



THE ATLANTIC COUNCIL
OF THE UNITED STATES

The Bulgarian Defense Industry
Strategic Options for Transformation,
Reorientation & NATO Integration

Curtis M. Coward
Working Group Chairman

Jeffrey P. Bialos
Author and Rapporteur

Policy Paper
July 2001



THE ATLANTIC COUNCIL

OF THE UNITED STATES

The Atlantic Council is a non-partisan network of leaders who are convinced of the critical importance of effective U.S. foreign policy and the cohesion of U.S. international relationships. The Council promotes constructive U.S. leadership and engagement in international affairs based on the central role of the Atlantic community in the contemporary world situation. To this end, the Council:

- stimulates dialogue and discussion about critical international policy issues, with the intention of enriching public debate and promoting consensus in the administration, the Congress, the corporate and nonprofit sectors and the media in the United States, and among leaders in Europe, Asia and the Americas;
- conducts educational and other programs for successor generations of U.S. leaders who will value U.S. international engagement and have the formation necessary to develop effective policies.

Through its diverse networks, the Council builds broad constituencies to support constructive U.S. international leadership and policies. By focusing on critical issues, choices can be illuminated, priorities established, and possibilities for consensus explored. Important contributions by the Council include:

- identifying major issues facing the future of the Atlantic Alliance, transatlantic economic relations, and the integration into European structures of the countries of central and eastern Europe, including Russia;
- building consensus on U.S. policy towards Russia, China, Japan, Korea, and Taiwan;
- balancing growing energy needs and environmental protection in Asia;
- drafting roadmaps for U.S. policy towards the Balkans, Cuba, Iran, and Panama.

In all its programs, the Council seeks to integrate the views of experts from a wide variety of backgrounds, interests and experience.

The Bulgarian Defense Industry

Strategic Options for Transformation, Reorientation & NATO Integration

Curtis M. Coward
Working Group Chairman

Jeffrey P. Bialos
Author and Rapporteur

Policy Paper

July 2001

*For further information about the Atlantic Council of the United States and/or its
Program on International Security, please call (202) 778-4968.*

*Information on Atlantic Council programs and publications is available
on the world wide web at ***http://www.acus.org****

*Requests or comments may be sent to the Atlantic Council
via Internet at ***info@acus.org****

THE ATLANTIC COUNCIL OF THE UNITED STATES
10TH FLOOR, 910 17TH STREET, N.W.
WASHINGTON, D.C. 20006

Table of Contents

<i>Foreword</i>	v
<i>Members of the Working Group</i>	vi
<i>Executive Summary</i>	vii
I. The Bulgarian Defense Industry in an Era of Transition	1
The Industry's Origins, Its 1980s Peak & Post Cold War Decline	1
Bulgarian Arms Transfer Policy: Signs of a Sea Change	3
Bulgarian Defense Industry Today: Challenges for the Future.....	9
II. The Way Forward: Recommended Actions.....	17
The Need for Continued Bulgarian Government Economic Reforms.....	17
Bulgarian Actions in the Defense Sector.....	19
U.S. and NATO Actions	24
Conclusion.....	31
<i>Atlantic Council Publications</i>	32

Foreword

Discussion in the United States and Europe about the enlargement of the Atlantic Alliance has tended to focus on the central questions of security and defense policy. The difficult challenges of economic reform faced by the aspirant members of the Alliance have for the most part been treated separately and often primarily in the context of the enlargement of the European Union. Such an approach fails to address adequately the special problems faced by those countries of the former Warsaw Pact which were major contributors to the arsenal of the Soviet empire and its dependents around the world and which were faced with the collapse of a significant sector of their economies when the Warsaw Pact and the Soviet empire collapsed. No country faced such problems in more acute form than Bulgaria, which at its Cold War height produced ten percent of its gross domestic product in the defense sector, but which never consumed more than seven or eight percent of its own defense production.

The opportunity to bring the economic, political and social problems associated with the reshaping and reorientation of the defense industry of Bulgaria into focus in connection with the issues presented by the country's aspirations to join NATO was therefore welcome by the Atlantic Council. Our hope is that the presentation of this report will act as a catalyst for government and corporate action not only in the United States, but also in Western Europe. There can be little doubt that such action would well serve the goals of Western policy as they have developed since the collapse of the Soviet Union.

The Atlantic Council was fortunate to be able to bring to this task a formidable array of talents and experience in the form of the working group that produced this report. We owe a great debt of gratitude to Curtis Coward, a member of the Council's board of directors and the able and indefatigable chairman of our group; to all the members of the group, and especially those who gave up almost a week of their time to visit Bulgaria for this purpose; and not least to Jeff Bialos, the rapporteur, who with great speed and dedication to the subject produced an extremely cogent and well-researched report. Thanks are also due to Elisa Moskowitz, the director of the Council's Planning Office, who with her usual immense skill and tact managed the working group's activities and the production of this report.

Finally, I would like, on behalf of the Atlantic Council, to thank the government of Bulgaria, which went to great lengths to provide us with the access and information needed to conduct this work. We hope that the recommendations we have produced, and more especially actions that will flow from them, will justify the considerable efforts Bulgarian officials made to facilitate our study.

Christopher J. Makins
President, The Atlantic Council of the United States

Members of the Working Group

The members of the working group believe that the recommendations stated in this paper promote overall U.S. interests. While there may be some parts of the report with which some participants are not in full agreement, each participant believes that the report, as a whole, provides a sound basis for future actions by the government of the United States. The views of participants do not represent the official position of any institution.

Chairman

Curtis M. Coward, *President, Trident Investment Group LLC; Director, The Atlantic Council of the United States*

Rapporteur

Jeffrey P. Bialos, *Senior Fellow, Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University*

Members

Wesley K. Clark, *Stephens Group; Director, The Atlantic Council of the United States; former SACEUR*

Chas. W. Freeman, Jr., *Chairman, Projects International Inc.; Vice Chair, The Atlantic Council of the United States*

Jacques S. Gansler, *Professor and Roger C. Lipitz Chair in Public Policy and Private Enterprise, School of Public Affairs, University of Maryland*

Christopher J. Makins, *President, The Atlantic Council of the United States*

Robert C. McFarlane, *President, Energy & Communications Solutions, LLC; former National Security Advisor to the President of the United States*

Donald C. Snedeker, *Senior Analyst, Science Applications International Corporation*

Executive Summary

This Report identifies strategic options available to the Bulgarian government and its defense industry, as well as the United States and its NATO partners, for transforming and repositioning the industry for the 21st century and facilitating its integration into the NATO and European Union industrial base. Since other Partnership for Peace (PfP) countries that are aspirants to NATO membership face similar difficulties concerning their defense industries, many of the recommendations herein apply to these countries as well. The report is based on numerous interviews with officials of government entities, private sector firms, and nongovernmental organizations and a review of pertinent governmental and private reports and original documents. A number of the members of the Atlantic Council's working group visited Bulgaria and several of its defense firms in April 2001. Given limitations of time and access to information, the report does not, however, attempt to set forth a thorough review of each firm in the Bulgarian industry.

Historically, in its former role within the Warsaw Pact, Bulgaria was a major producer of small arms and light weapons for export. At the peak in the late 1980s-early 1990s, Bulgaria produced more than US \$1 billion of such weapons for export, representing nearly 10 percent of the country's GDP. About 70 percent of such sales were to other Warsaw Pact countries, 25 percent to Soviet client states all over the world, and only 5 percent to domestic sources, principally the Ministry of Defense. Direct employment during this period was estimated at 115,000 persons, with an additional 400,000 in indirect support.

Since the end of the Cold War, the country's defense industry has experienced massive reductions in production and sales – primarily as the result of two sets of events. First, the collapse of the Warsaw Pact sharply curtailed its traditional markets in Central Europe, the Soviet Union and the former clients of the Soviet Union worldwide. This resulted in significant industry downsizing and sizable debt from cancelled sales or unpaid obligations. Second, and more recently, the Bulgarian government's promising new policy against the illicit export of small arms and light weapons – the industry's major source of revenue in the post-Cold War era – has exacerbated its condition. The resulting loss of revenues and sales has created serious economic and political problems for the current pro-Western Bulgarian government.

Specifically, as discussed in greater detail below:

- Today, the Bulgarian defense industry is facing very difficult circumstances as it seeks to adjust to and compete in the post-Cold War environment. The market for its Soviet era weapons has sharply declined. Russian government policies and actions, including the denial of components, spare parts, and designs to Bulgarian firms, interference with contracts, and demands for licensing fees, have hindered the Bulgarian industry's ability to compete in some markets. Consequently, the industry has closed facilities, downsized from 115,000 to 25,000 employees, and is operating at very low capacity utilization. While most of the 25 firms in the industry have been "privatized" in name, they were

predominantly sold to existing management, with the government retaining interests in some. Hence, without any outside strategic owners or investors, there has been virtually no outside infusion of capital needed for reorienting the industry. The industry also lacks modern management, financial and marketing skills. Moreover, a number of the industry's exclusively defense plants are labor intensive, low tech, antiquated, and in disrepair, and it is difficult to see how they can be converted.

- Despite these problems, the industry is gradually restructuring. The government is in the process of privatizing the remaining state owned firms and, in a sea change in approach, is willing to consider foreign investors in this previously closed sector, as well as a range of privatization approaches (from purchase of entire firms to separate sales of facilities and assets). Leading firms in the industry are in the process of reorienting their production (especially of small arms, light weapons and ammunition) to NATO standards, and are making some, albeit limited, contacts with potential strategic partners and customers in Western Europe and the United States. These firms are seeking new markets and new western partners. However, whether they will be able to penetrate these very protected markets or find appropriate partners remains to be seen. The Bulgarian defense firms possess strategic assets and skills for the future. These include skilled, low cost personnel with significant engineering capabilities, some modern and flexible industrial capabilities that can be deployed for an array of commercial uses (with large, modern, western industrial tooling), and significant maintenance and repair capabilities. They also are capable of producing a wide array of defense and non-defense products.
- The Bulgarian defense industry must make its own difficult transition in the context of the enormous global consolidation of defense industries in response to declining post-Cold War defense budgets. By 1998, defense industries worldwide had lost more than half of their employment from their mid-1980s peak. This process is not yet complete. There is significant unused global capacity, and defense industries worldwide are still under pressure to consolidate and restructure.
- The challenges facing the Bulgarian defense industry also parallel the situations in countries in transition in Central Europe. In countries where significant political and economic reforms were undertaken earlier and more deeply than in Bulgaria, the defense industries and corresponding workforce were substantially reduced during the 1990s. While some of the firms shut down completely and went bankrupt, the industries in all three new NATO countries (the Czech Republic, Poland and Hungary) were largely transformed through a combination of actions: overall market-based economic reforms (which removed impediments to market competition), true privatization of most of the firms, foreign investment and strategic partnerships, reintegration of some firms into the civilian economies (including some degree of defense conversion – with mixed success), some use of defense facilities and assets for other purposes, and some government assistance.
- Finally, it is noteworthy that: 1) there have been recent promising indications of fundamental change in Bulgarian arms transfer policy; and 2) there still are areas where Bulgaria needs to take concrete actions to improve the situation and follow through on its commitments. After years of inaction, the current leadership has taken meaningful

actions to curtail Bulgaria's trade of small arms and light weapons to regions in conflict and countries of concern, including improved licensing procedures and enforcement. Information available from a number of sources indicates that, for the most part, for approximately the last 18 months, new supplies of Bulgarian small arms and light weapons and other heavier weapons systems (e.g., tanks, helicopters, and artillery) are no longer being detected entering regions of conflict or countries of concern. At the same time, there is considerably more work to be done in areas where Bulgarian government commitments have not yet been matched by actions. Specifically, Bulgaria needs to follow through on: 1) its explicit promises and commitments to enact key amendments to its arms export control laws in order to institutionalize its improved arms export licensing and enforcement practices and impose criminal penalties for violations of international sanctions; and 2) its commitment to destroy its large stockpiles of arms and ammunition. Overall, however, Bulgaria has now taken important and encouraging steps forward in this key area.

