1. THE BULGARIAN DEFENSE INDUSTRY
IN THE TRANSITION PERIOD

The following background on the Bulgarian defense industry is provided for two broad reasons. First, the importance of the industry in the national and some local economies is key to understanding the domestic politics of arms controls. Second, analysis of issues such as overcapacity, conversion to civilian production, industry structure, and domestic markets, provides a clearer background to problems such as SALW stockpiles and illicit arms transfers.

During the communist period, the Bulgarian Military-Industrial Complex (MIC) was characterized by a clear focus on manufacture for export (about 90 percent of its output), advanced production technology and efficient production structure. Its product range was oriented towards market niches and Bulgaria’s specialization within the Warsaw Pact. This specialization included SALW, armored vehicles, and electronics. Bulgaria supplied arms to countries from the Warsaw Pact, the Middle East, North Africa, India and other smaller markets. A relatively large share, between 30 and 40 percent of the exports, depended on the political relations that Bulgaria had with these partner countries. This trade was worth several hundred million US dollars per year.

The healthy state of the defense industry at the start of the transition period was due to its privileged position under communism, rather than to exceptional management. A large part of the loans granted in these years were to ensure Bulgaria’s mobilization preparedness. After 1989, the MIC underwent widespread structural reforms that reorganized the MIC branch structure, reduced production, stopped technological upgrades and brought the reconstruction and modernization of company plants to a virtual halt. In the early 1990s, the management and the large bureaucracy of the defense companies still carried the mentality of the command-administrative economy. There was a need for a new business culture and a new type of relationship with the state, as the MIC was still state-owned. The state did not succeed in formulating a consistent defense industry policy or guidance for long-term development. Reforms were often simply imposed or took shape on an ad hoc basis, in response to severe crises within the industry.

The organizational restructuring of the MIC led to the break-up of large economic units into individual companies. Large economic conglomerates such as Metalchim

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and Electron were dissolved and transformed into 134 new companies. The only positive result of the restructuring process was the new horizontal management structure. However, there might have been additional positive effects, had the privatization process and the modernization of products and technologies been timely and speedy. In the new market economy the state could not control the management of the defense companies and had to allow them a higher degree of independence. Some managers, though, worked on the assumption that they could incur losses with impunity and rely on state subsidies and bailout credits. The government did not sanction or replace such managers. This was partly due to the fact that until 1997–1998 defense companies were used as a mechanism to maintain low unemployment. Moreover, in 1996, the bad loans crisis in the banking sector was covered up by the government until most banks in the country were declared insolvent.

In the new free market conditions the defense companies had to determine their products and market strategies on their own. The defense industry was in a rather precarious position because successive governments had failed to define clearly the different roles of the state as owner, key broker, customer, regulator and business promoter. Thus, conflicts of interest became unavoidable. More attention was given to defense trade regulation, without tackling in any depth the full range of problems related to the restructuring of the defense industry.

In the absence of clear state procurement needs it was difficult for companies to project their level of output. In addition, the state retained controlling functions in the marketing of MIC products without making any commitments to find markets for them. Eventually, this lack of clarity over demand led to a sharp decrease in output, and threatened the solvency of some defense companies.

Moreover, the annually adopted defense budget provides the industry with an inadequately short timeframe to adjust any strategic planning. In the principal documents on national security and defense, such as the National Security Concept (1998), the Military Doctrine of the Republic of Bulgaria (1999), and the Law on Defense and the Armed Forces (1995), the role of the defense industry is hardly mentioned at all. The parameters of the newly proposed Armed Forces Modernization Plan, which are relevant to the participation of Bulgarian industry, are still uncertain. As international experience shows, there is normally no sustainable development of a national defense industry without it having a sizable share of a reliable and protected domestic market.

These problems were compounded by the absence, until 1997, of a clear government position on the country’s integration into NATO or the EU. Arms production is dependent on the state’s choice of partners for economic and security co-operation. Such alignments not only result in joint production partnerships and collaborative research, but frequently also determine the marketing strategy and product line.

The extraordinary degree of secrecy surrounding MIC companies was yet another obstacle standing in the way of defense industry restructuring. Secrecy precluded the involvement of many specialists in a broader debate on the future of the MIC. Any information on the import and export of defense products, the defense budget and

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7 Dimitrov D, Restructuring and Conversion, p 41.
procurement was treated as a state secret. Since hopes for the revitalization of the defense industry were not supported by reliable analyses of the industry’s capabilities and the actual levels of production and exports, the secrecy surrounding the industry fuelled unrealistic public expectations and thus exacerbated social tensions in regions dependent upon the industry.

