

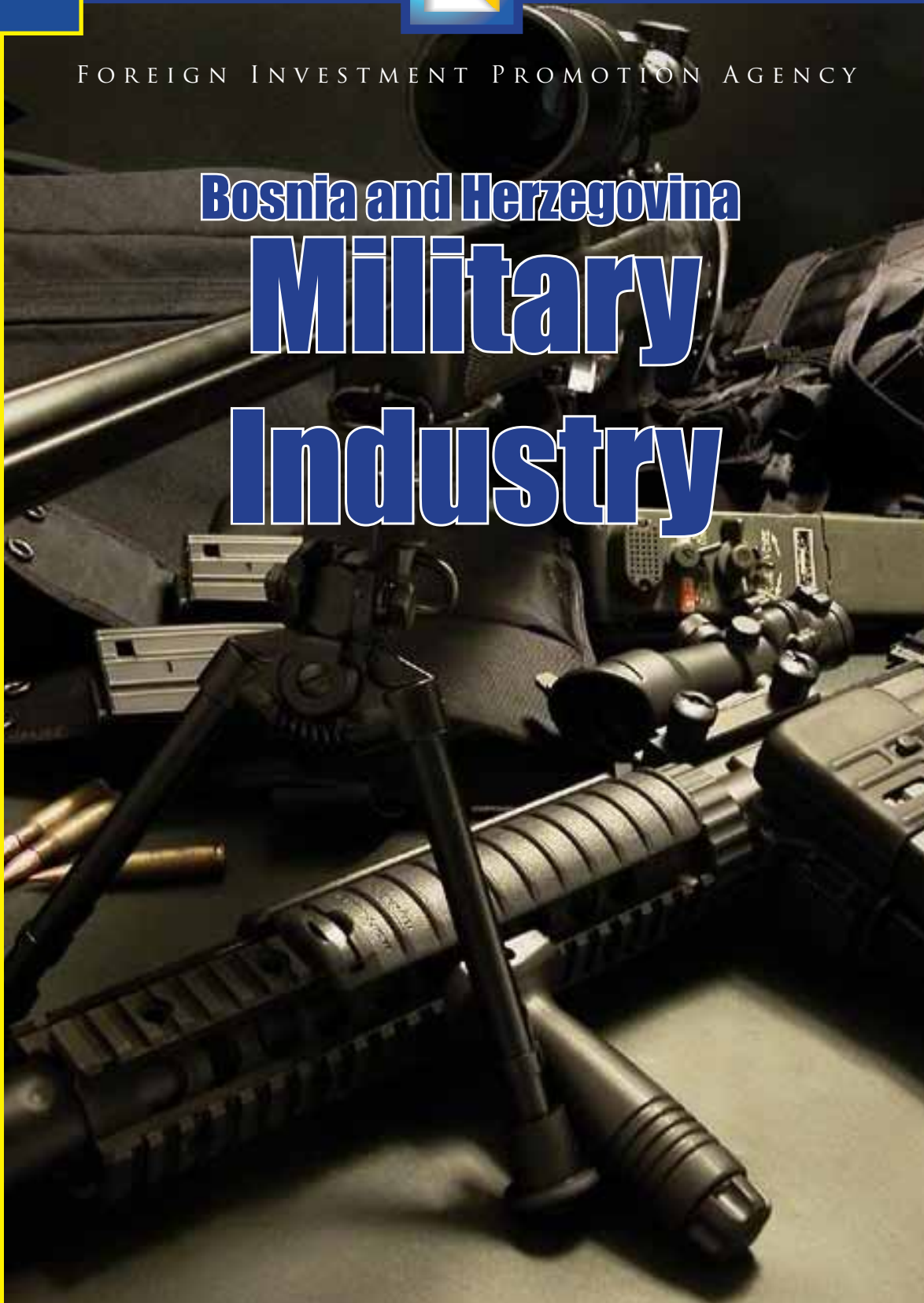
2014



FOREIGN INVESTMENT PROMOTION AGENCY

Bosnia and Herzegovina Military Industry

BOSNIA AND HERZEGOVINA INVESTMENT OPPORTUNITIES



Bosnia and Herzegovina Military Industry

MILITARY INDUSTRY OF BOSNIA AND HERZEGOVINA



I. Background

The military industry used to be one of the most powerful sectors in Bosnia and Herzegovina, which applied most advanced technologies and maintained most severe international standards for production of armaments and military equipment, being export oriented and which had a high reputation at the international markets all around the world.