The Way Forward: Recommended Actions

In these circumstances, it is in the mutual interest of Bulgaria, the United States and its NATO partners that the Bulgarian defense industry be refocused and restructured, in line with its strengths and areas of comparative advantage, to produce appropriate defense products and components for NATO and other legitimate markets, develop and reposition existing commercial operations, convert defense facilities to commercial uses where possible, and close down antiquated and nonconvertible operations.

The industry's transformation and true privatization, and the change in Bulgarian government arms export policies, will not only help remove economic incentives for illicit arms sales, but will promote other important mutual goals: economic reform and growth in Bulgaria, regional peace and stability in Southeast Europe, and the ultimate integration of Bulgaria and its industrial base into NATO and the European Union.

Moreover, the United States and its NATO partners should recognize a series of recent and constructive actions by the Bulgarian government across a range of areas. The current government has been very supportive of NATO coalition efforts in the recent Balkan wars, has moved towards economic and political reform, and has taken steps to curb the exports of small arms, light weapons and ammunition – notwithstanding the economic, political and social costs involved.

A Policy Bargain for Transformation, Reorientation and NATO Integration

The Atlantic Council's working group believes that the equities strongly favor appropriate actions by the United States and its NATO coalition partners on this issue. In effect, we recommend a "policy bargain." In exchange for the current and continuing constructive actions of the Bulgarian government in favor of political and economic reform, regional and global peace and security, and arms export control reforms, the United States and its NATO partners should, for their part, take steps to facilitate the Bulgarian defense industry's successful transition to the 21st century.

Regrettably, there is no quick or easy “silver bullet” approach for transforming and reorienting the Bulgarian defense industry. Rather, a series of short and long-term actions by the Bulgarian government and its defense firms, as well as by NATO, its members, and western defense firms, offers the best prospects for the future.

Bulgarian Actions

On the Bulgarian side:

- The Bulgarian government should continue and build on the dynamic economic and legal reform path it has taken in recent years in order to facilitate business development and provide a hospitable environment for foreign investment needed to transform the Bulgarian economy, including its defense industry. Any significant departure from the reform policies of recent years would chill the environment for investment and transformation of defense industries.
- The Bulgarian government needs to continue and build on its recent, and promising, changes in arms export control policy. The Bulgarian government should expeditiously enact the long pending amendments to its arms export law and take additional visible steps in the enforcement area, including prosecutions and penalties where appropriate. At the same time, these positive Bulgarian actions shift the burden to the United States and NATO to help facilitate the Bulgarian defense industry’s reorientation and remove underlying economic incentives for illicit arms sales.
- Bulgarian defense firms need to draw on their strengths in selected “niche” defense and commercial markets where they have a comparative advantage based on a skilled labor force, low wage rates, location, and customer relationships. To do this, the Bulgarian government should hire a team of marketing and financial consultants to help the leading companies in the industry develop a strategic plan for their future that reorients them toward legitimate markets. The review should examine existing product lines (commercial and military), and identify those that are potentially profitable and those that are not. On the basis of this assessment, the review should recommend appropriate financial, investment, and marketing strategies and should identify possible consolidations of facilities.
- Bulgarian defense firms need to recognize that the future of traditional small arms, light weapons and ammunition export sales is limited. The technology is dated and license restrictions imposed by Russia prevent sales of many traditional products. In addition, the small arms and ammunition markets are suffering from world overcapacity, and numerous market access impediments exist for defense firms from Bulgaria and other PFP countries. These include the need to meet rigorous qualification standards and “buy national” policies in NATO countries designed to enhance their own industrial base and ensure rapid mobilization in times of crisis.
- Given the difficult circumstances in the small arms and ammunition sectors, Bulgarian firms need to seek out other appropriate defense and non-defense-related market niches that draw on their significant existing strengths. These could include: work as

subcontractors to western prime level defense firms in areas where they have comparative advantage (*e.g.*, subassemblies and components for small arms, light weapons and ammunition); development of the firms' significant, modern and flexible civilian capabilities (in machining, bearings, and other areas); work on demilitarization (*i.e.*, destruction of arms and ammunition stockpiles in Bulgaria and other countries in the region); and defense and civilian repair, overhaul and upgrade work (drawing, for example, on the size and scope of Terem's capabilities and Bulgaria's possible position as a regional center). The Bulgarian government should seek to facilitate demilitarization programs (including destruction of its own weapons and ammunition stockpiles) as part of the defense industry's transformation, and should take active steps to solicit western funding for destruction of its stockpiles using local defense firms as contractors.

- To facilitate development of subcontract work for its defense firms, the Bulgarian government should seek specific opportunities for its firms to participate meaningfully in its own defense procurements on a best value, market-driven basis. Encouraging western defense prime contractors which are likely to compete for Bulgarian procurements in the coming decade to become strategic partners with local defense firms is a more sensible approach than requiring generalized (and trade distorting) offsets for such contracts.
- To facilitate their entry into legitimate international markets, Bulgarian defense firms should consider establishing a trade association that could better advertise their skills and capabilities and promote sales and development projects.
- The Bulgarian government should consider, in a manner consistent with its international obligations and broader policy objectives, special incentives to catalyze revitalization, reshaping and conversion of its defense sector, including: waivers of the VAT on capital equipment for U.S. and other foreign investors in defense firms; targeted tax incentives for transitioning defense facilities to non-defense sectors (especially in areas where the government has specific development plans); and programs to develop industry managers with modern managerial, financial and marketing skills (in light of the need for skills in these areas and the continuing "export" of skilled Bulgarians).

U.S. and NATO Actions

As a threshold matter, the United States and its NATO allies should recognize the significant strides Bulgaria has taken on the path to economic and political reform. In light of these recent changes and the new Bulgarian movement to restrain arms exports, the United States and its Alliance partners should reevaluate their panoply of incentive programs, including export financing, political risk insurance, equity financing, and assistance, to ensure that they are as robust as possible. These programs can help to attract needed western investment and generate economic growth as Bulgaria seeks to take advantage of its improved investment climate. These programs also can be potentially useful for private investments in defense conversion projects. In the United States, the Overseas Private Investment Corporation, the Export-Import Bank, the Trade Development Agency and the U.S. Agency for International Development should review their Bulgaria programs expeditiously, and seek to identify concrete opportunities for encouraging investment generally and defense conversion projects specifically.

In the defense arena, the United States and its NATO partners should recognize that Bulgaria and other PfP countries, like other nations of Central Europe and existing NATO members, will seek to retain some defense industrial capability as a matter of national security and security of supply. Accordingly, the United States and other NATO countries should seek to ensure that the retention and revitalization of defense industrial capabilities by Bulgaria and other PfP countries occur in a manner consistent with promoting the procurement of affordable, high quality weaponry by the coalition, interoperability within the alliance, and continued rationalization and competition in defense markets. Since other PfP countries that have aspirations for NATO membership also face similar difficult issues with respect to their defense industries (and since their integration into NATO and the European Union is also a sensible policy goal), many of the recommendations set forth below apply to all such PfP countries, not only Bulgaria.¹

NATO members should take a series of “demand” and “supply” side actions:

- *Enhanced Market Access.* On the demand side, NATO members should seek to remove apparent impediments that hinder PfP country defense firms from participating in NATO markets and allow their participation in a manner that ensures that NATO efficiency and interoperability goals can be met.
- *Defense Industrial Linkages.* On the supply side, the United States and its NATO partners should encourage defense industrial linkages of U.S. and other western firms with those in Central and Southeastern Europe as a means of promoting interoperability, rationalizing defense industries, and providing competition in defense markets and affordable solutions and economies of scale in an era of small national buys.

More specifically, the United States and the NATO allies should do the following:

- The North Atlantic Council should consider the issue of defense industrial capabilities of PfP members as soon as possible, and request that the Conference of Armaments Directors (CNAD) and its Industry Advisory Group consider developing an action plan on an expedited basis (preferably within 6-9 months) to address the future role of the defense industrial capabilities of PfP countries as part of the full integration of these countries into the Alliance. The plan should study and consider ways to address apparent impediments to the participation of PfP country defense suppliers in NATO markets, and should identify appropriate supply and demand side measures. In so doing, the plan should build on the existing participation of PfP countries in CNAD committee activities. The NATO Maintenance and Supply Agency (NAMSA), NATO’s principal logistic support management agency, also should be requested to participate fully in this effort.
- PfP countries, including Bulgaria, should, on an individual basis, consider requesting through their NATO representatives that the CNAD or its relevant committees hold “19 plus 1” meetings to focus on their defense industries. Bulgaria and other PfP countries

¹ The recommendations set forth herein pertain to only those PfP members that have aspirations for NATO membership and are a party to the NATO Membership Action Plan (MAP). Thus, the term “PfP countries,” as used herein, includes only the nine MAP countries among PfP members (Albania, Bulgaria, Estonia, Latvia, Lithuania, Macedonia, Romania, Slovakia and Slovenia).

should identify the problems they face, request that NATO provide assistance (initially in the form of an expert team) as part of the effort to develop an “action plan,” and highlight the need for strategic business partnerships in the defense area.

- Among other steps, NATO should consider establishing, on an expedited basis, a proactive program to qualify PfP country firms’ small arms, light weapons and ammunition produced to NATO standards. While PfP countries already participate in CNAD committees that develop various standards (for example on the safety, storage and transport of weapons), issues of actual market access into NATO markets exist and should be addressed.
- The CNAD and its Industrial Committee should encourage the United States and other collective and national procurement authorities in NATO countries to open their bidding processes to consider subcontract work for Central/Southeast European defense firms in their national, joint and NATO procurement programs.
- NAMSAs should consider setting aside a portion of its acquisitions of ammunition for qualified firms from PfP countries as a transitional matter (5 years) and should also consider allowing qualified PfP country suppliers to compete for NATO maintenance and repair work (especially in-theater work in Southeast Europe) as well as spare parts and components contracts.
- The United States and its NATO partners should consider moving expeditiously to enter into a new type of “transitional” procurement agreement with “eligible” PfP countries, such as Bulgaria, for a 3-5 year period that facilitate access into NATO markets, and encourage these countries to adopt open and fair procurement systems and other rational and non-distorting acquisition practices. The “bargain” could include 3-5 year unilateral, case-by-case waivers of “buy national” rules, joint cooperative projects, and small set asides for ammunition purchases from PfP countries on a best value, competitive basis.
- To facilitate investment, the formation of strategic partnerships and other business relationships (e.g., subcontracting, sales into NATO markets), the United States and its NATO partners should organize and support “industrial” missions by western defense firms to PfP countries (possibly focusing such missions around a conference on defense industrial capabilities in PfP countries). These missions should be carefully coordinated with the appropriate agencies in the Bulgarian government.
- The United States, other NATO partners, NATO and other international governmental and non-governmental entities should: (1) step up their constructive efforts to destroy stockpiles of light arms, small weapons and ammunition in Southeast Europe in order to promote regional stability, curb arms sales to regions of conflict and countries of concern, and promote the conversion of local defense industries; and (2) deploy some of the resources available for the destruction of light arms, small weapons and ammunition to hire firms in PfP and Southeast European countries to engage in this work.

- NAMSA should consider expanding its Ammunition Data Base, which facilitates access to interoperable ammunition in times of crisis, to include ammunition from PfP countries.
- Given the large potential procurement market in Bulgaria and other PfP countries in the coming decade as these countries modernize their forces, NATO-based prime aerospace and defense contractors should be encouraged to develop strategic relationships with Bulgarian and other PfP country defense firms. Defense firms in NATO countries should seriously consider joining organized missions to PfP countries, and review the prospects of making investments in PfP country defense firms.
- In the long term, NATO and its member countries should encourage countries in Central and Southeast Europe to develop collective procurement mechanisms for military acquisitions as they modernize their forces in the coming years. The intra-regional integration of their defense assets will help to encourage greater regional stability and security – especially in Southeast Europe.

