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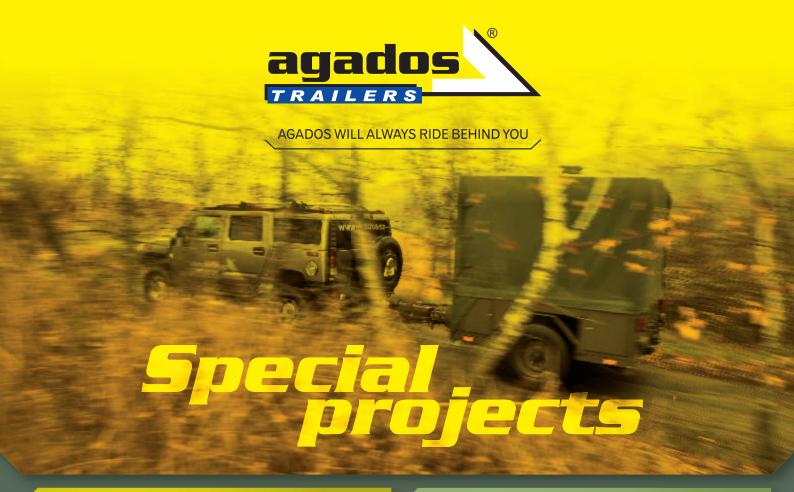




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EDITORIAL

Dear readers,

This year's second issue of CDIS Review will present to you the major of the Czech defence and security industry, which promotes its products and services through our magazine at numerous events, including DSEI London, NATO Days Ostrava, Defense & Security Bangkok, Milipol Paris and Intersec Dubai. It focuses mainly on support of Czech companies dealing in soldier's gear, security, defence industry, radio transceivers, optics, training, ammunition and development at abobe mentioned international fairs.

I believe that the companies like OPTOKON, AGADOS, OMNIPOL, MEOPTA, RETIA, VOP, PROWORK, AURA, MESIT or EXPLOSIA presented herein will convince you of their top-ranking status.

This issue you can read online at www.msline.cz.

Šárka Cook Editor-in-chief









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Opening speech by Mr. Lubomír Metnar

Minister of Defence of the Czech Republic



Dear ladies and gentlemen,

We are in the middle of 2019, which, from the point of view of the Ministry of Defence, represents an imaginary springboard towards increasing and modernizing the capabilities of the Czech Armed Forces to an extent unprecedented in post-November history. Therefore, in the following introductory lines, I would like to evaluate the current path taken by the MoD and what the future prospects are and what these steps will mean for the Czech defence.

First of all, I would like to mention the highly discussed acquisition of new infantry fighting vehicles to replace the outdated BVP-2. All four candidates advanced to the next round of the competition, so the candidates committed themselves in writing to being able and willing to meet all 16 non-exceedable requirements. The project to acquire a new infantry fighting

vehicle will represent a great opportunity to engage the home defence industry, despite the winner of the competition. The coordinator and integrator in this respect will be the state-owned enterprise VOP CZ, in which I and the Ministry have put our trust and we believe that it will manage its task with the utmost proficiency.

In addition to combat vehicles, we are preparing the acquisition of the utility helicopters, which is currently in the preliminary phase of communicating with the potential suppliers. If we move more into the future, then it will be necessary to gradually modernize the air defence systems and also to purchase new self--propelled artillery systems in 155 mm NATO calibre. Equally important will be the replacement of light vehicles Land Rover and UAZ for the airborne units. At present, the project of technical improvement of the T-72 M4CZ tanks, led by the VOP CZ, was commissioned. Thereafter, the General Staff, together with the ministry leadership, will choose the most appropriate course of action. All these projects will take into account the participation of domestic companies in the framework of so-called industrial cooperation programs or in the form of joining the supply chains.

In addition to material security this year, the construction of the airborne regiment, which will represent a lightweight manoeuvring element of the Army of the Czech Republic and will be built around the "hard core", which is represented by the current 43rd Airborne Battalion Chrudim. We also focus on expanding cyber defence capabilities, in terms of organiza-

tion, legislature and material equipment. Earlier this year, the organizational core of the new Cyber and Information Operations Command began to work in Brno. A modified version of the Military Intelligence amendment is also being finalized. The draft amendment will be submitted to the Government at the end of October and then it will undergo the legislative procedure in the Legislative Council. The amendment defines the concept of cyber defence, entrusts its provision to Military Intelligence and regulates the means that will be used to ensure cyber defence.

Whether building a new Cyber Command, building a parachute regiment or acquiring new equipment, it is in the interest of the MoD to maximize the involvement of domestic capabilities, whether defence-industrial or otherwise, to ensure maximum benefits and synergies for the relevant sector of the Czech economy. Czech companies in the defence industry and beyond are able to provide high quality products and services, as evidenced by their high competitiveness abroad and the positive experience of the local users. It is in our interest to involve domestic production to further strengthen the domestic defence-industrial base, which now, with the advent of initiatives such as the European Defence Fund and PESCO, is gaining further opportunities to cooperate in the field of development and capacity building.

Lubomír Metnar Minister of Defence of the Czech Republic

Opening speech by Mr. Miloslav Stašek

State secretary of the Ministry of Foreign Affairs of the Czech Republic



Dear Readers,

I am delighted to introduce you the second CDIS review magazine in this year. At the Ministry of Foreign Affairs of the Czech Republic we understand the importance of defence and security industry for the Czech economy. This is well proven by the rising export numbers. To be more accurate, Czech companies active in this sector exported last year the goods and services totaling the value of 14 billion CZK, nearly 10 times more than 15 years ago. This year's predictions are even reaching numbers close to 15 billion CZK. Without any doubt this shows incredible capabilities and competitiveness of Czech companies.

Embassies of the Czech Republic and the Ministry of Defence play an important role in helping companies to grow and take advantage of the global market. We are glad to support and organize nu-

merous incoming and outgoing missions for defence industry companies to help establish themselves abroad with the main focus mainly on non-EU markets. Just to name few examples, this year we have already organized sectorial presentations in Angola, Namibia, India or Lithuania. In fall we are organizing an upcoming mission to Thailand and Cambodia. The trend of the defense and security sector follows the same patterns visible elsewhere, which particularly means diversification and rising interest in African and Southeast Asian markets. This indeed does not mean omitting efforts to improve our position at traditional defence industry markets like the United States. For instance our embassy is presently preparing a specific presentation of the Czech technological solutions for drone operations. This demonstrates the broad range of activities in the field.

The defence industry sector represents

a perfect example of the field, in which the state intervention is vital. Without dialogue between countries, it is not possible to strengthen the commercial partnerships and grow the benefits from such relationship. We will stay committed to do our best to promote globally our defence industry, which represents one of the traditional Czech industrial sectors. The Ministry of Foreign Affairs is always open for a constructive discussion and ready to help companies to grow globally. I wish you all good luck in all our upcoming business missions!

Miloslav Stašek State secretary of the Ministry of Foreign Affairs of the Czech Republi

Message by Mr. Jiří Hynek

President of Defence and Security Industry Association of the Czech Republic





Dear exhibitors, dear visitors,

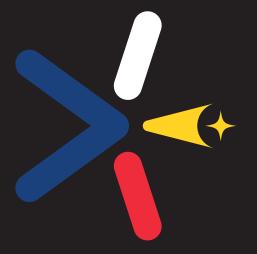
Czech defence and security industry is well known for its long-term history, unique structure, high-quality products and big innovation potential. Czech producers of military material always had to fight with limited options of the domestic customer given by small size of our country and its armed forces. Therefore, Czech producers of defence and security technologies had to constantly innovate their products that must be competitive mainly on foreign markets where we export 90 % of our production. Competitiveness of Czech products, whole scale of professionals and good name of traditional Czech arms industry create the cornerstone of Czech companies' export potential.

Majority of companies that present their products in this Czech Defence Industry & Security Review are members of the Defence and Security Industry Association of the Czech Republic (DSIA). For more than 20 years of its existence gained DSIA reputation of acknowledged representative of the Czech defence and security industry, important partner of Ministry of Defence, Ministry of Interior and Ministry of Foreign Affairs. DSIA also cooperates with the Parliament of the Czech Republic, in particular with the Foreign, Defence and Security Committee of the Senate and the Defence and Security Committee of the House of Deputies. DSIA represents the Czech Republic in NATO Industry Advisory Group (NIAG) and is present in structures of the Aerospace and Defence Industries Association of Europe (ASD). There relations are stepping stones for efforts of the Czech defence and security industry to be involved in specific European, transatlantic and international projects

It is my pleasure to say that Czech products of defence and security industry belong to the world top products and main reference is given by the satisfaction of customers around the globe. I wish to all visitors and exhibitors to enjoy the exhibition and Czech defence and security products and services.

Jiří Hynek

President of Defence and Security Industry Association of the Czech Republic



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Czech Republic Industry Reliable Partner for Defence Projects

A well established tradition: the Czech Defence Industry

The Czech Republic is the most industrialised country in the EU (the highest share of industry per GDP), an open, export oriented economy, and one of the nations with its highest share of GDP formed by exports of manufactured goods. Having such a strong position in industry in the Czech Republic, it does not come as a surprise that the defence and security industry counts among one of the most traditional Czech sectors. In fact, the Czech ammunition industry was already well developed before the First World War and further strengthened before the Second World War. For British soldiers one item will immediately stand out - the "Bren" Light Machine Gun which was originally developed in the Czech city of Brno,

from where part of its name originated and the other half of the name came from the British factory in Enfield where it was made.

Even during the dark period, when the Iron Curtain divided Europe and Czechoslovakia found itself within the sphere of the Eastern Block, the nationalised Czech defence factories kept their knowledge and expertise. Weapons were produced, mostly for the Warsaw Pact forces, such as small arms, machine guns, antitank weapons, but also armoured infantry vehicles, tanks, airfield radars, systems for passive radar reconnaissance and even jet aircraft such as the Aero L-39 Albatros, the most widely used jet trainer in the world.

This year we celebrate the 30th anniversary of the Velvet Revolution, which marked the return of democracy, freedom and a market economy to the

Czech Republic. Within a decade of the end of the Cold War the democratic Czech Republic had joined NATO, the Czech Army became a professional force and radically modernised most of its equipment – the SAAB Gripen fighter aircraft and Pandur wheeled armoured vehicles are now being used by the Czech forces for air policing missions in the Baltic states and allied missions in Afghanistan respectively.

The Czech defence and security industry has over the last 30 years successfully transformed and internationalised itself. Building on its long industrial history of producing high quality weaponry such as guns, aircraft and heavy equipment, as well as sophisticated technologies for radars. The privatised Czech defence companies are now diversifying their portfolios and seeking dual-use technologies such as nanotechnolo-





gies, telecommunications, civil aviation technologies, navigation and enhanced reality.

Thanks to this successful transformation, the Czech defence companies are nowadays competitive enough to export a larger part of their production, which means that they are building winwin partnerships globally. For instance, components and even whole parts of fuselages for a number of world renowned aircraft such as the Airbus A400M, the Sikorsky UH-60M Black Hawk, the Sikorsky S-76 and the Embraer KC-390 are being manufactured by Czech companies. L-159 fighter jets manufactured wholly in the Czech Republic have been delivered to the Iraqi air force in 2016 and orders for the relaunched production of the light subsonic jet L-39NG were placed during the Farnborough

International Airshow 2018. The all new F/A-259 Striker concept was also introduced to a world audience there.

Czech companies displaying at DSEI 2019

Marvellous Czech defence companies will be present at DSEI 2019 as well. The companies are: EVPÚ Defence, manufacturer of electro-optical systems; MESIT asd, a designer and manufacturer of voice and data communication systems; OPTOKON, the global producer of active and passive fiber optic components; ORITEST, a developer and manufacturer of products for the detection of chemical warfare agents; ZEVETAAMMUNITION, manufacturer of pyrotechnical products; RAY SERVICE, innovative manufacturer of cable har-





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Czech - British defence cooperation

The Czech and British Armed forces have for many years worked in joint cooperation in many international missions, in the Gulf, the Balkans, and Afghanistan. In addition, there are dozens of bilateral cooperation projects envisaged and implemented, mainly in the fields of training and exchange of personnel.

