

**Conflict Studies Research Centre**



**Southeastern European  
Defence Industry:  
International Cooperation  
& Market Opportunities**

**Eugene Kogan**

**February 2005**

# **Southeastern European Defence Industry: International Cooperation & Market Opportunities**

**Eugene Kogan**

## **Key Points**

- \* Southeastern European (SEE) defence industry is undergoing painful but necessary domestic restructuring.
- \* To revive its successes on the arms markets it urgently needs infusion of substantial funding, acceptance of new technologies, and creation of marketing departments.
- \* International cooperation is one of the most important vehicles to promote SEE defence interests abroad. Ways to achieve this are detailed in this report. Every type of cooperation is directly linked to the problems that the SEE defence industry is currently facing and it has both positive and negative consequences.
- \* One such negative consequence relates to the problem of illicit arms exports and surplus weapons. SEE countries tend to be accused of this, whether justly or not (it is of little relevance). Although such accusations might be politically motivated in order to discredit a country's image, they might also ruin their business relations with potential customers.
- \* Market opportunities for SEE defence industry are not great, partly because it was embargoed by EU member states, and partly because the traditional markets in Africa, Asia and the Middle East were temporarily lost. So-called niche products are not easy to market because global competition has become fiercer and the number of countries competing for the same market has increased in the last ten years. Thus, the marketing pie has shrunk, while the number of competitors has increased. Such a situation creates a serious disequilibrium.
- \* Although the future for SEE defence industry does not look very optimistic, the report offers some practical suggestions.

# Contents

<b>Introduction</b>	<b>1</b>
The Existence of Parallel Production Facilities & The Process of Restructuring	1
The Paucity of Domestic Markets & The Availability of a Large Skilled Workforce	1
Domestic Non Cooperation	2
The Potential for Foreign Cooperation	3
<b>1. The Problems of Lost Markets &amp; New Market Opportunities</b>	<b>3</b>
<b>2. The Problem of Illicit Arms Exports &amp; Surplus Weapons</b>	<b>4</b>
Political & Economic Implications for Southeastern Europe	5
Introduction of Arms Trade Regulations	5
<b>3. Identifying Niche Products &amp; Their Potential Markets</b>	<b>9</b>
<b>4. What are the Possibilities for Industrial Cooperation Between Southeastern Europe and the EU &amp; NATO Member States?</b>	<b>10</b>
Industrial Cooperation	11
Joint Ventures	12
Purchasing a Stake in a Company	12
Subcontracts & Manufacturing Under Licence	12
Marketing Under Foreign Trademarks	13
Offset Programmes	13
<b>Conclusion</b>	<b>15</b>

# **Southeastern European Defence Industry: International Cooperation & Market Opportunities**

**Eugene Kogan**

## **Introduction**

First and foremost it is important to stress that this paper deals with the conventional arms manufacturing facilities that were originally shared by the republics of the former Yugoslavia and not with nuclear, biological and chemical (NBC) weapons and cruise missiles. The latter were largely concentrated in just one republic of the former Yugoslavia and, as a result, the problems of that particular sector were not shared by the other republics of the country. The major shared problems that the southeastern European (SEE) defence industry is currently facing are discussed below.

## **The Existence of Parallel Production Facilities & The Process of Restructuring**

In spite of being former members of the Federal Republic of Yugoslavia (FRY) and having well integrated defence industry infrastructures, the individual SEE countries were forced to create a large number of parallel production facilities, particularly in the small arms and light weapons (SALW), ammunition and armoured (main battle tank, maintenance and modernisation) sectors. With the break-up of Yugoslavia and the ensuing wars in the Balkans, some of the production facilities performed at full-scale, while others underwent privatisation, restructuring and consolidation. The current SEE defence industry still has enterprises and research and development (R&D) facilities, but the well integrated defence industry of the former Yugoslavia has disappeared. As a result, the countries in the southeastern European region are restructuring their armed forces and at the same time modernising their current military hardware, privatising, restructuring and consolidating their defence industrial infrastructure to co-operate with the European Union (EU) and the North Atlantic Organisation (NATO) member states, with the aim of ultimately being integrated into the EU and NATO structures. The countries of SEE are also looking for arms markets world-wide, but this time in accordance with EU and NATO standards. The issues of illicit arms exports and arms trade regulations are discussed further below.

## **The Paucity of Domestic Markets & The Availability of a Large Skilled Workforce**

The governments of the countries involved know that the domestic markets are very limited and the domestic requirements for military and security systems that can be used by police, paramilitary forces and special forces will not be very great. As a result, the defence enterprises' managers are looking very carefully at which of the industries' niche markets are worthy of long-term investment. Another approach could be to broaden the civilian industrial infrastructure, but again the capacity of

the domestic markets remains very limited. An additional exacerbating factor is that there is very little funding for the current and future defence industry undertakings. The defence expenditures of the countries involved will probably gradually increase from about 1.2 per cent of the gross domestic product (GDP) today to about 2 per cent and/or perhaps slightly above 2 per cent by 2010 and onward. Funding alone will not solve the problems that have built up since the early 1990s, in particular with regard to new technologies and the rapid advances in electronic systems (including avionics and electro-optics). Although much of the workforce has, by and large, remained in their own country, many experts in the field of natural science and engineering are no longer working in the research facilities. This particular factor should not be considered as a bad sign for the countries involved. After all, the domestic defence industry's needs have to be tailored to the size of the country and its domestic requirements and not to the potential arms sales on a global scale. Furthermore, these countries are not in the top league of arms exporters and their future should not be tied to large arms sales.

At a conference recently staged by Cityforum in London, a United Kingdom (UK) government official said that in one successful integrated project team – which included both the military customer and the industry engineer – it was impossible to discern who came from the military and who came from industry. An official with the UK Ministry of Defence (MoD) seconded that, saying that success depended 60 per cent on the workers, 30 per cent on the process and 10 per cent on the research and technology. Another official noted that when such partnerships occur, the pay-off is high.<sup>1</sup> As a result, it is easy to envisage the development of such partnerships in SEE countries, since they have a large, highly qualified workforce that substantially improved its skills and ingenuity during the Balkan wars. However, the available technologies are lagging behind and the funding for R&D is very limited.