The Bulgarian Defense Industry

Strategic Options for Transformation, Reorientation & NATO Integration

I. The Bulgarian Defense Industry in an Era of Transition

The Bulgarian defense industry has been through two major adjustments: first, the end of the Cold War, the collapse of the Warsaw Pact, and the resulting collapse of its traditional markets in Central Europe, the Soviet Union and its client states; and more recently, the Bulgarian government's new policy against the illicit export of small arms and light weapons to embargoed countries and groups – the industry's major source of revenue in the post-Cold War era. As a result, the industry faces significant challenges as it seeks to adjust to and compete in this new, post-Cold War environment.

The Industry's Origins, Its 1980s Peak & Post Cold War Decline

Founded more than 120 years ago, the Bulgarian defense industry began to take its modern form in the 1930s. The major enterprises were established at that time, and facilities were set up in the towns of Kazanluk, Sopot and Rousse for repair of small arms, light weapons and air armaments. Subsequently, these operations were expanded into maintenance and repair facilities.

The Bulgarian defense industry (known during Soviet times as the military-industrial complex) peaked in the late 1980s, when the system was composed of two consortiums, with 150 companies. According to the Bulgarian government, the industry's total employment topped out at approximately 115,000 during this period. The industry was estimated to have annual sales over \$1 billion at its peak.² The industry's capacity, sized to meet the broader demands of the Warsaw Pact system, far exceeded Bulgarian demand. In fact, historically, approximately 90-95 percent of the industry's so-called "special production" output was exported. Arms sales may have accounted for as much as nine percent of the country's export earnings. As a member of the Warsaw Pact, the industry produced its defense products in accordance with Soviet standards. Like other defense industries in Central and Eastern Europe, the more sophisticated equipment was often manufactured with key parts either imported from the Soviet Union or produced locally under Soviet license.

² "Bulgaria: Money Talks," *Human Rights Watch Report* (April 1999) ("HRW Report"), Chap. II, p. 1.

The Focus on Small Arms, Light Weapons and Ammunition Production and Overhaul, Maintenance and Repair. Consistent with the Soviet approach toward other Warsaw Pact members, the Bulgarian industry's capacity was fairly specialized – focusing on small arms and light weapons, ammunition, and the overhaul, maintenance and repair of these weapons.

The industry traditionally provided AK-47 Kalashnikov rifles (the assault rifle of choice around the world) and various other small arms and light weapons and ammunition to Warsaw Pact countries, Soviet client states in the Middle East and elsewhere – such as Cuba, Ethiopia, India, Iraq, Libya, Nicaragua, Syria, and Yemen – and rebel groups for use in “wars of liberation.”

The Bulgarian industry also historically produced a range of more sophisticated weaponry, including radar, communications, defense electronics and surface-to-air missiles, again mostly under Soviet license. The industry provided maintenance, repair and overhaul services for virtually all Soviet era military platforms – from MiGs and aircraft engines to armored vehicles, ships and submarines – for the Warsaw Pact's southern flank.

Like other countries in the Soviet bloc, Bulgaria established a state-owned trading company, Kintex, which was the nation's only authorized weapons export company during the Cold War period. Kintex established and maintained virtually exclusive relationships with customers all over the world, and as a result the defense firms themselves had little contact with the outside world.

The Shift to Civil Production. Pursuant to the Gorbachev-era policies of the late 1980s, the Bulgarian industry, like the defense industries in the Soviet Union and elsewhere in Central Europe, significantly increased its non-military capability. Modern new facilities were built for casting precision and large-dimension parts from ferrous and non-ferrous metals; forging press operations; manufacturing a diverse range of instruments and tools, including automated product, assembly, pyrotechnics, ammunition mounting; manufacturing parts and components for communications equipment; and manufacturing optical components and devices. These modern facilities included highly capable heavy machinery from Switzerland, Germany, Japan and elsewhere. They enabled the firms to develop production in roller bearings, metal-cutting machines, combustion equipment and gas accessories, medical equipment, agriculture and food processing equipment, radio-electronic articles, devices and apparatus, and industrial explosives.

As a consequence of the shift into commercial areas, the industry's civil output grew markedly in the last half of the 1980s (but still apparently accounted for less than 40 percent of the defense industry's total output). The civil output was produced and bartered in a non-market environment pursuant to the CMEA framework of central planning.

The Post-Soviet Era Industry Decline. From its 1980s peak, the industry began a decade-long period of downsizing and decline resulting from the demise of the Soviet Union and abrogation of the Warsaw Pact. Bulgaria's traditional markets significantly declined. With the collapse of communist governments in Central and Eastern Europe, traditional customers, members of the Warsaw Pact, no longer sought Bulgarian defense products made to Russian standards. Exports to other Soviet client states also declined as the desire for Soviet

weaponry eroded. Moreover, some orders were cancelled and some customers failed to pay for past arms purchases – leaving the industry with heavy debt.

The adverse effect on the industry was significant. A number of factories suspended production or closed down and employment declined significantly in the early 1990s, leading to worker protests in several Bulgarian cities in late 1992.³ The concentration of the arms industry in several Bulgarian cities and towns meant that those regions were disproportionately affected. The industry also accumulated significant stockpiles of unsold weapons in the early 1990s – by some accounts as high as \$800 million by 1992. Moreover, the collapse of the broader economy in Bulgaria meant lower state subsidies and fewer funds for research and development or continued transformation and modernization. As a consequence, many, though not all, of the Bulgarian facilities have not been modernized and little research and development activity has taken place within the defense industrial sector since the early 1990s.

Unfortunately, the slow pace of Bulgarian economic reform during much of the 1990s (see discussion below) and a four-year moratorium established by the Bulgarian National Assembly in 1993 on the privatization of the Bulgarian defense industry significantly impeded progress toward the reform and revitalization of the defense industry during the last decade.

Bulgarian Arms Transfer Policy: Signs Of A Sea Change

A potent mix of circumstances created powerful supply-side incentives for the Bulgarian industry to export arms during the 1990s. The drying up of traditional Warsaw Pact and other markets, the slow pace of reform, the economic decline of the defense industry and the broader economy, and the corresponding Bulgarian need for hard currency earnings all fueled Bulgarian arms exports – both legal and illegal. Also, during the 1990s industry crisis, some industry and military officials advanced national security arguments for maintaining a strong defense industrial base as a rationale for illicit exports.⁴

Unfortunately, on the demand side of the equation, Bulgarian arms were most sought after by governments and rebel groups subject to international sanctions that could not obtain weapons legally. Thus, during most of the 1990s, there has been a series of press reports of Bulgarian arms entering conflict areas – from Africa to Latin America.⁵ As Human Rights Watch stated in a 1999 report,

Bulgaria has earned a reputation as an anything-goes weapons bazaar where Kalashnikov assault rifles, mortars, antitank mines, ammunition, explosives and other items are available for a price – no matter who the buyers are or how they might use the deadly wares. In the 1990s Bulgaria has been a weapons source for armed forces in Iraq, the former Yugoslavia, Angola, and Rwanda, among other countries. It has been implicated repeatedly in weapons sales to regions of armed conflict, countries under international or

³ “HRW Report,” Chp. II, at 2.

⁴ “HWR Report,” Chp.III, at 2.

⁵ *Peru Press Review*, Lima La Republica (Aug. 23, 2000); “Peru Daily Traces Gun Smuggling Through Trinidad.”

regional arms embargoes, and armed forces known to commit gross violations of human rights and international humanitarian law.⁶

Numerous reports indicate that a number of these sales were made through an underground economy involving middlemen or brokers, rather than normal trade channels, and were aided and abetted by a lax regulatory system for exports.

Bulgaria was also prominently mentioned in a March 2000 report by a panel of experts established by the United Nations Security Council to investigate violations of Security Council sanctions imposed on the sale and delivery of arms and military equipment to the Uniao Nacional Para a Independencia Total de Angola (UNITA), under the leadership of Jonas Savimbi. Specifically, the panel determined that the evidence it collected “overwhelmingly points toward Bulgaria as the source of origin for a majority of arms purchased by UNITA – at least since 1997.”⁷

Bulgaria subsequently cooperated with UN Security Council efforts to investigate the matter further and provided detailed information to the UN on the shipments. The Bulgarian Council of Ministers also adopted a decree in July 2000 that expressly implements the UN sanctions against UNITA, prohibits among other things the sale or supply of arms and related material of all types, regardless of their origin, by Bulgarian nationals and legal entities from Bulgaria to UNITA, establishes fines, and sets forth Bulgaria’s intent to amend its laws so as to provide criminal penalties for violations of international sanctions.⁸ (The decree does not expressly prohibit, however, all arms sales to Angola – thus leaving open the prospect of transshipment.)

A final UN report on the Angola sanctions issued in December 2000 and a subsequent addendum provided additional information and circumstances surrounding these shipments on the basis of information provided by Bulgaria. Significantly, the report also highlighted other sources of supply for weapons shipped to UNITA, including Ukraine, the Russian Federation and China.⁹ The UN found that while Bulgaria has “wide ranging legislation governing various aspects of the export of arms and dual use goods,” large quantities of the Bulgarian exports in question occurred through the use of end-user certificates from Togo that proved to be false and that, in fact, “there is reasonable ground to conclude that all of the equipment in question ... was destined for UNITA.”¹⁰ The UN Report also found that “the Bulgarian export control authorities and the Bulgarian supplying companies have acted on the basis of end-user certificates that they considered authentic.”¹¹ The UN report then

⁶ “HWR Report,” Chp. I, at 2.

⁷ March 10, 2000 “Letter from Chairman of the Security Council Committee Established Pursuant to Resolution 864 (1993) Concerning the Situation in Angola Addressed to the President of the Security Council, United Nations Security Council (General S/2000/203),” Paragraph 39. It should be noted that the panel, in its report, Paragraph 56 (Recommendation 5) supports the proposal of the chairman of the Sanctions Committee that compliance with United Nations sanctions regimes should be among the criteria considered by NATO and the European Union when evaluating candidates for new membership.

⁸ “Decree No 126, July 1, 2000, On the Implementation by the Republic of Bulgaria of the UN Security Council Resolutions on the Imposition and Implementation of Sanctions Against UNITA.”

⁹ See “Final Report of the Monitoring Mechanism on Angola Sanctions,” UN S/2000/1225 (Dec. 21 2000) (“Final Report”); Addendum, UN S/2001/363.

¹⁰ “Final Report,” at 10, 18.

¹¹ “Final Report,” at 18.

concluded that “while the export control systems and procedures” of Bulgaria and other countries “we have reviewed contain safeguards to prevent diversion of weapons to embargoed countries and other entities, the [UN] would nonetheless like to stress the need for arms exporting countries to strengthen their verification methods.”¹²

The Bulgarian government also has acknowledged exporting surplus weapons during the 1990s.¹³ In this regard, the 1990 Conventional Forces in Europe Treaty required Bulgaria and other countries in Europe to reduce inventories of certain weapons categories. This obligation effectively meant that governments could either destroy the equipment and sell it for scrap or export it. Again, a mix of powerful economic incentives has driven exports of surplus weapons by Bulgaria.

Bulgaria’s international commitments and laws on arms sales were not matched by actions during most of the 1990s. Bulgaria’s arms sales to regions and countries of concern in the 1990s occurred notwithstanding Bulgaria’s international commitments to arms sale restraint and the adoption of a rigorous arms export control law.

As a member of the United Nations, Bulgaria is committed to abide by UN Security Council Resolutions, including those imposing arms embargoes. Bulgaria is also a member of the Wassenaar Arrangement, which regulates the export of arms sales and dual-use goods. While Wassenaar leaves decisions on particular arms sales to individual countries, its members are nevertheless committed to maintain reasonable arms export policies and to avoid destabilizing accumulations of weapons or weapons sales to regions of conflict. Bulgaria is also formally committed to the 1993 criteria on arms exports of the Organization for Security and Cooperation in Europe (OSCE), which call for transparency and restraint in arms transfers.

In addition, in the mid-1990s, Bulgaria adopted a set of national laws and regulations on arms trade that establish a dual licensing procedure. First, a Bulgarian firm must obtain a license to participate in arms trade from the Interministerial Council on Defense Industry and Logistics at the Council of Ministers, a cabinet-level body. Second, a commission of the Trade Ministry authorizes individual arms transactions.¹⁴ Penalties are established for unauthorized trade and other violations, and documentation is required.

