in the European Union is also a very crucial one and part of the broader picture. So the Black Sea is very central to many developments that affect various aspects of security.

Clearly, the region is essential in the issue of energy security because all routes for export of gas and hydrocarbons from Central Asia and Central Russia converge around the Black Sea Region. All this has a huge impact and puts the region very much in focus.

It is an area where the direct impact of trouble on the margins of Greater Europe can be felt in Iran and in the transformations now going on in the Arab world, which have an indirect impact on issues like the debate on missile defense. It is an area where the issues of drug trafficking, as well as various other aspects of trafficking, are very realistic and real. Indeed there is also the problem of massive migrations. So we are here clearly at a very crucial point.

Chapter 14

A Regional Leader's Perspective on the Balkans
And Black Sea Region

His Excellency Anyu Angelov, Minister of Defense of Bulgaria

THE WESTERN BALKANS

Over the past decade, the political climate in the Western Balkans has improved considerably and the mentality of its people has greatly evolved. Instead of looking back on the past, they tend to look forward to the future and focus on economic prosperity, stability, and integration into NATO and the European Union. Both NATO and the EU have an indispensable role to play towards setting the region firmly on the road to integration and economic prosperity. The NATO Strategic Concept clearly defines our countries' goal, which is "to facilitate the Euro-Atlantic integration of the Western Balkans, with the aim to ensure lasting peace and stability based on democratic values, regional cooperation, and good neighborly relations." As to the European Union, it applies the full range of its tools to help develop institution building, strengthen the rule of law, and lay the foundations for sustained development.

Integration is at the core of the concerted approaches by NATO and the EU towards the Western Balkans. It has proved to be a powerful driving force for stabilizing and modernizing these countries. Creating synergy between NATO and EU policies is an important element of this strategy, and efforts by Bulgaria and Romania—the newly admitted members of NATO and the EU—to be role models for the whole region are important as well. Politically, our two countries are on their way to becoming positive examples; economically, this is more difficult since we live in times of recession. Of course, being able to join the Schengen area would further the integration process and be a positive example for the Western Balkans. As a border state for NATO and the EU, Bulgaria understands its responsibilities in this regard, which are to provide extensive but reliable and effective Air Policing and border and traffic control. Bulgaria seeks to enhance cooperation and promote reforms, and actively participates in all forms of regional cooperation that contribute to increasing security. Its most successful project in this respect may be the Southeast Europe Defense Ministerial Process (the SEDM Process) which Serbia and Montenegro joined during the two years of Bulgarian Chairmanship. So Serbia is on board already.

THE BLACK SEA REGION

I would like to say a few words about the Black Sea Region. The Black Sea Region is a natural link between East and West, North and South. Its resources have to be exploited with the security and prosperity of the littoral states in mind and with a more global perspective as well. Since the security of the energy and transport corridors is particularly important, we need to protect the corridors that exist and develop new ones. Establishing cooperation within the framework of the Turkey-led maritime operation BLACK SEA HARMONY is an illustration of our active policy in the Black Sea Region. Together with BLACKSEAFOR, this operation results in consolidating security. Our support of this activity goes along the lines of the EU's Black Sea Synergy policy.

MISSILE DEFENSE

NATO and EU Balkan countries are within the range of ballistic missiles. It is a challenge that our region is facing today and a reason why the project of completing the NATO key mission of building a Ballistic Missile Defense (BMD) that can cover the Balkans at the very first stage of its implementation is of paramount importance. We welcome the development

of BMD based on the principle of an indivisible security within NATO and an equal and effective defense of member states' territories and populations. We support the common NATO/Russia approach to the development of a missile defense shield with two interacting but separate systems, based on transparency and constructive dialogue with Russia. We are ready to discuss all options for building the Missile Defense, including the geographical footprint of its elements. And if it is up to our government to make a decision, the decision will be taken in Sofia and nowhere else.

CAPABILITIES DEVELOPMENT

Today, our defense systems are under the strain of reduced defense budgets. We all share this problem. However, crisis management is one area in which we need to strengthen our capabilities. In October 2010, the Bulgarian Parliament approved our White Book on Defense and the Armed Forces which stated that "in the current security environment, the events on one side of the world quickly reflect on another and it is therefore necessary to develop capabilities to react to sudden and unanticipated situations." Barely a few months later, the developments in North Africa and the earthquake and tsunami in Japan confirmed that assessment.

We may not be able to forecast natural disasters but the Libyan scenario gives us every reason to want to improve our capabilities. Nationally, we all have intelligence structures. Within NATO, intelligence data are exchanged and analyzed. The EU has intelligence and analytical structures as well. If we want to be more effective, we need to look into additional mechanisms to improve the exchange of information between member states and further strengthen the NATO/EU sharing of intelligence information. This will lead to better situation awareness and, in turn, to more effective and timely measures.

I would like to draw your attention to one more issue. As you know, both NATO and the EU are engaged in Libya and various types of actions have been discussed. My address today gives me a chance to tell my colleague ministers that NATO must have contingency plans that are developed well in advance and reflect a range of options as well. When combined with accurate intelligence information, I am convinced that these plans will allow us to respond in a prompt, decisive, and appropriate way.

Let me point out, however, that NATO is a political and defense organization which provides equal security to its members. In recent years, a number of Southeastern European countries have joined the Alliance. They fully contribute to NATO's policies and missions and share in joint commitments. It is of vital importance for NATO to demonstrate to these states—I mean Bulgaria, Croatia, Albania, and Romania—that it is completely and unreservedly committed to their security. That is why it needs to elaborate contingency plans for the territories of these member states as well.

In conclusion, I am optimistic about the future of our region. Geographically, we are both in the Black Sea Region and in the Western Balkans. If we continue our current positive developments and integration over the next decade, we will indisputably attain stability and economic prosperity for Southeast European countries.

Chapter 15

Challenges to Regional Security including the Russia-Georgia War

His Excellency Giorgi Baramidze
Vice Prime Minister of Georgia

Both the Balkan and Black Sea regions belong to Eastern Europe and, despite differences, are bound by a process of strong institutional Europeanization. Both regions have countries that are already members of NATO and the EU as well as countries aspiring towards Euro-Atlantic structures. Last year in Berlin, when we talked about these regions, we used the term "incomplete Europe" and I cannot agree more with this reference.

REGIONAL CHALLENGES INCLUDING THE RUSSIA-GEORGIA WAR

Unfortunately the two regions share volatile security challenges that affect the security of all of Europe. The Russia-Georgia war is a vivid demonstration. Let me share with you our vision of regional challenges.

It is very unfortunate that almost three years after the Russia-Georgia war:

- 20% of our territory is still occupied, and 80% of the residents of two occupied regions have been expelled based on ethnic cleansing, so a country of less than 5 million people now has up to 500,000 internally displaced persons (IDPs) and refugees;

- There is no international presence in the occupied territories, with the European Union Monitoring Mission (EUMM) denied access to the occupied regions—which have turned into black holes where the violation of human rights is a regular business and no one is legally held responsible. There are the issues of violation of property rights, proliferation of materials related to weapons of mass destruction, trafficking, insufficient protection of cultural heritages, and environmental damage. There has also been heavy militarization of Georgia's occupied regions, including offensive missiles just 50 miles from our capital;

- There are new threats from the occupied territories with high potential for escalation. Since June 2009 we have observed that Russian intelligence officers have been actively recruiting members of the remaining ethnic Georgian community in the occupied regions of Georgia, enticing them with financial payoffs or coercing them through blackmail. They have been providing the recruits with improvised explosive devices and instructing them on how to bomb the various targets that were selected in recent attacks on the non-occupied part of Georgia: railway lines, bridges, government buildings, the civilian population, the Embassy of the United States in Georgia, and the NATO Liaison Office in Georgia. This is verified by evidence corroborated by the intelligence services of Georgia and its partner countries.

We have been careful and constructive in our approach. Before making public statements, we passed the information to Russia, hoping that these events were not directed by the Kremlin but rather had local origins; unfortunately we did not receive an adequate response. We gave briefings and shared our concerns in Berlin at the Foreign Ministerial and later at NATO headquarters. Yet, we received no political or intelligence support from our partners. Only after Hilary Clinton and Pierre Morel, Special Representative of the European Union, made statements that a spate of incidents in the occupied regions were "alarming," with the potential for dangerous escalation and "a kind of warning signal," and only after our statements regarding the Geneva discussions, did Russia respond. It responded cynically but, still, it responded that it would examine the provided material. The question is, What does Russia want to achieve? Is it to destabilize Georgia? Is it to test the international community on how far Russia will be allowed to go? We think it is a combination of both. And, above all, we believe that there is a fundamental incompatibility in principles. We aspire to be an independent, democratic state, to freely choose security arrangements for our country and be a part of the Euro-Atlantic space, while the political leadership of Russia wants to "restore" the Soviet Union. That is why Russia seeks to broaden its sphere of influence, persistently tries to restore its "lost clout" and get Georgia back under its exclusive influence. That is why the enlargement of NATO, which brings only peace, security, and prosperity, is perceived by Russia as a restraint on its sphere of influence and is a major concern of its government.

In this context, let me give you our assessment of the "reset and engagement" policy. I am sure that you heard from the Georgian side that we supported the idea of a reestablishment of relations with Russia based on civilized and constructive approaches. Since we must not be the victims of the notion of engagement just for the sake of engagement, we should clearly analyze every single step made by the West and every single reciprocal step made by Russia. Russia has made several tactical moves in regards to Iran, Syria, and Libya, but there have been no results so far regarding fundamental issues such as:

- The fulfillment of Russia's international obligations under the EU-brokered cease-fire agreement. On the contrary, as I discussed earlier, Russia creates new additional threats.
- The Conventional Armed Forces in Europe—Russia killed all the very constructive proposals made by the EU and the U.S. and no progress has been achieved in the process.
- Energy security, which is the EU's fundamental issue to be worked out with Russia. It has seen no positive developments and Russia is still using this as a source of political power.
- Missile defense, which has been the central pillar of the West-Russia "reset" policy. It is being killed by Russia through its ultimatum that 1) Europe should be divided into sectors of military responsibilities and 2) Russia should be provided with a legally binding assurance that the missile defense facilities to be installed in ex-Communist Eastern Europe will not be directed against Russia; and above all, through the statement that Russia will pull out of the new START disarmament agreement in case the missile shield is deployed and operated without the Kremlin's input.

HOW TO RESOLVE THESE SECURITY CHALLENGES

Let me share with you our vision for solving these challenges and start by what Georgia should do and is doing:
- Continue to strengthen democracy in our country and democratic reforms.
- Despite everything, we have a clear message that "Peace is the only solution and a comprehensive political dialogue is the only way to achieve it." This pledge was reconfirmed in the President of Georgia's address to the members of the European Parliament in November last year. He unilaterally declared that Georgia will never use force to restore its sovereignty and territorial integrity against occupational forces or their proxies and that Georgia only retains the right of self-defense if the non-occupied part of the country comes under new attack and invasion.
- At the same time, since there is a need for confidence-building between the people living in occupied territories and IDPs and refugees at the local level, we have elaborated a comprehensive strategy of peaceful engagement of all populations, trying to rebuild the bridges between communities that have been systematically destroyed during the Soviet period and later by the Russian Federation. Together with confidence-building, the State Strategy and the Engagement Action Plan will ensure that residents of the occupied territories enjoy the same rights and privileges available to every citizen of Georgia.
- Intensify the EU and NATO integration process through existing mechanisms and implement the reforms under this format.

On the other hand, we believe that the West should not ignore the existing situation and should:
- Adequately react to new threats, take more proactive measures to pressure Russia to respect international law and order and make it fulfill the cease-fire agreement.
- Establish an unbiased international presence on the ground to outlaw existing black holes in our country.
- Recognize existing problems and adequately acknowledge them, otherwise we will not succeed in resolving them. To this end, it is essential to name things properly and start using terms such as occupation and ethnic cleansing. This is not to irritate Russia, but rather to stimulate constructive dialogue and, no less important, to bring legal clarity in terms of the responsibilities of the occupying power. We believe that international recognition will give an additional incentive to Russia and to its proxies on the ground to become more constructive.
- Accelerate the process of Georgia's integration into the EU and NATO structures. The EU should promote stronger democratic institutions, economic modernization and sustainable development; and NATO should contribute to stability through its open door policy which, recent history has shown, already provided vital incentives in Europe for the peaceful settlement of conflicts, democratic development, and the respect of human rights. We believe that history will repeat itself in Georgia's case. Therefore, it is very important to accelerate the process of Georgia's integration based on our merit and achievements so that nobody gets the wrong signal that it can hinder our integration into NATO.

I will conclude with a quote by the NATO Secretary General that "We all live in an independent, global world in which countries—great, medium, and small—should enjoy the same rights and sovereignty."

Chapter 16

Security in the Black Sea Region: A Russian Perspective

Ambassador Vladimir Chizhov
Russian Federation Ambassador to the European Union

I t is encouraging to see so many defense ministers from the Western Balkans sitting along this table. It means that, at least in the Balkans, the situation is good and there are no immediate security problems to face elsewhere. I hope this applies to the Black Sea Region as well since the Defense Minister of Bulgaria is sitting here too. On an optimistic note, I will say something that all of you present may not agree with but, in my view, the Black Sea Region today is safer than ever. It is not perfect, and I will explain why later, but we do have a network of organizations and mechanisms in place in various fields. If we look at the economy on a regional scale, we find a well-functioning Black Sea Economic Cooperation organization (BSEC) that is headquartered in Istanbul, works on a number of economic projects, and runs a Black Sea Bank for Trade and Development from Thessaloniki in Greece.

The Black Sea Region is also a region where many energy projects have been developed. Some are already functioning like the Blue Stream, which brings gas from Russia to Turkey and onwards; others have been planned like the South Stream gas pipeline and, hopefully in the near future, the Burgas-Alexandroupolis oil pipeline.

On the legal side of security, the 1936 Montreux Convention still remains a valid international instrument that governs the status of the Black Sea Straits. Our security in the traditional military sense is being taken care of, on a regional basis, by two initiatives in which all countries of the region participate. One is BLACKSEAFOR, a naval joint force aimed at combating hostile actions, be they caused by pirates, drug smugglers, or other sources. The other is the Turkish-launched initiative of Black Sea Harmony. Of course, there are a number of bilateral agreements as well. I will mention the recent Russia/ Ukraine agreement on the stationing of the Russian Black Sea Fleet in Sebastopol which removed any tensions that existed on that issue and another recent agreement between Russia and the newly independent Republic of Abkhazia on the protection of its sea coast. The appearance of two young vibrant democracies three years ago in this region, the Republics of Abkhazia and South Ossetia, is a new element of course. We certainly believe that this can open the way to increased stability and cooperation in the overall Black Sea Region.

Now, I do not want to paint too rosy a picture. Of course, there are causes for concern regarding the Black Sea Region.

- First, we are carefully monitoring the European Union as it develops its own Black Sea strategy. It started a few years ago with a document called the Black Sea Synergy. Perhaps due to the fact that it never got a separate budget line in the EU budget, the new strategy that is being contemplated today should really take into consideration the need to coordinate policies in the region with non-EU members. As a newcomer in the Black Sea with the accession of Bulgaria and Romania four years ago, the EU should certainly not impose its own rules on the whole region. We look forward to closer cooperation between BSEC and the EU, however, and support it.

- Second, the plans to include countries of the region, particularly Romania, in the global Anti-Ballistic Missile system (ABM) and the enthusiasm that Bulgarian Minister Angelov expressed a short while ago are also causes for concern in my country. I will not dwell on the Russian view on ABMs; most of you know it quite well. We look forward to what the staged approach promoted by the Obama Administration might bring at one of its later stages. One indication is the participation of an AEGIS Cruiser called USS Monterey in the recent Sea Breeze naval exercise in the Black Sea. We do not have anything to say about the exercise itself. It is perfectly legitimate, but the fact that the U.S. Navy did not find a better ship than an AEGIS Cruiser destined to be part of the global ABM system is of course an element that cannot but raise concern.

THE SITUATION IN GEORGIA

Finally, I would like to say a few words about Georgia. I sincerely hoped that Georgian Vice Prime Minister Baramidze would refrain from turning his presentation into a propaganda exercise. Unfortunately, he did not. Although I will not join him in that exercise, I want to point out that a few of his statements are actually not true. First, his reference to a cease-fire agreement brokered by the European Union is wrong. There was no cease-fire agreement. There was an agreement between Russia and the European Union represented by President Sarkozy which had to be fulfilled by parties to the conflict, namely Georgia, Abkhazia, and South Ossetia. Second, the EU Monitoring Mission (EUMM) is not there because Russia prevented it from coming. The fact that the EUMM has no mandate to work in the territories of Abkhazia and South Ossetia may concern Tbilisi and the EU too. I accept that, but any change in that mandate should not be negotiated with Russia but with the governments of those newly independent countries. As to Georgia serving as a role model for countries in the region and beyond, I would advise these countries to think twice before taking it as a role model. A few weeks ago, you only had to watch the TV coverage of the Georgian police using brute force against demonstrators to see for yourself what real progress Georgia has made in the human rights situation in Georgia. Therefore, it comes as no surprise that Georgia failed to be elected to the U.N. Human Rights Council.

Part Two

Admiral Edouard Guillaud
Chief of the French Defense Staff

General Manfred Lange
Chief of Staff, Supreme Headquarters Allied Powers Europe (SHAPE)

Ambassador Omar Samad
Ambassador of Afghanistan to France

Ambassador LI Baodong
Permanent Representative of China to the United Nations

Lieutenant General P.K. Singh, PVSM, AVSM
Director, United Service Institution of India

Ambassador Boguslaw Winid
Permanent Representative of Poland on the North Atlantic Council

Ambassador Stefano Stefanini
Diplomatic Advisor to the President of the Italian Republic

Ambassador Ertugrul Apakan
Permanent Representative of Turkey to the United Nations

Major General (Ret.) LIU Pei
Vice Chairman, China Institute for International Strategic Studies

Ingénieur Général Robert Ranquet
Deputy Director, Institut des hautes études de défense nationale, Paris (IHEDN)

General George Joulwan
Former Supreme Allied Commander Europe (SACEUR)

Mr. Ilan Halevi
Political Counselor, Palestinian General Delegation to Germany

Ambassador Michel Foucher
Institut des hautes études de défense nationale, Paris (IHEDN)

Ambassador João Mira Gomes
Permanent Representative of Portugal on the North Atlantic Council

Chapter 17

Key Dinner Address at the Hôtel de la Marine

Admiral Edouard Guillaud
Chief of the French Defense Staff

I t is a pleasure for me to be here for this short address in the Hôtel de la Marine that is so dear to my heart. I would like to thank Admiral Forissier, the Chief of the Navy, for hosting us here. Sharing our perceptions and our visions of the security challenges at this workshop seems to me of paramount importance.

This is a time when our post-Cold War world is deeply changing; this is a time when we see the positions of the various players moving on the global chessboard; this is a time when we are all confronted with major stakes for the future of our security, of our global security. Without playing a dangerous game of geopolitical and prospective guessing, I would like to share with you my strategic perception about current evolutions and crises. I see four strategic trends from the "Venturi" effect, i.e. the velocity increase studied in fluid mechanics: The world is accelerating!

STRATEGIC SURPRISE

First trend: The pertinence of the idea of "strategic surprise" in a complex, fragile, dangerous world—that is to say, these unexpected upheavals which have forced us to rethink the way we see the world. "Strategic surprise" means something. We need only to look at the past 20 years to prove it:

- November 1989: The Berlin wall collapses overnight,
- 2001: Hyper-terrorism strikes our cities,
- 2008: A major financial crisis reveals the fragility of our economic models,
- 2010/2011: The revolutions in the Arab World burst upon an established order which seemed to be everlasting.

All of these crises share two common points: No one had anticipated them or imagined them at least in that form; they reconfigure a fragile global model with an uncertain lifespan. We did not anticipate or identify these earth-shattering events—first of all, very probably because of our geo-centric or simply Euro-centric blinkers; also because of our intellectual myopia with an inability to think beyond the first stage or phase in a complicated reasoning process; and finally because of our static way of seeing things: Just looking at snapshots without taking the time to play the complete film. This is a movie, not still life photography. So we must be ready for new surprises in a more complex world hosting ever more fragile societies.

THE CRISIS ARC AND CHRONIC INSTABILITY FOR THE NEXT DECADE

Second trend: Confirmation of the crisis arc with chronic instability for the next decade. The 2008 French White Paper, built upon the idea of a crisis arc, had identified four critical areas: The Sahara, Sahel, and Horn of Africa regions; the Middle East and Eastern Mediterranean; the Gulf and Arabian Peninsula; and Afghanistan and the Indian subcontinent. Pandora's Box was opened by the so called Arab Spring and its uncertain outcome—be it happy or unhappy. These are the latest developments in this crisis arc! Countries on the Mediterranean's southern and eastern shores have entered times of instability and recomposition with risks of friction between different identities, political and economic tensions, and heightened fears about safety. We cannot ignore or neglect them.

THE U.S. LOOKS TOWARDS THE PACIFIC WHILE EUROPE FAILS TO SEE ITSELF AS A GLOBAL POWER

Third trend: The conjunction of the U.S. looking towards the Pacific with the lack of progress of a cacophonous or voiceless Europe, unable to see itself as a global power on the international stage. The Libyan crisis exposed the European

failure and EU's divisions on the very concept of power.

• On one side, we have the advocates of "global power Europe" in the "hard power" sense of the term. You can guess that it is exactly the approach that the U.K. and France have developed through the Lancaster House Treaty in November 2010. It symbolizes the will of two "old" countries, with their heritage, full military capability, nuclear deterrence, and a seat on the U.N. Security Council to fully play their role on the international stage.

• On the other side, we see the advocates of "influence-wielding Europe" in the "soft power" sense. It mainly relies on economic power and its influential networks to defend its interests. These dialectics will have to be transcended; and not only because some day, the question will not be that of European defence, but clearly that of the defence of Europe. Hilary Clinton referred to the idea of "smart power." It would be interesting for Europe to think about it:

• A "smart power" which would reconcile "soft power" and "hard power."

• A "smart power" which would acknowledge that the military tool is not the only lever of power, but that it is a necessary—and even a prerequisite—lever. This is Europe's real challenge.

If Europe does not ask itself this basic question, the real risk will not be choosing between "global power Europe" or an "influence-wielding Europe" but a defenceless and influenceless Europe. Today, Europe is at a standstill. The tools for CSDP allowed by the Lisbon Treaty are simply failing. Without a collective political will from the member states, the CSDP will not be able to make headway and the EU will remain hamstrung.

Europe must take into account the change in U.S. policy that complies with Mr. Obama's vision of a "multi-partner world." The United States is keen to forge new strategic partnerships. But Europe will only be one of America's partners. The United States' relatively low profile—but low profile all the same—raises the issue of Europe's defence that I was talking about a moment ago. The Libyan question clearly reveals the new American attitude vis-à-vis its European allies: America's desire not to put itself on the front line is a first. It shows the American intention to let the Europeans shoulder their responsibilities in their regional sphere of influence relying both on the Franco-British partnership and a NATO structure which has already proved its value, even if Robert Gates had some strange words lately on this topic.

ASSERTIVENESS OF THE EMERGING COUNTRIES

Fourth trend: An assertiveness of the "emerging countries." The "emerging countries" (BRICS) do not form a homogeneous group but claim, each in their own way, a status in the concert of nations. They have also clearly understood that assertion of their power, even at the regional level, demanded a full military apparatus at the level of the Western World's.

We must not forget that in the Libyan crisis and in the Ivorian crisis too, new voices were heard:

• Qatar and the UAE among the Arab countries were intent on playing a role.

• Not only Nigeria and South Africa, but also Uganda and Ethiopia, have established themselves as influential players within the African Union (AU).

• Others like China and Turkey have demonstrated an autonomous capacity for action, particularly for the evacuation of their nationals.

• I also notice that our strategic partners, India and Brazil, did not support us politically. Indeed, the first way of asserting power is often through opposition! So we will have to make sure that we work with the emerging countries so as not to let them confine themselves to this systematic opposition in order to exist on the international stage.

These few facts deserve our closest attention: We have to reckon with the emergence of these local or regional strategic players. The cards are currently being redealt at the global and regional level. Our ability to exert influence will be modified, if only because of our relative economic weight.

The new deal at the global and regional level is happening now. It will determine the future factors of tensions that you all know about:

• demographic pressure and access to natural resources;

• the uneven distribution of wealth and the expression of identity-driven nationalistic or religious fundamentalisms;

• natural or industrial risks, pandemics, and all types of proliferations, especially that of weapons of mass destruction;

• the threats related to the new combat fields, namely space and cyber space.

Taking this strategic environment into account, Europe must consider its defence, a defence which is not only military, but a defence in which the military tool keeps a determining nature to exist on the international scene.

The unpredictability of crises and the factors of tension that I have just mentioned should lead us to not get careless, to learn the lessons of history, and to remain careful and innovative in order not to be powerless in the face of adversity.

In Europe, this is a European stake.

Chapter 18

Panel on Dealing with Crises in Afghanistan and Pakistan—International Perspectives

General Manfred Lange
Chief of Staff, Supreme Headquartes Allied Powers Europe (SHAPE)

I t is a pleasure to chair this important panel discussion. My role as chair will be to try and facilitate a discussion on a vitally important and complex set of issues. For that reason, I will confine my comments to a few remarks on the crises in Afghanistan and Pakistan and seek reactions from both our distinguished panelists and the audience. As you can guess, my remarks will be from the point of view of someone with responsibilities in the NATO-led operations of the International Security Assistance Force in Afghanistan (ISAF).

NATO is in Afghanistan to assist in the establishment of a security environment in which Afghans can govern themselves, secure themselves, police themselves, and defend themselves. ISAF's job is to establish a situation in which ISAF ceases to exist.

Afghanistan and Pakistan share a 2,100 kilometer-long porous border, most of it consisting of very difficult mountainous terrain. Inside Afghanistan, approximately 140,000 ISAF troops operate alongside 300,000 Afghan security forces in order to provide security and protect the people from the insurgency. Along the Pakistani side of this common border, over 120,000 Pakistani forces conduct operations against an insurgency. Consequently, in addition to sharing a common border, both Afghanistan and Pakistan face insurgents inside their borders who use mountain passes as sanctuaries, training areas, and supply routes, and move across this long 2,100 kilometer border to conduct operations.

Afghanistan and Pakistan are on the front line of the fight against extremism and terrorism. Their people have suffered at the hands of brutal insurgents, and in this fight, many have made enormous sacrifices that are all too frequently forgotten. Although there is a long history of distrust between Afghanistan and Pakistan, both countries share a common challenge today and their efforts, in combination with the overall efforts of the international community, are contributing to greater security and stability, although at a pace that we would wish to see improve. In essence, Afghanistan and Pakistan need a common solution against this common opponent to stability. Without a common solution, there can be no stability, no security, and no peace for either the Afghan or Pakistani people.

- How can we find this level of cooperation between Afghanistan and Pakistan to address the common insurgency? I will listen intently to the views of our panelists on this vital issue.
- How can we forge a level of regional cooperation to reinforce this bilateral cooperation? Also, how can the international community work together to help nations in the region achieve this common goal?

These issues are critical to success and important questions for this panel to address.

NATO and ISAF have the task of supporting the development of security, governance, and reconstruction. This is a far-reaching set of tasks that stretches the military's capability and capacity and one that impacts the population throughout Afghanistan. Despite this enormous responsibility and the resources that the 48 ISAF nations have made available, we are not in a position to solve any of these challenges alone. We need to partner with the Afghan people, the Afghan government, and coordinate with the nations in the region. This is why the international community has come together on such a scale and in so many diverse ways to help Afghanistan and the region solve its pressing problems and develop a durable peace and stability. It will be very interesting to hear our panelists' views on the Afghan national strategies as well as the strategies of nations around Afghanistan and in the region as a whole because these strategies form a complex mosaic of interests, challenges, and problems that threaten the ability of the international community to realize its fundamental purpose in the region.

ISAF is doing its part inside Afghanistan and promoting cooperation and transparency along the Afghanistan-Pakistan border. At this tactical level, we see the benefit of such military cooperation daily. We have a common interest in securing both sides of the border and we have established in the military sphere a Tripartite Commission in which ISAF, the Pakistani Army, and the Afghan National Security Forces can meet together to coordinate their actions, to understand each other's problems, and to minimize friction. The Tripartite Commission is the highest level military forum to discuss matters of common concern to the three parties. Its main objective is to create "an enduring and mutually beneficial Afghanistan-Pakistan security relationship that contributes to regional security." Tripartite Commission meetings have greatly improved the coordination and communications in the critical border area. We have established a Joint Intelligence and Operations Centre, staffed by the Afghan National Army (ANA), Pakistan Military (PAKMIL), and ISAF delegations who have the mission to share intelligence, coordinate operations and plans, coordinate information operations, and coordinate Counter-Improvised Explosive Devices between ISAF, PAKMIL, and ANA.

We have also established Border Coordination Centers and intend to establish more. Beyond their present military utility, the seven agreed Border Coordination Centers have the potential to become information and intelligence fusion centers for frontier issues. Meetings and exchanges of views must continue at the highest levels but more is needed. If we do not increase our mutual understanding, every individual shock that occurs, every suicide bombing, every border incident will put pressure on key relationships and push people and leaders away from common solutions toward zero-sum paths. Again, our panelists may want to give their views on what possible arrangements might prove as useful at the strategic-political level as those that ISAF has created at the tactical level.

In July, ISAF will begin the transition of security to Afghan lead. This process will evolve over the next three years and conclude in 2014. Much is being done by our brave forces and much is being done by the brave Afghan forces as they develop more and more capability. NATO is moving ahead with a long-term strategic partnership with Afghanistan beyond 2014 after ISAF has left. The NATO commitment to Afghanistan will continue long after the last ISAF combat soldier has departed. However, it is perfectly clear that the formula for enduring peace and stability in Afghanistan requires solutions inside Afghanistan, outside Afghanistan, and solutions within the context of a broader path to regional security. Zero-sum formulas by the people of Afghanistan, by the nations surrounding Afghanistan, and by the region as a whole will not produce the stability that is being sought by the international community and needed by the region.

Chapter 19

Dealing with Crises in Afghanistan and Pakistan

Ambassador Omar Samad
Ambassador of Afghanistan to France

On 17 June, resolution 1988 was passed by unanimous vote at the U.N. Security Council. Intended to strengthen the international sanctions regime by severing the linkage between Al-Qaeda and the Taliban, this decision could promote the reconciliation policy targeting the insurgency in Afghanistan. It could also bring into focus the threat posed by groups such as Al-Qaeda as separate entities. The vote will be viewed by many as a strong signal of trust and support for the ongoing reconciliation effort. The resolution welcomes the Government of Afghanistan's desire to help the Afghan Sanctions Committee coordinate the listing and delisting of accused militants, and also to direct the new committee on the Afghan board to remove expeditiously from the black list individuals and groups that meet the reconciliation conditions agreed to by the Afghans and the international community—those who renounce violence, sever links with terrorists, and respect the Afghan Constitution, "including the right of women and persons belonging to minorities."