The Bosnia and Herzegovina's military industry produced the wide range of armaments and military equipment including:

- Various military, industrial and initiating explosives and chemicals
- Primers, Detonators, Pyrocartridges, Igniters and fuses
- All types of ammunition and bullets for small arms, mortars, artillery, tanks, rockets and aircraft bombs
- All types of weapons (except small arms) & military equipment (mortars, artillery, tanks, tracked vehicles, general and special purpose wheel vehicles, multiple rocket launchers and aircrafts)
- Other military and protecting equipment
- Research & development, design, transfer of knowledge & know how

Bosnia and Herzegovina participated around 51% in the total production of armaments and military equipment within the former Yugoslavia, which annual export attained amounts of several billion of US\$.





II. Actual status

Actually, the installed military industry capacities, including research, development, design, production and maintenance of the military equipment and armaments, are multiple times higher than present requirements and demands of the B & H security and armed forces, what inflicted that these companies operate with only 10 % of its capacities, being almost 100% export oriented and dependable on harsh international market demands.

In addition, some special technologies had to be temporarily abandoned; the existing production equipment in some of these plants became outdated and requires upgrading and modernization, while some military companies had to shift the excess of installed capacity to a civilian, commercial programs and activities.

Currently, military production is organized in more than 20 companies with a large number of subcontractors, basing its production on domestic resources in 90% of cases.

Despite to all before mentioned disadvantages, B & H military industry demonstrated that it can successfully operate at both domestic and foreign markets with existing and newly developed products, recording a steady annual export of armaments, military equipment and services worth U.S. \$ 40 to 50 million.

With actual human, organizational and technological capabilities B & H military industry can cover overall production of explosives; all types of ammunition; mortars, artillery and howitzers weapons; production of parts for tanks and engines as well as wide range of services related to the assembling, overhauling, modifying and upgrading of various arms, tracked and general or special purpose wheel vehicles, and aircrafts.



These companies are still technically capable to produce - particularly with support or in cooperation with strong strategic partner - a wide range of

1. Explosives

1.1. Military and industrial explosives

- Plastic explosives
- Powder explosives
- Single and double explosives
- Composite fuels
- Permissible explosives
- Low brizance explosives
- Geophysical explosives
- Explosives for smooth blasting
- Explosives for small arms, artillery, rocket and aircraft bombs
- Detonating fuse



1.2. Initiating explosives and chemicals:

- Lead azide
- Lead styphnate
- Lead cresylate
- Lead dinitroresorcinate
- Diazodinitrophenol
- Tetrazene
- Mercury fulminate
- Lead peroxide
- Lead nitrate
- Lead acetate
- Trinitroresorcine
- Sodium azide
- Barium chromate
- Barium nitrate
- Barium oxide

2. Primers, Detonators, Pyrocartridges and Igniters

- Percussion primers for small arms ammunition (revolvers, rifles, antiaircraft and hunting ammunition)



- Primers, initial boosters, duplex & blasting caps and detonators, delay elements, electric detonators & primers (hand grenades, mortars, artillery, rockets and antiair craft ammunition)
- Electric squibs, igniters and pyrocartridges (solid propellant rocket engines, various pyrotechnic devices, pyrotechnic devices for fire extinguishers in armored vehicles & tanks and thermal battery ignition)
- Fuses – 60 to 280 mm (rifle grenades, mortar, artillery, rockets,)