Czech defence industry companies are also in cooperation with their British counterparts. To highlight just a few of the many successful partnerships we only have to look at a few of the Czech companies; Ray Service for example has been contracted by BAE Systems to develop and produce cabling assemblies for mortar systems; the Czech

steel company Vitkovice became the first foreign supplier of steel to a British naval shipyard - Vítkovice steel was used in the construction of the Alternative Landing Ship Logistics landing craft for the Royal Navy; the Czech military codification software developer Aura cooperated with British technical publications and NATO codification specialists Allan Webb on several projects to provide a comprehensive codification, procurement and inventory management service to clients based in the UK and internationally. A number of Czech companies have also teamed up with British counterparts in the run up to the start of the modernisation projects of the Czech Armed Forces. Such partnerships enhance the competitiveness of both the Czech and their partner British companies and serve as starting points for larger international projects.

In order to keep standards high and the armed forces prepared for all eventualities the Czech Armed Forces are now preparing or implementing a procurement process for new arms systems such as dozens of new howitzers, new multi role helicopters, and hundreds of infantry fighting vehicles. This represents yet another opportunity for joint industry projects.

Business opportunities in the British defence sector

Britain being the fifth largest exporter of weapons and defence related goods and technologies is something which attracts Czech companies who have competences in the fields of the aviation and space industry, small weapons and many other high-tech components which have use for various sub sectors of defence and dual use industries. From the aerospace viewpoint, the UK is the second largest producer in the world with a wide portfolio of services and products, from the design and production of wings, engines, landing gear, fuel systems, and avionics. Over 90 % of the sector's turnover is generated by exports. The major manufacturers are Airbus, Bombardier, BAE Systems, MBDA, Leonardo, and Rolls Royce. In the space technology sector a number of UK hi-tech companies, such as Surrey



Satellite Technology, are active, focusing in particular on telecommunications, navigation, meteorology and Earth observation applications. Britain is the most important European supplier for Boeing. In Wales, the town of Broughton is home to the Airbus factory which assembles wings for all of the brand's commercial models. Opportunities for Czech manufacturers are mainly offered to subcontractors for British companies, for example in the field of electronics and in the rapidly evolving segment of composite materials.

A number of opportunities arise from the development plans of the British Ministry of Defence, which is planning to spend £178 billion on equipment and support over the next decade. These include the announced procurement of two additional Typhoon squadrons and an additional squadron of F-35 Lightning II combat aircraft to operate from the two new Queen Elizabeth class aircraft carriers and nine new Maritime Patrol Aircraft. In addition much of the equipment and support tools needed by British military personnel in transition from Future Force 2020 to Joint Force 2025 needs upgrading or replacing. It is worth mentioning other sectors where there are prospective areas for establishing collaboration with major British defence industry manufacturers. These are primarily in innovative technologies such as 360° situational awareness, future soldiers, connectivity, advanced materials, control systems and software architectures. Also in the traditional areas, where reliability and durability is the cornerstone, for example in the hydraulics sectors in connection with the planned construction of new British naval combat vessels including the 4 new nuclear submarines. These all represent a window of opportunity for Czech-British defence industry win-win cooperation.

Aleš Opatrný, Head of Economic and trade Section, Czech Embassy in London

Photo: Šárka Cook





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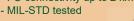
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The OPTOKON LMIPC

As military operations are now becoming network-centric, ground forces need excellent information and communication capabilities to respond to new threats and to work efficiently and smoothly with joint and allied forces. This is why mission computers are at the heart of every armoured vehicle platform.

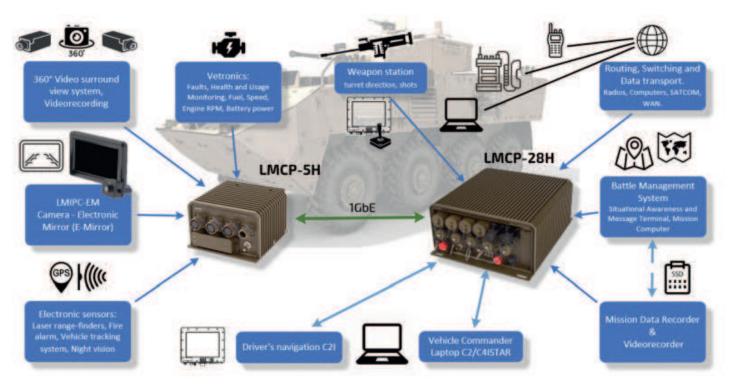


Fig.: Connecting vetronics, sensors and video camera systems into LMCP

The OPTOKON Light Mobile Computer Platform (LMCP) provides vehicle operators with the ability to see and control the battlefield with the advanced situational awareness and combat systems control necessary to complete their missions. OPTOKON a.s. continues to develop new design concepts that involve the overall Mobile Computer Platform, connecting vetronics, sensors and videocamera systems.

The **OPTOKON LMCP-5H** has successfully demonstrated vehicle sensor integration, which enables all vehicle sensors (Laser range-finder, Fire alarm, Vehicle tracking system, Night vision SeeCheck) to work together and unify information into the Battle Management System (BMS) running on the LMCP-28H. This results in a more tangible situation for modern commanders that again paves the way for making better-informed decisions. Overall, vehicle sensor integration will contribute to increasing operational speed, improving situational awareness, communication, and force protection.

The LMCP-5H server offers military-grade features in a SWAP-optimized ruggedized housing making it the ideal platform for applications in armoured fighting vehicles. The server is equipped with 6th Gen Intel® Core™ CPU. Dual SSD discs are removable and the server is equipped with 4x Gigabit Ethernet ports.

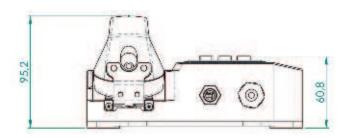
The larger and more powerful counterpart of the LMCP-5H is the LMCP-28H, which offers, for example, an Intel® Xeon® processor D-1528 with 64 GB of DDR4 memory and 15 Gigabit Ethernet ports.

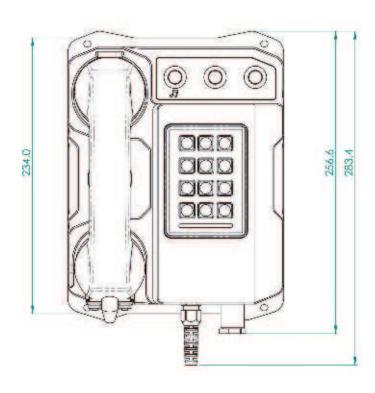


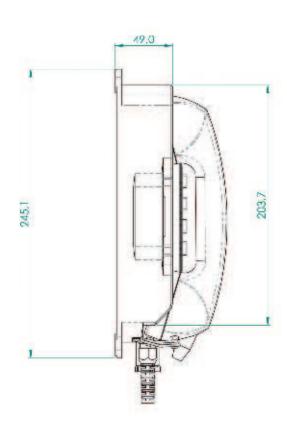
LMAT-116

New OPTOKON LMAT-116, rugged analog phone specially designed for use in harsh environmental conditions.

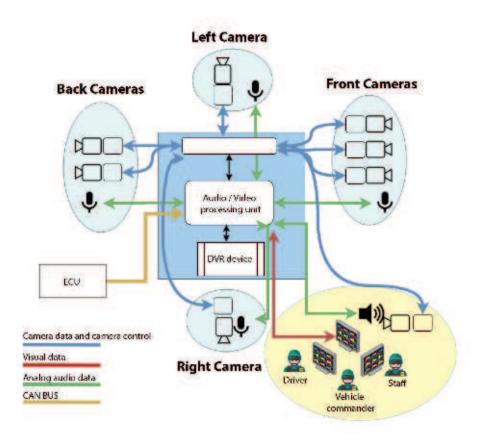
The phone offers an easy-to-use interface and provides a traditional telephony user experience.







LMIPC-EM-01 Camera - Electronic Mirror (E-Mirror)

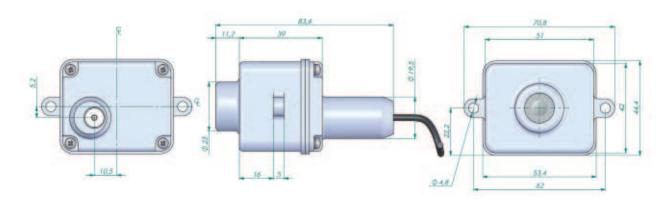




System for 4 Cameras

Examples of new concepts include the LMIPC-EM-01 Camera - Electronic Mirror (E-Mirror) integrated into the mobile LMCP-5H server. The OPTOKON LMIPC-EM Electronic Mirror is a camera-assisted vision system that enables the driver to view the rear right and left images without being affected by any external environmental conditions on the screens inside the vehicle with the cameras placed on top of military or commercial vehicles. It eliminates the need for traditional mirror mounting on vehicles and provides a wider angle view to the driver. Because of the small size of the windows in armoured military vehicles, traditional mirrors are not able to offer good visibility and when in operation the conventional mirror can be hit, which can deactivate the vehicle. The E-Mirror camera modules are relatively very small and too small to target. In addition, the E-Mirror is not affected by window misting in rainy and snowy weather.

Camera dimensions



We are pleased to announce that OPTOKON will be participating at these exhibitions:



ECOC 2019

23. 9. 19 - 25. 9. 19, The RDS Venue, Dublin, Ireland, OPTOKON Stand 208



OFSEC

21. 10. 19 - 23. 10. 19, Oman Convention and Exhibition Centre, Muscat, Sultanate of Oman, OPTOKON Stand B7



Digital Transformation Asia - TM Forum

12.11-19-14.9.19, Kuala Lumpur, Malaysia, OPTOKON Stand 11

Please accept our invitation to visit us.



Defense & Security 2019 Participation of the Czech Republic

Nowadays traditional fair of defence and security industry, Defense & Security, will be held in the capital of the Kingdom of Thailand, Bangkok. The fair, motto of which is "Power of Partnership", is accompanied by a number of attendant conferences and networking events.

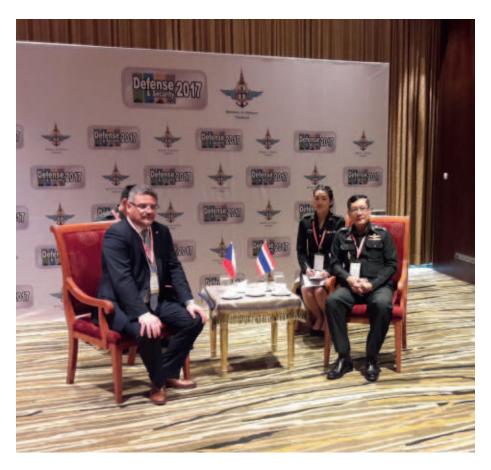


Defense & Security is one of the most important defence fairs in the region of Southeast Asia. This year, more than five hundred exhibitors from fifty countries will participate and there will be twenty-five national pavilions or stands, including the Czech Repub-

lic. Defense & Security is the fastest growing fair focused on defence and security industry in the region, with 5 % increase in exhibitor participation. Participation on the level of official delegations is expected from thirty-five countries, mainly on the level of defendence.

ce ministers, and should include up to three hundred representatives of defence ministries or armed and security forces.

This year's fair is all the more important because the meeting of ASEAN Defense Ministers in ADMM-Plus format



(ASEAN Defense Ministers Meeting - Plus) will be held in parallel with it. This means that in addition to presence of ten ASEAN Defense Ministers, there will be also eight ministers from partner countries. In particular, there will be Defence Ministers from Australia, China, India, Japan, the Republic of Korea, New Zealand, Russia and the United States of America.

