

# for Defence and Security Industry Review®

1/2017 | online   | [www.msline.cz](http://www.msline.cz)

The Media Platform of the Defence and Security  
Industry Association of the CR | [www.dsia.cz](http://www.dsia.cz)



**Prevent Leakage of Your Information**

**Desintegrator Heads  
for Dangerous Suitcases**

**Multinational Live Combat  
Training Possibilities in EUROPE**

page 20



**SAAB**





COMMERCIAL PARTNER

# AJBAN CLASS

The Ajban Class of 4x4 vehicles provides a multi-purpose platform for all military requirements.

[www.nimr.ae](http://www.nimr.ae)

[www.vop.cz](http://www.vop.cz)





QUALITY. PERFORMANCE. PROTECTION





# EDITORIAL

Dear readers,  
you are holding the first issue published in this year, with a new design and with the content full of news and enormous successful coups of the Czech companies involved in security and defence made in and beyond the Czech Republic. Reports from Czech Republic's official contribution to IDEX international defence exhibition in Abu Dhabi and from the Czech companies' presentations at ENFORCE TAC and IWA trade fairs will leave no doubts that the Czech industry has never had a thing to be ashamed of, more likely vice versa.

The issue starts with exclusive interviews with the leading representatives of government administration. The President of the Police mentions the successfully implemented concept of Czech National Police Development and the Czech Police Security Guard chief offi-

cer describes the procedures of challenging engagement of the security units at protecting the lives and health of the guarded persons. We highly appreciate the acceptance of a position in our editorial board of representatives, of whose meeting you can read more in pages 41-43, by the Director General of the Prison Service of the Czech Republic who also gave an interview in which he acquaints with the priorities, achieved goals and future plans of the Service. Forgotten should not be the no less interesting interview with the Czech Ministry of Defence Support Division Director presenting its uniqueness.

It is only several weeks to go before the 14<sup>th</sup> IDET Exhibition in Brno begins together with the partner exhibitions of PYROS and ISET and we will look forward to your visit to the stand we will share with the Defence and Security Industry Association of the Czech Republic (DSIA)!

Šárka Cook, Editor in Chief



## CONTENTS

8 One of the Priorities is Employment of Convicts

14 Logistical Support

18 Do we Know the Arms of our Enemies?

22 We Set New Trends in the Field of Monitoring Systems

32 New Mobile Supply Systems

34 Benefits of Flood Protection Barriers

36 Drones and Virtual Reality

41 Meeting of the Editorial Board

44 MoD of the CR and the Czech Industry on the IDEX



### ADVERTISEMENT:

AURA - 11 • DSIA CR - 55 • ERA - 31 • EVPÚ DEFENCE - 23 • KÄRCHER - 33 • NEXTER - 15 • SAAB - 1 • SWORDFISH - 53 • TESLA V.T. MIKROEL - 53 • UNITOP ČR - 47 • VELETRHY BRNO - IDET 2017 - 17 and 56 • VOP CZ - 2 and 3

# EDITORIAL BOARD OF REVIEW 2017

## Chairman of Editorial Board

**Jiří Hynek**  
President of DSIA CR

## 1<sup>st</sup> Deputy Chairman of Editorial Board

**Antonín Sed'a**  
Member of the CR Parliament, Head of the Permanent Delegation of the CR Parliament at the Parliamentary Assembly of NATO, Member of the Committee on Defence, President of EURODEFENSE CZ

## Deputy Chairman of Editorial Board

**Bohuslav Chalupa**  
Member of the CR Parliament, Vice-Chairman of the Committee on Defence

## Deputy Chairman of Editorial Board

**Radek Hauerland**  
Vice-President of DSIA CR, Vice-President for External Communication of Česká zbrojovka

## Honourary Members of Editorial Board

**General Petr Pavel**  
Chairman of the NATO Military Committee  
**Jaromír Novotný**  
Advisor to the Czech Prime Minister  
**General ret. Pavel Štefka**  
Advisor to General Director Trade Fairs Brno for IDET  
**Miloš Titz**  
Honourary Chairman and Founding Member of Editorial Board

## Military Office of the President of the Republic

**Maj.-Gen. Jan Kaše**  
Chief of the Staff

## Senate of the Parliament of the CR

**Michael Hrbata**  
Advisor to Senate of the Parliament of the CR for Defence Policy

## The Office of the CR Government

**Jiří Winkler**  
Defence and Security Department, Office of the Government of the CR

## NATO Support Agency (NSPA)

**Antonín Zlinský**

## Ministry of Foreign Affairs of the CR

**Miloslav Stašek**  
Deputy Minister for Economic and Operational Section

## Ministry of Industry and Trade of the CR

**Vladimír Bärtil**  
Deputy Minister - Section of European Union and Foreign Trade  
**Zdeněk Richtř**  
Director of License Administration  
**Martin Šperl**  
Deputy Director, Department for Export Strategy and Management Service

## Ministry of Defence of the CR

**Tomáš Kuchta**  
Deputy Minister - Head of the Industrial Cooperation and Organisations Management Division

## Martin Dvořák

Director, Defence Standardisation, Codification and Government Quality Assurance Authority

## Ministry of Justice of the CR

**Brig Petr Dohnal**  
General Director of Prison Service of the CR

• • • • •

## Armed Forces of the CR

**General Josef Bečvář**  
Chief of the General Staff  
**Maj.-Gen. Jaroslav Kocián**  
Deputy Chief of the General Staff

## Police of the CR

**Maj.-Gen. Tomáš Tuhý**  
Police President  
**Col Tomáš Hytych**  
Director of the Air Service

## Fire Rescue Service of the CR

**Maj.-Gen. Drahoslav Ryba**  
General Director  
**Brig František Mencil**  
Director, FRS Region Hradec Králové

## National Security Authority CR

**Martin Fialka**  
Director of Administrative and Physical Security Department

## Regional Authority

**Aleš Boňatovský**  
Secretary of the Pardubice Region Security Council, Head of the Crisis Management Section

• • • • •

## Czech Proof House for Testing Arms and Ammunition

**Milan Kukla**  
Chairman

## CESES FSV Charles University

**Miloš Balabán**  
Head of the Center of Security Policy

## AFCEA Czech Chapter

**Tomáš Müller**  
President

## Gremium Alarm Association

**Václav Nepřaš**  
President

• • • • •

## Defence Industry Representatives

**Štěpán Černý**  
Business Director of SVOS  
**Miroslav Dvořák**  
Chairman of the Board of PAMCO and T-CZ  
**Filip Engelsmann**  
General Director of AURA  
**Andrej Hronec**  
General Director of Audiopro  
**Josef Hudeček**  
Vice-Chairman of the Board of MESIT holding

## Lucie Kadlecová

Marketing Manager - Rubber and Plastics Branch - GUMOTEX

## Petr Kokeš

Commercial Director of INTV

## Jan Köhler

Commercial Director of T-CZ

## Antonín Mohelník

Director of the Prague branch of ELDIS Pardubice

## Radoslav Moravec

General Director of ZEVETA

## Petr Novák

General Director of RETIA

## Lukáš Novotný

Marketing Manager of Czechoslovak Group

## Lenka Orlová

Company Executive and Director of ORITEST

## Jaroslav Pecháček

Vice-President of DSIA CR, Managing Director of SWORDFISH

## Marika Přinosilová

Director Marketing and Communication of OMNIPOL

## Karel Ritschel

Director - International Defence Programs - TATRA TRUCKS

## Jiří Rousek

Exhibition Director of IDET, PYROS/ ISET

## Petr Rusek

Chairman of the Board of TATRA TRUCKS

## Pavel Růčka

General Director of Intercolor

## Jaromír Řezáč

Chief Executive Officer of GORDIC

## Jiří Řezáč

Vice-President for Cooperation and Trade Policy of DSIA CR, Advisor to General Director of OMNIPOL

## Milan Starý

Marketing Manager of ERA

## Pavel Šalanda

Vice-President of DSIA CR, Director of ROHDE & SCHWARZ - Praha

## Jiří Šimek

Managing Director of Quittner & Schimek

## Ladislav Šimek

Vice-President of DSIA CR, Managing Director of DROPPER and SHIMEQ Air

## Marek Špok

Director of VOP CZ

## Jiří Štefl

General Manager of OPTOKON

## Josef Tichý

General Director of EXPLOSIA

## Jaroslav Trávníček

Vice-President for Industry of DSIA CR, Deputy of Technical and Business Director of VTÚ

## Igor Valníček

General Director of EVPÚ Defence

## Aleš Výborný

Director - Czech Republic of BAE Systems



# Cooperation with Austrians: Current Migration Issues and Border Protection

We asked the Czech police president major general Tomáš Tuhý what new the first quarter of the year has brought to the Police of the Czech Republic. He informed of the continuing modernization of the corps he has been leading in the third year.

**Dear police president, what were the issues the Police of the Czech Republic has met since the beginning of 2017?**

As I already mentioned last year for the Review journal, we have been continuously working on the implementation of Czech Police Development in 2016-2020 concept. That includes, for example, general weapon modernization of the first responding patrols, intervention units, and upgrade of obsolete equipment. In February, we held the 4<sup>th</sup> memorial day of the riot police whose personnel are among the first who will appreciate the new devices and equipment in their everyday service. The immigration police has put in service six new specially equipped vehicles, “Schengen bus” of IV generation, as a part of vehicle pool upgrade in the same month. The vehicles contain for example an on-board laboratory for mobile checking of travel documents, fee stamps and other documents. Such equipment is absolutely necessary for efficient immigration police service today. We have now twenty-two vehicles of the kind available and we are going to increase the number by another nine in three years. Immigration police has also received two new large capacity vehicles that will certainly use very purposefully in the demanding work.

**We noticed police hippologists have added new very interesting entries in their team?**

Yes, that is true. We have acquired new horses of Anglo-Norman warmblood breed from the stud farm in Mezodegyes, Hungary.



The name of the breed is Nonius established in 19<sup>th</sup> century. The founder sire was five-year old stallion Nonius Senior seized in France during the Napoleonic wars and imported to the imperial stud together with other stallions. The following years proved the breed is very tough suitable to our work due to its calm, diligent and agile nature. Thus, the new horses are now going to twelve-month training and after that period, they will be able of actual engagement.

**How is going the international cooperation of the corps, in which the Police of the Czech Republic was so active last year?**

Of course, we keep being active in the sphere definitely not resting on our imaginary laurels. An exercise held around the Czech and Polish border early in March verified operation abilities for the case of temporary reintroduction of border control.





It resumed the series of exercises held on the Czech Republic's borders with Austria, Slovakia and Germany. The exercise allowed us to verify the times necessary to arrive at the appropriate checkpoints in case of international border control reintroduction, to check whether the Police of the Czech Republic is sufficiently equipped for the implementation of the measures and to test necessary communication with local authorities, foreign partners and with public. We will process all information and produce a comprehensive report, and present it to the Czech national government through the National Security Council.

**Do police personnel members continue to engage in a new mission abroad?**

The Police of the Czech Republic keep actively cooperating in the lasting issue at the Schengen borders and in migration crisis. Thus in February, we continued to cooperate with Macedonia, a country we have established a really good partner relationship proved by the already eighth mission, while 294 of our police personnel have Macedonia mission experience. The last contingent members served until the end of March close to the border between Macedonia and Greece where they primarily took responsibility for preventive measures, such as vehicle and person search and public order.

**A question that must be asked aims at earlier announced education for police personnel. Is there anything new in the issue?**

The Police education and service training unit was established as early as in 2015. The nation-wide unit's responsibility is education and training for police personnel at all levels. The establishment of the unit was the most significant change in police education giving the police force responsibility for its professional education and training for the first time in its modern history. It was a very good signal inwards police and a step in the right direction, as we see today with some time passed. We could present the lessons learnt at the meeting of the Executive committee of the Association of the European Police Colleges of which our unit became a member last year. Personally, I consider methodical education in a good quality for our police personnel a necessity so that we can maintain our position among the European and world top police forces also in future.



**At the end, dear police president, let me congratulate on behalf of the editors to the award you received in Austria. Would you mind to acquaint the readers with it?**

Thank you very much for your congratulation. I have been involved in international cooperation for a long time and I consider the agenda even more important in the period of facing various issues related to migration crisis when our work reaches beyond national borders. With Austrian mates, we have established excellent relations. Beside everyday cooperation at the joint police cooperation centre Drasenhofen-Mikulov, we worked on important migration issues and border protection through the Salzburg Forum platform. Therefore, I was conferred the Grand Decoration of Honour in Silver for Services to the Republic of Austria - a high national award during my visit to Vienna for the many years of intensive work in the issue and significant enhancement and improvement of police cooperation between the two countries. I highly appreciate that I received the decoration from Konrad Kogler, the Director General for Public Security under the Ministry of the Interior.

**Dear sir, thank you for the interview.**

Šárka Cook, photo Police presidium





# Priority of the Very Successful Ones for us is Convicted Employment

The Review journal editorial board's new member is the Director General of the Prison Service of the Czech Republic, brigadier general Mgr. Petr Dohnal. Thanks to his forthcoming approach, I could visit the Pankrac remand prison in Prague, including the Memorial. The Director General gave me an exclusive interview on that occasion.

**General, what are the principle goals and plans for the Prison Service of the Czech Republic in these days and what goals were accomplished in the recent period?**



The principle goal in this year is a successful implementation of the law on reduced types of penitentiaries, which is a revolutionary issue in Czech prison management in recent 50 years. The law comes in force on 1<sup>st</sup> October 2017. The reason is to increase the external as well as internal security of the penitentiary facilities, to boost recidivism prevention, to achieve a more effective usage of penitentiary capaci-

ty and a higher impartiality in convicted placements. It could also result in considerable relief in court agenda and at the same time, reduced number of escorted transports of prisoners to courtyard may be expected. Penitentiary of one type (secured) will merge the current monitored, supervised and secured penitentiary types. The other type (highly secured) will then accommodate those sentenced to higher secured jail, i.e. prisoners sentenced for serious crimes or to life imprisonment.

The authority responsible for the decision of prisoner classification into the two new penitentiary types would remain to courts. The Czech Prison Service will however be granted a new authority of categorisation to low, middle or high security level within the secured prison.

Then, it includes implementation of an open prison, to be established in Jiřice, which will require a high demands on the convicts' autonomous activities and employment. The expected output from the project is improved convicts' will qualities and their successful reintegration back in the society. The imprisoned will for example work in farming animals breeding or own food growing with this project. The Prison Service launched fallow deer and stock breeding farm project at the Jiřice prison in 2016. As we perceive, another success in this issue is the start of beekeeping at

more than 14 Czech prisons to spread to other prisons in 2017 reflecting the positive response received.

We are now very intensively working on the overfilled prisons problem looking for the possibilities how the accommodation capacity can be increased. As an option, I would like to see a new, modern and secure penitentiary of western nature been constructed. Speaking of which, at a working meeting with the general manager of Austrian prison service I expressed my interest in a tour to a new prison in Austria and in studying the projects.

Evaluating last year from the point of convicts employment view, we managed to find new jobs for more than 1,600 convicts to increase the number by almost 30 per cent compared to the absolute quantity of employed convicts at the end of 2015. In addition, we have become to support their responsibility and working habits through unconventional projects mentioned earlier. I am convinced that such an approach towards the imprisoned persons makes sense, as it will result in lower recidivism, learning new habits and competencies, which will improve their position at labour market after release.

We successfully started the humanisation process of imprisonment execution several years ago. The accused (before sentence comes into effect) placed to the section of custody execution used to be in much worse conditions than in the section of imprisonment execution. Which is unacceptable in my opinion as people in custody should be viewed as not guilty by law. Thus, our goal is the custody execution of the accused was in respectable environment, which is common practice in developed countries. We find ideas abroad and carefully choose what lessons learnt would be the best for the Czech prison system and then we apply them to our penitentiaries. We are also planning modernization of weapons, particularly exchange of the obsolete Scorpion submachine guns for its modern version.

**The Prison Service requested personnel increase in both the service personnel and civilian positions last year. Have the positions increased already and if yes, is it sufficient?**

We requested the system positions increase and we have had extra 250 service positions and 220 civilian positions since January 2017. Thus, the Prison Service has now 7,435 service positions and 4,311 civilian positions confirmed. In total 11,746 positions.

We understand the most significant shortage is in the positions of qualified prison specialists (counsellors, therapeutic counsellors, psychologists and special teaching specialists). Another lasting challenge is shortage of doctors and nurses. From the Czech national point of view, the penitentiaries in Prague have been those who have always faced shortage of personnel and high job changing rate. Today, based on the high demand of personnel in public sector, the same challenges in recruitment appear in regional facilities.

**Would you mind to intimate the pilot project of open prison and say the phase it is in now?**

The open prison compound is under construction in the area adjacent to Jiřice prison. The convicts will be accommodated in several detached buildings - dormitories whose style will be close to one-story residential houses. Each of the houses will consist of 4 bedrooms with two convicts in each making thus eight convicts to a house. Other parts of the dormitories will be a common room, a sanitary facility and a cooking desk. The latter

*Convicts in Jiřice prison make furniture*





will be used for self-service activities included in the programme treatment.

Open prison's outdoor areas will contain the already established Decorative Garden and a breeding and growing zone. The convicts in the open prison will act within the programme treatment to contribute to its maintenance and operation through growing selected plants and breeding small farming animals.

Treating the convicts in an open prison requires firstly modified policy in the current penitentiary practice. Living in the open prison should lead the convicts to boosting their social competencies necessary in civilian life, thus improve the rate of meeting the true purpose of imprisonment. The day of the convicts who will be placed to the programme will seem similar to civilian life. They will be responsible for looking after themselves, which means cooking meals, maintaining the dormitories clean and tidy, washing clothes, etc., but also looking after the earlier mentioned animals. Of course, they will have to work in their jobs so that they should be able to learn the essential habits for personal and social environment. I believe such a way of imprisonment will help those convicts to return to their normal lives once released.

The construction process of the open prison follows the timetable. The situation is that demolition of the buildings is in progress in the Jiřice prison area where the houses for the open prison are planned to be constructed.

#### **How many prisons and remand prisons are there in the Czech Republic, what types are there in the Czech Republic, and a new ones planned to construct, if applicable?**

There are 35 prisons and remand prisons in the Czech Republic; each of them has its director, centrally administered by the General Directorate. There are currently four types of prisons: monitored, supervised, secured and highly secured. The monitored prisons are intended for the convicts for least serious crimes while the secured and highly secured prisons accommodate the most serious crime authors.

Most convicts are detained in the secured prisons. The Czech prisons accommodate 48 convicts sentenced for life for the most serious criminal acts, 45 of them males and 3 females.

A single prison can contain sections of various types if such an arrangements do not threaten the sentence purpose. As a component of criminal judiciary system, the Prison Service respects the Czech national legal code, Charter of fundamental rights and freedoms, and European Council recommendations.

As mentioned earlier, I would be glad if a new prison could be constructed. We have opened the first negotiations in the matter. Prisons have been and will always be included in every society and today I see a modern penitentiary facility necessary for our society.

#### **The Pankrác remand prison in Prague went under a reconstruction recently. What exactly was reconstructed and do you plan other action in near future?**

The reconstructed building in the Pankrác remand prison that houses the male convicts to serve the sentence in secured penitentiary, opened in 2015.

That action increased Pankrác remand prison capacity to reach 1202 prisoners. The building used to be a utility building, in 1968 the seat of Penological Institute. The reconstruction took 8 months to build 19 bedrooms with the capacity of 98 prisoners. If prison capacity is necessary to enhance, another 32 beds might increase the number to the total of 130. There are two community rooms, 2 rooms for prisoners' activities, personnel rooms and utility rooms. The building is equipped with common toilets in anti-vandal modification. Showers operate in token system to save water.

Cost reached over 20 million in Czech currency and the Prison Service provided furnishings on subcontractor basis as this way helps to save substantial money in actions of this type. The prisoners contributed to remodelling furniture, making iron staircases or other furnishing. Of course, convicts contributed to this reconstruction similar to a number of others. Here, more than 50 of them were involved to work 4,824 hours in total, mostly at the iron working, cabinet making or maintenance. Making or repairing most



Plzeň prison central part

of the building furnishing by own employing also the convicts, the Prison Service decreased the total expenditures to the reconstruction by approximately 600 thousand in Czech currency.

The Pankrác prison launched in 2012 during my period in the office the process of humanisation of imprisonment execution as we used the opportunity to spend the funds saved within the amnesty. For less than 6 million, the prison has rebuilt the "free imprisonment" zone that offers the accused possibilities of reasonably spending leisure time in a vast range of educational or hobby activities in adequate rooms. It should be mentioned here that I am satisfied with the project taking into account humanisation of imprisonment has a pedagogical and cultivating effect on the accused. We continue in the humanisation of imprisonment project at a number of other remand prisons.

#### **A tender last year chose new contractors and made new contracts and framework agreements in terms of outfit supplies. What all will change and in what time horizon?**

Here, I would like to remark that outfit and equipment issues were in poor situation when I returned to the Prison Service leading position, which made me pay attention to it immediately. All new supply contracts are made in as short times as possible and we have taken numerous measures to renew the components one by one. The most stinging issue was winter jackets that were modelled last year and tested by ordinary personnel in real service. On particular requirements of the personnel basis, the winter jacket model has been modified and supplemented. The models also passed the tests of quality, hygiene safety and other parameters, done by a special laboratory. Prison Service ran a survey of jacket sizes and numbers through its structural units so that only the sizes preferred by personnel are ordered. You can see efforts of as fast as possible ordering in the whole issue. Fast ordering also saved quite a big sum of funds and the winter jackets are available in the Prison Service's central store.

We have selected new footwear types, summer and winter and sport or special purpose. Our structure unit personnel now test them. We are now modelling new fleece jackets that would correspond the new trends in security force equipment. The accent is placed on new design and personal comfort as well as on new technologies and materials.

We plan to model fine trousers for the personnel later to provide them appropriate user comfort at the demanding service at prisons.

#### **What are security levels in each of the prisons in the Czech Republic in terms of technology and weapon equipment?**

The levels of security and protection in each prison are determined by the particular prison profile and type.

Monitored and supervised prisons do not use special construction or equipment elements or armed guards to prevent the convicts from escape. The counsellors are responsible for checking and monitoring convicts behaviour in the monitored prisons while the supervised penitentiaries employ also supervisors.

The secured and highly secured prisons use special construction and equipment tools and armed guards to prevent the convicts from escape.

Monitored prisons allow the convicts to move in determined areas without any restrictions.