It can also be foreseen that there will be the exchanging of ideas, sharing of experience and extending of cooperation between the defence industry managers in Israel and those from southeastern Europe. (Perhaps the SEE countries can learn some useful lessons from Romanian-Israeli defence industrial cooperation.) The experience of war, the military embargo on Israel during the 1960s leading to the ingenuity of the domestic defence industry and its rapid development (for instance, the well-known Israeli company Elbit Systems Limited was set up in 1966), and the availability of a large number of military personnel and industry engineers means that Israelis and Europeans would be well suited to share their past and present experiences in shaping the future defence industries' paths. The issue of Israel will be further discussed in section 4.

### **Domestic Non-Cooperation**

SEE government officials should understand that although the level of cooperation between the defence industries of the republics of the former Yugoslavia was very high, this cooperation is now a thing of the past and it is no longer sensible to go back to it. As a result, the current cooperation between defence companies in the former-Yugoslav states is likely to be a waste of time and energy as individual states are pursuing the same objectives, namely joining the EU and NATO, and are individually trying to court the defence companies in the Western world. The failure of the Visegrad countries (the Czech Republic, Hungary, Poland and Slovakia) to work together on modernisation projects and acquisition efforts<sup>2</sup> should be kept in mind. Furthermore, SEE countries, compared with the Visegrad countries, lost

## Southeastern European Defence Industry: International Cooperation & Market Opportunities

almost ten years due to the war in the Balkans. Thus, they need to avoid making costly mistakes.

### **The Potential for Foreign Cooperation**

Cooperation between countries has the potential to open markets, either in the country of the partners or in a third market. Once a company secures an important foreign business connection, it is often able to gain access to a number of domestic resources and orders. The management of the defence industry enterprises should, however, keep in mind that in the event of foreign cooperation they would become subcontractors. It makes no sense on their part to cling to the illusion that they would be the main contractor. This issue is further expanded in section 4.

## **1: The Problems of Lost Markets & New Market Opportunities**

A crucial challenge for SEE defence and security-related companies is finding of new markets. Although in the 1990s, domestic military-related demand increased because of the war in the Balkans, the traditional markets in Africa, Asia and Middle East were temporarily lost. On the other hand, a country such as Libya, which at that time was under a UN embargo, is no longer on the list of countries under UN sanctions, while the Ivory Coast is currently under UN embargo. Thus, there have been certain changes in the international market and SEE governments and their respective arms trade organisation officials have to be aware of them. If, however, they try to get back the traditional markets mentioned above, they will need to put together better financial and technological offers to their potential customers. Thus, they need to combine low price with an enhanced quality of goods. Otherwise, their efforts are likely to be futile. In addition, the supply of spare parts to, for instance, India has already been carried out by the former Warsaw Pact countries including Belarus and Ukraine.

SEE defence industry officials might consider China as alternative market for their products. But until the EU lifts the arms embargo on China, the Chinese market is not on the cards. The latest episode, namely the Czech Omnipol's attempt to sell the Vera-E passive surveillance system to China, highlights the difficulties that an EU member state is likely to encounter.<sup>3</sup> The issue of arms trade regulations is further expanded in section 2.

At the same time Macedonia has turned out to be a new market for military products. Although it is correct to say that Macedonia has limited finances, every new customer, and particularly one that is close to home, is welcome.

The United States has recently bought some quantities of small arms, but again it will be mere illusion to think that the United States will purchase large amounts in the future. SEE companies are likely to have difficulty in finding new development products, securing their market position, and competing with up and coming new competitors eager to take their place. Global competition has become fiercer and the smaller countries in southeastern Europe have no particular financial incentives (for instance, an export credit line) to offer potential customers.

As a result, there is still a market in Africa. However, this market is fiercely contested by the arms brokers and a large number of countries world-wide. Undoubtedly, the massive influx of SALW on the African continent contributes to its

perennial instability. There is also the market of the Larger Middle Eastern area, which extends all the way from Egypt to Iran, where the potential sales by the countries of southeastern Europe are more likely to be found. However, the SEE countries need to keep in mind that Iran and Syria are likely to turn out to be difficult customers and the US will exert immense diplomatic and political pressure to prevent sales of military products to both countries. Finally, there is a large market in Latin America. Whether the countries of southeastern Europe might have a chance to sign contracts there remains to be seen.

## **2: The Problem of Illicit Arms Exports & Surplus Weapons**

The issue of illicit arms sales was extensively discussed and written about in 2002 and 2003. The SEE governments can draw some useful lessons from the experience of neighbouring countries in trying to solve the problem of illicit arms exports and in drafting arms export control regulations. There is, for instance, an excellent article on Slovakia, which was published in *Jane's Intelligence Review*.<sup>4</sup> The article clearly describes the clash of interests between the government and domestic arms dealers. As a result, efforts to tighten controls are meeting resistance. In the most recent setback, proposed legislation to prevent illicit arms trafficking left in place a provision that allows weapons shipments to transit the country for up to seven days without requiring a government licence. According to Human Rights Watch, this 'loophole makes it all too easy for weapons to move through Slovakia undetected'. Also, military systems coming into the country for servicing or modification and returning to the country of origin are exempt from control, and this may be exploited by illicit operators to divert upgraded weapons to third countries.<sup>5</sup>

Matus Korba has noted that the new law regulating the work of the Export Licensing Commission had left in place a licensing loophole for weapons shipments that transit Slovak territory. It did not address the activities of transport companies, it failed to increase penalties for violations, and it neglected to enhance the transparency of the arms trade or parliamentary oversight. Another weakness of the law is that a transit licence for military goods is not required as long as the transfer through Slovakia takes less than seven days. An air carrier needs to get permission only from the Transport Ministry's civil aviation section to transfer a shipment. The Slovak Airport Authority is unable to intervene in such arms transports, even if there is a suspicious cargo. There is no common transport policy regulating Slovak airports, and with dozens of small air carriers registered at Slovak airports, the lack of a transit licence has caused problems in the past with the shipment of arms to dubious destinations.<sup>6</sup> Until the issue of a transit licence for military goods has been properly addressed, Slovakia will continue to face difficulties.

