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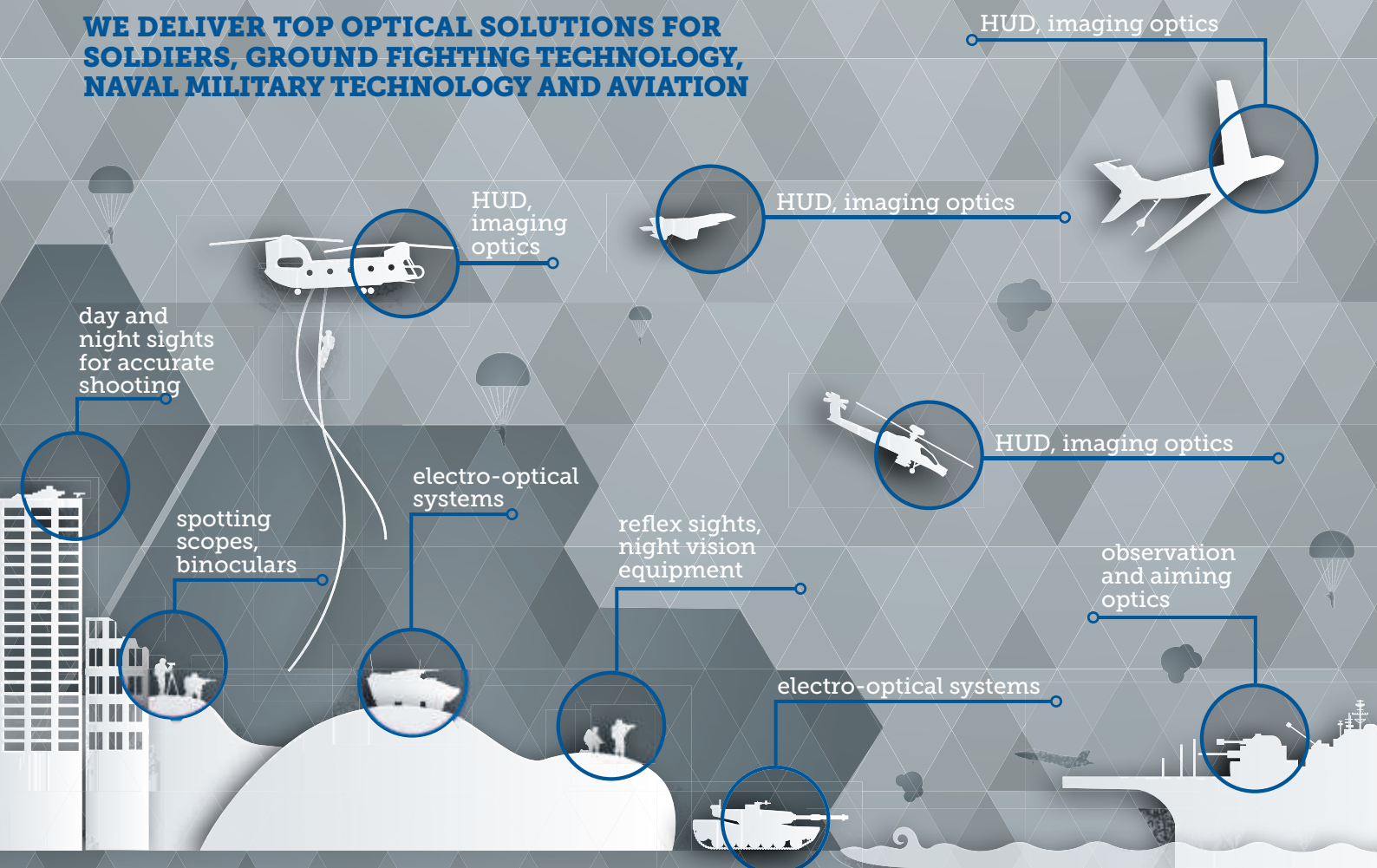
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EDITORIAL

Dear readers,

In this issue, on the occasion of the NATO Days in Ostrava and the Czech Air Force Days, we bring to you interviews with top representatives of the state administration, news and interestingness in the defence and security industry and in the end also the hindsight to the recent IDET 2019 Fair.

For example, the Minister of Defence mentions not only the current but also planned cooperation with DSIA and the Czech defence and security industry. The director of the fire brigade of the Moravian-Silesian Region, at the same time also the new member of our representative editorial board, describes in his interview experiences, projects, foreign cooperation and in a way actually „firefighting“ in this region. No less interesting is the following interview with the head of the Rapid Deployment Unit, who has held this position since 1996.