Since measures were often contradictory and unclear, the defense industry was sent confusing signals. On the one hand, there was publicly-stated government support for the industry, the recognition of its problem areas, and the retention of state ownership because of the companies’ strategic importance. The MoD organized arms exhibitions, intentions for enhanced international co-operation were stated, and the MIC was promised participation in the re-armament of the Bulgarian army. On the other hand, privatization was delayed, and no investment for restructuring and/or conversion was provided, nor were there tax incentives or subsidies.

1.1. DEFENSE INDUSTRY PRIVATIZATION AND ITS IMPACT ON EMPLOYMENT

The privatization of the defense industry was marked by an inconsistent and protracted policy process. A three-year moratorium (1993–1996) on MIC company privatizations prevented suspicious deals but it also became an excuse to postpone a decision on whether the MIC should be privatized at all.8 The lack of consistent policy deterred potential foreign investors, reduced the financing opportunities of the industry, and eventually rendered some companies insolvent.

At the end of the three-year moratorium a total of only 23 (out of 134) companies were defense products manufacturers. The others had either closed down or converted to civilian goods. In 1998 the government worked out a program for the privatization and restructuring of the defense industry envisaging that the state would keep a limited stake of 34 percent in ‘golden’ shares in no more than five key companies. Today there are around 26 defense companies in the industry, with about 15 more companies producing dual-use goods and technologies. Although several foreign companies showed an interest in the privatization, no foreign investors purchased companies. Most of the companies were privatized through employee/management buyouts.

The privatization process did not bring immediate positive results. According to some publications, most of the companies are hardly breaking even.9 Employment in the defense industry also fell dramatically, from 110–115,000 at the end of 1980 down to around 25,000 in 2003. The social and economic effects on towns like Sopot, Kazanlak, and Karlovo was markedly severe.10 Over the period 1995–2001 the unemployment rate increased dramatically in the municipalities of Kazanlak, Karlovo and Lyaskovets (See Table 1). According to industry sources, employment at Arsenal Co. in Kazanlak, a city of 81,000, fell from 25,000 to about 4,300.11

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10 Ibid, p 11.
11 Interviews with industry representatives in Sofia, Bulgaria on 25 September 2003.
1.2. PRODUCT REORIENTATION AND CONVERSION

Product reorientation

The new private owners have had limited access to financing and have been unable to invest in new technologies, and are thus compelled to rely on old products. The state has distanced itself from research and development (R&D). Currently the government spends annually about 0.36–0.39 percent of the defense budget (or € 1.5–1.6 million), much less than the standard expenditure in Europe of 1.2–2 percent.\(^\text{13}\) Human resources in the research field are in constant decline due to low pay, better opportunities in other industries, or better offers from the defense sectors of other countries. This will lead to permanent decline in the defense industry’s R&D, and will maintain the dependency on SALW production and export (which involves less technological sophistication). Contemporary defense production employs a high degree of technology and scientific knowledge. The share of R&D costs in the development of new defense products has been continually growing.

There are a few isolated cases of conversion to NATO-compatible production, but the process has been slow. More and more defense firms are introducing NATO and International Organization for Standardization specifications (such as ISO 9000 standard) to increase their competitiveness. Some companies have already been able to sell arms to NATO member countries, but only after their production process has been tested and certified by NATO member states or by NATO itself.\(^\text{14}\)

Bulgaria is a traditional producer of SALW. This is a shrinking and thus increasingly competitive market, characterized by heavy dependence on regional conflicts. Keeping in mind recent mergers of large arms producers in Europe and the US, small Bulgarian producers cannot compete independently in these markets.

The lack of marketing and business planning skills continues to pose difficulties. Insufficient foreign language skills and a lack of experience in approaching potential Western partners create additional obstacles to integration. Bulgarian producers have

been unable to apply combined pressure on the government to involve them in compensation agreements and offset deals when the government makes significant purchases from foreign manufacturers.

Conversion

The government tried unsuccessfully to implement a number of conversion policies during the transition period, particularly in 1989 and the early 1990s. There were two approaches to conversion.\textsuperscript{15} The first used the existing facilities and production lines. This process proved difficult, because facilities and equipment often had narrow, defense-oriented technical specifications. Most factories were built with a high level of specialization and with a capacity for civilian production not surpassing 10–20 percent of total output.\textsuperscript{16} Thus, investment in assets prior to the transition period did not yield the expected returns, as these assets could not be converted. The second approach involved the purchase of new technologies and production lines. However the lack of an adequate financing instrument proved a significant obstacle.\textsuperscript{17} This was further compounded by the lack of marketing or research and development resources, as well as insufficient technological expertise in the production of civilian products.