Supervised prisons have the convicts to move inside the facility usually under the supervision of Prison Service personnel in an organised way.

The secured and highly secured prisons required the convicts to move inside the facility under Prison Service personnel supervision in an organised way. All of the prisons pay maximum attention to security provisions.

#### What are the options for the convicts during sentence execution in terms of employment or education?

Employment of the convicts is a priority of ours and we are very successful in it. At the beginning, I said we could consider last year very positively as far as prisoners employment concerned. The imprisoned persons may be employed in a wide variety of industries, such as food processing, mechanical engineering, automobile, wood/iron making, toy production and many others. For example, the Vinařice prison hosts a very well running Call Centre inside the facility where thoroughly selected and trained convicts offer telecommunication products through telephone marketing. Convicts appear in some towns cleaning public areas. A new project of the kind launched recently in collaboration with the second Prague district authorities employing prisoners in waste collection support. Another such project is the collaboration with Prague Services Company for which more convicts work on waste sort lines. You may also meet convicts at our general directorate premises of at the Czech Ministry of Justice where they take care of cleaning. Those imprisoned persons who for security reasons cannot work outside prison premises are usually employed inside the prisons in "internal" workshops run by various businesses. We have now more than three hundreds of agreements with companies employing the convicts. There are more than 15 thousand convicts able to work, out of which almost 7,800 really work. Prison Service proactively presents prisoners work at exhibitions and at direct negotiations with potential employers. It should be mentioned, we have established our own internet prison shop, [arestshop.cz](http://arestshop.cz), where citizens can order products made by the convicts.

Convicts employment is very important in many ways. Their working activities meet the sentence purpose; work helps them find the sense of their imprisonment. Thanks to work, the convicts learn or deepen working habits that help them find job, join fully-fledged life and avoid further crime commitment after their release to civilian environment.

Our priority is the people leaving a penitentiary facility know how to work, have working habits and good manners. We have learnt lessons that convicts working for an employer keep the job even after sentence completion in many cases. It is the best way to join back the society and a meaning of the primary ones of the project. Furthermore, employed convicts earn reward for the work and thus are able to pay child maintenance, pay instalments, partially cover the cost of their sentence and support their families, as the case may be.

Convicts can use the opportunity of education at the Secondary Vocational School of the Prison Service of the Czech Republic. They can get trained in certain certified branches or take requalification courses. We offer them training as electricians and mechanics, in catering, engineering, metal machining, clothes making, services, wood working.

#### Convicts in Vinařice prison work in a call centre established right inside the prison facility



Some of the convicts may use the opportunity to study a college or university in distance mode within a project.

We educate the prisoners in financial literacy. In the leaving sections the prisoners learn practical things, such as self-sufficiency (cooking, ironing), social education (dealing with authorities).

We strongly accentuate hobbies, which form the habits of usefully spent leisure time. Several prisons have run bee-keeping projects since last year, plus Jiřice prison also a fallow deer and farming animals breeding. We would like to spread the fallow deer breeding to Rapotice prison in this year.

All those activities aim at forestalling repeated crime commitment, to say precede crime and relapse.

#### You went for a business trip to Texas at the end of February, which included the prisons and police stations there. How do you see their penitentiary system? Do you think some of their methods or procedures might apply to our prison system?

I would like to stress out that our cooperation with Correctional Management Institute of Texas has taken place since 2010 at which year the Texas justice representatives paid the first visit to the Czech Republic. The visits have adopted reciprocity nature since 2011 with one meeting each year while the host nations alternate regularly. We signed a Memorandum of Understanding that unifies, among others, the conditions of the reciprocal working visits.

The Correctional Management Institute reports to the criminal justice centre of the Sam Houston State University of Texas. It is charged with professional management education for the managers in all fields of justice - prison system, probation, court and paroling committees - from Texas and throughout the entire United States. Education programmes take advantage of research and close contacts with all justice executive elements accentuating primarily management practice.

The reciprocal working visits focus on learning the prison system of the other side as well as the entire justice system. Their goal is primarily exchange of experience in prison system operation and of best practices. Despite numerous structural differences of the two systems, we are facing the same challenges, such as security, unauthorised items breakthrough, ensuring sufficient capacity, convicts education and employment, expert programmes, health care for convicts, personnel selection and qualification, etc. Both sides coincide in the goal of convicts' reintegration after release and lower relapse rate. Mutual meetings allow open discussion on topical issues and bring up tips of solution options.

The principal issue of the last visit of Czech Prison Service delegation to Texas related to the Czech prison external differentiation under preparation. Texas jail system uses a sophisticated internal classification system of prisoners to place these into various levels of security and to special sections that provide expert programmes of treatment according to convicts' individual requirements. Czech PS representatives could acquaint in details with the classification system and witness several classification committee meetings including convict interview.

General, thank you for the interview.

Šárka Cook, photo DG PS CR

#### Part of the Amarillo open prison compound in Texas





**WE ARE NOW  
THE WORLD'S NO. 1**

**AURA**

**We help with materiel  
procurement  
for the armed  
forces**



**We are building  
bridges between  
the military  
and industry**



[facebook.com/aura.brno](https://facebook.com/aura.brno)



[www.aura.cz](http://www.aura.cz)



# Protection Service Czech Police Maintain High International Standard



The Protection Service of the Police of the Czech Republic responsible for direct protection of the constitutional authorities, VIPs and other significant persons, particularly foreigners, has belonged for many years to the closely watched activities of Czech national police and other security services. Current political situation in the global scale promotes the activities to the priority security issues for every country. As early as in 2009, which was the year of US president Barack Obama's or pope Benedikt XVI's visits to the Czech Republic, our journal published an interview with the director of the in that time existing Institutional Authorities Protection Unit major general Lubomír Kvíčala. Several year passed since then and the requirements placed on the protection units of that kind keep rising. Therefore, we welcomed the very positively approached interview of the director of the Protection Service of the Police of the Czech Republic, brigadier general JUDr. Jiří Komorous, who has been in the office since 1 August 2013.



## General, what is the primary mission and highest priority for the Protection Service of the Police of the Czech Republic?

Personally, I am convinced that our main priority as implied from the principal tasks for and the mission of the Protection service Czech Police is the protection of lives and health of the protected persons entrusted to us, no matter whether Czech or foreign origin. If a head of state coming with certain risk factors, for example, is entrusted to our care then the responsibility is enormous. Protection service Czech Police provide the listed permanently guarded constitutional authorities of the Czech Republic and the persons with provided protection during their stay in the Czech Republic territory according to international treaties with body and episodic protection and secured transports.

Further, the Service is responsible for protection of more than 200 diplomatic installations (embassies and ambassadors' residences) and for protection of protected buildings and compounds of special importance for internal order and security as approved by the government. These include for example House of Representatives of the Czech Parliament, Senate of the Czech Parliament, Czech Republic Constitutional Courtyard, Czech Government Office, Ministry of the Foreign Affairs of CR, Ministry of the Interior of CR and others.

It is also responsible for hygienic and toxicological protection, which stands for a comprehensive set of measures to guarantee the protected persons are served harmless food.

In connection with the protection of secured persons, it arranges measures to guarantee security for persons and of buildings and installations.

Based on minister's decision, it is responsible for a short-time



protection of endangered persons in special cases, such as judges or political representatives of the Czech Republic.

### How many security actions concerning foreign delegation protection do you arrange and what does that include?

In 2016, we arranged 240 security actions in total comprising a comprehensive set of activities and specialisations. We are responsible for the protection of the entire delegation as well as secured transport, place of living, food, explosive countermeasures against possible attempts on life, intelligence countermeasures against eavesdropping, etc. If there is a military persona of the foreign nation within the delegation, we of course cooperate with Czech MoD. There are three top-level specialised units providing person protection. One is the independent President Protection Unit responsible for the president and the ex-presidents, then the Protection Service of the Police of the Czech Republic as the largest one of the three and the Military Police Security Guard of the Czech Republic responsible for MoD representatives, such as Minister of Defence, Chief of Defence and other listed personas but also for foreign military delegations. When a foreign minister of defence pays a visit to the Czech Republic, our unit calls Military Police Security Guard in joint action but they report to us at the moment.

### Does the unit have adequate number of police personnel and employees?

Every police or military unit commander would say that more personnel is needed but I think, especially considering some new and envisaged installations under our protection, we will have to request increased number of staff. Otherwise, with the current 1400 police personnel and employees the staff shortage is minimum. The reason lays in some actual needs because we passed through staff cutbacks in recent years causing exhaustion of the existing personnel due to the quantity of compulsory responsibilities. Of course, we need reinforcement but not a massive one. Our effort of selected recruitment of personnel to the vacancies is quite successful. However, the applicants' quality is sometimes to the detriment of acceptance possibilities. Every applicant must pass a relatively complex competitive examination, from the patrol service whose requirements are less specific to bodyguards for which we require university degree, police background, excellent psychological results, physical results. Many end up at physical tests, but the all police and military are facing that problem. Today the generation of young men starting their lives is highly computer literate but many times reflects the low physical dispositions.

We have maintained the requirements equal for a long time, but it issues from the discussion at, for example, national conferences of police commanders or specialists' opinions in neighbouring countries. In my opinion, it is a present-day feature and western civilisation condition.



### Does your previous position of Anti-Drug Centre director match the current one?

I was acting as the Anti-Drug Centre director for more than 18 years. I utilise the experience learnt in the period though the service is just the opposite. The Anti-Drug Centre was an investigative unit working in criminal environment struggling to catch crime authors or a gang. This service is rather oriented to activities that should prevent an attack or attempt, etc. However, many things, actions and subjects usually overlap and this is what I utilise in my current position.

### What are the plans and goals, do you expect any changes to come?

The primary goal is to keep Protection service high standard it undoubtedly has. From the strategic tasks point of view, we want to continue to develop issues like training. In the recent 6 years, we have successfully improved logistics for weapons, outfit and vehicle pool equipment. We are working on our own training centre, and would like to build a new facility for the department of protected person transport. The latter is our priority. Our car pool comprises several dozens of very expensive vehicles that need adequate parking, personnel lodging and all the comfort concerning materiel support. The project has been approved and passed to pre-implementation phase. Talking about tactical and strategic tasks, we have modernised the fitness gym for our personnel and plan to build a cardio centre.

### Where do you train today?

In these days, it takes place at multiple places, which makes it relatively fund and time demanding. We try to concert the trained personnel requirements and personnel's needs in actual operation. Considering we have no own centre in near distance we use military training areas, such as Doupov, Jince... or various shooting ranges with matching capacity.

### What does international cooperation entail?

Every action of ours is international cooperation. The basis both for trips of our protected persons abroad and for foreign protected persons' visits to the Czech Republic, issues from the communication with the advance teams arriving to our territory to prepare the visit. Our unit includes a liaison officers department who communicate with foreign protocol and our partners the conditions, routes, etc. A number of bodyguards arrive from the other country to our territory and cooperate with us in joint operation. Then, they report to our command. It applies also vice versa. When Czech protected persons travel abroad, we have to follow our foreign partners' regulations and command. The key is always communication and usually all goes with no major problems.

### General, thank you for the interview.

Šárka Cook, photo author  
and Protection Service Czech Police





# Logistic Support is Always the Decisive Factor of Victory

There is ample historical evidence indicating that a truly elaborated and realistic system supporting combat operations is one of the fundamental factors deciding the outcome. This fact has been repeatedly confirmed by many historical and ongoing wars and conflicts, for example the Falklands War between the United Kingdom and Argentina or countless clashes of armies of disintegrating Yugoslavia, to mention but a few. Last but not least, the logistic support of combat groups fighting against the so-called Islamic State also proves that it is indeed the basis of success.



The command of the relatively small Army of the Czech Republic must perceive this fact very intensely even now, at a time when a relatively massive modernization programme of the armed forces is being discussed. The “Review” has therefore decided to contact perhaps the most significant person in this field - Major General Mgr. Dipl. Ing. Jaromír Zůna, MSc., Ph.D., Director of the Division of Support of the Ministry of Defence.

**General, the Division of Support of the Ministry of Defence is, by definition, an organizational unit responsible for conceptual and audit activities and professional management of the segment of logistics, communication and information systems (CIS) and military medicine. Can you briefly characterize for our readers what this essential definition is supposed to mean?**

The very wording of the question prompts a broad answer, so to say. However, I will do my best to be concise and comprehensible, and to emphasize only those of our army-related, departmental, inter-departmental and international responsibilities which are linked to the topic of our conversation. The uniqueness of the Division of Support of the Ministry of Defence consists in the fact that it encompasses three distinctive roles. The first of them is command and control of three agencies - Agency of Logistics, Agency of Communication and Information Systems, and Agency of Military Medicine, all of which have an all-departmental jurisdiction. The second role is that of a property manager of the Ministry of Defence with respect to property segments entrusted to the Division, including an audit role linked thereto. The third role stems from its status of a division of the General Staff of the Army of the Czech Republic. Activities of the Division of Support of the Ministry of Defence cover a whole spectrum of areas, from command and control or property management to acquisition processes, conceptual work, planning, technical assistance or international cooperation. Even this list is only indicative of the Division's scope of work. As a matter of fact, the purview of the Division of Support of the Ministry of Defence is much wider.

However, I would like to make use of this occasion to acquaint readers who do not have detailed knowledge of our activities with our Division and its components from a somewhat different angle. The general public connects the Division of Support of the Ministry of Defence almost exclusively with logistic support and related services. However, much fewer people realize that support is, first and foremost, a matter of performance. To this end, the Division possesses a number of unique military capabilities which it provides to operations abroad or to standby systems. These include, for example, field hospitals, the Deployable Communication Module (DCM), which is a part of the NATO Command Structure, Center of Support of Foreign Operations and Emergencies in Pardubice, or Center of Biological Protection in Těchonín. The overall size of the support structure is almost 5,000 professional soldiers and civilian employees, including active reserves. The support segment represents a significant part of the army's capabilities and combat strength. It is also one of the reasons why the Czech Republic was able to assume the role of the lead nation in logistic and medical support in the joint Visegrád Four EU Battlegroup and to completely fulfill this ambition. Support is thus mainly about performance and capabilities to act, which no segment of the Ministry of Defence of the Czech Republic, not to speak of the army, can do without.

**What is presently your and your Division's most important task in relation to support of the Czech defence and security industry?**

Well, these tasks arise from the strategies and goals that we have already set for ourselves. Our priorities include, in particular, comprehensive support of all acquisition projects of the Ministry of Defence. Their implementation phase will be mostly a matter of support. At this stage of development of the Army of the Czech Republic, we have been focusing especially on strengthening and improving capabilities of logistic support units, signal and medical units at the tactical level. New vehicles and equipment will be purchased and fielded to strengthen logistic capabilities at the first and second levels. First results will be visible as early as during this year, when mobile workshops, recovery vehicles, trucks and other support assets, all on a standard TATRA chassis platform, will be delivered. All in all, we will receive 112 vehicles in 2017; apart from the general contractor, the state-owned enterprises, VTU s.p. and VOP CZ s.p., will also participate in the contract.

One of our long-term priorities is also the build-up of the 143<sup>rd</sup> Logistic Battalion in Lipník nad Bečvou. The unit not only needs new and modern equipment, but must also provide adequate conditions to its soldiers. I am referring to the development of infrastructure of the base, which we will have invested CZK 175 million into by the end of 2021. The equipment of our field hospitals, which is naturally getting obsolete and which has been made intensive use of in operations abroad and also by units assigned to/earmarked for the NATO and the European Union, will also undergo an extensive upgrading in this and following years. Many major projects are taking place in the field of communication and information technologies. We can mention, for example, the fielding of KIM-5 communication and information modules, and there is also a final stage of the MILSATCOM project, which will help advance communication support of earmarked/assigned units of the Army of the Czech Republic to a qualitatively higher level. To summarize the current trends in the build-up of support forces in plain terms, I would say there is a shift of focus from operational involvement to operation-



nal readiness, from “off-the-shelf” purchases to acquisition processes, from ad hoc measures to a planned force build-up and an enhanced mobility of combat support forces at the tactical level, as well as an upgrading and improvement of their equipment.

The trend outlined above has already been reflected in new development programmes of logistic support, communication and information systems and military medicine for the 2016 - 2021 period. The programmes include specific investment objectives expected to help achieve long-term goals of the build-up of forces falling into our purview. We will, for example, proceed with projects based on the TATRA standard chassis platform or related to containerization. Mobility of support units will be improved by acquisitions of new vehicles and materiel-handling assets to be used in the field. There will also be a step-by-step replacement of capacities for the accommodation and comprehensive support of personnel and repairs of equipment and vehicles in the field. We will procure tents, field workshops, catering equipment, medical equipment, mobile communication systems etc. From the viewpoint of the planning and programming future of future steps, we are ready. It is, above all, the conceptual and programme framework which provides a main platform of mutually beneficial cooperation between the Czech defence and security industry and the army as a user of its products. We expect systematic cooperation with state-owned enterprises on technical assistance tasks.

**The Division of Support of the Ministry of Defence also manages movable property of the defence sector. It performs management of material sources needed for the armed forces of the Czech Republic in crises, emergencies, threat situations or even in wartime. There are many more tasks, but the fact is that the Division of Support of the Ministry of Defence is basically responsible for how the Czech Republic is capable to prepare, in a rapid and flexible manner, to a war threat. The previous years since 1989 have been rather tragic. Can you outline future trends and current positives in this area?**

This is a particularly important area which constitutes a significant part of our activities. However, I have to say that the fulfillment of different measures and the assessment of the level of readiness of the armed forces of the Czech Republic in this area will never be a subject matter of a public discussion. Participating in the set of tasks and measures which are related to the preparedness of the armed forces of the Czech Republic for different crises and emergencies are many elements of the defence sector and other organizations and agencies of the state. However, the role of army logistics in the military system is central. It is possible to say that the structure and process of providing material resources for the armed forces of the Czech Republic in emergencies are based on the required structure of and measures related to their mobilization, and this fact is reflected in a new document, “Concept of the Development of Logistics until 2025”. The document has been prepared along the lines formulated in the “Long-Term Defence Outlook until 2030” and the “Concept of the Build-up of the Army of the Czech Republic until 2025”. It is also based on the doctrine of the Army of the Czech Republic, NATO Capability Targets, and is in line with the Alliance’s logistics vision for the 2015 - 2024 period. The concept also reflects lessons learned during operational deployments and principles of multinational logistics, including national caveats and specifics. It is important to note that the subject matter of the conceptual document is the development of the logistic system of the Army of the Czech Republic within its peacetime organizational structure, but taking into account and permitting its fleshing out in the event of a mobilization. At the moment, investments are being made into immovable infrastructure to further enhance the ability of the armed forces of the Czech Republic to react to negative developments in the security environment and emergencies; we have redefined the structure of reserves, relevant standards are being updated, parts of infrastructure that were disposed of in the past are being put back into use, and there has been a significant increase, after years of cuts, of the number of personnel in logistic support structures, including new units of active reservists.



**nexTER**

CREATING NEW REFERENCES IN DEFENSE | [WWW.NEXTER-GROUP.COM](http://WWW.NEXTER-GROUP.COM)



**What can be, in this respect, positive and motivating for the Czech security and defence industry? Given the existing situation and condition of the Army of the Czech Republic or combat-ready reserves, national defence cannot be guaranteed by the defence sector alone?**

I believe that we maintain regular contacts with our manufacturers and that there is a sufficient two-way flow of information on needs of the Army of the Czech Republic on the one hand and products and plans of our existing and potential suppliers on the other hand. It also does not make any sense to repeat what has already been said many times. I would therefore focus on a specific issue which requires finding a joint future solution, namely the area of maintenance and servicing. It will become highly topical also because of new acquisition projects. The army is fielding, and hopefully will continue to field, new generation equipment and materiel, including information systems, information technologies and means of communication, which will require servicing and maintenance support throughout their lifecycle, such as in-house and outsourced repairs and supplies of spare parts. This is where the situation is really tight, be it with respect to possibilities to make sufficient allocations, acquisition processes or capacities of suppliers. At the same time, it will be necessary to carefully balance resources allocated to support of new acquisitions and those needed to support operability and combat readiness of existing equipment, materiel and information system which the Army of the Czech Republic will be using for years to come. One can read in textbooks that situations in which the dynamism of security developments generates pressure on faster modernization of armed forces may produce objective conditions favouring trends showing signs of autarky. This is why the acquisition process is recommended to purchase not just equipment or armament, but the whole related process, which is a long-term one. It requires a substantial amount of realism and knowledge of the theory of force build-up, whatever you call it. This is also how the Division of Support of the Ministry of Defence has approached the procurement of new off-road passenger cars, which are expected to start replacing UAZ and LANDROVER vehicles in 2020.

Due to set target-oriented processes, the support system has very limited possibilities to directly plan normal reproduction of assets and related reserves. The balancing of needs relies on target managers who, however, are focused in another direction, that of armament projects and acquisitions of new equipment and materiel. This situation results in a continuous worsening of the technical condition of armament and moral obsolescence of particularly transport and support assets, including water treatment and storage, field catering equipment, field washing and cleaning equipment, field collective hygiene/ablution equipment, field POL storage, transport and refueling equipment, field electricity generation and distribution equipment, field environment-friendly waste disposal and management equipment, field materiel transport and handling equipment, recovery and evacuation vehicles, field accommodation etc. All of the above are property categories which were not a priority in the past, when the emphasis, insofar as acquisitions and maintenance were concerned, was placed on operations abroad. Against the backdrop of today's security situation in Europe, the view of the size and purpose of armed forces is



changing and becoming more balanced, and requirements concerning their general preparedness are increasing. The area of servicing and maintenance has thus been included again among our priorities, and this fact has also been reflected in plans of the Army of the Czech Republic. Funds and resources allocated to repairs have been gradually growing, capacities for in-house repairs are increased by recruitment of personnel and investments into technologies of repair facilities, there is also an objective to revitalize current stocks of parts and components and to sign long-term general contracts with suppliers which outsourced repairs and maintenance work are awarded to.

**General, my final question is whether your division will also be present at the IDET, ISET and PYROS 2017 fairs in Brno?**

The Division of Support of the Ministry of Defence actively participates in a number of events both at home and abroad every year. One of the reasons is that it is responsible, inter alia, for the development of international cooperation within its purview; it has its representatives in a number of EU, NATO and V4 committees, and there is also the Multinational Logistics Coordination Centre (MLCC), which has already earned considerable reputation and respect among NATO members states as well as among EU nations and partner countries.