The Slovakian MoD maintains control of surplus weapons, and arms brokers and exporters can buy the stock legally from the military with the proper authorisations. Given that there is a market for these materials, there is a large incentive for the cash-strapped military to sell rather than destroy its excess inventory. Sales from such stockpiles accounted for about 62 per cent of the total legally sanctioned arms exports of \$US45 million in 2000. In addition to authorised stock sales, there are indications of problems of illicit sales and leakage. Poorly-paid and poorly-trained conscripts who guard weapons stores are vulnerable to bribes and/or intimidation, and personnel guarding the border, including the Slovak-Ukraine border, are

## Southeastern European Defence Industry: International Cooperation & Market Opportunities

similarly susceptible to being suborned to ease the possible transit of illegal weapons. At one end of the ethical spectrum, Slovakian arms exports are entirely legitimate and justified; at the other end, illicit or irresponsible exports fuel conflicts and lead to weapons falling into terrorist hands. Between these two extremes there is a large grey area where the desirability, or indeed legality, of any given deal is open to interpretation: this is where the problem lies in Slovakia.<sup>7</sup>

### **Political & Economic Implications for Southeastern Europe**

SEE countries need to halt illicit arms deliveries entirely to the countries under UN embargo. This certainly compounds the problem for a defence industry that is looking for new markets. However, these countries' security and image interests should come before economic interests. This is certainly something that is easier to say than to do. However, the governments of these countries have very much at stake, notably their countries' future integration into the EU and NATO. The government of Bulgaria, as we will see below, clearly understood the importance of illicit arms deliveries and, since early 2003, has rigorously enforced arms export controls. Perhaps the SEE governments can learn from the Bulgarian experience about how arms export controls can be successfully enforced. In a recent report, Yudit Kiss wrote that the radical change of policy, from permissiveness to rigour, came as a surprise to most of the companies.<sup>8</sup> Many company managers considered their companies to be abandoned by the supervising authorities. This feeling was reinforced by the fact that the Ministry of Economic Affairs, the institution in charge of the sector, had been reorganised and the staff were concentrated at the arms trade department, rather than the production department, as had previously been the case.

The change of government policy signalled a new and often insurmountable obstacle for many companies. Grey and black market transactions became considerably more risky than in the past. Most defence-related companies had to come to terms with the idea that, in order to survive, they had to find new sources of revenue, primarily by increasing their production in the civilian market, finding subcontracting work, or exploiting opportunities for cooperation. To conclude, perhaps the whole system of arms export controls needs a serious overhaul and undoubtedly personal connections need to be severed.

### **Introduction of Arms Trade Regulations**

In an effort to address some of the Slovak problems, the Export Licensing Commission, the body responsible for granting permission for individual arms deals, was reorganised in February 2002 in order to rationalise its functions. The previous commission comprised three members who held salaried positions in the arms trade. Now, it includes six representatives: one each from the Ministries of Defence, Foreign Affairs (which has a veto), Interior, the Customs Directorate, and two from the Ministry of Economy. These changes were the result of bitter political in-fighting, with some ministries resisting the inclusion of representatives from Customs and Intelligence on the basis that their role is 'enforcement' rather than 'policy making'. It took several months to persuade one of the representatives to give up his seat. Well-placed international sources were quoted as telling *Jane's Intelligence Review* that they were encouraged by the recent performance of the reformed licensing board and the reorganised Customs Directorate in terms of implementing and upholding international standards.<sup>9</sup> According to the new regulations all old permits for trading in military equipment expired on 28 February 2003. Arms trading private companies had to apply for new permits under stricter regulations. The number of companies licensed by the Ministry of Economy to



trade in arms decreased by as much as two-thirds: according to various estimates to between 150 and about 600. The Ministry of Economy, however, issued a press release in May 2003 confirming that about fifty companies had received general licences for arms trade according to the new criteria.<sup>10</sup>

On paper, Slovakia is committed to strict controls of its defence industries. It has pledged support for UN Security Council resolutions and other international regimes, including the EU Code of Conduct on Arms Exports. Sources informed *Jane's Intelligence Review* that, domestically, there were very tough controls, even over handguns and small arms. Thus, there is a legal framework in place that should facilitate effective control, in spite of the persistence of loopholes. The weakest point is not the law itself, but its enforcement, and this requires political will. Whether such a will exists remains unclear. While efforts have been made to improve the system of export controls and raise transparency, there is resistance in the system.<sup>11</sup> To date, there are no effective parliamentary controls or government accountability mechanisms functioning in Slovakia on the issue of the arms trade.<sup>12</sup>

Another useful example of arms exports policy from which the SEE governments can learn is the example of Ukraine.<sup>13</sup> The Ukrainian export control system and policy development have gone through many changes since their inception in March 1992. Of relevance here is the seventh stage of 8 July 2002. On that day President Leonid Kuchma issued the decree renaming the Commission on Export Control and Military and Technical Cooperation with Foreign Countries as the Presidential Commission on Military and Technical Cooperation and Export Control. Thus, the Commission was elevated in status, subordinated directly to the president, and included an export control agenda. On 24 December 2002, following the Kolchuga affair, President Kuchma signed the decree 'On Additional Measures to Improve Control in the Area of International Military and Technical Cooperation'. The decree was aimed at enhancing military cooperation with foreign countries, while at the same time increasing control over international transfers of military and dual-use goods. One of the main changes introduced by the decree concerned the implementation of UN sanctions. The State Service for Export Control and other executive agencies are now authorised to impose UN sanctions on foreign countries as soon as such sanctions are announced by the Ministry of Foreign Affairs (MFA). Previously, the State Service on Export Control and executive agencies had to wait for an official ruling from the Cabinet of Ministers before imposing UN sanctions. In other words, red tape was removed and Cabinet Ministers' requests to sell arms no longer granted, since the MFA is interested in substantially reshaping Ukraine's image and reputation as an arms exporter and enforcer of export control. Whether the MFA will succeed in its mission remains to be seen.

Another important change dealt with the development and implementation of Ukraine's export control strategy. For instance, the decree required draft presidential decrees on military and technical cooperation and export control to be submitted for consideration to the Presidential Commission on Military and Technical Cooperation and Export Control. Previously, the Commission did not review draft decrees. In addition, under the 24 December 2002 decree, the responsibility for the implementation of state policy for international military and technical cooperation and export control falls under the presidential administration's Main Directorate for Judicial Reform. The decree also changed the membership of the Commission by adding representatives from the Security Service and the Ministry of Defence, suggesting that the Kuchma administration intended to rely more on special services for implementing state policy on military and

Southeastern European Defence Industry: International Cooperation & Market Opportunities

technical cooperation and export control. In other words, compared with the Commission created on 4 February 1999, composed of ministries and agencies and accountable to the president of the Council of National Security and Defence (CNSD), the focus of the Commission moved from the CNSD to the Presidential Administration, with an increased surveillance of special services and implementation (the first time the term 'implementation' has been used) by the Main Directorate for Judicial Reform. By this means, the presidential administration hoped to tighten arms sales and export control to prevent a repetition of the Kolchuga affair (this well-publicised case related to the allegations that in July 2000 the Ukrainian arms-trading company Ukrspetsexport sold the Kolchuga passive detective system to Baghdad).