Although the post 9/11 Afghan dossier is multi-dimensional and complex, has many actors, and is now entering its tenth year—not counting the previous twenty years—let me shed more light on the current trends by referring to the recent policy statements and remarks that were presented by the Afghan leadership, first during a 10-11 June visit to Islamabad where they held extensive talks with the Pakistani leaders, and also at the 10th Shanghai Cooperation Organization (SCO) Summit in Astana on 15 June.

As part of the 11 June Islamabad declaration, the Afghan side expressed hope and optimism that they had agreed with the Pakistani side to share data and realistic views on common concerns; they also indicated that Islamabad had reaffirmed its resolve to work jointly to ensure durable peace, security, and stability and eliminate the menace of terrorism, extremism, and militancy. A joint commission mechanism was established to facilitate and promote reconciliation and peace. From the Afghan government perspective, this means that we are committed to pushing for a reconciliation policy that would somehow incorporate the Taliban, at least those who are willing, able, and reconcilable, in the political process. In this regard, the Afghans once again encouraged the Pakistani authorities to play a more constructive role. In return, it is the Afghan's view that we would all reap the benefits of a peace dividend in the form of stability, of course, and a path to regional and global economic prosperity. It is our view that a stable sovereign Afghanistan would be of great help in realizing regional aspirations for peace and socio-economic development while, as we know, the contrary is certainly true as well.

Following his visit on the occasion of the SCO Summit in Astana, President Karzai stated that Afghanistan has been pushing and pursuing peace and reconciliation with those Taliban who are ready to sever their association with terrorist groups and accept the Afghan Constitution. He also advocated the removal from the U.N. sanctions list of names of select Taliban members who are prepared to embrace peace and reconciliation. In light of these developments, many Afghans believe that an occasion is presenting itself to extend an olive branch, but they are no longer willing to accept promises and rhetoric at face value. They are asking for a process that tests the sincerity and intentions of those who historically provided sanctuary and military and other types of support to militant networks whose aim was to keep Afghanistan off balance.

In general, Afghans explain the insurgency's motivations and the unfortunate growth of violence in four different ways:

- First, if this militancy is part of an international jihadist agenda fed by proponents of a clash of civilizations as espoused by groups such as Al-Qaeda, then it would have to be fought on many fronts globally.
- Second, if the insurgency is an ideological war with a local scope, it would have to either agree to become part of the political order or continue to use violence as a preferred choice. This has been the case for what we call the Afghan Taliban and the Pakistani Taliban.
- Third, if the nature of this conflict has strategic and regional implications and such groups are used as proxy assets, then the main stakeholders need to either come to terms at some point or fight it out until fatigue sets in or one side backs down. This has been a core objective of previous military strategists in our region.
- Fourth, if the main reasoning behind this insurgency is internal to Afghanistan, i.e., for political, tribal, financial,

judicial, or even narco-driven reasons, and it is seen as less ideological, less influenced by international terrorism, we would need a strategy to address those issues at that level and neighboring countries would not have to meddle or exert themselves into a solution that would inherently have to be an Afghan one.

So, the predominant thought among most Afghans who aspire to a just and durable peace, as opposed to a lopsided negotiation for the sake of short-term advantage, is that all the above-mentioned motivations are real. All are at play and involved at one moment or another. Regardless of their focus, they have one element in common: With very few exceptions, they have enjoyed a structural support that is primarily based outside Afghan borders. Therein lies the challenge for Afghans as well as the international community, and therein lies the challenge for those who need to explain why a premature or precipitated drawdown is the right choice or how a single track political outreach can be sustained. Some instant solutions that are currently offered do not take into full consideration the complexity of the task ahead. Therefore, to Afghans, the main issue for verification is whether a change of strategy that has thus far used and supported asymmetrical proxy warfare is really at work and, if so, how is it in sync with the rest of the world.

In order to better explain the context, I will present you with two considerations: One, this single source has not easily tolerated internal dissension or alternative views. And two, if we have some interlocutors on the other side, who are they and when will they come forth? The Afghan government is in search mode right now, looking for these individuals and groups that will come forward and start talking about talks at least before we start talking about negotiations.

Undoubtedly, there are fundamental weaknesses within the Afghan governing structures and these weaknesses should be corrected at a comparatively low cost in the future with a strategy to rebuild trust, raise capacities, and build institutions in Afghanistan. The international community has been generous and has made great sacrifices in Afghanistan under the United Nations mandate, primarily for the sake of security. But a lot more can be achieved with well-managed national growth programs and by nurturing Afghanistan's nascent but promising mining and agricultural backbone, complemented with an adequate footprint to safeguard the gains that have already been made. This option is being very carefully examined right now in major capitals around the world.

Aside from the reconciliation program, we are at a stage where we are also juggling several other issues very quickly.

- First, there is the security transfer and incremental transition of responsibilities from U.S./NATO forces to Afghans by the end of 2014 that was decided in Lisbon last year. As we increase our security and government capacity, our international partners will engage in selected military drawdowns. Individual countries under the umbrella of NATO ISAF will decide on the scope and pace of these drawdowns. However, more than any other yardstick, Afghans believe that such decisions will need to take into account very hard realities on the ground, namely the balance of power since it has evolved and is evolving, especially after the surge that was initiated last year.

- Second, Afghanistan's long-term stability and development will still require continued civil-military support beyond 2014. In this context, we are starting to talk about long-term comprehensive partnerships and strategic partnerships with our regional and international friends, including the United States. Afghans will have an opportunity this year to provide advice and guidance to our government on a proposed mechanism that would help define the legal parameters of such strategic cooperation. Our leadership has indicated that Afghans will avoid a partnership that might jeopardize the security of our neighbors or that of our region.

- Third, Osama or no Osama, the ultimate goal is to put Afghanistan back on solid footing, responsible for its own affairs as soon as conditions permit with the minimum investment required and having functioning institutions, especially in the security sector, which has to be well trained and well equipped. This can be achieved if we do not lose the current momentum that was created last year while we aim to see if a real political track actually exists. In our opinion, failing to do so will surely worsen regional stability with a real risk of reversal for NATO and the re-energization of terrorist organizations with larger claims.

In the post-Osama world, where some believe that terrorism is decapitated, there is no sign that it is actually the end of this phenomenon; neither is there any guarantee of a diminished threat. What is clear though is that democratic development and issues such as women's rights, equity, and economic opportunity are crucial and need very thoughtful nurturing and mentoring. We also need to acknowledge that, despite weaknesses and manipulations, the growth of an Afghan civil society and democratic space over the last ten years has been extremely impressive and is starting to take root. This trend should remain irreversible at any cost. So as part of the strategic review and recalibration that is going on right now, it is imperative that we rekindle the hope that Afghanistan is not a lost cause, that the prospects for change and development over time are promising and made irreversible and that a stable developing and self-governing country can defend itself and finally contribute to regional prosperity and global security. These objectives are achievable, and now is the time to wisely redefine the path ahead, coordinate at all levels, and make decisions based on facts and pragmatic longer term perspectives.

Chapter 20

Promoting Peace, Stability, and Development in Afghanistan And Pakistan through Enhanced International Cooperation

Ambassador LI Baodong
Permanent Representative of China to the United Nations

In sharing my views with you on how to promote peace, stability, and development in Afghanistan and Pakistan through enhanced international cooperation, I would like to focus on two issues: What are the main challenges facing Afghanistan and Pakistan right now? And how will the situation in Afghanistan and Pakistan evolve?

AFGHANISTAN AND PAKISTAN—THE MAIN CHALLENGES TODAY

The security challenge. I believe that Afghanistan and Pakistan are facing four types of challenges: A security challenge, political instability, economic difficulties, and cultural conflicts. The security situation is posing a serious challenge to Afghanistan and Pakistan. These two countries are the most frequent targets of terrorist attacks in the world and there is no reason to be optimistic about the situation there. Taliban groups in Pakistan are spreading their influence from remote areas to urban centers. In the wake of bin Laden's death, Taliban forces have sought revenge through frequent terrorist attacks in Pakistan. They blatantly attacked a Pakistani naval base and a military training center, causing heavy casualties. During the Spring, Taliban cells in Afghanistan staged 80% more attacks than during the same period last year. They recaptured remote areas in the country's northeast. They also took advantage of such incidents as the burning of the Koran by an American pastor to stir up anti-American sentiment and assault a U.N. agency in Afghanistan as well as Afghan government officials.

Political instability. The successful general election in Afghanistan marked an important step forward for the country on the path to achieving governance by the Afghan people. Nevertheless, the country stands at a critical transitional juncture. Preparations for comprehensive governance by the Afghan people still need to be completed urgently. The country is confronted with the daunting task of fighting corruption and building its institutions. In Pakistan, the political situation is by no means more stable as evidenced by the successive assassinations of high-ranking officials, including the governor of the Punjab province and the Minister for Minorities Affairs. The Pakistani government is in a dire situation since it must actively engage in international counter-terrorism cooperation while maintaining domestic stability and keeping internal and external conflicts at bay. The international community should not forget that Pakistan itself is the victim of terrorism and has made tremendous contributions and sacrifices in the counter-terrorism campaign. The international community should therefore recognize and strongly support Pakistan's efforts; fully appreciate its predicament both at home and abroad; respect its independence, sovereignty, and territorial integrity; and continue to strengthen their common anti-terror cooperation.

Economic difficulties. Years of war and social turmoil have taken a heavy toll on the economies of Afghanistan and Pakistan. For the longest time, Afghanistan has been plagued with poverty, backwardness, and turbulences. After the general election, much needs to be done and the country is facing great difficulties in improving its own people's living standards. In Pakistan, terrorism and a host of other factors have seriously impaired the economic growth of the country. Last summer's massive flooding has jeopardized the economic and social development of the country and aggravated its economic difficulties.

Cultural conflicts. South Asia, where Afghanistan and Pakistan are located, is home to many religions, ethnic groups, and cultures. The historical disputes and conflicts among ethnic groups, religious groups, and tribes have seriously affected social stability and added to the complexity of the situation in the two countries and in the region at large.

HOW WILL THE SITUATION EVOLVE?

As I see it, the evolution of the situation in Afghanistan and Pakistan will depend on four pivotal issues: The troop withdrawal from Afghanistan, the reconciliation process, international counter-terrorism cooperation, and strengthened regional cooperation.

- *First, there is the withdrawal of American and NATO troops from Afghanistan.* The period from July, 2011 onwards will be a crucial year for Afghanistan as Afghan security forces take over the security responsibility from NATO. The full takeover is scheduled to be completed by the end of 2014. In light of their internal disputes, will the U.S. and NATO be able to withdraw their troops in a gradual, steady, and planned manner while maintaining security and stability in Afghanistan? Can NATO effectively shoulder the responsibility of maintaining Afghan security and stability during the transitional period? Can NATO help Afghanistan build its capacity to maintain security and enable the country to assume responsibility for safeguarding its own peace and security? All these important issues should be kept in mind when we discuss the situation in Afghanistan and Pakistan and in the whole region.

- *Second, the political reconciliation process in Afghanistan and Pakistan is very important.* There is a Chinese saying that we have to let the person who tied the bell on the tiger take it off. Afghanistan and Pakistan are countries with many ethnic groups. Only when the rights of every ethnic group to political participation are respected and when there is full and inclusive reconciliation among ethnic groups will it be possible to bridge the gaps among the different ethnic groups, religious believers, and political factions and achieve national reconciliation and unity. Long-term peace and stability in Afghanistan and Pakistan depend to a large extent on the success of the political reconciliation process in the two countries. Both the international community and the Afghan government need to promote this national reconciliation process and consolidate and expand the political foundation for peace and stability. In the meantime, the political settlement of the Afghan issue is also closely linked to Pakistan playing a passive role and being stable. The international community should therefore support Pakistan and contribute to its efforts to bring about stability in the country.

- *Third, there is a need for international counter-terrorism cooperation with Afghanistan and Pakistan.* The U.S. military raid that killed bin Laden was a major event and a positive development in the international counter-terrorism endeavors. However, bin Laden's death does not necessarily mean the end of the international fight against terrorism. The root causes of terrorism remain unresolved and terrorism continues to be a serious international challenge. At present, Al-Qaeda cells in the Middle East and South Asia and other terrorist groups are colluding. The Eastern Turkestan terrorist groups and other terrorist forces are also stirring up trouble across the world. This may lead to a rebound of international and regional terrorist activities and trigger a new run of retaliatory terrorist attacks across the globe which may have serious implications for the situation in Afghanistan and Pakistan. For the sake of the international counter-terrorism campaign as well as world peace and security, it is crucial for Afghanistan to restore peace, achieve reconstruction, and ensure that the country will never again be a breeding ground of terrorism and extremism. As to Pakistan, it is at the forefront of the international counter-terrorist campaign and has the huge task of fighting terrorism. The international community should develop close anti-terror cooperation with Afghanistan and Pakistan, bearing in mind both the immediate and long-term interests of such cooperation and addressing the issue of economic development in the two countries with greater urgency. It is important to tackle both the symptoms and root causes to avoid a cycle of violence and to strive to resolve the issue of terrorism that is the source.

- *Fourth, strengthening regional cooperation to promote economic growth in Afghanistan and Pakistan is also a very important element.* If Afghanistan and Pakistan are able to enjoy peace, stability, and development, all countries' interests will be served and the security and development of the region and beyond will be enhanced. As a reasonable member of the international community, China will continue to strengthen cooperation and coordination with all countries in all areas of international affairs, including security, and work toward a harmonious world of lasting peace and common prosperity. Afghanistan and Pakistan are China's very close neighbors. We have a big stake in these two countries and their ability to achieve peace and security is very important to us. I believe that the international community, the countries in the region, and the United Nations all have a large role to play, and we need to think about the kind of security arrangements that should be made after the U.S. withdraws its troops, after NATO withdraws its troops, and whether we should deploy a U.N. peacekeeping operation in Afghanistan. These questions really represent the challenges that we need to talk about today.

Chapter 21

Dealing with the Crisis in Afghanistan and Pakistan: The View from India

Lieutenant General P.K. Singh, PVSM, AVSM
Director, United Service Institution of India

This workshop comes in the aftermath of the tectonic shifts that have taken place not just in the Middle East and North Africa region (MENA) but also in the Afghanistan-Pakistan region. Although the situation is still unfolding in these two regions, it is certain that irreversible changes are taking place and new opportunities and challenges have cropped up with the killing of Osama bin Laden in Pakistan and the change of regimes in the MENA region.

When we discuss the Afghanistan-Pakistan region today, we must take into account several elements:

- First, the 2014 timeline set by the U.S. Administration is not a mirage. The United States, ISAF and Afghanistan have endorsed it, and the international community has endorsed it as well. This deadline, which is over three years away, signals that there will neither be a precipitous withdrawal nor a vacuum that could be filled by the Taliban or other opportunistic players. NATO and the U.S. are making strategic arrangements with Afghanistan and will stay beyond 2014. So there are three years during which countries in the region like China and India can think of how they can contribute to peace and stability in Afghanistan after 2014.

- Osama bin Laden's killing in Abbotabad has exposed Pakistan's double game of being an ally in the anti-terrorist operations while at the same time providing sanctuary and support to Al-Qaeda, the Taliban, Lashkar-e-Taiba etc. Such duplicity must not be allowed to continue.

- The killing of Osama bin Laden and other senior Al-Qaeda leaders on Pakistani soil should have convinced the Taliban that they can no longer count on the protection and support of Pakistan's Inter-Services Intelligence (ISI) to stage a triumphant re-entry into Kabul. I believe that the Taliban are entering secret talks with the U.S. not because of any change of heart but because they have been weakened militarily by the U.S./ISAF operations. So, we must maintain military pressure on Al-Qaeda, the Taliban, etc. and at the same time, take effective measures to cut the umbilical cord that binds Pakistan's ISI and the Taliban.

- The solution to the global war on terror cannot be found in Afghanistan alone. Whether we like it or not, we will have to address the problem of global terrorism emanating from the Afghanistan-Pakistan region. Therefore, staying the course in Pakistan is as important as staying the course in Afghanistan. I hope that other panelists will address the issue of terrorism coming from Pakistan and what we can do to convince Pakistan that terrorist organizations can neither be strategic assets nor be used as instruments of state policy.

AFGHANISTAN

I will not spell out the challenges faced in Afghanistan. Afghanistan is a strong society but a weak state. It can have strong warlords, who at times create localized violence to safeguard their power and position, or have a strong central government, but it cannot have both. Reconciling these will not be easy. We have all been watching events unfold in Afghanistan over the last decade. Contrary to what many believe and write, great accomplishments have been made there. A great democratic space has been created which would not have been possible without the successful operations being carried out by the U.S./ISAF troops and supported by other countries who have contributed to nation-building in Afghanistan. The challenge of creating effective organs of state functioning along with an effective Afghan National Army (ANA) and Police are Herculean tasks.

However the truth is that neither will be able to stand on their own feet even by the end of 2014. The training and mentoring of the ANA and Police by the U.S./ISAF forces or others may not be enough to fill the void created by the drawdown or withdrawal of these U.S./ISAF troops. Will China, India, Saudi Arabia, Turkey, etc. step in to fill this void? Or will we look for a U.N.-mandated peacekeeping force? Of course, U.N. peacekeepers will have to be prepared to fight.

Another crucial issue concerns the international funding for Afghanistan's social, political, and security needs. This will have to be a long-term commitment. Is that possible? More importantly, will this funding dry up should the Taliban regime come back to power again? So the challenge is to reintegrate the Taliban into the government without letting them take over the government.

According to Afghan interlocutors, Pakistan supports instability in Afghanistan for two reasons. First, with instability there, the Afghans will not have time to think about Pashtun irredentism. Do not forget that the Afghans do not recognize the Durand Line. Second, instability in Afghanistan creates refugees etc. and gives Pakistan a reason to interfere in Afghan internal affairs.

Now I will turn my attention to Pakistan. As the recent events surrounding the killing of Osama bin Laden make clear, Pakistan is undergoing a grave period of instability. This instability is a self-inflicted wound where a massive growth in militancy has spilled over from the periphery to the Pakistani heartland. While Pakistan is fighting insurgency, it is still doing so selectively. It has deployed over 120,000 troops but this number is not enough and the fight cannot be won in a short period of time. It will be a long haul and will require at least 250,000 troops. With over 600,000 troops, Pakistan can find the resources if it so desires. It is still neither a hopeless case nor in terminal decline. The challenge is to convince Pakistan to throw its full weight in its fight against terrorism and give up its selectivity in this regard. I believe that the U.S. and China can convince Pakistan about the futility of its calculus of treating the Taliban, Lashkar-e-Taiba, and the Haqqani network as strategic assets—you have enough levers in your hands but the moot question is "Will you use them?"

WHAT DOES THAT MEAN?

The creation of the Taliban to defeat Soviet forces led to Pakistan acquiring a veto power over U.S. policies in Afghanistan as well as in Pakistan. Acquiring nuclear weapons and perceived Chinese strategic support emboldens Pakistan even further. The challenge now is to ensure that Pakistan does not have a veto over U.S. policies at least in Afghanistan. I believe that the operation to kill Osama bin Laden was a good beginning and needs to be followed up.

I was recently in Tashkent for the 6th Shanghai Cooperation Organization Forum (SCO), which was held on 27-28 May 2011. Let me just give you a feel for what I perceive was the message emanating from that meeting:
- The Central Asian Republics abhor Islamic extremism and terrorism and would like to see the jihadist surge not only contained but defeated. They do not want the contagion of extremism and terrorism to spread to their countries.
- They fear that fatigue has occurred in the international community and should Islamic extremism and terrorism spread to the Central Asian Republics, nobody in the Western World or for that matter, China or Russia, would invest their money or blood to save them—in other words, there will not be another Global War on Terror!
- A regional solution to Afghanistan must include the U.S. and NATO along with Russia, China, India and all of Afghanistan's neighbors.

In conclusion I would like to say that bin Laden is dead and gone and will fade away from memory but what will remain will be terrorist groups like Al-Qaeda and the Lashkar-e-Taiba. The threat of nuclear proliferation and the continued fear that some militant or radical organization will obtain fissile material to make a dirty bomb, or the nightmarish scenario of one of them obtaining a nuclear weapon, cannot be simply wished away—and if Pakistan cannot be convinced to change course, the likelihood of this scenario unfolding there cannot be ruled out.

Finally I would like to salute all countries which have given their blood and money in the fight against terrorism in Afghanistan. As you may know, India too has made a humble contribution, both in blood and money, to bring peace and stability in Afghanistan. During the visit of Indian Prime Minister, Dr Manmohan Singh, to Afghanistan in May 2011, India and Afghanistan decided to establish a "strategic partnership covering all areas of mutual interest." Prime Minister Singh and President Karzai shared their vision of Afghanistan as an "independent, democratic, stable, and prosperous country." That is indeed a noble vision; let us all help Afghanistan achieve it.

Chapter 22

Dealing with Crises in Afghanistan and Pakistan:
A Polish Perspective

Ambassador Boguslaw Winid
Permanent Representative of Poland on the North Atlantic Council

MISSION OVERVIEW

My remarks present a perspective from Poland, a medium-sized European country which is participating in Afghan operations with roughly 2,600 troops to help the Afghans develop the beautiful province of Ghazny. Let me start by saying that we share the ISAF commanders' assessment that stabilization efforts in Afghanistan are slow but progressing steadily. The situation today is different from what it was two years ago, when I participated in Istanbul in a panel on Afghanistan which left many questions unanswered. Now, after two years marked by hot discussions but also good work in the political and diplomatic arenas, we have concrete plans, a 2014 timeline that was proposed by President Karzai, and the means to fulfill this task.

The insurgency is under pressure from the international and Afghan forces. During the last couple of months, the Taliban lost their strongholds in the south; of course, they are trying to get them back but ISAF is quite well prepared to defend them. Poland can only echo what was said many times: There is no purely military solution to the stabilization process in Afghanistan. We need a truly comprehensive political-military approach to the Afghan crisis and I would like to discuss four aspects of this approach: Transition, the new Rule of Law Mission, the regional aspect, and the reconciliation process.

TRANSITION

Transition is at the top of all NATO and ISAF political agenda discussions. We have a framework that both ISAF and the Afghan people are trying to implement. One crucial issue is the development of the Afghan National Security Forces. Let me just say that it is NATO's primary goal, and the training of Afghan National Forces is taking place in Afghanistan as well as in several institutions around the region and in Europe. For the first time in Poland's history, we have Afghan soldiers and police officers trained in our Joint Force Training Center in Bydgoszcz. I understand from our military colleagues that they are doing very well, and after their return to Afghanistan, they participate in very tough fighting. This is an example of how we can invest our resources and energy to build up these Afghan forces and actually retain them. There is no question that, after 2014, we will keep supporting Afghan security forces and Afghan police forces.

While the security dimension of the transition is NATO's primary responsibility, the civil dimension is equally important. This is why NATO will do its best to support and enable the international community in the non-military dimension of the stabilization efforts. Of course, NATO and ISAF cannot do everything on their own: The involvement of other actors, i.e., the European Union and the United Nations, is more than welcome. So far, the transition is progressing according to plan. We have ac which analyzes the situation in the different provinces. In March of this year, President Karzai announced the first tranche of those provinces that are ready for transition. This first tranche of provinces will very much streamline the process in the future.

We should not delude ourselves, however, and think that this will be an easy project. The transition requires human and financial support, resources, a good evaluation of the process on the ground and further discussion about the different phases of the transition until 2014. From President Karzai's point of view, the ethnic dimension is very important. Since Afghanistan is very mixed ethnically, we need to make the transition in such a way that it will not favor one ethnic group over another. For example, in the Ghazny region that we are operating in, different districts are run by different ethnic

groups, so maintaining the proper balance is crucial here and the handover should be planned accordingly. I believe that we are on the right track: The first tranche is balanced, including from the ethnic point of view, and we can hopefully go forward towards the 2014 horizon.

THE NEW NATO RULE OF LAW MISSION

During the June NATO ministerial, NATO defense ministers established the new NATO Rule of Law Field Support Mission. We very much support this decision. It goes without saying that an effective execution of the rule of law is truly essential to underpin the transition process and make it irreversible. Afghan people should feel that the Afghan government and its institutions give them reliable support. We should also avoid creating a vacuum, especially in the justice system. When there was a vacuum in the past, it was immediately filled by the Taliban, and the Afghan authorities lost control over some provinces or districts. We hope that this mission will succeed and know that the support of our regional partners is extremely important to its success.

REGIONAL DIMENSION

It is obvious that the emergence of a stable and secure Afghanistan out of this process will be critical for our regional partners and for worldwide security. We must increase our efforts to involve Pakistan in this regional cooperation, and Afghanistan is also an important aspect in our relations with India and China. In the future, we should find a place for Iran as well. Both Iran and Afghanistan have cultural and linguistic connections. Iran also hosted the second largest Afghan refugee group after the Soviet invasion in 1979. In addition, Iran has very strong ties with the Hazara ethnic group of Afghanistan—as is the case in the province of Ghazny where Hazaras represent roughly 40% of this province. So we hope to be able to have working relations with Iran, or at least an Afghanistan/Iran dialogue, in order to establish some kind of understanding. I know that this is a very difficult process but we should try to start it.

As I said, a secure and peaceful Afghanistan would serve regional interests, but an analysis of how Afghanistan's regional partners evaluate their activities in the region offers a very mixed picture. Some countries seem to be quiet players only. Others limit their influence to economic contacts and deals, but, to put it diplomatically, these economic deals may not always be very legal if we take into account the number of weapons that are illegally transferred into Afghanistan. We are also very familiar with the narcotics problem in Afghanistan, which has an important impact on the complex security situation. So, although the situation is improving slowly, there is still much to be done. We need to tighten control over what is entering the region, especially in the border area with Pakistan, but this issue is unlikely to be resolved without stronger regional cooperation. The international community should also better respond to the problem of the smuggling of chemicals, which are being used both for the production of opium and for the production of lethal weapons such as Improvised Explosive Devices or ammunition. We know that there is a very long tradition of producing armaments in this border region between Afghanistan and Pakistan and since armaments require the use of chemicals for their production, we as the international community should be better prepared to control the influx of these materials. In this light, one can hardly disagree that border security is a major challenge for stabilizing Afghanistan. Paradoxically, this issue also opens a potential area for cooperation between the Alliance and our partners in Central Asia.

RECONCILIATION

My last point concerns reconciliation, which is a very important process in Afghanistan. This reconciliation process is developing in different layers in different parts of Afghanistan. There is more support and understanding in some areas while a lot remains to be done in other areas. Reconciliation must be an Afghan-led process and must take place in Afghanistan, but the international community and Afghanistan's neighbors need to give it maximum support.

In conclusion, we have plans, we have dates, and we have limited means to implement our plans. What we need is political will and I think that we have this political will right now.

Chapter 23

Developments in Afghanistan and Pakistan:
Views from the Region

Ambassador Stefano Stefanini
Diplomatic Advisor to the President of the Italian Republic

My remarks will be extremely short. I left NATO a few months ago—just after the Lisbon Summit—and my three and a half years at NATO were really dominated by Afghanistan. The sense that we have today and that we already had in Lisbon is that, in many respects, we have come to the end game in Afghanistan. NATO knows what it is doing, but I believe that it is very important to hear from people from the region to understand how they see the next few years.

Since the follow-up to what NATO has done in Afghanistan depends very much on the region, it would be very interesting to hear whether or not the region is likely to cooperate for the stability of Afghanistan. If I can be a little bit provocative, I would like to hear, especially from our Afghan and Pakistani friends, something different from what we have heard so often in Afghanistan which amounts to, "You know, after all it is not us, it is Pakistan" or from Pakistan, "It is not the problem of Pakistan, it is India." Until the regional players make the choice to work for the stability of Afghanistan, whatever we have done or whatever the Afghans try to do—and I believe that they are trying to do a lot now—will not be enough.

Chapter 24

Turkey's Contributions in Afghanistan and the Region

Ambassador Ertugrul Apakan
Permanent Representative of Turkey to the United Nations

THE U.N.'S IMPORTANT ROLE IN MEDIATION

I will start my presentation with some remarks on the U.N. and the role of the U.N. in mediation. In that context, the recourse to Chapter Seven of the U.N. Charter and its implementation has recently increased due to the emerging crises all around the world. But this does not lessen the importance of Chapter Six. On the contrary, the peaceful settlement of disputes remains as relevant today as it ever was and Turkey is giving particular significance to the practice of mediation. During our presidency of the U.N. Security Council last September, we organized a Security Council summit and elaborated a presidential statement on fostering peace, peace building, and preventive diplomacy. In cooperation with Finland, we are also promoting a draft resolution on increasing the role of the U.N. in mediation. This draft resolution, which will be adopted by the General Assembly soon, will serve as a framework for U.N. members and will also help regional organizations develop better cooperation with the United Nations. Over the past few months, regional organizations have taken on a larger role. In the Côte d'Ivoire, Libya, and other countries, regional organizations have taken the lead and helped the Security Council make the necessary decisions in recent crises. However, having a resolution does not mean that it will serve as a blueprint. At the end of the day, every crisis is unique. Local conditions, opportunities, and limitations differ considerably from one country to another. For this reason, crisis diplomacy needs to be as flexible and creative as possible and take into account countries' specific features and other unique characteristics.

TURKEY'S EFFORTS IN AFGHANISTAN AND THE REGION

Let me now turn to Turkey's efforts on Afghanistan and on the whole region. Turkey has a historical relationship with Afghanistan and the Afghan people and, as a member of the international community and long-standing NATO ally, it strives to reinstate peace and stability as well as bolster Afghan ownership. We believe that Afghanization holds the key to lasting peace and stability in the country. So our comprehensive efforts are geared towards supporting the Afghan government, cementing national unity and solidarity, and empowering the Afghans to assume full ownership of their own state. We also believe that the resolution of many of Afghanistan's challenges requires first and foremost the constructive support of its neighbors and regional partners. With this in mind, we strive to continue our work towards regional cooperation, confidence-building, and development. I will refer for example to the trilateral cooperation between Turkey, Afghanistan, and Pakistan. Since 2007, we have been developing a tangible cooperation at the level of heads of state in the field of economic development, particularly in the border areas, as well as a trilateral cooperation in the field of counter-terrorism. We believe that this cooperation is productive and has a future. In addition, we organized a regional conference on Afghanistan in Istanbul in early 2010. This conference, whose title was "Heart of Asia," was held just before the London conference on Afghanistan and served as a regional contribution to the outcome of the London conference. We plan to hold another regional conference on Afghanistan again this year in Turkey.

In our region, we have recently witnessed crises starting with Tunisia, Egypt, and Libya. In the case of Libya, we fully support U.N. Resolution 1973 and the African Union roadmap, and we are cooperating with our partners in order to promote and implement this roadmap. In Syria, we are developing and continuing our efforts in order to avoid bloodshed and turmoil in the country. We are thinking of the interests of the Syrian people, of Syria's integrity and unity, and we maintain close ties with the government of Syria in order to overcome these difficulties.

In conclusion, we believe in mediation and preventive diplomacy and will try to be helpful to the international community at the regional level in order to find solutions to the ongoing crises.