But I cannot omit the presentation of our defence and security industry companies, which both in the Czech Republic and abroad increasingly prove that the quality of their production and services can rival with top foreign competitors. These companies are TATRA, OMNIPOL, MEOPTA, AGADOS, VOP, EXPLOSIA, ERA, RETIA or GORDIC and AURA.



Šárka Cook, Editor in Chief



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The commitment to NATO should be fulfilled in 2024

After the successful IDET 2019 fair in Brno and before the increasingly important NATO DAYS event in Ostrava, we asked the Defence Minister, Mr. Lubomír Metnar, for a short interview. The aim was to find out how the Minister perceives the Czech defence and security industry and how he wants to use it in the international programmes of modernization of the Czech Armed Forces in the near future.



Dear Minister, how do you assess cooperation with DSIA and how do you intend to deepen it in future?

We perceive DSIA as an important partner, thanks to which we are able to establish and mediate more effectively contacts between Czech defence industry companies and the Army of the Czech Republic. Our main common goal is mutual support of the development of the Czech defence-industrial base. With DSIA, we will respond synergistically and continuously to the needs of our defence industry and strive to support its business potential as much as possible. We have cooperated on dozens of successful missions to support the defence industry with foreign partners, industrial days and seminars. In terms of certain strategic initiatives and longer-term support for our domestic defence industry, we will no doubt use DSIA experience to find the op-

timal communication and implementation platform.

The armed forces cannot do without intensive cooperation with the domestic defence industry. How will the MoD organize meetings between users, i.e. soldiers, and technical staff of the companies in order to exchange experience and present technical novelties?

Trade fairs in the Czech Republic organized or co-organized by the Ministry, such as Future Forces Forum, NATO Days in Ostrava and IDET, help to put together people from the army and users of military equipment. In addition to this, our Ministry and its Industrial Cooperation Department in particular, is active in the organization of so-called industrial days and seminars. The aim of these events is to connect people from the Army of the Czech Republic with representatives of companies and portfolio of military equipment and state of the art technologies offered by them. We have had already several of events of this kind and the response was always positive. We will continue in these activities in future as well.

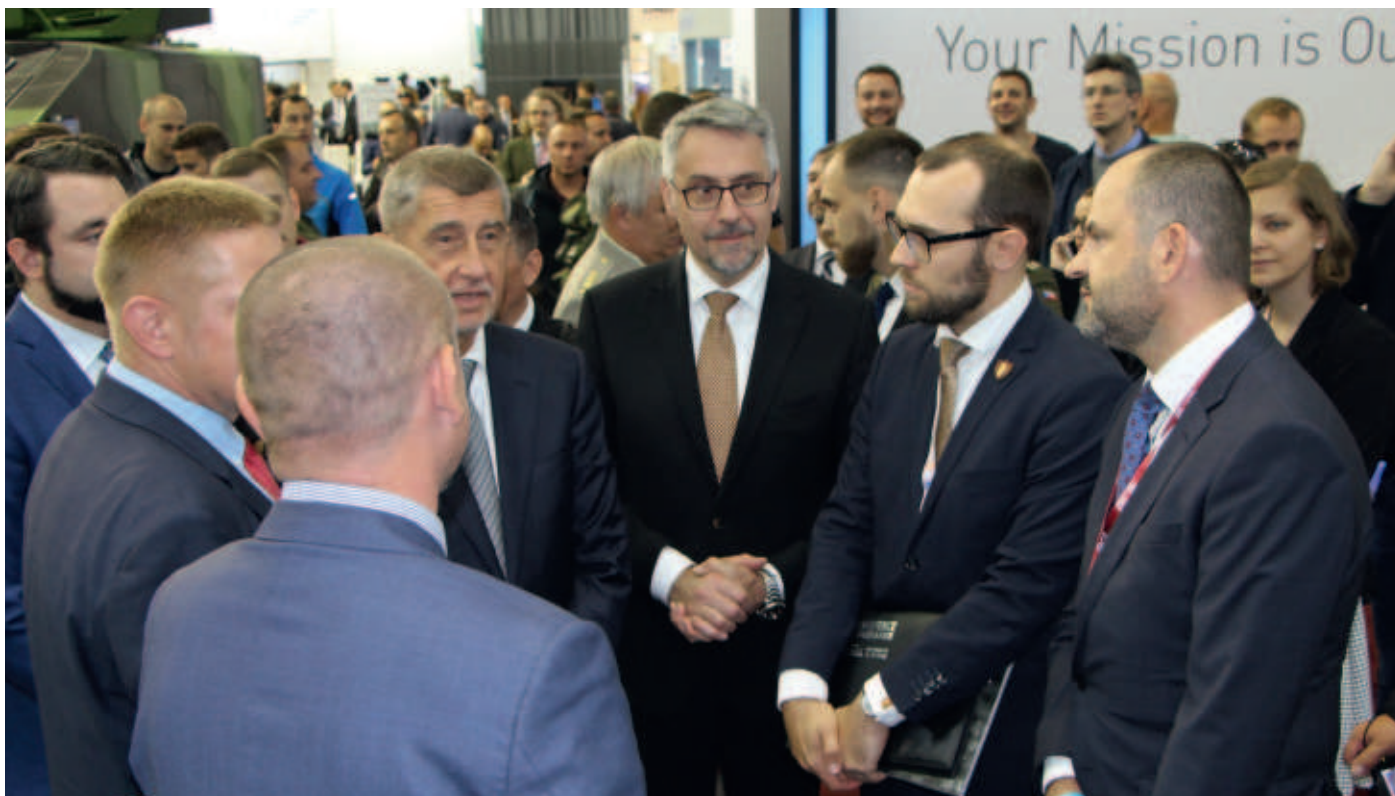
How would you assess this year's IDET 2019?