Despite these laws and international commitments, a series of Bulgarian governments failed to restrain Bulgaria’s illicit arms sales in the 1990s. The early 1990s government of Prime Minister Philip Dimitrov made a strong commitment to arms export control, but was unable to control the arms trade in practice. Subsequent Socialist governments in the mid-1990s paid lip service to restraint and made minimalist efforts to restrain arms sales or chose to take no meaningful actions. The failure did not reflect the absence of necessary laws or regulations or policies, but, for the most part, the fundamental lack of political will to enforce the existing rules.

¹² Id.

¹³ “HWR Report,” Chp. 3, at 3;

¹⁴ For a full description of the Bulgarian law and regulations and the dual licensing process, see “HWR Report,” Chp. IV.

Following the election in 1997, which brought the United Democratic Front to power, there has been increased focus on the small arms trade and its adverse impact in regions of concern. The United States and its NATO partners, as well as various non-governmental and international governmental institutions, have encouraged the Bulgarian government to address the problem. Indeed, the Stability Pact for Southeastern Europe has recognized that the “availability, accumulation and uncontrolled flow of small arms and light weapons ... pose serious threats to peace, stability and reconciliation in the region,” and has sought to develop regional approaches to addressing the issue. Also, in July 2001, the United Nations is holding a major gathering of the world’s governments to address what it calls “this critical humanitarian, development and human rights issue.”

Significantly, after years of inaction, the current Bulgarian government has taken meaningful actions to curtail Bulgaria’s small arms and light weapons trade to regions in conflict and countries of concern. Information available from a number of sources, including the U.S. Department of State, indicates that for the most part, for approximately the last 18 months, new supplies of Bulgarian small arms and light weapons and other heavier weapons systems (e.g., tanks, helicopters, and artillery) are no longer being detected entering regions of conflict or countries of concern. While there continue to be sporadic recoveries of gray market commercial sales of newly produced Bulgarian weapons, it is hard to tell when the weapons were exported from Bulgaria. In this regard, sources caution that light arms sales are difficult to track and that information is largely anecdotal. Hence, while progress has clearly been made, they do not believe that the information available is sufficient to draw definitive conclusions that the problem has been completely addressed.

More specifically, the clear signs of progress by the Kostov government include not only its public commitments to adhere to international arms export control standards, refrain from arms sales to regions of conflict, and improve its regulatory controls in order to curtail illicit arms trade, but a series of actions to back up its words:

- With technical assistance provided by the United States, among other countries, the Bulgarian government has improved its administrative licensing process and customs enforcement mechanisms in practice. Applications for arms exports have been denied. More specifically, pending the adoption of a new law, the government has in practice begun to put in place a better regulatory regime for arms exports, including a more rigorous system of mandatory end user verification certificates for arms exports to non-embargoed countries in Africa and Asia in close proximity to risky or sanctioned areas.¹⁵ The Bulgarian government is now authenticating information on the certificates prior to export and making post-shipment checks on actual deliveries. Bulgaria is using its embassies abroad to check end user certificates and is also cooperating with responsible authorities in other nations.

Other steps are being taken to address transshipment through Bulgaria of foreign arms and diversion of Bulgarian arms (through re-exports) from the country of ultimate destination to a third country. Thus, to obtain permission for importation of arms into Bulgaria, the end user in Bulgaria must be verified. Also, a register of firms acting as

¹⁵ Statement by Dr. Vladimir Sotirov, Chargé d’Affaires A.I., Permanent Mission of the Republic of Bulgaria to the United Nations, UN Security Council Debate on “The Situation In Angola,” February 22, 2001.

intermediaries and brokers is being put in place to improve controls.¹⁶ These steps help address “re-export” and gray market trade, and help respond to criticisms that the Bulgarian government took a narrow, formalistic approach and only looked at the specific purchasers rather than ultimate end users or diversion situations.

- In 1998, the Bulgarian government committed to the principles set forth in the European Union’s Code of Conduct on Arms Exports (which calls on states to limit arms sales, including to regions of violent conflict and armed forces that abuse human rights).
- After taking office, the government replaced members of boards of directors and supervisory boards of various arms companies, and also replaced leaders of Kintex and other arms trading companies.
- Bulgaria has cooperated fully in Stability Pact efforts to address small arms issues, and has committed to expanded cooperation within Southeast Europe on these issues, including sharing of information on transfers of arms, working to harmonize systems of end user certificates, and improving customs capabilities.
- On July 11, 2000, the Bulgarian government issued a decree providing for strict implementation of all Angola-related United Nations resolutions by Bulgarian nationals and corporate entities. Similar decrees also have been adopted to ensure compliance with the UN Security Council sanctions against Ethiopia/Eritrea, Sierra Leone and Afghanistan.
- The government has, for the first time, explicitly issued an arms export black list of seventeen countries and sanctioned groups, including UNITA, operating in three other countries. The Council of Ministers, in early April 2001, determined and announced that Bulgaria would not export arms, munitions, military transport equipment or spare parts to Yugoslavia, Armenia, Azerbaijan, Afghanistan, Myanmar, Bosnia and Herzegovina, Eritrea, Ethiopia, Iran, Iraq, Yemen, China, the Democratic Republic of Congo, Liberia, Libya, Somalia, Sudan and sanctioned rebel groups in Angola (UNITA), Rwanda and Sierra Leone. This list goes beyond nations subject to UN embargoes to include countries in regions of conflict and other countries “of concern” because of complicity in international terrorism. This decision is in stark contrast with earlier Bulgarian governments’ more narrow interpretations of the country’s international obligations and a refusal to list restricted countries officially and publicly.
- Bulgaria is stepping up its enforcement activities. In April 2001, Bulgaria impounded a Ukrainian plane, which stopped in Bulgaria for refueling, that was found to carry approximately 30 tons of Czech light arms allegedly destined for Eritrea, a country under a United Nations arms embargo.¹⁷ Bulgarian authorities determined that while the weapons had end user certificates for the Georgian Armed Forces, the aircraft and its

¹⁶ Id.

¹⁷ “Bulgaria Impounds Foreign Plane Loaded With Arms,” Reuters, April 29, 2001; “Eritrea Bound Arms Came from Czech Republic,” Agence France Presse, May 1, 2001.

shipment were destined for Eritrea. While this was in a transshipment situation only – stopping arms apparently produced in one foreign country in transit to another – the visible Bulgarian government action is nevertheless promising. However, to date, there are no apparent significant prosecutions or fines issued by the Bulgarian government in the arms export area – which is critical to highlighting the government’s changed approach.

There are other areas where improvements are needed and where commitments have not yet been matched by actions. While the government in late 1998 approved promising draft legislative amendments to tighten its arms export control laws, the legislation has languished in the National Assembly for an extended period of time. The amendments, if enacted, could strengthen criminal penalties, institutionalize improvements in the export permit and licensing process, better regulate brokering activities, and align Bulgaria’s legal framework more closely and explicitly with its international arms control obligations (for example, by making observance of UN Security Council decisions mandatory and allowing the government the right to ban arms deals when weapons are destined for a state in which there are ongoing military operations or which is involved in armed conflicts). Unfortunately, however, the legislation has not moved forward, despite frequent senior level commitments by the Bulgarian government to the U.S. government to move it forward. While no action is expected before the Bulgarian elections in June 2001, the Bulgarian government’s failure to advance this legislation expeditiously thereafter would undermine the credibility of its efforts at improvement in this area.

Also, while the government has committed to taking actions to destroy significant portions of its residual arms stockpiles within the framework of the Stability Pact, little action has apparently ensued. Presently, Bulgaria and the United States are in the process of negotiations leading to the possible use of U.S. demilitarization funds to hire Bulgarian firms to destroy approximately 150,000 small arms (primarily assault rifles). We encourage the successful completion of these discussions.

Finally, Bulgaria has not yet followed through on its decision to set up a new, independent arms export agency, which also requires the enactment of the pending legislation. However, the government has taken initial organizational steps, including establishing a skeletal organizational form, obtaining a needed computer tracking system, and identifying appropriate personnel. This initiative should continue following the national elections.

In sum, we find that, as of this writing there are promising signs of change in Bulgarian policy and the actual flows of Bulgarian weapons to regions of conflict and countries of concern have apparently been significantly curtailed in the last year and a half. However, there is considerably more work to be done and Bulgaria needs to enact the pending legislation as soon as possible after the Parliament reconvenes in order to institutionalize and make permanent its changed practices.

Moreover, the curbing of this traditional export trade has exacerbated the problems in the defense industry, and resulted in the shutdown of additional production lines and facilities. Hence, unless the industry is successfully restructured and transformed – with idle capabilities shut down, civil production expanded, and the like – the firms will continue to have incentives to export illicitly. Accordingly, the Bulgarian government has now put a

premium on moving to restructure its defense industry expeditiously in a manner that reforms and reorients the firms toward legitimate markets for legitimate products.

One irony is that privatization and the loosening of government control over the industry and government-owned trading companies may, in the short term, actually undermine arms export constraints. One way the government has attempted to keep the problem of illicit arms exports in check is through its ownership and control of firms in the industry, especially the trading companies like Kintex. Kintex is still 100 percent state owned, and much of the country's small arms sales (approximately 50 percent) are still made through it. Bulgarian government officials note that the continuing use of Kintex as the major channel for arms sales helps in its ability to control the sales. Thus, the recognition that full privatization and the expanded involvement of private firms in export trade will eliminate this control lever puts a premium on the government's efforts to restructure and reorient the industry to different products and markets. Moreover, as the firms are fully privatized and develop their own export capacity, the government will need to rely on regulatory mechanisms rather than direct ownership and control as a means of controlling the arms trade.

The Bulgarian Defense Industry Today: Challenges for the Future

Today, the Bulgarian defense industry is comprised of approximately 25 firms, most of which have been "privatized," at least in legal terms, as discussed below. During our study trip to Bulgaria, we visited a number of key firms, which together account for over 50 percent of the industry's employment: VMZ and Arsenal, the two largest defense firms, and Kintex, the leading Bulgarian trading firm for defense products. We also were briefed by senior officials from Terem SHC, the Bulgarian state-owned arms maintenance and repair firm.¹⁸

By way of overview:

- *Wide Array of Production Capabilities.* The Bulgarian defense firms have a wide array of production capabilities across a range of defense and civil products, from small arms and light weapons such as Kalashnikov assault rifles, artillery, ammunition, howitzers, radar and armored vehicles to optical devices, electronics and wireless communications. The firms' civil capabilities include bearings manufacture (VMZ), industrial drills and milling machines, tools, liquid propane gas cylinders, various industrial parts and components (milled and forged), and an array of other products.
- *Mix of Defense/Civil Production/Sales.* Defense production probably accounts for roughly 60 percent of the revenue of these firms today. The firms have flexible capabilities that can be shifted among different products.

¹⁸ The situations at these firms, which illustrate both the problems and opportunities facing the industry as a whole, and brief summaries of the capabilities of other firms in the Bulgarian defense industry which time did not permit us to visit, are set forth in appendices to this report that are available on request from the Atlantic Council.

- *Recent Exports.* While the bulk of the revenues from defense production industry-wide were historically from small arms and light weapons sales, Kintex personnel stated that the primary defense exports today by the Bulgarian industry were unguided missiles (to India and Algeria), 120 kilogram gravity bombs, 30 millimeter grenades for grenade launchers, C-5 missile modifications, and 40 millimeter grenade launchers. Kintex estimated that total Bulgarian defense exports were approximately \$100 million for 2000 (with approximately \$50 million through Kintex and another \$50 million in exports through other licensed firms).