Our attention in this field in 2017 will be naturally focused on the IDET fair, and there will be multiple forms of our participation. We will traditionally present activities of our centers and exhibits of the Army of the Czech Republic will include newly fielded vehicles and equipment of logistic, signal and medical support units. In cooperation with the Department of Logistics of the University of Defence in Brno, we will again organize an international conference on logistic support trends in modern armies. Positive lessons learned in the past indicated a high level of interest among the professional community, both at home and abroad, and we thus have every reason to believe this year will be no exception. On the occasion of the IDET fair, I will also invite my V4 counterparts and their delegations to a regular meeting known as the V4 Logistics Principals Group. The main task of cooperation in this format is coordination of processes of developing logistic capabilities and enhancing the interoperability of the armies of the Visegrád Four member states in the field of support. At the moment, joint planning activities concerning the V4 EU Battlegroup 2019 are already taking place on this platform. The agenda of the meeting is designed to make the IDET fair an ideal opportunity for our partners to get acquainted with the product portfolio of the defence industry of the Czech Republic. The Division of Support of the Ministry of Defence is cooperating with exhibitors that have already shown interest in presentations of their products to the directors of the logistic agencies of the V4 nations and their delegations. Throughout the IDET fair, the Division of Support of the Ministry of Defence will not only be present on the site, but will also do its best to make a significant contribution to the event's success.

**General, thank you for the interview.**

Šárka Cook, photo by the Ministry of Defence of the CR



# The Czech Republic Believes the Proposed Amendment of the European Firearms Directive is Misdirected

The proposed amendment of the European Firearms Directive imposing further restrictions on the ownership of firearms has recently been a much-discussed topic. We therefore asked Mgr. Milena Bačková, Head of the Unit of Municipal Police, Firearms and Traffic Engineering of the Security Policy and Crime Prevention a few questions related to this issue.



**Ms Bačková, the European Commission continues to exert pressure on the Czech Republic in its effort to restrict the right of citizens to legally possess firearms. How do you perceive this pressure and what impact can it have?**

The European Union (because nowadays it is not only the Commission) is promoting stricter

regulation of legally owned firearms as one of the steps in combatting terrorism and as a security-enhancing measure. In the opinion of the Czech Republic, however, the proposed amendment of the relevant directive is unfortunately misdirected. Legal owners of firearms do not pose a security risk. In the Czech Republic, they are people who meet fairly stringent legal requirements. On the contrary - we are afraid that legally possessed firearms will start "getting lost" if some types of firearms are banned. Their existing owners will simply refuse to surrender them, and they will instead prefer to state that they have lost them or that the firearms have been stolen from them. Of course they will be fined, but the firearms, until then owned legally, will find their way into the illegal sphere.

**Can you formulate the comments which the Czech Republic has sent to Brussels?**

We have presented hundreds of comments during the negotiations, from legislative and technical to conceptual ones. We were continuously commenting on changes of categorization of firearms, the effort to outlaw magazines for a specific number of rounds, or the very idea that a firearm category may depend on the magazine that is inserted in it. The Czech Republic presented its comments not just during meetings of the Council. Czech members of the European Parliament also have played a very significant role in promoting meaningful changes of the text. It is true that many of our comments have been incorporated in the draft - there are, for example, broader opportunities for granting exemptions to use banned firearms for the purpose of protecting critical infrastructure elements or areas of particular importance now. However, we still believe the proposal is bad

(on March 14, the draft directive was approved by the European Parliament - editor's note).

**According to the current wording of the Firearms Act, night vision devices are regarded as an illegal accessory. In the professional community, especially among hunters, the provision is viewed as outdated. Moreover, it has an impact on manufacturers of night vision devices. Will the Ministry of Interior do something about it?**

The adoption of the Firearms Directive will necessitate a fundamental reform of the whole firearms-handling system in the Czech Republic. We expect that the preparation of the new firearms legislation will also include a discussion on which, if any, accessories of firearms should continue to be banned.

**Can you specify in detail the so-called reservist system?**

It is true that the term has appeared in some media, but the Ministry of Interior does not plan anything in this respect. Instead, a debate as to how the new firearms-handling system in the Czech Republic should look like has begun, whether legal owners of firearms should be involved in the security system or not, etc. It is thus rather premature to discuss a specific system. Nevertheless, the Ministry of Interior intends to implement a firearms control system in which the possibility of legally owning a firearm would be retained at a level comparable to today's.

**Are there any other innovations in the field of ammunition and firearms that we can expect in 2017?**

There will be a major change as of August 1, 2017. This will be the day when the so-called Munitions Amendment to the Firearms Act, reacting to the explosions of munitions depots in Vrbětice, will come into force. The new legislation will affect companies dealing in ammunition. As of the above date, they will be required to have a munitions license and their employees will have to have munitions certificates. There will also be new provisions applying to the record-keeping and storage of ammunition. However, the Munitions Amendment introduces a fairly generous two-year transitory period by the end of which the companies will have to comply with the new requirements. Moreover, both the Munitions Amendment and its implementing regulations were broadly discussed with the companies concerned, so the former definitely should not be a surprise for them.

**Dear Ms Bačková, thanks for the interview.**

Šárka Cook, photographs by the Ministry of Interior of the CR



**PYROS**  
18<sup>th</sup> International  
Fire Fighting  
Equipment  
and Services Fair



**ISET**  
9<sup>th</sup> International  
Security  
Technology  
and Services Fair

**31. 5. – 3. 6. 2017**  
**Brno – Czech Republic**  
[www.bvv.cz/pyros](http://www.bvv.cz/pyros)



**NEW!**  
**SHOPPING ZONE IN HALL F**

**Integrated Rescue  
System Trade Fairs**





**BVV**  
  
**Veletrhy  
Brno**

BVV Trade Fairs Brno  
Výstaviště 405/1  
CZ – 603 00 Brno  
tel.: +420 541 152 926  
fax: +420 541 153 044  
e-mail: [pyros@bvv.cz](mailto:pyros@bvv.cz)  
[www.pyros.cz](http://www.pyros.cz)



# Prevent from the Leakage of Your Information Using SSL ZoKB

## Why is it necessary to resolve security of information and records?

In the current cybernetic world, prudence and carefulness is the necessary prerequisite and condition of secure information and record handling. The period of hardcopy records becomes slowly but surely marginal issue compared with electronic records. Electronic records are increasingly becoming a common part of the work of public authorities and other organizations. They speed up communication and decision making processes. It brings certain risks, for example, the attacks of hackers in the area of communication channels and possibilities of the lost or compromised information that can have, in many cases, existential consequences.

Among the main statutory requirements stipulating the way of work with records, we list the most important ones having a significant impact on the exchange and processing of records to the benefit of the electronic ones.

The eIDAS regulation that will take effect in the autumn of this year stipulates not only a higher emphasis on the processing of records but also on their authenticity and credibility. Non-compliance with the regulation can result in the sanctions of not a small amount.

In addition, Public Procurement Act stipulates that beginning the autumn of 2017, public procurement competition will take place exclusively in electronic form.

The European Directive NIS and its implementation into the amendment of Cybernetic Security Act and its implementing regulations and government regulation represent the umbrella legislation.

Implementation of security measures of Cybernetic Security Act was the necessary step to resolve the security of information not only in the area of public administration, but it was also the way how to comply with the respective measures required by the Regulation of the European Union GDPR. The products and services delivered by the company GORDIC® represent a comprehensive solution of cybernetic security as a response to current legislation.

## In what the way the processing of individual types of records take place?

Electronic records have the same life cycle as the hardcopy ones. Processing of digital records requires other specifics such as time stamp, electronic signature. Thanks to the software tools of the company GORDIC®, it is possible to make these processes more effective and secure. With regard to the electronic version of records, there are also audit traces, logging of records accessing, and other required elements of electronic records that are recorded with difficulties when working with hardcopy records.



Sample of record processing in the record management system GINIS SSL  
Source: (Own, 2017)

## What tools are used by GINIS SSL to resolve the requirements of Cybernetic Security Act?

GINIS SSL satisfies all these requirements that are based on the preceding questions „Why?“ and „How?“. With regard to the fact that a number of customers operate an electronic system such as VIS (Important Information System), they comply with the required functionality in accordance with the applicable legislation ensuring cybernetic security; it means Act No. 181/2014 Coll., on cybernetic security, and also Regulation No. 316/2014 Coll., on cybernetic security. To comply with the legislative requirements, from the point of view of the workflow layer, emphasizing system management and authorization to access the systems, the following modules are integrated:

Risk management - a measure assisting in preventing from the unauthorized user activities in the system GINIS SSL itself and taking care of access correction. This management is supported by the GINIS transaction protocols and the inner logics itself of the system operation as the whole.

Organizational security - an organizational measure concerning the system users where their roles, functions, and authorizations themselves are set.

Access management - a policy of access management where the identities of users themselves are important. Security of user accounts using the policy of password creation and management.

Security events - GINIS SSL contains also the module for activities recording, collection, and evaluation, management of cybernetic events. From this point of view, the system is therefore prepared for the possibility of notification of security incidents to the National Security Office. The functionality is ensured by the GINIS transaction protocols, advanced database tools, and integration within SIEM (Security Information and Event Management).

With regard to the management of processes, information flow, record processing, and management security policy, GINIS SSL has, pursuant to Cybernetic Security Act and Regulation on cybernetic security, the following measures:

Security policy - a measure ensuring access management, long-term storage, and protection of personal data. It is supported by the secure technological and process backups, in addition by the advanced modules Records Office (SPI), Stored Record Management (SUD), and Electronic Record Destruction Management (ESR). In addition, in the GINIS SSL system, an external tool is generated for the long-term care of the records - Guaranteed Long-term Repository (GDU) and also a long-term care of the electronic files using the module Signing and Stamping (PAR).

Management of access authorizations - in this case, it concerns the management of access to applications, data, and processes. It is ensured by the advance management of access rights to the system itself, further by the management of access to electronic records, by blocking access parameters, by tracing workflow (TRASYS), individual right management (IRP), and last but not least, by the signature and approval processes.

Compliance with all these elements is very important for meeting the requirements of Cybernetic Security Act, but mainly for the reason of protecting the information contained in the records. GINIS SSL is already today able to comply with the requirements of GDPR regulation that will take effect in May 2018.

The requirements of the act and regulation impose high administrative requirements on the administrators of these systems as well as their users. For this reason, GORDIC developed a special module GINIS SSL named DRMS ZoKB allowing management of necessary issues from the cybernetic security and GDPR point of view, particularly:

- Methodology
- Assets analysis
- Risk analyses
- Incident notification
- Single repository of all security records

For the sensitive records and records in special mode, a special archiving module GINIS SUD was developed, allowing regular automated record storage, their easy recovery if necessary, locally as well as in cloud (for example: MS Azure).

The secure system GINIS SSL meets the requirements of Cybernetic Security Act; however, it is necessary to mention that its resulting security depends on the environment in which it is implemented and the way in which it is operated. Operation of regular security check is necessary condition of secure and non-problematic operation.

Dipl. Eng. Vojtěch Hvězda,  
Manager of KYBEZ Platform

# Do We Know the Arms of Our Enemies?

**Motto:** *"In the same way as the security specialists develop new ways of defence against the new attacks, hackers develop new tools to fight their countermeasures. It results in a mixture of various types of attacks whose popularity change even in the course of year." Freely in accordance with Radware: "Pick Your Poison: The Most Popular Cyber Attacks in 2015."*

## Part 2: Attacks against networks and applications

I have to voluntarily admit that the classification of attacks represents quite a challenge for me. There is really a high number of them and attackers mutually combine them and develop new, comprehensive forms. In addition, there is a relatively high level of "freedom" concerning their description, categorization, and especially the terminology used. I do not have aspirations to provide a complete picture, or to even reach a perfect, particularly terminological compliance with all authors publishing their contributions in the area of cybernetic security. Nevertheless, I will try to provide as most complete and comprehensible overview as possible of the current state.

## Network and application attacks

Majority of classifiers divide attacks into two basic groups: attacks against network and attacks against applications. Radware states that in 2015, the proportion between network and application attacks was roughly 2:1. In fact, both groups overlap and attacks mutually complement each other. Network attacks not infrequently only open the door or they bring with themselves the attacks just against applications. In order to clarify the difference between the network and application attacks, let us take a reference model of Open Systems Interconnection, so called OSI model. Who knows what I am going to speak about, he can skip the next paragraph.

## OSI Model

The Open Systems Interconnection model, abbreviated OSI, describes in general in what way the communication between the systems takes place. The model consists of seven layers. Simply said, each layer describes the functions of transfer system, rules for their execution, and the way of cooperation with the adjacent layers, i.e. it defines the activities of transfer system and properties of the used protocols. The five lower layers relate to the data transfer itself, the highest, the seventh layer includes the communicating applications. The lowest, physical layer, describes the properties of medium and data transfer using it. The second, connection layer, describes the basic data frameworks and physical addressing, the third, network layer takes care of logical addressing of the network packets. The fourth, transport layer is responsible for a reliable transport of packets between two communicating systems. The fifth, relation layer, starts, maintain, and terminates connection between the end points that should communicate. The sixth, presentation layer, is responsible for ensuring comprehensibility of transferred messages, for example, transfer of the codes of different character sets. The last layer, named the application one, is created by the communicating applications. The most

frequently attacked ones include, for example, webpages, e-mail systems, or DNS servers.

In the real world, a certain group of technical tools, equipment, or software corresponds to the individual layers. They can be, of course, attacked and used to disturb communication or make it impossible, as well as to introduce another, not infrequently even more risky and dangerous harming tool into the network or system. We can therefore call the attacks carried out at the level of five lower layers of OSI model primary as the attacks against network (Network Attacks), while the attacks corresponding to the seventh layer as the attacks against applications (Application Attacks). At the physical layer, an attacker can, for example, cut a communication channel or to connect an intercepting equipment. It is possible to attack or put out of order a router that is the typical equipment working at the network layer. By the way, the attacks against the weakly configured home routers are recently very frequent. One does not know that he has a big hole, as big as the gate to the barn, into his home network, and often thus also into the network of his Internet provider, and that from time to time, he can participate in a certain DDoS attack.

## Passive and active, external and internal attacks

As we just described, network attacks show the efforts to penetrate network infrastructure. If the primary task is only a terrain reconnaissance without any adverse impact on the attacked system and without any modification to it, we speak about passive attacks. In the opposite case, we speak about active attacks. The attacks by an external offender not being authorized to access the attacked system are called external attacks. The attacks carried out by the person who has an official access to the system, are, on the contrary, called internal attacks. It is obvious that the most frequent aim of network attack is either to weaken it or put it out of order and/or to introduce a harmful tool into the system the network is part of. It most frequently concerns a harmful software, so called malware.

## How do the intruders behave?

Before we start dealing with the different types and vectors of the attacks, let us look at in what way such sophisticated attacks usually take place. First of all, it is true that modern cybernetic attacks are successful as they are carefully planned, methodologically organized, and mainly patient. While the ways of penetration can be quite different, the behaviour of saboteur in the system is more or less similar and following a simple scenario. The individual parts can be missing or take place differently, the principles and targets are always the same: to get what their sender wants.

The attacker first looks for a vulnerable place. As soon as he finds one, he penetrates the system through it, where he settles or allows settling of a harmful tool that it is bearing or it just opens the door for it. Not to bring too much attention to itself, the intruder first masks itself as best as possible. It then quietly starts the system examination, and at the same time, if it is possible, it puts out of order, blocks, or at least weakens the security measures that could reveal or eliminate it. It is patiently looking for other vulnerabilities and tries to infest other parts of the system. As he sufficiently strengthens its positions, he starts connection with so called attack control centre, Command and Control, or abbreviated as CnC Server, awaiting other instructions. They can come immediately but also after several months. We will still later speak about them in more detail. At the same time, user might not have any idea that a saboteur is present in his computer waiting only for the instruction.

You will find the other parts at [www.kybez.cz](http://www.kybez.cz)

Dag Jeger





# Multinational Live Combat Training Possibilities in EUROPE

The need for multinational exercises and interoperability requirements was early recognized by a number of European armies and as an initiative to solve the problem the Interoperability User Community (IUC) was formed. The first meeting was held in January 2008. The community now includes members from the armed forces in the Netherlands, Germany, Austria, Sweden, Norway, Denmark, Finland, the United Kingdom, the Seventh US Army, the Czech Republic, Slovenia and Chile as well as the training systems provider Saab AB. Lately also Poland and Estonia has been invited.

Many nations today have live training capabilities that use laser transmitters and fire simulators mounted on weapons to simulate engagement against soldiers and vehicles that are equipped with laser receivers and target simulators. Exercises are typically performed within a fixed combat training center area or by using mobile training systems. In both cases the radio data communication system's links the simulator equipment's together and records such parameters as vehicle and soldier movements, number of shots fired, engagement effects and casualties. Multinational missions require multinational training and interoperable training systems. Laser simulators and the standard SISO strongly improves the soldiers and units abilities to prepare for multinational missions. The IUC cooperation areas include the development of the optical interface, agreed ammunition tables, ammunition penetration capability data and target vulnerability guidelines. The objective is to support training between member armies, improve simulation realism and establish e.g. agreed ammunition lethality and engagement effects.

The SISO optical code is an open standard available for all armies and simulator suppliers and the optical specification is published on internet at <https://www.sisostds.org/productspublications/standards/sisostandards.aspx>. As the German Army has legacy simulator systems where full implementation is more difficult; they initially decided to implement a limited version. The German Army plan to upgrade to the SISO Standard to fully gain from all

benefits as the rest of the IUC member armies. Meanwhile the SISO has a partial backwards compatibility with the limited version that currently supports multinational training between the German Army and the rest of the IUC member Armies.

NATO has during a long time recognized the need for standardization and that some of the older live training optical communication interfaces does not fulfil the requirements to provide realistic live training. The probable result is not only combat effectiveness degradation but; also enhances the risks for casualties.

The NATO Urban Combat Advanced Training Technology (UCATT) Task Group (TG) was established within the NATO Modelling and Simulation Group (NMSG) in 2007. The UCATT TG was tasked to exchange and assess information on Military Operations in Urban Terrain (MOUT) or urban operation facilities and training/simulation systems with a view toward establishing best practice.

Historically, armies have developed their own live training capabilities with main focus on national defence, weapons and training needs. Operations in places such as Iraq, Afghanistan and Libya have proved that current and future conflicts are likely to be fought within a multinational structure. Examples of these structures include the NATO ISAF (International Security Assistance Force), NATO Response Force (NRF) and EU Battle Groups. This approach demands that nations who fight together also must train together and as a result, the adoption of common standards within training equipment is vital.





In September 2014 the NATO Response Force (NRF) prepared for their responsibilities by taking part in the military field training exercise "Noble Ledger". This was the first major exercise that proofed the OSAG 2.0 optical interface interoperability when six battalions including 6500 soldiers from four different European armies conducted an instrumented multinational exercise in Norway.

#### **SISO-STD-016-00-2016**

In April 2015 the bilateral exercise Operation Freedom Shock was conducted at the German combat training center in the surroundings of Colbitz-Letzlinger Heide. The objective was among others to test the interoperability between the German and U.S. armed forces training organizations, simulation systems and weapon systems.

Emphasized by army reductions the individual soldiers' skills get more important and there is a high priority on realistic and efficient soldier/crew training. This is also emphasized by the extraordinary complex tasks for those taking part in today's multinational operations. To conclude, military trends have changed over recent years and today nations need to learn to fight alongside their allies in coalition formations. This operational requirement demands that multinational high-fidelity live training must be undertaken prior to deployment. With the availability of the OSAG 2.0 optical interface, nations can train with their partners knowing that they are receiving efficient and realistic high-fidelity training minimizing the effects of negative training.

SISO-STD-016-00-2016 provides an overarching approach for multinational training whilst providing interoperability between training systems and weapons of the different armies. This results in increased combat effectiveness and better preparedness for operations.

#### **7<sup>th</sup> Army Joint Multinational Training Command (JMTC)**

JMTC has its headquarter in Grafenwoehr, Germany, which is the largest and most diverse training command outside the continental United States. By integrating mission with sound land management techniques, the JMTC provides realistic and relevant training to U.S. Army, Joint Service, NATO and partner units and leaders.

Due to US Army forward-based presence in Europe, JMTC has the unique opportunity to build interoperability with Allies and partners. The 230 km<sup>2</sup> Grafenwoehr Training Area is the largest and most dynamic live-fire training facility in Europe. The neighboring 162 km<sup>2</sup> of the Joint Multinational Readiness Center Hohenfels Training Area provides realistic and challenging combat training for the individual through brigade level.

The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI), has a requirement to support the European Reassurance Initiative (ERI) for the Deployable Instrumentation System - Europe (DISE). DISE is a Saab AB delivered mobile training system including laser fire and target simulators for soldiers, vehicles and buildings. DISE also includes GPS for player positioning and a radio data network for e.g. exercise command/control and engagement results reporting. The mobile exercise control (EXCON) computer system is located within the training area together with the supported unit.

#### **Joint Multinational Readiness Center (JMRC)**

In August 2015 more than 4,500 participants from eight nations were participating in Exercise Allied Spirit II including Canada, Czech Republic, Georgia, Hungary, Italy, Serbia, the United Kingdom, and the United States. This level of participation from so many multinational partners and allies at the Joint Multinational Readiness Center (JMRC), made the exercises somewhat unique.

As security threats grow, so does the need for training Complex conflicts, often in urban environments, require new strategies, materiel systems and new technologies. The growing number of multinational missions and alliances between national forces and different types of combat units are placing high demands on system integration, interoperability and command and control capabilities.

That is why Interoperability, the word which is repeated extraordinary often, becomes more and more contemporary. The Interoperability User Community (IUC) with representatives from ten European Armies, the Seventh US Army and Chile is a community with necessary activities solving challenges in conjunction with multinational exercises and interoperability requirements. Next meeting will be held in Finland at the end of April 2017.

[www.saab.com](http://www.saab.com)





# We Set New Trends in the Field of Monitoring Systems



In these present days of fast technologic progress, it is vital for every decent company to move their products forward so it doesn't stay behind its competitors. The better companies, however, are not content with just improving of their existing products, but they come up with new, revolutionary solutions, which surpass their competitors. One of such companies is also the company EVPÚ Defence, which brings to market new products every year, dictating new trends on the field of monitoring systems. And this year is no exception.