Chapter 25

Afghanistan: Situation, Approach, and Prospects for the Future

Major General (Ret.) LIU Pei
Vice Chairman, China Institute for International Strategic Studies

INTRODUCTION

It is really my great pleasure to be here to join our panel's discussion on the Afghan security issue. The fact that the Afghan issue is one of the most important subjects of this workshop again this year clearly reflects its importance in the current international strategic situation analysis. It is not only important for NATO and the EU but also for many developing countries, especially its neighboring countries, including China. Due to the complexity and comprehensiveness of the Afghan issue, I will not elaborate on the details. Instead, I would like to talk generally about its current situation, the approaches we ought to undertake, and its future development.

THE SITUATION IN AFGHANISTAN: A HISTORICAL OVERVIEW

As far as the evaluation of the Afghan security situation is concerned, it is obvious that there have been different views. Some are optimistic, believing that the situation is improving. The event of bin Laden's death is considered a milestone in the fight against global terrorism. Al-Qaeda and local insurgents have suffered great setbacks. For the NATO-led ISAF, it also means that it is easier to hand over its functions to the local government and implement an early exit strategy. On the other hand, some are not so optimistic, arguing that Afghanistan may experience more violence and bloodshed in the post-bin-Laden era. They think the country is plagued with problems and troubles and can hardly offer any reason for optimism. In my view, I would like to evaluate it over the longer term. What has happened over the past decade in Afghanistan has shown that the situation there has been steadily improving. We must acknowledge that, with the hard work of the Afghan people and support from the international community, Afghanistan has overcome many difficulties and made encouraging progress in many fields. For example, under the leadership of the new government, we begin to see the emergence of civil society in which regular elections are held and votes cast to hold policymakers accountable. Furthermore, we can see that the living standard of ordinary people has increased as the overall economic situation has improved.

However, despite the progress that has been achieved, many threats and problems still exist. Afghanistan and the international community are still facing various and great challenges. The security situation in some respects is still unstable and fluid, and likely to keep deteriorating. For instance, the number of terrorist attacks in some areas is on the rise and prevalent, and the Taliban insurgents and extremist forces' activities still run rampant. Corruption, drug trafficking, and organized criminal activities in the border areas have also damaged the country's image. Continued militancy and persistent riots have negatively affected the process of economic reconstruction and foreign investment in Afghanistan. The relations between the central government, local governments, and various ethnic groups have remained complicated and strained, a fact that makes it even harder to bring about further political reconciliation. Draining huge human, material, and financial resources, the NATO-led ISAF has been mired in the Afghan war for almost ten years. With the rising casualties year after year, it is highly unlikely that the NATO-led ISAF will be able to wipe out the effective strength of the Taliban forces and other insurgents in a very short period of time. Therefore, it seems, as many would say, that withdrawing from Afghanistan decently without pursuing a sweeping victory will be the best strategic choice for NATO and other foreign militaries.

AFGHANISTAN AT A CROSSROADS: FINDING THE WAY OUT

Now the development of Afghanistan has reached a pivotal crossroad. Facing both opportunities and challenges ahead, we have no other choice but to find a way out. The Afghan Government and the international community must seize the opportunities and continue their efforts to cope with the challenges. They can do so by strengthening and expanding the security apparatus on the one hand, while promoting social and economic development through building strong institutional structures on the other. More specifically, and drawing on the lessons from the decade-long Afghan war and its current situation, we shall focus on the following approaches:

- *First, security.* A stable environment is the basic condition for Afghanistan's reconstruction. In today's world, international and regional security threats are more diversified and complex. Traditional and non-traditional security issues are increasingly intertwined and no one can single-handedly resolve those issues. This major change in the world requires us to re-examine our thinking in a big way and abandon the zero-sum Cold War mentality and ideological stereotypes. In addressing Afghanistan's security issues, we need to follow a new security concept featuring mutual trust, mutual benefit, equality, and coordination. The international community, under the guidance of the U.N., must respect Afghanistan's sovereignty and independence and uphold the principle that "the Afghan people run Afghanistan." At the present stage, it should remain committed to bringing enduring security and stability to Afghanistan. And all the parties concerned, on the basis of mutual trust and mutual benefit, need to strengthen their coordination to help Afghanistan build its capacity for ensuring security at the national level so that it can take over the major responsibilities of safeguarding its peace and stability by itself. The Afghan Government must take the leading role and should do its part. To achieve greater social stability, it should take further measures to curb terrorism, crack down on drug trafficking and organized crime in border areas, and exercise security control over the whole country.

- *Second, the peace process.* The peace process is the cornerstone of Afghanistan's reconstruction. Using force or foreign military involvement cannot fundamentally settle the international disputes, regional conflicts and other security issues in today's world. Negotiation and cooperation are the effective ways to ensure the regional security. The disputes between regions and parties should be peacefully resolved through bilateral and multilateral negotiations and consultation. The diversity and complexity which are very distinctive features in developing countries and conflict-stricken regions must be respected and addressed through the principles of openness, inclusiveness, and seeking common ground while reserving differences. As far as Afghanistan is concerned, we all know that the Afghan Government has made a lot of efforts in seeking peace talks with the Taliban and maintaining contact with other political and military groups. After bin Laden's death, there has been no sign that the Taliban are likely to talk with the government. Afghanistan is also a developing country with various ethnic groups, local political organizations, and cultural backgrounds. All of these mean that the final realization of national political reconciliation will face considerable difficulties and will have a long way to go. However, since the implications of the Afghan peace process, the international community should continue to support the Afghan Government's political reconciliation and reintegration efforts and respect the leading role of the Afghan Government and its people in this process. The Afghan Government also needs to continue to seek to contact and negotiate with insurgents and other parties involved and delegate certain authority to the representatives of different ethnic groups and political organizations. History shows that reconciliation and stability can only take hold in Afghanistan when the relevant parties reach mutual understanding through dialogue and consultation.

- *Third, the economic reconstruction.* The future of Afghanistan is intimately related to the progress of Afghanistan's reconstruction. Eradicating the root causes of regional unrest and conflict depends to a large extent on the regional and national economic and social development. As long as we make a bigger pie for the common people's interests and enable them to benefit from the dividend of development, we will be able to win their hearts and support. For many developing countries and their people, they are facing the common challenges of strengthening the economy, eliminating poverty, and modifying their development patterns. In the case of Afghanistan, we also need to focus our efforts on promoting its social and economic reconstruction. A military solution alone cannot resolve the issues. The most important thing is to win the hearts and minds of the Afghan people. The international community must continue to provide financial aid to develop the Afghan economy as it promised. The assistance from the international community should be given on a priority basis to agriculture, education, public health, and infrastructure projects that will bring immediate benefit to the ordinary people. The international community also needs to provide assistance to the Afghan Government for its campaign of fighting corruption and counter-narcotics. The Afghan Government's top priority should be placed on building a healthy social, economic, and legal system aimed at raising the living standard of its people. It needs to come up with a more farsighted and comprehensive approach, which combines such measures and mechanisms as

diplomatic efforts, socio-economic development, infrastructure investment and institution and legal system building programs. To gain the confidence and support of the people, the Afghan Government needs to continue to reform its society, enhance its governance capacity, and assume more responsibilities as an effective authority.

FUTURE DEVELOPMENT OF AFGHANISTAN

Finally, I would like to move on to Afghanistan's future development. With the world coming into the second decade of the 21st century and looking back on the journey that Afghanistan has traveled, I think that despite the various problems and challenges the country faces, peace, cooperation, and development represent the shared aspirations of the Afghan people and the international community, and is the trend of the times. I believe that Afghanistan will ultimately be transformed into a stable, vibrant, and promising country. A peaceful, independent, and prosperous Afghanistan that enjoys good-neighborly relations will be beneficial to regional peace, stability, and the global anti-terrorist struggle.

As a neighboring country, I think that China will play an important role in Afghanistan. China respects the development path which Afghanistan has chosen based on its national conditions. Since the establishment of a new Afghan Government, China has been committed to developing friendly relations with Afghanistan. To the extent that it is able, China has actively supported and engaged in Afghan reconstruction and offered a large amount of assistance to Afghanistan. To improve the livelihood of the local people and strengthen Afghanistan's development capabilities, China has assisted Afghanistan in building infrastructure projects such as hospitals, highways, water conservancies, and other public facilities. China has also provided support for training Afghan professional and technical personnel from various fields. As its neighboring friend, I believe China will continue to provide support and assistance to Afghanistan and will be committed to developing a comprehensive and cooperative partnership featuring mutual trust, mutual benefit, and equality with Afghanistan.

Chapter 26

Libya and the Arab Spring

Ingénieur Général Robert Ranquet
Deputy Director, Institut des hautes études de défense nationale
(Institute for Higher National Defense Studies)

How do we cope with the so-called Arab Spring, or Arab Revolution? And in particular, at least from a French point of view, how do we deal with the Libyan crisis now? In his key opening address, Minister Longuet alluded to the Libyan situation and shared with us very candidly his concern that we are obviously not out of the first phase of the military action there. Many people are already thinking of how we will deal with Libya in the long term but we must recognize that we are still in the military phase and that it is not conclusive yet.

At the Hôtel de la Marine last night, Admiral Guillaud also expressed concern with the situation in Libya in a very personal way. I have not yet quite identified what he was referring to, but Libya was obviously very present in his mind when he talked to us. So our panel intends to look at the situation in this part of the world, which is by no means a homogeneous region. There are significant differences between these countries—and perhaps insufficient democracy and underdevelopment are the only two elements they share—but aside from that, there are many different situations at hand. We talk of the Arab Spring but, from an ethnic point of view, these countries are not even homogenous Arab countries. And is it an homogeneous Spring? This remains to be decided.

Chapter 27

Libya and the Arab Spring:
Dinner Debate at the Musée Carnavalet

General George Joulwan
Former Supreme Allied Commander Europe (SACEUR)

I t is good to be participating in the workshop again and in particular the dinner debate. A dinner debate is something very special and I know we just had an excellent dinner, so let us talk about the debate part of it. A dinner debate is an informal discussion on a particular topic in which opposing arguments are put forward. So that is what we are going to try to do tonight. We had a very good discussion on Libya today and the speech last night by the French Chief of Defense, Admiral Guillaud, was extremely well done. So the topic for the dinner debate is Libya, and the corresponding upheavals in the Middle East and Africa. My first question for you is: We talked several times about an Arab Spring, well in three days, it is going to be an Arab Summer. If it is not resolved, it is going to be an Arab Winter and I think it is going to go much longer than people thought. So let me start by remembering the words last night of Admiral Guillaud who spoke about Libya in very candid terms. He said that Libya has exposed some weaknesses in the military capabilities and in the thinking of the EU and of NATO. I realize that these are difficult subjects, but I would like to get your candid views on what some of those weaknesses may be and what we may be able to do to correct them. Who would like to comment or offer an opinion—pro or con? Let me add the issue of credibility. Is the credibility of both NATO and the EU involved in the outcome in Libya?

RWB: There was no other option for a responsible country like France or for the U.K. or the European Community. They had to intervene in some way. We can discuss what is the best way to intervene, what should be the extent of the intervention, but there needed to be some kind of intervention.

GJoulwan: Do you agree or disagree with Roger? To me the more difficult question is how long will this intervention take? And are there munitions shortages and lack of ISR in the countries involved and will that have an impact on the outcome?

Terry Morgan: So let me give a historical example of some planning that happened around Bosnia-Herzegovina. When we said it would take twenty-five years, that was based upon a discussion and experience in 1983-84 as a U.N. peacekeeper in the 13th year of the Lebanon rebellion. So, the question of political will becomes a very important part of creating success in a multi-generational conflict.

GJoulwan: What about political will? Is there political will to see the operation in Libya through? By NATO? By the EU?

Unknown speaker: It is not only the political will but, as a military person, I would ask you: Did the military, whoever started in Libya, think that they would win in two weeks? Now you are arguing that it might even be winter. Politicians might take decisions, good or bad ones, but the military should perhaps know if it is feasible or not. And even if it is not feasible, of course, they have to do it because politicians are the masters. Still, Libya, to many of us, does not seem so simple to win.

GJoulwan: Excellent question. Let me ask you before you sit down since you brought it up, and this is for all of you, what is the mission in Libya? What is the clarity of mission that we are now trying to perform in Libya?

Same unknown speaker: I think if we go by the line, it is U.N. Resolutions 1970 and 1973—protection of civilians, the embargo on the seas and in the air, but if we involve NATO, then the question is a little bit trickier.

GJoulwan: To follow up, is the mission regime change? Gaddafi must go, the regime change must take place? Is that what U.N. Resolution 1973 says? Resolution 1973 is the protection of civilians; that is why clarity of mission is important here and I think there is a mix-up in terms of what we are trying to achieve. It is very important that we understand what the intended end-state is in Libya and Resolution 1973 is the protection of civilians. As a consequence of that, Gaddafi may

step down, but do you believe we intervened in Libya to do regime change?

Admiral Zappata: You used the term *end-state*. Before defining a mission, we need to know from our politicians what end-state they want, what results they are searching for. So my question is: Are we sure that, from the beginning, we had the proper information, the proper intelligence and the proper knowledge of the situation on the field before deciding to act? Were we at that time, based on this information, able to define the *end-state* before attacking?

GJoulwan: I think all of that is important. The U.N. Resolution is important. By the way, personally I would tell you, we had a U.N. resolution for Bosnia, and this is a very strong U.N. resolution. The problem is, What is the political clarity here, whether it is the EU or the North Atlantic Council or both? The troops need to understand what it is you want them to do, for how long, and how to measure success. And I think it has been a little bit obscure here about what the true mission is. I would just say, from my vantage point, that we in the military must fight for that sort of clarity or you are committing young men and women in harm's way without them fully understanding what the mission is. So I agree, I think there needs to be some discussion here but that is part of political will. Let me shift a little bit because I am concerned by the reports that I am getting that nations—even like France and Britain and others—don't have enough precision munitions and other capabilities to continue to carry this out if it goes to the winter time, an Arab Winter. What are your views? Is capability limited in what we are doing in the air campaign?

RWB: There was a statement on the French television by the head of the French Navy who spoke to us last night. There was also a statement to the British press by the First Sea Lord, Admiral Stanhope, who came to our workshop in 2005, that the British forces can only hold on at the current rate for something like six or seven months. So there are statements by high-level officials.

GJoulwan: And how does this fit into the simultaneous engagement now of NATO in Afghanistan, in Iraq, in the anti-piracy campaign, in the embargo in the Mediterranean, and now in Libya? These are four or five simultaneous engagements and that costs money. It costs troops. How long will the Alliance and the EU be able to carry this out in a time of tight budgets etc.? Yes, General.

Unknown speaker: Could I just add one thing? How does it add up to NATO's core issue of collective defense?

GJoulwan: That is a good question! Is Libya a proper mission for NATO or the EU?

General Rainer Schuwirth: I am in an awkward position, since I belong to—but I am not representing—a nation that did not even join the U.N. Security Council Resolution on Libya. I have my own opinion on that, but I come back in regard to your question to which, in my point of view, Luciano Zappata rightly responded earlier. I even would not call it an *end-state*. What do we want to achieve or what does NATO and the international community want to achieve in Libya? What is the vision? Who will be the successor, among those who engage there, assuming that Gaddafi will step down? With whom will the international community negotiate with etc.? And this, from my point of view, has no relation to other engagements, whether we have sufficient ammunition or not. It is subordinate to this dominant political question.

GJoulwan: I agree with General Schuwirth. It is going to take some sort of political will or political guidance to be able to let the military commanders plan for the Libya mission. I believe that clarity in that political guidance is missing. Lack of intelligence on the rebels is also disturbing. But we are where we are. How do we proceed? Yes—over here, you have a comment?

Unknown speaker: Yes, I had a comment on what you said before. You said that the two missions, Libya and Afghanistan, are comparable. I don't think so. The fact is that Libya poses a great problem of sustainability for many nations. Norway declared that, starting on 1 August, it will stop some kinds of missions. In fact, there is a push to end this operation before the end of the summer or Ramadan as has been said today. That means that we don't have sustainability for these missions. We don't have the possibility of performing these missions very long. And as to the European Union, it is not doing any military missions now. It is just doing planning because—for the same reasons—the nations are the same, twenty-one nations belong to both organizations, and they don't have tools and means to perform both sides of the same mission.

GJoulwan: If I can build on that to say, what about the other Arab nations that have political protests: Yemen, Syria, Bahrain, and so forth? Even in Lebanon today there is an uprising. Are there expectations by countries concerning what we do in Libya? Do they expect that we condone the same sort of protests that are going on and will provide the same sort of support? Do you agree that there is some expectation here by other countries that are protesting and would want to see some assistance from European nations, from the EU, and from NATO? Yes, Ambassador Novotny.

Ambassador Jaromir Novotny: This afternoon, I asked a simple question: Whom are we supporting in Libya? The answer was, we are supporting values, but values are always represented by people. So the values of Al-Qaeda, or of the Muslim Brotherhood, or of the tribes—are these the values we are supporting in Libya? Nobody knows who is governing in Benghazi. Are the people who are responsible for the tragedy of the Bulgarian nuns in the leadership in Benghazi? If so, are these

the values we are supporting? That is a simple question. I am a simple citizen.

GJoulwan: We all know that a great deal of support for Iraq and Al-Qaeda in Iraq came from Eastern Libya. That is a fact. So I agree. What is the outcome that we are looking for? There are pros and cons as to the joint council that has been established and the direction they are taking. Some nations have recognized them. But what about other nations that are having these protests? Do they have expectations as to what NATO, the EU, should do for them? Or are there no expectations?

Unknown speaker: Yes, I think about nations such as Bahrain, Yemen, and Egypt. Thinking about these countries in terms of the potential economic return and prosperity, I would propose that financial support be given to Egypt, which is a moderate country. Moreover, there is financial reciprocity between the United States and Egypt. So I would think that the U.S. would have a stronger voice in supporting the Egyptian Revolution.

GJoulwan: But are there expectations that help may come from the EU, NATO, or the United States in what they are trying to achieve in, say, Egypt or Yemen by tens of thousands of demonstrators? And if they start getting shot, if the protestors are being killed in Syria? I heard nothing about any strong effort to try to protect the Syrian protestors. Are we right or wrong? Is it a double standard? I ask you. What do you think? Yes, Ambassador.

Unknown speaker: I think that our duty to protect is relevant only in the cases where we actually can do something. And we can do something when it comes to Libya, largely because the Arab countries themselves—after all Gaddafi has tried to kill almost all Arab leaders in one way or the other at different points of his career—simply hate him. There are Arab countries that are part of the coalition. I think Gaddafi in that way is a very unique case. You cannot expect to have a similar situation with other Arab leaders. So, at this point, we actually have the possibility to do something in Libya. I don't see any other case whereby we could collect such a group where, for instance, Qatar or the Arab Emirates, would be part of it.

GJoulwan: If the U.N. came to the EU and NATO and said, the killing in Syria must stop and the U.N. were willing to pass a resolution, what would be the political will of the EU and NATO to respond to a request like that?

Unknown speaker: I think that, in Syria, it would be zero, and that's why the U.N. Security Council will never pass such a resolution, but let me make just one additional remark on Libya. If you read the last statements of the contact group and even if you read the final document of the Berlin NATO foreign ministerial on Libya, it is said there in black and white that Gaddafi has to leave power. So, basically, it is written out. It is not a sort of hidden understanding. It is very clear; it is written down. Everybody understands that this is the target of the war.

GJoulwan: I would hope all of that would happen. And I have a little scar tissue here from my own experience where we had a three year deny flight air cap over Bosnia; we had an arms embargo on the Mediterranean and in the end, after Srebrenica, we had to put sixty thousand ground troops into Bosnia. Would you ever see an opportunity or an option that would put NATO or EU ground forces into Libya? Now, I know that there are some trainers in there now from certain countries but could you ever see ground troops being introduced into Libya? Is that an option that should at least be considered if things continue to go into the Arab Winter or longer, or is there no political will for that?

Unknown speaker: Let me put your example with Bosnia the other way around. What if NATO and the countries of NATO had intervened earlier and had taken an early decision like they did in Libya, would that have ended the bloodshed in Sarajevo three years earlier? Would the U.N. not have been in Bosnia? As the situation escalated, our public could no longer stand the pictures they saw every day on their TV sets. And then NATO moved into it and ended it. There are situations where you just have to jump in and then try to fix the situation and make something positive out of it. That is how I see the situation in Libya at the moment.

GJoulwan: Thank you for your candid comments. I don't know if I agree totally with you because you could end up in a quagmire when you have not thought through what it is that you are trying to achieve. You end up committing more and more air and land assets. It has to do with political will, and I am not sure that the political will is there for Libya. Unfortunately, our allotted time has been reached. Let me thank you for your questions and responses. The workshop has always been a forum for candid discussions where all views are welcome. Tonight's dinner debate is no exception. In closing, let me thank Roger, Anne, and their staff for another excellent workshop. You have provided superb venues and assembled the right people to discuss the difficult issues facing our nations and the international community. Thank you all.

Chapter 28

The September Strategy and the Process of National Reconciliation

Mr. Ilan Halevi

Political Counselor, Palestinian Delegation General to Germany

It is no secret that the very much celebrated Middle East peace process came to a total standstill more than two years ago; this stalemate has been acknowledged by practically everyone. What is new is that in the course of the past six months, the American Administration, in the words of the President and the Secretary of State, has openly admitted that the peace process was moribund, that there was nothing on the way, and that given the present Israeli Government's obstinacy not to make any concessions on the issue of settlement colonization, it found itself incapable of imposing anything. It vetoed a U.N. Security Council resolution that had been deliberately worded with the language of the U.S. Administration on the settlement; the U.S. representative in the U.N. agreed with all the arguments raised against settlement colonization by those who proposed the draft, but yet he vetoed it. As a result, this has created a political and diplomatic vacuum in which other international actors have started to ask whether they could help make things move back towards possible negotiations.

THE "SEPTEMBER STRATEGY"

So we, the Palestinian Authority—the PLO—defined a timeline which has been called in the media our "September Strategy." This September Strategy means using the opportunity of the General Assembly of the United Nations to propose a resolution to recognize the Palestinian state at its 1967 borders according to international law Resolutions 242 and 338. This is in the footsteps of a number of states such as Brazil and nine other Latin American countries who have recently decided to recognize the Palestinian state according to its 1967 borders. We are also in constant discussion with the EU member states to adopt a decision in that direction. The French government is very active and is trying to convene a conference on the Middle East in France in the near future but it is not certain yet that it will take place. At any rate, all these partners are discussing seriously the issue and we are trying to coordinate with them as much as possible.

Implications of the "September Strategy"

I want to make it clear that the matter is neither a declaration of statehood nor a unilateral declaration. It is not a matter of declaring statehood because, in October 1988, we did declare the State of Palestine and today, one hundred and forty seven member states of the U.N. recognize it. The matter is certainly not unilateral either because we are making all possible efforts to coordinate with the international community through its most widely representative organisms in the United Nations. So, this can hardly be called unilateral since calling "unilateral" an international action of which only the State of Israel and the U.S. are absent is really twisting language a little bit too far.

Of course, even if recognition in the U.N. were to take place—there are many legal obstacles to it—and we obtained such a vote, we have no illusions that it would be implemented but it would be a very important political clarification and legal victory. It would be a political clarification because it would mean that we would no longer be discussing whether this is a disputed territory, but that it is an occupied state. No Israeli government could say, we want to keep this part and also that part and our vital strategic interests demand that we remain with a military presence in the heart of the other state. This would be finished. We would have to negotiate security and other types of arrangements, to make sure that the peace treaty would not be only on paper. We would have to discuss functional arrangements in Jerusalem after a redistribution of sovereignty according to international law. We would have to discuss all the modalities of the solutions to the refugee problem.

There are many things to negotiate, but not the principal given the terms of reference of the peace process that were set at the Madrid Conference twenty years ago. These are the terms of reference that we have to go back to in order to negotiate because we are without illusions: No recognition will give us sovereignty on our territory. Only an Israeli withdrawal can

give us the sovereignty and an Israeli withdrawal will not happen without an agreement with the Government of Israel. So, all these procedures and means of pressure are not meant to be a substitute for negotiations. They are meant to be instruments to put negotiations back on track in the terms of reference of the peace process itself without which the peace process cannot work and cannot lead to anything but failure and the continuation of the status quo. As you all know, the status quo is an explosive situation for the whole area. Palestine and Israel are small countries geographically and they are not very big oil producers but, by concentric circles throughout several continents, the conflict's symbolic value and significance is considerable. It has been used as justification to fuel hatred and intolerance throughout the area. And very recently, most of the main actors in the international community, especially the U.S. Administration, have said that the creation of a Palestinian State alongside the State of Israel is a national security imperative for the U.S. So, we all have to move on this.

THE PROCESS OF NATIONAL RECONCILIATION BETWEEN FATAH AND HAMAS

I would like to speak briefly about the process of national reconciliation between Fatah, the party that I belong to, and Hamas. After the electoral victory of Hamas, there was an international and regional situation which did not allow for a constitutionally legitimate arrangement between the majority and minority in the Legislative Chamber to form a national unity government. On the one hand, Israel, the U.S., and the European Union took measures to boycott Hamas and any government that would include them. On the other hand, Hamas claimed that it wanted to govern but refused to announce that it was committed to the international agreements signed by its predecessors. We insisted that international agreements are signed by states or national entities, not by political parties and, although they were free to criticize the Oslo Accords or whatever other interim agreements that had been signed, they had legally inherited these agreements. It took them over a year and a half to give up on their refusal to admit this logic. In the meantime, they took power unilaterally in the Gaza Strip, causing a state of division in the Palestinian political body that had never existed before; it jeopardized everything and gave a new excuse for the reinforcement of the Israeli-imposed siege and blockade of the Gaza territory. So we needed this national "reconciliation." I am talking about reconciliation with quotation marks because this is a political agreement. We are not looking for political unity with Hamas because we are in favor of political pluralism. Only political pluralism can create the framework for the coexistence of such diverse and contradictory political currents of thought and society. But we have an agreement now and through this agreement, we will form a provisional technocratic government that will prepare for elections. Its main function will be to run current affairs and prepare for elections which are the key to the reconstitution of our political system. In the meantime, this process will permit to delegate the power to negotiate to the President of the Palestinian Authority, conditioning it only on the demand to have the results of the negotiating process approved by popular referendum, which we do not oppose if it is internationally supervised and free and fair. In this sense, many of the representations of what Hamas could or could not do have been shattered because we discovered that a good part of the present leadership of that group has gone a long way from their ideological uncompromising sources and origins.

THE REST OF THE REGION: LEARNING FROM TUNISIA AND EGYPT

Finally, I just want to say a few words about the rest of the region. For many years, at least the two regimes that were recently pushed out by popular protest in Tunisia and in Egypt both justified their anti-democratic systems and constant violation of civil and human rights by the fear of Islamists. It was either them or the victory of obscurantism in its worst forms. Now I believe that this is a lesson that the people in our region and the whole world can learn from those events. I am not talking about other countries, I am talking about the two countries where non-violent and non-sectarian popular protests did away with the power elite of anti-democratic regimes. Of course, nothing is solved yet, either in Tunisia or in Egypt, and we share everybody's concerns about what the future holds in store. The economic problems are burning and will be the ultimate factor determining whether these changes have a future or not. But for the people in our area and for Palestinians particularly, this is a great lesson. We have chosen non-violence after years of armed struggle. We do not seek violence or armed insurrection because it does not fit our situation. Since we have achieved no victory through it, we have embarked on this strategy of non-violent mass resistance. Now, the victory of this strategy in Tunisia and in Egypt under completely different conditions gives us moral strength and confirms that this is the right path. Victory has become possible when years of underground organizations and armed struggle gave no results, were counter-productive, and were used by the adversary in their own propaganda machinery. So, while we share current concerns about security, stability, the control of migratory flows, and other issues, we remain fundamentally optimistic as to the changes that have started taking place in our area.

Chapter 29

Strategies for the New Challenges in Libya, North Africa, And the Middle East

Ambassador Michel Foucher
Institut des hautes études de défense nationale (IHEDN)

Since the subject of our panel, "Strategies for the New Challenges in Libya, North Africa, and the Middle East," is very wide, I will focus my remarks on two aspects. First, an observation of the so-called Arab World shows a very wide range of problems, situations, and directions, and this diversity requires that we develop differentiated strategies (which by no means signify double standards). Second, I would like to talk about security perspectives since several countries within NATO—France is one of them—are involved in war situations in these regions.

THE ARAB WORLD

First, is there an Arab Spring? My answer is no. This is not an Arab Spring, but there is something like an Arab World. It is a set of societies that are making their way to globalization for the first time. Their situation is similar to what happened in Berlin more than twenty years ago. It was a region which stayed apart from the more general evolution of the world and today, it is aspiring to normal life, to freedom of expression and circulation, and to better governance. These are aspirations that are not limited to this part of the world. When I visited India recently, I was very interested by the impact on Indian magazines of the situation in Egypt. Even though India is a vibrant democracy, it still suffers from governance inequalities. So, this is an important element.

The Arab World is a world in the sense that its societies are sharing a written language, a faith—even though there are religious minorities—and a perceived common history. They have a common representation of their past, a very long memory, especially when it comes to Europe and its colonies and mandates, a perception that Israel is basically a Western country within the Middle East, and a deep feeling of historical decline, which is fostering resentment—and resentment is a kind of fuel for disappointment and grievances. So, it is true that what happened in Tunisia over the past few months had an impact elsewhere because the Arab World functions within the same realm of interpretation and analysis. It is like an echo chamber; there is political resonance inside, but if we look at the present political and geopolitical situation, the commonalities stop there.

- *Diversity is a key feature.* After six months of continuous crises, revolts, revolutions—we do not know exactly what they are—there is something much more complex than a simple domino effect. A comparison was made, at least in France, with the situation in Central, Eastern, and Baltic Europe twenty-two years ago. This comparison is not correct because there is no Arab Gorbachev. There is no leader. Egypt used to lead but it is no longer the case. The Arab world is without obvious leadership today and there is something about leadership in the outcome of the present situation. So, this situation is very specific. Without listing country by country what is happening today, some key elements of this diversity are:
- *The diversity between political regimes, which are either monarchies or republics.* This is bad news for Europe since Arab republics tend to be more authoritarian than monarchies. Monarchies have a wider room to maneuver. I will give as an example the speech that the King of Morocco gave on 17 June. With his new generation of advisers and perhaps some friendly embassies, he quickly understood that the time was ripe in Morocco to organize a transition toward something like a constitutional monarchy. With many dispensations, this initiative will be approved by referendum. The king is taking a risk but he is the one who took the initiative. Although we do not observe the same trend with some other monarchies—Bahrain did not follow that path—there are possibilities in Kuwait and the United Arab Emirates. In

Saudi Arabia, King Abdullah is a real reformer but he is not alone and the succession system is not in favor of reform in his country today.