The Czech Republic traditionally received the official invitation from the Thai Minister of Defence addressed to his Czech counterpart. Based on this, our participation, including accompanying business mission, is being prepared. The fourth participation of representatives of the Czech defence and security industry will be again supported by the Project of Economic Diplomacy, within which a workshop entitled the "Czech Defence Industry Day" is planned. As in the previous edition in year 2017, the aim of this accompanying event is to introduce Czech companies and their solutions to a wide range of experts not only from the Thai Ministry of Defence, the Armed Forces and the private sector, but also to a number of regional partners from Southeast Asia. The event constitutes specific support to the Czech defence industry provided by the Ministry of Defence of the Czech Republic and the Embassy of the Czech Republic in Bangkok and it fits to the framework of the 2025 Armaments and Defence Industry Development Support Strategy of the Czech Republic.

As in the previous years, the National Pavilion of the Czech Republic will be arranged by CzechTrade, while exhibiting companies will join the program of the mission accompanying the Minister of Defence, including the Czech Defence Industry Day. During the Defense & Security 2017, the national booth with eight exhibiting companies and nine more companies represented in the accompanying mission of the Deputy Minister of Defence of the Czech Republic, Mr. Tomáš Kuchta, enjoyed great attention of Thai and foreign participants. The top representatives of the Thai armed forces who visited the Czech stand in 2017, included the then Assistant Commanders-in-Chief of the Royal Thai Army and Royal Thai Air Force, who are now in the position of commanders-in-chief of their forces. It was also visited by Chiefs of the General Staffs of the armed forces of other ASEAN countries. The Czech Republic thus had a specific opportunity to present companies, especially within



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the wider region of the ASEAN member states. Companies also held separate negotiations on specific projects with Thai and foreign partners.

The Czech Republic's participation in Defense & Security 2019 is all the more important because it is a natural continuation and another milestone of enhanced cooperation with Thai partners. Its significant impetus, or better said accelerator, was the first official visit of the Prime Minister of the Czech Republic to Thailand in January 2019. The Prime Minister Andrej Babiš was accompanied by representatives of major Czech companies operating in the defence and security industry and held an official meeting with the Thai Prime Minister, Gen. Prayut Chan-o-cha, and the Deputy Prime Minister and Minister of Defence, Gen. Prawit Wongsuwon. These high level meetings provided a clear impetus and institutional framework to enhancement of mutual cooperation. Also on the basis of the Prime Minister Babiš visit in January, a numerous official delegation of the Thai Ministry of Defence visited the Czech Republic in May and held talks with the Deputy Mi-

nister of Defence Jakub Landovský and the Chief of the General Staff Gen. Aleš Opata, attended several presentations and visited Czech companies, and also participated in this year's IDET fair. It was not the only visit from Thailand to expand defence cooperation, including industrial one. There was also about the visit of the Royal Thai Air Force delegation in April 2019. Discussions on enhancement of cooperation with the Royal Thai Police are also being held. Czech-Thai industrial cooperation in the area of defence and security industry thus includes not only discussion on supplies of unique Czech solutions, but also possible projects involving the transfer of capacities, know-how or technologies to jointly build a regional background for further expansion in ASEAN countries and more generally in Indo-Pacific region. The idea of industrial cooperation between the two countries enjoys the support at the government level and fits to the priorities of the Thai government. It declared the defence and security industry as one of the areas to which it wants to pay increased attention and provide resources, including its integration to the framework of the Eastern Economic Corridor (EEC) as the project for development of Eastern provinces and 11 priority sectors.

It is therefore clear that the Czech participation in Defense & Security 2019 will be another important milestone in the effort to support and establish Czech companies and their solutions not only in a high-profile country, which Thailand with its defence budget amounting USD 6.4 billion undoubtedly is, but also in the wider region of ASEAN countries. In the region that is, due to its strategic location and a number of geopolitical and economic factors, one of the areas with the fastest growing defence spending in the world.

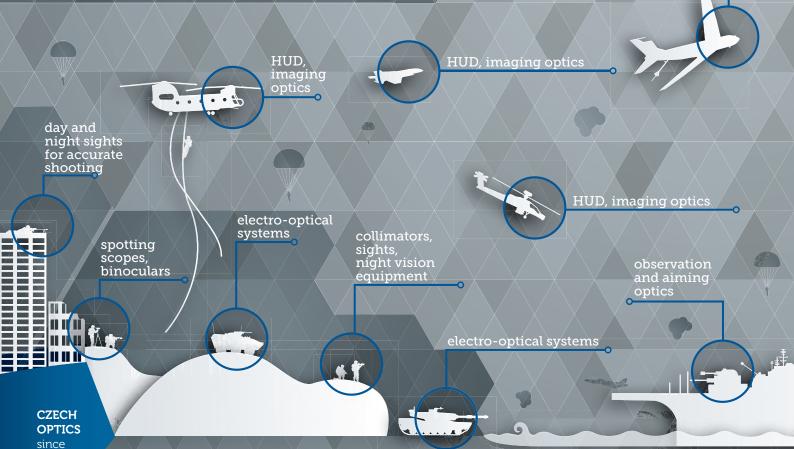
Aleš Vytečka, Deputy Head of Mission Embassy of the Czech Republic in Bangkok



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Exclusively with the Brigadier General Libor Lochman, director of the elite department of the Czech Police

As I know, you have been a commander of the elite unit of the Police of the Czech Republic for at least 17 years, because our first interview in "Revíčko" took place in 2002. When I think about how far my memory goes, the time of your activity in the top positions of the Police of the Czech Republic (editorial note: but also in other similar units) is guite unique. Apparently, it is not comparable with anyone else in your sector. And this fact speaks about something without any further comment.



Our readers from the security and defence community will certainly be interested in your experience in managing and organizing actions in extreme situations, but also how training, armaments and equipment, international cooperation or the main tasks of your elite department in the Czech Republic but also abroad have changed during your term in the office.

Dear Mr. Director, what essential can you say about the Rapid Deployment

Unit activities in the past years?

Basically, the only thing I can say is that when I took up this position in 1996, the Rapid Deployment Unit was a great, high-level professional unit and remains it until the present day. This unit is developing fairly quickly in terms of tactical procedures, armaments and equipment, but most importantly, the unit is consisting of amazing people. Professionals who live for their work and therefore I think a lot of them.

Mr. General, how have the basic tasks of your department within the Czech Republic changed, especially given the changing international situation? Do you also cooperate with other special forces, such as the Army of the Czech Republic, etc.?

The basic tasks of our unit remain unchanged, namely the fight against terrorism and organized crime and cooperation with other police units, especially in detai-



ties and education of members contribute to the fact that today the vast majority of Unit members can communicate in English

or other languages without any problems.

Can you please briefly summarize the main tasks and activities of your unit in missions, protecting VIPs etc?

In general, the Rapid Deployment Unit generally carries out two types of missions abroad. These are a protective mission and a security mission. Protective mission is about sending the protection team to provide comprehensive protection of VIPs including all kinds of security services (protection of the place of residence, protection of workplace, transport etc.). Security mission is about deploying the security team acting as a security advisory body in the area in question, to carry out situation assessment, risk analysis and preparation of security rules for a given situation and location. Other types of activities abroad are fairly specific and always related to specific assignments. The Rapid Deployment

ning dangerous perpetrators of serious crimes. In addition to this, another important task has been added up, namely the service abroad on protection of Czech embassies and their employees, especially in areas with increased security risks, given the ever-changing conditions in the fight against crime, close cooperation between security forces is, of course, essential. We cooperate, for example, with the Fire Rescue Service in the field of CBRN, or with the Medical Rescue Service in the field of medical training. Cooperation with the Army of the Czech Republic is also important for us, especially in the field of air transportation of our intervention teams.

A number of tasks cannot be accomplished without international cooperation. How do you assess the current activities of the RDU in this respect? Can you provide some examples? How about the language skills of your members?

International activities of the RDU are currently mainly connected with the European network of ATLAS counter-terrorism units, of which the RDU is a member. Within this network, the Unit participates in various exercises and other activities abroad (e.g. the largest pan-European exercise AT-LAS Common Challenge 2018), but also organizes exercises in the Czech Republic. In this connection I can mention for example this year's exercise Fortress 2019 with the participation of Italy, Slovakia, Hungary and Croatia.

As far as the language skills of the members of the Unit are concerned, the present level is quite good. Regular international activi-





Unit generally does not provide standard VIP protection for, but is involved in this protection if it takes place in hazardous and very dangerous locations, if the protection is highly risky and concerns very important and prominent personalities. The Rapid Deployment Unit carries out the protection measures on its own or can be integrated into a wider protection team as part of ongoing measures.

In implementation security measures, the Rapid Deployment Unit relies on general procedures and principles, complemented by specific knowledge and skills acquired and refined over nearly forty years of its existence. These are various unconventional methods and procedures, covering and detaching manoeuvres, special defensive and offensive techniques, etc.

The quality of training undoubtedly significantly affects success in real action. What has changed over the past 20 years and can you also outline the perspective in this regard?

The quality of training is undoubtedly the

key to a successful solution of any crisis, not only for special units. Therefore, the maximum attention has been given to this since the establishment of our Unit. A huge qualitative leap was, of course, the time after the revolution in 1989, when the opportunity to communicate with other European counterterrorism units and to gather and exchange information on both tactical procedures and technical means was opened. At the time of my appointment as the Director, intensive work has already been done to create a basic tactic in all conceivable environments, i.e. in various types of buildings, in open terrain, personal and public transport means, on the ground, underground, in water or air. And this trend still persists. Instructors and commanders are working to adapt flexibly particular tactical procedures to changing conditions and new information. They prepare for teams hard and realistic training both in "living" spaces, as well as in buildings and training facilities. The philosophy of our work has changed dramatically. Of course, the work in so-called "Full Gear", i.e. in full heavy equipment and armament,

remains the standard, but close attention is paid to civilian work and the movement of small teams. Emphasis is also placed on the maximum use of technology, such as intervention vehicles, tactical platforms, motorcycles and other conveniences that we did not dream of when I joined the unit. Technical and tactical means have changed considerably since then, but what remains are great people who do their work with both heart and reason.

Results of the Unit certainly depend also on the quality of equipment, armament and other items. Does the Czech defence and security industry also participate in providing the equipment for RDU?

The Czech defence and security industry plays an important role in the equipment of the Unit, it is certainly worth to mention the light armoured vehicle T-KAT, which is manufactured in the Czech Republic and which appropriately complements the fleet of the unit and also extends the Unit's operational capabilities. The vehicle is manufactured by Tatra Defense Industrial s.r.o.

in cooperation with the Israeli company Plasan Sasa and its production reflects the experience of armed forces operating in areas such as Middle East or major European cities. It is a unique special vehicle with a high level of ballistic protection for the crew, while maintaining considerable off--road capability in the difficult terrain and excellent driving characteristics on paved roads. The design of the vehicle is to the large extent modular, which allows individual tailoring to the needs of the end user and, on the other hand, this solution makes it much easier to repair or replace damaged or destroyed parts. The range of use of this vehicle is very wide, it can be used as a so--called intervention and emergency vehicle, eventually as an extraction and evacuation vehicle. Furthermore, it may be used also in for VIP transportation - for transport of important people in risk areas.

Other Czech products available to the Unit include special ballistic plate carriers developed by the Czech company 4M. This product provides to policemen necessary mobility, in particular in confined spaces, while maintaining necessary ballistic protection. These plate carriers also provide the police with sufficient comfort, since they are also

designed as a tactical material carrier which can be equipped with suitable accessories and components. The use of this material has proven not only in the Czech Republic, but also in foreign operations

Another entirely Czech item available to the Rapid Deployment Unit are individual protective overalls from DEVA F-M s.r.o., which are compliant with the highest standards. These overalls are made from a combination of special materials that guarantee the necessary user comfort, but especially high heat resistance (non-flammable). The use of these overalls provides policemen with the necessary protection when operating in high-risk and unstable environments.