## Image calibration during temperature fluctuations

Not always can cameras work under favourable climatic conditions. The often have to deal even with high temperature fluctuations. These fluctuations can cause blurring of an image, especially to cameras with a multiple optical image zoom. The company EVPÚ Defence has come up with a solution of the problem, which allows to regulate a back focal length of the cameras and thus compensate unfavourable temperature effects. The cameras SUMO HD32, newly allow the automatic regulation of the back focal length in dependence on the temperature, and thus they prevent from blurring of the image at high or by contrast low temperatures. This function is controlled fully automatic in the cameras, but in case of need, it can be controlled by user via software.

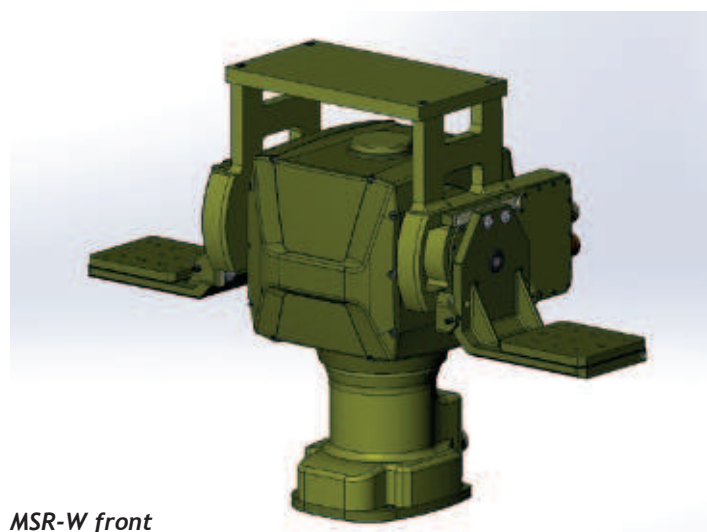


Camera SUMO HD32

## Pan-tilt MSR-W

This year, the company EVPÚ Defence is getting ready a project of new pan-tilt MSR-W, which, compared to other, usual pan-

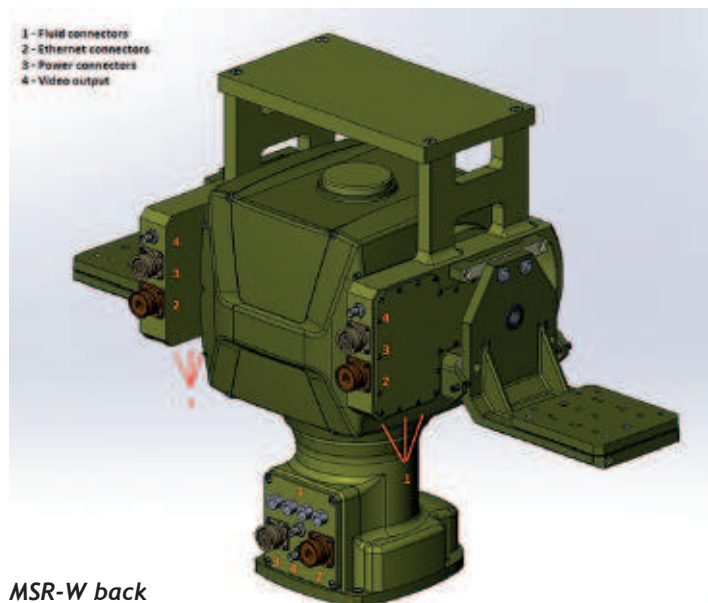
tilts, allows transfer of fluid medium to attached optical devices, whether for a purpose of cooling or lens showering. This ability makes the pan-tilt MSR-W totally priceless namely at desert areas, where cameras are exposed to extreme temperatures and sand polutions.



MSR-W front

The possibility of transmissions of electric power of about five hundred and seventy watts, together with video signal at HD-SDI format, data communication, Ethernet 100BaseT and three separate fluid media to both arms of the pan-tilt, where there were movement abilities and other technical parameters of original pan-tilts of this series maintained at the same time, makes of the pan-tilt MSR-W a completely revolutionary project. The new pan-tilt MSR-W can carry a load up to 100 kg. The arms

of the pan-tilt moves in range from -90 to +90 degrees and rotation speed of both elevation and azimuth axis is impressive one hundred degrees per second.



MSR-W back

### Container CRANE MSC-01

A new sensory container CRANE MSC-01 is a container equipped with a series of optical systems for day and night vision. It contains a night IR camera, two daylight, fixed cameras, surveillance camera with motorized zoom and a laser range finder for distance measurement. Optical axes of every single sensor are aligned parallelly in order for all cameras to be focused to a single spot, with divergence below 10 miliradians.

The sensory container is constructed in order to endure shocks of

force up to 40 g, without losing signal or optical sensors alignment. Its construction ensures the container to endure the most demanding mechanical requirements.



Container CRANE MSC-01

The sensory container CRANE MSC-01 is designed in multiple different versions to satisfy all customer's needs according to a purpose of use, for ranges from 1,5 km to 6 km. The whole system is supported by easy mechanical manipulation and a simple software control of all the built-in elements.

Dipl. Eng. Martin Vala, EVPÚ Defence a.s.



development | design | production | sale of:

- special fixed and mobile surveillance systems
- surveillance vehicles equipped with TV, infrared and optical sensors and laser rangefinders
- multisensory heads and containers
- two-axis pan/tilts with or without stabilization
- special cameras and SW applications

[www.evpudefence.com](http://www.evpudefence.com)



EVPÚ Defence a.s. | Jaktáře 1781 | Uherské Hradiště | Czech Republic



# Exclusive Interview with Jaroslav Strnad

There is hardly anyone in the defence business whom this man would have to be introduced to. Mr. Jaroslav Strnad is a hard-working and capable man who avoids publicity, shuns social events and rarely gives interviews. The Review's editorial team therefore appreciates that, in spite of the above, he, as a long-time member of the editorial board of our magazine, did not refuse to give one to us.



**Mr. Strnad, can you tell us how you actually got to the defence business?**

Of course. In the 1990<sup>ies</sup>, I was dealing in scrap iron, which I was buying, inter alia, from the Railway Troops of the Army of the Czech Republic, which were being disbanded at that time; I am talking about, for example, rails or railcars. This was in fact my first contact with decommissioned military equipment. Surplus tanks and armoured vehicles followed; initially, they were just another source of scrap iron, but I gradually realized that this equipment, often almost unused, could be kept in

storage, repaired and sold with a high added value. My realization developed into a long-term business plan. We were buying, mostly at auctions, surplus equipment, spare parts and defence materiel from various European armies, sorted out the unsellable part and kept the rest in storage, being aware that it might take years before it found a buyer.

**How come that EXCALIBUR ARMY, initially just a trading company, has developed into a major and profitable manufacturer of ground vehicles?**

The customers we were delivering armoured vehicles to also needed spare parts to support their long-term operations. Initially, these could be bought from surplus stocks, but the sources gradually dried up and it was necessary to start manufacturing them. The vehicles we had kept in storage for as long as several years also needed a complete overhaul, or often an upgrade tailored to the customer's requirements. This was why we began developing our own production capacities. The first enterprise we acquired was the bankrupt military repair facility in Přelouč; we bought it from the receiver in bankruptcy in 2008. In 2013, we won the tender for the sale of the site of former VOP Štern-

berk. While the government did not have any work for these repair enterprises, we managed to find orders, mainly export ones, for them, thus retaining jobs and bringing additional benefits for the Czech economy and the state exchequer.

**A question comes to mind why state-owned enterprises are unable to achieve something like this; why, state-owned defence companies in other countries prosper, although they have to hunt for orders themselves...**

This is partly true, e.g. in Israel. However, conditions in the Czech Republic are different, because of the legal framework and also because of the mindset. We draw from the industrial tradition of the First Republic, and it was at that time when the most important strategic enterprises, such as Škoda in Plzeň or Kolben in Prague, were in private hands. However, the trend in Europe is opposite, away from exclusively state-owned enterprises, as exemplified by France or Slovakia, where partial or full privatization or long-term lease of state-owned defence companies is taking place.

**It is a well-known fact that you and many other entrepreneurs - members of the Czech Defence and Security Industry Association - choose experts or top-ranking managers leaving the army or the Ministry of Defence as your advisors or for top managerial posts. The same applies to defence companies in other countries. What do these people contribute to defence companies?**

As you said, the employment of ex-soldiers or ex-policemen by the private sector after their career in the force is a common phenomenon worldwide, and it is a legitimate career choice on their part. Ex-soldiers bring in unique experience and professional capabilities. Today's times are characterized by narrowly specialized professions, and this of course applies to the defence industry as well. This is why our holding, just like all defence and security companies in the Czech Republic and worldwide, employs former soldiers. However, the previous military career is not a guarantee of success in the private sector. At the end of the day, the success in this demanding environment depends on abilities of the individual concerned.

**Thanks for answering the previous questions, and we are coming now to other breakthroughs - the establishment of EXCALIBUR GROUP, later renamed CZECHOSLOVAK GROUP. What made you take these steps?**

A group of other companies gradually started forming up around Excalibur Army, and they needed to be structured in some way. This is why the companies I own or hold a majority stake in are gradually becoming a part of a holding structure which is transparent both toward banks and toward partners. The change of the name to CZECHOSLOVAK GROUP (CSG) was necessary because of several reasons. First, we really follow tradition of the Czechoslovak industry and the "Made in Czechoslovakia", even in territorial terms. Second, we are not - and we have in fact never been - just arms manufacturers. Civilian production - automotive, railway or aerospace products - accounts for a substantial part of our revenues. Moreover, the Excalibur brand was rather military-sounding and, last but not least, our present name is unique, while the previous one was not.



## CZECHOSLOVAK GROUP (CSG) in the year 2016

- **January** - EXCALIBUR ARMY changed its name and CZECHOSLOVAK GROUP has been established.
- **March** - a new rocket launcher RM-70 Vampir was presented for the first time.
- **May** - ceremonial opening of the new TATRA DEFENCE VEHICLE factory with the participation of Prime Minister and Minister of Defence of the Czech Republic.
- **May** - RETIA company has become a part of CZECHOSLOVAK GROUP.
- **June** - CSG took part in the defence exhibition Eurosatory 2016 in France.
- **June** - CSG participated at the traditional Czech Army's defence show Bahna, ASCOD armoured vehicle was displayed at the show.
- **August** - the first public presentation of a modernized wheeled howitzer DANA M1 M during traditional Tank's Day show in Lešany, the Czech Republic.
- **September** - CSG took part in the defence exhibition MSPO 2016 in Kielce, Poland. Bridge layer AM-50 EX vehicle on TATRA chassis was displayed for the first time.
- **September** - CSG participated at the traditional defence show NATO DAYS in Ostrava, the Czech Republic. Prime Minister and Minister of Defence of the Czech Republic visited CSG's exhibition at the show. MRAP TITUS vehicle, ASCOD armoured personal carrier and DANA M1 M howitzer were displayed there.
- **November** - CSG had own exhibition at the defence trade show Indo-defence 2016 and presented UAV CANTAS for the first time. During the trade show CSG signed tens of millions of dollars' contract for Tatra trucks and APC Pandurs II delivery for Indonesian Army.
- **December** - RETIA company finished delivery of ground control stations for NATO's Alliance Ground Surveillance (AGS) system.
- **December** - ELTA systems and Retia have won Czech Army tender for new MADR radars.
- **In the year 2016** - CZECHOSLOVAK GROUP delivered a new RM-70 Vampir rocket launchers, logistic vehicles and equipment for Indonesian Army.

**You were previously known as “repairmen” of older vehicles of Soviet provenience; now CSG will manufacture Pandurs, i.e. Western vehicles. Does it mean the focus of your group has changed?**

Our business strategies naturally aim to satisfy market requirements. We cannot expect that vehicles which are dozens of years old will continue selling for the next fifty years, no matter how much we will upgrade them. If we relied only on them, I am sure we would not be able to provide enough work for our production employees. Even if the market for older ground equipment without sophisticated and expensive electronics continues to exist, we must be prepared for the future. Thanks to our strategic partnership with General Dynamics European Land Systems, we now have technologies that allow us to manufacture a modern wheeled armoured personnel carrier, which the Pandur undoubtedly still is. Another new vehicle that we manufacture is the six-wheeled Titus on a TATRA chassis. Here too we have a major Western manufacturer as our partner - the French company Nexter. As far as the defence segment of our production is concerned, we clearly focus on partners from NATO countries.

**Are you satisfied with how your goals are being met?**

I have never been aiming too high. I have been in business for twenty years and now there is an industrial holding developing traditional Czech and Slovak industries, which turns out products with a high added value and does not depend on a single person. The enterprises are managed by their managing directors and there are many capable people working for the group. Without a team of capable people I work with, many important and traditional enterprises would have disappeared, and jobs, tax revenues and, above all, production capacities which are also essential for the Czech Army would have disappeared as well. The above applies mainly to the defence industry, but also to the civilian segment of our group. An analysis of Ernst & Young indicates that each Czech Koruna that TATRA or any other company of our group spends in the Czech economy generates roughly three Czech Ko-

runas at our subcontractors. One job in our group generates slightly less than three jobs at our subcontractors.

The government realizes it as well, and therefore reassesses procurements of vehicles and other military equipment and materiel through go-betweens, preferring to support the domestic industry which returns the favour in higher taxes and lower unemployment rates. Why, it is good that can manufacture something in our country and export it.

**Do you agree that the attitude of the government and the Ministry of Defence to the domestic defence and security industry may also be affected by the security situation?**

Certainly. Today's different security crises show that it is useful for any country to have defence industry production capacities on its own territory. A local factory cannot run away, cannot refuse deliveries to the domestic army.

In this respect, I would to emphasize that we perhaps often mention companies, but not so much people. They are our most valuable asset. As our business had expanded and developed, so have our people and their capabilities. Now we have a strong human potential in production and development areas.

**Unfortunately, the defence industry often involves very tough competition in which fair play principles are sometimes forgotten. And being what it is, police elements or various secret services may be involved as well, sometimes cued by competitors. Does the competition affect you, what is your opinion about it?**

Until recently, nothing of the above actually concerned us. Just like the rest of the Czech industry, we have been and will be living off export contracts rather than off orders of the Czech Army. By saving TATRA and other strategic companies in our territory, the situation has changed for us. By building a structured industrial holding, we are reducing the playground for go-betweens that only want to import foreign products to our country without an adequate involvement of the Czech industry.

One should bear in mind that our way of doing business, i.e. the acquisition of own manufacturing capabilities rather than a mere resale of foreign products, is a significant disturbance of a system that has existed for more than twenty years in the Czech Republic. It is obvious that we pose a problem for connections and relations which have existed and still exist here. Success is not something that is forgiven and we must be prepared for and protect ourselves against the attacks you mentioned.

However, it is the results that matter, and they speak for themselves. Thanks to CSG's team, several important enterprises with a long-standing international tradition have been saved for the Czech Republic, including ones in a purely civilian sphere. This of course helps to maintain existing jobs and create new ones, generate tax revenues for the state and all positive secondary effects resulting from our activities. CSG's business profits are being invested into the group's growth and the development of companies that have been, for various reasons, neglected by their previous owners. Political representatives realize it and treat the CSG holding and its companies accordingly; the company TATRA in Kopřivnice is a showcase example.







Your companies are active exhibitors both at home and abroad. We will distribute our Review magazines at the IDEX 2017 and IDET 2017 international exhibitions in Abu Dhabi and Brno, respectively. Can you briefly out-line CSG's presentation and marketing plans?

Companies belonging to the CSG group will take part in roughly 40 exhibitions and other marketing events in 2017, both in the Czech Republic and abroad. The participation in exhibitions is a key part of our corporate presentation, as it allows us to meet with both customers and our defence industry colleagues. We will display both the defence and civilian product portfolios of the group. Thanks to the inclusion of the Pardubice-based company Retia in the CSG holding, we will also be able to add electronics and radars to the products that we are going to show.

Mr. Strnad, you are a relatively a very young man, and I will

now ask you a million-dollar question - have your goals been fulfilled, or are you planning another surprise for us?

The year 2016 was a year rich in acquisitions. Avia, Elton, Retia and JOB Air Technics have been added to the CSG group. These acquisitions show that the holding also devotes its attention to sectors other than ground vehicles. In addition, we have been helping the South Bohemian company Kovosvit MAS, although it is not, strictly speaking, a part of the CSG group. Most of the projects and acquisitions had been prepared for quite a long time, and they were just finalized in 2016. The year 2017 will not bring so many new great surprises, i.e. new companies in the group. We must now pay attention to the development of those which have already been included in the group. By mid-2017, we want to restart the production of new Avia trucks, it will be a big symbolical step forward, much more demanding than in the case of TATRA which, its problems notwithstanding, maintained its truck production at the time when I and my partner René Matera acquired it. Avia has not been producing anything for three years; we will have to transfer the production from Prague to Přelouč and in fact to rebuild the enterprise from the scratch. I am not saying we will not expand the group in 2017, but everything will depend on opportunities.

*Roughly 10 to 15 years ago, a phenomenon known as globalism, i.e. mergers of defence giants, became quite important, particularly in Western countries. From the viewpoint of international competitiveness, it is gratifying to see that, thanks to you, CZECHOSLOVAK GROUP has become, insofar as ground vehicles are concerned, the leading defence entity in the Czech Republic. Mr. Strnad, we wish you many successful years in your business and may all your companies be profitable.*

Interviewer: Miloš Soukup

## Modern cabs of TATRA Force vehicles

The TATRA Force model range is one of the production pillars of the TATRA TRUCKS automaker based at Kopřivnice. A brand new armoured cab designed for special vehicle models was put into production together with modernized cabs in the so-called soft design.

### Cabs in the so-called soft design

The modernized cab of the TATRA Force vehicles in the so-called soft design brings significant changes to both the interior and exterior. The original design based on the welded bent sheet metal technology has been replaced by inbuilding of flat aluminum parts into the base welded steel-section structure.

This is a fundamental technological change in production, which brings a number of benefits, such as simple production of individual parts, reduced cab weight, increased resistance to corrosion and lower labour intensity for repairs. The crew also has better vision from the cab fitted with a new one-piece windscreen with three wipers. Modernized cab also features a larger front folding bonnet for easy access to internal structural assemblies.

In the interior you will find new upholstery and new storage compartments. A completely new dashboard is made of



**RM-70 Vampir 4D rocket launcher on the Tatra Force chassis with an extended cab in the so-called "soft version" was presented at IDEX 2017 at a common stand of CSG and Tatra Trucks.**

durable plastic. The interior has been optimized to provide more space for the seats. There are a two-seat to four-seat versions available, two passenger seats can also be mounted on the centre tunnel. Another novelty is also a four-door double cab for six crew members. This cab is used for example, in the newest RM-70 Vampire 4D rocket launcher, which had its premiere at the recent IDEX 2017 defense exhibition in Abu Dhabi.

### New armoured cab

TATRA TRUCKS has developed an advanced armoured cab for special vehicle models of the Force range together with an external company with years of experience in this field. The new armoured cab is based on the original design of the modernized common cab variant. In accordance with NATO standards, it is fully certified by the Military Research Institute in Brno to LEVEL 2a/b of ballistic and mine protection, and it features a protection setting option of up to LEVEL 3/b. The armoured cabs are installed on the vehicles directly in the Kopřivnice factory, sharing interior elements with the "soft version".

The cab comes in two-door and four-door design with a capacity of three (1+2) or five (1+4) seats. Both variants have the same height and the same interior design, including the material of the instrument panel. These armoured cabs with improved ballistic and mine resistance are also equipped with special seats, protecting the crew against a pressure wave in the event of an explosion under the cab. The roof of the armoured cab has a variable orifice to mount a weapon system on it. The installation of the armoured cab on the Force vehicle required structural modifications to the vehicle chassis, especially in terms of the integrated mine resistance of the cab floor. The assembling length of the armoured cab is the same as that of the regular version, even in the four-door design.

[www.tatratrucks.cz](http://www.tatratrucks.cz)



REGISTER BY 31ST MARCH FOR A £100 DISCOUNT



The SMi Group Proudly Present The 3rd Annual...

# FUTURE ARMoured VEHICLES CENTRAL & EASTERN EUROPE

15TH - 16TH  
**MAY**  
**2017**  
PRAGUE  
CZECH REPUBLIC

Andels Hotel, Prague, Czech Republic

**Central & Eastern Europe's Most Focused Armoured Vehicles Meeting**



## EVENT HIGHLIGHTS:

- **Gain** detailed insight into the Czech Armed Forces future armoured vehicle modernisation plans pertaining to the 8x8, main battle tank and infantry fighting vehicle replacement
- **Hear** keynote briefings from leading Central and Eastern European Nations including updates from heads of land procurement and operational command within: The Czech Republic, Austria, Germany, Romania, Lithuania, Latvia, Bulgaria and Slovenia
- **Meet** and network with industry leaders from the region, systems integrators and internationally respected programme managers at the forefront of vehicle platform development
- **View** the latest combat vehicle survivability, C4i and weapon systems technology in the exhibition area

## CHAIRMAN:



**Major General (ret) Josef Sedlak**, Former Commander, Joint Forces, **Czech Ministry of Defence**

## SENIOR MILITARY SPEAKERS:



**Major General Jaromir Zuna**, Head of Support Branch, **Czech Ministry of Defence**



**Brigadier General Norbert Huber**, Director Armament and Procurement, **Austrian Ministry of Defence**



**Brigadier General Mircea Mindrescu**, Deputy Commander, Land Forces Operational Component, **Romanian Armed Forces**



**Brigadier General Morten Eggen**, Head of Land Systems Armament and Procurement, **Norwegian Defence Logistics Organisation**



**Brigadier General Norbert Wagner**, Commander, Munster Training Centre, **German Army**



**Brigadier General Roberto Soria Martinez**, Head of Land Systems, **Spanish Ministry of Defence**



**Colonel Glenn Dean**, Project Manager Stryker, PEO Ground Combat Systems, **United States Army**



**Colonel Ilmārs Lejiņš**, Commander, **Latvian Land Forces**



**Colonel Dalius Polekauskas**, Chief of Staff, **Lithuanian Land Forces**



**Colonel Tomas Dvoracek**, Director, Land Forces Armaments, Armaments and Acquisition Division, **Czech Ministry of Defence**



**Colonel Ing. Zdeněk Mikula**, Head of Mechanized & Infantry Section, Capabilities Development & Planning Division, **Czech Ministry of Defence**



**Lieutenant Colonel Miroslav Radoslavov**, Chief, Interoperability and Planning Department, **Bulgarian Land Forces HQ**



**Lieutenant Colonel Jan Kerdik**, Commander 73rd Tank Battalion, **Czech Army**



**Mr Fatih Yakici**, Head of Land Platforms, SSM, **Turkish Ministry of Defence**

**ARTEC**



Sponsored by:

**LOCKHEED MARTIN**



[www.futurearmouredvehicles.com/msline](http://www.futurearmouredvehicles.com/msline)

Register online using code SMIYGSA\* at check out to save £100 or call +44 (0) 870 9090 711

**SPECIAL RATES AVAILABLE FOR MILITARY AND GOVERNMENT REPRESENTATIVES**

\*This offer is available to new registrations only. Subject to availability and final approval by SMi.