I am convinced that IDET 2019 can be assessed as very successful. This year's IDET has only confirmed its reputation as one of the largest defence technology fairs in Europe. Compared to the previous IDET, the interest of exhibitors increased - this year 400 companies from more than 35 countries presented themselves, which caused the fair to be larger in terms of rented spa-

ce and offered a wider range of exhibited equipment. I am pleased that Czech companies left a significant mark at the fair and proved to be successful if compared with top foreign competition. The domestic defence industry is of utmost importance for us and we count on its involvement in several acquisition projects.

How important is the NATO Days event worldwide and what it brings to the Ministry of Defence?

NATO Days in Ostrava and Czech Air Force Days are the largest security show in Central Europe. This event is important from the point of view of the extraordinary general public interest, which can thus become acquainted for free with a wide range of means available to the Czech Republic and its allies in ensuring defence and security. The defence-industrial dimension of the event is important as well, since it is the opportunity for domestic and foreign defence industries to present themselves. Among other things, NATO Days create a suitable platform for meetings of representatives from government, politics, the private sector and experts involved in security issues, not only from the Czech Republic, but increasingly also from abroad, especially from Europe and the United States. NATO Days thus allow for a broad international debate on current defence-related issues and challenges. Also, we should not forget that the event contributes to building a positive reputation of the Czech Republic abroad and strengthening security cooperation with participating countries. Thus, the Ministry of Defence has the opportunity not only to present military equipment



available to the Army of the Czech Republic, but also to share and gain experience in various areas with our partners, and therefore enrich each other.

In June, the MoD received two bids for the supply of 12 helicopters. Does the project also envisage cooperation with a Czech repair company regarding maintenance and repairs?

The involvement of the Czech defence industry in the "Multipurpose Helicopters - Purchase" Project is an integral part of the requirements for the multipurpose helicopter. It envisages the involvement of the domestic industry both in the phase of acquisition of helicopters as well as in the course of securing their life cycle in the scope of general overhauls, repairs of combat damages, as well as securing upgrades and modernization. It is also one of the criteria for evaluation of preliminary proposals for the market research.

In forthcoming years, the Czech Republic will continue to increase its defence spendings. NATO commitment should be fulfilled by 2024. After the acquisition of IFVs, mobile radars and helicopters, what will be the next important step?

The Czech government does not intend to divert from its NATO commitments and

expects that by 2024 the Czech Republic's expenditures will reach 2% of GDP. The achievement of this level of state defence spendings is closely connected with the implemented acquisition and modernization processes. It is precisely the completion of major strategic acquisition projects that leads to fulfilment of defence spendings in the amount set up for 2024. Launching of acquisition processes is related to the development and modernization of the Army of the Czech Republic, which depends on the commitments made by the Czech Republic in connection with its NATO membership. Apart from the acquisition projects mentioned earlier, in foreseeable future we need to re-equip the army with new small firearms, acquisition of NATO standard 155 mm artillery guns, acquisition of short-range anti-aircraft sets, or, last but not least, purchase of the new communication means. In this context, I would like to mention that it is important for us to have a close, transparent link not only to the Czech defence industry, but also to international partners and to building close cooperation on this basis.

Recently you mentioned that currently you are not in support of the European army. What does that mean exactly?

