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## EDITORIAL

#### Dear readers,

"Our security is not a matter of course and without security there is no prosperity", that is the motto of two ongoing events held on 18-19. September at Leoš Janáček Airport in Ostrava, NATO Days, celebrating twenty years this year, and the ACR Air Force Days, which is the official event of the Czech Air Force held in parallel with NATO Days on the basis of the decision of the Ministry of Defence. This year, our publishing house has the honour of being a media partner of both such important events.

In this issue, the Review will present production, services and news from companies from the security and defence sector not only from the Czech Republic but also abroad such as STV Group, AURA, NEXTER, ARQUUS, RHEINMETALL, AGADOS, FIDES, Tatra Trucks, Česká zbrojovka, TOVEK, GORDIC, Cont-System, Protect Parts, EVPÚ Defence, ERA, EXCALIBUR ARMY, Explosia, Kärcher, ATS-TELCOM and, of course, not to be missed the BRNO TRADE FAIRS, which this year organizes a trio of security fairs IDET, PYROS, ISET, exceptionally in the autumn term, from 6 - October 8 at the Brno Exhibition Grounds. Here, too, as in previous years, our publishing house is the main media partner for the Czech Republic, which we greatly appreciate.

Finally, I would like to mention the 12<sup>th</sup> edition of the hardcover Security and Defence Technologies Catalogue 2021-2022 in Czech-English languages, which will be available at the October IDET at our MS Line stand in Hall P, number 054, where together with DSIA CR we look forward to seeing you.



Šárka Cook , Editor in Chief







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Aleš Výborný

Director - Czech Republic of BAE Systems

# Deputy Minister Tomáš Kopečný: Czech Defence is Going to Depend on Emerging Technologies.



## EXPORTING AND DOING BUSINESS ABROAD

## How did the COVID-19 pandemic affect export on foreign markets?

Years 2020 and 2021 were heavily affected by the coronavirus pandemic, which also impacted travelling abroad. Many arms expos, conferences, and even whole bilateral routes are delayed for a more favourable pandemic situation. Akin to other industries, most communication with foreign partners moved online. However, business with military material is a susceptible area that requires a more in-person approach. Online tools are possible to use only in limited phases of promotion and networking. We are hoping for a brighter tomorrow, and, overcoming all obstacles, we are trying to support the Czech military industry abroad as much as we can. This year, with the support of Czech entrepreneurs, I managed to accomplish four significant foreign missions.

Czech military and security industry are approximately 90 % export; thus, state support is crucial. You mentioned foreign missions. However, what are your other tools of promoting the military industry? How does that support happen during the current pandemic situation?

Our main goal is to provide mechanisms that will answer the needs of the Czech defence industry for its growth and competitiveness in foreign markets. Our support to businesses encapsulated both support to economic diplomacy PROPED and PROPEA activities abroad. The intention is to collaborate with local partners and bureaus in a given country to help the companies establish within their industry. We are trying to enable Czech companies to engage with European initiatives such as EDIDP and EDF in the same spirit. We also realise that support of the industry can have many faces, that is why, last October, we released a series of short clips "We know what we have"

(in Czech "Víme, co máme"), in which we present the most prominent companies of the Czech arms industry.

However, the core of our support to Czech military-security export lies in the communication with our partners abroad. That is why I am thrilled that even during the pandemic, we managed to carry out several successful foreign missions during which I was able to help our companies personally in the territories where necessary.

#### While we are talking about business trips abroad, tell me which one of your trips was the most productive and the most considerable success?

It is hard to say which mission was the most successful or productive. Each journey is positive in bilateral relations. They almost always result in the forwarding of the collaboration in the defence-security industries. All trips entail long and diligent preparation, which are now complicated by the pandemic. That is why I consider it a big success that despite the pandemic, as I mentioned, we realized, in total, four business trips to fifteen countries – and planning to carry out more.

We focused predominantly on trips to the Middle East and Africa. For instance, already this February, we visited the IDEX expo in Abu Dhabi in the UAE, where we launched several new products from the Czech industry. Since the start of the pandemic, it was the most significant arms expo, and I am incredibly proud that a record number of Czech companies took part in the expo. We also visited Botswana and Malawi, where our goal was to open the door into these markets. During another business trip to Africa in June, we visited the Democratic Republic of Kongo, Uganda, and Rwanda. By the end of May, we carried out the largest business mission of the Czech Republic to the Middle East, during which we visited Iraq, Kuwait, and Saudi Arabia. The last major mission happened in the first half of July, during which we visited Mali, Burkina Faso, Ghana, Togo, Cameroon, and Gabon. Mali and Burkina Faso represent one of the closest partners of the Czech Republic in Africa. It is necessary to point out that the Czech army participates in the stabilization mission in Mali. We are receiving heavy interest from the Malian side for more profound development of the relations besides others, in the military sector.