Moreover, the conversion process itself was on shaky ground because the government was not clear which companies needed to preserve their capability to convert back to arms production. Consequently, parallel defense and civil production capacities were retained at a very high cost. In any case, either approach to conversion was predisposed to be ineffective because the focus was on the micro level of the factory or company. The government did not have an overarching policy that considered the entire industry.\textsuperscript{18} Moreover, there have been no recent government plans for further conversion programs.\textsuperscript{19} Consequently, the main defense companies continue to focus on their defense business rather than on civilian production, as the former is much more profitable.

1.3. ARMS EXPORTS

During the late 1980s, Bulgaria’s exports averaged $900 million per year\textsuperscript{20} and reached as high as $1.5 billion.\textsuperscript{21} The defense output and export trends are hard to analyze in detail since the information on them is classified.\textsuperscript{22} Industry estimates for exports in 2000 were $100 million.\textsuperscript{23} Government sources estimated total exports for 2002 close to $90 million, of which $30 million is in small arms, not including small arms ammunition.\textsuperscript{24}

\textsuperscript{15} Dimitrov D, Restructuring and Conversion, p 75.
\textsuperscript{16} Bonn International Center for Conversion, BICC Conversion Survey 2001: Global Disarmament, Demilitarization and Demobilization, (Baden-Baden, Nomos Verlag, 2001), p 68.
\textsuperscript{18} Ibid, p 75.
\textsuperscript{19} Ibid, p 78, and interviews with government officials in Sofia, Bulgaria on 15 August 2003.
\textsuperscript{21} Interviews with government officials, 13 October 2003.
\textsuperscript{22} Art 25, Addendum 1, item 11, 17, 22, Law on the Protection of Classified Information, [in Bulgarian] State Gazette (SG), 45/2002.
\textsuperscript{23} Ibid.
\textsuperscript{24} Interviews with government representatives, 5 October 2003.
Government officials often formally announce significantly higher export figures but industry and government experts consider these incorrect and politically motivated.25

The diminishing trends of Bulgaria's exports are in line with global trends. Global arms deliveries for 2002 were $29 billion, down from $42 billion in 2000, which is and the second lowest figure since 1995. The leading exporters remain the US, Russia, the UK, France, and China.26 Thus, in a global perspective, Bulgaria's exports represent an insignificant share. Domestically, the macroeconomic importance of arms exports also should not be overestimated. In 2002 Bulgaria's arms exports represented only about 1.6% of total exports which reached $5.69 billion.

Nevertheless, the effects of this relatively small-scale export output may be disproportionately high when it reaches zones of conflict. In the past three years some of Bulgaria's exports have gone to such zones.27 According to its submission to the UN Register of Conventional Arms, in 2002 Bulgaria exported six 130mm M-46 artillery systems to Uganda, a country that is not only embroiled in a civil war, but whose government has played a very controversial role in the civil war in the neighboring Democratic Republic of Congo (DRC). Another ten 120mm mortars went to the Ivory Coast, a country that is engulfed in a civil war itself and which at the time was supporting and arming the Movement for Democracy, a rebel group fighting in neighboring Liberia.28 Keeping in mind that the UN register reveals only major weapons systems, the possibility that ammunition and SALW were also delivered to these countries cannot be ruled out. Most troubling is that, despite the UN Security Council (UNSC) and the OSCE sanctions on Armenia and Azerbaijan, and despite both being on Bulgaria's own list of restricted destinations, arms were sold to both countries.29 In 2002 Bulgaria sold to Azerbaijan thirty-six 130 mm M-46 artillery pieces, most likely equipment made surplus in the downsizing of Bulgaria's Armed Forces. Apparently such a step was in line with the US decision to lift its own embargo and to provide military assistance to Azerbaijan as part of the fight against terrorism.30 Yet it is doubtful that 130 mm artillery could serve Azerbaijan's counter-terrorism efforts. In the absence of transparency in the arms trade, it is legitimate to ask whether the Bulgarian government could have received assurances that these arms would not be used in a way that would heighten tensions over the disputed territory of Nagorno Karabakh. It is questionable whether the above mentioned exports were in the spirit of the EU Code of Conduct on Arms Exports, to which Bulgaria aligned itself in 1998, and whose third criterion calls on members "not to allow exports which would provoke or prolong armed conflicts or aggravate existing tensions or conflicts in the country of final destination."31