From my point of view, as the member of the Czech Government, the North Atlantic

Alliance is the best guarantee of the joint defence, security and freedom. Although the European Union also has its own security dimension and is active in this area, building a joint European army is problematic in the context of the current level of integration, given both political and practical difficulties (such as the creation of a joint military command or possible structural and system duplication) that such a joint initiative would bring. I see the European Union's position in the security area as essential, in particular, in its support, stabilization and coordination role in foreign missions. At the moment, it is crucial to focus on the defence and defence-industrial cooperation projects that the European Union offers. These are PESCO, permanent structured cooperation, and European Defence Fund (EDF), where the European Union plays an important role in supporting the development of national defence capabilities, and through these mechanisms it can contribute very effectively in foreseeable future.

Thank you for the interview.
Šárka Cook

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 quite 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-

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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 ATLAS 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-

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





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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 on-going 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 techno-

logies 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.





TATRA TRUCKS

is one of the world's oldest automotive company with a manufacturing tradition reaching back 169 years.



TATRA all-wheel drive off-road vehicles with a unique chassis concept, which is based on a backbone tube and independent swinging half axles made in drive configurations ranging from 4x4 to 16x16, are the key element in the equipment of the Army of the Czech Republic while also being used by armed forces all around the world. 80% of the production of the company are exported and aside from standard model ranges, customized trucks are also tailor-made for customers. TATRA FORCE is a key product in the defence segment, equipped with the TATRA unique chassis, complete with TATRA

air-cooled eight-cylinder engine made in versions from Euro 2 to Euro 5 and with a manual TATRA gearbox (either a direct shift model or with a TATRA electronic shifting system). Besides the air-cooled engines TATRA provides also liquid cooled engines by renowned manufactures Cummins or Caterpillar and fully automatic gearboxes by Allison for instance. TATRA FORCE line can be equipped with standard "soft-skin" cabins, as well as armoured cabins with enhanced ballistic and antimine protection according to NATO standards STANAG 4569. The standard and armoured cabins are made in

two-door or four-door versions for crew capacity up to 1+5.

Another major defence product is the TATRA TACTIC range, a medium class all-wheel-drive off-road logistic vehicle. This high mobility off-road vehicle has been designed at the borderline of medium and heavy truck classes N2/ N3. Unlike other TATRA vehicles, TATRA TACTIC is based on the standard ladder frame in combination with special TATRA RIGID portal axles, reaching the extremely high ground clearance. The vehicles are made in 4x4 or 6x6 configurations with regular or armoured cabins and further extensi-

ons can be custom ordered.

In cooperation with the French company NEXTER SYSTEM, TATRA TRUCKS has developed a new armoured vehicle of the MRAP category named TITUS, which is unique in its combination of high durability and exceptional performance in rough terrain. TITUS can be used in diverse types of missions from combat to security, all the way to police missions protecting property and population. The key feature of this vehicle is its unmatched modula-

rity based on sets of tactical equipment, sets that correspond to the operation environment and a wide range of versions and configurations of the vehicle including IFV, ambulance, command vehicle, self-propelled mortar and maintenance vehicle. The Czech Army is planning to incorporate into service up to hundred of TITUS vehicles in several versions. TATRA TRUCKS also supplies NEXTER with chassis for self-propelled howitzers CAE-SAR 8x8.

TATRA TRUCKS continues to supply armies of the Czech Republic, Slovakia and other countries with its vehicles. TATRA TRUCKS also supplies chassis for military vehicles made by the Brazilian company AVIBRAS. TATRA TRUCKS made more than two hundred FORCE chassis in 4x4 and 8x8 versions for customers in Jordan and Egypt. Moreover, in 2014 new production facilities were established in Saudi Arabia to manufacture TATRA TACTIC vehicles.



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.

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 presence 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 Vodoňovice 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,



Aircraft L-39NG

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 its 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 L-39NG.

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



Handheld radio RF40

MEOPTA COLLABORATES WITH THE CZECH ARMY ON A SHOOTING COMPETITION

Meopta is one of today's global players in optical systems manufacturing. One of the pillars of its production is a wide range of manufacturing for military purposes.

To successfully sell military products on world markets, the endorsement of domestic armed forces — especially the army — is almost indispensable. Last year, Meopta began a new stage of cooperation with the Czech Army, aiming to develop a natural partnership.



One of the important elements is support and collaboration in military competitions. The best known of them is the "Moravian Brigade Cup", whose year zero was organized in May of this year by the 7th Mechanized Brigade in Hranice, with

Meopta's cooperation.

The 7th Mechanized Brigade, known as "Dukelská", is a fighting unit that represents a decisive fire and strike force among the Czech Army's heavy ground forces. It boasts 3,000 men and women. Their job

is to prevent and react to crisis situations nationally and with allies, both in the Czech Republic and abroad.

The purpose of the event was to test the capabilities of mechanized infantry soldiers in their typical activities. Also tested were



members of other Czech Army units and other security units.