#SMiFAVCEE  
@SMiGroupDefence





## VOP CZ and NIMR Automotive Signed a Strategic Partnership Agreement

After two years of cooperation and mutual acquisition of experience in the joint manufacture of cabs for the NIMR AJBAN 440A vehicle featuring an armoured cab protecting the occupants against IEDs, blasts and ballistic threats, designed for a variety of applications, including personnel transport and communication, and offering a possibility of installing a roof-mounted weapon system for self-defence, NIMR Automotive and VOP CZ signed another agreement, this time about strategic cooperation in marketing, manufacture and post-sale support of the complete range of NIMR armoured vehicles.

In the next three to five years, NIMR Automotive expects to produce more than 1,000 vehicles the aggregate value of which will exceed USD 500 million. The strategic partnership agreement may be relevant for all the armies of the Visegrád Four member countries, i.e. not just the Czech Republic, but also Poland, Slovakia and Hungary.

After the signature of the agreement, NIMR Automotive CEO Dr. Fa-

had Saif Harhara said: "This partnership will greatly enhance the company's growth opportunities in the European market, where defence spending is set to rise to support urgent requirements. This includes modernizing existing military vehicle fleets to address today's complex threat environment."

The CEOs of NIMR Automotive (UAE) and VOP CZ (CR) signed the strategic cooperation agreement during the IDEX 2017 International Defence Exhibition and Conference in Abu Dhabi, capital of the United Arab Emirates, on February 20. Together with its London and Paris counterparts, the bi-annual fair ranks among the three largest defence industry events in the world.

NIMR, a subsidiary of Emirates Defence Industries Company (EDIC), United Arab Emirates, is a leading manufacturer of proven combat vehicles in the region of Middle East and North Africa. The vehicles are designed for the harshest environments and have been fielded by armed forces of the whole MENA region. They are reputed for their robustness, versatility and high performance. Now, in cooperation with VOP CZ, they will be modified to deliver the maximum performance also in the region of Europe.

"Thanks to the agreement, VOP CZ is now able to offer and manufacture NIMR vehicles mainly in the re-





gion of Central Europe. The agreement combined with the placement of production in the Czech Republic also enhances the potential of both companies to sell the vehicles. We are also preparing modifications allowing the vehicles to be operated in local climatic conditions, including very cold regions,” added Marek Špok, CEO of VOP CZ, s. p., when signing the agreement.

The signing ceremony was attended by representatives of Ministries of Defence of both countries, Ministries of Defence of Visegrád Four member states, H.E. Alexandr Sporyš, Czech Ambassador to Abu Dhabi, leading representatives of the UAE Army, military attachés of Visegrád Four member states and other European countries, and representatives of VOP CZ, NIMR Automotive and EDIC.

VOP CZ, as a major supplier of NIMR, has now become a marketing partner not just for the NIMR AJBAN 440A model, but for the complete range of NIMR vehicles.

“The cooperation offers a combination of seventy years of experience of VOP CZ with defence equipment and the latest, state-of-the-art production facilities, and permits deliveries of top-of-the-class military vehicles to the European market, including an increase of skilled jobs and development of industrial capacities,” said Tomáš Kuchta, Czech Deputy Minister of Defence.

In the end of February 2017, a demonstration of the NIMR AJBAN 440A 4x4 vehicle for representatives of the Ministry of Defence and the Army of the Czech Republic during Industry Days in Vyškov. The objective is to offer the Army of the Czech Republic a modern high-performance lightweight armoured vehicle which can also be used as a platform for CBRN, reconnaissance, medical and other role versions.

#### NIMR Automotive (United Arab Emirates)

NIMR Automotive, a subsidiary of Emirates Defence Industry Company (EDIC), offers modern wheeled military vehicles designed for the most demanding conditions. NIMR 4x4 and 6x6 vehicles are available in both armoured and soft-skinned versions and offer



NIMR AJBAN 440A

a modular and configurable combination of passenger capacity and payload, taking into account protection and mobility requirements. NIMR vehicles are exceptionally reliable and provide the best desert performance due to a comprehensive test programme and the implementation of the highest design and manufacture standards.

#### VOP CZ, s. p. (Šenov u Nového Jičína, Czech Republic)

VOP CZ is a state-owned enterprise founded by the Ministry of Defence of the Czech Republic. Its principal mission is to cater for needs of the Army of the Czech Republic. It deals mainly in the development, manufacture, repairs, maintenance and upgrades of ground forces equipment. In the past, for example, the company upgraded the T-72 Main Battle Tank for the Army of the Czech Republic, or participated in the production of 107 Pandur II wheeled infantry fighting vehicles for the same customer. The company celebrated its 70<sup>th</sup> anniversary last year. Nowadays it employs more than 870 people and its 2016 revenues were in excess of CZK 1.3 billion. More at [www.vop.cz](http://www.vop.cz).

Photo VOP CZ a MoD CR

#### NIMR AJBAN CBRN







## Desintegrator Heads for Dangerous Suitcases

Research Institute of Industrial Chemistry of Explosia a.s. comes with means intended to combat terrorism - Desintegrators - special small charges designed for the “opening” of suspicious baggage or items, like for example suitcases, bags, drums, wooden boxes, etc. Desintegrators are offered in two versions.

The Desintegrator 13 is used for rapid opening of items/containers with soft casing by explosion from a distance of 10-80 cm, depending on the thickness of the opened object. Small charge contains only 13 grams of plastic explosive Semtex, which is enough to open suspicious luggage.

The Desintegrator 50 has a higher power, is intended for opening harder containers such as metal drums or wooden boxes. It is able to pierce steel with thickness up to 4 mm. For it serves 50 grams of plastic explosive Semtex.

Standard detonator is used to initiate the Desintegrators. Desintegrator from a distance greater than 200 mm typically does not initiate the explosive materials like emulsions, ANFO, TNT, AN/

TNT, RDX, Semtex. It confirmed tests at the company range. Desintegrator uses the action of “mass cloud” when the energy of explosion is transferred to the object by the heavy powder. It can break objects at a short distance, but at a larger distance (about 150 cm) it loses energy and does not threaten surroundings by fragments. Together with a small amount of explosive it means that these Desintegrators are safe and can be used in built-up areas.

In 2016 Pyrotechnic Service of Czech Police showed interest for these special charges. Pyrotechnicians have tested these special charges and confirmed that Desintegrators work as requested. Currently they are preparing extensive tests. Their goal is to introduce this new tool in the toolbox of pyrotechnic services. A similar concern is also expected from the Army Special Forces, Fire and Rescue Service, or IRS.

*Explosia a.s. is the traditional and most important Czech manufacturer of explosives with a history dating to 1920. Explosia a.s. is 100% in the ownership of the Czech Republic. It is an independent commercial company with a significant position not only on the market of industrial explosives in the Czech Republic.*

*The Research Institute for Industrial Chemistry ensures research and development in the field of explosives and ammunition. Apart from research and development offers services in the field of analytical chemistry, testing and safety engineering for explosives and ammunition, small tonnage production of new energy materials and special explosives.*

[www.explosia.cz](http://www.explosia.cz)





# SDD - Radiotechnical Reconnaissance Tool for Army Special Units

The SDD long-range station developed and manufactured by RAMET a.s. is an electronic intelligence tool to acquire valuable information from adversary's wide rear area. It is the only system in the world allowing reception of a wide range of radar signals propagated either straightly, or through tropospheric scatter beyond radio horizon. It can monitor ground and naval targets within an extensive reconnaissance area of 360° and 900 km.

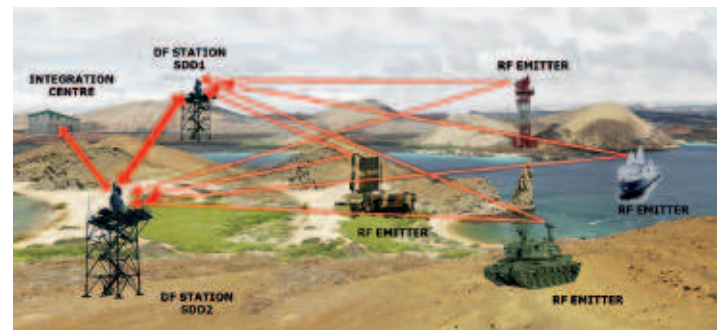


The system can be installed on ground masts. Another alternative is a mobile application where the station is located on a trailer easily transportable to any other site. An integral part of the system are data links implemented either by ground connection or via satellite communication in mobile configurations. The communication is in both cases fully encrypted to avoid any misuse of transmitted information.

The system is able to work as self-contained or as paired stations in arbitrary quantity. The heart of the system lies in integration centre which is the only workplace with continuous presence of operators, enabling remote control of individual stations and integration of all information in

one place. The information is presented in 2D virtual space where single detected targets are localized and identified based on targets database. The database is a powerful tool for operation of the system. It is created during the installation and contains all data serving to precisely identify detected targets. Operators continue to maintain the database which thus becomes a valuable support for work of the system during its life. Signal processing itself is fully digitalized in SDD stations, making use of broadband receivers. This allows to considerably speed up the process of searching radar targets compared to previous models. Newly developed phase-compensated antennas allow to perform precise identification and direction finding of targets. The SDD station is a highly efficient reconnaissance system that plays a key role in situations where monitoring of ground and naval targets within a long distance is required, with the privilege of "seeing without being seen".

[www.ramet.as](http://www.ramet.as)




[www.era.aero](http://www.era.aero)



## ERA SOLUTIONS

## MORE THAN SENSORS

UNIQUE PASSIVE SURVEILLANCE SYSTEM	DATA DISPLAYS	CONSULTANCY / TRAINING CUSTOMER QUALITY SERVICES
COMMAND & CONTROL SYSTEM	SIMULATION TOOLS	RESEARCH & DEVELOPMENT



# The New Mobile Supply Systems for Immediate Use



*The functional modules are fitted with different applicators and related components for the decontamination of vehicles, personnel, equipment, sensitive items, interiors and infrastructure.*

Kärcher Futuretech, world-renowned specialist in protection and supply systems, based near Stuttgart in Germany, provides innovative solutions in the area of CBRN protection, water supply, mobile catering, and field camp systems. Here, the Kärcher Futuretech name represents high 'made in Germany' quality, more than 30 years of experience all over the world and an extensive range of services. At IDET (from 31<sup>st</sup> May to 2<sup>nd</sup> June 2017) in Brno, Czech Republic, Kärcher Futuretech is presenting the following innovations:

**CBRN protection:** The Cage Based Decontamination System

**Water supply:** The new WTC 500 RO 2

**Catering:** Rapid Response Kitchen KRR 50

**CBRN:** The modular Cage Based Decontamination System

Based on a lightweight but robust cage frame, the new modular system consists of individual, compact and interoperable transport units, which are rapidly mounted, e.g. up to 9 modules on a 20' transportation platform compatible with the ISO twist lock system.

The "choose the modules you need"-principle allows selection of specific decontamination functions necessary for individual decontamination scenarios.

Kärcher Futuretech designed the electrically operated Rapid Response Kitchen specifically for scenarios involving little or no existing infrastructure. Packaged in four functional units (basic system) for space saving integration, the Rapid Response Kitchen can be transported to any location and set up within a minimum delay, for instance in a tent or existing building. The basic system is conformed by four units: cooking, combi steamer, water and warm water supply.

The KRR 50 E can be used to prepare varied menus for up to 50 personnel, or simple meals for up to 75 personnel. The use of top-quality stainless steel assures high corrosion resistance and maximum hygiene.



*With the new WTC 500 RO 2 it is possible to supply approx. 4000 people per day with purified water, even from salt water.*

assures high corrosion resistance and maximum hygiene.

[www.karcher-futuretech.com](http://www.karcher-futuretech.com)

**Kärcher Futuretech provides innovative protection and supply systems 'made in Germany'**  
Presentation at the IDET international trade fair, 31<sup>st</sup> May to 2<sup>nd</sup> June 2017, Brno, Czech Republic

*KRR 50, Minimal space requirement during transportation. Maximum working surface.*





# FUTURETECH

Kärcher Group



## COMPLEX SOLUTION FOR THE ARMY, RESCUE AND CIVILIAN SECTOR

- CBRN decontamination units
- Mobile catering systems
- Turnkey tent camps
- Watertreatment systems

Kärcher spol. s r.o.  
Modletice 141, 251 01  
Tel.: 602 226 104  
E-mail: futuretech@karcher.cz

[www.karcher-futuretech.com](http://www.karcher-futuretech.com)





## Even Water can be a Good Servant, but a Bad Master. Under GUMOTEX's Direction, Water will Protect you Against Itself.

The Czech Republic, with a bit of exaggeration, is called the roof of Europe. The answer to the question "Why?" is quite simple. Many rivers have head waters in our country, but almost none of them flow into our country from elsewhere. All the water then drains away like from a proverbial roof. And if there are strong torrential rains or the spring thaw occurs, they can cause huge mischief.

Unfortunately, we have extensive experience with floods in the Czech Republic. Already in the fourteenth century, water washed away the fabulous Judita's Bridge, and only a few decades later, water badly damaged the Charles Bridge at the same place. This same scenario has repeated several times, even up to today. We need not only search in the historical annals to see what water on the loose can do. We all still have fresh memories of the devastating floods of 1997 and 2002. And moreover, it has not even been four years since the Vltava River in Prague had a flow rate of over three thousand cubic meters of water per second. Also at that time, the flood claimed lives and caused enormous damage to property.

### Concrete troughs do more harm than good

Neither has the often well-intentioned, but not well thought-out interventions, in the second half of the twentieth and the first decade of the twenty-first century helped. They bear the hallmarks of the idea that a person can get the better of nature. In response to the floods, the river and stream beds were straightened and made from concrete. Nowadays, the water flowing through cannot naturally expand out as it was possible earlier thanks to meanders in the landscape. So nothing is obstructing the force of a flood wave on

its way. On the contrary, the force continues to grow causing more damage when the waters finally burst the banks.

Building on farmland, which has been the trend in recent years, poses an even bigger problem. Instead of ground which is able to soak up the rain water, we have asphalted car parks or growing urban satellites. The water that used to enrich our groundwater in the past, flows to the surface. On top of that, you have to add the fact that the baulks and hedgerows, which earlier helped to retain water in the landscape, disappeared from our fields a long time ago, and that the use of heavy farm equipment and the planting of unsuitable crops have changed our land from a thirsty sponge into rather a slide, so you are asking for trouble.

### Brevity is the soul of wit

Therefore, it is no wonder that an efficient and easy to use a flood barrier system has been developed in the Czech Republic. The development and testing was mainly done by professionals from the company GUMOTEX in cooperation with the clever heads of the Laboratory for Water Resources Research, Water Structures Institute, Faculty of Civil Engineering, Brno University of Technology. The resulting solution is very simple in its principle.

### Benefits of GUMOTEX flood barriers

- Mobile system of "water against water"
- Low demands on logistics due to being filled with water
- Storable
- Useable on a variety of surfaces (e.g. concrete, asphalt, gravel)
- Impervious connectability to unlimited lengths
- Can be connected into angles and to copy riverbeds
- Intended for repeated use
- Tested and recommended by the independent testing laboratory (Laboratory for Water Resources Research, Water Structures Institute, Faculty of Civil Engineering, Brno University of Technology, Czech Republic, T. G. Masaryk Water Research Institute in Prague, Czech Republic)





The basis are coated textiles, this is figuratively speaking the daily bread of Gumotex. Already in 1950 protective clothing was being sewn from coated textiles at the Břeclav plant, and the company has continued that tradition. Most of the company's products are also intended today to protect the health and safety of customers. The range of products has grown quite significantly. In addition to working clothes, inflatable mats, and boats, products from polyurethane foams are being made here. Even though orders for the automotive and furniture industries dominate manufacturing, GUMOTEX is also well-known by the paddlers, and last but not least, by the rescue services.

They probably know the product line Rescue Systems best: including tents, decontamination showers and basins, or aids and special suits for rescuers, as well as the flood barriers. And what does such a flood protection system by GUMOTEX really look like? First of all - it reminds us of a construction kit. And maybe you will be a little bit surprised that it uses water for the fight against water. This time, however, harnessed in ten meters long bags with a diameter of 80 and 40 cm or in cubes with a steel frame that can hold back flood waters up to a height of 1.35 meters. The modular system, where the individual bags and cubes are connected into a dike of any length, allows intervention effectively and very quickly.

#### **When you are playing for time, you need a quick but a reliable solution**

Speed is crucial in the case of flood water. Although early warning systems are constantly being improved, they are often not able to predict torrential rains. Even today's modern equipment is not able to pinpoint exactly at which place the storm will exactly strike. Yes, they know that the rain will be coming. But they can only recognize "at eleventh hour" whether the rain will be, just as in Běšiny in the Bohemian Forest where flood disaster swept through in 2012.

Also, the localized character of today's weather plays against us. There is nothing unusual about the fact that in one city a drop does not fall, while a few kilometres away, people are having to fight for their lives and property in an unequal struggle with the elements. This phenomenon has even got its own, uncomfortably apt name - the flash flood. And provided that the people in the area affected by a flash flood can learn about it in advance - they only have minutes to get prepared, rather than having maximally some hours.

A river or a local stream can be overflowing in minutes, and all that is left to do is to stop the water or to drain it into a new riverbed to prevent any damage to the surrounding buildings or other objects. In most cases, it is too late for the slow and difficult filling of sandbags and piling up of embankments. The GUMOTEX's flood barriers manage to do them both. Thanks to their stability they can raise already existing dikes and riverbanks. Their modular system allows creating an almost unlimited long row of barriers which also can be connected and built at right angles, to copy the riverbed, or to create a completely new riverbed.

#### **For a smaller and even a stronger "flood water"**

If you are not expecting a flood of biblical proportions, bags being filled with water are an ideal tool. Even two people can manage the deployment of them easily. After unpacking, the pictograms directly on the bag show them how to proceed. Then, you only have to



choose which way to lead the temporary dike, how long and high it should be. The bags have to be chained to one another tightly. Additionally, they can be piled up in triples on each other like a pyramid, so they can create a higher barrier. Besides floods, they can also be used by the fire fighters, who can easily assemble a tank of them if they need a bigger water reservoir. It is not important on what surface you arrange them. They will work equally well everywhere, whether they are placed on concrete, asphalt, soil, or gravel. It is important to remove sharp objects and to make sure there is a maximum terrain inclination of 2°.

The cube barriers with steel frames are intended to be used in cases where very large amounts of water have to be held back. Like the bags, they can be connected to another impenetrably. However, unlike the bags, they are able to stand even when they are not filled with water thanks to the fixed frame. Even the independent experts from T. G. Masaryk Water Research Institute in Prague recommended them for their durability and efficiency.

A big advantage is that you can use both types of flood barriers made by Gumotex again at any time after draining water. This is possible thanks to the high resistance of the coated textiles and other materials, which the company buys only from reliable and proven suppliers from Western Europe. The use of modern technologies such as high-frequency welding and hot-air welding as well as sewing on automatic machines is common place in production. Demanding stress tests ensure that you can rely on the flood barriers from Gumotex under any conceivable circumstances.

#### **We will not get rid of floods soon**

Unfortunately, the reports by climatologists are quite clear. We can expect a lot more flooding in the future. Today, we rarely experience typical meteorological cycles which were the basis of the colourful weather proverbs of our ancestors, such as "St. Catherine on mud, Christmas on ice" or "Martin on a white horse". The main characteristics of the weather nowadays are unpredictability and extremes. Periods of drought and torrential rain can take turns several times a year. Or on the contrary, the weather gets stuck in one place for a longer period. Two years ago, while we in the Czech Republic enjoyed an unusually mild winter, it could not stop snowing in North America.

Both of these examples demonstrate the risk of flooding. And in the case of flood water, the saying is doubly true that it is better to be prepared than surprised. The flood barriers system from GUMOTEX have not only been used by municipalities and cities, rescuers and industrial companies in the Czech Republic, but also abroad due to its versatility, ease of handling and efficiency. Satisfied customers include Prague, the capital city of the Czech Republic or the Škoda Auto plant.

[www.gumotex-rescue-systems.com](http://www.gumotex-rescue-systems.com)





**www.robodrone.com**

# Increasing the Security of Virtual Environments ICT through VMware NSX

IMPROMAT-COMPUTER has successfully implemented VMware NSX at several major customers, with the practical results of increases the security of VMware virtual infrastructure, simplifying and streamlining the management of the ICT environment and reducing overall costs.

- The safety analysis, consultancy, counselling;
- Implementation, operation and technical support for standard and sophisticated security technology;
- Simulation of DDoS;
- Data loss/leak prevention (DLP);
- Network infrastructure security (VPN-Virtual Private Network, firewalls, etc.);
- Global solutions for antivirus and antispam protection of the ICT infrastructure, DDoS protection;
- Global Endpoint Security;
- Remote Security control;
- Emergency plans, safety plans for Backup and Recovery.

The diagram illustrates the VMware NSX architecture. It shows a multi-tiered stack. At the base is the 'Existing Physical Network'. Above it are several layers of hardware and software components, including switches and routers. The top layer is a large, colorful, isometric cube labeled 'VMware NSX'. To the left, a cloud icon is labeled 'Internet'.



# PBS Velká Bíteš - Aerospace Technology, Surface Treatment

## Company profile

První brněnská strojírna Velká Bíteš, a. s. (PBS), has been active in the field of high precision engineering for over 60 years. The key area in the company's scope is most definitely aerospace engineering: development, production, testing and certification of small turbo-jet engines and auxiliary power units. PBS also provides services in galvanising surfaces, namely anodising aluminium surfaces, for aerospace, defence, and automotive industries.

## Aerospace products, cryogenics

Thanks to the ratio of mass and dimensions to the thrust the PBS turbo-jet engines designated for both, the small manned and unmanned aircraft, targets and drones with a guaranteed thrust of 200 - 1,300 Newton, currently rank in their category among the best ones in the world.



**Turboprop engine TP100**

Development and production of turboprop and turboshaft engines with the output of 180 kW designed for light manned as well as unmanned aircraft, and UAV systems, are part of the manufacturing programme.