The Bulgarian defense industry today faces serious challenges and hurdles as it seeks to make up for lost time, find new products for its talents and new markets for its products in a competitive market environment:

- The markets for the Bulgarian industry's Soviet era defense products are very limited for a number of reasons: many of the products are antiquated (there is little demand going forward, for example, for Soviet-standard unguided missiles), many of the traditional purchasers are shifting to NATO-compatible equipment, and weapons export sanctions policies noted above have constrained exports, especially of small arms and light weapons to other markets;
- Russian government policies and actions have hindered Bulgaria's ability to compete in some defense markets. In overt efforts to facilitate sales by its own struggling defense industry, Russia has: 1) denied components/raw materials/spare parts to Bulgarian defense firms, thereby making it difficult for them to produce or repair a number of existing product lines; 2) sought to deny drawings/designs or use of Russian technical information without the payment of license fees; and 3) in some cases, directly sought to interfere with Bulgarian contracts with its traditional customers, such as India. The Bulgarian government has been unwilling to pay license fees to Russia for antiquated products/components with short life spans. Also, as a matter of policy, the current Bulgarian government has been unwilling to settle license disputes by providing Russians with equity ownership in Bulgarian defense firms;
- While the industry has a wide array of product lines (commercial and military), it generally has very small production runs. Moreover, a number of the product lines probably make no sense (from a profitability standpoint) and should be discontinued. These products were often developed on the basis of technical competence rather than market opportunities and, hence, may not be competitive in the new market environment;
- A number of defense-unique plants are labor-intensive, low tech, antiquated, and in disrepair, and it is difficult to see how they can be "converted"; they are likely to be closed, the buildings used for an entirely different purpose, and the skilled labor force redeployed. Moreover, there are virtually no synergies between some of the facilities at the same company, suggesting that the restructuring of some of the larger firms and sales of individual facilities or other assets is a serious possibility;

- Given the low demand for its traditional products, the Bulgarian industry's facilities are not surprisingly operating at very low capacity utilization rates. Civilian industries that supply the defense firms (metallurgy, chemicals, electronics, and mechanical engineering) have also been adversely impacted and downsized ;
- Consequently, the industry employment has declined substantially from 110-115,000 in the late 1980s to 25-30,000 today – causing serious political and social unrest in some regions. Several towns that are heavily dependent on defense firms for employment and revenue, such as Sopot (VMZ) and Kazanlak (Arsenal), have been particularly affected. A number of firms have already been liquidated, and others are likely to continue to be downsized;
- The defense firms have sizable debts and significant problems financing their obligations to the government, municipalities, the National Social Security Institute, banks, suppliers, and power companies;
- The defense firms have virtually no funds to invest in product research and development, facility modernization, or future market development and are badly in need of investment;
- Most defense firms lack marketing skills and capabilities needed to identify new markets or potential investors; the firms are especially limited in expertise in identifying international markets and potential foreign investors. As already noted, during the Soviet era, a single state firm, Kintex, had a monopoly on defense exports. Accordingly, other firms in the industry did not have the right to develop overseas contacts and had little opportunity to develop marketing expertise. While Kintex's state monopoly has been ended and approximately 20 firms today have licenses to export defense products, these firms nevertheless lack marketing skills and contacts and have not yet fully explored their market potential.
- The industry also lacks needed management, financial and accounting skills as experienced managers have left, and the remaining managers are primarily engineers without financial and marketing expertise. The industry is also losing engineering/scientific capabilities as talented engineers look elsewhere for their future.

An Accelerated Pace of Industrial Transformation. Despite these changes, industrial restructuring is proceeding. The industry is now adjusting to its new market circumstances and has considerable resources and assets for the future.

With the 1997 change in government (see discussion below, section II(a)), the new reform-minded government accelerated the pace of transformation in the defense sector and the parliamentary moratorium on privatization in the sector was lifted. Pursuant to the government's 1998 privatization program, 18 of the 25 leading defense firms have now been "privatized" in legal terms; the state has retained a 34 percent stake in only five of them. Additional privatization is underway.

The privatization is really incomplete, however, because most of the private ownership interests in the defense firms are held by pre-existing management and the firms owe significant debt to the government and various regional and local governments. Also, there has been no real infusion of new leadership, investment, or management, financial or marketing expertise into the industry through privatization.

There is currently no foreign ownership or investment in Bulgarian defense firms, and historically the Bulgarian defense sector has been closed to foreign participation. This restriction was lifted by the current government in 1999, thus permitting foreign investment and ownership in the defense industry. Moreover, the government recognizes that further privatization may require a range of approaches and is prepared to be flexible; the government is willing to privatize parts of the companies separately, as appropriate. For example, in its published strategy for the privatization of VMZ, one of the leading defense firms, the government explicitly recognizes that some of the firm's assets, including the firm's bearing plant and other facilities and properties, may be sold separately.¹⁹

At government urging and direction, the companies, including those now privatized, are moving forward and undertaking restructuring activities:

- Some facilities have been closed and some product lines discontinued.
- The defense firms have made efforts to reorient their production toward NATO markets (converting to NATO caliber 5.56mm ammunition and other NATO standards, for example). A number of plants are in the process of meeting NATO standards and ISO 9000 standards.
- The firms are making contacts with firms and potential customers in the West, although the contacts remain limited, sporadic and not well organized.
- While we have not seen financial data concerning the defense firms, Ministry of Defense officials assert that a number of them are approaching the break-even point, at least on a cash basis, although many are still believed to be operating at a loss.

The Industry's Strategic Assets & Skills. The Bulgarian defense firms do have significant assets that can be deployed for the future:

- *Skilled, Low Cost Personnel.* A key resource is skilled Bulgarian personnel available at low wage rates (when compared to their western counterparts). Generally speaking, the firms have a highly skilled workforce, with considerable engineering and design capabilities. The skilled labor rate is very low in Bulgaria – a key comparative advantage. The national average for skilled labor is approximately \$120 per month (varying widely by region, with Sofia higher and lower rates in smaller towns);
- *Modern and Flexible Industrial Capabilities.* The major firms, including VMZ and Arsenal, have significant and modern large scale commercial manufacturing facilities, with

¹⁹ See "Summary of the Strategy for Privatization of VMZ EAD, Sopot" (at www.priv.government.bg/ap).

considerable German, Japanese and other western industrial tooling (from hydraulic presses to injection molding equipment to computer controlled lathes and other precision equipment) for the production of a range of large industrial machines, tools, and milled and forged products. This equipment can be utilized for a range of commercial purposes. VMZ, as noted above, has a significant bearing facility that accounts for a considerable portion of its sales and revenue;

- *Significant Maintenance and Repair Capabilities.* Terem, a government owned entity, has very large maintenance, repair, and overhaul facilities because of its role in servicing the military equipment fleets of the southern flank of the Warsaw Pact and various Soviet client states (for example, including the capacity to service 300 tanks simultaneously). Terem's capabilities range across land, sea and air platforms and also include some manufacturing capability. These include the large Varna shipyard. Terem, like VMZ, Arsenal and other firms, has a wide range of modern industrial equipment, from digitally controlled lathes to high precision grinding equipment.

In sum, while the Bulgarian defense industry faces significant challenges going forward, it has considerable assets to bring to bear as it seeks to be competitive in international markets.

The Bulgarian Industry's Challenges in Context: The Post-Cold War Global Downturn in Defense Industries. It also must be recognized that the Bulgarian industry is not alone in facing serious challenges in adjusting to new post-Cold War political and economic realities. In the post-Cold War era, cutbacks in peacetime defense budgets worldwide have resulted in a significant reduction and consolidation of defense industries globally. In the United States, what once were 55 defense units are now five; in Europe there has been a consolidation down to two large defense primes. Defense industries worldwide lost 450,000 employees in 1998. From a global peak of 17.6 million employees in 1987, the defense industry had lost more than half of its employment by 1998.²⁰

This process is not yet complete and "the defense industry worldwide has continued to be under pressure to consolidate and restructure."²¹ There is still significant unused global capacity across national defense industries – raising serious questions of affordability and economies of scale given fewer and smaller-sized procurements. Indeed, in light of these and other key changes in the security environment, there has been a shift toward a new paradigm in defense policy. Rather than resort to insular defense industries, as in the past, the United States and its NATO coalition partners are moving toward the integration of their defense industrial bases. Alliance members are encouraging trans-Atlantic defense industrial linkages as a means of maintaining competition and open markets within the Atlantic marketplace and improving interoperability of coalition forces in an era when coalition warfare is likely to be the norm. Of course, developing these linkages requires addressing a series of difficult issues, including how to maintain security and prevent the diversion of key technologies to third parties in a globalizing economy. While these issues are challenging, approaches to addressing them are being developed and transatlantic defense industrial integration is now moving forward.

²⁰ *Conversion Survey 2000 on Global Disarmament, Demilitarization and Demobilization*, Bonn International Conversion Center (2000).

²¹ *Id.* at 7.

Thus, to some extent, the challenges facing the Bulgarian defense industry are a subset of issues affecting defense industries everywhere, and reflect the need to rationalize facilities and improve efficiency while maintaining competition in a peacetime era of lower global demand for military products. Simply put, the level of demand for military equipment and services in peacetime (as reflected in defense budgets) means that many smaller nations will not be able to afford stand-alone defense industries to supply their needs. Notwithstanding the desire to maintain separate domestic industries on national security grounds, considerations of basic economics will inevitably drive national industries toward continued downsizing and further integration. Many smaller nations will no longer be able to afford to maintain prime defense contractors that manufacture significant defense platforms (e.g., military aircraft, ships, ground combat vehicles, etc.), and their industries are likely to migrate toward subcontractor or niche roles in areas where they have comparative advantage. This process is already occurring in Europe, where only a few military platform providers can now be found in the smaller countries.

The Experience in Defense Industrial Restructuring Elsewhere in Central Europe The challenges facing the Bulgarian defense industry parallel similar situations in other countries in Central Europe. The results to date are instructive. In those countries of Central Europe where significant political and economic reforms were undertaken earlier and more deeply than in Bulgaria, the defense industries and corresponding workforces were significantly reduced during the 1990s. While some of the firms shut down completely and went bankrupt, the industries in all three new NATO nations (the Czech Republic, Hungary, and Poland) were largely transformed through a combination of actions: overall market-based economic reforms (which removed impediments to market competition), privatization of most of the firms, foreign investment and strategic partnerships, reintegration of some firms into the civilian economies (including some degree of defense conversion and some use of defense industry facilities and assets for other purposes, such as industrial parks), and some government assistance (including technical assistance to aid in restructuring).²²

Conversion of defense facilities to profitable commercial endeavors is difficult in the best of circumstances. The empirical evidence indicates that key factors enabling conversion include: the growth of the nation's economy; commitment of the company, especially management; commonality of technologies – products and processes; marketability of alternative products; availability of capital; flexibility of employees, especially management; level of defense dependence of firms; and government support.²³ Even in ideal circumstances where these factors are present, defense conversion “takes time and is not an easy or quick solution to defense downsizing.”²⁴ Thus, not surprisingly, the track record on defense conversion in Central and Eastern Europe, where circumstances are far less than ideal, is decidedly mixed. In Poland, for example, where a number of firms attempted conversion, key impediments included the lack of capital, the lack of government support, the lack of management and

²² See, e.g., Kiss, Y., “The Transformation of the Defense Industry in Hungary,” Bonn International Center for Conversion, Brief 14, July 1999 (“BICC Hungary Report”); Wiczorek, P. and Katarzyna Zukrowska, “Conversion in Poland: The Defense Industry and Base Redevelopment (Poland Report),” Bonn International Center for Conversion, Brief 8, November 1996 (“BICC Poland Report”).

²³ Gansler, Dr. Jacques S., *Defense Conversion: Transforming the Arsenal of Democracy* (MIT Press 1995), at 83.

²⁴ *Id.*

marketing skills and knowledge of civilian markets, inadequate quality of civilian goods produced, especially initially, and the failure to innovate. Also significant were the relatively high production costs for civilian commodities caused by the expensive machine tools and other unusual costs associated with military production and the fact that higher production volumes needed to be reached to achieve profitability for commercial production because price levels of cranes, for example, are significantly lower than those of tanks.²⁵

Moreover, when military demand dropped sharply in these countries, especially for antiquated Soviet era weapons, and new requirements were only in the process of being established, as planning for NATO membership proceeded, many military production lines were closed and machinery discarded. Many small arms, light weapons and ammunitions production capabilities were closed (for example, in the Czech Republic), and, in some cases, assembly lines were sold to other Central European or foreign countries, such as Vietnam.