The competition was attended by 60 participants, mainly from units of the Czech Army ground forces, who are involved in construction of the 7th brigade task force. This means a cross-section of many different skills from members of the 7th mechanical brigade, including engineers, artillery, explorers, anti-aircraft, etc. Also participating were soldiers from the tactical air force base, the Castle Guard and the 4th Rapid Deployment Brigade. Among Czech security forces other than the army, the Prison Service competed this year. Foreign participants included two teams from the Polish 22nd brigade Podhalaňský shooters and two teams from the Austrian 3rd mountain brigade and two teams from the Austrian 3rd mountain brigade.

During the three days of competition, 28 different shooting scenarios were prepared for the participants simultaneously on six shooting ranges by shooters from the Military Technical Institute for Arms and Munitions in Bzenec and five shooting ranges at the Libavá Military District. The vast majority of activities involved dynamic shooting with equipment and materials, often in combination with technology. Night-time disciplines were set up in Libavá. During the competition, participants had a chan-

ce to shoot practically all small arms used by the 7th mechanical brigade — pistols, assault rifles, machine guns, suspended grenade launchers, sniper rifles, anti-tank weapons and shotguns.

A number of situations were also done with “unknown seized weapons” lent by the Czech Armoury for the competition, some of which aren’t even produced in series. Some activities required considerable physical commitment and a certain degree of self-denial.

Moreover, the whole competition was accompanied by unusually cold weather for mid-May, rain and wind. At Libavá, snowflakes even flew for a while, and the temperature was just above zero. This all added a slightly different dimension to the events. Each scenario also had its own story, so it didn’t just involve mindless shooting on command from a firing line. For example, the task might have been performed after dismounting from an infantry fighting vehicle, by leading fire from the hull of a





moving vehicle or the machine gun carriage of a tracked rescue vehicle, or by shooting in a gas mask with a physical load. The disciplines also examined the cooperation among team members, their ability to assess the situation, and to think on their feet. The desired outcome was not always achieved through a high level of physical readiness or shooting skills. Despite the inclement weather, which brought many participants to the limits of

their strength, there was positive feedback from many of the competitors. They particularly appreciated the diversity of scenarios and spaces, the organization and the wide range of weapons involved in the competition. And it is appropriate to mention the most successful participants: First and third place went to members of the 42nd mechanized battalion from Tábor, which is considered the Czech Army's "cradle" of modern

marksmanship training. Second place went to soldiers from the 13th artillery regiment in Jince. For the future, both organizing partners plan to grow the competition. This may involve increasing the number of foreign participants, adding still more attractive equipment, or involving more varied disciplines.



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MISSILE
WEAPONIZATION

MODULARITY



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ARQUUS - DEFENSE . COM

MEMBER OF THE VOLVO GROUP

AGADOS has introduced a special amphibious off-road trailer

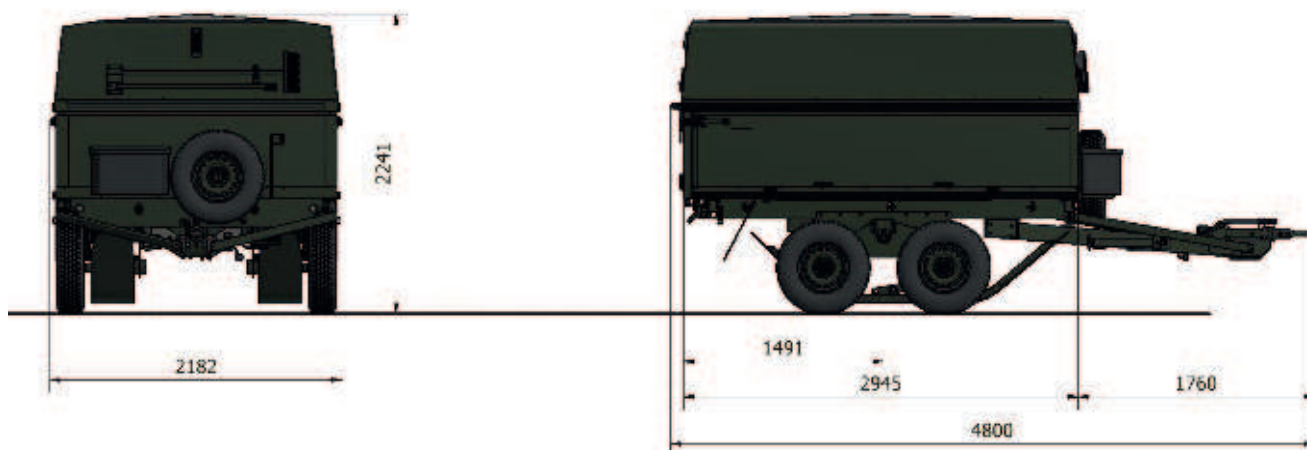
An amphibious off-road trailer has been added to AGADOS's portfolio of special projects. It was presented at this year's IDET International Trade Fair of Defense and Security Technologies in Brno and immediately it was awarded the Golden IDET 2019 in the category of Military and Security Logistics and 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.