For nearly 50 years, PBS has been developing and producing auxiliary power units (APUs), that deliver start-up and backup power supplies for airplanes and helicopters. The PBS manufacturing programme further includes air-conditioning systems for air-

planes and helicopters, cryogenics - helium turboexpanders or cascades of low-temperature compressors, which are, for instance, operating in the CERN particle accelerator in Switzerland.

## Precision casting, decanter centrifuges

PBS is a foundry of great importance performing precision cast operations, working with high heat resistant cobalt- and nickel-based super alloys - supplying the power industry with combustion turbine cast blades, and precision cast turbine wheels for propulsion systems.

The company is involved also in the environmental care, namely by producing decanter centrifuges that are able to separate solid and suspended particles from liquids.

## Precision machining, special technologies, surface treatments

PBS Velká Bíteš further offers 5-axis CNC precision machining of all types of structural steels, including stainless and tool steels, and all types of aluminium, titan, and other metallic alloys, special technologies such as thermal processing and vacuum soldering in furnaces, grinding and inspection of gears, electrical discharge machining, PVD coating as well as galvanic surface treatments, especially anodising aluminium and aluminium alloys surfaces.

## Certifications

PBS quality management system is certified in accordance with ISO 9001, AS 9100, and ISO 14001. PBS is further a holder of Design Organisation Approval (DOA), Production Organisation Approval (POA) and Maintenance Organisation Approval (MOA) issued by the European Aviation Safety Agency (EASA) and Nadcap.

[www.pbsvb.com](http://www.pbsvb.com)

# TENEO 3000 - Connectors and Components

TENEO develops and manufactures connectors, components and cable harnesses with high mechanical strength and reliability for use in severe operating and climatic conditions.

Our products are used mainly in the mining, transportation, military technology and aerospace industry. We are also manufactures and suppliers of contact systems, special parts for electrical applications, precision machined parts, including the production and supply of contact systems according to individual customer's technical requirements. We offer development, testing and production of connectors, cable harnesses and complete units starting from prototypes to mass production. We design and manufacture prototypes, carry out testing and optimizing

the supplied components. We cooperate with partners from more than 15 countries, including the USA, Russia and Japan.

At the trade fair IDET in Brno, which will be held from 31<sup>st</sup> May 2017 to 2<sup>nd</sup> June 2017, we will present representative of connector product lines SR, RM, PK, VS, BS, ZGH / ZGT, RWN, TENEO-POWER, TSL and TEX - explosion proof Series.

Our great achievement of recent times is a newly developed line of connectors TNR-POWER. These are high performance connectors designed especially for power and mining equipment. The connectors are designed for very extreme conditions, environmental rated IP68. They are designed for continuous voltage rating 1000 Volts and maximum current load 1140 Amps, and even peak 1300 Amps.

[www.konektory.cz/en](http://www.konektory.cz/en)





# Talks with German Arms Businessmen

The very first official talks of the defence and security industry associations of the Czech Republic (DSIA) and Germany (BDSV) took place on 13-14 March 2017. In the talks eve, an ice breaking dinner took place in the Prague DAP Hotel. The B2B part was held in the Czech MoD main hall, attended by 13 BDSV companies and 21 AOBP businesses.



The total number of talks participants counted 55 industry representatives, Tomáš Kopečný as the Industrial Cooperation Department director for the MoD, also the Germany Defence Attaché to the Czech Republic LTC Stefan Halberstadt and the head of the Czech commerce department of the Embassy to Germany Petr Jaroš. Companies could present their production portfolios and search for business partners, if

applicable. Some of the already running activities of the German companies in the Czech Republic were quite surprising and the interest in establishing further contacts with Czech manufacturers was encouraging. Similar was the interest of Czech companies in their inclusion into the supplier chains for German companies or join in research and development programmes.

Even though the German companies' production power is above comparison to Czech industry production, synergy potential to use is obvious. Similar to civilian industry branches. Along with the working cooperation in the branches of electronics, air and space research, we have noticed interest in other areas, such as RPG, simulations and training, air defence and others. It was nice that together with the leading German companies, such as KMW, MBDA, Diehl, Rheinmetall, also small and middle businesses, such as Dynamit Nobel Defence were present there. AOBP President Jiří Hynek and BDSV Director Andreas von Büren agreed on continuation in the cooperation on a two-year basis, which dates the next talks to hold in Germany in 2019. Most of the asked companies viewed the event positively therefore we will keep supporting and boosting activities towards Germany, also in a smaller scale. For example, a meeting of defence and security industry companies will take place at the Czech Embassy in Berlin on 29 June 2017 backed by the Czech Ministry of Foreign Affairs (PROPED). The companies will receive details of the meeting later in cooperation with the embassy and BDSV. The presentations of each of the companies are available at DSIA.

Photo Šárka Cook

## Defence Research and Development: New Opportunities

Research, development and innovation (RDI) form the conditions for an advancement of our industry. Defence research is undoubtedly an investment in national security and a basis of a long-term development of defence industry. The Czech Defence and Security Industry Association (DSIA) in the effort to coordinate discussion with the institutions who have RDI funds available has established its RDI section that, however, does not include all AOBP members.

Therefore, in cooperation with the Ministry of Defence (MoD), we arranged a workshop for all AOBP member companies on 9 March 2017, having in mind the purpose to discuss the options for the involvement of Czech companies in the research projects launched by MoD or by Technology Agency of the Czech Republic (TACR), or for how to use EU resources. The MoD representatives informed in detail of the situation in defence department whose amount of funds allocated to defence research is far under corresponding the ambitions of our research organisations and industry. Most funds go to currently opened programmes, purchases, institutional support, while the rest for companies' competition is small. Therefore, it is necessary to search for other resources. These are available from TACR and EU. In that relation, we listened to a thorough explanation completed with practical procedures how to get to each of TACR programmes. A number of companies learnt experience with MoD and TACR programmes, which caused practical remarks to the process and administrative requirements of providers. A completely new resource of defence research funding has appeared on EU scene in 2017. Until 2016, EU refused defence research funding by its budget. Only dual research funding was allowed. I can see three main reasons. The first lies in national defence ministers' fear of defence budget cuts by the amount provided by EU (legitimate fear especially in the countries allocating quite high amounts of funds to defence research). Secondly, EU level is missing a customer, research results consumer. Customers are national states who are both protectionist and sovereign in terms of defence equipment purchase. The commission is struggling to break barriers through introducing common purchase mechanism, but it provokes justifiable concerns of many countries. The third reason is EU's attitude to defence as it has

been presented at security crises. The call for exact steps after the deterioration of security situation in EU and lagging technology behind USA and other fast growing economies resulted in the decision of contributing to defence research in EU. EU plans to allocate modest EUR 30 mil a year by 2020, but then approximately EUR 500 mil a year. Yet, the Commission will only be the third investor in defence research behind UK and France but it is worth striving anyway. It means that our companies need to look for partners, establish international consortia entitled to apply for the funds and to introduce ideas of research projects. The research funds may be expected to aim especially at strategic projects putting our companies to the position of research subcontractors rather than main coordinators. What you need for that is contacts to the main European players in Germany, France and other countries. For that matter, bilateral talks with Germany took place in January 2017 and we are negotiating B2B with French companies. Ideas of how programme administration could improve and some system errors be corrected were mentioned at the workshop. We have sent a motion to solve via AOBP president's letter to deputy Prime Minister Pavel Bělobrádek, who is responsible for research and development in the Czech Republic. Here is a part of it: System error is in the impossibility for the Minister of Defence to fund participation in an international defence research. Working long time on research programme preparations (for example within EDA) and then hoping that the Ministry of Education, Youth and Sports after several years of negotiations allocates funds to the programme is not the assurance expected by the companies or MoD. It is a reason of low involvement in the international defence and security research from the Czech Republic. It is quite a large risk especially for small and middle size



enterprises (SME). Another trouble is in the complex administration of participation in national programmes as each provider uses different methods and software. Requests for various certificates and documents available to government administration in the central databases should not exist in a modern society either. It would make the involvement much convenient particularly for SME. Another remark directed at research institutions' engagement in programme implementation phases. For example, universities are not encouraged to finalise a project until production as they receive funds for publications, demonstrators, etc. A financial motivation towards commercialisation is missing. Evaluation criteria need reconsideration. That is briefly all concerning the workshop conclusions that have been sent in a letter to Pavel Bělobrádek. The workshop primary conclusion can be found in understanding the opportunities that are or will be offered. Obviously,

we are going to live in an interesting period full of changes and opportunities that would be a pity left unused. It is a challenge for government, in particular, as government is who should largely fund defence research but it should also participate in the arrangements because government is the main and often sole consumer. We should realise defence research is different from purely winning funds to implement the project. It is a long-term process forming the scientific, research and development staff. It is a process contributing to the improvement of engineering skills and eventually to the security of our country, too. We can acquire an important part of equipment for our armed forces from our research, development and production through the process. Our involvement in international research than contributes to collective defence as well as to the progress of our own research capacity.

Dušan Švarc

## Too Regulated EU

Purchase weapons at European defence market sound voices from EU and dictates the European regulation to the member countries (Defence package regulations 2009/43 and 2009/81). But rather than a purely market-oriented issue, defence is primarily an issue of politics and strategy. Everybody who has ever contributed to a larger defence purchase knows how the business is. Calls for open tender make sense where equal conditions for free competition exist. We know how strongly the defence market is regulated and the customer is government.

It is the meaningfulness of the European defence market and its specifics that keeps being discussed in EU - Commission and EDA. Tender is the right way if the competition conditions are fair and the playground lines are drawn in accordance to the free market rules (as determined in the Treaty on European Union). This is the moment where we are facing oddities when purchasing defence equipment. EU policy is pressing competition but thus it also wants to solve duplicity production. Is market to solve duplicity, that means creates monopolies? And eliminate competition in this way? That is a disconcert. In fact, it is much easier. The point is determination of defence equipment to that tenders should apply and equipment of strategic importance that deserves political "treatment". The matter is to find the balance between political interventions and market forces, to find the line when competition should apply and when market rules may be neglected in the national security interests to purchase directly from the national manufacturer. The problem is each country has got the line somewhere else. Some have the line close to market forces, maybe because of strong home industry able to compete and succeed in almost every purchase, while some other on the contrary very close to political decisions, because of an aggressive neighbour round the corner, for example.

And the Commission as the treaty keeper is struggling to control. Here it threatens with the European courtyard, there exerts political pressure or appeals to European values, eager to make nations at least feel embarrassed. It results in pointless tension between nations (particularly between small and large countries), but especially between the Commission and nations. Brussels cannot distribute a uniform level of perceiving threat and fear, can it? Many countries have an issue with it. Here geography and history count. What stands in Ireland is completely different in Finland. To maintain readiness to action and eventually have the materiel capacity for defence, the countries have to search for paths through the legal jungle via a very complex administrative process supported by law experts and consultants. The statistics show the coun-



tries achieve their goals anyway in the end, which is a paradox. Only approximately 20 % of defence purchases (from financial amount point of view) apply the defence regulations. The rest is done "alternatively". Searching for the optimum solution complying with national security interests is however more legally complex which implies more costly and lengthy. At least for the countries that have implemented the appropriate regulations at a disadvantage or cannot utilise them completely. The result is especially the large countries massively purchase from home producers and the small ones learn the same. I can often hear in Brussels from the Commission the countries thus circumvent EU legislation and cheat. I do not think so. The countries simply implement their national defence policies for which they are accountable to the nations not the Commission. In summary, the new regulation has brought little good and failed in moving us forward while it was meant a tool to strengthen competitive abilities of the European defence industry.

Dušan Švarc, photo illustration EDA

## How to Proceed with European Defence Agency?

So much hailed was the European Defence Agency (EDA) in 2004 at its establishment. I witnessed it, short after our accession to EU. Optimistic words were said of cooperation, of a more efficiently spending of defence fund under the motto of more spending, more together, more efficiently. The goal was drawing abreast of the USA as much as possible and disallow too much pressure in the technology level from the countries in the East, particularly Russia and China.

All were full of expectations, in hilarious mood. Military were All were full of expectations, in hilarious mood. Military were expecting

better weapons, politicians saved funds and higher cohesion of the member countries, industry was expected to consolidate production



capacity surplus and industry expected larger purchase. In addition, the EDTIB (European Defence Technological and Industrial Base) building policy appeared expecting support from defence market through strengthened competition. It is called EDEM - the acronym for European Defence Equipment Market. The EU Commission began working on the directives to a stronger regulation of defence market, EDA ordered studies of the procedure and it seemed to be the right way for a moment. However, hardly any of the new countries realised what industrial consolidation means in real. That it implies somebody will have to leave the game as the governments were unwilling to allocate more investment in defence, vice versa expenditures went downwards. So what really happened was that the shrinking cake was redistributed where some supported by governments and public funds cut a bigger portion from the cake. Some of the new countries naively thought EU accession will sell better their cheaper products, it means also defence technology, in the richer countries. The situation is the other way round in many cases, though, and we as Europe end up purchasing expensive products and our defence companies live mostly on export outside EU. Somehow, we felt there would be winners and losers, but in contradiction, I can see only few winners. There are only more or less defeated. In comparison to USA and growing investments of China in defence and sale in Russia, EU keeps falling behind. Current main successful exports come rather than from current research investment from the investment done decades ago (but exceptions) and from the security situation. It is possible to state that Brussels interventions, more regulation, political declaration and EDA establishment failed to bring the expected effect. The Commission is aware of the situation (see Council conclusions 2013, 2015, 2016), admits EU defence industry lagging, lost positions at the global market, and brings therefore another solution. This time it is money instead of regulation. Hopefully it has realised the only thing a simple redistribution of the same cake by Brussels intervention causes is higher tension among nations. It plans to allocate approximately € 30 m a year to defence industry until 2020 and approximately € 500 m a year after 2020. Here we come back to EDA. Being a defence ministers' tool (who are eventually the customers for research outputs and persons responsible for defence), EDA was expected to determine what will be in research focus and also will administer it. It seems so, at least

in the preparation phase. However, the Commission seems to be going to take over the implementation of the larger sums of money after 2020. The Commission probably will not miss the opportunity of a stronger voice in defence issues as the defence of Europe is turning into a supra national interest, albeit agreement scope says otherwise. The argument is strong - it is "our money" so we, understand the Commission, want to hold the stack on its spending. What about EDA? If the defence ministers allow loosing their deciding control on defence, EDA will end up empty-handed again. Why should not? It suits leading nations and lesser ones are silent. The leading nations execute more control via the Commission. In EDA, almost everyone has a grasp on it and member countries have even equal, but not equally strong, vote. In addition, some of the lesser countries openly demand their shares in industrial production because they want more than being simple consumers of defence technology. It is EDA that should be a platform for such discussions, having been established as an intergovernmental organisation, as an expert defence forum, as a strong voice for defence representatives against European pacifists and "Brussels administration". But EDA slowly turns to a part of the "Brussels administration" because there are equal ones and more equal ones in EDA, too. And the more equal ones are occupying all EDA key positions through which the lesser ones' interests hardly pass. That brings us back to the beginning. What can we do in the position of a lesser and new EU country? It seems a way might go through strengthened regional cooperation, advancing our interests with the closest partners, such as V4 within EDA. As an intergovernmental organisation, EDA should be our tool, a platform for the weaker ones. But looking at practical results from V4 countries cooperation, it is even a sorrier sight than EDA's results. But money for defence research will be distributed this time - more than little money. It is worth thinking of how to cut a piece of the cake and how to use EDA according to our interests, isn't it? With regard to the size of our country and corresponding influence, we should coordinate the process with regional partners, especially within V4 group. Or is it really true what an ex-minister of finance of ours said that if four poor mice join together they make one big poor mouse? I am afraid from time to time that some in Brussels are still looking at us that way, but we are hopefully a bit further.

Dušan Švarc

## CEVRO Institute Offers a Unique Way to Study in Oxford Style

**Most people know names like David Cameron, Tony Abbott or Rupert Murdoch. They are different personalities, each of them has a specific view of the world, but there is something that connects them. They are exceptional people. Why? They studied PPE Master's program. In an Oxford way!**

For those who seek a degree, CEVRO is the first university in the Czech Republic to offer a unique, fully accredited and

truly international Master's program in Philosophy, Politics and Economics (PPE) where students can specialize in "Studies of Transition", "Austrian Economics" and "International Politics". For those who look for a great study abroad experience, CEVRO offers a variety of semester-long courses with local and international faculty. This international faculty is led by directors of first-class U.S. PPE programs at Duke University, Michael Munger and George Mason University, Peter Boettke. Studying offers, among many other things, the platform to critically assess and to analyze political and economic problems faced by modern societies and its philosophical underpinnings.

**Be a part of the few!**

In the first year we have welcomed students from the United States, Canada, Ireland, Germany, Switzerland, India, Armenia, Israel, Slovenia, Serbia, and the Czech Republic among others. Their second semester has successfully started. Join us and study with them in Prague during the academic year 2017/2018. [www.cevroinstitut.cz](http://www.cevroinstitut.cz)



Students of PPE Program with the President of University prof. Josef Šíma



# Representative Editorial Board Annual Meeting and Launching the Security and Defence Technologies Catalogue 2017-2018



The representative editorial board of “Czech Defence Industry and Security Review” and “Review for defence and security industry” journals met in the Congress Hall of the Military Club Prague on 12 January 2017 to look back upon the previous year and discuss the future vision and details of both periodicals advance. Attended by numerous invited guests from all spheres of Czech security community as well as by a number of defence attaches accredited to Prague, the expected launching ceremony of the “Security and Defence Technologies Catalogue 2017-2018” followed the editorial board meeting together with the announcement of appraised personas, companies, and products of the Czech defence industry. The night could not miss the raffle of traditional as well as surprising presents and souvenirs.

This year, the following persons attended the editorial board presidium meeting: Col Martin Hrinko, Czech public order police director, Police Presidium of the Czech Republic, on behalf of Police President; Brig Petr Dohnal, director general of Prison Service of the CR, Ministry of Justice of the Czech Republic; Maj.-Gen. Drahoslav Ryba, director general of Fire Rescue Service of the Czech Republic; Antonín Sed'a, Member of the CR Parliament, Head of the Permanent delegation of the CR Parliament at the Parliamentary Assembly of NATO, President of EURODEFENSE CZ; Šárka Cook, REVIEW magazines Editor-in-Chief and MS Line director; Jiří Hynek, president Defence and Security Industry Association of the CR, editorial board chairman; General Josef Bečvář, Chief of the General Staff of the Armed Forces of the CR; Tomáš Kuchta, Deputy Minister - Head of the Industrial Cooperation and Organisations Management Division, Ministry of Defence of the CR; Miloslav Stašek, Deputy Minister for Economic and Operational Section, Ministry of Foreign Affairs of the CR; Martin Šperl, Deputy Director of Department for export strategy and Management Service, Ministry of Industry and Trade of the CR.

Nowhere in the world, any editorial board presidium of similarly oriented magazines can proudly present so many competent and erudite personas of security community, said Miloš Soukup, lone-time former Editor-in-Chief of the Reviews and MS Line director during the editorial board meeting. All present to the meeting clapped their hands to his words.

At the beginning of the meeting, Jiří Hynek evaluated both magazines activities and prospects not only in 2017. Among others, he suggested to discuss via survey cards, semestral vision of CDIS Review and acquainted the auditorium with the different role of the two periodicals in promoting Czech defence industry home and abroad. Editor-in-Chief Šárka Cook presented the publication plans and distribution network of the magazines in 2017, pointing out IDEX 2017, Defence and Security Industry Association's (DSIA) general assembly, IDET, PYROS, ISET 2017, NATO Days and other exhibitions in Kielce, London and Paris. General Bečvář appreciated the continuously improving cooperation with AOBP and its media platform and talked about the useful partici-

pation of the Czech defence industry representatives to his business trips abroad propagating Czech reputation in the world. Maj.-Gen. Drahoslav Ryba accented the opportunity of the Fire Rescue System presentation in Reviews, and magazines' educative role. He thanked the auditorium for the chance to immediate discussion of the issues related to general security as well as some common details. Deputy minister of defence Tomáš Kuchta broadly explained the policy of and the ways to implement the Strategy of armament and defence industry support and observed the current balance of the magazines resulting in their optimum usage and distribution. Deputy minister's positive assessment of the economic diplomacy project contributed by three ministries was supported by the deputy minister of foreign affairs Miloslav Stašek who revealed some funding details of the programme. Martin Šperl said the support to Czech defence industry with its added sophisticated support stands permanently a priority of the Ministry of Industry and Trade and is in the same way considered in the Ministry's strategy until 2020. He highlighted the cooperation with CDIS Review, primarily within ministry's displays at trade fairs officially attended also by AOBP, such as Abu Dhabi, Paris, London, in prospective Kuala Lumpur, but also at the incoming missions such as at FFF 2016. He also mentioned the need for sy-



nergic actions of the ministries of industry and trade, of defence and of foreign affairs, and for connecting particular partial activities, as well as the necessary diversification of production and action. Col Martin Hrinko and Brig Petr Dohnal underlined and appreciated the significance of the magazines to the support of stable security environment. The importance of the support of research, development and innovation, as well as of scientific and production foresight reflected in the speeches given by the House of Representatives member of the Parliament of the Czech Republic Antonín Sed'a and ex-representative and honorary chairman of the board of editors Miloš Titz, CSc. All in auditorium listened with high interest to the analysis of the attitudes, resonating through the Czech Republic, to the EU regulation at that time under preparation

on firearm acquisition and possession, presented by Milena Bačková working for the Ministry of the Interior security policy department. Its Editor-in-Chief Eva Soukupova launched in collaboration with DSIA president Jiří Hynek, Czech Army Chief of General Staff General Josef Bečvář and the member of the House of Representatives of the Parliament of the Czech Republic Antonín Sed'a, the new, already tenth in order issue of the Security and Defence Technologies Catalogue 2017-2018 applauded by almost 200 guests. They had been invited to come from the Czech Republic as well as from abroad to the launch ceremony and to the following ceremony of awarding the outstanding personas and companies within the Czech defence and security community in 2016. Antonín Svěrák

## Awards to the Best in 2016

Once the annual meeting of representative editorial board was over, the friends of Review magazine met for the following ceremony. In the process of the night the guests could listen to a music performance by Gabriela Boháčová with the accompaniment by Thomas Jochman, enjoy the dinner, the raffle and then the award ceremony of the best personalities, companies and products in granted by MS Line, s.r.o.