- *The diversity between Maghreb and Mashreq.* Libya lies in between the two. The Western part of Libya is really close to the Maghreb. But for historical reasons, culture, food, habits and other characteristics, Cyrenaica, which is the Eastern part of Libya, is very close to Egypt, not only for reasons of geography, culture, food, habits, and the influence of the Egyptian Muslim Brothers, but because Egypt has a vested interest in the stability of Eastern Libya. Of course, we should do everything possible to avoid any kind of partition and I believe that we have overcome that risk. Both in countries with very homogenous societies such as Tunisia and when there is a minority versus a majority like in Syria, a very small minority is in control of the power and it will fight to the last day to retain it. In Iraq, the Sunni minority lost power but it took them several years to understand that they had lost power. This explains the ensuing violence etc.. So the situation is much more complex in Syria for example than in Tunisia or even Egypt.

- *The diversity in the present political trajectories.* Even when the basic elements of a civil society, a new generation and a military establishment exist, in Tunisia and in Egypt, they are close to the people and behave as referees. In Syria and Iran, it is the other way around. Incidentally, Iran is completely involved in Syrian affairs with experts in propaganda, intelligence, counter-insurgency and Islamist movements everywhere. The Syrian pro-Iranian supporters do not have a political majority today but, like Ayatollah Khomeini thirty-two years ago, they are well organized to win elections. So the key lesson here is that a movement which starts a revolution, even in an improvised way, may not be the one which controls the end game, and we are not witnessing a transition to democracy but the beginning of a process. At the IHEDN Institute, we discussed this process with Professor Yadh Ben Achour, a remarkable professor of constitutional law in Tunisia who is bearing the burden of drafting a new Constitution by himself.

- *The diversity of geopolitical conditions, constraints, and stakes.* In Syria like in Iraq, there is a clear competition between Shia and Sunni Muslims which, in effect, translates into a civil war between two outside actors, one from Iran, the other from Saudi Arabia, both providing money, weapons, and intelligence. Since Iran is nowhere near the Mediterranean shore, Iran's role in Syria is unacceptable of course for Egypt, for Saudi Arabia, or even for France. What is the position of Egypt? Egypt wants to resume a normal relationship with Iran. What is the position of Washington? It is marked by a hierarchy of interests, first Israel, and more or less at the same level, Saudi Arabia for the oil, which is nothing new. After that, it is Iran that is a target for regime change, but Libya is not important for the United States. As to the EU's position, it is a different story. It is about geography, it is neighborhood, whether the EU likes it or not. In order to secure a peaceful transition in Central, Baltic, Eastern and Southeastern Europe, we have invested a lot in terms of strategy, security, and diplomacy and now, we have to do a similar job in the South. This is a permanent concern for us, not only in terms of migration but also because stability is a very contradictory concept. We were in favor of stability in Tunisia and in Egypt but this was not the wish of the people. President Mubarak was close to our President and was trying to launch l'Union pour la Méditerranée, a big Mediterranean initiative. He was a key ally and it was easy to work with him. Of course, we chose stability versus democracy. This is our challenge since we cannot forget that the gap in economic terms between the EU, the Southern EU, and Northern Africa is two to three times wider than between the U.S. and Mexico. So we will have permanent pressure from these regions since they know that life is greener on the other side of the sea. Consequently, we will need a diverse or differentiated strategy.

Today, Morocco, Tunisia, and Egypt are receiving economic support from the EU. The neighborhood policy is more active, there is more money, a greater mobility of people, training, opening of markets, and tourism is back again. And in Cairo, beyond the economic support, we will need a guarantee that the new government will not give up the peace treaty with Israel because even if it is a cold peace, it is still better than tension. In Libya, military pressure is on but a mediation process with Russia, Italy, and France is starting in Paris. Political pressure is being applied in Syria, and Turkey has a very important role to play there. On the two long-lasting Palestinian issues, there are new initiatives and new rounds of talks. Time is ripe for something new. And in Yemen, the EU is encouraging a political settlement which is needed because Al-Qaeda is very active in the country.

My last point, which may seem far from strategy and security issues, is that we lack knowledge. For example, there is no single good book on Libya in French and we do not know anything about this country. Of course, diplomats and some military people know about it but this is a bad side effect of embargo. It is the same in Iran and in Iraq. So there is room for intellectual investment and a long-term research program.

SECURITY CHALLENGES

In his speech last night, Admiral Guillaud insisted on the fact that the concept of the 2008 French White Book on the "arc of crisis" is confirmed. Concerning Libya, three kinds of policy lessons can be derived:

Avoiding another Srebrenica. We felt a moral obligation to stop the Libyan regime's announced massacre of the Benghazi population. We simply cannot afford another Srebrenica in Europe. This is the first point. It was our first intervention under the auspices of the responsibility to protect. However, once the humanitarian law is understood, nobody seems to follow it, including our German friends. In the American perspective, this is a "handover" test for Europe and it is good news in my view. NATO works by consensus but, like in Afghanistan, its effectiveness is hampered by caveats.

Strategic lessons on Libya. Is European security at stake only in the Hindu Kush Mountains, as we were told in the past, or should we focus on our periphery? This is a real question for the next version of our White Book. Also, there is evidence in the Libyan crisis that autonomy of decision and action, especially in London and Paris, is based on capacity planning, military intelligence, and targeting. It took three weeks to understand the location of the important target area over which to impose a no-fly zone. So this is very important and for us, it is a very positive lesson. We need our capacity of planning but, so far, there is not the same capacity at the EU level. The full return of France into NATO does not solve everything.

Operational lessons. The air campaign is well conducted but time is running out. Our objective is to stop before the very hot summer. Everybody has in mind the history of the Libyan battles during World War II, and we also need to stop before Ramadan. So we need a political settlement before that.

In conclusion, we learned a lot and we are still learning a lot. We will find a political solution in Libya. We will also need to reorganize the relations between Washington and Brussels. Currently, our situation is one of transition from burden sharing to burden shifting and we have to think about that. So perhaps the topic for next year may not be about European defense but about the defense of Europe, which is a completely different story.

Chapter 30

The New Challenges in Libya, North Africa, and the Middle East: A Portuguese View

Ambassador João Mira Gomes
Permanent Representative of Portugal on the North Atlantic Council

WHY THE MEDITERRANEAN REGION IS IMPORTANT TO NATO

The Mediterranean is a region of strategic importance for the stability of NATO as whole, not only for Allies in the southern flank. Portugal is one of the countries in NATO and in the EU that emphasizes the increasing importance of the South. Actually, you might not know that NATO has an ongoing operation in the Mediterranean, which was launched after 9/11, to patrol and monitor shipping in order to help detect, deter, and protect against terrorist activity. Keeping the Mediterranean's busy trade routes open and safe is critical to NATO's security.

Since 1994, NATO has had an active partnership policy, namely the Mediterranean Dialogue, which was reaffirmed in Lisbon last November. It includes seven countries in the region: Mauritania, Morocco, Algeria, Tunisia, Egypt, Jordan, and Israel. In addition, there are the four Gulf States of the Istanbul Cooperation Initiative: Kuwait, Bahrain, Qatar, and the UAE. Since some countries going through a process of transformation are NATO partners, it is normal that NATO stands ready to support them to successfully deal with those processes.

In the Mediterranean region, there are common challenges to our security: Terrorism, religious and political extremism, proliferation of weapons of mass destruction, energy security, maritime security, and illegal immigration. A single organization, such as NATO or the EU, does not have the capability, on its own, to deal with the aspirations of people in North Africa and the Middle East in these times of profound change. And at the same time there is no solution of the type "one fits all." Consequently, we must adapt our responses to the particularities of each country even if there are common root causes of the so called Arab Spring, such as lack of democracy, frustration of the younger generation concerning their future, and non-representative governments.

WHAT DOES THE REGION EXPECT FROM NATO?

Let me be clear: NATO is not at the top of the list when people in the region think about which organisation is best suited to help them in the transition to democracy. The main priority for most governments will remain of a political and economic character and consequently they will seek the assistance of international actors that can provide them with assistance in addressing those priorities. The EU will certainly be the focus of attention and it is much better suited to address the challenges and meet the aspirations. The EU has a solid experience in the region and both the Mediterranean and the Middle East have been top priorities for the EU.

WHAT CAN NATO OFFER?

Nonetheless, NATO can help in important areas where it has unique expertise, such as the reform of the military and the security sectors, which are milestones in the road to democratic societies. Modern, effective, and accountable defense and security institutions will be vital priorities for countries in the region and NATO is ready to help if so requested. NATO's approach should be based on a number of principles:

- *Complementarity.* NATO's efforts should be coherent with other efforts by international organizations, notably the EU and the U.N., and focused on areas where NATO can add value.

- *Inclusiveness*. NATO's offer to support, while addressing primarily transition countries, should be open to all partner countries.
- *Local ownership.* Any effort by NATO to assist should follow a specific request by the countries concerned and should not seek to impose solutions or dictate results.
- *Continuity.* NATO will not re-invent the wheel or create new programmes. The main aim should be to adapt existing programmes to individual needs and to new priorities and concrete requests.
- *Specificity.* Any offer to an individual partner should be tailored to meet its priorities.

NATO IN LIBYA (AND A POSSIBLE ROLE IN THE MEPP)

Let me finish by briefly addressing NATO's operation in Libya (Operation Unified Protector). We are making significant progress in fulfilling the U.N. mandate. But we are aware that a permanent solution will be political, not military. In order to create the conditions for that political solution we need to keep the pressure on. Accordingly, we have decided to extend the mission for another 90 days from the end of June.

Within NATO, however, we all agree that there will be no major role for NATO in Libya after we have completed our operation. But we must stand ready to help, in coordination with other international and regional players, if the Libyan people deem it useful. In this context, the door of NATO's Mediterranean Dialogue will be open to a new and democratic Libya.

The Arab Spring should be a source of inspiration to other countries in the region in promoting a long lasting peace, friendly coexistence, and, consequently, a brighter future for their people. I have specifically in mind the Middle East Peace Process (MEPP) and the prospect of a comprehensive settlement which will meet the aspirations of all parties.

NATO is not involved in the MEPP and is not seeking a role in it. The three conditions for any possible NATO involvement are well known: If a comprehensive peace agreement between Israel and the Palestinians were reached, if both parties requested that NATO should help them with the implementation of that agreement, and if the U.N. endorsed NATO's possible involvement. Those three if's are far from being met. But let us hope that the Spring will blossom also in the MEPP.

Part Three

Mr. Howard Schmidt
Special Assistant to the President and Cyber Security Coordinator
United States National Security Staff

General of the Air Force Patrick de Rousiers
General Inspector of the French Air Force, Office of the Minister of Defense

Mr. Dave DeWalt
CEO, McAfee|Intel

His Excellency Jaak Aaviksoo
Minister of Education and Research of Estonia, Former Minister of Defense of Estonia

Ambassador Peter Gottwald
Commissioner of the Federal Republic of Germany for Arms Control and Disarmanent

Mr. Donald Proctor
Senior Vice President, Office of the CEO, Cisco

Mr. Scott Culp
Principal Cyber Security Architect, Microsoft

Mr. Robert Lentz
Former U.S. Deputy Assistant Secretary of Defense

Mr. Timothy D. Bloechl
Senior Vice President, Global Public Sector, WISeKey

Mr. John Stewart
Chief Information Security Officer, Cisco

Chapter 31

Securing Our Networked World: A United States' Perspective

Mr. Howard Schmidt
Special Assistant to the President and Cyber Security Coordinator
United States National Security Staff

It is an honor to be here with you, and to join my good friend Bill Lynn as we share the United States' perspective on securing our networked world. It is fitting that this year's International Workshop on Global Security focuses on cyberspace—just this month, we have learned about major cybersecurity incidents at a major bank, a global online service company, an entertainment provider, and a U.S. defense contractor. These events ranged in size, but all had impact.

Deputy Secretary Lynn already spoke about the range of threats we face, and the military's work to adapt to it. Look at that list of companies, though. It should give us all pause—military, civilians, industry, and academics. Cybersecurity incidents affect our entire nation, and the entire international community. From the largest companies to individual computer users, it is hard to find someone nowadays that does not rely on this technology, and troublingly, who has not been affected by an incident like these.

THE G8 COMMUNIQUÉ AT DEAUVILLE

Problems like these require sustained international attention and concerted international action. And so it is equally fitting that this year's workshop is held here, in France, where President Obama recently joined other G8 leaders in signing a landmark communiqué focused in large part on the internet. Its key message about the importance of cyberspace to our economies, societies, and national security cannot be understated, nor can its vision for ensuring cyberspace's future by recognizing the obligations that states have in safeguarding individual rights online as well as off, in promoting an innovative environment and effective governance, and in enhancing international security through cooperation.

But what we saw in Deauville was a long time coming. It was a big and important step towards an international consensus that is building around a few simple and powerful ideas:

- That the internet should remain OPEN to innovation,
- That it should be INTEROPERABLE the world over,
- That it should be SECURE enough to earn people's trust,
- And that it should be RELIABLE enough to support their work.

These messages are at the core of President Obama's International Strategy for Cyberspace, which I launched at the White House last month with John Brennan, Assistant to the President for Homeland Security and Counterterrorism. There I was joined onstage by the Secretaries of State, Commerce, Homeland Security, the Attorney General, and of course Deputy Secretary Lynn. For us, this was a watershed moment in this Administration's cybersecurity policy, and cyber policy more broadly.

The International Strategy is a document that unifies our engagement with international partners on the full range of cyber issues. It is, quite simply, our mission statement on international internet issues. It is significant where the President's Strategy begins—not by talking about the risk alone, but focusing our agenda on all the good these technologies bring us. I do not have to tell anyone here the benefits we derive from cyberspace, and the technologies that enable it. Today, a company can do business anywhere in the world with an internet connection, supporting countless jobs and opportunities. And more than ever, citizens across the globe are being empowered with information technologies to help make their governments more open and responsive. Yet as we have seen, and countless others have pointed out, the threats we face in this space are real. So we need to devise concerted efforts to confront them, internationally, while preserving all the good that currently exists in cyberspace.

A STRATEGY FOR CYBERSPACE

We see this moment as a critical point in the development of an international internet. It is a moment where we can either work together to realize its potential, or we can succumb to narrow interests and undue fears that limit progress. And so the Strategy lays out a plan for achieving that potential, through our own government's action, but just as importantly through partnerships with other nations and peoples.

We break that work into three sections: diplomacy, defense, and development.

- *Diplomacy is about strengthening our partnerships, and building new ones.* Diplomatically, our goal is to create incentives for, and build consensus around, an international environment in which states work together and act as responsible stakeholders. They do so for a good reason: They recognize the intrinsic value of an open, interoperable, secure, and reliable cyberspace, and all it can offer them.

- *Defense is about dissuading and deterring.* In a similar vein, we are committed in the political-military space as well, joining with other nations to encourage responsible behavior and oppose those who would seek to disrupt networks and systems. To do so, we will dissuade malicious actors by denying them the ability to do serious harm, but also reserve the right to defend these vital national assets as necessary and appropriate. Now that is an idea that has been misconstrued in recent weeks. The United States is not asserting some new right to respond kinetically to cyber incidents. We are acknowledging, as we have for a decade, that a major attack in cyberspace—one that has effects that seriously threaten our or our partners' national security—could force us to respond with force. This would be a measured decision. It would not be taken lightly. And it is asserting what we all intuitively know: Cyberspace events can have effects in real space that could mean real harm and real loss of economic productivity.

- *Our final pillar is development, often overlooked but crucially important.* On this point, President Obama has taken a clear stand: The virtues of cyberspace should be more available than they are today. And as the world's leading information economy, the United States is committed to ensuring others benefit from our technical resources and expertise.

So how do we, collectively, get there? Well let me recommend a first step. We need to build agreement internationally on the principles we stand for in cyberspace. Let me name a few:

- States should respect fundamental freedoms of expression and association.
- States should respect intellectual property (IP) rights, and not steal IP for their own gain.
- States should value privacy, protect citizens from crime, and seek to prevent armed conflict.

These are principles that are not new to cyberspace. They are the foundation of a peaceful and just international order. They apply offline and on. And they are a good start.

But there are also newer norms that make the internet what it is today. They include preserving global interoperability and network stability, not arbitrarily disrupting individuals' access to the internet, upholding the multi-stakeholder model of governance, and last but certainly not least, undertaking national cybersecurity due diligence. Again, these norms are not the invention of the U.S. They are our observations about what it has taken to build today's internet, and ensure its future.

Take the example of Egypt or Syria. Within hours of both countries shutting down their internet, they were met with a flood of outcry—including from President Obama and Secretary Clinton. Killing their internet helped kill those regimes' legitimacy. I am not sure the same could have been said ten years ago. But today, these ideas matter, and will even more so in the future. So let me leave you with this point: Cyberspace has done us a tremendous amount of good in these last thirty years. It is up to us—all of us—to ensure that good survives the next thirty years. This strategy is an invitation to other states to join us as we work to secure cyberspace, to build prosperity upon it, and to safeguard the openness it brings our networked world.

Chapter 32

Cyber Security: Balancing the Opportunities and Challenges

General of the Air Force Patrick de Rousiers
General Inspector of the French Air Force

I am pleased to participate again in this Workshop on Global Security because it is always enlightening and fruitful. Last year in Berlin, I talked about strategic communications and missile defense. These are two easy topics—missile defense was a particularly interesting one, especially since it was just before the Lisbon Summit. This time, I am chairing a panel on "Cyber Security: Balancing the Opportunities and Challenges." As was said today and yesterday, there is no need to challenge the need for cyber security, but what about the question of "how" to deal with it? There are many ways to deal with cyber security and our panel has the expertise to address at least three areas: The political means, the role of industry, and the role of law enforcement in arms control.

Prior to leaving the floor to the panelists, let me just say a few words. Mankind is eager to discover and master new areas—land, sea, the moon, and now cyber of course. The cyber world is no different; it brings opportunities and challenges. We focus on cyber security, we focus on defense issues, but there is also cyber criminality, which is increasing and is a concern for all of us. In any case, I see perhaps two paradoxes: The first one has to do with "the cloud," the second one with the "defense issue."

Cloud Computing. We generally say that our vulnerability is increasing. We see industry hackers, we see more and more cyber attacks, and we know that this will continue. Yet we depend more and more on the internet and new technologies. Are we not, to some extent, increasing our vulnerability? And how is cloud computing, which is coming and already in place, increasing our vulnerability?

The Defense Issue. The second paradox is the defense issue. Cyber security is of course a topic for defense, for security, for law enforcement, and for industry. But is it really a defense issue or is it not a broader issue than just defense?

Chapter 33

Cyber Security Keynote Address—A View from Industry

Mr. Dave DeWalt
CEO, McAfee|Intel

I appreciate the chance to come and chat with everyone here. Having professionally grown up in IT, I have some sort of good news today, some bad news, and then I have some more good news. I spent the last 25 years of my life growing up in Silicon Valley. I grew up on the East Coast of the United States and drove my car across the country and, as soon as I graduated from college, I went right to Silicon Valley in the mid-eighties and spent my whole career watching technology develop. It has been amazing to watch the scenarios that we are involved with today and just how far we have come along. I find it a fantastic time to be alive. The amount of innovation that we are seeing on the internet, and the amount of development that we are seeing with IT and technology is just phenomenal. Of all the years I have been a part of this, I think these last couple of years have been explosive. So I want to talk to you a little bit about what is happening in cyberspace and maybe expand on what Howard Schmidt talked about and what others probably have talked about.

For McAfee, we have a very unique position. As a large multibillion dollar dedicated security company, we serve hundreds of millions of consumers around the world in over one hundred countries. We have more than three million customers that run our products. We have more than one hundred governments that use our technology. So we see it from the private sector if you will, and we see a very fast-changing world. I often talk about it as a "perfect storm."

FOUR VECTORS OF INFLUENCE

What we are seeing are four vectors of influence coming together to create a very unique scenario that is exciting but also very dangerous at the same time. Many of you probably read in the newspapers about some of the things that have been going on. I wish for a moment that you could be in my shoes to watch some of the escalation that we are seeing around the world and the challenges that companies are facing. What companies and governments are dealing with right now in the world of cyberspace is almost unbelievable. Why is that?

The Pace of Innovation

The first vector is an incredible pace of innovation. The amount of devices that are connecting to the internet has exploded. As we watch the movement from what is called IPV4, which is the internet protocol that most of the internet is based on, to what is now called IPV6, we are moving from billions of devices connected on the internet to literally a trillion. So you have an exponential explosion of the amount of devices that are connecting in. Of course, you think of things like your PC or your mobile phone, but everything is now connected to the internet. There is hardly an automobile designed today without Wi-Fi service, interoperability to the internet, a disk drive to write into the automobile, and a cloud that can communicate to the automobile. Tens of millions of lines of code are built in an operating system in every automobile. So we will have driving computers all over the world as we move into the next few years. Every television that is being manufactured today has internet accessibility and we now find ourselves with a gigantic browser built right into our television. We can shop online, we can search online, we can do just about anything for commerce through a new portal on television- and the list goes on, medical devices, all types of ATM machines for banking industries, point of sale registers, and printers. We are seeing billions and billions of devices connected with a simple IP address to talk to the internet. Knowledge workers who have access to computing and are able to connect to the internet are now measured in nearly four billion citizens.

Complexity of the IT Environment

This has created an interesting challenge because the second vector is that the complexity of the IT environment has

gone up exponentially as well. When we look at the supply chain of the devices that are being created, we start to understand the complexity of how we manufacture products today. We basically use a worldwide supply chain and that worldwide supply chain is only as good as the weakest link in that supply chain when you think of it from a security point of view. If you followed some of the recent threats that have happened, somewhere in the supply chain a vulnerability existed that created a potential pandemic of an issue because of the way in which we manufacture our products. So the complexity, coupled with the amount of devices, is creating a near perfect storm.

The Bad News: An Explosion of Threats

What is the bad news? We have seen an absolute explosion in the threats that are happening around the world and when I mean explosion, in my position in running a large public company for security, I have watched the amount of threats that we see on a daily basis go up exponentially over the last couple of years. Every day at the McAfee labs we receive somewhere around two hundred thousand bad pieces of content or files. We receive about fifty thousand unique brand new ones every day. We now track about sixty million active bad files in the world. These are viruses, Trojans, all types of threats that are happening in the world. An incredible capitalistic ecosystem has been created. We can essentially buy these bad files online, on eBay, on commercial sites, and we can buy them for very low amounts of money. An entire industry is being created to develop kits to disrupt networks, to steal money, to cause havoc, to engage in hacktivism, or other types of activities. So this threat landscape has been growing as exponentially as the complexity of IT devices have. It is almost unsustainable at this point in time for security vendors. We find ourselves in a very unique world in which we are attempting to keep up with the bad guys. That is just the reality of where we are at. We are receiving so many challenges on a daily basis that it is just incredible to watch. This absolute change in the threat landscape worldwide is the sobering part of what we see today. When I first started at McAfee as the CEO four years ago, we were tracking about four million bad pieces of content which have now become sixty million just in a short period of time because we have an ecosystem around the world that is for profit and has the ability to exploit criminal kinds of activities with very low risks and high rewards. As a result, the cost of offense versus the cost of defense is completely out of balance. It costs a lot of money to protect our government networks and ourselves as consumers versus what it costs to create havoc or an offensive activity. So until that balance changes, we are facing a very unique scenario.

The Lack of Governance Models

The fourth vector that is going into that sort of perfect storm is quite honestly the lack of governance models on the internet around the world. I will give you a statistic that is absolutely amazing. On average, somewhere between eighty and one hundred thousand bad websites are created every day. On average, we get two million bad websites every month. What that means is that there are two million new websites created every single month that are essentially built and designed for one activity: Malicious acts. Why is that? That is because the mechanisms that we have for registering domains, the mechanisms that we have for building a site online are not governed very effectively. Bad guys can buy a domain for five dollars, they can buy ten thousands of those domains, create a phishing attack against your network within seconds, and change domains tens of thousands of times in order to hide themselves anonymously. So the lack of governance has created a magnificent scenario for these bad guys to create threats in the world. Until we improve the governance model of how companies and individuals can create websites, we will find ourselves in this scenario. There is one more fact: Ninety percent of all the malicious activity in the world starts with the website. So when we look at how we may address cyberspace and cyber security, there are some interesting places to go to and look at in terms of what we might do.

WHAT ARE THE KEY THREATS?

What are the key threats? There are now four groups that I consider potentially bad guys and over the course of the last few years, we have seen the emergence of several groups that are new.

Hacktivism

The most recent group is motivated by hacktivism. It is a catch-all phrase but this group of individuals has a motivation, either revenge-oriented, political, or perhaps religious. They are motivated not by money necessarily but by the ability to

disrupt companies, governments, and sensationalize them in the media. We have all seen what has happened to a lot of companies recently such as Sony with the hacktivist group Anonymous. These virtual hacktivist groups are accessing malware kits online, on eBay for example, and are able to disrupt companies. Some of these companies—Visa, Mastercard, or Sony—have literally spent tens of millions of dollars trying to put defenses in place against a simple kit that can disrupt them. So hacktivism is a very active and prevalent problem in the world today and from our vantage point, this problem will only get worse.

Terrorism

The second group, which is probably the most terrifying one, is motivated by terrorism. More and more cells are being created and very powerful and angry organizations around the world are increasingly seeking to acquire a disruptive capability. We have been working cooperatively to fight those types of groups but, in my opinion, they will continue to be very disruptive. I am sure that the Deputy Secretary of Defense talked about that. The scenario that keeps me up at night is that of a very motivated group whose sole purpose is to bring down critical infrastructure around the world. Again we, as organizations globally, have to figure out ways to unite and resolve those types of issues.

Criminal Actors

The third big group is the criminal group and this is a very active group as well. We are starting to see that the amount of revenues that are generated from crime online has now surpassed the illegal drug trade worldwide. This very large problem, at least in my viewpoint, is now measured in hundreds of billions of dollars. And it is not only in the form of financial gains, but also in the form of intellectual property gains. The target for a lot of this criminal activity is now centered around intellectual property—source code activity if you are in high tech or some sort of patent if you are in other biosciences markets or agricultural markets. The theft of innovation is a big part of the operations that we see in these organizations and in some cases, the access to go after that technology is easy. We are finding the emergence of what are called APTs, Advanced Persistent Threats, which are solely intended to spy on organizations and, for the first time, governments, on commercial activities and on civilian activities for the express purpose of intellectual property theft. This is an amazing scenario that we had not seen until very recently.

Governmental Actions

The last group that I think you are all aware of is government activities. These four groups are rising as a result of easy access to devices and the internet, and the lack of a governance model has created nearly a Wild West scenario, almost a perfect storm, at least from my vantage point. I am probably preaching to the choir slightly when I talk to you about this, but at least from one citizen's viewpoint in the world, it is an amazing problem.

HOW TO RESPOND: THE FOUR T'S

Teamwork

What can we do about it? I will talk about what I call the four "Ts," which I see as ways to improve the world. The first one is teamwork. It sounds like an old cliché but it is extremely important and we have to unite in a number of vectors around teamwork and cooperation. I see the first one, which is starting to get momentum, which is public government and government cooperation. Dr. Buckley made a great example of the biosciences markets and the biology markets versus the cyberspace markets. For cyber security, we have no global organizations like the World Health Organization or the Center for Disease Control. When a virus breaks out, or a threat breaks out, it can infect tens of millions of computers and homes and corporations in milliseconds. We need constructs that unite communities together better and are similar to what we have done in the bio world. It has to evolve that way and is not that expensive to do.

We also need a lot of cooperation between public and private companies and we need to take this cooperation to a global level. There is a lot of intelligence that companies like McAfee are gathering now on what we can see in the world. We have consumer machines and corporate machines, and we understand the threats that are evolving and how quickly they are evolving. But we cannot see everything either. We cannot see what intelligence can gather or what law enforcement

can gather, but together we can solve problems and react to problems around the world much faster. As a public company, however, we have to have safe harbors and some legislation in order to share data because privacy can sometimes get in the way. It is a very big issue for companies who have shareholders to be able to cooperate with governments around activities like this. We need mechanisms to work together better as an industry and as governments to help one another with these problems. Teamwork is not just government and government cooperation; it is government and the private sector as well and the security industry itself needs to cooperate a lot better. Companies like Symantec and McAfee have begun partnering much more and we are sharing our research and our intelligence quicker. I never thought that there would be a day when I might be sharing information with one of my archenemies but it is in our best interest to protect our consumers. We have to share and we are coming around to doing that as private companies too.

Training

The second "T" is training. In cyber security, what we call the layer 8 issue is one of the biggest issues. The layer 8 is people. There are seven layers in an IT architecture and layer 8 is the people side of things. What do we find in the people side of things? We find that education can often prevent a problem. Not long ago, we did a survey at McAfee to see how many people would click when presented with a screen that said, "Click on this and you will be infected with malicious content." This is like an intelligence test but no one reads it and everyone clicks. One fourth of the people clicked and downloaded malicious content because they did not pay attention online to what could happen to their computing environment. So education and campaigns to educate can go a long way. How many citizens do we find in the consumer world who are still using a very simple password for all their banking information that anyone can figure out? As an example, I cannot tell you how many times we see fraud occur due to a lack of discipline in using passwords. The concept of what we call spear phishing is also one of the easiest entry points to attack a company or a network. Spear phishing is using social engineering to target someone and have it come from somebody whom you think might be a friend or ally, or someone you are familiar with. How is this done? You receive a fake email, a fake correspondence, and it looks like it comes from a friend. You click on it and you download malware which steals your credentials. So education and training can go a long way to solving the basic ways in which bad guys can attack systems.

Testing

The third area is testing, which is critical. The ways in which products are developed have no security standards whatsoever. Today we see twenty-five million mobile applications being developed. There are now twenty-five million of them that you can download to your smart phone. Who tested whether those applications were secure? No one. Who is policing that those applications can be uploaded and downloaded? It is all capitalism driving it. There is no mechanism in place to test these applications' safety. It is almost like when we introduced the need for seat-belts in the automobile industry. We have to introduce a very similar concept online, which is to have general safety requirements in the way we handle this.

Technology

The last "T" is technology. It is thrilling to watch the security landscape develop and innovate in the world of defense too. There is a tremendous amount of progress being made in order to get ahead of the bad guys in terms of what tools they use and ways in which we can build architectures that are much more secure than ever before. I give huge credit to Cisco and Microsoft and other large IT companies for building a mindset of security from the day they manufacture their products. A few years ago, you did not see that nearly as much but we all need to start driving in that direction. One of the reasons I am sitting here today as a part of Intel was to be able to think about ways to use a much lower level of the IT stack to create a mechanism of certainty that the computing environment is safe. So the advent of security in a silicon layer is a future opportunity to protect people around the world. Today, security products typically sit much higher as an application. If we can get lower in the stack, we can start to see things that the bad guys are doing to the architectures that are out there. The bottom line is cloud computing, security in the cloud, security in the silicon, and thinking about ways to technologically innovate. We have ways in which we can get ahead of the major threats that are occurring today. So there is a lot of good news that can happen here if we can come together as communities to solve problems.

Chapter 34

Cyber Security: Balancing the Opportunities and Challenges

His Excellency Jaak Aaviksoo
Minister of Education and Research of Estonia

L et me first reflect on what we have heard so far from both Howard Schmidt and Dave DeWalt. I think that there is a very important statement in the International Strategy for Cyberspace that was adopted in the U.S. This strategic approach states that network technologies hold immense potential for our nations and for the world and that it will remain open to innovation and interoperable all over the world. Despite all the threats, I think that this is a fair starting point. Even if we lack governance in cyberspace, we should always think of the strategic view, which is to leave it open to innovation and new things being borne, although they may include a small percentage of maliciously-aimed innovation. That is my first remark.