The VOP CZ State Enterprise in the role of integrator of the IFV Acquisition project

VOP CZ from Šenov u Nového Jičína will be the focal company on behalf of the Czech Republic during purchase of new infantry fighting vehicles for the Czech Armed Forces. The enterprise will coordinate the Czech part of production of these transporters. Czech companies will work together to carry out more than 40% of total production, in cooperation with VOP CZ, to completely re-arm the 7th mechanised brigade to the modern standard for heavy technology, in the most extensive armament project costing over 50 billion crowns.



Work groups from the Czech industry sector arrived in Šenov u Nového Jičína on Thursday 20th June 2019 in the afternoon. The VOP CZ State Enterprise took the next in a series of necessary steps in the role of integrator of the project for acquisition of new tracked infantry fighting vehicles (IFV). It organised an Indust-

ry day and B2B meeting with representatives of Czech industry.

At the start of the meeting in Šenov u Nového Jičína representatives of Czech industry received current information about the tender and the role of VOP CZ as the integrator within the terms of

the project. At the subsequent individual B2B meetings representatives of companies from the Czech industry sector presented their solutions and products to representatives of VOP CZ. Over 50 companies from all over the Czech Republic attended Industry Day. VOP CZ compiled all the proposals and sent them to all

four foreign bidders in the tender for their use.

Selection of specific companies and the scope of their involvement in the IFV project is based on negotiations with individual bidders in the tender (comment: GDELS, BAE System, PSM, Rheinmetall), who choose the companies they wish to collaborate with. VOP CZ does not determine which companies the bidders should contact.

"VOP CZ has extensive know-how and facilities. We have made, repaired or modernised nearly 20,000 pieces of military wheeled and tracked equipment in the past. We have ensured manufacture of PANDUR transporters or modernisation of T-72M4 CZ tanks for the Czech Army. As a strategic military enterprise and partner to the Ministry of Defence and the Czech Armed Forces, we are once again logically prepared to assume the crucial role of integrator of Czech industry in the IFV project. Transfer of know-how to Czech industry and assurance of the life cycle of new IFV, and not just their manufacture, is important," said Martin Volný, authorised to carry out the position of Director of VOP CZ, at the beginning of the meeting with company representatives.

During the subsequent phase of the project the four bidders in the tender, the GDELS, BAE Systems, PSM and Rheinmetall companies, will choose suppliers from the Czech industry sector. VOP CZ and other state enterprises such as the Military Technical Institute, the Military Research Institute and VR Group are preparing to collaborate with Czech companies in advance.



Members of the IFV project team at the Ministry of Defence of the Czech Republic and representatives of the Ministry of Industry and Trade of the Czech Republic also attended the event. *"I believe VOP CZ plays an exclusive and pivotal role in what is historically the biggest strategic project within the terms of armament of the Czech Armed Forces. Its role as integrator of involvement of Czech industry in the project is also important," said Colonel Ctirad Gazda, manager of the project and also co-chairman of the Management Committee.*

We must mention that in the past the VOP CZ enterprise was involved in development and manufacture of Pandur II 8x8 CZ vehicles, in repairs and modernisation of T-72M4 CZ tanks and other heavy military equipment. VOP CZ also successfully develops or makes equipment for defending critical infrastructure, robotic systems, undercarriage scanners, special CAP 6/

M1 tank trucks, equipment for protection against WMD, light armoured vehicles, decontamination vehicles and others. Three years ago the enterprise manufactured 450 armoured cabins in Šenov u Nového Jičína for the NIMR Automotive Company from the United Arab Emirates and last year it launched a partnership with the French ARQUUS Company (formerly Renault Trucks Defense).

The purpose of the VOP CZ State Enterprise is to assure long-term competence for provision of continual and effective support of assurance of the state's defensive capabilities. The position of VOP CZ as strategic partner to the Ministry of Defence is defined in strategies, which the Ministry of Defence of the Czech Republic accepted previously, in compliance with the government approved "Strategy of armament and support of development of the defence industry in the Czech Republic until 2025".