3. Ammunition - eastern and western standards

- All types of small arms ammunition and bullets (5.56 – 12.7mm)
- All types of mortar ammunition (60 – 120 mm)
- Artillery (guns & howitzers) ammunition (76 – 155 mm)
- Tank and antitank ammunition (75 -125)
- Various rockets (122 mm – 262 mm) and aircraft bombs



4. Weapons

- Infantry arms (recoilless guns, hand launchers - anti armor & aircraft)
- Hand grenades, mines, mining rounds
- Mortars 60, 81, 82 and 120mm
- Guns & howitzers
- Multiple rocket launchers & systems



5. Military equipment and components

- Vehicles (tracked and general & special purpose wheel vehicles - tanks & armored vehicles)
- Vehicle engines and components (574 kW to 735 kW – for tanks, heavy military vehicles and bigger construction machines)
- Gearboxes and transmissions for tanks T-34, T-55, T-72 , M-84, M-84A, Infantry Fighting Vehicles: M-60 and BVP M-80A family and boats
- Optical & optoelectronic devices & laser technique (Fire control systems, sighting, observation & measuring devices for infantry, artillery and tanks)
- Telecommunication equipment (radio, telephone, audio equipment and accessories)
- Measuring-detecting devices (radiation, chemical, mine and metal detectors)
- Military electronics (automatic rocket control and antiaircraft systems)
- Aircraft - turbojet engines and components
- Protecting equipment



6. Services - design, transfer of knowledge & know how

Beside before mentioned military products, military research and development institute (established in 1924), companies' development centers and laboratories for material testing and certification and verification of processes and operators, as well as production facilities and its expert's teams provide a range of specific services including transfer of technology and knowledge (know-how), education of personnel, maintenance, overhauling, modifying and upgrading of arms and military equipment, etc, such as:

- Development and engineering of new military facilities
- Overhaul, modification and upgrading of all types of motorcars - tracked vehicles, general and special purpose wheel vehicles, mining mechanization, trailers, engines and generating sets
- Overhaul of turbojet engines (thrust by 2000 daN for subsonic; by 8300 daN for supersonic aircrafts)
- Overhaul and upgrading of motorcar engines and transmissions
- Overhaul and modification optical, optoelectronic, radio and other electronic devices
- Overhaul and modification all types of arms





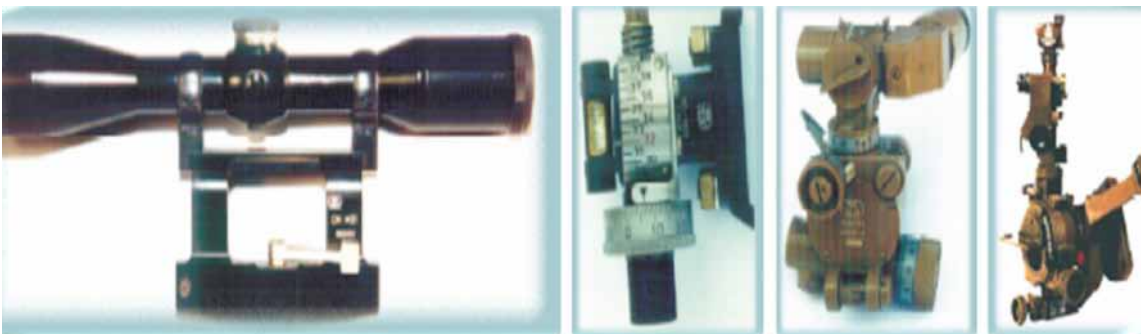
III. Development programs and investment opportunities

Despite before mentioned potentials and experience, all military sector companies are seeking for significant modernization and upgrading of existing production programs through introduction of new technologies, new production equipment and enlargement of markets, what require substantial capital investments, which this industry cannot afford in this moment.

For this reason, military sector is interested in establishment of strategic partnership with strong foreign partners, which could enable successful and profitable implementation of modernization and development programs, through joint venture, PPP or other suitable arrangements.