Although the developments clearly indicated the shift to more vigilant and careful arms exports, Ukraine's arms export control system still has much room for improvement. It is based not on laws adopted by the parliament but rather by a decree of the president. The drafts of the Law on Export Control and the Law on Military and Technical Cooperation with Foreign Countries are yet to be produced and submitted to parliament. For the time being, both drafts are a long way from completion, not to speak about ratification and implementation. Despite the presidential decrees and a variety of regulations, Ukrainian arms exports are driven by profit and not by strictly adhered-to rules. As a result, the rules are bent and the country has obtained a reputation for being corruption-oriented and associated with various shady structures. In addition, Ukraine has not abandoned its tradition of secrecy with respect to military and technical cooperation with foreign countries and does not keep any publicly available records. While stating that Ukraine adheres to all international agreements and sells no weapons to states under international sanctions, top Ukrainian officials<sup>14</sup> have admitted to carrying out a large number of illegal arms transfers. Official estimates indicate that legitimate arms sales account for only a fraction of the number of these illegal transfers.

In addition, according to the deputy director-general of Ukrspetsexport, Alexander Kovalenko, re-export of military goods presents a serious problem for the present-day arms market. A company often faces a situation where arms sold by Ukraine or transited via Ukraine are offered for resale to hot spots throughout the world. A number of steps have been taken to prevent such occurrences, such as the strengthening of control over the transporters of weapons. Contracts for the lease of Ukrainian carriers include provisions banning traffic to countries that are subject to sanctions. In the event of contract violation, the responsibility falls on the party that has leased the carrier. The State Service on Export Control has formed a department that checks whether arms are actually used by the end customer. It turned out that in 1999 alone,<sup>15</sup> at least ten middle men were identified who might perform re-export operations. The rather hypothetical question that the Ukraine government needs now to consider is how many other unidentified middle men of Ukrainian origin there are. For the time being, the answer to the question is unknown.

In 2000, to prevent a recurrence of what happened in 1999, a State Service report recommended registration of all manufacturers of special-purpose items subject to control; keeping a watchful eye on thirteen defence exporters; control over negotiations on exports of military and special-purpose goods and technologies and provision of an up-to-date list of all military goods and licences issued to foreign economic operations. In spite of the State Service recommendation nothing was

done until 2003. Whether the recommendation will be implemented remains to be seen.

At first glance it appears that, over the last eleven years, the Ukraine has set up a system of arms export control. Although the system is still flawed, at least it does exist and, as far as we can judge, it works, but not well. The major problem with the current system of arms control is that it is not based on laws passed by parliament, but is administered by presidential decrees. As a result, the current structures can be reorganised at any time at short notice by order of the president. There is also no parliamentary oversight of its operations. Furthermore, no parliamentary commission exists to investigate the so-called illegitimate exports. There is absolutely no transparency and this is unlikely to change in the near future. As a result, Ukraine has been told by the international community to tighten its arms-control regime and respect international arms controls. This will be difficult to achieve, given the country's record.

The problems of Slovakia and Ukraine highlight the current difficulties in enforcing arms export controls. Both countries' past experiences of weapons sales without clear arms regulations continue to haunt and affect their ability to operate under the EU Code of Conduct on Arms Exports. In addition, both countries' statements that they adhere to all international agreements need to be taken with a pinch of salt. Finally, both countries continue to lack parliamentary oversight and transparency related to arms export controls.

It is worth stressing that the introduction of arms trade regulations alone would not solve the problem of illicit arms exports. It is, however, important to note that the arms regulations need to be concise and precise without any ambiguities in order to prevent the officials who implement the regulations from claiming that they 'didn't understand this or that particular point in the regulations'. In addition, any legal loophole should be avoided at all cost. Furthermore, the arms regulations must include a clear and concise reference to the sales of surplus weapons, transit licences and dual-use items.

For instance, according to Internet sources, on 12 November 2002 six top officials at Bulgaria's state-owned Terem defence plant were arrested for violating a ban on the export of dual-use equipment. The executive director and the entire managing board were also dismissed as authorities discovered and halted the unauthorised export of spare parts for armoured personnel carriers, which had been misrepresented as civilian tractor parts. The recipient was a company based in Syria, one of the seven countries on Washington's list of state sponsors of terrorism. Coming less than two weeks before NATO's summit in Prague, the scandal raised concerns among politicians about its possible impact on Bulgaria's bid to join NATO.<sup>16</sup> Fortunately for Bulgaria, the government reacted immediately and the affair did not affect Bulgaria's bid. However, the whole unfortunate affair might have been avoided if proper export controls were strictly enforced and not ignored.

The arms trade regulations should be forcefully and vigorously enforced right from the top political and military echelon down to the lowest clerk in an arms manufacturing company. The International Crisis Group report published in December 2002<sup>17</sup> stresses the importance of enforcement regulations. There are no excuses for anyone to breach regulations and remain unpunished and there are no excuses for either political or military echelons to state they were not aware of what happened. Finally, there is no point in creating arms trade regulations in the first

## Southeastern European Defence Industry: International Cooperation & Market Opportunities

place if they are not subsequently enforced. It is important that the arms export controls are not just viewed as window dressing.

Although the Czech electronics company ERA AS (manufacturer of Vera-E) has received approval from the Ministry of Industry and Trade in the form of an export licence it has not received the approval of the Ministry of Foreign Affairs.<sup>18</sup> As a result, the sale of the system has been halted. Thus, it is vitally important to make a clear indication in the arms regulations of the number of ministries and security organisations involved in the defence deal. Every minister and/or deputy minister involved in the process will bear a personal responsibility for approving and/or rejecting every defence deal. The process might turn out to be lengthy and tedious but there is a chance that it will lead to a fall in the number of arms transfers to dubious destinations. It should be stressed that SEE countries are well known for their production of SALW, and it is these small arms that have the fastest rate of proliferation in areas of conflicts, so their impact on a conflict can be felt immediately. In addition, the impact of small arms and land mines is not only immediate but also deadly compared with, for instance, large weapons systems such as aircraft and/or helicopters. Therefore, the arms regulations relating to the sale of SALW should be stricter and the implementation of such regulations should be even more rigorous.