VOP CZ, s. p. (Šenov u Nového Jičína, ČR)

VOP CZ is a state enterprise established by the Ministry of Defence of the Czech Republic. Its primary goal is to assure fulfilment of the requirements of the Czech Armed Forces, as the only state enterprise concerned with development, manufacture, servicing and modernisation of military ground equipment. In 2016 VOP CZ celebrated 70 years of its existence. The enterprise currently employs over 850 people and in 2018 its revenue exceeded CZK 1.1 billion. More about the enterprise at www.vop.cz.



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 Vencel 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 Vencel. 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 in Brno.

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 Vencel.

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 indi-

rect 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 explosives.

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 purpo-

se 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-



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.

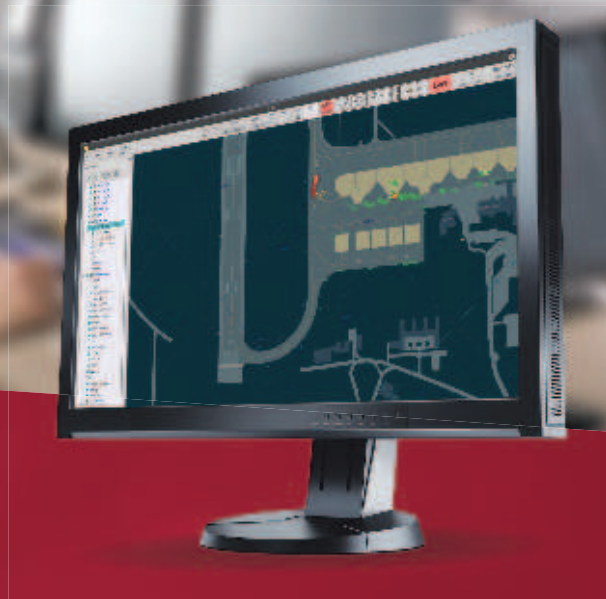
Author: Martin Vencel





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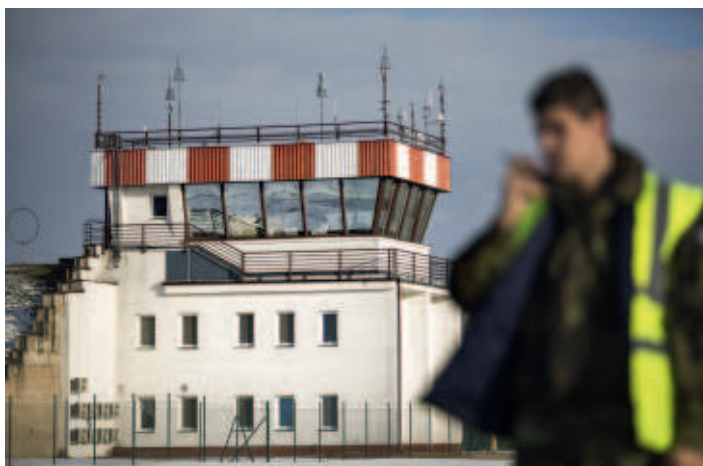
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Easy integration on masts, rooftops, poles or mobile objects



ERIS

the alternative ATM and ATC system for medium-sized airports



Recently Czech based company ERA (a member of OMNIPOL group) launched its new product ERIS, the ATM and ATC system for ground surveillance and control at medium-sized and regional airports. The system represents cost effective alternative for regional military airports and is designed to support command and control of air forces at all operational and tactical levels. ERIS was introduced to public for the first time at the World ATM Congress 2019 in Madrid and is supposed to be showcased also within the NATO Days airshow in Ostrava this fall.

ERIS represents a product family of Air Traffic Management systems designed for Air Traffic Control and flight planning of civil and military operations. ERIS in conjunction with ERA's NEO multi-sensor surveillance system represent the complex solution for ATC controllers and air defence commanders. ERIS's modular architecture and scalability enable individual and optimal site-specific tailoring and easy integration into various ATC environments. The use cases of ERIS range from a solution on ACC or APP level to a Common Ground Surveillance System (CGSS) for medium-sized and regional airports.

ERIS is based on a modern sophisticated and modular design that has been deve-

loped in compliance with ICAO and EUROCONTROL standards. The system is designed for 24/7 continuous operation with its configuration depending on the given use case. The key features include Multi-sensor Data Fusion, Flight Data Processing, Safety Nets, Integrated Situational Data Presentation, Complex Supervision and Monitoring, and Recording and Analysis tools.

ERIS Product Portfolio

The newly introduced ERIS system, depending on ATC operations, is provided as:

ERIS C2

ERIS Command and Control is an information system designed to support command and control of air forces at operational and tactical levels, enabling planning and implementation of air and GBAD operations.