In this direction, the Law on Foreign Direct Investment Policy particularly stimulates foreign direct investments in the military sector, due to the fact that beside other incentives, this Law actually does not impose any restriction or limitation regarding foreign investment in the field of weapons and military equipment production.

In addition, imminent approach of Bosnia and Herzegovina to NATO alliance, make the investment in the military sector supplementary attractive.



IV. Military sector legal and regulatory framework

Legal and regulatory framework which regulate military sector in Bosnia and Herzegovina is harmonized or in process of harmonization with the UN Firearms Protocol and EU Directive, assuming a harmonization of legislation with communitarian law, including licensing and firearms permits issuance process, development of weapons and ammunition import and export policies, fostering of the firearms registers, setting up of the single legal framework in the field of weapons and ammunition field, etc.

In this process Bosnia and Herzegovina cooperates with international institutions, such as South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (SEESAC), which has a mandate from the United Nations Development Program (UNDP) and the Regional Cooperation Council (RCC) to further support the strengthening of national and regional capacity to control and reduce the proliferation and misuse of small arms and light weapons.

Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, and particularly its Department for control of foreign trade traffic of strategic goods keeps a record of licensed legal persons for production of armaments and military equipment (Central Register), implement the measures and procedures of securing and protecting of people, facilities, plants, control the research, development and warehousing of armaments and military equipment, as well as trading and business and financial transactions with abroad including export, import of weapons and military equipment, products and technologies.

Laws and regulations related to the production and repair of armaments and military equipment, as well as other issues significant for the production and repair of armaments and military equipment are enlisted below:

- Law on production of weapons and military equipment („Official Gazette of BiH“, No. 9/04 and 25/09)
- Instruction on the procedure for issuing licenses to legal entities for production and overhauling of weapons and military equipment and the manner of keeping records in the Central Registry („Official Gazette of BiH“, No. 36/04)
- Law on control of foreign trade of goods and services of strategic importance for the security of Bosnia and Herzegovina („Official Gazette of BiH“, No. 103/09)
- Instruction on the procedure for registration of legal entities and physical persons for foreign trade of goods and services of strategic importance for the security of Bosnia and Herzegovina („Official Gazette of BiH“, No. 19/10)
- Instruction on conditions and procedure for issuing documents for foreign trade of goods and services of strategic importance for the security of Bosnia and Herzegovina („Official Gazette of BiH“, No. 19/10)
- Instruction on the implementation of supervision of legal entities and physical person who has been licensed or registered for performing foreign trade of goods from control lists („Official Gazette of BiH“, No. 28/10)
- Law on testing, branding and marking of small arms and ammunition („Official Gazette of BiH“, No. 21/03)
- Rulebook on the procedure on testing, branding and marking of small arms, ammunition and devices („Official Gazette of BiH“, No. 61/07 and 42/09)
- Common military list - Translation of Common military list of the European Union - 2008/944/CFSP („Official Gazette of BiH“, No. 48/10)
- Law on control of movement of weapons and military equipment („Official Gazette of BiH“, No. 53/09)



KEY B & H MILITARY INDUSTRY COMPANIES



1. UNIS GROUP which incorporates:

1.1. IGMAN DD Konjic

Production of ammunition in accordance with C.I.P. and ANSI-SAAMI standards:

- Ammunition Cal. from 5.56 x 45 mm to 12.7 x 108 mm);
- Sniper Ammunition Cal. 7.62 x 51 mm, Special Ball, M118 and Cal. 12.7 x 99 mm, Special Ball, Sniper;
- Blank - Cartridge from Cartridge Cal. 5.56 x 45 mm, Blank, M200 to Cartridge Cal. 12.7 x 99 mm, Blank, M1A1

1.2. PRETIS DD Vogošća

Production of ammunition for:

- 60 to 120 mm mortar
- 76 i 90 mm guns
- 105, 122, 130, 152 and 155 mm guns & howitzers
- 128 mm rockets ground-ground
- 122 mm rockets ground-ground
- 262 mm rockets ground-ground
- Infantry weapon ammo - 90 mm rocket, rifle grenade anti-personnel, rifle grenade anti-tank