The level of the MILIPOL international fair is constantly growing and attracts stakeholders from all over the world. How do you use similar exhibitions? How useful are they for you?

Fairs such as MILIPOL and other events of a similar nature are very beneficial for our specialists. They acquire new information on current trends in armament development and new technologies and systems. The possibility to establish contacts with potential suppliers of such special technologies is also positive as well as obtaining specific information and data on particular products

Finally, Mr. General, you can remember the BEST TOP action of the RDU in your career?

Under my command, the Rapid Deployment Unit carried out hundreds of various operations, whether it was about arresting dangerous criminals, protection of witnesses or our agents and other specific actions that I cannot talk about. Therefore, it is somewhat difficult to pick one so-called TOP action. However, such operations undoubtedly include rescuing hostages in banks on Novodvorská Street in Prague 4 in 2009 or a similar action in Příbram in 2018.

Dear General, I am pleased that you have given us an interesting interview again.

Miloš Soukup thanked for the interview.



OMNIPOL, 85 years in the defence and security sector

OMNIPOL origins and key milestones as one of the leading companies in the country

OMNIPOL a.s. is a leading Czech company, headquartered in Prague, and with 85 years of global experience in the field of international trading in defence and security products. We still serve Customers in more than 60 countries around the world. Export of products on the global market accounts for almost 90 % of its profits. Nowadays the OMNIPOL Group has, in its

portfolio, a significant manufacturing pre-

sence in the Czech Republic, some 1500

employees, with very well known, 100% owned daughter companies like ERA which is part of the OMNIPOL group since 2011 and the MESIT Group of companies, acquired in April 2018.

OMNIPOL has a proud historical association with trading in the Czech Military aviation sector, in particular with the nation's most successful exported aircraft the L-39. OMNIPOL, in June 2015 joined the L-39NG (Next Generation) Project as the Strategic

Partner and 50/50 financial co-investor alongside our colleagues from AERO Vodochody AEROSPACE. The L-39NG was rolled out on the 12th of October 2018.

OMNIPOL, a strategic partner in defence industry and engineering

OMNIPOL provides a broad range of products and solutions. From passive surveillance systems, namely the VERA-NG, and related software products,



ircraft L-39 NG

data mining, long range passive reconnaissance system called SDD, Air Traffic Management (ATM) systems to modern jet and light combat trainer L-39NG, and the re-engined version jet trainer L-39CW, including flight simulators and training programs, weapons, ammunition and logistics. OMNIPOL also provides training courses to customers, integration and commissioning products, production and technological cooperation or transfer/ sale of Know-how. OMNIPOL can provide "turn-key solutions" according to the requirements of it's customers. It is worth mentioning the fact that OMNIPOL also supplies the technologies for military production and for the food industry, specialized mainly on brewing, distilling, dairy, bakeries and the sugar industry.

OMNIPOL and its subsidiaries: ERA, top producer of passive surveillance systems

In 2011, OMNIPOL bought ERA a.s., the successor of the famous Czech company TESLA. ERA was then literally saved from near financial collapse due to the underestimated R&D investment by the previous American owner. Now ERA is considered to be a world leading company in multistatic surveillance and reconnaissance technologies; it develops, manufactures and implements mission-critical systems for military and civil purposes. The most remarkable ERA products are: VERA-NG - the military passive surveillance and reconnaissance system for air defence and electronic warfare and NEO - multi-sensor





Passive Surveillance System Vera-NG

multilateration and ADS-B system for civil air traffic control. Recently ERA introduced ERIS - ATM system for medium size regional airports and IXO - the flight and drone zone planning tool. Over last 2 decades, ERA has reached the number of more than 130 installations, deployed in 65 countries on 5 continents with 24/7 operations.

MESIT, tactical radiocommunication systems in 40 countries

The MESIT Group is very proud of more than 60 years of production in engineering and the electronics industries. MESIT's products are used both in civil and military applications, both in the air and on the ground. Typical products of the company are advanced tactical radiocommunications systems, systems for communication in armoured vehicles, control and indication systems for civilian and military aircraft e.g. L-410 both NG and L 159, but also special castings and complex engineering components with unique surface finishes in the field of laboratory and automotive technology. Important customers include State institutions in the Czech Republic and around the world, as well as leading domestic and foreign companies. Our timekeeping technique can be found in the famous CERN underground laboratory in Switzerland. The major asset of MESIT holding is that it holds all the necessary certifications for design, development and production, and also possesses specific

and exceptional technologies.

From radars to jets

OMNIPOL invests in prospective projects with high potential, primarily in the area of surveillance and aeronautics. One of the pivotal projects are the L-39 CW and L-39 NG Aircraft.

The earlier generation L-39 is a key part of OMNIPOL's history. Not least over a period of 30 years L-39 Albatros, OMNIPOL was responsible for exporting almost 3000 pieces of this aircraft. It was not only about the export of the aircraft, OMNIPOL also successfully took care of complex logistic and servicing for customers. Motivation for this kind of investment is due to the continual interest of present customers to keep L-39 aircraft in operation. There are more than 700 L-39's still in operation. The very first step to realize the L-39NG was the construction of a demonstrator L-39CW which verifies a new and modern engine and new avionics. This project has gained the necessary certification and is offered to customers, who run L-39 as an intermediate stage before switching to

Due to the recent acquisitions and strategic investments, OMNIPOL has the potential to be on the top of the Czech defence and engineering industry.



RETIA company presents its latest 3D radar ReGUARD

RETIA is one of the leading Czech manufacturers and suppliers of radar technology and special electronics. Over the more than 25 years of its existence, it has developed a range of unique and cutting-edge systems that have been used in the military sector as well as by civilian users. The latest innovation from the development of the Pardubice based company is the ReGUARD radar.



The latest 3D radar ReGUARD had its Czech premiere at IDET 2019, which was attended by a lot of experts, guests and journalists. ReGUARD was one of the attractions of the exposition of companies belonging to the Czechoslovak Group or related to it. ReGUARD is designed for the detection and tracking of ground targets and slow low-flying objects with a small radar cross section simultaneously. A specific feature of the novelty is that it searches the space of interest by utilizing electronic beam steering and mechanical rotation of the radar head.

The design of the ReGUARD radar is flexible and exclusively uses semiconductor technology, which ensures high reliability of the system, including parts redundancy. ReGUARD belongs to the category of pulse-doppler 3D radars, which brings the advantage of a great range and better resolution in the distance compared to fixed wave radars. The versatility of the ReGUARD radar is underlined by the possibility of using it either as a standalone sensor or as an integral part of a complex system.

ReGUARD works in two basic modes, sector or three hundred-sixty degrees circular. The modes differ from each other in the way they scan the area in azimuth. In sector mode, the radar beam is steered only electronically in azimuth and elevation. In circular mode, the radar sensor head revolves on a turntable at a speed of 15 revolutions per minute and the

electronic steering of the beam is primarily used in elevation. Steering in azimuth provides rapid confirmation of detection when initiating track and enhances the quality of tracking while scanning.

The new radar enables simultaneous monitoring of ground and air targets and can capture a wide range of objects. It is therefore suitable, e.g., to protect borders or important infrastructure, and it will work well in anti-drone systems, e.g. for the protection of airports, but also in the air defence systems.

ReGUARD can be delivered in portable, stationary or mobile configurations. In the portable configuration, the radar head is mounted on a tripod allowing for easy location changes. In the stationary configuration, the radar head is fixed at a stationary location like a building or on a pole. In the mobile configuration, the radar head is fitted on a vehicle or other movable platform.

ReGUARD is characterized by its compact dimensions and low weight, e.g. the radar head weighs only 65 kg. To reduce the maintenance demands, increase durability and enable deployment in harsh weather conditions (e.g., dusty environment) the RETIA designers chose passive cooling without fans.

The deployment and start-up time does not exceed 10 minutes while the radar can operate continuously for an unlimited period. Thanks to the ability of electronic steering of beams, ReGUARD allows quick scanning of the area of interest, so it can identify and track priority targets within a few seconds. In the case of objects with a small radar cross section (LSS), its range is 18 km with an altitude coverage of up to 3 km, while in the ground target mode the instrument range is also 18 km.

The radar evaluates the information about targets using advanced signal and data processing and thus can effectively suppress clutter. The radar also has a built-in automated self-diagnostics system, which facilitates its maintenance and guarantees high reliability. Part of the Re-GUARD radar is a compact workplace for the equipment operation and diagnostics, which can be placed in remote areas from the radar sensor position depending on the nature of the deployment.





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AURA 30th year

The largest Czech exporter of comprehensive information systems (IS) for military logistics, the AURA company from Brno, has been celebrating its 30th anniversary this year. The AURA Production Cooperative, established in April 1989, specialized in the development and implementation of large and comprehensive information systems for warehouse management and logistics. In addition to domestic customers, the company exported successfully to Germany, Switzerland, Austria and Russia. In 1992, the production cooperative has transformed to a standard company AURA, s.r.o. (ltd.) with the sole owner – the founder Dipl. Eng. Jan Engelsmann.



AURA conquers Czechia and the world

In 1994, AURA won the tender for the development of the Information System for Logistics (ISL) for the Ministry of Defence and Armed Forces of the Czech Republic. In 1998, AURA entered into a strategic partnership with the Danish company Bruhn NewTech, developer of IS for the assessment of the situation of weapons of mass destruction use. Next year, a sister company AURA LOGIS was founded in Slovakia. In 2000, AURA launched the sale of the information system "Judicial Officer". In 2004, AURA becomes a codification agency certified under the new legislation

in Czechia and Slovakia. In the same year, the Ministry of Defence of Slovakia becomes the first foreign customer to order MC CATALOGUE, a codification software developed by AURA. In 2006, the National Codification Bureaus of Czechia, Slovakia and Finland established in Brno a working group of this codification software "MC CATALOGUE User Group". In 2009, AURA was the first in Czechia to receive the ISO 8000 certification "Quality Master Data Provider" and "Master Data Quality Manager". The first delivery of MC CATALOGUE as Software as a Service (SaaS) for Estonia in 2012 started the series of successful replacements of French

codification software Adagio by Czech MC CATALOGUE - after Estonia, Lithuania, Morocco, Croatia and Latvia followed. In the same year, the University of Defence in Brno organizes the first NCS College international codification course with a significant cooperation of AURA. The Information System for Logistics developed by AURA for the resort of defence of the Czech Republic was awarded the "Gold Future Forces 2014" prestigious prize and was recognised as the "Best System Solution" at the Future Forces 2014 international trade fair. The year 2015 became significant for AURA - it entered into a strategic partnership with the UK based



Allan Web and Swedish Saab and acquired Australia as the 15th country using MC CATALOGUE, thus becoming the world leader in the field of SW for materiel codification according to NATO standards. In 2017, MC CATALOGUE was implemented in the United Arab Emirates armed forces. In 2018, AURA delivered MC CATALOGUE for Japan, becoming the first Czech company registered as a supplier to the state administration of the Japanese Empire. In the same year, AURA wins the tender announced by the NATO Support and Procurement Agency (NSPA) for codification software for the Hashemite Kingdom of Jordan. This year, AURA has celebrated its 30th anniversary and become member of the newly established FE Holding, s.r.o. At the annual meeting of the Czech defence and security community in January, AURA was declared the Company of Decade.