ERIS ATM

ERIS Air Traffic Management is an information system designed for radar and procedural air traffic control on all types of ATC centers. It allows tracking and evaluating the movement of air objects and fulfilling special functions depending on the location and the way of its particular implementation.

ERIS A

ERIS Alternative Common Ground Surveillance is an information system designed to detect objects (airplanes, vehicles, or persons) moving in defined areas of an airport.

ERIS DSD

ERIS Distributed Surveillance Data is an information system designated for receiving, filtering, processing, fusion and con-

trol of ASTERIX like data flow on a scale of country where the system is implemented to the single communicated nodes.

ERIS SAR

ERIS SAR is an information system designed to support search and rescue operations (SAR) and combat SAR (CSAR) operations in state of emergency crews. The system can be implemented within civilian and military rescue coordination centers (RCCs), operational information centers (OICs) and other SAR sites.

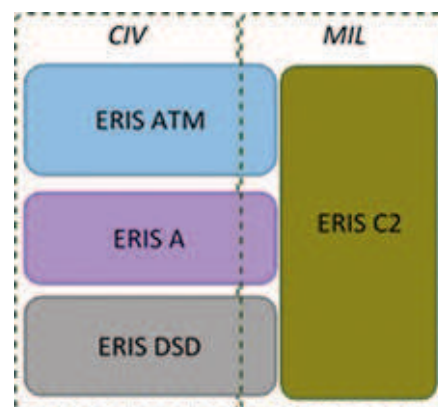
ERIS ATM – Air Traffic Management System - a solution for Approach Control Service (APP) or Area Control Service (ACC)

ERIS A - Alternative Common Ground Surveillance System and ATC/ATM solution for TWR

ERIS C2 – Air Command and Control System for military operations

ERIS DSD - Distributed Surveillance Data System

ERIS SAR - Search and Rescue System





Therapia

Art of care

***WE CARE
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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 Koteň, 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 Drahoš 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 Pyromeeeting 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 EXHIBITORS' 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 Koteň, 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 Basovnick, 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 Uchytel, 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.





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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 IDET 2019.

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 Chateau of Austerlitz, close to Brno in the Czech Republic.



Archive BVV

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.**



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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.



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

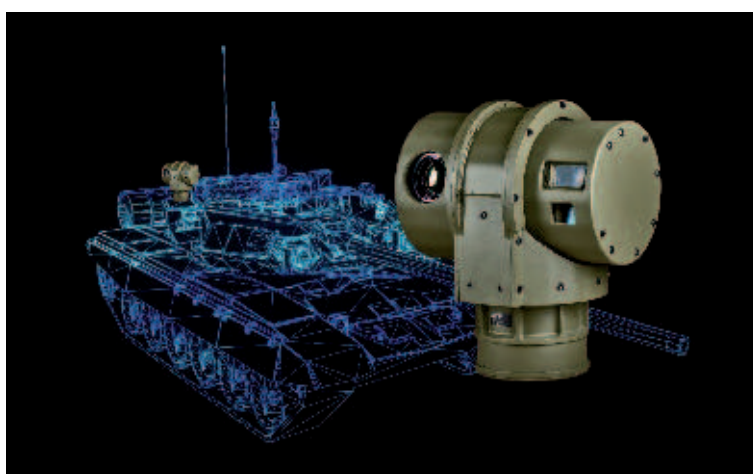
CMS-1 is a multi-sensor electro-optical system developed as a stabilized panoramic sight. All optical sensors are mounted on a gyro-stabilized pan and tilt positioner, allowing a commander to get an overview of the battlefield.

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.



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The top **Golden IDET NEWS** was awarded fairly clearly to the company **EXPLOZIA** 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 occurrence of false alarms etc. This sample set is possible to thoroughly see especially at IDET fair. Explozia company is regular participant of the fair which is place to meet current and future customers.

By Eva Soukupová



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THE UNMISSABLE
WORLDWIDE
EXHIBITION



1,802
exhibitors

 **+14,7%**

from 63 countries
65,9% of international

65 startups at Eurosatory LAB

98,721

Total attendance
(exhibitors, visitors,
press, organisers)

227

Official delegations

from 94 countries
and 4 organisations
(representing 760 delegates)

696

journalists
from 44 countries

75 Conferences

2,102 Business meetings made



2018 key figures



**AGADOS
WILL ALWAYS RIDE
BEHIND YOU**



AMPHIBIOUS OFF-ROAD TRAILER

- * Possibility of transporting all kinds of military material
- * Variable anchoring of transported material
- * Possibility of using the trailer in all types of terrain and overcoming sources of water
- * Patented system of independent suspension in each wheel
- * System of superstructure modules



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