My second remark concerns the "four Ts" to fight the cyber threats: Teamwork, training, testing, and technology. Before coming to the main challenges and how I see them, I would like to go further with an analogy that was already mentioned, namely that of survival in a biological world and survival in cyberspace. The human body is a home to around six billion living organisms, most of them harmless, some of them useful and many of them harmful which, depending on your philosophy—either God or Darwin—have made it possible for us to survive in this environment. I believe that we have to adopt the same approach if we want to survive in cyberspace: There will always be a lot of living entities around us, most of them useless for us and non-threatening, some of them useful, and many of them threatening. So the problem is not about how to get rid of the bad guys or bad pieces of content but how to survive in that world.

Now I will come to what happened in Estonia. Four years ago and three weeks into my functions as defense minister, a decision was made to begin excavations on a Soviet military memorial. There was a protest that evolved into street riots and then calls to attack Estonian institutions in cyberspace. These calls were answered, there was a broad attack—you may call it a voluntary public response—in the form of overflooding of some of the Estonian news agencies, government offices, and also financial institutions. This attack brought down for several hours almost all of the electronic bank services and news agencies. Several of the government websites were also out of order because of denial of service attacks. Within this broad attack background, there were many sophisticated, well-targeted operations against specific websites. It was a complex phenomenon but this is not important. What is important is how this was perceived by people in my country. It was perceived as a massive attack against their way of life and security. This is, I believe, the reason why it is perceived today as the first case of cyber attack that posed a national security threat.

LESSONS LEARNED: AWARENESS BUILDING, INSTITUTIONAL AWARENESS, AND COOPERATION

Since that time, over the last four years, we have made tremendous progress. Almost every government has a strategy in place on how to secure its cyberspace. What are the main lessons we have learned, at least as I see them?

Awareness Building. The most important thing—you may call it training or education—I call it awareness building. We do have a lot of political awareness already. This workshop is an example. We are aware of the problems, we are aware of the threats, but when we say *we,* how far have we reached out with our understanding of the level of threats, the potential threats, and how to fight those threats?

Institutional Awareness. Proceeding in a top down approach, next is institutional awareness, be it a government agency or a private company or a non-government organization. How aware are these institutions about the threats, not in an abstract way but in a concrete way, in terms of understanding the threats and addressing real vulnerabilities? Individuals, be they physical persons or companies or government agencies or nations, have to be aware of their vulnerabilities. One of

them is psychological vulnerability, i.e., if you do not take due care, you will click on the wrong buttons. It is as simple as that. Whenever we want to develop institutional awareness, at some point in time we mustunderstand that the weakest link in the chain is an individual and his ability to behave in a responsible manner, both as an individual and as an employee of the company or organization. A good code of conduct in cyber space—what one should do and not do, how to engage in contacts and protect relationships—is what we need. We have gone a long way in doing that with safe sex, why should we not use the same technologies in cyberspace? So, awareness building is where we should do a lot more, including at the national level through educational systems and other mechanisms.

Cooperation. Cooperation or teamwork is important but it is much easier to say than to implement. This cooperation needs to involve different government agencies (and we know very well how high the barriers may be between two or three different agencies), the private sector, and individuals as well. As in all kinds of teamwork, the most critical issue is how to build mutual trust and create a win-win formation. It is almost impossible to try to enforce cooperation by imposing obligations on private partners in a society, forcing them to behave in a certain manner, to develop certain defenses, etc. In principle, all partners are strategically interested in building defenses but in many cases they do not have enough trust in their partners. We must find out how to reduce these barriers in order to increase mutual trust and, if they do not see what the gains are, make them aware of what they stand to gain from a practical partnership. So, building these win-win partnerships—I mean public, private, and individual partnerships—is a very critical issue. If we manage to do that, if we are able to build effective teamwork, we will have done a good job.

But let me reiterate that awareness building is priority number one. If awareness is there, the interests are there, and if we are then able to build teamwork to address the problems we have been talking about, I believe that we will be successful.

Chapter 35

Arms Control, CSBMs, and Norms of Behavior
In a Global Cyber Order

Ambassador Peter Gottwald
Commissioner of the Federal Government of Germany for Arms Control and Disarmament

INTRODUCTION

Focusing attention on the cyber dimension of international security is very important and I would like to offer some thoughts on how best to enhance security in cyberspace through international rules and confidence-building. As Wilhelm von Humboldt said, there can be "no freedom without security." Today, that also applies to the virtual world. Top priority therefore has to be given to developing robust protective measures and strengthening our defenses. Our highly industrialized countries are worst affected by security gaps in cyberspace.

The huge dependency of modern warfare on ICT (Network-Centric Warfare, Revolution in Military Affairs) is fairly accurately described by the ever-deepening process of automation and digitization of warfare. In view of this pervasive dependency, some believe that there is a danger of a "digital Pearl Harbor." However, while we should not underestimate the threats, it seems rather unlikely that an army's ICT would be completely shut down by a cyber attack. The term "daily digital Pearl Harbor" therefore applies more to the daily violation of intellectual property rights and billions of financial losses due to hacker attacks than to the military sphere. On the other hand, even more than in the conventional field Clausewitz' strategic premium for whoever launches the first cyber attack may turn out to be unassailable, especially if it is targeted against the adversary's military ICT infrastructure. In addition, further risks stem from the fact that instruments for waging a cyber attack are comparatively inexpensive. It is also possible to buy cyber mercenaries.

On 19 and 20 November 2010 in its new Strategic Concept, NATO addressed the security policy dimension resulting from threats to the computer systems of member states and their critical infrastructure, and mandated a new Cyber Defence Policy. Germany played an active role in ensuring that NATO drew up a new Cyber Defence Concept and just adopted the new Cyber Defence Policy.

In order to enhance cyber security we need to tackle all dimensions. For our societies and knowledge-based economies, the economic, human, and cultural dimensions are paramount.

Many cyber threats directly concern the business sector. Violations of intellectual property rights occur on a daily basis and result in losses of millions of euros. Cyber technology also provides new international opportunities for businesses.

The internet and its new social media such as Facebook and Twitter can support cultural freedoms as is the case in the current transformation in the Arab World. On the other hand, we face cyber repression by regimes that violate human rights and prohibit new social media or misuse them for suppression and indoctrination.

In order to safeguard freedom of opinion and freedom of information, Germany advocates against internet filtering, which is shutting down or blocking the internet.

Former Assistant Secretary General to NATO Ambassador Henning Wegener has made two proposals:
- Controlling the export of filtering technologies, and
- Creating monitoring and complaint mechanisms, for example within the framework of the multi-stakeholder Internet Governance Forum that was created by the U.N. World Summit on the Information Society in 2006.

To address and coordinate all the dimensions of a coherent cyber foreign policy, our Foreign Minister has established a cyber coordination unit in the German Foreign Ministry.

A TWO-PRONGED APPROACH TO CYBER SECURITY

In addition to our traditional security policy instruments, we have to think about further and new measures. Various aspects of cyber attacks make defense a major challenge. Just like many of the newer security threats, many cyber attacks are asymmetrical. In contrast to traditional threats, deterrence through retaliation is hardly possible. Furthermore, there is the unsolved problem of attribution, that is to say, it is difficult to establish who initiated an attack.

Instead of large-scale weapons, all that is needed for a potentially devastating attack is a room with computers and internet access. Geographical vicinity is not necessary. There is no "cyber radar" to determine where an attack is coming from as the origin of data in the internet can be concealed. In the case of DDoS (distributed denial of service) attacks, the attackers often use cross-border infected systems of unsuspecting users (bot networks), which makes attribution difficult if not impossible. Even if the problem of attribution is solved technically, even if we can pinpoint the computer from which an attack originated, we still would have to determine who actually sponsored the attack.

Non-state actors can carry out cyber attacks relatively easily. Governments cannot simply be made liable for individual private actors. For the time being, states can shirk responsibility for cyber attacks by blaming private "patriotic" hackers. What we need is a discussion of state responsibility for cyber attacks launched from their territory when states do nothing to end such attacks despite being informed about them. Against this background, a two-pronged approach of national and collective defense plus international confidence-building, comparable to NATO's Harmel Report of 1967, is necessary.

First, robust defense and resilient data safety measures should be carried out to deter attackers by robbing them of any hope of success. This is deterrence by denial.

Second, the framework for admissible state conduct in cyberspace should be defined by international rules, and the risk of misperception and escalation should be mitigated through confidence-building and transparency measures. This would effectively strengthen defensive measures. The two sides must come together to create the greatest possible security in cyberspace. Aggressive activities on the internet, such as attacks on civilian infrastructure, should be expressly prohibited. Given the worldwide interdependencies in the net, states should comply with minimum standards of duty of care in cyberspace and adhere to an all hazards approach including recognition of acts of nature beyond control. This would help detect or distinguish real malicious attacks from incidents due to mere carelessness. Thus it would help to avoid misperceptions that might lead to conflicts.

ARMS CONTROL OR CSBMs?

Traditional arms control or disarmament instruments seem hardly applicable. Apart from the lack of means at present of verifying whether rules are being adhered to, there is no recognized definition of cyber weapons. Technical capabilities in cyberspace cannot be classified using traditional categories which merely differentiate between "civilian" and "military" and can hardly be limited. So, if we have a closer look at the proposals for arms control in cyberspace, most of them are elements for confidence- and security-building measures (CSBMs), not for restricting technical capabilities, which would not be feasible.

Examples of such proposals are:

- Internet providers should be obliged in the case of an attack to disable botnets. Via an obligation to assist, states should be compelled to ensure that their providers comply. States have an international responsibility to investigate cyber attacks launched from their territory. Sanctions in the case of noncompliance could, among other things, result in a country's internet access being restricted. CSBMs should compensate for the infeasibility of inspections with early warning and transparency mechanisms.

- A first strike against civilian infrastructure through cyberspace should be prohibited in line with international humanitarian law, as is the case for kinetic weapons. This includes an express ban in peacetime on installing back doors or logical bombs (remote-controlled software faults) in civilian infrastructure. Attacks on financial institutions, such as the deletion and manipulation of data, should also be prohibited.

Most of these elements are not about arms control but, rather, CSBMs in the narrow or broader sense. Thus, in recent weeks a consensus among the G8, and hopefully also in the OSCE, is building to develop CSBMs and rules of behavior through the OSCE and then on a universal level in the United Nations in order to avoid international destabilization risks in cyberspace. NATO Allies support the development of "international norms of behavior" in the new Cyber Defence Policy of the Alliance. To this end, cooperation with other international organizations, such as the EU and the U.N., is envisaged.

It is important to use the right fora for this exercise: As a U.N. agency, the International Telecommunication Union (ITU) is working to improve the technical framework to ensure the functionality of the internet via a current reordering of IP addresses—a new version of the internet protocol IPv6. This is welcome. However, we are opposed to any attempt to also deal with CSBMs in the ITU, which is the wrong forum. Rather, the well-established venue through the First Committee of the U.N. General Assembly should be used to develop international rules of behavior as a basis for universal negotiations on CSBMs within the framework of the United Nations. Germany has played an active role in the two U.N. Groups of Governmental Experts in 2005 and 2010 on the issue of cyber security. Our goal is to anchor the issue of global cyber security in the U.N. in such a way that we can achieve concrete, globally valid solutions.

In 2010, the U.N. Group of Governmental Experts produced a first report based on consensus. Germany believes that the most important task in the First Committee now is to establish norms and confidence- and security-building measures in cyberspace. From 2012 onwards, there will be a new Group of Governmental Experts. Germany together with the U.S. was among the co-sponsors of the Russian Resolution in 2010. We are considering more specific elements for the upcoming General Assembly Resolution.

THE WAY FORWARD ON CSBMs

The G8 Summit in Deauville gave an important impetus for our future work by underlining the need to develop international norms of behavior in cyberspace. Let me thank France for this success. In preparation for the G8 Summit as well as at the recent OSCE cyber security conference in May 2011, Germany has made proposals for norms and CSBMs for cyber security. We can also build on various proposals developed in Track II processes including joint U.S.-Russian ideas of the EastWest Institute (EWI) in close cooperation with the IT industry. In a U.S.-Russia study, the EWI drew up proposals on improving cyber security by defining international humanitarian law in more concrete terms. One idea is that protected humanitarian spheres in cyberspace should be specially marked like the marking of the Red Cross.

Germany also supports a project of the U.N. Institute for Disarmament Research (UNIDIR) to look at applying humanitarian international law and to specify possible CSBMs for cyberspace. The specific CSBM elements put forward by Germany draw on the work of the Group of Governmental Experts and the OSCE and include:
- Early warning mechanisms, inter alia among Computer Emergency Response Teams (CERTs);
- Transparency measures by way of an exchange of information and best practices on national cyber security strategies and national views of international rules on cyberspace;
- Cooperation on fostering the development of technical recommendations for robust and secure cyberinfrastructures;
- Establishment and notification of national focal points;
- Establishment and/or improvement of existing crisis communication channels which can also be used in case of cyber incidents; and
- Support for capacity-building in cyber security in developing countries.

We also support the proposals put forward by British Foreign Secretary William Hague at this year's Munich Security Conference that are aimed at bringing about international agreement on general principles and norms in cyberspace and will play an active role in the London conference on cyber security in November 2011.

OUTLOOK

While we need a comprehensive approach to cyber security covering all dimensions, it is difficult to tell at the moment whether an incremental methodology and a step-by-step method starting with tackling the most urgent or the dimension most likely to achieve consensus (for example CSBMs) might not be more successful. In cyberspace we are only at the start of a process of developing international rules and confidence- and security-building measures. Such a set of rules and CSBMs can be a first step on the road to more cyber security. It should focus on the regulation, restriction, and if appropriate, prohibition of hostile activities in cyberspace. It would not envisage a limitation on cyber capabilities. That would be difficult to put into practice.

A comprehensive approach to cyber security will not only take into account the security dimension but also economic, humanitarian, and cultural aspects of this complex issue. It will preserve and expand the freedom-promoting effects of cyber media. In light of the diversity of challenges, effective international cyber policy requires a coherent approach. As stated by the G8 leaders in Deauville, we will have to use our best efforts to make progress in the OSCE and the U.N. in this urgent task.

Chapter 36

Cyber Security: Dealing with Technological, Economic, And Demographic Disruptions

Mr. Donald Proctor
Senior Vice President, Office of the CEO, Cisco

It strikes me just how often, over the past twenty-four hours, I have heard the terms cyber security and nuclear disarmament mentioned in the same sentence. To use an American expression, we are in a whole new ball game. Let me try to connect the dots between some comments we have heard from both government and industry so far, between Howard Schmidt's remarks and Dave DeWalt's observations, and attempt to give an industry perspective, both on what is different in this new ball game but, more importantly, on how we might work together to address some of these very real challenges.

I will start with the word "disruption" that Deputy Secretary Lynn used in his address, but in a different way. Secretary Lynn described exploitation, disruption, and destruction as three categories of cyber threats. I will use disruption in a way that is familiar to us in the Silicon Valley: It is a small number of very key market disruptions that represent the kind of tectonic forces that are shaping a brand new landscape for all of us in cyberspace. I will talk about the technology disruption, the economic disruption, the geopolitical disruption, and the demographic disruption and close with a few perhaps provocative suggestions about how government and industry might be able to work together.

TECHNOLOGY DISRUPTION

As Dave DeWalt mentioned earlier, we are living in a world in which the number of connected devices is exploding. Last year for the first time, there were more mobile devices than people on the planet. Although they are not evenly distributed, this is a lot of devices and they are not only mobile devices or just things that we all interact with every day. We are at the very beginning of what we call the "internet of things." The internet of things is that world in which virtually every device is network-connected, from video cameras, security sensors, and power meters to even vehicles. What all these different kinds of devices have in common is that they are all connected by a network. My colleagues in the security business area tell me that they look back fondly on the days when all you had to do to protect your network was to download the latest Windows patch from Microsoft. We are clearly not living in that world anymore. It is not only the number of connected devices but the diversity of these connected devices, and by definition any solution that attempts to target only one kind of device is in a sense solving yesterday's problem tomorrow.

ECONOMIC DISRUPTION

I would argue that the technology disruption is not the most powerful one at play here. There is also an economic disruption that is equally powerful. We are beginning to see a major trend in the ICT world toward virtualization: Virtualization of storage systems, of computer systems, and of network resources. In recent years, we have started to refer to the shift to virtualized ICT resources as "the cloud," and both businesses and governments are adopting cloud services at an accelerating rate. But the paradigm shift to the cloud is driven by economics, not technology. Einstein talked about the "miracle of compound interest." In the cloud, we have the "miracle of marginal cost." Because asset utilization in the virtualized ICT world is so much higher than in the traditional ICT world, the incremental cost of providing services for each new user rapidly approaches zero. This enables new, flexible consumption models, including Software as a Service (SaaS), dynamic capacity, on demand, and "pay by the drink" services—exactly what is called for by the discussions about 'Pooling and Sharing' we have had this week.

GEOPOLITICAL DISRUPTION

Globalization has enabled companies to reach new markets, take advantage of lower cost structures, and make previously inaccessible products and services available to a much larger population of consumers. It has also diminished the importance of political boundaries, and enabled global information resources like the internet to be available to every corner of the earth—our discussion on the role of social networks in the Arab Spring is a compelling illustration of this. But globalization also presents new and unique challenges. Who is responsible for the quality of products produced overseas, where local laws may be different? And how do businesses prevent their products from being copied by unscrupulous suppliers who may not be subject to familiar intellectual property laws? Globalization requires that governments adopt globally-accepted standards for assuring the integrity and safety of the ICT products they purchase. As ICT becomes more critical to governments and defense organizations, managing the benefits and risks of globalization is becoming even more important. After listening to Minister Aaviksoo's comments, it is impossible for any of us to forget that in today's geopolitical landscape, cyber security has become synonymous with national security.

DEMOGRAPHIC DISRUPTION

A fourth disruption is becoming increasingly relevant. It is what I call the demographic disruption. We are now in an environment in which a large number of our workers and soldiers belong to the millennial generation. Most of us know who the millennials are because they are our children and they operate differently than we do in many cases. They are digital natives. I have raised three daughters and I can tell you firsthand that the experience has been quite personal for me. Since our home had only one telephone line, this might have been a problem but in fact, the only one who ever used the telephone was me. On the other hand, if the broadband connection to the internet ever went down, it did not matter where I was in the world or what time zone it was, it was a family crisis and I am tech support. The digital natives are equally comfortable using mobile technology and social networks. A very interesting article in the *Financial Times* talked about information leakage through social networks in the services of Great Britain. In order to counteract some of the information that had been inappropriately shared through sites like Facebook and services like Twitter, the U.K. did not create a new policy and did not block the services or any of the traditional means. They created instead a YouTube video that illustrated the dangers of posting confidential information on a public website. This is a particularly insightful strategy, I think, in light of this demographic disruption.

OPPORTUNITIES FOR COLLABORATION BETWEEN
INDUSTRY AND GOVERNMENT

Anyone listening to all of this ominous activity might conclude that we are fighting an unwinnable battle. It is clear that this is a new landscape and the challenges may seem overwhelming. There is a lot of discussion about the asymmetric advantage that our adversaries have in cyberspace but I am also extremely optimistic about the future for a couple of reasons.

- First, we have a valuable asset that our adversaries do not have, which is the power of innovation. Some of the best minds in the industry and in the world are working on the hard problems that we talked about today and they are coming up with solutions. I will point out that the internet of today is not the internet of ten years ago and again, it will be very different ten years into the future. The internet is a dynamic body of living technologies that are constantly being upgraded and enhanced.

- Our second valuable asset is the power of collaboration. For us, collaboration can be a force multiplier. How do we collaborate? Let me suggest a couple of different areas. First you heard Secretary Lynn talk about public-private partnerships. This is a powerful tool which is much more effective than the more traditional "regulate, avoid regulation, re-regulate, avoid more regulation," a paradigm that we often get into in countries around the world. Of course, there is a risk of overdoing it as with most things, but I am very encouraged by some of the momentum I see in Europe behind the public-private partnerships like ENISA and EP3R, which are attempting to consolidate many different kinds of activities into a small number of high impact partnerships.

- The other powerful tool is awareness. In the end, cyberspace is not purely a technology problem. It is about technology, people, and process. Howard Schmidt mentioned some of the communications that have come out of the White House recently. In one of these communications, President Obama mentioned the "Stop, Think, Connect" campaign which was orchestrated in a partnership between industry and government by an organization called NCSA, the Na-

tional Cyber Security Alliance, in the United States to educate people about their role in securing cyberspace.

- Third, I want to emphasize the importance of global standards. The challenges that we are talking about are not a national problem. They are a global problem that requires a global solution. Howard Schmidt talked about the need to maintain interoperability and access to information for global citizens. National solutions take us in the opposite direction. With apologies to my colleagues in the Balkans, national solutions lead us to Balkanization. Global solutions preserve both interoperability and industry's ability to innovate. An example in this area is the Common Criteria Recognition Arrangement, which is a global standard for security. It has twenty-six signatory countries and maintains a baseline of testing and validation for IT products that are used in government networks around the world. This is a great foundation for global standards moving forward.

We already discussed international law enforcement. I will not add anything to that point here except to say that attribution, which we talked about earlier, is not all about the technology but also about having a policy framework that allows the source of attacks to be identified in a rapid timeframe.

I observed that we are beginning to move the dialogue in this area from talking about security to talking about responsible risk management. As Howard Schmidt said, it is important to consider the benefits that we get from our connected world when considering the risks. It has become clear that not all information assets are worth protecting equally. Using a risk management framework in which the value of the asset, the threat of the asset, and the cost of protecting it, are all taken into consideration is a much more productive path.

Finally, we have a unique opportunity, especially in these times of shrinking budgets, to leverage industry R&D investment. Cyberspace is a highly dynamic environment; it is changing more quickly than any of us can anticipate and we need to recognize that the incentives of industry and the incentives of government are in fact aligned in many areas. To the extent that we can work together collaboratively to recognize the threat, to develop solutions, and to deploy them in a timely manner, we will succeed. This is what I call the "innovation dividend" and there is no better time for it and no better time for industry and government to work together than now.

Chapter 37

Cyber Security: A Practitioner's Viewpoint

Mr. Scott Culp
Principal Cyber Security Architect, Microsoft

These remarks on cyber security represent one man's view, based on current experience as a consultant helping customers restore and harden their networks after attack, and prior experience as a person who operated the "burglar alarms" on Microsoft's own network. I would like to emphasize three topics: Review of the strategic balance of forces; identification of key actors, methods, and goals; and thoughts on policy approaches for response and deterrence.

THE STRATEGIC SITUATION: A GRAVE MISMATCH IN FAVOR OF ATTACKERS

In the balance of forces between attackers and defenders, attackers have a clear advantage. Attackers benefit greatly from being online, with the ability to reach from anywhere due to global connectivity. Attacks can happen quickly, with little traceability and near anonymity. On the other hand, defenders must face the reality that the internet is built to share, not defend. It is difficult to detect attacks or even judge the difference between unusual versus nefarious activity. Deterrence and response are difficult because of lack of attribution, as well as the fact that the infrastructure is shared and integrated. Unfortunately, this means that a defender who cannot deter attacks nor respond to them is effectively on the receiving end of a siege.

IDENTIFICATION OF KEY ACTORS, THEIR METHODS, AND GOALS

In order to understand fully the present cyber security situation, it is important to take into account the key actors as well as their methods and motivations: Ideological movements, organized crime, nation states, terrorists, military espionage, and, of course, warfare. These can be summarized as follows:

The Actors:
- Ideological movements want to prove a point. Accordingly, they favor technical sophistication over operational sophistication, and they operate from areas with traditions of tolerance for dissent.
- Organized crime wants to make money. These criminal groups have a sophisticated, horizontally integrated business model. They operate from areas where weak cybercrime laws and lax enforcement create safe havens.
- Nation states support traditional state interests. State actors favor operational sophistication, while operating under the shield of state sovereignty.
- Terrorists, thus far, constitute a security threat that uses IT. They are not a cyber security threat. Their activities include various forms of crimes: Misuse of monetary instruments, extortion, and the use of others' networks for criminal purposes.

Their Goals:
- Economic espionage involves the theft of intellectual property for transfer to another party. It is virtually always seen in support of a national program. In fact, I have never seen a case of company-on-company cybercrime.
- Military espionage is the modern version of classic spycraft, involving the theft of a potential adversary's strategic plans, military capabilities, or other security-related information.
- War involves offensive steps to degrade an adversary's ability to commit and sustain warfighting capability.

POLICY OPTIONS FOR DETERRENCE

What are the policy options for deterrence?
- For cybercrime, existing law enforcement mechanisms provide the right framework, but legal regimes need to be harmonized and enforcement needs to be speeded. When nations refuse to help address these problems, consideration should be given to mechanisms traditionally used to obtain assistance from reluctant countries in other contexts, e.g., international money laundering.
- In the case of economic espionage, some countries believe that their national security depends on their economic security. Consequently, they believe that the the government's role is to support indigenous industries, by theft if necessary. Therefore, international diplomacy should focus on codifying norms via international agreements, as has been done in other trade areas.
- On the other hand, military espionage is unlikely to be deterred, as nations always reserve the right to act in their best interests and espionage does occupy a useful niche as an option short of war.
- In the case of cyberwar, there is a need for rules of war that protect non-combatants, akin to the existing Geneva Convention rules in physical warfare.

CONCLUSION

Despite the many challenges, there has been some recent progress: Four members of "Anonymous" were arrested in Spain in mid-June via traditional law enforcement methods applied to cyber; Secretary of State Clinton spoke out publicly in the wake of the Aurora attacks against Google; and in May, the Defense Department announced a doctrine considering cyber attacks as potential acts of war. Still, much work remains: In June alone, attacks were reported against a major defense contractor, an international bank, and the International Monetary Fund. And earlier this year, there were attacks against a major security vendor, an entertainment conglomerate, and the European Commission.

Chapter 38

The Rapidly Growing Importance of Cyber Security

Mr. Robert Lentz
Former U.S. Deputy Assistant Secretary of Defense (Cyber, Information, Identity Assurance)
And President, Cyber Security Strategies

This is our final discussion on cyber security and, as Roger Weissinger-Baylon pointed out, we had our first workshop discussion on this little subject called cyber security in Moscow back in 2003. At that time, I had 15 minutes to talk about cyber security and there was a dazed look on everybody's face. They all wondered, "What is cyber security and how does it fit into this international dialog on global security?" Now, here we are in Paris exactly eight years later. Over the past two days, we have already had several hours of discussions on cyber security. In fact, ambassadors, defense ministers, and almost everyone brought up cyber security in some context during their remarks. So, we have shifted a lot of attention to cyber security and I am very pleased and excited that we now have a common ambition and goal to move forward in this area.

CYBER SECURITY IS ABOUT INFORMATION, NOT CYBER WARFARE

At the 2003 Moscow workshop, one of the senior Russian defense officials asked a question after my very brief remarks. He said in effect, "We in Russia have been studying this issue and watching the activities of the Department of Defense in Iraq; we certainly understand the criticality of moving towards net-centric operations, but what happens if the internet is not there?" This is a good question! So, I want to introduce a hopefully provocative change of pace based on this question. Since we have been talking about cyber security, let me ask, "What is the definition of cyber security?" You will get fifty different answers. Yet, the thing that keeps me up at night is the fact that we have turned the discussion of cyber security more and more into one about cyber warfare. In fact, we have nearly turned the cyber discussions into an arms race. And that worries me the most.

When we were developing the cyber security strategies in the United States, one of my comments to the commission that was formulating its report—and I still stand firm behind this point—was that this issue is still only about information. For every one of the nations that are here, I firmly believe that they concentrate on the fact that this really all comes down to information when developing or reviewing their cyber security strategies. Consequently, if you are talking about governance, I do not believe that you need a single leader focused on the somewhat warfare-oriented title of cyber czar. Instead, you need a chief information officer or chief information leader, who has cyber as a sub-element of his functions—just like a chief security officer, a chief technology officer, a chief knowledge officer, a chief risk officer, or a chief privacy officer would be a sub element. All these terms are related to information. So when we talk about the availability of the internet or the security of the internet, what really matters is making information available for us to conduct operations worldwide, to help with peacekeeping, to help with African development, etc. Although I do understand the importance of talking about the issues of a possible cyber war in a worst case scenario, I think it is very important that, when we talk about this subject of cyber security, we understand that it all comes down to information, how we manage information, and how we make information available to create opportunities and permit the innovation that we have going on right now in the Information Age.

AN INTERNATIONAL OPEN SOURCE CYBER RANGE

During the period since I retired a year and half ago, I have visited about 26 countries and have begun to assess countries in terms of their cyber security maturity (or information security maturity). Rated on a one to five scale, there is no na-

tion that has even passed the full level of maturity, not even the U.S. Department of Defense. In fact, we have such a long way to go in making information richly available and secure that we should concentrate on dealing with that important informaton and not get distracted by these side issues which sometimes leaad to discussions of cyber warfare. One initiative that I am championing—and this is also a major objective in the United States in the Department of Defense—is the establisment of a cyber range. Unfortunately, because of these discussions on warfare, these cyber ranges oftentimes turn into proprietary warfare-oriented ranges. That is not going to solve the problem of dealing with the Information Age. So I am working on a project to have an international cyber range that is like open source software. Let everybody have a dialogue; let everybody participate; let the Chinese and everybody else participate in this range. I am sure there will be some sobering aspects and some proprietary aspects, but the proposed cyber range still focuses on information. And that is the important thing.

SUMMARY REMARKS—THE DANGEROUS NOTION OF CYBERWARFARE

In summary, cyber security is the newest and most unique national security issue of the 21st century. The fact that this topic has risen to be a core element of the workshop is reflection of this strategic shift.

The most critical and potentially most dangerous aspect of this issue is the notion of cyberwarfare, which involves extending the use of computer technologies as an offensive weapon in international relations.

Until now, there has been no comprehensive national debate within the United States over the concept of cyberwarfare; neither its meaning nor the international laws governing this issue, to say nothing of the domestic rules regarding it. President Obama's reliance on a resurrected notion of the "just war doctrine," as enunciated in his acceptance speech for the Nobel Peace Prize in Oslo, heightens the need for legal clarity. Recent developments concerning WikiLeaks and Stuxnet malware and reports like Shady Rat as well as Denial of Service attacks in Estonia, Georgia, and most recently in South Korea further heightens the debate over legal rules.

The debate over cyberwarfare is only now emerging and recent foreign policy dialogue between the United States, the Russian Federation, and other nations underscore the seriousness of this issue. Unfortunately, much of the debate on policies related to cyber war is happening behind closed doors. National and international understanding and strategy need to be developed, and architectures must be implemented, both nationally and internationally. Since 2009 the United States entered into talks with the Russian Federation on cybersecurity and cyberwarfare. Since 2010 these are now being conducted in the United Nations as well as being addressed by the State and Defense Department in multilateral forums.