The three cases presented above emphasise the crucial importance that the MFA plays in arms export controls. Foreign sales directly affect the image and reputation of a country. The importance of image and reputation needs to be clearly understood by the governments of southeastern Europe. A damaged image and/or damaged reputation will remain with the countries for a very long time.

As a follow up to the unsuccessful sales of the Vera-E system to China the Czech government decided to increase restrictions on arms sales. According to an Internet source, on 5 January 2005 the Czech government in response to domestic pressure approved changes in the law that would simultaneously tighten arms trade regulations and make the arms trade more transparent. Under the amended law, state organisations will have to regularly compile current lists of military hardware and provide better information on the reasons for refusing to grant licences. The law also envisages the compilation of a list of countries to which arms exports are strictly banned. Cooperation between the National Security Office and the Minister of Industry and Trade would also be more clearly defined. The changes to the law must now be approved by the Czech parliament before they are put into effect.<sup>19</sup>

### **3: Identifying Niche Products & Their Potential Markets**

The future for manufacturing niche products does not look very optimistic and, undoubtedly, it is extremely hard for government officials to accept this. So-called hybrid systems, which are compatible with both former Warsaw Pact and NATO standards, are not a solution. The Warsaw Pact market has disappeared. The countries that used to purchase military hardware from the Warsaw Pact countries such as, for instance, India, Indonesia and Vietnam, have either substantially improved the performance of their domestic defence industry and now co-operate with Russia or Israel and/or have significantly decreased the quantity of military goods that they purchase from the developed world. In addition, the present SEE defence industry lacks new technology and know-how, particularly in the field of electronic systems (including avionics and electro-optics). Furthermore, even if the

defence industry did have the new technologies and know-know, it would be in direct competition with Israel, a country that has accumulated massive experience in modernising Warsaw Pact and NATO military systems and that has already built a first class reputation in that market.

However, the transfer of SEE countries' defence technology to, for instance, Indonesia and co-development of some projects may give a chance to the SEE defence industry to re-enter its traditional markets and to penetrate new ones. This is, for instance, the current trend in defence industrial relations between Poland and Indonesia.<sup>20</sup>

The southeastern European governments should consider allocating funds for research and the design of systems aimed at anti-terrorism activities in the following areas: detection and destruction of improvised explosive devices, early warning of terrorism threats, and harbour protection. This is a niche in the market where it is possible to co-operate with the defence industries of Israel, since the latter has accumulated vast experience of a war with terrorists.

Another niche product is dual-use technology goods. For instance, the design of the central nervous system for security, surveillance and command and control of high-profile international events and/or for the fight against crime and terror.

In the FRY modern mines and booby traps were largely designed and developed in isolation. It could be suggested that putting effort into research and the design of mine clearing and mine detection equipment can be rewarding. Such a niche product is needed urgently at home and the countries in the vicinity as well as world-wide.

There is no sense in the countries of southeastern Europe tendering for modernisation projects such as the self-propelled gun howitzer; the self-propelled anti-aircraft gun; the armoured personnel carrier; the T-72 tank and even surface-to-air missiles SA-3/6 in, for instance, India and Pakistan. They cannot compete with stronger bidders such as, for instance, Israel, Poland, Russia, Slovakia and Ukraine, which are capable of working in tandem with the local manufacturers.

#### **4: What are the Possibilities for Industrial Cooperation Between Southeastern Europe & the EU & NATO Member States?**

Industry officials say that one way of allaying Western concerns is to encourage joint projects with western defence companies; this would bring cash and added accountability.<sup>21</sup> It would mean that western defence companies would choose those companies in southeastern Europe that they consider worth investing in. Such a scenario means that the number of chosen companies would probably be limited. At the same time, SEE governments should remember that it takes time for a western company to find a new partner, not to speak of buying a stake in a company that is located in southeastern Europe. For instance, even in the well-known case of cooperation between Romania and France, namely between Eurocopter, a subsidiary of the European Aeronautic Defence and Space Company (EADS) and Interprinderea Aeronautica Romana (IAR) Brasov, the French company was reluctant to purchase a major stake in the Romanian helicopter manufacturer,<sup>22</sup> despite their long-term cooperation.

## Southeastern European Defence Industry: International Cooperation & Market Opportunities

It could be suggested that SEE governments should immediately set about renewing their cooperation with the EU countries with which the former Yugoslavia used to co-operate before the outbreak of war in the Balkans. Several countries in the vicinity of southeastern Europe could be involved in co-operative projects and/or joint ventures. These include Turkey, a country that is currently attempting to establish a self-sufficient defence industry and perhaps also Austria, Germany and Italy. As for potential markets, although Portugal did buy small arms ammunition in 2003, hopes for further NATO contracts have not materialised. Even if the contracts do come, they will not be large.

The former Yugoslav states used to manufacture Pandurs, wheeled armoured vehicles produced by the Austrian company Steyr-Daimler-Puch. This company was acquired by the US-based General Dynamics in November 2003. The production of Pandurs is very likely to start again in the not too distant future. In addition, SEE countries used to co-operate with Switzerland's Oerlikon Contraves, which, since then, has become part of the German Rheinmetall Group. Perhaps this cooperation can also be renewed.

Although Israel is neither a member of the EU nor of NATO, the Israeli experience of looking for potential partners in the EU can be of use to the SEE governments. In addition, Israeli success, particularly in Poland and Romania, and also its expanded cooperation with the hard core members of the EU, namely France, Germany, Italy and the UK, illustrates how the 'mini superpower' in the Middle East can be accepted by the EU member states. The former pariah states of FRY can only envy such success. It needs, however, to be stressed that Israel's success story has only taken place in the last fifteen years, although a mini embargo on Israel (such as denying and delaying supplying certain military components and fully fledged systems) initiated by some EU member states has been imposed as recently as 2003.

At the end of section 1 I noted that finally, there is a large market in Latin America. There is at least one potential co-operative partner, namely Brazilian-based aerospace's most well-known company Embraer. SEE governments should consider contacting Embraer marketing officials.

To conclude, it will be a bitter disappointment for SEE countries to discover that only a few foreign companies are likely to be interested in their markets and their products. However, these are hard truths that are not always clearly understood by the governments.

### **Industrial Cooperation**

Industrial cooperation per se is based on genuine common interests and is aimed at mutual assistance and, as such, is basically very different from the other types of defence industry cooperation discussed below.