25 Bialos J, op cit, p 10. In February 2003, the Bulgarian Deputy Minister of Economy, Milen Kekeremedchiev, said in an interview to Dnevnik: 'NSI statistics do not include trade in arms and dual-use goods which rose from 40 million US dollars in year 2000 to over 500 million dollars in 2002. This means from the 1.35 billion US dollars statistically recorded foreign trade deficit we should subtract about 400 million dollars or over that were spent on arms trade'. Dnevnik, 6 February 2003.
27 The data on the arms transfers in this section comes from the database of the UN Register of Conventional Arms <http://disarmament2.un.org:8080/UN_REGISTER.nsf>
29 These sanctions are not legally binding.
31 EU Code of Conduct for Arms Exports, 8 June 1998.
1.4. SALW PRODUCTION AND EXPORTS

Bulgaria is a small player in the SALW market. The Small Arms Survey estimates the global trade in small arms at $4 billion. The global market in small arms is dominated by Russia and the United States, and small arms are produced in 98 countries by 1134 companies, 44 percent of which are in Europe and the CIS. In 2002 Bulgaria exported around $30 million in small arms and, thus, has less than one percent of the estimated small arms market. The illicit trade in small arms is estimated at $1 billion. Bulgaria’s share in the illicit trade, if it has one, would be also insignificant. In the last few years, with the exception of smuggling of small amounts of SALW by individuals, there have been no reports of illegal exports of SALW.

As in other countries in Eastern Europe, Bulgaria’s SALW trade declined dramatically during the transition period. This was due to a number of external factors. First, the demand worldwide has shifted to favor advanced high-tech armaments. Second, some of the developing countries that were traditionally Bulgaria’s clients have managed to build their own SALW production capabilities. The number of international conflicts requiring small arms and ammunition have subsided, and access to these markets has been restricted by increased control measures at national and international levels.

The solvency of prospective clients is likewise problematic for the industry. Common weapon procurements are being replaced by more complex contracts including maintenance agreements, and staff-training or offset agreements. Many Bulgarian producers cannot offer these at competitive rates. They are thus left with erratic high-risk deals for one-time deliveries to clients that are not known and are often unreliable.

SALW production is one of the main components of Bulgaria’s defense industry. The five companies producing SALW are Arcus JSC, Arsenal JSC, NITI JSC, VMZ, and Samel-90. The total number of employees is around 11,800. Of these, Arsenal has 4,300 employees, NITI 250, VMZ PLC 4,300, Arcus 3,100, and Samel-90 550. While VMZ and NITI are entirely state-owned, the other three are privately owned, but the state has retained 36 percent ownership in Arsenal. The share of civilian production in all of them is well under 50 percent. Over 90 percent of the SALW production in all five companies is exported. Arsenal, who in 2002 exported close to $25 million worth of arms and ammunition, remains the leading company. It should be noted though, that the tendency in SALW production, according to industry representatives and government sources, was to produce ammunition rather than small arms.

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33 Interviews with government officials, 5 October 2003.
34 Graduate Institute of International Studies, op cit, pp 1–2.
35 Two more companies, not discussed in this report, Opticoelectron and OMZ JSC produce sights and optical parts for SALW. Two branches of the MoD-owned Terem company (www.terem.bg), in Veliko Tarnovo and in Kostenetz also produce certain types of SALW. The Veliko Tarnovo branch produces spare parts for and repairs small arms. The Kostenetz branch repairs rifle and mortar ammunition. It also produces a number of training and smoke grenades, as well as several types of explosives. Not much is known about the exports of either branch, or their production capacity.
37 Interviews with government and defense industry officials, September 2003.
Although the total amount of exports is not large, Arsenal’s exports rank it among the top 20 exporting companies in Bulgaria.

Arcus is the most financially stable SALW producer. It was privatized by employee-management buyout, and unlike other MIC companies privatized in the same way, it managed to become profitable. Its product range has doubled to about 60 items, about half of which are SALW related. They include ammunition for Kalashnikov assault rifles, semi-automatic guns, grenade launchers and mortars.38 In 2002 the value of its production grew to a 10-year high of 60 million leva (€30 million).39 Its most recent investment has been in the construction of a facility for disposal and recycling of ammunition. The company is also certified able to export its production to NATO countries. The company has confirmed that its products are exported to five NATO member-countries, Asia, the Middle East, and India.40 In the first half of 2003, there were media reports that Arcus had exported 12,000 handguns to the US, a claim which government officials later denied.41 In May 2003 the Italian Beretta visited Arcus, Arsenal, and Opticoelectron and apparently is considering investing in the production of SALW.