Brno gatherings and Kroměříž celebrations

On the occasion of the AURA 30th anniversary, its management organized an international conference at the Brno headquarters at the beginning of May to

present the current company portfolio with visions and plans for future development. Guests from almost twenty foreign partner companies and dozens of representatives from domestic cooperating organizations discussed in an organized format as well as in informal discussions other ways and forms of future cooperation - not only in the field of highly successful information systems for military logistics, but also in the areas of civilian sphere, such as legal agenda or publishing text and multimedia documents. The professional international conference continued with a spectacular party in the premises of the Observatory and Planetarium in Brno, which was opened by the general director of AURA, Dipl. Eng. Filip Engelsmann. Further outstanding speeches were given for example by the representatives of Japan, Norway and Slovakia. Brno gatherings were followed by a two-day meeting of current and former AURA employees in the beautiful Moravian town of Kroměříž. They were greeted in the Assembly Hall of the Archbishop's Chateau where the heads of individual divisions and sections recalled the history of AURA, followed by a wonderfully commented city tour for the Flower Garden and evening full of games and talk. It turned out that AURA not only has a great working staff, but also playful cohesive teams that create the true wealth of the company.

IDET has never been without AURA

One of more than 400 exhibiting companies from 35 countries at this year's IDET was also AURA, which has participated



with honour and success in all 15 years of the International Defence and Security Technologies Fair in Brno. AURA introduced innovations in the development of the comprehensive information system for the support of logistics - LIS, with the emphasis on MC CATALOGUE, the most widespread codification software in the world. It presented also the new Advokta information system for law firms. For the GOLDEN IDET 2019 competition, AURA with Code Creator, s.r.o. registered Publi - a multi-platform software system for publishing text and multimedia documents, which was presented to particular exhibitors at their stands. To date, Publi is used by ten major Czech universities, including Charles University, Czech Technical University and Masaryk University. Codifiers from AURA Codification Agency offered their cataloguing services to the suppliers of the defence department directly at their trade fair sites. AURA representatives participated in several accompanying conferences and seminars focusing on defence armaments and military logistics.

The question "where is AURA heading" was clearly answered by its general director, Dipl. Eng. Filip Engelsmann, in his opening speech at AURA 30th anniversary celebrations in Brno: "I believe that AURA will continue to play a leading role in the development of military logistics information systems as well as information systems for law agenda, and that you will see further pleasant surprises in the portfolio of our company. We will keep on looking for new trends in all our fields and build bridges between armies and defence industry."

AURA, s.r.o. is a purely Czech company with headquarters in Brno, currently active in more than 20 countries on 5 continents. It develops specialized military and civilian logistics information systems (IS). The company portfolio includes also IS for documents and content management (DMS/CMS) for defence standardisation, IS for standardised description of goods and services for public procurement, and Advokta IS for law firms. In Czechia and Slovakia, AURA supplies the most widespread IS for judicial officers. Newly, AURA offers Publi - a multi-platform server-client software system for easy publishing of text and multimedia documents.

Achievement of Explosia Pardubice

Explosia, the manufacturer of explosives and propellants in Pardubice, begins to prepare for a big celebration. In March 2020 it will be exactly one hundred years since the establishment of the Joint stock factory for explosive substances. Explosia is not just Semtex plastic explosives and similar products. Through the Semtín factory gate we also distribute products used in stone quarries, as well as by fire fighters and police forces. Our products for military purposes are also in demand.



Fight against terrorism

The Research Institute of Industrial Chemistry, which is a part of Explosia a.s. and celebrates its 65th anniversary this year, developed a means for combating terrorism. It is called Semtex Desintegrator. It is a special charge for "opening" suspicious luggage. The spokesman of Explosia a.s. Martin Vencl explains: "Desintegrators are offered in two variants. The smaller one is used for the professional opening of objects with limited rigidity, e.g., suitcases or backpacks, by explosives. The second, more powerful, variant is designed for opening of harder packages, e.g., metal barrels or wooden crates. The Semtex Desintegrator can pierce steel up to 4 mm thick."

The Semtex Desintegrator uses so-called physical cloud impact, which transfers energy onto the object through heavy powder material. Objects at shorter distances can be pierced, but at longer distances (up to approx. 150 cm) energy is lost and poses no danger to the surroundings by fragmentation. Because of the use of such a low amount of explosive, it is safe to use in urban areas.

In 2016 the EOD service of the Police of the Czech Republic expressed interest in these special charges and tested them. "We are currently working on the details so the Desintegrator meets the requirements of its users," says Martin Vencl. Similar interest like that of the Czech Police is expected from special forces of the Czech Army, the Integrated Rescue System, and the Fire Rescue Service of the Czech Republic. In 2017, Semtex Desinte-

grator won the Golden IDET News award at the International Defence Industry Fair

Gold Explosive Detection Kit

Explosia was also very successful at IDET this year. With the explosive detection kit DETEX Explosia won the Golden IDET News award again. "This win is a reward for the research team involved in the implementation and modernization of the kit," says Explosia spokesman Martin Vencl.

The DETEX detection kit includes six basic agents for the detection of explosives. Individual agents, divided into six parts and their combinations, are used for the identification of unknown explosives. Successful demonstration of evidence requires correct application of a sample of the tested substance on a disc of smear paper, which is part of DETEX kit. "If an unknown substance (solid, liquid) found, e.g., in some luggage, is available, it can be applied to the smear paper, then proceed according to the user's manual of the detection kit," Josef Tichý, Explosia a.s. General Manager, describes about this new item. The second alternative used, e.g., during airport checks, is smearing various materials (directly from persons or luggage, etc.) with paper. It is an indirect method of sampling.

Any place where the presence of explosive is expected is wiped with the paper disc. Apply 2 drops of the first agent from the dropper bottle. If a change of colour occurs, traces of explosive are present. If no change of colour occurs, add another agent from the other two bottles. For example, a pink colour indicates the presence of explosives including nitroesters or nitramines. Proceed the same way to detect other possible misuse of explosi-

Explosia strives to assist in the combat of terrorism with this product. The company utilises its knowledge of the environment where, as a traditional manufacturer of explosives, it can very quickly identify explosives according to their composition. The detection system is based on the experience with older detection systems used by the Czech Police, Czech Army and other foreign users. The detection systems currently used at airports have a disadvantage because they are often overloaded during use. The restoration of their function requires dozens of minutes. DETEX responds immediately.

Bi-modular charges

Full-combustible Bi-modular charges are designed for gun-howitzers. The purpose of howitzers is in most cases indirect shooting on area targets. Simply put, depending on the distance you want to shoot, so many charges you should use. Full-combustible Bi-modular charges thus not only allow the use of the total weight to deliver energy to the shot, but after the shot the chamber can be immediately charge with another shot without waiting for the cartridge to be removed. "The evolution of full-combustible propelling charges in Explosia has been in progress since the 1990's. But it didn't come from scratch, but we already had experience with the combustible materials for the base cartridges, designed for Russian 125mm tank guns," explains Dipl. Eng. Zbyněk Akštein, Ph.D., Head of Department Chief Engineer.

Bi-modular charges are designed for present-day 155mm gun-howitzers. The "present-day" in this case are weapon systems with a barrel length of at least 39 calibers and a chamber volume of at least 19 liters. Charges are of course designed for the latest systems with a barrel length of 52 calibers and a chamber volume of 24 liters. Today's charges are in accordance with ballistic memorandum (JBMoU - Joint Ballistics Memorandum of Understanding, the convention unifying requirements for 155mm guns and am-



CZECH DEFENCE INDUSTRY I msline.cz

munition). The memorandum divides the basic range of up to 30 km into six zones defined by the muzzle velocity, and currently it means that two types of modular charges are used. One type is used for short ranges and the other type serves to reach large ranges, usually over 15 km. "Explosia currently produce the second generation of Bi-modular charges made up of the two types of modular charges just mentioned. The system is called the 155mm BMCS (Bi-Modular Charge System) and consists of short-range BC-E modules (zones 1 and 2) and TC-F modules (zones 3 to 6), says Zbyněk Akštein. Developments in this area haven't stopped and new requirements are still emerging. It is necessary to keep up with the competition. Explosia has therefore built a new development and production center to develop new and optimize existing production technologies for full-combustible ammunition parts.

Explosion against icy danger

We see these frequently apocalyptic images every year – fire fighters working on ice-covered rivers, because ice floes on rivers or wedged beneath bridges pose a risk to our safety. Explosia offers rescue services several options to remove these ice obstacles.

The simplest way to free chunks of ice or even entire surfaces is to use explosives, e.g., Perunit. Just place a charge on the ice and initiate it. The issue of this solution is the high consumption of explosives and noise exposure to the surroundings. "Within minutes the water is clear", says Ladislav Říha, a researcher of Explosia a.s. Another solution is to install a charge beneath the ice. Because the explosive is sealed with water, it will transfer more energy, so much smaller amounts of explosive than in the previous option are required. The time consumption is the disadvantage. Since the precise amount of explosives is hard to estimate, this method of ice obstacle removal poses a risk of flying ice. This type of blasting usually utilises dynamite, which is relatively water proof for a certain period of time and more affordable.

The use of a charge placed on the ice, covered with a water bag, is an interesting option. Explosia, in collaboration with Scientific Research Institute of Coal in Radvanice, have studied this issue in recent years. "The use of bags creates a situation similar to the explosive being



submerged in water, making the transfer of the explosive energy more efficient. The advantage is that you can use an amount of explosive almost as small as if it was placed beneath the ice", says Říha. The water-filled bags also minimise the spray of ice fragments, limiting it to a few metres. The technology is currently being implemented in practise by fire fighters, who are very satisfied with the test results of the bags.

The fourth solution is the use of flexible long cumulative Semtex Razor charges, the performance of which is similar to those charges covered with water bags. Its installation is simple and the spray of ice is relatively small; however, the price is substantially higher. Success depends on correct placement of the charges, yet the result is precise, quick and safe.

No stone left unturned

One of the important fields of business of this Pardubice company is the production and sale of explosives for opencast mining. This is associated with comprehensive services offered by Explosia to mining companies. "We provide drilling works using our own drilling machines, we also have mixing and loading trucks

that produce the explosive directly above the bore, which is then loaded by the operators", describes Josef Tichý, General Manager of Explosia. The explosives are loaded using mixing and loading trucks, saving approx. 30 % of the cost of the drilling works. Another important advantage of this loading method is increased speed of blasting preparations, savings in transportation and storage of explosives, but most importantly increased safety and hygiene at work.

Explosia has dedicated the Fospol division for these purposes, which provides mining companies with the combination of drilling, blasting and loading of the mined material into primary crushers. In recent years the company has annually provided the blasting and supply of almost 5 million tons of broken material at 18 locations in the Czech Republic.

With its origins beginning in 1920, Explosia a.s. is both a traditional and the most important Czech manufacturer of explosives. It is 100% owned by the Czech Government and is an individual business corporation with an important position in the commercial explosives market.

Author: Martin Vencl



AGADOS has introduced a special amphibious off-road trailer

An amphibious off-road trailer has been added to AGADOS's portfolio of special projects. It was presented at this year's IDET International Trade Fair of Defence and Security Technologies in Brno and immediately it was awarded the Golden IDET 2019 in the category of Military and Security Logistics and Services and the Bronze IDET News, a prestigious award from the International Journalist Jury.

The amphibious trailer is primarily designed for wheeled and tracked vehicles for all types of terrain. The patented system of independent suspension in each wheel is an indisputable advantage. While using unique skis, the trailer can be easily operated in difficult terrain such as snow, mud and rocky terrain. The advantage of this newcomer is also the ability of overcoming sources of water, when the trailer

is able to float behind a towing vehicle. The useable load area, whose payload capacity is up to 1500 kg, is made up of interchangeable modules for various uses not only in extreme conditions. It is a two-axle suspension trailer with four fifteen-inch wheels with a total weight of 3500 kg. The trailer is equipped with a height-adjustable drawbar that enables towing by vehicles of different types.

The new trailer, which are already being used by foreign armed forces, can serve as a waterproof box, tank, open plateau, 8-10-foot container carrier and tilting superstructure flatbed with tarpaulin. It is also ideal, for example, to transport a generator. The modules are attached to the bottom frame at four anchoring points and secured with pins. The trailer has two salvage eyes at the rear.