The prizes to the awarded were presented by: Antonín Sed'a, General Josef Bečvář, Maj.-Gen. Drahoslav Ryba, Brig Petr Dohnal, Tomáš Kuchta, Jiří Hynek and Lt-General Jiří Baloun - 1<sup>st</sup> Deputy Chief of General Staff of Armed Forces of the CR. The master of award giving ceremony was Jan Pejšek, Director of the Communication Department of the Czech Ministry of Defence.

At the beginning, the Editor-in-Chief of Review magazines and MS Line director Šárka Cook presented "Acknowledgement of long-standing support to MS Line Publishing House's media activities" to Tomáš Kuchta, deputy minister - Head of the Industrial Cooperation and Organisations Management Division at the Czech Ministry of Defence, Brig Miloš Svoboda, deputy director general for prevention and civil emergency preparedness of the directorate general of Fire Rescue Service and to Jaroslav Pecháček, AOBP vice-president and SWORDFISH s.r.o. executive director. A Commemorative Certificate for TESLA a.s. Company that marked 95 years since its establishment in 2016 was given to TESLA a.s. president František Hála and military telecommunication technology division director Michal Nováček.

### NEW PRODUCT OF THE YEAR

#### PK 4 (KAGA) - Mobile field kitchen by AGADOS

Award received by AGADOS executive Petr Ostrý and General (ret.) Pavel Štefka.



After 60 years, AGADOS has developed a new field kitchen PK4. Using the latest technology and materials the field kitchen can move through difficult terrain, easily deploy and put in operation and is flexible to make a vast scale of food.

AGADOS Company seated in Velké Meziříčí is the leading and traditional Czech trailer maker with experience of special projects for foreign military forces (e.g. Sweden, Qatar, and others). Special trailers have

been fielded by the Czech military, police and Fire Rescue Service units.

AGADOS works on other projects of the kind to be presented at IDET, PYROS and ISET exhibitions in 2017.

### PRODUCT OF THE YEAR

#### AGS System by RETIA, a.s.

Award received by RETIA a.s. general director Petr Novák.



RETIA, a.s. handed the last special mobile Alliance Ground Surveillance (AGS) operator unit over to the North Atlantic Treaty Alliance in the last year. AGS should be the pillar of NATO forces protection in the theatres. This supply completed RETIA's challenging order place by NATO demonstrating its affiliation with the leading makers of special electronic systems in the Czech Republic and in the global scale. The instrument comply with the strict NATO security requirements for information security and top technology know-how.

### IMPROVEMENT OF THE YEAR

#### GUMOTEX a.s. Company

Award received by GUMOTEX a.s. sales manager Radim Krmiček.





The GUMOTEX Rescue Systems products have been helping to save human lives and property in crisis for over 20 years. They are tested under difficult conditions by the first respondents themselves. The new products within GUMOTEX Rescue Systems inflating tents certainly comply with the strict criteria applied by NATO member forces.

#### MANAGER OF THE YEAR Igor VALNÍČEK, EVPÚ CEO



In 2016, EVPÚ Defence a.s. marked the 15<sup>th</sup> anniversary since its establishment and produced the largest amount of manipulators in its history settling the record to 524 pieces for many customers all over the world. The most selling manipulator type is MSO-2 with more than 3,000 pieces sold over the 15 years. In this year, the company won the tender opened by the Police Presidium for one monitoring vehicle and 5 pieces of portable mobile monitoring systems for Czech Police. EVPÚ Defence a.s. has also significantly enhanced the optoelectronic systems technology. That and its effort paid to continuous improvements and advances rank the company to the world leaders in the branch. We thank general director for long-lasting using our media to present the production and trade activities of EVPÚ Defence.

#### MANAGEMENT TEAM OF THE YEAR AURA, s.r.o. Company

Award received by AURA, s.r.o. general director Filip Engelsmann and executive director Zdeněk Buřival.



AURA, a truly Czech company, has aimed its main activities at the development of information systems and their implementation in armed forces, industry, distraintment offices and public administration. Looking especially from the export point of view AURA finds the year 2016 successful. The company completed supplies of codification systems to Sweden, Australia and Algeria, ran a four-month codification course for Algeria military officers, provided arrangements and information for the third international codification courses of NCS College 2016 in Brno and in late 2016 started working on the implementation of MC CATALOGUE 5 codification information system for United Arab Emirates armed forces. It is obvious that AURA management led the company to provide pro-

ducts and services of such a high quality so much that it became the world leader in codification and contributed thus to promoting truly Czech products in the world.

#### PERSONALITY OF THE YEAR Josef TICHÝ, EXPLOSIA a.s. president



Under the leadership of its president Josef Tichý, Joint-stock company Explosia has achieved the 2016 turnover exceeding 900 million in the Czech currency. Such a sum is just a short way to the magic billion, which is planned in 2017. The company wants to attain further expansion through the new hall intended for fully combustible propellant charge cases production among others. It is now purposefully modernizing its production of smokeless powders to be able to cover the growing demand. For the same reason, it means growing demand, it increased the capacity of spherical powder shop already in 2015 and in 2017 it plans to put in operation a testing line of new technologies to be able to intensify the preparation of combustible ammunition parts and to respond faster to the new trends in large calibre ammunition, especially concerning the modular propellant charges for 155 mm calibre cannon howitzers.

#### COMPANY OF THE YEAR CZECHOSLOVAK GROUP Holding

Award received by CZECHOSLOVAK GROUP Holding sales manager Aleš Klepek.



CZECHOSLOVAK GROUP (CSG) is a holding resuming the Czechoslovak industry tradition and joining the traditional Czech and Slovak companies of defence and civilian industry production. CSG has more than 6 thousand employees and you can meet the Holding products on all continents. The Holding closely cooperates with TATRA TRUCKS Company affiliating companies such as TATRA DEFENCE VEHICLE, EXCALIBUR ARMY, RETIA, AVIA Motors, ZTS METALURG, DAKO-CZ, JOB AIR Technic, ELTON hodinářská, EXCALIBUR INTERNATIONAL, KARBOX or DHS Logistics. CSG also cooperates with the world leading producers of defence technology, such as General Dynamics and NEXTER. Probably the most profound changes in this sense took place in the last year reflected in the Czech defence industry structure.

Photo Miloš Soukup and Antonín Svěrák



# Czech Ministry of Defence and Defence Industry at IDEX 2017 Exhibition



Czech Ministry of Defence managed to be very successful at one of the world most important armament trade fairs in Abu Dhabi. Deputy Minister of Defence Tomáš Kuchta backed twenty-five Czech businesses for the negotiations with delegations led by the defence ministers of UAE, Slovakia, Estonia, Pakistan or India and other international partners. The Czech contribution to the fair climaxed at the signature ceremony of a new strategic partnership in wheeled infantry vehicles production made by VOP CZ Company and Emirates' NIMR Company. It could be considered a crucial success for the entire Czech defence industry!

The 13<sup>th</sup> exhibition of military technology IDEX 2017 together with the simultaneous exhibition of naval defence technology NAVDEX 2017 held in the late half of February, attracted more than a hundred thousand visitors to the exhibition halls in Abu Dhabi. IDEX is the largest armament exhibition in the Middle East and North Africa region, globally belonging to the three most significant trade fairs on the planet in scope and significance. In total, 1,235 companies came to the event from 57 countries to present their products, while 25 entities represented the Czech defence industry.

Out of that, 16 Czech companies were included in the joint display managed by the Ministry of Industry and Commerce of the Czech Republic, the other 9 exhibited within the display of the Czechoslovak Group concern's display. Other participants in the mission were representatives of the Czech Ministry of Defence and Ministry of Foreign Affairs, along with those of the Defence and Security Industry Association accompanied by a large delegation of executives.

The key successful points of the Czech contribution to the exhibition include the appointments of deputy minister Kuchta with the United Arab Emirates Minister of State for Defence Affairs Mohammed Ahmed Al Bawardi, and with the Emirates' Air Force commander, logistics commander, CBRN corps commander and the head of the general directorate responsible for defence purchase.

Another significant success was the signature of strategic agreement made by Czech VOP CZ Company and Emirates' NIMR Automotive. The goal of the partnership is joint production and distribution of wheeled infantry vehicles NIMR AJBAN 440 A for European market. VOP CZ will modify the vehicles to comply with colder climatic conditions based on its specific abilities and experience, or can offer special superstructures through its specialisation including command vehicles or specially modified ones for CBRN. The ceremony, during which the agreement was signed, was attended, along with deputy minister Kuchta, the Czech Ambassador to the United Arab Emirates, Alexandr Šporýš, the leading representatives of UAE armed forces and the defence attaches of V4 countries.

The last but not least successful issue of the mission was attracting attention to Czech stands. The effort culminated in a short appointment of deputy minister Kuchta with the crown prince Sheikh Mohammed at the main Czech stand. Both gentlemen met again on the same day at the outdoor presentation of Czech companies. Sheikh Mohammed had him been informed of the Czech development of unmanned aerial vehicles or of the options for the production of the legendary Czech TATRA trucks in UAE.

UAE are currently the third globally leading trade partner of the Czech Republic from beyond the European Union. The available estimated value of Czech export in defence and security industry to the country should have reached 50 million dollars in 2016.

The deputy minister concluded the successful Czech







mission to IDEX fair by thanking the representatives of the Ministries of Foreign Affairs and of Industry and Commerce, Czech-Trade and Defence and Security Industry Association, for their cooperation in the arrangements for and implementation of national activities at the important event. Special thanks went to the



personnel of 24<sup>th</sup> transport air base in Kbely for their support in transporting the delegation. Thanks should be given to the Minister of Defence of the Czech Republic Martin Stropnický who approved the mission and transport.

Ministry of Defence of the CR

## Exhibitors' voice

We asked several Czech companies who participated in IDEX 2017 for a short evaluation.

### ORITEST

It was our eighth participation in this year and it was unmatched. We had successful meetings with UAE's CBRN command and with other partners in the area, too, and we have established several projects with a high probability of implementation. That confirmed the Near and Middle East regions belong to crucial for our export.

### CSG

The joint display of CZECHOSLOVAK GROUP (CSG) holding and TATRA TRUCKS automotive company was in the focus of attention, which was proved by the visit of Sheikh Mohammed bin Zayed Al Nahyan, the crown prince of Abu Dhabi and the deputy supreme commander of the United Arab Emirates armed forces. Presented were several new items of the portfolio that met unusual interest. For example, the crown prince was interested in the new CANTAS E unmanned aerial vehicle for which Abu Dhabi was the world premiere. TATRA TRUCKS representatives acquainted the Sheikh with to

the latest model of TATRA TACTIC line in command vehicle modification. The crown prince and UAE forces representatives met also the latest RM-70 Vampir 4D multiple rocket launcher also exhibited within the display, and found interesting information of the modernisation of DANA self-propelled howitzer.

### OPTOKON

The exhibition helped us to establish new contacts and to get oriented in the trends of C2/C4 systems (tactical networks) solutions and the possible ways of IT hardware installation in the "hard" vehicles. We consider it therefore a benefit for our company in the issues of marketing and strategic progress in development.

### TATRA TRUCKS

TATRA TRUCKS Company is an established and traditional exhibitor at IDEX international exhibition and it could miss this year. There was a kind of premiere though, in the form of enhanced display and







joint stand of TATRA TRUCKS and CZECHOSLOVAK GROUP. We plan to keep the tradition for the occasion of the next exhibition in two years, including further enhanced display. The exhibition went on in the traditionally challenging tempo with a great number of renowned exhibitors and even greater number of implemented appointments either in reference to the current projects or to start new cooperation. We evaluate our contribution to the exhibition very fruitful and look forward to the next time where we will be glad to present again the new items in our portfolio.

#### VTÚ

It was the first exhibition abroad of such importance where VTÚ s.p. actively contributed to as an exhibitor. We had a number of meetings during the exhibition concerning the demand for the products in our portfolio, particularly weapon stations, mortars and ammunition. We also had a number of meetings on the possible cooperation with international partners in the current or perspective projects within the scope of our business.

#### Česká zbrojovka

Czech leader in small arms production presented its new striker-fired pistol CZ P-10 C and CZ BREN 2 assault rifle of new generation for the first time publicly at the Near East region.

The other exhibited products involved service and defence polymer pistols CZ P-07 and CZ P-09, sport pistol CZ SHADOW 2 or the sub-machine gun CZ SCORPION EVO 3 A1. Together with CZ products, presented were ballistic vests made by the affiliated 4M Systems Company, particularly ballistic T-shirt CZ 4M SPIRIT, body armour CZ 4M VIP and plate carrier CZ RAPTOR.

The visitors to the display of Česká Zbrojovka and 4M Systems companies included also VIP guests among them the Minister of Defence of the Slovak Republic Peter Gajdoš or the deputy minister of the Czech Republic Tomáš Kuchta. An important meeting with the minis-



ter of defence industry of Pakistan took place during the exhibition. Based on the higher interest of suppliers in the United Arab Emirates in cooperation with Česká Zbrojovka, it may be stated that the defence and security authorities in the Near East countries increase their awareness of the quality and significance of CZ mark.

#### Sellier & Bellot

Well, it is and largest exhibition in the Near East region with corresponding attendance by the "commercial" company representatives as well as by official government authorities and potential customers in the region.

Finally yet importantly, we meet a number of our regular customers and representatives there from the Near East region and from almost all the world, in fact. The importance of the exhibition is highlighted by the very "visible" support and participation of Czech national representatives.

#### PBS Velká Bíteš

We consider our participation in IDEX 2017 very positively despite the event was rather broadly oriented to defence than only to our field, which is aviation.

It was positive to meet the top representatives of the companies in the region and to learn of the actual projects where our products could be used.

Our jet engines were exhibited at our stand plus in two unmanned applications of our customers, the latter supporting awareness of PBS Velká Bíteš, a.s. as a renowned producer of an aircraft technology.

We recommend participation in the exhibition to the companies willing business in the Arab peninsula.

#### MESIT HOLDING

IDEX is for MESIT Company an important opportunity to present the latest tactical communication systems. In this year, we presented both our newest products assembled within the communication system and our capabilities and ambitions of contributing to the most challenging programmes and projects. The exhibition let us present our communication system to the potential users and establish new business contacts. Customers' interest was attracted to company's ability of supplying complete and operable solutions including the abilities of customisation. We consider our participation in the exhibition this year beneficial and successful.

#### AURA

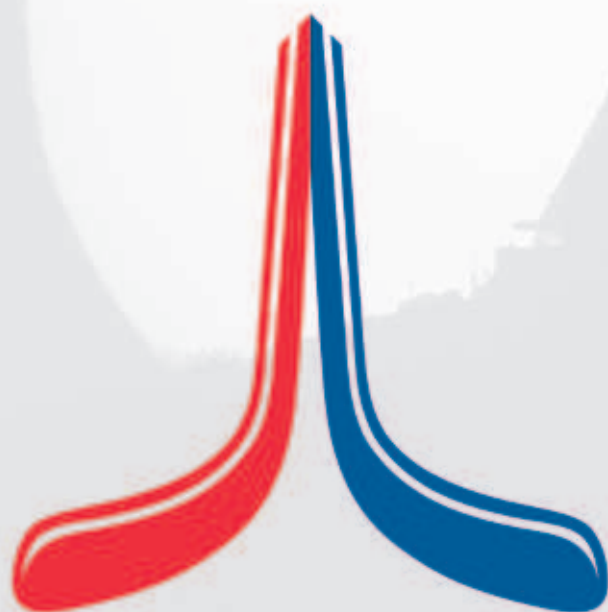
AURA has had the honour to accompany the deputy minister of defence Tomáš Kuchta during his visit to the United Arab Emirates (UAE) on the occasion of the exhibition IDEX 2017 in Abu Dhabi. The exhibition was at a high level, as evidenced by its already spectacular air launch. During the fair, AURA with the assistance of Colonel Miloslav Bláha, Military and Air Attaché of the Czech Republic, and AURA's partner in the UAE organized a meeting of the new Chief of Logistics Staff, Major General Mohammed Murad Albaloushi with Mr. T. Kuchta, deputy minister of defence, Czech ambassador Alexander Sporyš and other members of the Czech delegation. The Major General highlighted the crucial importance of logistics and materiel codification itself for the military. Following this, he mentioned the importance of the project to implement the NATO Codification System, which AURA along with its partner in the UAE implements.

The deputy minister and the section of industrial cooperation managed by him deserves thanks for their help the Czech defence and security industry by very important and significant support during official foreign missions. The evidence of this support is a considerable move forward in the perception of the Czech defence and security industry abroad, which already capitalized in the implementation of some projects.

THANK YOU!

Photo Šárka Cook and MoD CR





# ICE HOCKEY WORLD **POLICE CUP**

APRIL 18 – 24  
LIBEREC 2017



# IWA OUTDOOR CLASSICS 2017 Trade Fair

This exhibition took place on 3 - 6 March for the forty-fourth time. According to organiser's statistics, 1,500 exhibitors participated in the fair, the stands area covered 100,000 square metres and more than 49,000 expert visitors attended the exhibition. No less interesting is the fact three quarters of the exhibitors and two thirds of visitors came from abroad. In Ms. Lichte's words, who is the German trade fair deputy to the Czech Republic, the share of the Czech companies this year has been the highest in fair's history reaching the record of 50 exhibitors.



One of them it was Česká Zbrojovka, whose traditionally exclusive display attracted our attention, presenting several new items that had their premiere two months before at IDEX exhibition in UAE, new pistols by Brno based FK Brno Company and indisputably also the display of Logic SHELTERS. Companies that naturally could not miss the opportunity were Sellier & Bellot, MEOPTA, EXPLOZIA, DASTA and others. It has become a tradition that crowd constantly surrounds the stand of Arms and Ammunition Makers and Sellers Association. A more noticeable distribution of Czech exhibitors over the halls was new for us. It is probably a pity from our point of view but we asked several exhibitors and visitors for their opinions.

## Česká zbrojovka

Many times during the exhibition we passed by your stand and every time it was literally overcrowded. The stand ranks among the largest, nicest and most interesting ones, with visitors' interest in all weapons and posters and calendars was so high you could hardly able to distribute. Along with weapon demos to individuals, you had a number of business appointments. How successful were you, and in what was the most interest?

We were very successful in negotiation. The most interest was naturally in the new striker-fired pistol CZ P-10 C, but also in the second generation of CZ 550 Safari Classics centrefire rifles in magnum calibres intended for hunting large Africa game, or the new rimfire rifle CZ 455 Stainless. IWA exhibition is crucial for us especially in terms of sport and hunting weapons. That is why we come here every year and every time we present a new piece of our production.

Short before this exhibition, the Enforce Tac exhibition preceded. Why you had not exhibited there?

Really, we did not exhibit at Enforce Tac exhibition. In fact, there is no chance for us to get to the armed forces; domestic competing companies almost solely occupy the market.

The new law on arms possession will also certainly affect you! How it can threaten your production in future and will you have to reorient to anything else?

The new EC regulation prohibits possession of short semiautomatic firearms with magazines of more than twenty cartridges and long semiautomatic arms with magazines of more than ten cartridges. Long firearms equipped with folding or telescopic butts that are easy to hide therefore will become illegal, too. The forbidden arms will also include semiautomatic arms remade from automatic ones. Undoubtedly, the restrictions will also apply to our arms.

However, our company has a wide scope of hunting and sport arms available. We would do our best to boost the production of weapons excepted from the embargo and concurrently we would look for other opportunities how to use the production capacity. Of course, it would not be easy.

Do you plan a similar stand at IDET exhibition this May?

The Česká Zbrojovka a.s. stand at IDET 2017 exhibition in Brno will be in similar design to that at IWA fair. The stand area, though, will be smaller with regard to the exhibition scale. As IDET is a military-oriented exhibition, the portfolio of weapons will also differ from IWA fair. Our offer at the exhibition will present our complete programme for armed forces including ballistic vests made by our affiliated company 4M SYSTEMS s.r.o.

Hana Smilková

DASTA, s.r.o.

How successful were you at this year fair? Last time you told us you were meeting your regular clients and this year we could see that during the short period of time that our visit lasted, also new customers stopped by. Were they potential clients or just interested in information?

It could be said, they are regular clients as well as potential customers. Our holsters met with a high interest as in the previous years. The visitors appreciated the wide scale of our products, their quality and working.

How have you summarised the place in another hall than the Czech Republic display, as it used to be? Was it a benefit or a loss, in your opinion?

Some companies have been leaving the joint Czech display already before. We made the decision after the Hall 2 had closed. We noticed no difference in visitors' interest comparing the new separate place and the joint display.

Markéta Staňková

Zelený sport, s.r.o.

How successful were you this year, director, and how is it going with the last year "case" of confiscated exhibits?

IWA 2017 met our expectations and we were undoubtedly satisfied with this year. The last-year weapons confiscation will be a trial at Nurnberg court and now we have no information concerning the case.

Martin Rudolf sr., director

LOGIC SHELTERS

We visited your stand because we had found your display as early as a day before opening during its building. I suppose, your exhibit did not remain unnoticed. How would you evaluate the interest in the exhibit?

It was for the first time we exhibited the shelter at a trade fair so it had





been difficult to guess visitors' response. We understood it was something exceptional even at IWA trade fair at the moment we could not categorise the exhibit appropriately. Still, we were really taken aback by the interest caused by the exhibit on the first day. Hundreds of people visited our stand and their responses were positive in most cases. We have also acquired many contacts with whom we will negotiate business collaboration at the European market zone.

**You told us you were going to offer the shelter to schools and individuals; don't you think it would be suitable to offer it to the Czech integrated rescue system?**

The LOGIC SHELTERS' shelter is primarily intended for civilian population and individual persons. However, IWA has brought us many ideas and opportunities for further development. We will process them internally and think of their usage. One of them is the purpose for other population groups, including the Czech integrated rescue system, which is not eliminated for future.

**What is your company other portfolio?**

We are specialists in underground shelters produced now in two varieties - 4.5 or 6 metres long. We are now focusing at establishing new business partnerships across border and expansion abroad, so we plan no enhancement of the portfolio, but we will continue to work on the improvements of the current products and we will also tailor them to market requirements.

Mgr. Michaela Vrbová, marketing & PR specialist

## Enforce Tac 2017

After two days of trade fair and congress, the sixth Enforce Tac - International Exhibition & Conference Law Enforcement, Security and Tactical Solutions ended at Nurnberg exhibition centre with a very positive result. The number of exhibiting companies in comparison to last year increased by 42 % to 214, exhibition area grew even by 80 % and the number of visiting experts raised by 38 % to the 3,810 in total.