Arsenal is the biggest SALW producer, and the only producer of Kalashnikov assault rifles (5.45, 5.56, 7.62 mm). In addition the company produces pistols and ammunition for firearms and mortars.42 Its products have long been exported to India. Most recently the company announced that it would be supplying the new Iraqi army with SALW.43 The company is also hoping to supply the Bulgarian Armed Forces with NATO-compatible 5.56 mm assault rifles.44 Arsenal’s recent certification with AQAP 110 Certificate has raised hopes for more exports to NATO countries. The company, though, is in a very difficult financial position. Reportedly, its exports for the first half of 2003 have barely reached $2 million. Many of its employees work only part-time or sporadically.45 There have been reports of further lay-offs of about 2,000 workers, a very difficult step politically, in a town that already has 25 percent unemployment.46

NITI Kazanlak is the former research and development branch of Arsenal (“NITI” stands for Science, Research, and Technology Engineering). On Arsenal’s privatization NITI remained a separate state-owned company. Its SALW production is small and comprises the SPS handgun, the Mazalat hunting rifle, a barrel adaptor for the Makarov handgun, some small arms ammunition, and anti-tank mines. In addition the company produces a range of artillery ammunition. Not much is known about NITI’s exports but, given the company’s small production capacity and facilities, its SALW exports are probably insignificant.

38 A full list of Arcus Co. products is provided at the company’s website: <http://www.arcus-bg.com/>
41 Interviews with government officials, 17 October 2003.
42 A full list of Arsenal’s products could be found on its website: <http://www.arsenal-bg.com/defense.htm>
The state-owned VMZ Sopot is among the largest 100 companies in Bulgaria, but is also one of the least successful.\textsuperscript{47} In 2000, the company had a net loss of 40 million leva (€20 million). Its revenue in 2001 was 63.5 million leva (€31.7 million), but its short-term debt was 90 million leva (€45 million). During 2002–2003 its employees, whose salaries went unpaid for several months, went on strike at least twice.\textsuperscript{48} Two civilian production units of the company were sold last year, in order to cover debts and salaries owed to employees.\textsuperscript{49} The production line of the company is quite extensive, only 40 percent being for civilian goods. Its production includes a range of artillery and aviation ammunition. In the field of SALW, it produces man-portable (Stinger-type) anti-aircraft missile systems and RPGs (rocket-propelled grenade) systems.\textsuperscript{50} Reportedly, the company has been working mainly on India-bound production,\textsuperscript{51} but most likely these have been artillery ammunition exports.

Samel-90’s military production consists mainly of military communication equipment. Samel-90 produces \textit{Strela} and \textit{Igla} portable anti-aircraft missile systems but the export destinations for these are not clear. Civil production forms a significant proportion of the company’s output.

The majority of the above companies’ arms exports (but not all) are conducted through brokers. The state-owned broker, Kintex, and the less active Teraton, as well as close to 70 smaller brokers are involved in exporting Bulgaria’s arms and dual-use goods.\textsuperscript{52} It is not clear, though, how many of them focus on SALW. Kintex is the only broker authorized to export to India, which is Bulgaria’s biggest client. The privatization of Kintex and Teraton has also been stalled for over a year, but plans remain for the two companies to be sold.\textsuperscript{53}

Another state-owned trading company, newly involved in trading small arms, is Contactless Multiplexing Systems (CMS).\textsuperscript{54} CMS is a company owned by the Ministry of Interior and until January 2002 was solely involved in providing the MoI with security alarm systems. Since then, the company has created a chain of firearms stores and developed a firearms repair shop. Its primary activity seems to be importing and selling firearms for civilian use. In February 2003 CMS purchased 1,300 firearms that had been confiscated by the police in previous years.\textsuperscript{55} The company has a license to export arms but no information on its exports has become public so far.

\textsuperscript{49} \textit{Ibid}, and ‘Erato Holding Buys a Unit of VMZ-Sopot,’ \textit{Dnevnik}, 18 March 2003.
\textsuperscript{50} Armaments and Equipment Policy Directorate, \textit{Defense Industrial Co-operation}, 2003, p 74.
\textsuperscript{51} ‘VMZ Sopot is Hardly Making It’ [in Bulgarian] \textit{Trud}, 2 December 2002.
\textsuperscript{52} ‘Who is Trading with Arms in Bulgaria,’ [in Bulgarian] \textit{24 Chasa}, 4 December 2002.
\textsuperscript{54} More about CMS [Bezkontaktni Multipleksorni Verig] could be read on its website <http://www.bmv.online.bg/eng/index_en.htm>.
\textsuperscript{55} ‘MoI Firm Buys a Police Arsenal’, [in Bulgarian], \textit{Trud}, 2 January 2003.