However, some defense facilities remain in the Czech Republic, Hungary, and Poland (including in the small arms, light weapons, and ammunition sectors), and seek opportunities in both export markets and in supplying national needs as their armed forces are transformed and modernized and integration into NATO proceeds. The result of defense consolidation in each of these countries was a considerably smaller, more focused defense sector. In Hungary, for example, defense industry employment shrank from 30,000 in mid-1988 to 5,000 by mid-1998.²⁶ In Poland, defense-related employment shrank from 180,000 in 1988 to 85,000 in 1995, and the zloty value of production in 1995 was nearly 5 times lower than in 1988.²⁷ In the Czech Republic, armament production in 1994 was 15-20 percent of its 1987 volume, with a virtually complete stop to the manufacturing of small weapons and ammunition.²⁸

²⁵ See "Poland Report," at 26-28.

²⁶ "BICC Hungary Report," at 23.

²⁷ "BICC Poland Report," at 7-8.

²⁸ "Changes and Growth in the Czech Defense Industry," statement of Czech First Deputy Minister of Defense Petr Necas, *XIII NATO Workshop on Political Military Decision Making* Warsaw, Poland (June 1996).

II. The Way Forward: Recommended Actions

There is no quick or easy “silver bullet” approach to creating an environment in which the Bulgarian defense industry can be effectively transformed and repositioned for the 21st century. Rather, a series of short- and long-term actions by the Bulgarian government and its defense firms, as well as by NATO, its members, and western defense firms, can potentially facilitate the creation of conditions in which transformation can occur over time (*i.e.*, in which the firms can shift toward producing and selling NATO standard defense products in NATO and other legitimate markets, convert facilities and other assets to civilian use where possible, and shut down nonconvertible operations).

The Need for Continued Bulgarian Government Economic Reforms

As a threshold matter, it is critical for the Bulgarian government to continue and build on the dynamic economic and legal reform path it has taken in recent years in order to facilitate business development and provide a hospitable environment for foreign investment needed to transform the defense industry.

When the current Bulgarian government, under the leadership of Prime Minister Ivan Kostov of the Union of Democratic Forces, took office in 1997, the country was suffering from what the OECD has termed a “full-blown economic and political crisis.”²⁹ Inflation, government debt, and the budget deficit had spiraled out of control, commercial banks and financial markets had essentially collapsed, and foreign reserves for defending the national currency were exhausted.

Since that time, the Bulgarian government has implemented deep structural reforms. Pursuant to agreements with the IMF, Bulgaria adopted an effective macroeconomic stabilization program which stabilized the currency pursuant to a currency board arrangement, brought hyperinflation under control, curbed the budget deficit, and created “an important window of opportunity to make up for lost time in structural reform.”³⁰ The Bulgarian government has made good use of this opportunity. It has significantly accelerated the pace of privatization, with over 70 percent of the state-owned assets destined for privatization actually sold by the end of 1999. The government expects that all enterprises other than utilities will be nearly completely privatized by the end of 2001. The private sector now contributes on the order of approximately 70-75 percent of GDP, according to Bulgarian government figures. The government has also put the banking system on a sounder basis and restored public confidence in it. Reflecting these positive changes, GDP grew by 2.4 percent in 1999 and an estimated 5 percent in 2000, and foreign direct investment grew from \$620 million in 1990 to \$755 in 1999 and approximately \$1.1 billion in 2000, according to the Bulgarian government.

Moreover, the government has made a number of changes in laws affecting foreign investment, taxation, and land ownership, and today has a reasonable legal framework for private sector development and foreign direct investment. According to the State Department’s recent “Investment Climate Statement,” Bulgaria has one of the most liberal foreign investment regimes in the region. In this regard, pursuant to Bulgaria’s Bilateral

²⁹ OECD Economic Survey of Bulgaria, April 1999, at 2.

³⁰ *Id.*

Investment Treaty with the United States and its national laws, U.S. investors and investments in Bulgaria are entitled to national treatment, protection against expropriation and unfair treatment, and recourse to international arbitration as a means of vindicating these and other rights. U.S.-owned domestic companies can today own buildings and land in Bulgaria, there is a liberal regime for repatriation of after-tax profit and capital, and registration of foreign investments is no longer required. Moreover, Bulgaria has now changed its rules so that foreigners can acquire interests in defense firms.

These changes in the investment climate have begun to bear fruit. There have been a number of high profile western investment success stories in the last several years. For example, one of the largest green field investments in Bulgaria so far is by American Standard (\$42 million), which in 1996 established a subsidiary (Ideal Standard Bulgaria) that built the largest sanitary ware plant in Europe. American Standard has since expanded its Bulgarian operations through investing in the construction of a new china sanitary ware plant (\$17 million). At this writing, American investments totaling over \$1 billion are also pending in Bulgaria's energy sector.

The government has made EU accession a priority, and has developed a national program on the adoption of the EU *acquis communautaire*, which requires the harmonization of Bulgarian laws and international agreements with EU rules and standards. This work is proceeding. As one sign of progress, the EU recently eliminated its Schengen agreement visa arrangements for Bulgaria, and Bulgarians now have non-visa access to EU member states.

In short, while Bulgaria has initially suffered from underinvestment in the post-communist era because of the slow pace of reforms, it is now poised to attract Western investment – although it must compete with emerging democracies and market economies throughout Southeast Europe.

The continuation of the Bulgarian government's robust program of economic reform is critical to catalyzing foreign investment and economic growth. Moreover, this “new” business and investment climate will facilitate, and is essential to, the transformation of the Bulgarian defense industry. Any significant change in the reform policies of recent years would undoubtedly chill the environment for investment and transformation of defense industries.

At the same time, however, some impediments to investment continue to exist and, hence, additional reform steps are needed. In particular, the Bulgarian government needs to eliminate unnecessary licenses and other bureaucratic requirements that encumber private enterprise, improve regulatory transparency, address corruption issues, reform the tax laws and practices by improving collections and lowering marginal tax rates, take steps to protect and enforce shareholder rights, and enhance the effectiveness of the judicial system as a means of resolving investor and other business disputes. These additional steps will help to attract foreign investment in the defense and other sectors.

Bulgarian Actions in the Defense Sector

Within the framework of overall economic reform, a series of actions/approaches (some already underway) by the Bulgarian government and its firms can help facilitate the creation of a viable industry for the 21st century. To compete effectively in world defense markets in

an era of global defense industrial downsizing and global overcapacity, Bulgarian defense firms need to draw on their strengths in selected “niche” defense and commercial markets where they have a comparative advantage based on skilled labor force, low wage rates, location, and customer relationships.

The Bulgarian government needs to continue and build on its recent changes in arms export control policy. It should take the additional steps noted above, including the enactment of new laws and affirmative steps to reduce its arms and ammunition stockpiles. These steps are vital, and part of the “trade” for seeking US and NATO support for reforming and reorienting the Bulgarian defense industry.

Bulgarian firms should recognize that the future of traditional small arms, light weapons and ammunition sales is limited, and plan accordingly. Given the fact that the legitimate market for automatic weapons is relatively small in size and that overcapacity exists worldwide, the small arms market is likely to be a limited market for Bulgaria going forward.

Some small arms and light weapons sales to legitimate customers continue to be possible (e.g., Egypt, Israel, India) and can be pursued by Bulgarian firms. But the volumes are limited, as reflected by Bulgarian export totals in recent years.

Significant participation (i.e., large quantities or revenues) in U.S. and other legitimate national defense markets – especially in the areas of small arms, light weapons and ammunition – will, in all likelihood, prove difficult. First, the United States has a Buy America Act that, unless waived, would preclude sales into the US market, and various other NATO countries have similar laws. While the United States has waived this restriction for other NATO members and, on a limited basis, for neutral countries, there presently are no waivers for PfP countries. Second, even assuming waivers could be obtained for Bulgaria (as proposed below), the markets for *small arms, light weapons* and ammunition remain highly protected in most western nations in light of industrial base considerations.

There is significant world overcapacity in the area of small arms and light weapons. In the United States, the two main producers of small arms and light weapons for defense markets (Colt and FN Herstahl, a Belgium firm with U.S. facilities) are known to be producing at “minimum sustaining rates” – that is, the lowest rates needed to justify continued operation of existing plant facilities. The principal small arm being purchased by the United States today is the M-16, the U.S. Army’s primary combat rifle. The current contract, held by FN Herstahl, runs through 2003. While the Army will likely conduct a competition for a new contract beginning in 2004 (perhaps for a new combat rifle), the prospects that the procurement would be “full and open” (i.e., including non-U.S. competitors) are low because Colt, the owner of the proprietary data on the weapon, has given the United States a limited license for purposes of its procurement, which does not authorize foreign production or sales.

The national markets for ammunition are similarly protected, and it is common policy of most NATO countries to maintain a national munitions production base for wartime emergencies and mobilization. In the United States, most ammunition is manufactured at U.S. Army ammunition plants, nearly all of which are running under full capacity (with five of the nine plants running at less than 50 percent capacity utilization). By and large, the practice in all U.S. Services has been not to conduct full and open procurements (i.e., not to

consider foreign sources of supply) because of the perceived need for unhampered replenishment during wartime. The Army views this “national security” logic as prevailing over considerations of efficiency and cost.³¹

Recent legislation makes foreign participation in US ammunition procurement even less likely. Section 806 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 vests a single official in the Department of Defense, designated as the Single Manager for Conventional Ammunition (SMCA), with responsibility for supervising the procurement of ammunition (broadly defined). The SMCA is required by law to limit conventional ammunition procurements to domestic sources within the national technology and industrial base, if he or she determines that such limitation is necessary to maintain a facility, producer, manufacturer or supplier in order to ensure access to essential ammunition items or components during times of national emergency or to achieve industrial mobilization.³² In practice, this law significantly reduces the likelihood that contracting officers will seek full and open competitions, including foreign sources, for ammunitions buys.

Accordingly, even assuming (as appears to be the case) that Bulgarian firms can transition to make small arms and ammunition that meet the requirements in these national NATO member markets and are competitive in terms of price and schedule, the prospects for significant sales to national markets remain limited unless affirmative actions are taken.

Finally, in the commercial area, niche markets do exist for commercial small arms (semi-automatic weapons) for hunting and other recreational and police uses. However, the volumes are likely to be very limited.

Given the circumstances in the small arms and ammunition sectors, Bulgarian firms need to seek out other appropriate market niches, some of which are suggested below, that draw on their existing strengths. *To do this effectively, however, Bulgarian firms (with Bulgarian government assistance, where appropriate and possible), should hire a team of marketing experts and other appropriate management and financial consultants to assist in the transformation and to compensate for their own limitations in these areas. These experts should develop a strategic plan for each of the firms that can be utilized with potential investors, strategic partners and customers.* The review should assess existing product lines (commercial and military), and identify those products that are potentially

³¹ While more sophisticated weapons that would need to be ramped up during wartime are manufactured by private firms (e.g., AMRAAM missiles) and the costs of maintaining largely underutilized capacity at government plants is significant, the Army nevertheless believes that it is essential that low tech ammunition be produced in Army facilities and that offshore sources not be considered. While the U.S. Department of Defense has been working to change these attitudes, and reduce unneeded defense infrastructure such as government-owned plants and achieve taxpayer savings, change is nevertheless coming very slowly in this area.

³² Recently, pursuant to this law, the Under Secretary of Defense for Acquisition, Technology and Logistics issued a policy guidance requiring that all acquisition plans for strategies for all proposed ammunition procurements must be reviewed by the SMCA and a determination must be made that the acquisition is appropriate in accordance with the standards of section 806 prior to the release of the solicitation. Moreover, each year the Assistant Secretary of the Army is required to publish a list of ammunition or components that potentially qualify for restricted competition under the statute. See Memorandum from Under Secretary of Defense for Acquisition, Technology and Logistics Jacques Gansler to Secretaries of the Military Departments on “Section 806 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999,” November 20, 2000.

profitable and those that are not. The review should also assess each facility in the industry to ascertain its condition and prospects for future use. Based on these analyses, the review should recommend financial, investment and marketing plans and options for plant consolidation and rationalization. (Given limitations on Western assistance that preclude funding from being used in relation to defense industries, U.S. government or other donor governments' aid agencies are unlikely to be able to provide funds for this purpose.)