In all countries, we received a warm welcome on the highest levels, and we perceive there to be significant potential for deliveries from the Czech companies. I firmly believe that Czech companies will be able to profit from this mission in the future. In both regions, Africa and the Middle East, our companies witnessed high interest for their products – not just with armed forces, but also with, for instance, Kuwait's firefighters.

## SUPPORT OF THE EXPORT ABROAD – AMOS

This April, at the press conference of Minister Metnar, the Agency for Intergovernmental Defence Cooperation (AMOS) was officially announced whose function and tasks you presented. Now we are finding ourselves five months into the initial of its operation. How is AMOS doing?

In the last few months, AMOS thoroughly established itself into the structures of the Ministry of Defence. That predominantly means the end of the series of tenders. I and the Director of AMOS were very pleasantly surprised by the great





interest of candidates who have profiled themselves both from the state and private sphere. So, with great pleasure, I can inform you that the AMOS team is now complete.

We realise that you cannot share the details of what exactly AMOS is working on with the Czech companies and foreign partners. Can you at least generally share what type of projects and which territories is AMOS currently focusing on?

In the last few months, there was a series of intensive bilateral meetings with the leadership of the defence industry section of Czech Chamber of Commerce, Defence and Security Industry Association of the Czech Republic and, in particular, most of the key companies producing military and security material. A surprising amount of very concrete projects crystallized from these dealings.

We cannot share the details, though. I can hint at one of the southeast Asia countries in which we are monitoring three projects that could be conducted under the auspices of AMOS. We are consulting five potential projects with Česká zbrojovka Group, and with Aero Vodochody Aerospace, we are discussing four or five territories, at minimum.

Let me summarize that there is considerable interest in collaborating with AMOS already a few months since the beginning of its operation. And it is both from the big players, but also the mid-size and smaller companies. However, it needs to be said that projects in the defence industry are for the long haul. And thus, I am glad that I and the Director of AMOS are committed to this field.

Most agencies in the developed countries, e.g., France, Spain, or Israel, where this tool is being used for several years now, were established by a gradual process. What is the MoD planning to do regarding this? What steps will you take in the medium-term horizon to set up enhanced tools to realize government-to-government basis projects?

From the series of meetings with the Czech companies and the direct and vir-

tual meetings with foreign partners emerges that our main long-term end strategic goal is to enhance the tool that AMOS will have at its disposal. We are already holding a series of meetings with concerned legal partners in the state sector, and we are also consulting gained experiences with foreign colleagues.

## INDUSTRY COOPERATION AND THE SECURITY OF DELIVERIES

Currently, there is a lot of fuss in articles in the media about the security of supplies and industry cooperation. Can you hint at these issues and their manifestation in the Czech MoD?

Events like the COVID-19 pandemic and the worsening of the global security situation heighten the risks of dependency on foreign suppliers of military material. High dependency can result in lowering or loss of the defensibility of the country. Due to the Czech industry not being able to suffice enough military material across the whole spectrum, the Czech Republic has to purchase military material abroad. At the same time the Czech Republic has the infrastructure and human resources with enough potential to be included in the deliveries of the military material from foreign suppliers. Thus, the state has an irreplaceable role in the realization of a new level of political, economic, and defence relations that will ensure the fulfillment of the essential security interests of the state. The specific scope of industry involvement is defined by the essential security interest of the state in ensuring the security of supply of military material for the Czech Armed Forces.

The Industrial Cooperation Division significantly contributed to the updated "Armament and Defence Industry Development Support Strategy of the Czech Republic until 2030", which has just been approved by our government. Among other things, the updated version develops the goals and principles of industrial cooperation support and emphasizes the security of supplies and ensuring the essential security interests of the state. It also reflects new EU and NATO initiatives, such as the European Defence Fund (EDF).

#### How does the preparation for industry cooperation work? Who selects partners from the Czech industry to cooperate with foreign suppliers?

Based on the analysis of the potential involvement of the Czech industries in a specific project, we are builling the requirements for the supplier characteristics. The output of the analysis is the variance of possible participation of local enterprises. The preparation and enactment of the plan of industry cooperation are to follow on the supplier's side, all the while the supplier is choosing and validating the abilities of their distributors. In strategic projects, the MoD can assign a state-owned enterprise to be the leading integrator of the cooperation. The plan for industry cooperation enables the MoD to control the fulfilment of the identified essential security interests and volumes of industrial collaboration. The MoD requires it for the agreements concerning the industry cooperation to be signed before or at the same time as the main acquisition contract.