According to Internet sources reinforced by *Military Technology*, on 14 December 2000 the Roethenbach-based company Diehl Munitionssysteme (DMS) signed a contract with the Slovak MoD to modernise the RM-70 (122 mm) artillery rocket launcher system. For Slovakia this was the first co-operative project with a NATO member state.<sup>23</sup> DMS still wants to earn money on common programmes and supplies components for Slovak tracked equipment.<sup>24</sup>

## Joint Ventures

There are at least two well-known forms of joint venture: with the national company of, for instance, Romania having control of the majority and/or 49 per cent of the new company. For instance, according to Internet sources reinforced by *Jane's Defence Weekly*, on 14 June 1999 two collaborative agreements were signed at the Paris Air Show between the French and Romanian aerospace industries. The first agreement is relevant here.

The first agreement between Aerostar SA and Thomson-CSF Communications (a subsidiary of Thomson-CSF) was to form a new joint venture called Aerothom Electronics SA (not to be confused with AE Electronics SA). This new company has a registered capital of which 60 per cent is held by Aerostar SA, 10 per cent by Jiar and 30 per cent by Thomson-CSF Communications. Aerothom Electronics SA will manufacture identification friend or foe (IFF), professional electronics and radio navigation equipment at the Bacau-based Aerostar SA headquarters. Aerothom Electronics SA will first assemble and then gradually take on the manufacture of all the equipment.<sup>25</sup>

According to Internet sources, on 2 July 2004 Finmeccanica unit Marconi Selenia Communications inaugurated a new defence electronics manufacturing joint venture in Romania, Elettra Communications. This new company is 51 per cent controlled by Marconi Selenia Communications, Marconi Selenia Romania and Marctel, a private Romanian company that Marconi Selenia is set to purchase. The remaining 49 per cent is controlled by CN Romarm SA and Electromecanica Ploesti, a unit of Romarm. The group is to manufacture defence electronics equipment in Romania for the local and foreign markets.<sup>26</sup>

## Purchasing a Stake in a Company

There are few known examples of a foreign company purchasing a stake in an Eastern European company to assist the latter in achieving a technological and commercial breakthrough. The joint ventures mentioned above are a more common trend. However, one example can be mentioned. In March or April 1998, Paris-based Thomson-CSF International bought a 35 per cent stake in ERA AS. Milan Bernard, ERA's sales manager, said on 2 April 1998 that the partnership with Thomson-CSF gave the Czech company a strong technological link as well as access to international markets.<sup>27</sup> Whether Thales (formerly known as Thomson-CSF International) will decide to increase its stake in ERA AS and/or to set up a joint venture remains to be seen. One can only assume that, for the time being, Thales management has been carefully assessing ERA's technological developments, marketing performance and financial profits. Another, not so successful, example was Boeing's purchase of a 35 per cent stake in Aero Vodochody. Although Boeing's intention was to provide the Czech company with a strong technological link, necessary know-how, financial investment and access to international markets, the final result has turned out to be very unsatisfactory from both companies' perspective.<sup>28</sup> *Jane's Defence Weekly* noted that the Czech government decided in early February 2004 to buy back the 35 per cent stake held by the US Boeing local affiliate Boeing Ceska.<sup>29</sup>

## Subcontracts & Manufacturing Under Licence

It can be said that that the subcontracting business is part and parcel of defence industry cooperation, although the relationship between the contractor and subcontractor is never equal. In general subcontracts involve the manufacturing of components by a local company for a European and/or American company. This is

## Southeastern European Defence Industry: International Cooperation & Market Opportunities

the most common type of defence industry cooperation. An additional type of subcontracting business is in manufacturing under licence. For instance, the Polish company Radmor SA has been building digital RP4G field radios for Thomson-CSF under a \$US50 million government supply award that concluded at the end of 1996.<sup>30</sup> Manufacturing under licence usually involves the production of ammunition and missiles, for instance anti-tank guided weapons, artillery systems, defence electronics equipment, small arms and light weapons.

### **Marketing Under Foreign Trademarks**

Even the most successful military products from Eastern and southeastern Europe are best marketed under foreign trademarks, and by established Western trade companies. This is not because the quality of the product is inferior but because the Eastern European company is not well known and/or it has no well organised marketing policy. As a result, any share of the defence companies' participation, for instance, in the marketing of the final product, is likely to diminish. In other words, the company remains, for instance, southeastern European. The name of the company remains on the product itself, but it is displayed less prominently than the foreign trade name. Whether this situation can be reversed remains an open question.

This is perhaps one of the solutions to the marketing of a locally manufactured product. Another potential solution might be the setting up of a joint venture with a Western company as mentioned above.

### **Offset Programmes**

It is important to stress that offset programmes are directly connected to a purchase from a particular country of a large number of high quality military goods such as, for instance, aircraft, armoured modular vehicles, helicopters, etc. Although such purchases are not yet on the SEE countries' agendas, it is worth mentioning at least one here. This is perhaps for the time being the largest and most important deal signed between the USA and Poland. There is, however, another example of an offset programme that might be relevant to SEE defence industry capabilities, namely the Israeli company Rafael Armament Development Authority's (also known as Rafael) sale of Spike-LR long-range anti-tank missiles. In addition, an offset deal may also involve repayment of debt. For instance, in April 2002 the Czech Republic ordered three An-70s as part pay-off of the Russian debt to the Czech Republic. The deal was later cancelled. However, in 2002 the Czech army received seven Mi-24/35 combat helicopters from Russia as partial payment for debt owed to the Czech Republic dating back to the Communist era.<sup>31</sup>

According to Internet sources, the USA-Poland offset agreement was signed on 18 April 2003. In the words of Jerzy Hausner, Minister of Economy and Works, 'the nominal values of the compensatory investments (offset) comes to \$US7.5 billion and its real values reaches the level of \$US12 billion'. According to Christopher Hill, the US Ambassador to Poland, 'this is the biggest offset agreement that has ever been signed'.<sup>32</sup> In another statement, Internet sources noted that in addition to the offset agreement to build the jet engines for the F-16 aircraft in Polish factories, the deal also commits General Motors Corporation to enlarging a car plant there and Motorola Inc to installing an emergency telecommunications system for the Polish government.<sup>33</sup> *The Baltic Times* further clarified and expanded on the offset deals by reporting that Lockheed Martin and a number of other US companies (including General Motors and Motorola) have committed themselves to investing more than \$US6 billion in Poland between 2003 and 2013 in 43 offset



projects. The projects involve the purchase of Polish commodities (70 per cent of the total sum), direct investments in Polish production capacities (20 per cent) and the transfer of US technologies (10 per cent).<sup>34</sup> *Science* also noted that the F-16 deal gave a boost to Polish science; final contracts with investment partners are to be signed in the coming weeks. Companies include Bioton, a Poznan biotechnology company that produces recombinant insulin and a business and technology centre in Lodz. According to Adam Wilczega, Bioton's president, the agreement with the company will be worth tens of million of dollars. The \$US300 million Lodz technology accelerator project aims to give venture capital funding and business advice to high-tech entrepreneurs.<sup>35</sup>