Defense Subcontract Work. Bulgaria's defense firms have skills and capabilities that suggest a future role in Bulgarian and other procurements as subcontractor – on a value-added basis – to prime defense platform contractors in a consolidated market. Bulgarian firms, therefore, need to seek these opportunities actively, market their capabilities to large defense primes that operate within NATO, and develop strategic relationships with Western defense contractors where possible. Bulgarian firms should leverage that fact that such strategic relationships would be useful to Western contractors seeking to participate downstream in Bulgarian defense procurements. Examples of work Bulgarian firms would do include the production of cartridges for ammunition or other components (using their significant industrial base for machining).

The Bulgarian Ministry of Defense should take non-distorting steps to facilitate the participation of its defense firms in Bulgarian defense procurements on a best value basis. Bulgaria has commenced a new downsizing, reform, and modernization plan (Plan 2004) that will result in a smaller force of approximately 50,000, based on a rapid reaction force and two additional headquarters corps. Consistent with its efforts to reform and restructure its military forces pursuant to PfP and NATO standardization goals, the Bulgarian MoD will commence a series of defense procurements over the coming years. In this regard, the Bulgarian government is already planning procurements in air defense (including radar), C4I, and logistics, and will likely plan additional buys once it completes a pending force modernization study.

Rather than seek broad, open-ended defense offsets (which distort trade), the Bulgarian government should seek specific opportunities for its firms to participate meaningfully in these procurements in a manner consistent with its goals of obtaining affordable and high quality weaponry – for example, as subcontractors that provide specific value-added on a competitive, market basis (and not on a subsidized or non-market basis). Given the need for some local maintenance and repair facilities, Bulgaria also should consider building into total lifecycle support contracts the use of local facilities of its defense contractors for testing, repair, and overhaul (together with requirements for training and technical assistance, as needed). Given Bulgaria's large facilities and location, this may give Western contractors an incentive to draw on these strengths and use Bulgaria as a regional repair, overhaul, and maintenance center.

This type of approach was used in the contract recently awarded to BAE Systems (Marconi) to design, develop and provide a command, control, communications, computers (C4) and reconnaissance system for the Bulgarian Land Forces and to train specialists in C4 areas. Some of the subcontract work will be done in Bulgaria, including testing, development of certain software elements and the cryptology work, as well as maintenance.

Development of Commercial Products/Capabilities. The Bulgarian firms, with the assistance of outside marketing and other functional experts, should identify areas where shifts into

additional commercial business may be successful. In some areas, this will not so much involve defense “conversion” as much as further development or changing uses of existing commercial facilities. As noted above, the Bulgarian firms (especially VMZ and Arsenal) have modern industrial facilities deployed in producing civilian products today. A good portion of the industry is in effect a modern machining industry that can be flexibly deployed for a wide variety of commercial/industrial uses – from producing components and subassemblies to complete machinery. Accordingly, it would be critical to identify areas where these capabilities can be sensibly deployed, retooled, or otherwise reoriented for sales in Western markets. In other areas, experts can identify conversion opportunities (recognizing the difficulties involved and the impediments and conditions for success noted above).

Destruction of Small Arms/Ammunition Stockpiles. Given their facilities and skills, Bulgarian defense firms can potentially play a significant role in the market for destruction of the large stockpiles of small arms, light weapons and ammunition in Central and Southeast Europe. Bulgarian firms have already participated in this work, and have the resources for the task. A Terem facility located in Veliko Tarnovo has been retooled for this purpose, and recently held a demonstration effort. The Bulgarian government should seek to facilitate this activity as part of the defense industry’s transformation, and should take active steps to solicit western funding for destruction of its stockpiles using local defense firms as contractors.

Defense (and Civilian) Repair, Overhaul and Upgrades. Terem’s significant expertise and facilities in this area can be a potential springboard for the repair, overhaul and upgrade not only of Soviet era products, but also of newer products and technology, provided that it can form partnerships with Western firms (including civilian aircraft and helicopter platform manufacturers). The size and scale of facilities offers an opportunity to be a significant repair/overhaul center for the region in a variety of areas – from air platforms to ground vehicles to radar. Given the probability that future defense procurements in Central and Southeast Europe (as elsewhere) would be structured to include total lifecycle support (including maintenance and repairs), these Bulgarian facilities are potentially attractive to Western defense firms and could potentially be privatized and sold on a factory-specific basis. It should be noted that “buy national rules,” like the Buy America Act, do not apply to offshore procurements by U.S. forces in theater or to services (*e.g.*, overhaul and repair).

Creation of Bulgarian Defense Trade Association. Bulgarian defense firms should consider establishing an industry trade association to interact better in the international marketplace. This type of group could help to advertise the firms’ capabilities and skills, and help facilitate their entry into legitimate foreign markets. Most defense industries around the world have such groups, which often play a useful role in creating industrial linkages abroad.

Bulgaria should be commended for its recognition that the transformation and revitalization of its defense industry – a previously closed, government sector – will require privatization (on either a firm, plant or asset basis) and participation by Western defense firms. The Bulgarian government’s willingness to do this opens the door for a variety of forms of joint ventures, equity investments and the like that will facilitate transformation of the industry. As the Bulgarian government recognizes, this process will probably need to be done on a selective, case-by-case basis through sales of specific assets/plants. The Bulgarian government’s willingness to be flexible will be critical to the transformation effort’s success.

The Bulgarian government should consider, in a manner consistent with its international obligations and broader policy objectives, special incentives to catalyze revitalization, reshaping and conversion of its defense sector. One option is to provide waivers of the VAT on capital equipment for U.S. and other foreign investors in defense firms. Such flexibility would encourage investment and development. Currently, goods imported into Bulgaria are subject to a 20 percent tax on the customs value (plus the customs duty). Pursuant to international trade agreements, the rates are reduced or at zero for numerous goods imported from nations in the European Union, EFTA, CEFTA, Turkey, and Macedonia. Hence, investors from the United States and certain other countries seeking to import capital equipment would be at a decided disadvantage, unless the equipment was imported from Europe.

To encourage the continued conversion of non-competitive defense facilities, the Bulgarian government also should consider offering tax or other incentives to domestic industries and their strategic, non-Bulgarian partners that develop and implement plans for transitioning defense facilities into non-defense sectors. Such an incentive program could be broad-based or targeted on particular sectors of interest to the government (*i.e.*, sectors or regions where the government has specific development plans underway).

The Bulgarian government also should move forward and make changes in its secrecy law to facilitate investment in the defense industry. In the past, private sector access to information about the industry has been constrained by limitations imposed by the secrecy law.

Finally, the Bulgarian government – in cooperation with domestic and foreign industries and educational institutions – should create a program to develop industry managers with modern managerial, financial and marketing skills. Given the shortage of trained personnel and the continuing “export” abroad of skilled Bulgarians in light of the economic circumstances there, Bulgaria should develop outreach programs – through donor funding and government loans – to encourage students and businessmen alike to improve their skills in these areas through education abroad, local university and adult education courses, on-the-job training, and informational exchange visits with Western businessmen and women.

U.S. and NATO Actions

The United States and its NATO partners should take a series of steps to encourage the transformation of the Bulgarian defense industry and other defense industries in PFP countries. Their successful reorientation promotes important U.S./NATO goals: the economic and political reform processes in these countries, regional peace and stability in Southeast Europe, and the removal of the underlying economic incentives to export small arms and ammunition to regions of conflict and countries of concern. Moreover, the United States and its NATO partners should recognize the recent constructive actions by the Bulgarian government in a range of areas – including actions in support of the NATO coalition efforts in the Kosovo campaign and the curbing of the exports of small arms, light weapons and ammunition at the cost of further economic dislocation and pain to its defense industry. These Bulgarian actions in support of peace and stability argue strongly for the United States and NATO to take appropriate steps to facilitate the Bulgarian defense industry’s successful transition.

The United States and NATO countries also should recognize that the nations of Central and Southeast Europe, like existing NATO members, will seek to retain some defense industrial capability as a matter of national security and security of supply. Therefore, the United States and other NATO countries should seek to ensure that the retention and revitalization of these capabilities occur in a manner consistent with promoting the procurement of affordable, high quality weaponry by the coalition, interoperability within the coalition, and continued rationalization and competition in defense markets. To achieve these goals, NATO should take a series of “demand” and “supply” side actions.

As noted above, NATO national markets are largely protected, especially in the areas of small arms and ammunition, and it is difficult for Bulgarian or other producers to participate. NATO’s own procurements are also generally reserved to NATO member countries. Thus, on the demand side, NATO and its members should seek to remove impediments that hinder PfP country defense firms from participating in NATO markets and allow their participation in a manner that ensures that NATO efficiency and interoperability goals can be met.

On the “supply” side, the United States and its NATO partners should encourage defense industrial linkages of U.S. and other western firms with those in Central and Southeastern Europe as a means of promoting interoperability, rationalizing defense industries, and providing competition in defense markets and affordable solutions and economies of scale in an era of small national buys. (By way of example, having a Bulgarian/U.S. firm compete against a Czech/UK firm in all NATO markets would be a useful way to ensure market access and competition and avoid expensive, fortress-like conduct.)

More specifically, the United States and its NATO partners should do the following:

1) *A CNAD Action Plan.* The NATO Council should consider the issue of PfP industrial base integration in the near future, and should request that the Conference of National Armaments Directors (CNAD) and its Industry Advisory Group, together with the NATO Maintenance and Supply Agency (NAMSA), NATO’s principal logistics support management agency, consider developing an action plan as expeditiously as possible (preferably within six to nine months time) to address the future role of the defense industrial capabilities of PfP countries as part of the full integration of these countries into the coalition. More specifically, the CNAD and its committees (including the AC313 Committee on Acquisition Practices), the NAMSA Industry Advisory Group, and NAMSA should evaluate and consider ways to address apparent impediments to the participation of PfP country suppliers in NATO markets. It would be useful if the action plan identified concrete steps for promoting: 1) access by PfP firms to NATO defense markets; and 2) defense industrial linkages between NATO members’ defense firms and PfP country defense firms. While NATO has established a full Partnership Work Program for 2000-2001 to foster the integration of PfP countries into the Alliance and various PfP countries currently engage in certain CNAD committees (including some pertaining to standards), it is noteworthy that the Program does not address issues pertaining to the industrial base or market access issues. The CNAD may wish to consider holding a regional conference (Central and Southeastern Europe) to address defense industrial issues, and may also want to establish a separate NATO standing committee to address the full range of issues concerning defense industrial transformation in PfP countries.

To facilitate this process, PfP countries, including Bulgaria, should on an individual basis, consider requesting through their NATO representatives that the CNAD or its relevant committees hold “19 plus 1” meetings to focus on their defense industries. Bulgaria and other PfP countries should use such meetings to identify the problems they face, request that NATO provide assistance (initially in the form of an expert team sent “in country”) as part of the effort to develop an “action plan,” and highlight the need for strategic business partnerships with western firms in the defense area.

2) *Facilitation of Qualifications by PfP Country Firms in NATO Small Arms and Ammunition Markets.* To facilitate market access, NATO should consider establishing, on an expedited basis, a program to qualify PfP countries’ firms’ small arms and ammunition produced to NATO standards.

As noted above, Bulgaria and other PfP country firms are in the process of converting to NATO standards in their production of small arms and ammunition (e.g., 5.56 millimeters, 7.62 millimeters and 9 millimeters). In the ammunition area, a key first step to market access is to pass rigorous qualification tests required to meet the NATO technical and interoperability requirements set forth in the NATO Standardization Agreement (STANAG) and Manual of Proof and Inspection. This would allow firms to market effectively in NATO national markets. To date, no PfP country suppliers have been so qualified by the regional qualification centers in Europe and the United States. Generally, a NATO country seeking to purchase the article in question sponsors the qualification process and absorbs its costs.