Advantages

- Possibility of transporting all kinds of military material
- Variable anchoring of transported military material
- Possibility of using the trailer in all types of terrain, even overcoming sources of water
- Possibility of blocking overrun brake for off-road transport
- Patented system of independent suspension in each wheel
- System of superstructure modules

Technical parameters

- Dimensions (L×W×H) 4800 x 2182 x 2240 mm
- Total weight 3500 kg
- · Payload: 1500 kg
- Braked, two-axle trailer (4 half axles)
- 15-inch wheels including spare wheels









Other special products introduced by AGADOS in the past include, besides the new amphibious trailer, were the PK 4 KAGA mobile field kitchen, the larger PK 6 field kitchen, the NAVA 2000 mobile tank, the UVA 500 water treatment plant or the freezer box for preserving fresh food even in extreme conditions. Furthermore, the company offers chassis for gensets and a mobile lighting tower suitable for illuminating bases, areas of accidents, fires, etc. AGADOS is focused on the production of trailers of all categories. In this area, it is a company of European importance - half of the production is exported. Over just a year, more than 20,000 trailers were produced. AGADOS's production grows year by year due to growing interest in its products and at the same time the company expands its rich portfolio.

Safety and Security sector in the U. A. E. and its potential for Czech know how

Safety and Security is a priority sector for the United Arab Emirates (U. A. E) government. In response to rapidly-evolving security threats worldwide and continued growth in the country's commercial, shipping, property, financial, and tourist sectors. The U. A. E. is now expertly contributing to the security and stability of the Gulf Region and playing a vital role in the global security infrastructure surrounding the global war on terror. Despite the continued importance of this sector the U. A. E. has only minimal local capacity for security-related production. In this regard the country has attracted many foreign security and safety companies. In general terms the U. A. E.'s safety and security sector is comprised of five segments: Commercial Security & Information Security; Aviation Security; Homeland Security & Policing; Fire & Rescue and Safety & Health.

Market Acces:

There are no trade barriers against products

from the Czech Republic. Imported goods are subjected to 5 percent customs duties. The U. A. E.'s Offsets Group Program (now renamed as "Tawazun Economic Council" requires defence/security contractors which are awarded contracts valued at more than \$10 million to establish commercially viable joint ventures with local business partners that would be projected to yield profits within a specified period.

Competition:

Competitors in the sector include specialized security and technology systems integrators from various European, American, Asian, South African and Australian manufacturers. Supplied products include: highend IP camera systems, automatic number plate recognition, video analytics, radar systems, real-time IP based access control solutions, traffic bollards, turnstiles and gates, road blockers, tire killers/spikes, security crash barriers, and metal and passenger

baggage detectors. Many Czech firms will have to rely on technological, qualitative advantages in facing often less expensive, low-quality of Asian competition.

Government Procurement:

Various U. A. E. government entities contract with private sector vendors for the procurement of goods and services for performing public works. The U. A. E. is not a signatory to the WTO Agreement on Government Procurement. Depending on the nature and scope of the work, government entities offer two types of tenders for selecting qualified vendor(s):

Public Tenders: Procurement and contracting processes in public tenders involve four main steps: announcement of tenders, evaluation of proposals, awarding contracts, and supplying items or performing work. Public tenders can be either global or local. Global tenders are open to suppliers and contractors from within the country and







abroad and advertised in the local as well as international media; local tenders are restricted to all suppliers and contractors within the country and advertised in the local media only.

Restricted Tenders: For restricted tenders, calls for bids are sent only to suppliers and contractors whose names are registered and are selected by the concerned entity. Except for public advertising, all the rules and procedures pertaining to public tenders apply to restricted tenders.

To be qualified to work with any government entity in the U. A. E., contractors and suppliers must register with the concerned entity by submitting a completed pre-qualification application form it to the procurement department. Prior to that, they must have obtained all necessary licenses to practice the type of activity from the Department of Economic Development (DED), the Chamber of Commerce and Industry or any other competent authority in that Emirate. They should also be adequately staffed with qualified technical personnel having the necessary skills, in addition to the availability of proper equipment, workshops and warehouses.

Since direct purchases from foreign suppliers is rare, it is important to work through a local agent/distributor that has the ability not only to supply/install goods but also provides proper and timely aftersales service. Therefore, selecting a local partner can be a critical first step in operating in the U. A. E. A reputable agent with good contacts can provide timely information, which is often very impor-

tant for foreign companies. In addition, in a view of increased importance to provide adequate after-sales service, choosing a competent agent who has the resources and ability to qualify is of high importance. Not only do the local agents provide knowledge of the market, they greatly assist in managing technological and cultural differences, while at the same time sharing local marketing and sales support tools.

Potential and Opportunities:

With security remaining an integral concern in this part of the world, it is estimated that investment in advanced security solutions, primarily in government-initiated projects in the U. A. E., will continue. Also, with a large expatriate population, the possibility of reaction to events in their home countries cannot be totally ignored. In order to combat any negativity and to curtail cross border infiltration, the U. A. E. continues to intensify security at airports, land routes, seaports and coastline patrols. Having major infrastructure and oilfield installations, the U. A. E. offers the greatest potential for Security Risk Management of major infrastructure projects. The value of these assets and the threat profiles of recent attacks by terrorist groupings in the region indicate that major infrastructure projects are the most likely targets.

There are also great prospects for Crisis Management and Incident Management preparedness based on software solutions that aid commanders' decision making. Subsequently, interest in new technical solutions is growing to a greater extent than





previously experienced, resulting in tremendous opportunities for Czech companies.

The market for security consultancy services in the U. A. E. is one other area that is likely to experience a period of significant growth as understanding of threats and their approach to risk management becomes more valuable. With the growth witnessed in the infra-development sector, system integrations and security systems have gained high prominence in the region. The U. A. E.'s market is constantly in search of products to create a niche in the region with global standard solutions catering to commercial buildings, residential properties, shopping malls, hospitals, parks, museums, hotels, and industrial facilities among others.

There is a demand for various security products, especially unmanned vehicles, drones, closed circuit television sets (CCTV), surveillance cameras, perimeter control and access control systems.

Commercial Security & Information Security which includes Cloud-based solutions, CCTV, Video Surveillance equipment (VSaaS), drone technology, internet security, anti-virus software, SPAM filters, Biometric Identification Systems, digital signature, data security/protection/recovery, system back-ups, software protection, and user right management are considered good prospects in the U. A. E.'s ever growing

surveillance sector.

Aviation Security: The U. A. E. Aviation Safety Affairs consists of the following departments Air Navigation and Aerodrome (ANA), Airworthiness (AW), Flight Operation (FOP), Licensing (LIC) and Policy, Regulation and Planning (PRP) and reports directly to the Director General (DG). The Executive Director has been appointed is responsible for the regulation and oversight of the safety of the aviation industry in the U. A. E.

Homeland Security & Policing: The growing internal security challenges in the Middle East have raised demand among the region's authorities and security agencies for innovative products to improve Homeland Security. Both government law enforcement agencies and private companies are allocating more budgets to control terrorist attacks. The U. A. E.'s spending for Homeland Security products is set to double from \$5.5 billion to \$10 billion in the next ten years.

Fire & Rescue: The ongoing investments in the commercial, retail, industrial, hospitality, and the healthcare sectors and the upcoming Dubai Expo 2020 is likely to create robust demand for the latest equipment, fire protection and firefighting systems.

Safety & Health: As U. A. E.'s construction industry prepares to deliver multi-billion dollar projects, the health and safety regu-

lations in the country are becoming increasingly stringent. That in turn is reflected by an increased investment in more health and safety products such as jackets, shoes, helmets, and services to help ensure safety at work.

The leading trade fair for Security, Safety & Fire Protection in the region is INTERSEC. Intersec's influence has spread not only across the Middle East, Africa and the Indian subcontinent but has gone well beyond. Record breaking over 34,800 visitors (+20 %) from 135 countries attended the 21st edition of Intersec in 2019 to meet with more than 1,200 exhibitors.

Commercial Security, Information Security, Smart Home, Fire & Rescue, Safety & Health, Homeland Security & Policing, Perimeter & Physical Security products and innovations come together in one place. For major brand manufacturers, newcomers, local or international. Intersec with its unique product diversity, is one of the most important industry meeting points and a source of technologies for wholesale and retail trade as well as for corporate buyers and the government.

Daniel Blažkovec, First Secretary - Economic and Commercial Affairs, Embassy of the Czech Republic in Abu Dhabi







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Humanitarian aid and Development cooperation with involvement of the Fire Rescue Service of the Czech Republic

Humanitarian Aid

Providing humanitarian aid is an integral part of the Czech Republic's foreign policy. Humanitarian aid abroad is provided according to the urgency of the situation and needs of the affected country, according to the possibilities of the economy, the available resources of the state budget, in accordance with the principles and resolutions of the international community and with its own priorities and inte-

Humanitarian aid is governed by Act No. 151/2010 Coll. on international development cooperation and humanitarian assistance abroad. Humanitarian assistance abroad is the set of activities financed from the national budget in order to prevent loss of life and injury, to alleviate suffering and to restore basic living conditions after an emergency, to mitigate long-lasting consequences of emergencies and to prevent their occurrence and negative consequences.

Humanitarian aid includes ad hoc response to natural or man-made disasters, aid in long-term (complex) humanitarian crises and disaster prevention.

State humanitarian aid to foreign countries is financed from funds allocated in the budget of the Ministry of Foreign Affairs.

From this budget can be financed humanitarian aid provided abroad in particular:

- Rescue (rescue teams) special teams are prepared for rescue humanitarian aid abroad and are always composed to meet the needs on the place of emergency (search and rescue, fire, flood, chemical and ecological and special). Teams consist mainly of members of the Fire Rescue Service of the Czech Republic. Members of the canine brigades, the Police of the Czech Republic or doctors may also be part of the teams.
- Material material humanitarian aid abroad is provided on the basis of a spe-

cific request from the affected country, which is then considered by the Czech side and eventually provided.

- Financial the Ministry of Foreign Affairs is providing financial humanitarian aid abroad. Assistance is mostly provided through international organizations or directly to the bank account of the affected country.
- Advisory advisory activities of the Fire Rescue Service of the Czech Republic and persons included in the Integrated Rescue System to affected countries.
- Combined a combination of the above mentioned kinds of aid.

Depending on the nature of the disaster, the Minister of Foreign Affairs decides to release of the funds from this budget, up to 10 million CZK. In individual cases, the government of the Czech Republic must decide on the release of funds over 10 million CZK based on a proposal made by the Minister of Foreign Affairs.

According to Article 9 of Act No. 151/2010 Coll., on international development cooperation and humanitarian assistance abroad, the Ministry of Interior provides humanitarian aid to EU member states and other states of the European Economic Area and decides on its scope and form.

According to Act No. 239/2000 Coll., on Integrated Rescue System the tasks of Ministry of the Interior in this field are fulfilled by the Directorate General of Fire Rescue

In 2018, the sum of 180 million CZK was originally allocated to humanitarian assistance (the budget for humanitarian assistance to foreign countries is 218 million CZK for the year 2019); during the year, the budget was increased by another 27 million CZK for assistance to Syria and for the realization of the MEDEVAC program. During 2018, 44 humanitarian activities in 23 countries were supported in the total amount of 181,3 million CZK; other 7

activities in total 31,45 million CZK were indicated for recovery of Syria.

Almost 88 % of the budget was allocated to the needs of displaced persons, (internally and in third countries) as a result of conflicts, including support for host communities; the remaining 12 % were allocated for disaster relief, including reconstruction and resilience.

Humanitarian aid with involvement of the Fire Rescue Service

During 2018, the expert assistance to Thailand was provided, assistance was offered to Sweden in forest fires fighting. Material assistance to Greece (fires) and Iran (floods) was provided in the first half of the year 2019.