Again my biggest fear is we let this topic of cyberwar derail the fundamentals in accelerating adoption of broad measures to secure critical information infrastructures with the key thrust to enable a robust "information" society.

Chapter 39

The New Cyber Security Challenges

Timothy D. Bloechl

Senior Vice President, Global Public Sector, WISeKey

The emphasis on international military cyber security information, first by U.S. Deputy Secretary of Defense William Lynn and then again by White House Cyber Security Coordinator Howard Schmidt, was refreshing to hear. In 1999 when I started to build U.S. military international cyber defense cooperation, we faced a real challenge. We faced significant issues on determining what information we could share as there were no established rules. We had challenges figuring out with whom to share the information, and it took time to get agreements in place. Fortunately, Bob Lentz brought me up to the Pentagon so we could really push forward. It has been a long haul but having an official at the level of the Deputy Secretary of Defense here at this workshop—as well as the national leader from the White House—to talk about international cyber security shows a great deal of progress has been made to move the ball down the field.

LEARNING TO SHARE

The present challenge is to operationalize these new approaches, which is tricky because in every nation and across every network, nationalism and natural concern about sharing too much information, which might increase one's vulnerability, works against the type of information sharing we need. To be successful there has to be give and take across all the countries within the Alliance. This new "need to share" approach needs to find its way into operations and plans; it has to become part of the routine way we do business. The other challenge, of course, is to determine what information can be shared. There is a natural tendency to withhold sensitive information for fear you might give away too much. In the cyber defense domain, the problem is situations move very rapidly—within milliseconds in some cases. This means if you do not share information quickly when you know you have a significant problem, such as attacks by viruses, worms, or whatever the current threat, results can have large if not cataclysmic effects on certain networks or critical infrastructures. We have not yet experienced major events like this, but we certainly have endured significant attacks and system outages. A few weeks ago [June 2011], I counted over ten different cyber-attack or cyber security issues mentioned in two newspapers in a single day. Two days later Citicorp announced their bank was infiltrated by cyber criminals. Such events are becoming commonplace. Although we are focused here generally on problems for our military networks, this is clearly a problem set which impacts potentially all computer networks.

CYBER SECURITY IN CIVIL-MILITARY OPERATIONS

My next point is we have a tendency to discuss only what we are doing on our own networks or on specific operations. An area where this lack of thinking more broadly can have a huge impact is during civil-military operations. In Afghanistan, for example, a host of political and non-governmental organizations are involved. Information has to flow down to the local level outside the military networks. Information sharing and cooperation is critical. How do you defend this kind of network from cyber-attack or computer network exploitation? A variety of computer networks and devices are used by the disparate operators in this "system," with various degrees of security applied on these interlinked networks and, in some cases, with no security applied at all. The challenges posed by this type of "come as you are" network has to be given some thought and I do not think any one organization is taking the lead to focus on this issue. Of course, NATO has had some success in improving the way information flows across this civil-military battlefield. An example is the civil-military cooperation portal which was stood up at NATO some years ago and remains an important link between the civil-military actors in the current conflict. The portal was designed to improve information sharing across the combat zone with local/ regional/national government officials, NGOs, the military, and a host of other players who have a role to play in these

operations. Portal operations are going very well from what I have seen based on the periodic reports sent to me by the team, and this information sharing mechanism has been expanded to support operations outside of Afghanistan or Iraq as a testament to its success. However, I wonder which organization is looking at the cyber defensive aspects involved here, and if there is a lead, what lessons can be applied to defenses in similar types of networks and information sharing schemes.

IMPROVING NATO'S CYBER DEFENSE POSTURE

Recently, I visited NATO's Center of Excellence for Cyber Defense in Tallinn, Estonia. I was given the opportunity to share some of my thoughts on this subject with many of NATO's cyber defense leaders who were in Tallinn. Some years ago, I was part of the decision-making process to go ahead with this center in Estonia. They now have a good team in place and nice facilities; they are doing great work within the NATO cyber defense community; and they have conducted important internal exercises. These activities need to be expanded, however, so such efforts can include the various civil organizations which are involved in the cyber defensive fight. In other words, there needs to be more cyber-defense information sharing, exercises, and operational planning outside NATO's networks with these types of civil-military operators to bolster the defenses of the larger system. While I believe various NATO national plans, or the plans of NATO itself, include cyber defense annexes, at least I hope they do, I do not think you will find the topic of cyber defense included in civil-military plans. Cyber defense has to be integrated more and more with other non-kinetic operational plans and exercises. Today's military doctrines call for a synchronization of effort across all the battlefield operating systems. I submit the current state of the cyber battlefield, highlighted by the cyber events in Estonia and Georgia as few years ago, make this an area of increasing importance in all types of military operations and we need to adjust thinking and action to focus more in this area.

INNOVATION CREATES NEW CHALLENGES

Cyber Security in the Cloud. The information technology industry is heading to the cloud. In my previous position at Microsoft, and now with WISeKey, cloud computing is a constant point of discussion and innovation. Industry is helping us find new ways to use our devices and systems to become more efficient, to save money and time, and to obtain other benefits. Consequently, the cloud becomes another security challenge we have to consider. We are just now learning how to effectively conduct cyber defense within closed networks and now we are shifting more and more to the cloud. This is a growing challenge for our cyber defenders and it will certainly keep those of us in industry busy!

Moving beyond Two-Factor Authentication. My last point is directly related to my new role at WISeKey and what we focus on. I had the opportunity over the last six years to look across military networks around the world as the Microsoft lead for defense and I learned a great deal from the experience. The vast majority of the networks used by military forces, and by governments in general, lack a security basic called two-factor authentication. Most networks today require only a user ID and password to go online. This is dangerous. System administrators need to add public key infrastructure and additional security capabilities at the user level to help confirm the identity of the person logging on, thus reducing the risk of network compromise. We call this two-factor authentication and in my view this is the minimum standard to achieve for network access within organizational environments. Applying at least this level of logon security helps deter, and hopefully defeat, hackers who are trying to enter with stolen passwords. Surprisingly, most NATO nations contributing to combat operations today lack two-factor authentication. Outside the military, the problem is just as bad. From what I have seen, many senior government leaders depend on Hotmail, Yahoo, Gmail, you name it, as their primary means of communication. Under these circumstances, one can assume if someone or an intelligence agency wants to read your email, they can do so fairly quickly if they target you. Basic use of the internet allows a tremendous information sharing capability for the global population. It does not provide adequate security by itself for the communication of sensitive government or military information. Our network operations are only as strong as the weakest link and some of the leaders in this room oversee organizations which lack a basic level of computer security. Please give this your attention.

Insider Threats. Finally, to echo an earlier comment about classified networks, just because you operate on an encrypted network, do not assume it is completely safe. You may have an insider within your ranks, or someone from the outside who has found a way to get in. Once inside, these "insiders" have access to virtually anything you have on your classified network. Unless, of course, you apply additional security measures to help you monitor your network looking for such a threat. There have been several examples over the last few years of significant damage to national security caused by insiders. The U.S. WikiLeaks case is the most prominent. Please learn the lessons, question those responsible for your networks and information systems, and be a force of change to improve security, lest you and your nation become the next victim.

Chapter 40

Cyber Security: Asymmetry, Internationalization, and Fear

Mr. John Stewart
Chief Information Security Officer, Cisco

The first thing that came to my mind when I was trying to figure out what to say is, What can I say that is unique? I did not want to duplicate prior speakers' content, reiterate things that you might have already heard and just add another voice to suggest that I agree with most of the principles already stated. I concluded that there are three things that I can say that are unique as of now and, given that I have to go first on the panel, it is possible that I will completely disrupt the other speakers in so doing; if that is the case, my apologies to them.

I am a former hacker as well as a security operations executive inside a Fortune 50 company. These two things are actually connected because to a great degree, a number of people that we are working against are doing nothing other than learning. They just might not always have figured out, or even cared about, the fact that they are learning with your network or mine. I hope to drive a data-driven discussion versus perception. I believe that a great deal of what is happening in our industry is misperception and confusion and I will get to that in a minute. I also want all of us to remember that, while we are working through formal processes and mechanisms to make this better, we should never underestimate informal processes and mechanisms that also make it better; those two need to work hand in hand.

So with that in mind, I listened carefully today and heard the following words used more than once: Asymmetry, disruption, innovation, attribution, behavioral norms, international, frustration, fear, containment, early warning, unbelievable, public-private, private-public. I picked out three—I told you I was going to do that: Asymmetry, international, and fear. Let me describe to you what, in my opinion, each one of those means.

ASYMMETRY

The first word I chose was "asymmetry." For twenty-five years of doing this, I have come to the conclusion that it is still costing less to break into a system than it costs to deter or protect those very same systems. I will give you an example, namely how our best defenses can be trivially circumvented. The example is how easy it is for most human beings, when presented with an email that has a PDF attachment in it, to either double click on it or send it along to a friend or colleague who will double click on it. It is 2011. We have been using systems for 30 years plus and we will double click on just about anything that shows up in front of us, as was mentioned earlier this morning, as if we wanted to deliberately infect our computer with malware.

Our best defenses are also trivially circumvented when a USB key can undermine the investments of a decade. It can place at risk an infrastructure that is as critical as some of those in the United States or elsewhere and it is only a USB key. I got a free one at a prior speaking engagement earlier this week in Vienna and it costs seven U.S. dollars or less.

The other "asymmetry" we are facing is that every technological advancement feels like the equivalent of a Black Swan Event to security teams. No sooner did we believe that we understood perimeter security with firewalls that somebody created the laptop and we felt suddenly completely confused about what to do next. Then, as soon as we believed we had the laptop under control, somebody created the smart phone and we felt behind once again. Virtualization and collaboration and the cloud are the three elements that are creating that Black Swan set of events today. But that will neither stop today nor is it the first time that we see this. So we end up finding ourselves technologically advancing long before we have a clue on how to keep it remotely secure or notionally secure or even partially secure.

The third part of the "asymmetry" is that we are all starting this conversation again, even today, from a slightly different place. Countries are at different evolutionary stages of using the internet so, for example, whereas in the U.S. early days we could make all kinds of educational mistakes by breaking into each other's computers and learning together as I used to do, you cannot do that in a country that is just getting the internet for the first time, more often than not because it is now already deemed criminal.

INTERNATIONAL

The second word that I chose was "international." In particular, I am very concerned at the moment about the nature of cooperation given that nationalization is the operational norm. In particular, the Western countries, just as much as the Eastern countries, are beginning to impose national standards on technological development. For example, the United Kingdom developed what is called "PEPUS," a new certification regime on technology that is very different in common criteria in some ways and yet is by deliberate choice an advantage only to the U.K.'s national infrastructure. I do not blame them for doing this, I just suggest that in having to do it, it now means that every company that is trying to do the right thing to provide technology has to add a tax that is unique to that country. The U.K. is not alone. The U.S. has done this. India has done this. China has done this. Russia has done this. And I do not see any end in sight because each nation is beginning to come to the opinion that they have to certify the use of ICT technology in their own way.

The second part of "international" that I am concerned about is that, to a great degree, the global stability that we have enjoyed, with small exceptions aside, for over two decades, was because of interdependence. From trade, from finance, from land, from peace, from war, from the creation of asymmetrical or symmetrical capabilities, our countries essentially kept the world as a whole essentially stable. Unfortunately, the internet is making us wonder whether we are unstable because we are all able to see one another, touch one another, talk to one another, and yet we have not quite figured out what the right and wrong things are. Even when we have, we most assuredly do not agree at all with each other as to what they are. So it is creating some challenging discussions and nations are beginning to uplevel rhetoric versus keeping calm.

The last part about "international" is that I do not actually know as a user, as a community member, or even as a United States citizen, precisely what the path forward is in order to achieve the international norms, agreements, and conclusions as to what is right and what is wrong—as witnessed in at least two debates this morning. This is because I could not tell you if NATO is leading the EU, U.N., G-8, or G-20 (these are just a few examples) and I sure do not know precisely when we are going to be ready and done. So, we seem to be marching along somewhat blindly, bumping our way through this without necessarily making progress by a fixed date.

FEAR

The last word I used is "fear." I get nervous when we start using the words "war" and "cyber." I echo the comments Bob Lentz made that it gets very disturbing to think about the concept of using fear as the way by which countries start to uplevel the rhetoric versus de-escalate the rhetoric. I am very worried about the words that were used even today: "Exploding" was used today, "unbelievable" was used today, "exponential" was used today. I would argue that most of the threats that we are facing today are essentially just not unchecked but they are pretty close to unchecked and mostly undeterred. They are not unbelievable; if they were unbelievable, we would not be able to talk about them because they would be unbelievable.

We talk about "advanced persistent threats" where essentially most of the problems are behavioral. We seem to focus on the worst problem or the latest problem, not the simplest ones. We definitely do not pay attention to the most common ones. We see that there are millions of pieces of malware on the internet. I actually do not worry about how many of them are seen, I just want to know how many of them are successfully doing something bad; but yet it is a statistic that to some degree even my company is guilty of. We do not focus on trend lines, we just seem to be focusing on today, reacting to the cyberattack on the IMF recently seen in the newspaper, or something else along these lines that just became the headline.

In closing, I would like to offer reasons why this has become a full day event here at the 28th workshop. It is because we do not use technology anymore, we fully rely upon it. There is no such concept of actually not having technology in our lives, be it Don Proctor, my colleague at Cisco who has become the technology support person across the globe for his family, or the fact that the only way I am consuming news during most of the day is through some sort of technological means. We have moved from simply having technology around when it was useful to keep bad things out and good things in to a critical service that is running all the time.

A WAY FORWARD

Speed, trust, and clarity are three essential principles: We need to react quickly; we need to trust one another and know what that means; we need to be able to trust the systems we are using; we must have clarity for what we do and on how to go forward. If we walk away from these common goals, we will not be able to actually come to the 29th workshop and say that we have made progress because we will just be having another discussion about the same problems.

Part Four

Mr. Alfred Volkman
Director for International Cooperation, Office of the U.S. Under Secretary of Defense
(Acquisition, Technology, and Logistics)

Mr. Thomas Homberg
Corporate Vice President and Head of EADS Strategic Coordination, EADS

Mr. William Ennis
Director, International Business Development, Northrop Grumman

Dr. Edgar Buckley
Senior Vice President, Thales

Mr. Kevin Scheid
Deputy General Manager, NATO C3 Agency

Lieutenant General Ulrich Wolf
Former Director of NATO CIS Agency

Chapter 41

Dealing with the Challenges in Afghanistan, Pakistan, and Libya: How the Defense Industry Can Assist

Mr. Alfred Volkman
Director for International Cooperation, Office of the U.S. Under Secretary of Defense
(Acquisition, Technology, and Logistics)

The defense industry can help governments address the challenges we face today in Afghanistan, Pakistan and Libya. However, the challenges that governments and industry face are much greater than those presented by these three countries. When Secretary Gates was asked by President Bush to be defense secretary four and a half years ago, the expectation was that he would concentrate on the wars that we were fighting at the time in Iraq and are still fighting in Afghanistan. For many of us, Secretary Gates will definitely go down as one of our more effective defense secretaries for addressing the challenges presented in Iraq and Afghanistan. He has also been defense secretary when the United States became part of the NATO coalition that is fighting the war over Libya, although he probably went into the coalition somewhat reluctantly. Overall, he is leaving a significant mark on the role that the United States has played in the conflicts that we are about to discuss today.

I work for the Under Secretary for Acquisition who is the Armaments Director for the United States, and as I mentioned earlier, when Secretary Gates came into office, we thought that he would focus exclusively on the wars, on the geopolitical side of things, but he became very active as well in acquisition matters. I believe that he was forced into it because, as he observed early on, we were not doing the job that we, as an institution, should do to support the warfighters and provide what they needed badly. What they needed badly were things like armored vehicles that would protect them against Improvised Explosive Devices (IEDs). Under Secretary Gates' leadership, the response that we made to the challenge posed by improvised explosive devices was what is called MRAPs, Mine Resistant Ambush Protected vehicles. Secretary Gates also actively sought to improve body armor for troops and counter-IEDs, etc. So he has made a very significant contribution to some of the issues that we will be talking about. Several speakers at the workshop have already cited some of his comments such as his concern about the NATO Alliance, about the willingness and capability of some European members of NATO to wage the wars that we have to wage today and about the fact that some nations are running out of ammunition in Libya. All these issues are serious problems.

Secretary Gates also made some remarks on the United States that I will mention here to set the stage for the panel. He warned that the United States and the European Union face a serious fiscal predicament. It is indeed a serious predicament that could turn into a crisis unless we do something about it. As a result, President Obama has promised to reduce defense spending by about four hundred billion dollars over the next ten years or so. Many European Union nations are also facing severe cutbacks in the amount of money that they have available for defense: The U.K. is probably the example that comes most readily to mind today. So the United States and many allies as well are facing a drastically reduced defense budget. At the same time, we need to prevail in the wars that we are fighting now in Afghanistan, Pakistan, and Libya, while investing for the wars that we may have to fight in the future. We cannot forget that and it is an expensive proposition.

One thing that the United States and other nations will need to do is to recapitalize our ground forces. In the United States, the Army and the Marines, who are bearing the brunt of the fight at least in Afghanistan and in Iraq, are using up their combat vehicles and their helicopters, and they will have to be recapitalized. After being at war for a decade, the United States' equipment is worn down and replacing it will be expensive. We will also need to replace ballistic submarines and are looking at an "inexpensive" price of about five billion dollars per piece, which has been lowered from about seven billion dollars per piece. So this is an extremely expensive but necessary capability. The size of the U.S. Navy is shrinking but the challenges it is facing, especially in the Pacific, are growing, requiring the building of more ships. In that scenario,

we will have to make a significant investment and those of you who know about the cost of building warships know that it is a very expensive proposition. Again, we are now about to embark on building a new aerial refueling tanker and we will have to spend a lot of money to do it quickly because the ones we currently have are about twice as old as the pilots that fly them. The joint strike fighter program that we have been working on for a long time is a necessity for air superiority but we will have to bring down the cost of that program.

Finally, we must continue to invest in information technology, which has been a hallmark of this conference, especially in intelligence, surveillance, and reconnaissance. We must also make sure that these information technologies are secure, something that we talk about frequently. So, making these kinds of investments in order to prevail in the wars that we are fighting now at a time when our defense budgets are reduced is a pretty challenging task. The only way we will be able to do it is if we can rely on an effective and efficient defense industry. This panel is going to address some of those challenges. I look forward to our speakers' insights into how the defense industry can assist governments in meeting these challenges.

Chapter 42

A View from Industry

Mr. Thomas Homberg
Corporate Vice President, and Head of Strategic Coordination, EADS

THE WORLD HAS NOT BECOME A SAFER PLACE

Indeed, it is the fourth time for me to join this panel as a speaker. Since my first intervention four years ago, the world has not become a safer place. However, some of my points remain unchanged, which leads to two possible conclusions: Either I am lazy in preparing my interventions (I assure you it is not the case), or some of the arguments I raised four years ago remain valid.

The security environment in the Middle East and the Mediterranean region represents an enormous challenge, looking to countries like Libya, Syria, or Egypt. The war against terrorism continues in Afghanistan. The 2008 terror attack in Mumbai and the 2009 bombings in Jakarta required joint international reactions. Maritime security also remains a challenge. As we speak, despite initiatives like the anti-pirate operation "ATALANTA" off the Somali coast or the ASEAN initiative to combat piracy in the Malacca Strait, 23 ships will be seized by pirates with more than 500 sailors taken hostage. Natural disasters like the 2008 Tsunami or the earthquake in Japan showed the need for international cooperation in disaster relief.

The financial crisis continues to place significant pressure on government defence and security spending, which in turn has affected our ability to respond to these threats and their related requirements.

The majority of requirements are well identified, yet we struggle to answer in an efficient manner.

- *Improvised Explosive Devices* remain the Taliban's deadliest weapon in Afghanistan, despite armed forces and industry efforts to develop and deploy protection and jamming systems.
- *Camp and specifically convoy protection* is critical, considering that 80 percent of supplies reach Afghanistan by land. Over one million gallons of fuel are supplied per day and there is one casualty for every 24 fuel supply convoys.
- *Mobility in theatre via vertical lift* remains a key requirement given the rugged terrain of Afghanistan, which often makes helicopters the only option.
- *Situational awareness* is a basic condition for efficient operations. *Unmanned Aerial systems* have experienced a substantial development in capability, and increasing numbers have been deployed since operations in Afghanistan started. Indeed, more than 1,000 platform systems are deployed in theatre today. Still, we face a steep learning curve in making these systems even more efficient and autonomous.

INTEROPERABILITY AND FASTER DEPLOYMENT CYCLES: SOME IMPLICATIONS

Not only are hardware requirements well known, but also the needed equipment and system features are well identified. I would like to specifically refer to two of these: a) interoperability and b) faster joint development cycles with reduced complexity and cost.

I would first like to discuss interoperability and take a different, slightly provocative perspective. Interoperability led us to harmonization and standardization, not only in training, procedures and Concept of Operations, but also in equipment and systems.

Although standardization is beneficial for seamless in-theatre net-centric operations, it may increase the vulnerability of the network to cyber-attacks. Let me use an example from a different domain: One of the best protection mechanisms nature ever invented against bacteria and viruses is biodiversity, since one virus of the same profile will not erase the entire

system.

What conclusions should we draw for our networked and increasingly standardized, no longer diversified set-up, given the alarming numbers of cyber-attacks?

In 2009, the U.S. Department of Defense reported over 70,000 incidents. In 2011, the French Ministry of Finance had to switch off 10,000 computers after a hacker attack and the International Monetary Fund (IMF) was hacked. Also, the industrial sector is affected, as various incidents in companies like Lockheed Martin, Sony, and Safran demonstrate.

To be sure, I am not suggesting that we abandon interoperability and standardization, which are non-negotiable needs. However, I would like to stress that new threats require adapted answers in order to ensure the best protection, including military networks and the defence industry.

My second point refers to achieving *faster development and delivery cycles with reduced complexity and cost,* which is of specific importance in our constrained financial environment, with budget and program cuts in Europe and even the U.S.

As we have known for some time, certain steps are required:

- We have to *harmonize and prioritize requirements on an international level to support industrial rationalization and consequently favour cooperation programmes over national industrial approaches* to avoid redundancies. In this respect, the Franco-British or the German-Swedish initiatives are surely good steps, and I am confident that they will not lead to exclusive bilateral cooperations, which would be counter-productive in a European perspective;
- We have to *better coordinate and better fund research* in new domains like Cyber Security;
- We have to *foster dual use to maximize economic benefits* in the fields of research, development, and procurement;
- We have to implement *new methods of acquisition,* because the conventional processes are too long;
- We have to *improve industrial capabilities* to deliver quick modifications, prototyping, and rapid manufacturing.

CONCLUDING REMARKS

As I already requested in earlier conferences, we need an honest and straightforward dialogue between governments, forces, and industry. The objectives are clear and have been known for quite some time; however the results are not always satisfying.

- *We need to revitalize and strengthen cooperation* to share capabilities across Europe and in a transatlantic frame and also jointly prepare for new threats;
- *We need to refrain from over-customization* which results in overly complex programmes and higher risks, including cost overruns and delays;
- We need to ensure *faster and more cost efficient development and production cycles.*

Finally, I would like to mention the increasing popularity of terms like *"buying-off-the-shelf"* and *"75% solutions."*

I just did it myself, arguing for cost efficiency and against over-sophistication. However, let us not forget that:

- We need a sustainable and competitive industry to put the right stuff on the shelf, particularly in the case of new, complex threats such as cyber-attacks. This requires *appropriate budgets for research, development, and procurement.*
- We need to understand that *75% solutions have a limit* and *this is defined by our responsibility to the warfighter who definitely deserves the very best equipment that we can offer.*

Chapter 43

Afghanistan, Pakistan, and Libya: The Benefits and Challenges of Information Technologies in Current Operations

Mr. William Ennis

Director, International Business Development, Northrop Grumman

The killing of Osama bin Laden by a U.S. Navy SEAL team in Abbottabad, Pakistan last month was the kinetic tip of a vast information technology iceberg. The incident in a way, serves as a metaphor for a largely "invisible" process that has been underway for more than three decades. The transition of the manner in which military capabilities are created, supported, and employed as a result of a shift from the "industrial" model of the 20th century to the "information technology" model of the 21st century has occurred slowly and incrementally. However, evolutionary developments in the scientific and industrial sources of military power have succeeded in producing revolutionary change in the capabilities of modern military forces to achieve military and political ends.

MEGATRENDS

In order for us to grasp fully the benefits and challenges of information technology in current military operations, it is useful to assess how several of the most significant "megatrends" surrounding the emergence of the "information technology" model have occurred and affected military operations and organizations.

- *Globalization.* The collapse of the military power and authority of the former Soviet Union contributed to the vast deregulation and promotion of international trade. The technology base supporting scientific and industrial innovation evolved swiftly to a globally distributed phenomena responding to the relentless imperatives of economic and industrial efficiency. For the defense establishment, globalization was not a choice, but a fact to which adaptation was compulsory.
- *Sources of technology for military applications.* Until World War II, military innovation was concentrated in government arsenals. The overpowering demands for industrial production on an unprecedented scale drove the necessity to make the private sector the decisive partner in the development and production of defense products. The extension of the need to maintain large standing forces able to innovate, develop, and produce defense products built around the revolutionary technologies of the post-war period—thermonuclear weapons, the military applications of space, and digital computers—made permanent the shift from government domination of defense-related Science and Technology.
- *Moore's Law.* The functionality produced by modern silicon-based devices and microelectronics permitted the creation of entirely new markets and applications for products in both the civil and defense sectors. However, the remarkable regularity and duration with which device performance doubled and costs halved (or more) for several decades has contributed to the creation of an industrial base for microelectronics that has enabled a vast increase in the military functionality and a decrease in its underlying cost that are beyond the reach of classic industrial technology.
- *Accuracy is independent of range.* The creation of a predominately civil sector capacity for precision navigation and timing (90% of GPS use is in the civil sector) has made it possible for weapons to be delivered with extraordinary precision, vastly diminishing the need for large platform inventories since high delivery accuracy has produced extremely high probabilities of the destruction of intended targets with much smaller explosive payloads than in the past.
- *Bandwidth as a substitute for force structure.* The military applications of advanced IT have made it possible to more precisely allocate weapons to targets because the modern theater commander has extensive situational awareness over hundreds of square kilometers while being able to tag, track, and locate targets continuously in day/night/all-weather. The commander's ability to do so has been enabled by a vast increase in communications bandwidth to leverage the continuous output of processed sensor data throughout the depth of the theater. The cumulative impact of these de-

velopments has made it possible for large-scale campaigns such as Operation Iraqi Freedom (2003) to be conducted with one-third the number of troops required for a similar large scale campaign a dozen years earlier (Operation Desert Storm in 1991)—but more than 100 times the bandwidth was needed to provide the command-and-control support for these forces.

- *Networked computers.* The impact of digital computers on the economy was marginal until computers began to be networked in the early 1990s. Networked computers, especially as the internet became universally accessible, produced a notable improvement in the productivity of the civil economy. The military impact of networked computers has been no less significant. Networked platforms into "systems of systems" have vastly improved the capabilities of military organizations that have adapted to the capabilities networked systems create. At the same time, the cumulative impact of the military applications of IT has significantly reduced the economic and financial burden of national defense. At the height of the "peacetime" Cold War (1962), the U.S. spent nearly 10% of GDP on national defense. Today, a comparable peacetime figure is 3-4% of GDP. Even today with two-plus military conflicts absorbing a substantial national effort and share of the defense budget, only about 6% of GDP is required for national defense—compared to 11% per year during the Korean War (1950-53).

HOW THE DEFENSE INDUSTRY ADAPTED TO THE NEEDS OF ALLIED FORCES IN AFGHANISTAN, PAKISTAN, AND LIBYA

The major firms in the defense industry have historically been producers of integrated weapon systems—tactical aircraft, naval combatant vessels, and armored vehicles—among the most obvious. During the Reagan defense build-up in the 1980s, thirty-two major prime contractors in the United States were producing more than 1,000 aircraft of all types, twenty capital ships, and well over 1000 armored combat vehicles per year. A quarter century later, the number of major prime contractors has been reduced to eight producing one-fifth the number of platforms. These statistics reflect the extent to which the defense industry adapted to the challenges of modern warfare, in large measure driven by the rapid pace at which IT has been introduced.

The imperative of achieving maximum individual platform performance has been replaced by the manner in which the platform performance contributes to the performance of networked systems. Pervasive networked joint operations and the optimization of the capabilities of the joint force throughout the theater have substantially improved military performance. This improved performance has led to a diminished need for manpower and equipment, and yet has created far less counterproductive civil destruction than has accompanied modern warfare in the past.

In Iraq, the pervasive propagation of military IT among joint forces deployed in Iraq were able to destroy the conventional Iraqi Army in three weeks, but the subsequent insurgency took more than five years to subdue as the defense industry reshaped the military applications of IT to take into account the realities of this form of warfare.

The intelligence collection and processing system evolved to recognize that its focus on the adversary's Order of Battle—the classic preoccupation of military intelligence—had to give way to the fact that in a non-state sponsored insurgency, the targets were individuals, objects, and activities—not military units. The application of IT created a capacity to continuously tag, track, and locate targets 24/7. Episodic reconnaissance flights were replaced by persistent surveillance that took advantage of technological advances in unmanned vehicles, remote sensing, advanced signal processing, and related technologies. Pervasive communications enabled every soldier to become an intelligence collector, while sophisticated IT-driven training and rehearsal technologies permitted highly effective execution of military operations and campaign plans.

In Afghanistan, a well-established indigenous insurgency has been joined by Islamic extremists to create a particularly resilient insurgency that has compelled further adaptation of IT by the defense industry to meet military needs. The village-based insurgency is sustained by large and complex social networks exploitable by allied intelligence organizations. When its sophisticated capacity to exploit social networks is joined with persistent surveillance, enabled allied forces in Afghanistan have been able to prosecute a successful campaign against the insurgency's leadership. The ability to pursue the insurgency leadership—both indigenous and extra-territorial (the bin Laden strike is illustrative)—has disrupted the insurgency's ability to collaborate effectively.

The insurgent's weapon-of-choice, improvised explosive devices, continues to be preferred because of its lethality and ease of manufacture. However, the impact of the military applications of IT has contributed to diminishing the effectiveness of this weapon. The technologies of persistent surveillance have permitted allied forces to target the bomb-maker (relatively few in number) rather than attempting to neutralize the device (numerous). Persistent surveillance permits allied intelligence personnel to "unwind the tape" from the time and place where the device was emplaced back to the site where

it was manufactured so that those who are responsible can be dealt with directly.

In Libya, the exploitation of the U.S. capacity for persistent surveillance has permitted highly effective attacks on the Libyan air defense and command and control network, and has forced the Qaddafi forces to abandon the use of armored military vehicles. By the end of March of this year, 1,237 vessels have been hailed, 82 boarded, and eight diverted as part of an effort to enforce the U.N. Security Council ban on arms shipments to the Gaddafi regime. More recently, a decision has been made to seek out leadership targets in an effort to contribute to bringing the conflict to an end without the need for an allied intervention force.