1.3. BNT TMiH Novi Travnik

Production of:

- Infantry arms (recoilless guns)
- Mortars 60, 81, 82 and 120mm
- Guns & howitzers
- Multiple rocket launchers & systems

1.4. BINAS DD Bugojno

Production of:

- All types of fuses (calibar 60 mm to 280mm) for:
 - Artillery (mechanical, piezoelectric, proximity and time pyrotechnic and electronic)
 - Mortars (mechanical, proximity)
 - Rockets (mechanical, piezoelectric, electronic time)
 - Anti armor weapons (mechanical, piezoelectric)
- Gun primers for artillery and rockets
- Delay devices for electronic time fuses & explosive products for:
 - Hand grenades
 - TNT demolition charges
 - Hand operated devices for initiation of electronic primers
- HE 40 mm hand cartridges for grenade launchers (h range from 400 m to 2200 m)
- Processing of explosives (pressing, casting) & manufacturing of pyrotechnical components

1.5. UNIS GINEX DD Goražde

Production of:

- Initiating explosives and chemicals
- Primers, Detonators, Pyrocartridges and Igniters:
 - Percussion primers for small arms ammunition (revolvers, rifles, antiaircraft and hunting ammunition)
 - Primers, initial boosters, duplex & blasting caps and detonators, delay elements, electric detonators & primers (hand grenades, mortars, artillery, rockets and antiaircraft ammunition)
 - Electric squibs, igniters and pyrocartridges (solid propellant rocket engines, various pyrotechnic devices, pyrotechnic devices for fire extinguishers in armored vehicles & tanks and thermal battery ignition)
 - Fuses – 60 to 280 mm (rifle grenades, mortar, artillery, rockets,)

1.6. TRZ DD Hadžići

- Overhaul, modification and upgrading of all types of motorcars - tracked vehicles, general and special purpose wheel vehicles, mining mechanization, trailers, engines and generating sets
- Overhaul and modification all types of arms
- Production of protection equipment

1.7. ZRAK DD Sarajevo

Production of:

- Optical & optoelectronic devices & laser technique (Fire control systems, sighting, observation & measuring devices for infantry, artillery and tanks)



1.8. VITEZIT DD Vitez

Production of military and industrial explosives:

- Plastic explosives
- Powder explosives
- Single and double explosives
- Composite fuels
- Permissible explosives
- Low brizance explosives
- Geophysical explosives
- Explosives for smooth blasting
- Explosives for small arms, artillery, rocket and aircraft bombs
- Detonating fuse

2. ORAO, Bijeljina

- Production of aircraft - turbojet engines and components
- Overhaul of turbojet engines (thrust by 2000 daN for subsonic; by 8300 daN for supersonic aircrafts)

3. FMSN, Pale

Production of:

- Auto-components and vehicles (tracked and general & special purpose wheel vehicles)

4. FACTORY OF SPECIAL PURPOSE ENGINES, I. Sarajevo

Production of:

- Auto-components and vehicle engines (574 kW to 735 kW – for tanks, heavy military vehicles and bigger construction machines)

5. FAST, I. Sarajevo

Production of:

- Auto-components, gearboxes and transmissions for tanks T-34, T-55, T-72 , M-84, M-84A, Infantry Fighting Vehicles: M-60 and BVP M-80A family and boats

6. CAJAVEC, Banja Lika

Production of:

- Telecommunication equipment (radio, telephone, audio equipment and accessories)
- Measuring-detecting devices (radiation, chemical, mine and metal detectors)
- Military electronics (automatic rocket control and antiaircraft systems)

7. ZRAK, Teslic

Production of:

- Optical & optoelectronic devices & laser technique (Fire control systems, sighting, observation & measuring devices for infantry, artillery and tanks)

8. RZT Travnik

- Overhaul and modification of optical, optoelectronic, radio and other electronic devices