Bellow you can find a brief description of humanitarian aid provided during the last

Thailand

The Czech Republic actively participated in the rescue mission in the Tham Luang Cave in northern Thailand, where twelve boys and their football coach were trapped by torrential rains. The Minister of Interior in agreement with the Directorate General of the Fire Rescue Service decided to dispatch two members of the Fire Rescue Service of the Czech Republic who flew to Thailand on Friday 6 July 2018. Reconnaissance group of experts composed of David Kareš and Petr Vodička worked in Thailand from 6 to 11 July 2018, where the situation was assessed. The Czech Republic suggested in the initial stage assistance in form of high capacity pumps. The possibility of their deployment was refused by Czech experts because of the difficult terrain profile for water pumping with high capacity pumps. Subsequently, smaller type of high-performance sludge pumps and the necessary electrical and hoses lines were offered to the Thai side. Thailand eventually did not accept the

Czech offer to help due to successful evacuation of all persons from the cave.

Sweden

In the summer of 2018, Sweden was affected by extensive forest fires. In July, Sweden requested through the European **Emergency Response Coordination Cent**re in Brussels for international assistance. The Czech Republic itself faced fires in the natural environment and was limited in the number of usable aircraft. Even though, the assistance was offered to Sweden in form of a helicopter with the crew. The Swedish party did not accept the offer of the Czech Republic due to massive assistance from other countries.

Greece

In September 2018, the government of the Czech Republic approved humanitarian aid to Greece under the law on foreign development cooperation and humanitarian aid provided abroad. The reason was the restoration of material after the devastating fires in the Kinetta area on 23 July 2018. The Minister of Foreign Affairs approved 5 million CZK from the Ministry's humanitarian budget for 2019. This humanitarian aid was implemented through the Directorate General of Fire Rescue Service. The Greek Fire Department identified the Fire Rescue Service in Megara for assistance.

After consulting, one Ford Ranger Pick-Up 4x4, one Volkswagen Transporter 4 x 4 minibus, and other equipment needed to perform firefighting tasks in Megara, such as sludge pumps, flashlights, air compressors, pressure cleaners, footwear and other equipment for firefighters, were purchased. The humanitarian aid convoy set off from the Czech Republic on 22 May and the aid was officially handed over to Megara firefighters with the participation of the Czech Ambassador to Greece on 25 May 2019.

Iran

From 9 to 10 April 2019, the Ministry of Foreign Affairs decided to allocate 2 million CZK for material aid to Iran after the devastating floods, which the Directorate General of Fire Rescue Service released from its stock and ensured smooth provision of aid. It was handed over in the target country with use of the Czech Army aircraft. The requirement mainly concerned material for the affected population (tents, sleeping bags, kitchen sets) and

the equipment for the liquidation of the consequences of floods (power generators, pumps, boats).

Detailed information about humanitarian assistance not only in 2018 and 2019 can be found on www.usar.cz.

Development cooperation

Development cooperation is an important part of foreign policy of the Czech Republic. It promotes security, stability, prosperity and sustainable development as well as human dignity, good services to the citizens and good reputation of the Czech Republic abroad.

Development cooperation with involvement of the Fire Rescue Service

Project of Development cooperation "The Improvement of Operational Competence and Proficiency of Moldovan Firefighters II"

Based on the previous cooperation between Civil Protection and Emergency Situation Service of Moldova and Fire Rescue Service of the Czech Republic, the





project "The Improvement of Operational Competence and Proficiency of Moldovan Firefighters II" was implemented in the time period from 2015 to 2018. This project was financed from the budget of the Czech Development Agency and primarily was focused on the training of Moldovan firefighters in interventions with HAZMAT and flood protection. Main aim of this project was to establish functional training program, to provide training for Moldovan firefighters for the interventions with HAZMAT, to purchase material for safe and proper conduct of the interventions with HAZMAT and to purchase flood barriers and provide training in the area of flood protection.

In 2016, purchases of material was executed and also a training facility was built to train interventions with HAZMAT in Moldova. Trainings for calibration of the detection devices and for interventions with HAZMAT were organized in the Czech Republic and also in Moldova during the year 2016.

In 2017 the activities of the project were focused on operational centres - in particular gathering the relevant information from callers and the deployment of forces and means in the event of an accident with HAZMAT. Other project activities

were aimed at providing first aid. One of the activities of the project was also focused on the principles of proper behaviour of citizens in the event of an accident involving HAZMAT, including combustion products. A set of recommendations were created for persons dealing with HAZMAT to eliminate the occurrence of an emergency and information support for intervening firefighters. Participation of the Czech CBRN module in the exercise MOLDEX 2017 was additionally included to the project. This exercise was organized in the frame of the European Union project PPRD East 2 (Prevention, Preparedness and Response to Natural and Man-made Disasters in the Eastern Partnership Countries 2) in Moldova in September 2017. Czech firefighters, during this exercise, co-operated with Moldovan colleagues in the emergencies related to the leakage of HAZMAT using the means purchased under this project.

In 2018, the project implementation was focused on flood protection. Mobile flood barriers were purchased by the Czech Development Agency based on the technical specification prepared by the experts of the FRS CR. In July, 10 Moldovan firefighters arrived in the Czech Republic to be acquainted with the barrier system. A

one-week training focused on both flood protection and barrier construction took place in Zbiroh. In autumn, Czech firefighters went to Moldova, where a similar training was held in local conditions and for a bigger group of Moldovan firefighters. The project was completed at the end of 2018 and all activities were funded by the Czech Development Agency. The total project budget was CZK 18,120,400.

Security development cooperation

Fire Recue Service of the Czech Republic has also joint Program of the Security development cooperation. This program is a part of the official development assistance of the Czech Republic and it is funded from the budget of the Ministry of Foreign Affairs. It is led by the Ministry of the Interior. The program is aimed at strengthening partner structures and facilitating mutual cooperation, preventing safety and security threats or emergencies and indirectly promoting interests of the Czech Republic.

Security development cooperation with involvement of the Fire Rescue Service of the Czech Republic. Moldova

The aim of this cooperation is to inspire

and help building the National Training Centre of the Office for Civil Protection and the Emergency Situations Service of Moldova focused on the training of firefighters - rescuers, assessing the current state of volunteer firefighters and helping to implement new systems in Moldova.

In 2018, the business trip to Moldova was undertaken to analyse their dispositions and suggest possible solutions to build a Training Centre and establish a voluntary firefighting system.

As part of the planned establishment of a Training Centre in Moldova, the Moldovian side obtained experience of the Czech experts in the field, including the right and wrong solutions already explored.

At the same time, both sides discussed the issue of voluntary fire brigades that almost do not exist in Moldova. The establishment, operation and functionality of voluntary units would have a positive impact on changes in self-government in this field, and better area coverage by forces and means would provide faster assistance to citizens.

In 2019, representatives of the Moldovan service visited the Czech Republic, specifically the School and Training Facility of the Fire Rescue Service of the Czech Republic in Brno. During the 3-day visit, they had the opportunity to see the training facilities and simulators used by the Fire Rescue Service for firefighters training and they were introduced into the system of firefighters in the Czech Republic. Partners have seen a functional firefighter training system and have gained lots

of experience, leading to more efficiency in their decision-making processes.

Ukraine

Cooperation with the Ukraine is implemented with the aim of renewing the equipment of the Transcarpathian firefighters by means of personal protection equipment, respectively small rescue equipment, thereby improving their material and technical capacities and intervention activities.

The reason for choosing the Ukraine, specifically the Transcarpathian region, is the historical interconnection of Transcarpathia with the Czech Republic (or Czechoslovakia), which is why the tourists from the Czech Republic are heading to this area. There is also the fact, that equipment of local firefighters is problematic due to the situation in the country and their support will strengthen the goodwill of the Czech Republic with the local population.

In 2018, the firefighter helmets were handed over to Ukrainian firefighters. More helmets will be delivered during this year as well as power generators, chainsaws and mobile spotlights. The implementation of the projects improves the current equipment of the Transcarpathian firefighters, leading to an improvement in their ability to deal with emergency situa-

In 2018, a Memorandum of Cooperation between the Fire Rescue Service of the Czech Republic and the State Emergency Service of the Ukraine was signed. The

Fire Rescue Service of the Czech Republic plans to continue in this cooperation also in the future.

Armenia

The aim of the project is to improve the functionality of the rescue system of the Republic of Armenia in form of expertise, in particular the Ministry of Emergency Situations of the Republic of Armenia, and the transfer of knowledge and experience of the Fire Rescue Service of the Czech Republic in the field of fire protection, Integrated Rescue System, crisis management and population protection. The reason for the selection of the country is an application submitted by the Embassy of the Republic of Armenia with a request for activities based on the Memorandum of Cooperation between the Fire Rescue Service of the Czech Republic and the Ministry of Emergency Situations of the Republic of Armenia from 2014.

In the spring of 2019, experts from Directorate General of the Fire Rescue Service presented in Armenia various topics such as the organization of the Fire Rescue Service of the Czech Republic and the Integrated Rescue System, humanitarian aid, measures to prevent emergencies, preparedness and timely response to emergencies and risk analysis. In the autumn 2019 the Armenian group will visit the Czech Republic, where they will be given more information about the system in the Czech republic. They will visit Directorate General of Fire Rescue Service of the Czech Republic, Fire Rescue Station in Prague, Technical Institute of Fire Protection of the Fire Rescue Service of the Czech Republic and the School and Training Facility of the Fire Rescue Service in Zbiroh or Institute of Population Protection Lázně Bohdaneč

The Armenian side would like to draw inspiration from our knowledge to develop better system in Armenia.

In the future, the Fire Rescue Service is planning to implement other development cooperation projects. Within the framework of security development cooperation, the Fire Rescue Service would like to focus primarily on the countries the Ukraine and Vietnam, and a project with Moldova is planned to be implemented in the framework of development cooperation through the Czech Development Agency.



15th IDET was the largest ever

The IDET International Defence and Security Technologies Fair ranks among the most important shows held in NATO countries. At the same time, it is unique for its connection, concurrently with PYROS and ISET fairs, to a comprehensive presentation of the Integrated Rescue System. This year's security fairs presented exhibits of a total of 534 companies from 35 countries and documented the growing strength of the Czech defence industry. Over the first three days 26 389 visitors passed through the gates of the Exhibition Centre; on Saturday, there was an event for the general public called Safety Day – Rescuers for Children, which welcomed about 10 150 visitors.



Record-breaking size of this year's fairs corresponds to the difficult security situation and growing investments in strengthening national defence. "IDET is a transparent presentation platform, a place for establishing defence and industrial cooperation. Those who attended show their interest in defence cooperation with the Czech Republic," said Jiří Kuliš, CEO of BVV Trade Fairs Brno. The trefoil of the Brno Security Fairs for the first time in history was launched by the Czech Prime Minister. On this occasion, Andrej Babiš wrote in the Brno Trade Fairs memorial book: "A great trade fair that definitely significantly supports the

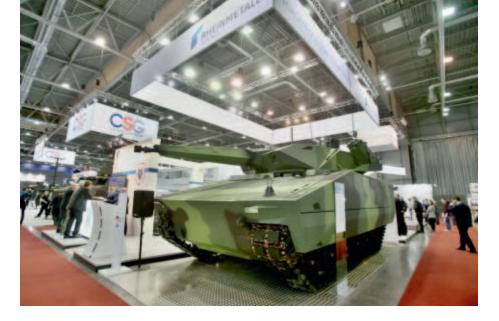
exports of Czech armament companies. I'm here for the first time, but I'm sure I'll be happy to come back and talk about IDET abroad everywhere I visit."