VULNERABILITIES

The military applications of IT have produced enormous benefits, and improvements in these technologies are advancing rapidly driven by the Moore's Law pace of civil sector technology development. However, the shift to networked military operations that have proven to be crucial to exploiting these new capabilities has created new vulnerabilities as well. The post-Cold War phenomenon of a globally shared technology base has created symmetric access to advanced IT applications among adversary states and non-state actors alike. The capital cost of entry is low, and IT expertise is widely distributed internationally. Internet access is universal, and the supply chain that produces much of the modern microelectronics is extensively penetrated by implanted malware and other IT pathologies. This contaminated supply chain facilitates adversary access to allied networks that expose data sets and data processing to the risk of manipulation, destruction, or exploitation. Moreover, the pathologies that affect military IT also pose profound threats to the underlying civil sector infrastructure upon which modern military forces depend. Adversary networks suffer the same vulnerabilities, but the IT-dependence of allied forces and civil society is much greater, and hence the vulnerability more acute.

Recognizing the fact that IT is simultaneously a powerful instrument for military effectiveness and in non-kinetic support of military operations, and source of profound vulnerability, the U.S. has reshaped its capacity to conduct integrated cyber operations. Cyber operations are now an operational element of warfare and have been institutionalized in the creation of dedicated joint (CYBERCOM) and military departmental organizations (e.g. 2nd Army, 10th Fleet, and 24th Air Force) who will train, organize, equip and provide integrated cyber support to military operations. The DoD effort closely parallels related U.S. government initiatives to protect the IT infrastructure of the defense industry, U.S. government agencies, and crucial elements of the civil sector IT infrastructure.

Chapter 44

A New Age of Pragmatism in Global Security:
The Implications for Industry

Dr. Edgar Buckley
Senior Vice President, Thales

Let me start with an observation about the security environment as seen from Europe because I believe that Europe is entering a new age of pragmatism. It starts with the fact that European governments are beginning to recognize that they are facing serious security challenges on the periphery of Europe and that they will have to deal with these challenges largely on their own, with their own forces as they are constituted today and without the sort of U.S. leadership that they have become accustomed to. They will just have to get on with it. Of course we always knew and they always knew that this day would come. We just thought that it was going to be many more years into the future than it is. Instead, the new security age is with us today.

The second fact that European governments are facing up to is the reality that the European Union itself is not going to lead the response to these crises. At best, I think that the European Union will have a supporting role in dealing with them. While we once thought that the Security Policy Coordinating Committee, the so-called COPS, would provide a political direction that would be transmitted through EU institutions to lead EU-led operations, this will not happen because, as we have seen in Libya, the political consensus for such action in Europe is not there. We are missing what I call the essential element of followership. We have a little bit of leadership but, along with leadership, we need followership. So I believe that the real operations in Europe will be somewhat like what we see today. They will be led and effectively controlled by those nations who have the means and will to act. Then, NATO may come along later to provide the organizing structure. Why NATO? Because NATO is the most suitable organization to bring into play the necessary U.S. supporting infrastructure for these operations. What has happened in Libya simply could not have been done without U.S. engagement.

At the level of European cooperation, Pooling and Sharing among like-minded states has become the main vector of progress. I believe that this modifies former concepts of EU-wide capability development and former assumptions about a defense market driven by competition alone. We have heard a lot about the benefits of competition but I can tell you that, if like-minded nations come together to pool and share their capabilities, there will be limits on competition because these nations will want to make sure that the assets they have invested in are fed with work as necessary. So, they will not want open competition; and the EU will accept that.

In NATO too, reforms are being introduced. Although this has taken some time, agencies are being consolidated to deliver better coherence and efficiency. NATO has been wasting quite a lot of money up until now through lack of coherence in the procurement programs and we can no longer afford to waste money. All these changes have come about, not through intellectual policy analysis, but through necessity as defense resources have become more and more scarce and security challenges have increased. This conjunction of funding shortages and increased security challenges is forcing us to do what we should have done years ago, which is to cooperate, consolidate, and be more pragmatic.

On the defense industry side, i.e., on the supply side, similar necessities are driving a similar process. As defense budgets are cut, industrial and technological capabilities are placed under increasing pressure. If we do not have money for our people and our assets in our facilities, we close them. So, the only solution in the face of reducing demand is to merge them and share technologies, across borders in many cases, on the basis of assured access. This process rapidly becomes very serious when governments realize that they need legally-binding commitments to have these shared assets in place, which leads them to treaties like the Anglo-French defense treaty. Such treaties are concluded between like-minded partners. As the British Defense minister recently remarked, he wants to have agreements with people who are willing to pay and fight. From his point of view, it is simply not a theory or game anymore, it is serious, and I believe that there are resulting impli-

cations for the defense industry.

- First, industry is becoming more and more recognized as an essential strategic capability in its own right alongside the armed forces and the civil facilities which we use to resolve crises. In my view, the defense industry is a capability at the same level as the military: It provides the essential technological underpinning for our operations and it provides the necessary resupply capability when operations last longer than originally foreseen. Without such resupply capability in Libya—today it is coming from U.S. industry, not from European industry in many cases—we would not be able to continue and prevail because European governments do not hold large stocks.

- Secondly, as a result of this new strategic environment, industry will be called on more and more to provide operational support to our military forces, up to and including the front line. This is partly to save money, partly to provide more capacity and flexibility, partly for increased efficiency, but mainly in my view it is because of the increasing technological demands of today's operations which are beyond the scope of what in-service military providers can deliver. This is particularly true in asymmetric operations where we need to have information dominance, which can only be achieved through processing and sharing sophisticated and integrated information out to the edge of the operational space. Since it is mission-critical data, it has to be provided in a very secure and robust manner. Today, only industry can provide the necessary infrastructure for that sort of service; the backup reference facilities; as well as the engineers to design, maintain and service it on a lifecycle basis. In Afghanistan, we saw this demonstrated over the last twelve months through the rapid creation and implementation of the Afghan Mission Network, which would simply not have been possible without industry's active engagement. Currently, my own company has around ninety points of presence in Afghanistan. This is about ninety five percent of the total communication points of presence in that country that are provided by industry. We are in the fourth year of this important service contract and its success does demonstrate that NATO can partner successfully with industry and rely on industry to deliver. We see that as an important precedent for delivering future capability, not just to NATO, but to all military forces, including the American military forces who have been looking at it very carefully. I believe that part of the solution to breaching the affordability gap in European defense will be for the defense industry to significantly increase its functional engagement in operations and support.

Chapter 45

Dealing with Challenges in Afghanistan, Pakistan, and Libya: Experience with the NATO C3 Agency

Mr. Kevin Scheid
Deputy General Manager, NATO C3 Agency

I would like to speak this morning about the space between the requirements that are generated by NATO commanders in the field, and NATO industries. First, let me provide a bit of background on the NATO Consultation, Command and Control Agency (NC3A). NC3A is relatively small for a national agency, but it is significant for NATO and has a fair amount of influence within the Alliance. It has about 800 employees and approximately one hundred million Euros in revenue. I say "revenue" because we earn revenue like a company and, on behalf of NATO, invest about four hundred million euros annually in equipment, software, and systems. Having joined NC3A eighteen months ago, I am still learning and still a little bit of a newcomer although I have been there long enough to be fully responsible for my Agency and its success and failings.

Let me stress that the observations I will make are my own, not NATO's, not NC3A's, and since I am seconded to NATO from the U.S. Department of Defense, they are not the views of the Department of Defense either.

My basic observation is that NATO is not organized for warfare: Its requirements process, its budgeting, its acquisition, and its relations with industry, are not conducive to the speed and agility that is required to conduct warfare.

SPEED AND AGILITY IN THE CONDUCT OF WARFARE

I am not trying to pile on what Secretary Gates said in early June because large bureaucracies and large institutions have similar speed and agility problems. The U.S. Department of Defense has this problem. Al Volkman mentioned the Mine Resistant Ambush Protected vehicles (MRAPs), a procurement of over twenty billion dollars that was developed in eighteen months from concept, to development, to the manufacturing of these vehicles, and to deployment to Iraq and Afghanistan. It was really a remarkable story, but it had to be done outside of the normal procurement processes because it was known that those processes were too slow and would not meet the pace of warfare. Another example is JIEDDO, the U.S. Joint Improvised Explosive Device Defeat Organization, which is specifically designed to defeat one technology—the Improvised Explosive Device—that the normal acquisition processes in DoD could not address as quickly as the technology was changing. More recently, the goal of Secretary Gates's ISR Task Force is to get more assets, aircraft, and collection platforms into Afghanistan. Again, the task force had to be set up outside the normal processes and required special management attention. So, speed and agility are critical. Large bureaucracies struggle with this and NATO is and has been struggling with this challenge as well.

TRANSFORMING NC3A INTO A COMBAT SUPPORT AGENCY

When Georges D'hollander, the NC3A General Manager, and I joined NC3A, Afghanistan was clearly a focus of both NATO and NC3A, but this focus was dispersed across the agency. Basic facts were not known: How many projects does the agency have underway to support ISAF troops? How much was being spent annually? What had been spent to date? What management mechanisms were in place for overseeing these projects? None of this was known or understood. Many staff had not deployed to Afghanistan except for a small contingent. Since NC3A was largely a scientific and engineering organization, the employees, largely scientists and engineers, had not been hired to deploy to an operational theatre; that

was not their mission. We had field offices and still have field offices in Kabul and Kandahar but they were small, rather crude, and not well maintained. The agency quite frankly was not on a war footing. So we looked at ways to better position it for the challenge.

Today, we have ninety-eight projects in Afghanistan, one of them is NATO's largest outsourcing—the operational communications network in Afghanistan. We have invested about eight hundred million Euros to date on behalf of NATO. We established what I called the ISAF Scrum. It is a management vehicle within the agency to get together all the players and project managers involved in ISAF in one room, three times a week for thirty minutes. We discuss possible barriers to advancing their various projects and how these barriers could be removed. This provides regular interaction between the staff and management. Moreover, every six months, the General Manager travels to Afghanistan to speak with the commanders on the ground to ensure that the agency is being as responsive as possible to their requirements. And over the past 18 months, about one third of the staff have deployed to Afghanistan, either on short-term TDYs or to work in our field offices.

So, in a relatively short period of time, we have seen a dramatic transformation of our agency from a scientific, research, and engineering organization into a focused, committed combat-support agency.

SOME EXAMPLES OF INEFFICIENT PROCESSES WITHIN NATO

But it takes more than just NC3A to reform itself to better support NATO troops in Afghanistan, NATO Headquarters needed to be on a war footing as well. Of course, the nations are focused, the North Atlantic Council is focused, the permanent representatives are focused, but the International Staff and the resource committees are not structured to have the same sense of urgency.

I would like to identify two: The NATO Office of Resources composed of members of the international staff; and the Investment Committee composed of representatives from the national delegations.

The NOR is NATO's very important gatekeeper to common funding. It holds the purse strings and in any organization charged with managing funding, it is easy to always have a complaint with them because they are in the business of saying "no." However, I would like to identify a different concern with them: The NOR has not been properly resourced to do the job they have been given.

Over the past five years, NC3A's investment of NATO resources to procure equipment and services has roughly tripled and increased in technical complexity. All of those requests go through the NOR staff to be screened, but their staff has not increased. Their numbers and skills have stayed the same although requests have dramatically increased. Since they have not received the support they need to keep pace with the volume of funding requests, they have become a bottleneck in the overall NATO funding process. In addition, they are following old procedures. Their procedures were originally focused on infrastructure investments like building aircraft hangars, and runways, or a road in one of the NATO nations. Now these same procedures are applied to procuring software and the most recent example is the NATO Computer Incident Response Capability-Full Operational Capability (NCIRC-FOC), the NATO computer instant response center. We estimated its costs to be about fifty million Euros. The NOR agreed with the purpose and with the technical solution that we proposed, but determined that fourteen million of this sum should really be paid for by the nations because it was not eligible for common funding. If you compare this with a communications network and say that parts of it need to be secured in a different way than the main central network, you have gaps and holes. So, we have had to struggle; we have to use old procedures for infrastructure investments in NATO and apply them to new and highly technical capabilities. The NOR definitely needs to step up and get the resources that it needs.

The Investment Committee's major role is to look at the affordability of a project, as well as its technical and procurement solutions. They rely on the NOR's advice in these matters. Since the Committee is composed of diplomats and military officers, which typically are not technologically adept, they have created a working group of national technical experts (WGNTEs), which is affectionately referred to as the "wing nuts." The wing nuts review NC3A's technical proposals and, once they are done, the Investment Committee reviews, often over the course of multiple meetings, whether the funding requested, the technical solution and procurement strategy is sound and supportable. In short, NC3A gets a requirement from a commander; we spend time—weeks if not months—developing a cost estimate (this is another internal process we are trying to improve); the cost estimate is screened by the NOR with its measured procedures; the wing nuts look at the technical solutions and slowly dig into the details; and the Investment Committee reviews and challenges the procurement processes before any funds are authorized. It is a slow and deliberative process designed to get the best financial and technical solution for NATO; however, it is not a process that lends itself to war fighting. For example, the insurgents in

Afghanistan can develop multiple generations of IEDs, killing hundreds of NATO troops, while we are working our way through this resource process designed for a different era.

CHANGES IN TECHNOLOGY AND NATO REFORM

This is a rather gloomy picture, but I have faith and optimism in the future. I put my faith in technology and NATO reform.

First, technology changes in such a way today that NATO can buy capabilities as commodities—networks can be procured as commodities. We do not need to use soldiers to put networks in place if industry can do it in the theater. We can keep the soldiers focused on warfighting instead of having them put in or manage computer networks. I know that this is a big issue that has been debated in the agency reform discussions over the past couple of years. As industry has stepped up more and more, where should the line be? But if industry can procure capabilities and if they can fight in theater with us, I think we should do that.

My second reason for optimism is NATO reform. I see a silver lining in the NATO reform efforts, which have come under a great deal of criticism in other forums. One of the key improvements I see is in bringing "life cycle management" to the communications and information capabilities of NATO. Today we have NC3A developing capabilities that we turn over to a sister agency, the NATO Communications and Information Systems Services Agency (NCSA), to actually operate and maintain. There are a lot of inefficiencies and bureaucracy involved in the transition from developer to operator. This new Communication and Information Agency will manage the whole life cycle and this will result for NATO in a real improvement of that transition. The new agency will have a mixture of customer funding, which is what NC3A has today, and common funding, which is what NCSA and other agencies typically employ. There will also be more of an operational focus because NCSA, when it is merged, will be a larger military organization and have a greater focus on operations.

So, these are some elements of change processes and NATO reform that I think will improve the situation. NATO is not organized today for warfare. We are working at NC3A to do our part to improve this situation, but it requires reforms at NATO headquarters as well. At present, we succeed by brute force, not by design, and by bending, pushing, and prodding the processes to make them work under the current circumstances. There are smarter ways of doing things and I think in some respects we are on the right track and moving in that direction.

Chapter 46

Industry's Role in Supporting Operations

Lieutenant General Ulrich Wolf
Former Director of NATO CIS Agency

WHAT ARE THE BASIC REQUIREMENTS?

Allow me some short remarks about the role of industry in support of modern operations from a military customer point of view. If you were to ask me what the basic requirements are for industry's contribution to operations, I would say the following:

- *First, they need to deliver to cost.* I believe that this requirement is violated in about 95% of all projects involving the delivery of equipment to the military.
- *Second, industry needs to deliver on time.* I am quite convinced that delivering only 80% but doing it fast is better than delivering 100% but doing it late.
- *Third, delivery must be made with guaranteed and sustained support.* Products have more than a delivery date; they have a lifetime.
- *Fourth, industry must provide a quality product and render their service with professionalism and experience.* The theater is not the area where to train people.
- *Fifth, from an organizational point of view, industry must be ready to integrate their service solution in a running operation into the command and control of the operation.* It must be ready to be part of the team.
- *Last, and that may sound a little bit strange, industry must be prepared to play a role in the comprehensive approach.*

INDUSTRY'S ROLE IN THE COMPREHENSIVE APPROACH

I am not talking here about the common understanding of the comprehensive approach, which many of us still have, where we only look at a problem and challenge in a specific situation and in a specific theater like Afghanistan. We need to change this to a comprehensive approach view which has five phases starting with the first phase—peacetime contingency planning and preparation—and continuing with exercises, preparation, execution, and finally stabilization and handover. I would recommend that industry play an integrated role in all of these phases, not only in the last one but right from the beginning because for industry, the military and various other players on the comprehensive approach side, it will create a feeling that the industry contribution is a decisive part of the overall effort. In addition, on the industry side, it will create a feeling that timely delivery of the product, the quality of the service and cost, all play a role in the overall success of the mission. That might put some pressure on industry to deliver on time, to deliver to cost, and to deliver with quality and be fully integrated.

In our day-to-day business operations, what kind of simple model could support a public-private venture of this type? I would simply say that such a model could be done on three levels:

- The first level would be the business level where the government spends money and industry hopefully delivers a quality product.
- In the second level, no money flows but mutual interest produces a useful contribution for both the government side and the industry side. Information assurance is one of these areas that can serve as an example.
- There is also an opportunity for a third level, which is common responsible citizenship. I will give an example of what I mean. During my active time, we cooperated with industry on a project to deliver for three months video solutions for the soldiers and their families from Afghanistan to Europe and forward. Industry delivered at no cost, we contributed with personnel and transportation, and it was something that benefitted both the soldiers on the ground and their fami-

lies. So if we follow this three level approach, and maintain close personal relationships on all levels from top management down to the technical level, if we do that, we will see the most beneficial change from a mere "vendor-customer relationship" to true partnership and team spirit.

Part Five

Ambassador Jorge Argüello
Permanent Representative of Argentina to the United Nations

Ambassador Linas Linkevicius
Permanent Representative of Lithuania on the North Atlantic Council
Former Minister of Defense of Lithuania

Ambassador Carsten Sondergaard
Permanent Representive of Denmark on the North Atlantic Council

Ambassador Terry Stamatopoulos
Permanent Representative of Greece on the North Atlantic Council

Mr. David Swindle
Executive Vice President, URS Federal Services

Mr. David Patterson
University of Tennessee

Ingénieur Général Robert Ranquet
Deputy Director, Institut des hautes études de défense nationale

Chapter 47

South America: A New Doctrine for a New Zone of Peace

Ambassador Jorge Argüello
Permanent Representative of Argentina to the United Nations

I come from a region that has become one of the most peaceful ones in the world. We went through decades of military dictatorships of different kinds, which kept the region in constant uncertainty and in constant threat of a conflict between neighbors. For decades, defense policies in the region were marked by conflict scenarios that were basically binational (Argentina vs. Brazil, for instance). Some military regimes brought us to the brink of war, such as the one that was avoided by an urgent Vatican mediation between Argentina and Chile in 1978. Thus, for decades, the armed forces of the region were unable to cooperate with each other. It was unthinkable to exchange information between military commands when the only external threat perceived was that of their very neighbour.

Of course, in a bipolar world, the only common overall goal was to help the United States maintain the continental "security" against the "enemy," the Soviet threat and all the Cold War byproducts. This way, in 1985, when Brazil and Argentina kicked off the creation of Mercosur (Common Market of the South), they were dismantling decades of political, diplomatic, trade, and even nuclear rivalry and mistrust between the two biggest countries in the region. Our democracies were able to find, among the barren rocks of the national defense doctrines fostered by dictatorships, the first green buds of a new spirit of integration for the whole of South America.

As it happened in the European experience, the individual efforts were followed by the creation of permanent institutions. In the same way the regional political identity is reflected in the Union of South American Nations, (UNASUR), we have recently seen the creation of the South American Defense Council or Consejo de Defensa Sudamericano (CDS). The main goal is to convert the region into a "zone of peace" with strategies that focus, for instance, on the protection of our natural resources.

FROM PEARL HARBOR TO COSTA DE SAUÍPE

A quick review is necessary to understand the evolution of the historical process that brings us to the recent creation of the South American Defense Council. If we had to arbitrarily choose a starting point, that would be 1942, when the Inter-American Defense Board (IADB), the basis for a collective defense treaty for the continent, was established. This political context was marked by World War II. After the attack on Pearl Harbor, upon which the U.S. entered the war, military experts from all over the region were sent to Washington to study and to suggest measures for the defense of the continent within that same agreement. Any aggression against a country in the Americas by any country outside the region was "an attack on all of us." The war ended and the political scenario was ripe for the American interests at the outset of the Cold War. The continental power slowly dictated the conflict scenarios to the Latin American countries, and designated the enemy to be combated, the doctrine to be followed, and even the weapons to be used.

The Inter-American Treaty of Reciprocal Assistance (TIAR, also known as the Rio Treaty) of 1947 was another Cold War instrument. The concept of collective defense that animated TIAR referred to the common defense of all the signatory states in case of an attack from a state outside the region on the territory of the Americas. Yet, the main objective was linked to the strategic stand of the U.S. in line with the Monroe Doctrine. It kept open the possibility of repelling a military intervention and the ideological influence of the Soviet Union, and at the same time it ensured the alignment of the countries of the Americas in the conflict. The ineffectiveness of TIAR was manifest in particular in 1982, during the Malvinas War, when the U.S. vetoed its application upon the Argentinian request, prioritizing their alliance with Great Britain and the commitments under NATO. The Treaty fell apart and it is buried at the bottom of the South Atlantic.

In 2008, shortly after the creation of UNASUR, Brazil promoted a defense system that would be purely regional, and President Lula Da Silva himself proposed the creation of the South American Defense Council, which was later adopted by the Heads of State of the Union. At the Summit in Costa do Sauípe, Brazil, a new defense doctrine for the whole of

the region was born. The logic of collective defense, exclusively aimed at avoiding the interference of extra-regional powers, gave way to the promotion of a cooperative defense—seeking to preserve peace among our states, to share fundamental political values, to respond reciprocally to any crisis in the subcontinent without resorting to violence, and to be mutually predictable.

PRINCIPLES AND OBJECTIVES OF THE NEW DOCTRINE

It is in this context of political maturity that the South American Defense Council was created, conceived as a forum for cooperation and consultation within South America from the perspective of cooperative defense. We are no longer brought together by external threats such as those typical of "collective security" schemes during the Cold War but through cooperation, confidence measures, and even through integration of our defense systems. The "zone of peace" that we want to build in South America follows principles that were formally established by UNASUR members: Unrestricted respect of sovereignty, territorial integrity and the self-determination of states, the full functioning of democratic institutions, the peaceful solution of controversies as the preferred method to resolve conflict, and respect for international law.

With general goals as the starting point—such as fostering a basic consensus to strengthen regional cooperation on defense and building a South American identity—that have also been postulated since the creation of UNASUR, the South American Defense Council has set for itself specific objectives of policy, industrial cooperation, and even academic and military training. These objectives are to build a joint vision for defense, promote the identification of risk factors and threats that might affect regional and global peace, coordinate common positions in multilateral fora, promote mutual confidence-building measures, increase exchange and cooperation in the defense industry, and foster exchanges in military instruction and training. They also seek to promote academic cooperation, encourage and support humanitarian actions, and share experiences in the context of the U.N. peacekeeping operations.

RISKS AND PERSPECTIVES

South America has decided today to eradicate mistrust among its states and to bring them gradually to a regional cooperation for the defense of the region where the military component is necessary, but is only one of the components. Joint peace forces that are prepared to be deployed anywhere in the world such as the "Cruz del Sur" of Argentina and Chile, thirty years after those two neighboring countries found themselves on the verge of war, are a convincing regional example of how countries can take decisive action by following a fitting defense doctrine.

The whole of the region, mainly upon the initiative of Argentina and other states, is about to engage at the Organization of American States (OAS) in an in-depth review of institutions such as the Inter American Defense Board and to consider the elimination of instruments such as the Inter-American Treaty of Reciprocal Assistance, within this same framework of review of defense and security doctrines for the Americas. From now on, any reform of the inter-American defense system must acknowledge existing mechanisms such as UNASUR and the South American Defense Council.

NATURAL RESOURCES: NOW AND IN THE FUTURE

In short, we are talking about redefining the authentic risks and threats that are common to the continent, starting with a new agenda for the 21st century in the context of globalization, intense multilateral relations, and new emerging powers, a context that is far from the previous scenario of U.S. hegemonic power. The agenda that derives from the new South American Defense doctrine leads us to the protection of strategic natural resources. South America, the most peaceful region today, owns twenty-five per cent of the land that is suitable for agriculture, the same proportion of drinkable water reservoirs, and forty percent of the biodiversity of the planet. That, with a total of merely 400 million inhabitants.

Natural resources, their control, and their administration demand a strategy for regions such as ours, which stretches from the Caribbean to Antarctica. As they are potential sources of threats and opportunities alike, they need to be the focus of a renewed South American defense policy. For instance, we have already secured access to the same level of information concerning our own resources as others have from outside our region. South America is living a unique opportunity, in terms of democracy, peace, and with an unprecedented political unity and under very favorable terms of trade. And as our President, Cristina Fernandez, said, we are aware that "the first defense of a country is its economic development, which allows for the social inclusion of all of its inhabitants. The other defense, the military side, must accompany that." From now on, this is the only sure way to permanently become a "zone of peace."

Chapter 48

Three Pillars

Ambassador Linas Linkevicius
Permanent Representative of Lithuania on the North Atlantic Council
Former Minister of Defense of Lithuania

As an introduction from a NATO perspective and in particular from a North Atlantic Council perspective, I would like to suggest that when we are talking about something such as this wrap-up, we are talking about the post-Lisbon spirit. And as you know, in Lisbon, there were some very important decisions. Some of them involved the Strategic Concept, for which we now have three pillars.

Around these three pillars we are organizing all our activity. I have in mind the strategic core tasks—and one task which is repeated very often is collective defense—and this will remain so as long as the Alliance exists, no doubt about that. But two more tasks are now being added at the same level, namely crisis management and cooperative security—simply speaking, partnerships.

So these three pillars are very important in our activities nowadays. And some of my colleagues will reflect on some segments of them, as will our colleagues from other organizations as well.

Chapter 49

Considerations for NATO in Future Contingency Operations

David W. Swindle, Jr., P.E., Executive Vice President, URS Federal Services
Daniel Roh, Director Strategic Initiatives, URS Federal Services

Facing the new challenges, NATO has migrated from a "force in being" during the Cold War to a "force in doing." Although its Article 5 focus on mutual deterrence and defense remains of paramount priority, its non-Article 5 reach has matured since the 1990s in the Balkans through the NATO Response Force (NRF) engagements for Hurricane Katrina and the earthquake relief in Pakistan to its current engagements in Iraq, Afghanistan, and Libya. This interest has migrated from a mutual defense focus balanced on efficiency of interior lines to an understanding and action that sees mutual security interests outside the geographic reach of the Alliance, even as the NATO Alliance has grown in the number of member nations. This means that when expanded engagements of mutual interest occur outside the Alliance's borders, NATO must have a capability that is both contingency and expeditionary-focused and be able to respond quickly and decisively.

Today, for political and humanitarian purposes, NATO must be able to mobilize rapidly, deploy, and then sustain operating forces over long distances, often to austere operating environments, and almost always across very long and challenging supply chains. In addition, unprecedented cooperation and coordination with Non-Governmental Organizations (NGOs), local governments, and international and multinational organizations are necessary for ensuring success.

This also means that NATO requires on-demand resources and pre-established business processes with strategic reach and specialized, technical capabilities such as strategic air and sea lift, interoperability enablers, information dominance technologies, and other specialized weapons, intelligence, and technology advantages. If these capabilities are to be available, such readiness would come at a cost that would strain the budgets of member nations—particularly if a member nation has to sustain such capability in its active duty or reserve forces.

Today's engagements in Iraq and Afghanistan have done well to outsource much of the needed technical support resources by acquiring contractor logistics support and weapon system partnerships for specialized systems and capabilities that are both highly proficient (suitable) and just what is needed (sufficient). This issue of suitability and sufficiency is not just an operational solution—it is an economic one as well. For example, the U.S. military today buys just what is needed, when needed. Selected support services are bought on demand and, as a result, the costly investment to recruit, train, and retain that special technical logistics capability in the standing forces has been avoided. This avoidance is cost avoidance but not operational readiness avoidance. Use of contingency contracting and the specialized procedures to augment urgent mission operations permit a primarily military response organization to invest its limited, critical resources into operational force development and the needed technologies.

Let me describe how and why NATO should adopt a contingency contracting model, also referred to as the Civilian Augmentation Program or "CAP" process, to achieve suitable and sufficient rapid response mobilization for military, humanitarian, and disaster responses where the will of the member nations is to act quickly and effectively and to provide such response capability in support of civilian and/or NGO objectives.

THE CHARACTER AND COST OF ENGAGEMENT

NATO has many ambitious challenges. Premier among them is to protect and defend from attack the territory and populations of member nations. This requires a mature and credible military capability that is sufficient to deter attack and, failing that, to prevail in armed conflict in defense of the Alliance. This capability can and has been leveraged in expeditionary operations outside Alliance borders to affect security and stabilization operations, and to respond to natural disasters in cooperation with other international aid organizations.

Maintaining a credible military capability of advanced air, ground, sea, and space systems, and ensuring the requisite interoperability of combined operations comes at a huge cost. Today, NATO has increasingly engaged, with full member state support, in engagements beyond the NATO Alliance borders. Such engagements require an expeditionary quality and capability that alone demand increased investment. Already, this lack of investment and level of preparedness that is specific to non-military mission support has impacted the effectiveness and timeliness of non-military response actions for humanitarian stabilization and disaster response.

In the simplest sense, this requisite capability for immediate response entails planning for pre-deployed equipment with defined capability and people with defined skills. The equipment must be designed, procured, maintained, and modernized. The right people with the proper skills and authorities must be recruited, trained, and retained. The people and equipment are integrated and woven together into systems and formations and trained, exercised, and employed inside a context of doctrine to achieve defined outcomes. This process is also very expensive if member nations are required to maintain, train, and retain these resources on a full-time or "always ready" basis.

Even without the additional cost to deploy and sustain operating forces, the carrying cost to have and maintain a credible force—whether on active duty or reserve status—strains the budgets of member nations. Such burden needs not be so great. It is not necessary to generate and maintain the entire capability requisite to success, where success is measured by timely and cost effective mission response when required.

Military formations generally consist of combined capabilities that fall into three general classes:

- The first and most specialized of these are *Combat Formations* with the inherent capability to move, shoot, and communicate in a coordinated and synchronized fashion to create specific outcomes. These are lethal formations, which are designed to impose their will and to defeat an armed enemy. As a collective capability, combat formations have no peer or application in the civilian or commercial sector, and have little value outside deterrence or armed combat. However, Combat Formations are very useful and, especially today, they are increasingly busy training our allies (such as in Iraq and Afghanistan) to defend themselves and maintain civil order.

- Secondly, there are *Combat Support (CS) Formations*. Examples are engineers, signals, military police, civil affairs, and air defense artillery. These formations enable and support the Combat forces. Although equipped and trained with special capabilities to integrate and perform in the rigors of combat, they often perform tasks in a more benign space and many do have peers in the civilian or commercial sectors—particularly within NGOs.