Industry cooperation is an essential tool for enhancing the technological level of

companies thanks to the access to the new patents, knowledge, and experience from foreign military material suppliers. Transfer of technologies to the Czech Republic, integration of the Czech defence industry into international projects of NATO and EU, and involvement in global supplies chains are supported by the MoD.

#### **EUROPEAN DEFENCE FUND (EDF)**

Defence research and development projects are often financially very demanding. One of the EU tools to solve this problem is the EDF. What are its

#### current goals, and how does the recent development look like?

The general goal of the EDF is to support competitiveness, efficiency, and innovation capacity of the entire EU. EDF contributes to the EU's strategic autonomy and the ability to act, supports cooperative action and across-the-border cooperation. It stimulates the development of small and medium-sized enterprises, supports flexibility and stability of the supplier chains in the area of defence, and supports the utilization of the industry potential of research, development, and innovation.





The specific goals of the EDF are the support of cooperative development, maximization of innovation, and establishing new defence products and technologies, including break-through technologies. The efficiency of fund allocation for defence research and development within the EU is also in EDF's focus as well as lowering the risk of doubling the task and avoiding fractionalization. Interoperability and standardization among the EU member states are also important goals for the EDF.

The budget allocated for the EDF for the 2021-2027 term is more than 7 billion EUR, a third of which for research and the rest for development.

Nine hundred thirty million EUR were allocated for the EDF's 2021 Work Programme for the year 2021.

EDF has essential positions in supporting break-through defence technologies, which is a separate chapter of the EDF's Working Programme. Subsidies for this support are determined following public consultations on breakthrough defence technologies in areas such as intelligence, monitoring and reconnaissance, cyber-defence, and command and control. How specifically the MoD supports possible applicants in the EDF programme, and how successful are you in connecting them with the army's requirements and plans on the EU level?

The realization of the EDF is supported by the Industrial Cooperation Division, which connects the companies and the General Staff of the Army of the Czech Republic during the project assessment. It also covers issuing documents proving an interest in project results and cooperates with the General Staff on setting up initial operational requirements for the project outputs.

A recent addition to helping the companies process EDF's project documentation will be the so-called National Focal Point (NFP) which is part of the European network of national focal points. Doctor Kristýna Stejskalová has been named to lead the NFP.

The leading national EDF coordinator will be assigned for political project management regarding the potential third-party participation. The coordinator will also cover discussions and questions of the involvement of third-party companies in national institutions and designed workgroups within the European Commission. The support is also realized by the European Commission, which seeks to establish necessary synergy with the EU initiatives such as the Action Plan on Synergies between civil, defence and space industries, representing another form of support for the EDF goals.

To give you a better idea, in March 2020, the Commission published an EDIDP 2020 call to present the projects for the EDIDP program. Thirteen Czech companies responded in nine projects. By the end of June 2021, the results of the EDIDP call were revealed. As a part of the consortium led by foreign subjects, eleven Czech companies are taking part in four EDIDP projects with almost 30 million EUR in funding.

## EMERGING AND DISRUPTIVE TECHNOLOGIES

The defence of the state has always been connected to science, innovation, and utilization of the most up--to-date technologies. Nations with the most advanced technology have a substantial strategic head start - that is also why NATO defined seven strategic areas of future strategic advancement. Can you give us any more details on the areas?

You are correct. Modern technologies belong to defence since the beginning of time. Successfulness of defence forces is far from depending on heavy machinery these days - security threats are way more complex. Any future conflict will be framed using emerging and disruptive technologies (EDTs), which NATO defined. EDTs, for instance, entail biotechnology, space technology, or artificial intelligence.

#### Terms like "EDTs" and "emerging and disruptive technologies" that you mentioned - how can we recognize these technologies and how they differ from the tech we use today?

The difference is quite significant. The technology we track the existence of, but we cannot utilize entirely, are what we call "emerging". Cyber-tech, for instance, used to be considered emerging fifteen years ago - it is no longer the case as it is used fairly broadly in both military and civil space. Today, quantum technologies are a great example of emerging tech. Adjusting the behaviour and customs of its users and entire industries are typical for what we call "disruptive" technologies. Disruptive technologies are, for instance, hypersonic weapons, Al, or big data.

#### You mentioned space tech, big data, Al, quantum technology, or hypersonic weapons. Which one of these technologies is the most interesting in your opinion? And which has the biggest potential to change future conflicts?