To facilitate the qualification process, NATO should consider establishing and funding a special program to qualify PfP country suppliers in small arms and ammunition. In the ammunition area, the AC/225 (LG/3-SG-1) Committee of NATO (i.e., the Small Arms Group under the Army Arms Group’s Land Group) could supervise this effort. It could publicize this program and facilitate qualification testing for PfP country suppliers. PfP countries interested in the process, including Bulgaria, should send representatives to the Committee’s meetings.

3) *Promotion of PfP Country Subcontract Work on NATO Programs.* The CNAD and its Industrial Committee should encourage the United States and other NATO members to consider subcontract work for Central/Southeast European defense firms in their national, joint and NATO procurement programs. In particular, the Organisation for Joint Armament Cooperation (OCCAR), which includes as members France, Germany, Italy, the Netherlands and the United Kingdom, should open its bidding at the subcontractor level to include PfP country participation. While PfP country participation should be on a competitive basis, OCCAR and national procurement authorities should consider incentivizing their defense contractors to include PfP firms by giving special credit to such participation in their award decisions.

4) *Competition by PfP Firms in NATO Logistics Procurements and Establish Transitional Set Asides.* NAMSA should consider setting aside a portion of its acquisitions of ammunition for qualified firms from PfP countries as a transitional matter (5 years) and should also allow qualified PfP country suppliers to compete for NATO maintenance and repair work (especially in-theater work in Southeast Europe) as well as spare parts and components contracts. NAMSA should provide technical assistance to PfP country suppliers to facilitate their qualification for such maintenance and repair work.

NAMSA procures supplies and maintenance services for a wide range of military equipment held by two or more NATO countries. This includes components, spare parts and modification kits, as well as services such as specialized maintenance, repair, and upgrade services for platforms and components. NAMSA's basic mission is to consolidate procurement where possible in order to effect substantial savings, to improve efficiency of logistics operations, and promote material readiness.

While NAMSA procures supplies and services through competitive bidding, its Management Board has determined, as a matter of policy, that only firms in NAMSA member countries (which do not include Bulgaria or other PfP countries) are eligible to compete. We recommend that NAMSA should open competitive bidding on its contracts to qualified firms in PfP countries. Recognizing the difficulty of qualifying, NAMSA should establish a process for qualifying PfP country firms for its programs and provide technical assistance as needed.

Finally, recognizing the difficulty of integrating PfP countries' defense firms into the NATO industrial base, NAMSA should, for a transitional five year period, consider establishing an ammunition set aside whereby 15 percent of its acquisitions of ammunition will be made from qualified firms from PfP countries on a competitive basis.

5) *Transitional Defense Procurement Memoranda of Understanding (MOUs) with Eligible PfP Countries.* To facilitate mutual market access, the United States and its NATO partners should consider moving expeditiously to enter into a new type of "transitional" procurement agreement with "eligible" PfP countries such as Bulgaria for a 3-5 year period that would facilitate their integration into the NATO industrial base, provide market access into NATO markets, and encourage these countries to adopt open and fair procurement systems and other rational and non-distorting acquisition practices.³³

In effect, the "bargain" to be struck could include the following elements. First, NATO members could commit to:

³³ These transitional MOUs would fit well into the fabric of existing U.S. defense procurement MOUs with other countries. Currently, the United States has in place MOUs with NATO partners that establish principles for cooperation in defense research and development, procurement, production, and logistics support. These agreements are designed to improve market access, interoperability and the technological capability by and among NATO members. Key principles include: ensuring consideration of qualified sources in procurements (which has the effect of waiving Buy America Act and other "buy national" laws); agreement to publish timely procurement solicitations with sufficient information for bidders and apply other basic principles of fair and open procurement (including timely notice of the outcome, provision of reasons for award decisions, and procedures for handling complaints concerning the procurement process); full consideration in procurement decisions of potential NATO savings and/or NATO combat capability enhancements from procurement of standardized or interoperable items; and duty free treatment of defense articles in accordance with national laws and regulations. The United States has also entered into more limited defense procurement MOUs with neutral states (Austria, Finland, Sweden and Switzerland). Specifically, the MOUs establish case-by-case waivers of "buy national" rules; where a firm from one party submits a bid or offer which would be the low responsive and responsible offer but for the application of any buy-national requirements, the government of the other party agrees to process waiver requests of any buy-national requirement or restrictive procedure rules. These MOUs also commit each government, consistent with its national laws and regulations, to use competitive contracting procedures in acquiring defense equipment.

- 3-5 year unilateral, case-by-case waivers of “buy national” rules and other restrictive procurement rules (rather than “mutual” provision of such waivers) in recognition of the transitional economic status of PfP countries;
- other measures to enhance market access, such as “best efforts” measures to facilitate the qualification of the PfP country firms to supply defense articles, goods and services;
- commitment to send missions to identify opportunities for NATO forces to utilize repair and maintenance facilities in Central and Southeast Europe (on a competitive bidding basis) and to take needed steps, including provision of technical assistance, to qualify facilities to repair and provide logistical support to NATO equipment;
- provision of timely information about prospective procurements to the governments of PfP countries, in addition to timely publication of such information;
- establishment of a small PfP “set aside” for 3 years for ammunition and small arms in any forthcoming national procurement programs (for up to 5 percent per cent of the contract value);
- steps to facilitate participation of qualifying PfP country firms as subcontractors in NATO country procurements, including providing notice to prime contractors that inclusion of PfP country subcontractors on a best value basis would be considered favorably in procurement decisions. To qualify, PfP firms would have to provide evidence of compliance with export restrictions; and
- the waiver of all duties on defense articles.

NATO firms could also commit to seeking to establish joint projects (either government-to-government) or to facilitate joint industrial cooperative efforts.³⁴

In exchange for these “transitional benefits,” a PfP country would agree to:

- become a signatory to the WTO Procurement Code and develop fair and open procurement processes for defense procurement, with concrete milestones for establishing procedures for: timely provision of information to potential bidders; competitive bidding for defense articles; provision of reasons for awards; and procedures for handling procurement process complaints;
- not seek generalized offsets in connection with defense procurements (while recognizing that participation of PfP country firms as subcontractors on a best value basis could be considered as a factor in procurement decisions);

³⁴ The United Kingdom is already pursuing an agreement that seeks to establish such joint projects.

- establish laws, regulations and enforcement mechanisms designed to preclude corruption in defense contracting, including laws requiring the disclosure of any fee arrangements by prospective bidders with local agents;
- agree to establish security procedures to avoid the misuse of any information provided to PfP country suppliers in connection with NATO country procurements and to preclude transfer of such information to third parties or countries;
- establish and enforce effective national laws and regulations governing the flow of arms and agree to abide by UN and Wassenaar rules.

There are mutual interests that support entering into this type of transitional agreement. It would allow the United States and NATO partners to integrate the PfP countries into the NATO industrial base on the basis of sound acquisition principles. It would also recognize that significant procurements will take place in PfP countries in the next 10-15 years, and that it is important to establish now the basis for fair and open procurement decision-making on a best value basis. Finally, it would offer “transitional” market access benefits to these firms as they make progress toward full NATO membership and rational acquisition practices. Inclusion in the NATO market is probably the best available means of transitioning these countries toward sensible, market-based practices.

NATO countries should only enter into these “transition” agreements with PfP countries that are willing to, and show concrete evidence that they can, make progress in meeting the acquisition principles noted above, are committed to and in fact taking steps to abide by their international obligations with respect to arms sales, have made material progress in establishing and implementing reasonable national laws and regulations on arms sales, and have committed to take meaningful steps to address the problem of large stockpiles of weapons and ammunition.

6) *Industrial Missions/Conferences.* The United States and NATO partners should organize and fund “industrial” missions to defense firms in PfP countries (possibly focusing such missions around a conference on defense industrial capabilities in PfP countries generally). This will familiarize western defense firms in the defense field with the capabilities in the region, encourage the development of strategic partnerships and possible investments in the region, and allow PfP defense firms to promote their products and skills.

7) *Enhanced and Expanded NATO Demilitarization Efforts with PfP Firm Participation.* The United States, other NATO partners, NATO and non-governmental entities should: (1) step up their efforts to destroy stockpiles of light arms and ammunition in Southeast Europe in order to promote regional stability, curb arms sales to regions of conflict and countries of concern, and incentivize the conversion of local defense industries; and (2) deploy some of the resources available for the destruction of light arms and ammunition to hire firms in PfP and Southeast European countries to engage in this work.

Significant stockpiles of light arms, other weapons and ammunition still exist in Bulgaria and other Central and Southeast European countries. The United States, its NATO partners and numerous other non-governmental entities have strong interests in having these stockpiles

destroyed rather than exported – especially to regions of conflict and countries of concern. Moreover, Stability Pact members have strong interests in eliminating the stockpiles in order to promote regional security. To accelerate these efforts:

- NATO should expedite its constructive efforts to expand its existing Partnership for Peace Trust Fund for the Destruction of Anti-Personnel Mine Stockpiles to small arms, ammunition, and other munitions, and should seek significant funding from NATO members. This expansion, now underway, would provide a funding mechanism for destruction of these weapons and ammunition.
- NAMSA, which administers the Trust Fund, should utilize qualified contractors in Bulgaria and other PfP countries in the demilitarization programs on a competitive bidding basis and under international supervision, providing technical assistance as needed to ensure their qualification.
- The United States and other donor countries that have set aside modest amounts of funding for demilitarization should actively seek to use these funds on an expeditious basis for similar demilitarization programs using in-country contractors (on a competitive bid basis) or should fund the NATO Trust Fund. The United States, the European Union, Germany, the Netherlands, and Norway have established programs or set aside modest funds for this purpose. However, much of funds have yet to be disbursed and donor governments are seeking appropriate uses of them. In the United States, for example, \$2 million is available for this effort, and to date approximately only one third of these funds have been committed. The United States is apparently in negotiations with the Bulgarian government over such activities, and we encourage their successful conclusion.

8) *Expansion of NAMSA's NATO Ammunition Data Base (NADB) project to include ammunition from PfP countries.* The NADB is designed to assist countries in exchanging ammunition during crisis. It provides ammunition managers with a ready source of data on available ammunition, including its full technical details. Data base users can then search the database for ammunition meeting their required technical and interoperability requirements. To join the database, PfP countries will need to classify their ammunition pursuant to the NATO classification system.

9) *Development of Strategic Relationships between NATO-based prime aerospace and defense contractors and PfP country defense firms.* NATO-based firms should recognize that there is a large potential procurement market in Bulgaria and other PfP countries in the coming decade as these countries modernize their forces and shift toward NATO-standard equipment, and that PfP governments are likely to consider favorably bids by foreign primes that enter into strategic partnerships with local firms. Hence, these primes should recognize the benefits of early strategic alliances or investments. Modest investments of time and capital now could pay significant benefits downstream.

10) *Long-Term Collective Procurement by PfP Countries.* In the longer term, NATO and its member countries should encourage countries in Central and Southeast Europe to develop collective procurement mechanisms (along the lines of OCCAR, recently established in Western Europe) for military acquisitions as they modernize their forces and integrate with NATO, and to take steps to integrate their defense industrial bases. Consolidating small

national buys will promote efficiency and allow economies of scale to be recognized. Integrating the procurements and industrial bases of these countries and promoting mutual market access can also promote regional stability and economic integration. A Southeast Europe procurement market where firms from the region can compete would allow principles of comparative advantage to operate, and enable participating firms to gravitate toward niches where they have an edge.

Conclusion

No one approach exists for restructuring and revitalizing the Bulgarian defense industry. However, a combination of the approaches recommended above is likely to produce short-term improvements in terms of increased profitability and employment stabilization. This can provide the window of time necessary for governments and industries to take the longer-term actions needed so that the Bulgarian industry can be positioned, through transformation and full privatization, to exploit the real, concrete opportunities for long-term revitalization.