- Third, there are *Combat Service Support (CSS) Formations*. These include such capabilities as maintenance, supply, transportation, and medical as well as specialized tasks, for example, port and airfield operations, food services, medical services, etc. Although CSS Formations can and do operate and support in the most lethal dimensions of the battlespace, much of their activity generally occurs in safer areas behind direct contact; however today, CSS operations are occurring more frequently in the battlespace. These capabilities have peers and are ubiquitous in the civilian and the commercial sector to include NGOs. Increasingly, these CSS capabilities are called into use to support stabilization, humanitarian, and disaster response needs that are internal and external to the Alliance's borders.

All of these formations have the specialized quality of professional leaders and staff. This professional Command and Control (C2) capability is unique. They are trained and matured through experience to accept challenges, assess and design solution sets, and then decide and direct action of their assigned formations to affect positive outcomes. Military staffs such as exists in NATO have a disciplined ability to plan, coordinate, synchronize, monitor, and control activity, in a tight and continuous cycle which makes them experts at managing and controlling change. In NATO, member nations field (e.g., equip, man, train, and maintain) this expertise because, collectively, this expertise represents a capability to deter aggression, defend Alliance borders, and project power to impose the will of the Alliance. But as noted earlier, NATO's non-Article 5 activities have increased and, as such, NATO is expected to do more than deter aggression—it has to support non-military missions for humanitarian, disaster response, and political missions, also referred to as "soft power" missions.

In addition to their inherent combat and peace enforcement value, we deploy and employ our militaries increasingly to affect peacekeeping, stabilization, and reconstruction tasks in failed states and even to respond to the immediate demands of natural and other disasters. Much of a military's intrinsic value, training culture, and Command and Control excellence is well suited to these tasks. Recent protracted engagements in the Balkans, Iraq, and Afghanistan have matured a new skill set in the profession of arms. This is the requisite quality to interact in a comprehensive approach and to integrate effectively with the deployed national civilian experts, mission staffs, NGOs, International Organizations (IOs), local governments, and the populations in target event areas. This civil-military integration, while respecting local laws, customs, and culture, is imperative to success in the increasingly complex and challenged global security environment. As recently as the 2006 Riga Summit, NATO has recognized that it needs a more coherent approach to military support in stabilization

operations and reconstruction efforts.

Consequently, the collective will of NATO's member nations has found new ways to use its military capability. But NATO has also discovered that its collective will to act does not always match its business processes, personnel management, and acquisition skills, and procedures to resource that action in a timely and responsive manner. Additionally, NATO confronts the fact that, when requirements exist to commit capability to one event, it cannot be available for other actions, even in crises. Today and for the foreseeable future, NATO's needs simply exceed its means.

NATO has an opportunity to increase its capability and realign its investment priorities at significantly reduced life cycle costs. NATO can increase its capability to respond in a timelier manner at lower total mission costs and with greater effectiveness by adopting CAP processes and practices, and procure capability only when needed.

CIVILIAN AUGMENTATION PROGRAMS (CAP): A COST-EFFECTIVE OPTION

Although fully involved in synchronized combat and stabilization operations, a military's CS and CSS elements have broad application to tasks that we find in reconstruction operations and disaster response. In addition, the Command and Control and training acumen of our combat leaders and staffs also bring value across the full range of potential engagements and in fact are unrivaled in terms of the discipline required in contingency operations when compared to non-military organizations such as NGOs, IOs, etc. Recall that our Combat Support and Combat Service Support formations have much peer capability in the commercial sector across NATO member nations. Comparably, many commercial activities bring program management skills and processes that are sufficiently on par with military Command and Control and training excellence, when employed in more benign event areas or when protected by military force in lethal operations. This is a global, not just a Western, reality.

Where the mission envelope allows NATO to meet a mission's requirements by contracting using civilian augmentation capabilities through competitive bidding, NATO forces will be able to field far more sufficient capability to meet a mission's needs without the standing cost to maintain all this capability internal to member nations. Some national solutions already integrate commercial capability. For example, NATO maintains via the NATO Maintenance and Supply Agency (NAMSA) standard agreements for combat logistics support and weapon system partnerships. NAMSA also contracts commercial augmentation in Partnership for Peace weapons demilitarization and for logistics and life support requirements in protracted events such as Iraq, Afghanistan, and the Balkans.

However, when required for disaster response deployments, NATO can provide greater value to the host country being supported and the NGO and IO responses that will arrive by simply putting a force Command and Control capability on the ground with rapid acquisition authorities and management capability. The intent would be to direct the contract support needed and coordinated through local lead agencies. Traditional NATO capabilities can back this support by leveraging strategic lift, communications, and national staging areas in member countries. But this would be an ad hoc and suboptimized approach.

NATO can even achieve greater cost avoidance, while achieving suitable and sufficient options for deployed operational capability across the engagement spectrum, if it establishes standing CAP agreements into the NATO Alliance response tool-kit. Once in the tool-kit, with the understanding that in urgent missions, it will outsource needs when possible, NATO will see opportunities to avoid much of the sustained force structure investment and maintenance that these contracts can and will replace.

Ideally, these standing agreements are competitively bid Multiple Award Task Order Contracts (MATOC). Such contracts would require a broad range of capabilities- and performance-based outcomes that can be mobilized and delivered on demand on a global or regional basis to perform in event locations when needed. There are many large commercial integrating contractors that exist globally in NATO member nations with excellence in large-scale program management that will compete for this work. Recall that mature program management skills are the requisite commercial equivalent to the Command and Control acumen of the standing force.

In a base award, these companies would compete to demonstrate that they can and will deliver technical excellence, on time, and within reasonable cost with little notice and often to austere and sometimes dangerous event areas. This rapid response capability, which balances cost, schedule, and quality, must match the expeditionary quality of the standing force at significantly less cost and with relative assurance against the risk of failure to perform. In this competition, several contracts would be awarded to responsible bidders (multiple award). Such awards would initially carry either no or minimal financial obligations, except for exercising their preparedness and planning. But, when needed, specific Task Orders can be competed rapidly among the base award MATOC winners, giving NATO the opportunity to gain additional cost savings

or specific comparative technical advantages. Under urgent and compelling situations, NATO can retain the option to rapidly award the work to a single MATOC provider without competition in a transparent and auditable process—a practice that has been proven in the U.K. and U.S.

Such a process allows NATO the option to buy only what is needed, when it is needed; NATO would then buy only what is suitable and sufficient to the task at hand. For example, under this approach, NATO would buy as much as possible in or near the target area, an act alone which brings additional relief and value to affected populations, and such acquisitions are bought with the confidence that it will be there when needed.

MITIGATING RISK

In establishing Civilian Augmentation Programs to save force structure and costs, steps must be taken to ensure that there is sufficient capability to support NATO operating forces to achieve the required outcomes. This requires the rapid mobilization of a trained and capable commercial response, in the event area and in time to perform. In establishing CAP contracts, the competing contractors develop robust teams that collectively bring the full range of capability and manifest sufficient capacity, depth, and responsiveness to augment standing member nation forces. Such CAP prime contractors will do this with pre-arranged subcontracts and ordering agreements, developed with qualified vendors, on a global scale (or at least within the regional limits of NATO member nation borders or anticipated regional event areas). In procuring such contractor capability, the acquisition solution can require that, during competition, the prime offeror's proposed subcontractors provide for a best cost solution but also ensure that they manifest the required technical skills, while also demonstrating they can and will mobilize and perform rapidly—starting in as little as 72 hours upon notice to proceed.

Early in the response development phase, while the standing force mobilizes for deployment, the CAP capability must also mobilize and be ready in the event area. Much of this capability should be sourced locally; some will also mobilize and deploy from distant locations. In this early phase, responsiveness (e.g. time schedule) and quality are imperative and ascendant on cost. Today, combat force structures pay a premium to mobilize sufficient and suitable capability on time. Additional costs are incurred from such realities ranging from architect/engineering services; life support and maintenance facilities; fire response; police/guards; infrastructure including roads, airfield, water and waste facilities, power, and telecommunications; as well as base operating support services (dining, life support, laundry), and a host of other realities from moral (welfare and recreation) to special mission area capabilities, etc. As the capability stands up and operations mature to a sustaining phase, then cost emerges ascendant and NATO can begin to realize additional savings.

Because the commercial CAP tasking cannot act until triggered with authority to source people, equipment, and material solutions, it is essential that existing NATO procedures, policies, and authorities be examined and specialized contingency guidelines and policies be established as has been done in the U.K. and the U.S., to trigger contracting task orders and notices to proceed and mobilize as soon as possible after an event requiring response.

SUMMARY

Increasingly, NATO has decided to mobilize and deploy forces capable of supporting any range of missions from combat/peace enforcement to peacekeeping, reconstruction, stabilization, and immediate disaster response support. As a political organization with established Command and Control capabilities and the support of its member nations, NATO has demonstrated it is adept at integrating responses internally among member nations, but also among international and non-governmental organizations. The special nature of the Command and Control function in NATO forces makes NATO extremely well-suited to be among the first responders with the organization, disciplined Command and Control, acquisition expertise, and scale of capabilities to achieve success across the range of engagement possibilities. The ability to achieve this degree of resilience and responsiveness can best be realized through augmenting the NATO force structure—this is achieved utilizing Civilian Augmentation contracting. Civilian Augmentation contracting can be accomplished with a low cost of investment compared to member nation-maintained force structures.

NATO Alliance member nations should engage in exploring the requirements to develop, adopt, and utilize CAP contracting as a new tool for the transformed NATO in supporting its non-Article 5 engagements. When established, this CAP capability will return both political and readiness dividends.

Chapter 50

The International Security Environment and Implications for the Defense Posture

Ambassador Carsten Sondergaard
Permanent Representative of Denmark on the North Atlantic Council

THE SECURITY ENVIRONMENT

Let me summarize my reflexions on the workshop presentations and discussions by focusing first on the security environment and, second, on the consequences for the defense posture. I believe that the workshop presentations and discussions have clearly underlined the fact that we live in a high risk environment and that we face many new asymmetric threats. What are the consequences of this? It means that deterrence, as we used to know the concept, does not really work anymore. Therefore, we must develop new instruments and partnerships with other countries and international organizations. We are also living in a time where transforming events have occurred. Half a year ago, NATO adopted a new Strategic Concept in Lisbon and we are now engaged in an operation in Libya that is an operation in North Africa with Arab partners. This would have seemed inconceivable even a year ago.

What consequences can we expect from our various operations in Afghanistan, Libya, Kosovo, etc. and from the Arab Spring? Who knows where, how, and when these will end? Clearly, we will have a lot on the agenda in the coming years. The preliminary conclusions we can draw and which were mentioned by workshop speakers is that Europe cannot do much without America. We do need U.S. cooperation. I recall an article in *Foreign Affairs* in April 1995 by Richard Holbrooke whose title was "America, a European Power" and believe that this title is still valid. We also need American cooperation because of the unfinished business on our continent in Russia, Ukraine, in the Balkans, etc. On the other hand, the U.S. obviously does expect Europeans to do much more. Libya is a case in point. These are the points that I wanted to make on the security environment.

IMPLICATIONS FOR THE DEFENSE POSTURE

It is clear that the Alliance's new Strategic Concept can only be fulfilled if nations continue to provide the capabilities that are needed. Given the nature of the security environment, capabilities have to be flexible, deployable, and sustainable. In short, they have to be more usable. The most likely scenarios will all demand a comprehensive approach and use all the tools from the crisis management tool box in close cooperation with other actors, partners, and international organizations. So, providing the necessary capabilities and working with others are the main challenges that we are confronted with. Capabilities have to be available and there must be a political will to use them as required. What does that mean? It means that when we develop multilateral projects—be they bilateral, trilateral, or quadrilateral projects—we have to be willing to solve the political problems with regard to making the capabilities operational when we have to use them. It would just be a decision of a very simple nature but I know very well that it will not be easy because there are domestic political constraints in many countries. In general, this is primarily a European challenge.

I believe that Europe has come a long way since the end of the Cold War in terms of transformation and contribution to operations, but further significant improvements are required in order to meet the future challenges. This will be even more difficult in a situation of declining budgets. Having to do more with less, however, can also be an incentive to think in new ways. Intensified transformation and smart defense in the form of more cooperation, more multilateral solutions, and better coordination of national plans are the way forward. The alternative is for the process to be driven by the finance

ministers and we all know too well that, at the end of the day, it is not at all easy. All politics are local. There are interest-related aspects, there are regional interests, there are inter-service rivalries, and in many countries, there is also a debate about what it really means to be a sovereign nation. For example, do we need to have an Air Force, etc.? This way forward will require political will and local leadership built on a shared view of European security interests, challenges, and needed capabilities. As always, external shocks could accelerate this process. The danger is that Europeans will end up doing less with less but, by doing more, they will strengthen our transatlantic partnership and our collective ability to address future challenges. In a nutshell, we need the U.S. but in order to remain relevant, Europe should be able and willing to act in a relevant way. That is our basic challenge here.

Chapter 51

Remarks on Cyber Security and NATO's Ongoing Operations

Ambassador Terry Stamatopoulos
Permanent Representative of Greece on the North Atlantic Council

The added value of this excellent conference, both for me and my colleagues on the North Atlantic Council who have taken part in this workshop, was the discussion on cyber security. We have been thrown off the deep end in a way because cyberspace is "terra incognita" for us, but it is something that we have to deal with, especially following the new Strategic Concept and the decisions taken in Lisbon.

LESSONS ON CYBER SECURITY

From that discussion, I have noted a few points and will go through them very quickly. They are:
- Exponential growth and bad files, files that can be used or even bought by malevolent users;
- Imbalance between cost of offense versus cost of defense and the asymmetry therein;
- Technology, especially the need for a race to get ahead of the bad guys;
- Lack of and, therefore, need for governance;
- Need for recognition arrangements, whether these should be done via passport ID, claims-based authentication or any other system that works; and
- Attribution. From our perspective, attribution is a key element. Perhaps this point has not been emphasized enough and I would like to stress it. While cyber defense is of increasing importance, our specific problem is with deterrence. How can we deter against something whose provenance is unclear? This is why attribution is a key question for us and the points that I enumerated earlier are relevant and related to this. If possible, I would like the cyber community to think about this.

OVERVIEW ON NATO'S RECENT OPERATIONS

Now, let me say a few words about operations and other issues that came up during the workshop discussions. We started with Kosovo in 1999, going semi out-of-area; we went out-of-area following the Reykjavik decision on Afghanistan; then we did Operation Ocean Shield, which is off the Horn of Africa; and now we are in Libya. So we have gone almost full circle in a couple of ways. Kosovo was primarily a U.S.-led operation. As we went further out, that was still the case. It was much less the case with Operation Ocean Shield and it is even less the case now in Libya. In my opinion, there is a movement here that signifies a trend and other speakers have pointed it out as well. This pattern, which leads us closer to Europe, is likely to continue; and it is just as unlikely that we, NATO, will be engaged in Afghan-like operations anytime in the foreseeable future. This is my assumption.

In the Libya Operation Unified Protector, the U.S. is not in the lead. About half of the Allied nations are taking an active part—even though of course all are taking part in a way. I agree with the point that was made earlier by Edgar Buckley that Europe is facing new challenges in its periphery without the United States. But that does not necessarily mean that this situation will happen in the way it was said it would happen, that coalitions in the future will be led by some able and willing Europeans, with NATO coming in to provide the structure and with Europe and the EU structure staying out. I would like to point out that we need consensus for NATO to be engaged, just as we need consensus for the EU to be engaged, and I do not believe that consensus in NATO is any more secure than the EU consensus is secure. But we must prepare for Europe "going it alone" or being in the lead much more than in the past. We heard what Secretary Gates said. He has a valid point and it is something that we, Europeans, need to bear in mind.

In his address, Admiral Guillaud, the French Chief of Defense, raised some questions about soft power, hard power, and Europe's place in the world. All this comes within the context of a financial crisis which is global, but more specifically European. Europe is faced with key decisions and without going into the financial side, I think it needs to face up to the deficits on the security side, many of which have been highlighted by the Libya crisis. Even the deliberations on Libya showed deficits in European decision making and in ESDP. So I think that Europe needs to think very hard about this. It needs to revisit the necessity of developing its own command and control capabilities, especially in light of the Franco-British accord and also the new views in Washington that bring fresh thinking on this problem.

Finally, I do not believe that any of this can be done without industry and I agree that industry needs to look into merging its facilities and sharing technologies, primarily within European industry, but also with the U.S. This is a commitment that Washington has made some time ago provided that we, Europeans, can get our act together in this area.

Chapter 52

Can't Afford War No More

Mr. J. David Patterson
Executive Director, National Defense Business Institute
College of Business Administration, University of Tennessee

OVERVIEW

When seemingly benign or even serious but manageable events happen as isolated, one-off situations, they are often seen with little more than modest concern. However, when there is a confluence of such events, the combined impact may well eclipse the ability of even great nations to cope with the results. The United States is in exactly such a situation. The world's most powerful nation is now confronted by three overlapping realities:

- First, the U.S. faces a national debt growing at the rate of $1.5 billion each day. The enormity of the debt owed by the United States ($14.3 trillion at present) drives home, more than at any time in its history that, "it's all about the money."
- Second, the burden of this huge debt forces recognition of a problem that is new for America: Can we afford to defend ourselves in a manner sufficient to deter or defeat all of the likely threats the world points at us? The Department of Defense has made significant attempts to reduce defense spending while maintaining capability, but with little success.
- Third, there are powerful forces changing the balance or strategic equilibrium of influence throughout the world. The emerging "BRIC" nations—Brazil, Russia, India, and China—are serious contenders for economic prominence, supplanting both the U.S. and the European Union, a prospect made far more likely by the economic problems facing the U.S. and Europe. From history we know that economic strength often evolves quickly into hegemonic power.

BUDGET PRESSURES ON U.S. NATIONAL SECURITY

Looking first at the U.S. financial circumstance, there is a clear impact on the U.S. capacity and willingness to invest in its national security. The U.S. is spending 40 percent more than it is recovering in revenues from taxes and other sources. The debt burden on every U.S. citizen is roughly $46,022, and not all citizens are taxpayers. (Only about 50% of U.S. households pay taxes.)

Just as troubling is that the annual interest on the U.S. national debt ($3.58 trillion) is larger than the yearly deficit spending ($3.54 trillion). If there is no positive intervention, the Congressional Budget Office projects that in the next four years the U.S. national debt will grow to $18.4 trillion, or a 29 percent increase over the present level. This would mean that the U.S. federal debt would be 104.9 percent of the projected U.S. Gross Domestic Product (GDP). According to the Obama Administration, "if there are no changes in government policies, the debt will soar to $18.76 trillion by 2014 and $20.8 trillion by 2016." Over the same period, defense spending is projected to be flat or decreasing.

The Brookings Institution's Michael O'Hanlon wrote, "Today, we are witnessing a period of even greater American economic travails, with much larger fiscal deficits. These are coupled with deep concern that less friendly powers—China in particular and perhaps Russia and others—may be poised to benefit from the relative decline of the United States specifically and the West in general." O'Hanlon explains his thinking as a case for a rational cutting of defense spending, "Put most sharply for the purposes of this essay, to what extent should the United States, as part of a broader strategy to reduce its deficits and strengthen its future economic prospects, accept some defense budget cuts now to preserve and enhance its power in the future?"

"By contrast, those who criticize the Pentagon budget often note that it constitutes almost half of aggregate global military spending (to be precise, 45 percent in 2008, according to the estimates of the International Institute for Strategic Studies). Alternatively, they also note that 2009 and 2010 discretionary spending levels (approaching $700 billion each

year) exceed the Cold War inflation adjusted spending average of $450 billion by 50 percent (expressed in 2009 dollars, as are all costs in this chapter). Indeed, current defense spending exceeds the Cold War average modestly even without including war costs. In addition, they note that defense spending dwarfs the size of America's diplomatic, foreign assistance, and homeland security spending levels (roughly $16 billion, $38 billion, and $55 billion respectively in 2009).

Aside from the direct competitive impact that the U.S. national debt has on the U.S. defense budget and the willingness to invest in national security, we need to think about how the debt affects the value of the dollar and what that means for the U.S. ability to exert influence with both soft and hard power. Steve Forbes pointed out that former President John F. Kennedy was correct when he said that a great power does not have "weak" money. Forbes went on to point out that the world's perception that weakness in the dollar is evidence that the U.S. cannot get its finances under control pushes other nations to believe that America is a feeble and declining world power.

EFFECTS ON FUTURE U.S. AND EUROPEAN SECURITY

Admiral Michael Mullen, Chairman of the U.S. Joint Chiefs of Staff, presented a more dire and immediate picture of the relationship between the mounting national debt and national security. He described the national debt as "the single biggest threat to national security."

Of course, power is not just about GDP. It is not just about the economy. Power is also about the ability to project hard power through military means. And some people in Washington like to comfort themselves by saying, "We can still do that way more than they can. Count their aircraft carriers, count ours." But one point that follows from the financial crisis which is terribly important is that by combating our crisis of private debt with an extraordinary expansion of public debt, we inevitably are going to reduce the resources available for national security in the years ahead.

The U.S. intelligence community has also ranked the U.S. national debt high on its list of issues adversely affecting U.S. national security. In testimony before the House of Representatives Permanent Select Committee on Intelligence, Central Intelligence Agency Director Leon Panetta explained to the panel that the growing national debt represented a real threat to "American national security."

According to Leslie Gelb, President Emeritus of the Council on Foreign Relations, "The main challenge for Washington, then, is to recompose its foreign policy with an economic theme, while countering threats in new and creative ways. The goal is to redefine 'security' to harmonize with 21st century realities." Therefore, the U.S. is in the historically unenviable position of foreign policy, and by inference national security policy, constrained by budget.

Whether the U.S., faced with such economic realities, will be able to afford to invest in its defense capabilities as it has in the past has become a serious and vexing question. Secretary of Defense Robert Gates has set a very challenging goal before the U.S. military departments. He expects military services and agencies to save $78 billion in the next five years with a resulting leveling of the defense budget. This so-called 'cut' is, in fact, to the rate of predicted growth. The size of the base defense budget is still projected to increase in real, inflation-adjusted dollars, before eventually flattening out over the next five years."

A large part of the projected savings comes from Defense Department overhead expenses. However, with the war in Iraq winding down and the need to repair, replace, and modernize existing equipment (at a time of decreasing congressional appetite to pass significant Overseas Contingency Operations funding measures) more of those costs will be paid for in the U.S. base defense budget. With the base budget remaining flat or reduced for some time, the money for the reconstitution of U.S. fighting forces will most likely displace procurement and research and development funding.

Reducing procurement funding will require major reductions in what has been a growing albeit modest investment account. President Obama raised the specter of making even deeper cuts in defense, using the Gates defense budget reductions as just the overture to a more aggressive reduction plan. Obama's proposal would slice $400 billion from defense through the year 2023. This would mean that the U.S. defense budget would not grow, as it has historically, even though that growth was sometimes no more than the rate of inflation. There is however a very large problem.

The defense procurement programs the U.S. already has on the books have a value of over $1,700 billion and if there were to be no more programs added and the funding for buying weapons and other equipment were kept at the Defense Department's fiscal year 2012 request of $113 billion, it would take 15.2 years to field it all. The question that ultimately raises is, Does this rate of spending on these systems give our warfighters what they really need, or does it force them to abandon key roles and missions?

The growth in total value in the procurement of defense systems has, in the last 40 years, produced an irregular pattern of feast and famine. The cost of weapons levels off as less is invested, but the shortfalls that result are answered by rapid

spending to adjust for whatever defense needs are thought to be essential. This cycle, however, produces a bow wave of obligations that will have to be funded and makes having to fund contingencies when they arise even more difficult. The choice to pay for the military deployments has been borrowed money, contributing to the rising national debt and to a decline in the opportunity to engage in military contingencies.

THE INTERNATIONAL CONTEXT—THE RISE OF THE BRIC NATIONS

All of these facts need to be judged in the context of a rapidly changing global economic and geopolitical power orientation. The combination of the U.S. national debt and the sudden and drastic initiatives to address that national debt at the expense of U.S. defense spending create discouraging results. Evidence that the economic landscape is changing was the news in August 2010 that China had surpassed Japan as the number two economic power in the world. After 42 years of holding the position as second in GDP to the United States, that distinction evaporated when Japan posted an estimated GDP of $5,474 billion compared to China's $5,879 billion. If we include Brazil, Russia, and India, a trend of economic prominence that will change the balance of financial power emerges. India and China are particularly strong when considered as a geographic economic center of gravity.

According to China and India expert Jagdish Sheth, China and India will soon become global powers: "This will lead to the rise of China and India as the next economic superpowers in the first half of the century." Yet, within the BRIC circle there is concern over China's unabated economic growth and trading prowess. The *Financial Express* (India) explained in a February 2011 editorial, "An undervalued yuan hurts India by tilting the trade balance decidedly in favor of China."

Early this year Yu Yongding, President of the China Society of World Economics, counseled Western nations, "The lack of alternatives to the dollar as a reserve currency has bred a sense of security within the U.S. Treasury and the Federal Reserve. A reduction in Chinese buying (when China reduces its current account surplus and diversifies away from U.S. dollar assets) will be felt in the U.S. Treasuries' market. Some in Washington may dismiss this as a bluff, but surely a healthier U.S. fiscal balance is in everyone's interest." The idea that China could believe that its economic status in the world is substantial enough to make such an intimidating statement would have been far-fetched 10 to 15 years ago. Today, such warnings carry greater weight.

There is an even starker picture of the existing economic relationships with regard to U.S. economic influence. Of the $4,474 billion U.S. national debt held by foreign countries and lending institutions, 34 percent or $1,519 billion is held by the BRIC countries. India holds approximately $40.4 billion in U.S. Securities. Compared to the rest of the world the ability of the BRIC countries to influence the financial future of the U.S. has grown to the point at which their combined influence over us cannot be ignored.

According to the *Weekly Sunday Times*,"Western capitalism survives, but limping, wounded and carrying a heavy load of debt, inequality, demography, neglected infrastructure, social discontent and unrealistic expectations. Meanwhile, other variants of capitalism—Chinese, Indian, Russian, Brazilian—are surging ahead, exploiting the advantages of backwardness, and their economic dynamism is rapidly being translated into political power." Time will be the judge as to whether this statement is prescience or undue negativism. Regardless, with the U.S. financial circumstance such as it is, at least some deference should be made to this and similar points of view.

CONCLUDING REMARKS

As a concluding observation, the significant changes in the affairs of nations seldom turn on a single cataclysmic incident, but are the result of the combined effects of many events. The combined effect of the growing U.S. national debt, pressure on necessary defense spending, and the increased economic influence over U.S. affairs of other countries that, heretofore, were not significant players on the economic stage should be cause for a thoughtful response by the U.S. This should be so particularly when global security and economic security are so intertwined. As for the U.S., there could come a time in the future when the international political-economic conditions among emerging global powers driving for decisive global influence create a war that the U.S. cannot afford to attend.

Chapter 53

Closing Remarks

Ingénieur Général Robert Ranquet
Deputy Director, Institut des hautes études de défense nationale
(Institute of Higher National Defense Studies)

Cluny Museum and the Lady with the Unicorn

I will not presume to say anything serious after General Joulwan's brilliant dinner debate. Instead, I would like to give a light French touch to my concluding words and talk about some subjects that relate to the great places we have been to during the workshop by evoking the ladies that were associated with these places.

On the first night, we were at the Cluny Museum, the Musée National du Moyen-Age. This beautiful mansion was built for the Abbots of the Benedictine order of Cluny when the order was at the peak of its influence on Western Christianity (the Cluny order used to "make" popes). Cluny reminds me of a very interesting woman figure of that period called Héloïse. Héloïse was a beautiful young girl of very high education, a writer and a poetess, who came to study in Paris and lived near Cluny. She fell in love with a scholar from the Sorbonne whose name was Pierre Abélard. At that time, the university was run by the Church and scholars at the Sorbonne were either priests or clerics. So Pierre Abélard was a cleric and a beautiful and romantic love story developed between Héloïse and Abélard. Unfortunately, the lovers were discovered, causing outrage in their respective families, and both were sent to very distant monasteries so that their love story would come to an end. Actually, to make very sure that the love story would come to a real end, Pierre Abélard was emasculated. So it was the end of the love story but it was not the end of their careers since Pierre Abélard became a prominent theologian and a leading philosopher of the time. Héloïse became the Abbess of her order as well as a very famous writer. Héloïse actually never lived in the Cluny mansion but I am sure that all of you were able to meet the real lady of the place, the Lady with the Unicorn, who is certainly one of the most exquisite portraits of a beautiful lady from the 12th century, one that you can still fall in love with without any hesitation.

Hôtel de la Marine and Place de la Concorde

Let's turn now to the Hôtel de la Marine. The master of the house, Admiral Forissier, was very gracious and did a wonderful job showing us the place and giving us a lot of details about it. One thing that he did not mention, however, was the role of another leading woman of that time, the Marquise de Pompadour. Madame de Pompadour was the official mistress of King Louis XV; she was also a highly educated woman with a good sense for the arts, architecture, painting, and music. She became a quasi Minister for the Arts for the king and was involved in promoting a number of projects. I would like to mention two of them: One was the very place where you were last night, Place de la Concorde, which was called at the time Square Louis XV. She was involved in parts of its design and one of the main sponsors of the architecture of the square which was renamed Place de la Concorde at the Revolution. We are also equally indebted to Madame de Pompadour for being the promoter of the Ecole Militaire. The Ecole Militaire is a magnificent military compound at the other end of the Eiffel Tower and Champ de Mars. This is where the Institute for Higher National Defense Studies is located today and, as Deputy Director, I am especially indebted to her as well. For the anecdote, the rumor is insistent on the fact that, although she was the king's official mistress, she was also frigid, which you may find peculiar, but she probably was able to compensate for her lack of inclination with a lot of sophistication on how to make things interesting for the king.

Hôtel Carnavalet and Madame de Sévigné

And now, I will quickly end my remarks with the lady who is associated with this very mansion, Hôtel Carnavalet. Every school boy and school girl in France has learned, and worked on, Madame de Sévigné's letters. Marie de Rabutin Chantal, Marquise de Sévigné, is a very leading figure of French literature. She did not write novels or theater tragedies, but she wrote letters. She wrote almost daily or every other day to her daughter during approximately thirty years, so this amounts to a great many letters that stand as a monument of French literature. In these letters, Madame de Sévigné expressed herself as a very clever expert on the psychology of the mother-daughter relationship for one thing, but she was also a very fine observer of the social and political life of her time. Many things that we know from Madame de Sévigné's time, which is the 17th century, come from her letters. I would like to leave you with two quotes from Madame de Sévigné that I really like: One is somewhat related to our subject today of security and war. She wrote to her daughter: "Vois-tu, tout le monde parle de la guerre; on ne parle plus que de la guerre" (You see, everyone talks about war; everything today is about war) and "Toute la Cour est à l'armée et toute l'armée est à la Cour. Paris est un désert" (All the Court has gone to the army and all the army has gone to the Court. Paris is a desert). This has something to do with our topic, doesn't it? The other quote has really nothing to do with our topic, but I love this quote and would like to leave you with it. She wrote, "Le coeur n'a pas de rides" (The heart has no wrinkles). I wish you a good night.