Among VIP guests of the fairs there were also the Minister of Defence of the Czech Republic Lubomír Metnar, Minister of Defence of Sweden Peter Hultqvist, chairpersons of both parliamentary security committees Pavel Fischer and Radek Koten, Chiefs of General Staff of the Czech and Slovak General Staffs Aleš Opata and Daniel Zmeko, general director of the Fire Rescue Service of the Czech Republic Drahoslav Ryba and

others. Based upon invitation by the Ministry of Defence of the Czech Republic and the company Trade Fairs Brno, foreign delegations from 20 countries arrived from countries such as France, India, Lithuania, Latvia, Hungary, Germany, Norway, Poland, Austria or Slovakia. There were also delegations of NATO and EDA (European Defence Agency). Particular attention was paid this year Swedish – Czech cooperation in defence industry.

The IDET fair was attended by 423 exhibiting companies on a record-breaking area; 70 % of these companies came from abroad. The exhibiting companies were very pleased with the interest of the visitors and the fair also saw the signing of several major contracts. For example, two contracts signed by the Ministry of Defence of the Czech Republic: a contract for the servicing and modernization of sixteen L-159 aircraft worth 1.6 billion crowns with Aero Vodochody and a contract for the purchase of 31 heavy off-road military vehicles Tatra worth 500 million crowns with the company Tatra Trucks.

An important event as part of the supporting programme was traditionally the CATE international conference (Community – Army – Technology – Environment), which focused on logistics in armed forces, the changing nature of conflicts and challenges of adapting the armed forces. The Czech – Austrian Industrial Forum, the Czech –



Turkish Industrial Forum and the Czech - Swedish Innovation Seminar discussed the development of bilateral cooperation in defence technologies. On the occasion of PYROS 2019, the traditional Pyromeeting conference was held, this time on the topic of "Climate Change". For the first time ever, the Brno Exhibition Centre was the venue for the finals of the NATO Innovation Challenge 2019 contest, which is backed by the armies of NATO member states. Seven teams - five from the United States, one from the United Kingdom and one from Germany - presented their solutions to the topic of "Electromagnetic Pulse - Prevention, Mitigation and Recovery" directly on the spot, four other teams joined in online and eventually won the team of Electronics Service from the USA.

The supporting programme also featured the IDET ARENA terrain polygon for military, fire and police equipment shows, which was a real attraction to visitors.

Some great exhibition stands focused on significant anniversaries. The Ministry of Defence and the Czech Army commemorated 100 years since the establishment of the General Staff of the Army of the Czech Republic and also 20 years since the Czech Republic joined NATO. The Police of the Czech Republic commemorated 100 years of transport police.

Five Golden IDET awards and three IDET NEWS awards were handed out to the best exhibits at the fair. 27 exhibits were entered and an expert jury selected five winners: the company Excalibur Army won with its armoured tactical vehicle PATRIOT II., the company ERA got an award for its VERA-NG Simulator, the company Agados received an award for its Agados amphibious off-road trailer, and the company Dajbych won with its Gepard reconnaissance vehicle; the Golden IDET 2019 was

also awarded to the Common Operational Image of Ground and Air Force Command and Control Systems with the Highest Level of Communication Protection, manufactured by the companies Delinfo, ALES and ICZ. The IDET NEWS 2019 journalists' awards were also handed out. The gold was won by DETEX Explosives Detection Kit of the company Explosia, the silver belongs to EVPÚ Defence for its CMS Panoramic Commander Sight and the bronze went to the company Agados for its amphibious off-road trailer.

QUOTES ABOUT THE FAIRS AND EXHIBI-TORS' VIEW

Andrej Babiš, Prime Minister of the **Czech Republic**

IDET has made an incredible move forward, therefore today it is deservedly one of the largest trade shows of its kind in Europe. I think this fair is also important for our citizens, who see where our army and security are heading.

Lubomír Metnar, Minister of Defence of the Czech Republic

IDET has been one of the largest European trade shows of defence technology for a long time. The proof is the rich participation of foreign companies and government officials. In today's interconnected world, Czech companies cannot do without foreign partners and the venue of the fair is an ideal place to arrange a new cooperation or further develop an existing one.

Peter Hultqvist, Minister of Defence of Sweden

Sweden and the Czech Republic have great relationships and have been working closely together in the defence sector for 30 years. Czech innovation strategy until 2030 gives space for joint projects also in other areas and I believe our cooperation it will

continue to grow and will be beneficial for both parties. My thanks go to IDET organizers for their work and for the fact that Sweden can be the fair's special partner this year.

Radek Koten, Chairman of the Committee on Security of the Chamber of Deputies of the Parliament of the Czech Republic

I am at such a fair for the first time and I have to say the range of technology presented here is utterly fascinating. All manufacturers that I have visited show a fantastic technological rise.

Jiří Hynek, President of the Defence and Security Industry Association of the **Czech Republic**

I feel satisfied that the Czech defence and security industry once again leaped technologically forward. In the world we have nothing to be ashamed of, which we can already see on the fact that we export 90 percent of our production and we beat renowned world manufacturers on foreign markets.

Göran Lennmarker, Chairman of the **Swedish Security and Defence Industry Association (SOFF)**

I perceive the Czech Republic as an experienced and respected partner with a tradition of industrial manufacturing, whom there is no need to teach lessons, but with whom Sweden can cooperate. I see space for cooperation here even outside the big metropolises where smaller innovative companies operate, which have something to offer.

Jiří Kuliš, CEO, Trade Fairs Brno, a.s.

The accession to NATO 20 years ago gave IDET a completely new impetus. IDET is nowadays a well-established presentation platform for international industry cooperation in the defence and security industry.

Lukáš Novotný, Marketing Manager, Czechoslovak Group as

We rate the fair as very successful, we were visited by many trade partners, both existing and new, and several delegations from around the world.

Petra Paminger, International Business and Services Manager, General Dynamics European Land Systems

Our display attracted large amounts of visitors every day. I have never seen such inte-



rest at other fairs; Brno and IDET were truly unique in this respect. Our sales representatives also arranged several new trade meetings here with international outreach.

Zdeněk Soudný, spokesperson, BAE CZ

We attend IDET regularly and it is a great opportunity to meet people from the industry, representatives of the public sector and trade public.

Oliver Mittelsdorf, Senior Vice-President, Rheinmetall

The atmosphere of the fair was very good. I'm absolutely exhausted because we had a lot of meetings in the last two days. A lot of visitors came to who were interested in our products. I really enjoy being here.

Markéta Maršálek Čadková, Communication Manager for Central and Eastern Europe, Saab Technologies

The fair was very successful for us. We are glad we could present a wide portfolio of our company at IDET in Brno, among others the Carl-Gustav simulator, which attracted a large number of visitors. People were also interested in the Gripen dummy and other ground equipment products.

Jiří Lojan, Director of PRAGA-Export s. r. o.

We arrived at IDET in Brno for the fourth time. We use our presentation mainly to strengthen our business relationships with major partners on the international level.

Rostislav Psota, Marketing Manager, Glomex MS, s. r. o.

When we look back at IDET, enormous interest from the professional community

comes to mind.

We are glad that the contact platforms did a great job and important foreign guests found us.

David Basovník, Sales Representative, Česká zbrojovka a.s.

We rate our participation in IDET fair positively. We had a large number of meetings with representatives of armed forces at our stand, we had the opportunity to provide comprehensive information to our target customers and introduce our production to them.

Ivo Uchytil, Head of Sales, AGADOS, spol. s r.o.

We see the greatest benefit in the meetings that we had with our existing and new partners from the Czech Republic and

abroad. At IDET we presented ourselves for the third time in a row and we noticed business achievements each time. We certainly shall not miss out on the next season.

Alexandra Tománková, Promotion Manager at Omnipol

We have IDET as one of the regular fairs to which we come to and present our news to current and new customers. This year we were pleasantly surprised what interest invoked our display among trade visitors. We were also successful with international delegations that we managed to meet at the exhibition centre.

Milan Macholán, CEO, První brněnská strojírna Velká Bíteš, a.s.

We participate in all major trade fairs around the world. We presented our jubilee products at IDET in Brno this year. At the fair we meet our international partners and we make or negotiate new contracts.

Pavel Bušta, Project Manager, Zetor Engineering s.r.o.

We appreciate the fact that BVV Trade Fairs Brno pushes the professional level of IDET constantly higher. We simply couldn't miss this opportunity to present our new Gerlach tactical vehicle. Throughout the fair we had meetings with potential domestic and international industry partners. We will surely arrive at the next fair in full force again.

The next season of IDET will be staged from 26 to 28 May 2021. The PYROS and ISET fairs will run from 26 to 29 May 2021.



Prestigious **IDET NEWS awards**

nominated by the International journalist jury to the Best at IDET 2019

More than 500 exhibitors from throughout the world presented their exhibits at the International Defence and Security Technologies Fair

The announcement of the prestigious nomination and awards as a part of Golden IDET and IDET NEWS competition for the best exhibits was held on the first day of the fair in the Chattel of Austerlitz, close to Brno in the Czech Republic.



The IDET NEWS awards for the most interesting exhibits were nominated by the International journalist jury consisted of 6 journalists from Germany, Austria, Italy and Croatia with the chairman Stephen Elliott from Mönch publishing house and deputy chairman Šárka Cook from MS Line. The prestigious prize for the most interesting stand as well as the winner's company largest stand in history of IDET was awarded to the Military Technical Institute.

The prestigious journalist Bronze medal IDET NEWS was awarded to the company **AGADOS** for the special **Amphibious off-road trailer**.

The amphibious off-road trailer is primarily designed for wheeled and tracked vehicles for all types of terrain. The patented system of independent suspension in each wheel is an indisputable advantage. While using unique skis, the trailer can be easily operated in difficult terrain such as snow, mud and rocky terrain. The useable load area is made up of interchangeable modules for various uses - waterproof box, generator transporter, tank, open plateau, 8-10-foot container carrier, and tilting superstructure flatbed with tarpaulin. The waterproof box trailer is also able to overcome sources of water and is able to float behind a towing vehicle.



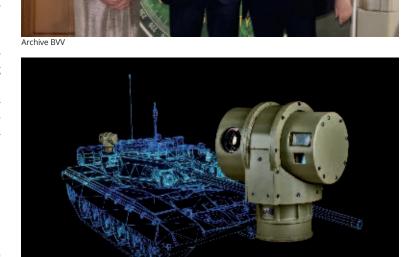


The Silver IDET NEWS was awarded to EVPÚ Defence for the panoramic sight CMS-1 - Multi-sensor electro-optical system.

CMS-1 is a multi-sensor electro-optical system developed as a stabilized panoramic sight. All optical sensors are mounted on a gyro-stabilized pan and tilt positioner, allowing a commander to get an overview of the battle-

Combination of sensors ensures a capability of the system to see in all weather and light conditions. There are three types of sensors - day channel, night channel and LRF. Day channel is provided by a zoom camera with a color and B/W mode. Night channel is provided by a cooled thermal camera. Range measurements are performed by an eye safe laser rangefinder. All sensors are precisely aligned and fixed to prevent any movements during gunfire.

The body of the container is ruggedized against vibrations and resistant to all weather conditions. The whole system is protected with an Armox shield to prevent damage from an indirect hit.



The top Golden IDET NEWS was awarded fairly clearly to the company EXPLOSIA for the exhibit DETEX - Set for detection and identification of explosives.

The detection set is designed for airports, logistic centers or safety units. It contains six basic reagents for detection of explosives. The set is developed for safety, military and civil using, just as for control of object which can be contaminated by explosives (baggages, clothes, parcels etc.) One of the best of advantages of the set is ability of fast using (the test results are available in some seconds), ease of operation, wide scale of detected explosives, no need of electrical energy, minimal occurence of false alarms etc. This sample set is possible to thoroughly see especially at IDET fair. Explosia company is regular participiant of the fair which is place to meet current and future customers.

By Eva Soukupová





Archive BVV









SECURE YOUR PARTICIPATION AND PREFERENTIAL LOCATION OF YOUR EXHIBITION STAND IN THE NEXT EDITION OF IDEB THAT WILL TAKE PLACE FROM 13^{TH} TO 15^{TH} MAY 2020 RIGHT NOW.

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