To conclude, the offset package that Lockheed Martin and a number of other US companies provided to Poland has brought visible financial benefits to a large variety of Polish companies in both commercial and military sectors. An additional important point for SEE governments to remember is that an unusual provision inserted into fiscal legislation in November 2002 provided for a \$US3.8 billion direct loan to Poland. Poland need only pay interest on the loan for the first eight years of the fifteen-year loan. Furthermore, according to Willard Mitchell, US Air Force Undersecretary for International Affairs and the lead agent for the US sales effort, in the Polish tender political pressure and offsets also played a role. However, offsets accounted for only 15 per cent of the final points in the competition.<sup>36</sup> Thus, political pressure combined with financial incentives and success in the technical competition were the key to the Polish tender. The offset agreements remain crucial for the final contract. Thus, if during the tender, offset counted for only 15 per cent, its share substantially increased in the post-tender negotiations. This particular factor needs to be carefully considered. Finally, offset agreements need to take into account not only the defence complex but also a large variety of commercial and civil infrastructure projects, as presented above.

The financial aspect played a very important role in the US-Polish fighter deal. Poland and the USA finalised a multibillion dollar F-16 payment deal for the first 16 of 48, which will be due from 2010. In other words, the time frame of eight years before the first payment gave Poland the breathing space needed to come up with the required funds. Undoubtedly, the US government's understanding of the current Polish financial difficulties and the unconditional support provided by the government to Lockheed Martin highlights the interconnection between financial and political factors. One could foresee a very similar US strategy in a future aircraft tender for Romania. It could be suggested that SEE governments should watch Romania's offset agreements closely.

On 29 September 2003 the Polish Ministry of National Defence signed the long-anticipated contract with the state-owned missile and ammunition manufacturer ZM Mesko and its parent company Bumar Capital Group for the procurement of the Rafael Armament Development Authority Spike-LR missile. Rafael submitted an \$US825.5 million offset package to the Polish government comprising twelve direct and eight indirect projects. Manufacture of the Spike-LR in Poland will provide up to three hundred local jobs, including between 150 and 200 at ZM Mesko. Up to ten companies, mainly from the Bumar Capital Group, will participate in manufacturing some 20 per cent of the system. The Bumar Capital Group will have export rights to countries approved by Rafael and the Israeli Ministry of Defence as well as the Polish authorities.<sup>37</sup>

## Conclusion

The task ahead is not a simple one. Every solution to the problems that the SEE defence industry is facing has both positive and negative consequences. The important point that needs to be highlighted is that these countries tend to be accused, whether justly or not (it is of little relevance), of unauthorised arms transfers. Although the governments of these countries and other defence related organisations rebuff such accusations, their overall reputation has been damaged, to say the least. Although such accusations and allegations might be politically motivated in order to discredit the image of the countries, they might also ruin their business relations with potential customers. In addition, such accusations and allegations are excessively publicised and, as a result, damage their chances of joining the EU and NATO. This particular dimension needs to be taken into serious consideration by SEE governments. Short-term temptations to earn money as quickly as possible without taking into consideration the longer-term consequences remain on these countries' agenda. Furthermore, the existence of domestic arms dealers complicates the formation of an arms export controls agenda.

One thing is clear. SEE government officials and their arms marketing team need to be realistic in their overall assessment of what their country's defence industry is capable of manufacturing, who is going to manufacture what, and where products are going to be delivered. What may be hard to accept is that the international arms markets are currently not expanding but remain stable. The current situation is unlikely to change in the next two to three years at least; however, from 2007 onward we are likely to see certain changes. The most recent natural catastrophe, the tsunami, also affected the South-East Asian region, one of the most financially capable geographical areas for purchasing a variety of arms. However, it would be very unwise for the governments in southeastern Europe to try to sell military goods to Myanmar (also known as Burma). Although Myanmar is on the lookout for military goods and is also interested in modernising its military arsenal, the EU member states still have an arms embargo on that country.

In addition, the foreign cooperation mentioned above will require time and effort on both sides to reach agreements; compromises need to be made and the parties need to be flexible and prepared to give up some national pride. The last point is sometimes the most difficult to accept and to live with.

## ENDNOTES

<sup>1</sup> Jane's Defence Weekly, 24 November 2004, 18.

<sup>2</sup> For earlier information, see Jane's Defence Weekly, 6 February 2002, 9; Flight International, 12-18 February 2002, 17; Jane's Defence Weekly, 20 March 2002, 14; Slovak Army Review (Spring 2002), 23; Jane's Defence Weekly, 24 April 2002, 10; 5 June 2002, 3; 12 February 2003, 9; Air Forces Monthly (April 2003), 10; [http://www.defensenews.com/pgt.php?htd=i\\_story\\_1799680.html&tty=worldwide](http://www.defensenews.com/pgt.php?htd=i_story_1799680.html&tty=worldwide); Jane's Defence Weekly, 30 April 2003, 5; 11 June 2003, 5; Flight International, 17-23 June 2003, 28; Military Technology (July 2003), 88; Jane's Defence Weekly, 16 July 2003, 13; Aviation Week and Space Technology, 4 August 2003, 26; Air Forces Monthly (September 2003), 8; Flight International, 2-8 September 2003, 16; Jane's Defence Weekly, 10 September 2003, 72; Jane's International Defence Review (October 2003), 21. For the latest information, see Jane's Defence Weekly, 3 March 2004, 10.

<sup>3</sup> Omnipol is a Czech company specialising in export and import of military equipment. For Czech domestic and international pressures, see Jane's Defence Weekly, 28

April 2004, 20-21; <http://www.defensenews.com/story.php?F=2937448&C=europe>; Flight International, 1-7 June 2004, 15; 28 September-4 October 2004, 18; European Voice, 7 October 2004; Jane's Defence Weekly, 20 October 2004, 28.

<sup>4</sup> A Rogers & J Hill, 'Slovakia struggles to control arms exports', August 2002, 33-35. This article was partly based on Matus Korba's Independent Report on Slovak Arms Exports, which was published by the Bratislava-based Slovak Foreign Policy Association in Summer 2002, 1-26.