Presenting to the exhibition for the Czech Republic were the Defence and Security Industry Association of the Czech Republic and the following companies: Adventure Menu s.r.o., EUROLAMP s.r.o. and Meopta - optika, s.r.o. The exhibition shows the latest equipment for security forces of government authorities every year. Two expert conferences for police and government authorities' security experts complete the offer of exhibiting enterprises. A conference is for expert police trainers (EPTK) and another one is expert conference "Guns and equipment" by the Police Management Academy, Münster, Germany. The exhibiting enterprises presented weapons and ammunition, ballistic accessories, optical and optoelectronic devices, communication technology, tactical equipment and emergency vehicles as well as personal defence equipment, such as ballistic vests, stab proof vests, body armours and face protection, shields, helmets etc.

Enforce Tac is a specialised trade fair and therefore accessible only to the representatives of appropriate authorities, such as police, justice, border protection, customs, military police or authorised wholesalers after ID check.

### Czech Defence and Security Industry Association

The Defence and Security Industry Association (DSIA) of the Czech Republic exhibited at Enforce Tac in Nurnberg for the second time. Your agenda included an appointment with your German counterpart. We know the response in the Czech Republic to the changes in arms possession being completely different from that of ordinary German people, as we have learnt during the exhibition. What is your German counterpart's opinion and what were you discussing?

The appointment with Andreas von Büren, who is the director of BDSV, which is the German analogue of our association, concerned primarily the cooperation of Czech and German producers. I also opened the issue of the new European Union's arms regulation that will affect the legal arms holders as well as Czech producers. German producers of small firearms have already shifted the significant part of their production outside the European Union, primarily to USA. Even though director von Büren did not want to confirm, I am convinced that the producers will stop manufacturing in Germany or will substantially reduce their production if more European restrictions come. I am glad that the Czech

owner of Česká Zbrojovka has been acting differently. Nevertheless, if the European legislation makes do the same, it will threaten more than 10 thousand jobs. In addition, our armed forces will thus lose a domestic supplier, which is a high security risk.

**Do you think that separating the two exhibitions in time was beneficial? The exhibitions overlapped on one day last year.**

Model chosen for this year gave more time for strictly expert talks and limited spectator visits.

**The first exhibition last year raised a big appreciation from Czech producers being completely different from IWA and taking place in and interesting territory. Why only minimum Czech exhibitors came here this year? Did you talk about that issue with Ms. Lichte?**

This exhibition very narrowly aims at German market, particularly at various elements of police and other non-military armed corps. German market is highly protectionist and it is almost impossible for foreign producers to get there. Despite, I am sure there are technologies in the Czech Republic able to achieve success at German market. If we manage to obtain a fund subvention from the Ministry of Industry and Commerce, the Czech contribution will definitely be larger next year.

Jiří Hynek, president

## Výstava U.T.SEC 2017

U.T.Sec 2017 (Unmanned Technologies and Security) exhibition premiere took place this year on 2 and 3 March held in the Hall 12 foyer (NCC West), which means separately at the same exhibition centre in Nurnberg with the news and innovations presented by 25 exhibitors. "U.T.SEC Conference 2017" took place parallel to the exhibition. More than 600 experts visited the narrowly specialised exhibition and expert conference. The contributing experts came especially from Germany, Austria, Italy and we proudly add from the Czech Republic, too.

### BVV Trade Fairs Brno

**Do you know the exhibitions? Were you attending them before? I am not going to ask for a comparison to BVV exhibitions, it is impossible as those are different, but what is your opinion of placing Czech companies in various halls? There were 1,500 exhibitors there and it was a hard job to find somebody of look over the 100,000 sq. metres. You could see yourself it kept you busy all the time.**

We know the exhibitions but we have never contributed. Originally, we went to attend U.T. SEC (unmanned technologies) and ENFORCE TAC, but not IWA. Companies exhibiting here have the scope close to IDET exhibition. I could not see many Czech companies here but there were many at IWA exhibition. IWA exhibition scope differs from our exhibitions. It covers hunting and outdoor sports. We have met companies we had not met before so it is primarily an investment to future.

**I suppose the purpose of your visit was to get the exhibitors acquainted with IDET, ISET and PYROS exhibitions. Have you succeeded?**

Yes, that was our plan. Some of the exhibitors would like to take part in our exhibitions but it is unreal due to short time. We will address them and keep regular contact with them.

**Have you been inspired in something by this exhibition what we would find in Brno?**

IWA exhibition is indisputably large and well organised. The exhibition centre has a very modern and fast ticketing system with all necessary information and simple follow-up checking. I have not seen much inspiration at the other two exhibitions.

I think IDET, PYROS and ISET exhibitions are very interesting, well arranged and we can look our competitors in the eyes without fear. We have an attractive and manifold concurrent programme that reflects the current security situation in the world. The examples are cyber defence, UAV, UGV, and perfectly working integrated rescue system demos.

Pavel Štefka, CEO adviser, BVV Trade Fairs Brno

*The editors find their attendance to the exhibition quite inspiring and are glad the Czech companies were definitely far from overshadow.*

By Eva Soukupová, photo Petr Miklík

# IDET 2017 Will Present News from Defence and Security Technology

**Most modern infantry fighting vehicle in the world CV90, a new protective service pistol from the Czech arms factory, paratrooper training simulator SOKOL™ or special robots for exploration in difficult terrain. This is just a small part of all the innovations whose presentation has been announced in advance by exhibitors of the 14<sup>th</sup> International IDET trade fair.**

This year's IDET is being prepared at a time of increased investment in the military and security sector. Therefore the exhibitors' offer will be not only broad but also very attractive, as evidenced by the already pre-announced novelties by some exhibitors.

The exhibition space of GLOMEX Military Supplies will also introduce helmet systems by OpsCore. New items will include helmets from the SENTRY and FAST series. Both series offer a significantly lighter LE ballistic option (LAW ENFORCEMENT), which is intended mainly for riot police and other state authorities. Of course there are also system components, such as ballistic and splinter plates, protection of the lower jaw, ballistic ear protection, RAC communication set and other accessories. GLOMEX Military Supplies have traditionally exhibited low profile night vision goggles AN / PVS-21, designed by Steiner eOptics for special forces. This year, these glasses are presented with an additional COTM thermal module (Clip-on thermal module), which guarantees the detection of heat traces not only in the dark but also in smoke, fog and other harsh climatic conditions, while maintaining IR (InfraRed) capabilities. The COTM module also can use data imaging (maps, photos or videos) from commonly used external data sources with SVGA, VGA, NTSC, PAL resolution.

Visitors will definitely not miss the PUMA infantry fighting vehicle in the exhibition space of the German company PSM. BVP PUMA, thanks to its design and new versions, is considered the best and most modern BVP currently established in NATO. PUMA is able to effectively operate in urban environments and also offers a wide range of modifications. PUMA is a combat vehicle principally designed as BVP for operations within NATO and suppresses any complicating national peculiarities. However, it is also possible to easily implement requirements of national customers while maintaining full interoperability within NATO or smaller groups, such as V-4 etc.

The exhibition stand of BAE Systems will feature CV90 - the most widely used and produced infantry fighting vehicle in the world. It was developed as a model range of vehicles characterized by a high degree of mobility and operability on any terrain, high durability

and high firepower, including defence against airborne means of combat. The platform is being continually evolved and modernized, and so among 1,300 vehicles sold to date to seven countries there are 11 different vehicle variants. Due to the relatively lightweight frame the CV90 is able to manoeuvre on the battlefield better than traditional tanks; the version CV90120 armed with 120 mm cannon even equals tanks in firepower.

In the category of transport vehicles, the offer will be extended by the ALFAVARIA Group. Their custom-made multipurpose pull-out containers for pick-up vehicles are an innovative solution for utility vehicle storage space; the floor boxes are lockable, weather resistant and can be pulled out 100 %. Furthermore, the company will also offer built-in elements for cars and various types of mobile service garages - temporary, self-contained service centres for maintenance and repairs for land, air and naval forces.

The state enterprise VOP CZ will bring a multifunctional loader and tool carrier DAPPER MILITARY to Brno. This versatile helper for any work uses a lifting telescopic arm to handle tools, equipped with a universal terminal for connecting additional fixtures such as shovels, snow blowers, rotary mowers, etc. Another interesting exhibit is an automated robotic ground system TAROS V2 intended for combat and logistical support for mechanized, reconnaissance and special units in complex operating environments with high risks. Automated robotic ground system TAROS V2 is designed in a modular way, and thus its individual 4x4 and 2x2 modules can be assembled into a robotic vehicle TAROS V2 in configurations 4x4/6x6/8x8 with the possibility of retrofitting with components of a broad spectrum of accessories, both weapons as well as robotic and sensory systems. The exhibition will also include KERBEROS 3D VISION - a globally unique system developed specifically for surface inspection of motor vehicles chassis at the entrance to a protected area. This system allows for automatic detecting of potential terrorist and sabotage attacks, as well as various spying equipment.

The area of aviation technology will be represented e.g. by the





První brněnská strojírna Velká Bíteš offering turbine engines that hold a privileged position in the world in terms of the parameter weight ratio. Besides TJ100 and TJ40 turbojet engines they will also exhibit a novelty - in the past year they completed the development of a new small TJ80 jet engine, which is designed for missiles, drone targets and UAVs.

The state enterprise LOM Praha will present themselves at the fair as a principal repair plant for Mi helicopters and their aggregates in the NATO countries and the EU, with a closed repairs cycle. They offer comprehensive services for the complete life cycle support of Mi helicopters as well as modernization of these machines; they also provide flight training for pilots in the Air Training Centre in Pardubice and tactical training in the tactical simulation centre. The VR Group subsidiary focuses on manufacturing simulators and simulation technology for aircraft, helicopters and ground forces.

IDET exhibitors will also include the company OMNIPOL as a global supplier and integrator of defence, security and aerospace systems. The wide range of products offered contains a new subsonic jet trainer L-39NG and related services as a joint project of OMNIPOL and AERO Vodochody AEROSPACE. Other products offered include turboprop aircraft L 410 UVP-E20 for special missions, systems for border monitoring and other solutions in the field of defence and security. They will share a stand together with their subsidiary, ERA, which provides solutions for airspace control of military bases based on multilateration, and a unique passive system VERA-NG for air defence and border protection. Recently ERA has expanded its portfolio of C2 (command and control) ERIS system for the military command and control units and a 3R system (Record and Replay Investigator) for continuous data recording for working military air traffic controllers.

T-CZ Company will exhibit a precision landing radar RP-6PA with modern technology for navigation and landing of aircraft in bad weather conditions or reduced visibility. It is intended primarily for military use, and to aid in guiding a damaged aircraft. The system with an electronically phased antenna was developed in collaboration with an Indian partner and has successfully passed military tests. Another example of successful development activities of the company is a new NTP server - a highly accurate and affordable time reference source, supporting all global time synchronization systems GNSS (GPS, GLONASS, Galileo).

Modernization of aircraft and airport facilities are the focus of MESIT, a company that also develops and manufactures wireless tactical communication systems to support command and control of military operations and provides voice and data services with high-tech radio communication. Based on the needs of modern armies, the company develops new products to increase security: tactical speakers, speakerphone PA systems and radio monitors.

Interesting products for the monitoring and protection will be exhibited by EVPÚ Defence. Stationary monitoring systems of the SIRIUS series can be used for monitoring and surveillance of critical sites such as national borders, airports, oil refineries, power plants etc.; the radius of detecting a person is up to 20 km. The monitoring system in the BMS- MIRA 42 box is designed to protect vehicles against unwanted intrusion and SeeCheck - "Screech-owl" is an imaging system designed particularly for monitoring the near vicinity of a vehicle or vehicles or to protect the landing during the day or night.

Devices for day and night observation, systems for determining the exact position of the target and reconnaissance robots will be introduced by NIDES. Their STERNA digital viewing station is equipped with a gyroscope; it works reliably even in strong and changing magnetic environment and is destined for the fulfilment of tasks of forward artillery, aerial observers etc. A tEODor heavy robot with its outstanding throughput, robust construction, manoeuvrability, high sensitivity, accuracy and fluency of arm movement can be used for handling various objects. Medium-size Telexmax robot is equipped with four independently controlled belts with excellent throughput even in the toughest terrain, buildings and such. A unique principle of TCP arm control (Tool Centre Point) allows their control much like a human hand. A small robot COBRA MK2 is designed especially for exploration in confined spaces such as pipes or caves and also to explore the chassis of motor vehicles.

Meopta Systems also applied to participate: a specialist in optical products, they offer the highest quality optical products destined for both the individual soldier, as well as armoured fighting vehicles of various types. Their last year's supply references include optics for the next stage of the Czech Army rearmament to BREN.

The Dcom company will exhibit effective means of team communication by Hytera, the second largest manufacturer of professional radio equipment in the world. Their radio stations and dispatching systems offer communications on a vast territory and calls secured against monitoring with up to 256-bit encryption. Data transfer including GPS is supported together with text messaging and telemetry. Hytera do not offer only radios, but complete solutions, which also contain dispatching applications with the integration of various communication technologies, including the interconnection of mobile phones and radio networks.

News from the field of information protection and security will be presented by the company MARKET.sk & SIGINT.sk. The T-Gorilla unit delivers comprehensive protection against communication monitoring and also serves as a complete prevention and protection against industrial espionage. ELIDE FIRE is a fully automatic fire extinguishing system with activation during an unattended fire. When exposed to an open flame, it activates itself and reliably extinguishes







the fire, thus simply and effectively reducing the risk of fire while effectively facing a fire if it occurs.

Maintenance of fire-extinguishing systems in armoured vehicles will be offered by EAF protect who, among other things, completed the intensive development of an extinguisher for civil and military aviation as required by the standards issued by the EASA European Aviation Safety Agency.

Safety technology is the domain of HOLOMÝ company. They bring a warning LED light kit VNT 012LU-BbwbbwbB-TM6--AL-1089/60 to



IDET, homologated for two levels of light intensity, and a new series of electronic AZD 400 sirens with digital bus communication.

A perfect glare-free lighting of a space will be provided by an exhibit of the company MIPESA. The advantages of LED lighting balloons YANMAR / LIGHT BOY include high light output, adjustable light intensity, easy operation and low power consumption. At the exhibition stand, visitors can also view a new range of extremely rugged



PELI AIR suitcases that are up to 40 per cent lighter than standard PELI cases while maintaining the properties and a lifetime guarantee.

Masking is the focus of B.O.I.S. - FILTRY, a company that will offer trade fair visitors multispectral camouflage nets with a modular structure that allows joining several pieces to achieve the required size; also multispectral mobile camouflage designed for vehicles and permeable NBC protective disguises to protect skin against vapours, aerosols and droplets of chemical warfare, radioactive dust or biologically active particles.

Interesting exhibits for decontamination will be introduced by PTV. An interior decontamination system LDV-X with unique output is designed for efficient, effective and rapid critical infrastructure protection and decontamination of large volumes. A special decontamination / detoxification nozzle SANIJETGUN serves in combating CBRN warfare agents and can be used at temperatures up to 90 °C. The decontamination system for sensitive surfaces SX-34 is used on control panels, detectors, aircraft and vehicle dashboards, personal belongings and weapons.

IDET cannot of course miss weapons and ammunition exhibits. Česká zbrojovka will introduce CZ P-10 C here; an absolute novelty in the "striker fired" segment guns for personal protection and for armed forces in a compact size. This defence and service pistol features high reliability, durability and a sophisticated shot coping, which is influenced by unique checking and an excellent grip designed with a new ergonomic DiFEND methodology. The exhibitions will also intro-

duce CZ SCORPION EVO 3 - the latest 9mm machine gun used by intervention units and armies around the world - and a CZ BREN 2 weapon system as a comprehensive solution for the armed forces.

E.sigma group has been focusing on integrated training solutions for over 30 years; their specialized software and modular simulation platform are easily applicable to various types of training centres. At IDET, they will present SOKOL™ parachute training simulator that offers comprehensive multi-stage training for both beginners as well as experienced skydivers and special and amphibious units.

The trade fair offer will also include field kitchens. The company AGADOS will introduce the first new Czech product in this category after 60 years - a mobile field kitchen PK 4 (Kaga). Thanks to its modular design, this field kitchen trailer system can be adapted to culinary customs of any group of users; the modules are made of high quality steel and the chassis allows movement through difficult terrain.

KÄRCHER exhibition stand will present an electrical mobile kitchen for quick deployment KRR 50 E. A multifunctional modular kitchen can be used both in the field and in enclosed spaces, and thanks to the modular design can be expanded for larger events. Compact transport dimensions of one and a half pallet allow transporting the system in almost all vans.

Also EXPLOSIA have announced their news for IDET. A new kind of plastic explosive Semtex 90 uses silicone-based binder, which guarantees the stability of the material even at high temperature changes. Compared with the existing Semtex plastic explosives it also guarantees 20 per cent higher efficiency.

There have been even more novelties announced, for example, the company AURA is going to present the latest software for military logistics, the company Aliter Technologies will exhibit new tactical communications equipment while TENEO want to show certified connectors tailored to the needs of the Army. Traditional major participants will also include the state company Military research institute or the company Sellier & Bellot who have running ammunition production continuously since 1825.

[www.idet.cz](http://www.idet.cz)

Photo BVV Trade Fairs Brno



- CDIS Review
- Review for Defence and Security Industry
- IDET News
- Security & Defence Technologies Catalogue



[www.msline.cz](http://www.msline.cz)



## SWORDFISH s.r.o.

Member of Czechoslovak Ocean Shipping Group

**Speciální skupina:**  
SWORDFISH s.r.o.

**Hlavní obor činnosti:**

- Přeprava železniční, pozemní, letecká a námořní
- Kontejnerová a kusová přeprava zboží
- Doprava vojenského a IMO materiálu
- Odborná konzultační činnost



**Special Group:**  
SWORDFISH s.r.o.

**Main Activities:**

- Chartering, rail, road, air and sea freight forwarding
- Transport of containers and conventional cargoes
- Special and military cargo, IMO transports
- Transport insurance
- Shipping and transport consulting



**Address:**  
SWORDFISH s.r.o.  
Říčanská 1984/5  
101 00 Praha 10  
Czech Republic

**GSM:** +420 602 517 402  
**Phone:** +420 270 004 641  
**Fax:** +420 270 004 640  
[service@sword-fish.cz](mailto:service@sword-fish.cz)  
[www.group-cos.com](http://www.group-cos.com)



**TESLA V.T.**  
**MIKROEL, s.r.o.**  
[www.tesla-mikroel.cz](http://www.tesla-mikroel.cz)



- manufacturing of magnetrons for radars
- custom manufacturing of ceramic feedthrough insulators



# Publishing Plan for CDIS Magazines in 2017

REVIEW for DSI (Czech and English online edition on [www.msline.cz](http://www.msline.cz))

## Review for Defence and Security Industry 2/2017

Deadline: 5. 5. 2017

Put into print: 19. 5. 2017

Expedition: 26. 5. 2017

Available at IDET, PYROS, ISET 2017, annual general meeting of DSIA CR and Conference Fast Jet Pilot Training.

## Review for Defence and Security Industry 3/2017

Deadline: 25. 8. 2017

Put into print: 8. 9. 2017

Expedition: 15. 9. 2017

Available at NATO Days.

## Review for Defence and Security Industry 4/2017

Deadline: 1. 12. 2017

Put into print: 15. 12. 2017

Expedition: 22. 12. 2017

Available at the annual editorial board meeting in Ministry of Defence resort in January 2018.

CDIS REVIEW (English copy and English on-line edition on [www.msline.cz](http://www.msline.cz))

## Czech Defence Industry & Security Review 2/2017

Deadline: 11. 8. 2017

Put into print: 25. 8. 2017

Expedition: 1. 9. 2017

DSEI (London) - 12.-15. 9. 2017 and NATO Days (Ostrava, Czech Republic), MSPO (Kielce, Poland) - 5.-8. 9. 2017

## Czech Defence Industry & Security Review 3/2017

Deadline: 27. 10. 2017

Put into print: 9. 11. 2017

Expedition: 16. 11. 2017

MILIPOL (Paris, France) - 21.-24. 11. 2017, Intersec (Dubai, SAE) - 21.-23. 1. 2018, Enforce Tac (Nuremberg, Germany) - 7.-8. 3. 2018, IWA (Nuremberg, Germany) - 9.-12. 3. 2018

Publishing plan will be in the course of the year 2017 updated of any other shows.



## 15<sup>th</sup> edition IDET NEWS

Trade Fairs IDET, PYROS a ISET.

Deadline: April 24, 2017.

Contact: [scook@msline.cz](mailto:scook@msline.cz)

Online: <http://bit.ly/1V91XIs>

for Defence and Security Industry  
**Review**

Publishing House: MS Line, s.r.o., Vykáň 82, 289 15 Kounice, Czech Republic, phone/fax: +420 321 672 601, e-mail: [info@msline.cz](mailto:info@msline.cz), [www.msline.cz](http://www.msline.cz) • Editor in Chief: Šárka Cook • Deputy Editor in Chief: Dipl. Eng. Miloš Soukup • Professional Editors: Dr. Antonín Svěrák, Dipl. Eng. Petr Miklík, Blažej Kletečka • Language Editing: Šárka Cook, Eva Soukupová • Translator's Agency: Jiří Mareš, Eva Soukupová • Design: Miroslav Pelz • Marketing: Eva Soukupová (e-mail: [esoukupova@msline.cz](mailto:esoukupova@msline.cz)) • Internet Manager: Soliter-polygrafická společnost, s.r.o. • Print: Magnus I s.r.o. • Distribution: MS Line, s.r.o., A.L.L. production, s.r.o. • Put into print: 24. 3. 2017 • Issue published: 4. 4. 2017 • Key number: MK ČR E19352, ISSN 2336-3460 • Not for sale • Photo on the Front Cover: Saab Technologies s.r.o.

The CDIS Review editorial team bears no responsibility for language and content correctness of text and graphics developed by advertisers and specialist content editors.





**We Work to Make the World  
a Safer Place**



**Since 1997**

**Defence and Security Industry Association of the Czech Republic  
has been a Significant National and International player.**

**[www.dsia.cz](http://www.dsia.cz)**

# 14<sup>TH</sup> INTERNATIONAL DEFENCE AND SECURITY TECHNOLOGIES FAIR



31. 5. – 2. 6. 2017

BRNO, CZECH REPUBLIC



31. 5. – 3. 6. 2017

BVV Trade Fair Brno  
Výstaviště 405/1  
CZ – 603 00 Brno  
phone: +420 541 152 926  
fax: +420 541 153 044  
idet@bvz.cz  
www.idet.cz