<sup>5</sup> Rogers & Hill, 'Slovakia'; 33.

<sup>6</sup> Abstract from a forthcoming research paper 'Security sector reform in Slovakia: A case study of arms exports and transparency', 14 January 2005.

<sup>7</sup> Rogers & Hill, 'Slovakia'; 34.

<sup>8</sup> Small Arms and Light Weapons production in Eastern, Central, and Southeast Europe, Geneva-base Small Arms Survey, Occasional Paper No 13, October 2004, 18.

<sup>9</sup> Rogers & Hill, 'Slovakia'; 34.

<sup>10</sup> Abstract from a forthcoming research paper 'Security sector reform in Slovakia: A case study of arms exports and transparency', 14 January 2005.

<sup>11</sup> For further details on the efficient enforcement of the law, see Rogers & Hill, 'Slovakia'; 34-35.

<sup>12</sup> Abstract from a forthcoming research paper 'Security sector reform in Slovakia: A case study of arms exports and transparency', 14 January 2005.

<sup>13</sup> The author wrote an English-language article on the issue 'The Ukrainian arms exports policy', which was translated into Danish by Brita Vibeke Andersen, editor of the Danish Foreign Policy Society journal Udenrigs, and published in the journal under the title 'Ukraines vabeneksport', No 3 (2003), 73-82.

<sup>14</sup> V Zaborsky, 'Ukraine looks to boost arms exports', Jane's Intelligence Review, November 2001, 33.

<sup>15</sup> V Badrak, 'State Control of 'Sensitive Exports' through the prism of accusations', National Security and Defence, No 6 (2001), 13.

<sup>16</sup> For a complete article, see <http://www.balkantimes.com/html2/english/021113-SVETLA-001.htm>.

<sup>17</sup> 'Arming Saddam: The Yugoslav Connection', International Crisis Group Balkans Report No 136, 3 December 2002, 1-23.

<sup>18</sup> Jane's Defence Weekly, 28 April 2004, 20.

<sup>19</sup> <http://www.defensenews.com/story.php?F=584928&C=europe>.

<sup>20</sup> For more information, see Jane's Defence Weekly, 12 May 2004, 14.

<sup>21</sup> Jane's Defence Weekly, 25 July 2001, 20.

<sup>22</sup> For the whole story, see Jane's Defence Weekly, 8 March 2000, 26; Flight International, 2-8 May 2000, 23; Rotor & Wing, March 2001, 13. Rotor & Wing reported Eurocopter's decision to purchase stake in IAR Brasov.

<sup>23</sup> [http://www.diehl.com/diehl\\_gruppe/bib/en.jsp?druckversion=1&enVersion=0&enDispW](http://www.diehl.com/diehl_gruppe/bib/en.jsp?druckversion=1&enVersion=0&enDispW), May 2003, 70.

<sup>24</sup> For a complete article, see T Szulc, 'Slovak defence industry faces very serious challenges' in NATO'S Nations and Partners for Peace, No 49, Vol 3 (2004), 175-177.

<sup>25</sup> <http://www.aerostar.ro/Files/news8.htm>; Jane's Defence Weekly, 23 June 1999, 20; Military Technology, July 1999, 112.

<sup>26</sup> <http://www.defensenews.com/story.php?F=3070067&C=europe>.

<sup>27</sup> Defense News, 20-26 April 1998, 44; Jane's Defence Weekly, 20 May 1998, 27; <http://www.era.cz/en/profile.shtml>; Flight International, 15-21 July 2003, 14.

<sup>28</sup> Defense News, 25-31 March 2002, 3; Aviation Week and Space Technology, 8 April 2002, 41; Flight International, 21-27 October 2003, 17; 18-24 November 2003, 28; Jane's Defence Weekly, 17 December 2003, 20; Financial Times, 17 February 2004; Flight International, 17-23 February 2004, 7; 24 February-1 March 2004, 27.

<sup>29</sup> 25 February 2004, 15. For later information, see Flight International, 16-22 March 2004, 24; 6-12 April 2004, 24; 19-25 October 2004, 28; Jane's Defence Weekly, 20 October 2004, 33.

<sup>30</sup> Aviation Week and Space Technology, 22 March 1999, 63.

<sup>31</sup> [http://nvo.ng.ru/forces/2002-04-19/3\\_korotko.html](http://nvo.ng.ru/forces/2002-04-19/3_korotko.html); Jane's Defence Weekly, 24 April 2002, 10; Air Forces Monthly (September 2003), 11; Jane's Defence Weekly, 3 March

Southeastern European Defence Industry: International Cooperation & Market Opportunities

---

2004, 10; 24 March 2004, 11; 21 April 2004, 12;

<http://www.defensenews.com/story.php?F=367259&C=europe>.

<sup>32</sup> [http://www.defensenews.com/pgt.php?htd=i\\_story\\_1787737.html&tty=worldwide](http://www.defensenews.com/pgt.php?htd=i_story_1787737.html&tty=worldwide).

<sup>33</sup> <http://www.iht.com/articles/93773.html>.

<sup>34</sup> 24-30 April 2003.

<sup>35</sup> 300 (25 April 2003), 565.

<sup>36</sup> Defense News, 6 January 2003, 1 and 8.

<sup>37</sup> Jane's Defence Weekly, 16 July 2003, 5; 7 January 2004, 5; 24 November 2004, 13.

## **Want to Know More ...?**

See: NATO's Nations and Partners for Peace Special Issue: Slovenia and NATO, 2002, especially 'Priority: The Reaction Force' pp13-15; 'Modernisation of the Slovenian Armed Forces', pp28-29; 'Small, but efficient', pp30-31; 'Research potential is substantial', pp40-41.

Eugene Kogan, "*European Union (EU) enlargement and its consequences for Europe's defence industries and markets*", BICC, Paper 40, Bonn, January 2005, <http://www.bicc.de>

### **Disclaimer**

The views expressed are those of the  
Author and not necessarily those of the  
UK Ministry of Defence

ISBN 1-905058-03-9

**Published By:**

**Defence Academy of the**  
**United Kingdom**

**Conflict Studies Research Centre**

Haig Road  
Camberley  
Surrey  
GU15 4PQ  
England

Telephone: (44) 1276 412995  
Fax: (44) 1276 686880  
Email: [csrc@da.mod.uk](mailto:csrc@da.mod.uk)  
<http://www.da.mod.uk/csrc>

**ISBN 1-905058-03-9**