Each of the technologies is interesting in a way, and all of them independently from each other can change the future warfare - that is why we call them disruptive. My personal favourites are space and biotech, though. Importance of the space will grow as we move forward. For instance, NATO selected space - after earth, water, air, and cyberspace - as the fifth operating domain. Space tech is also interesting for its dual nature. Most of the systems can be used both for civil and military purposes - and it is somewhat tricky to tell them apart. At the same time, the potential decommissioning of satellites could blind not only the armed forces but also integrated rescue system units. Thus, space will be crucial for the security and safety of the Alliance. It is essential to view and invest in space tech and don't look down on it as sci-fi.

Thanks to biotech, we can overcome the limitations of the human body - this can have a massive impact on the combat readiness and efficiency of the soldiers. Among the tech used today, exoskeletons - used for muscle enhancement - are great examples. Soldiers can then carry much heavier loads. The biotech also can enhance sensory inputs of a soldier, for instance, sight and hearing; also, you can adjust processes in the body in a way the soldiers can stay up longer. Biotech can also be helpful in the rehabilitation of soldiers wounded in the field. For instance, soldiers after amputation can get a mechanical prosthesis that can be controlled by the brain almost as a normal limb would be.

#### Biotech, space tech, or quantum technologies do not sound cheap. Is it worth it for NATO to invest in such technologies? And how do we stand, as NATO/EU, compared to the rest of the world?

Big players such as China and Russia invest not inconsiderable amounts of funds into the EDTs. Europe has put them on the backburner, unlike the US, the leader in the space - EU is heading towards more engagement in the EDTs these days. For the Czech Republic, these investments present an exciting opportunity. Several Czech companies already provide deliveries for ESA (European Space Agency). In Prague, there resides a new EU Space Programme Agency (EUSPA) or satellite centre SATCEN, Czech companies using AI develop software with military and civil application. And I could go on, we have a lot to offer.

## THE CAMPAIGN "WE KNOW WHAT WE HAVE" AND PODCASTS

You have mentioned the campaign "We know what we have" as a tool to support the Czech industry. This year you also released a podcast about the EDTs mentioned above called "In Defence". In which way do these initiatives support the Czech security industry? It all started with the "We know what we have" campaign, during which we introduced the abilities of nine key companies of our arms industry. Several companies in the Czech Republic are essential players in the global market or are irreplaceable parts of the production chains of the biggest companies in the world. Unfortunately, there is a lack of awareness of their importance. The output of the campaign is, thus, underlining the unique abilities of the Czech companies to the Czech public with marketing overreach to potential clients around the world. Since the videos are dubbed and have subtitles in many languages - including English - they can be presented at military expos and international meetings. After one year, the videos have between 10k - 20k views on YouTube, which sums to almost a hundred thousand views. Most importantly, as it has not been designed for mass scale consumption, it has reached the right target audience with an interest in the subject co I am really satisfied.

On top of that, we received lots of positive feedback from the companies and other subjects of interest. That is why we decided to continue this initiative. Coincidently, NATO released the paper about EDTs simultaneously, so we decided to elaborate on these areas because Czechia has a lot to offer. However, its development is generally in very early stages and lacks two key elements - experts and funding. That is why we came up with the "In Defence" podcast, which aims to explain EDTs to both layman listeners but also representatives of scientists and the private sector. Hopefully, it will raise awareness for some of these areas. This interest could then be converted into more significant funding from private investors, but more importantly, it could entice more experts that move the R&D of EDTs forward. Each Monday, an intro video representing specific technology or field was released, and on Wednesday, a podcast episode was released where I invited important personalities within the field.

By using popular science, both campaigns are trying to explain topics whose development could increase the defensibility of the Czech Republic as well as our allied potential within NATO and the EU. It could also help our economy to grow at the same time.

Thank you for the interview, Šárka Cook

# Post-Covid IDET / PYROS / ISET

As a consequence of the development of the pandemic situation and the uncertainty in spring, in this year, the IDET / PYROS / ISET trade fair is exceptionally held in autumn. The important thing, however, is that it really takes place. The accumulation of similar events in Central Europe in the second half of the year is not the best option, therefore in the coming years IDET will return to the traditional May / June period in a two-year cycle alternating with EUROSATORY Paris.



The media and epidemiologists are haunting another autumn pandemic wave, while at the same time the desired easing of the Covid-related regulation of everyday life including trade shows is taking place. However, we are in a completely different situation than a year ago. In the Czech Republic, more than 60% of the population will certainly be vaccinated and there is a large number of those who have recovered from the disease and have acquired immunity. Therefore, a new lockdown of the whole economy including scheduled events is not an option.

The biggest obstacle for organizers so far was the limitation of number of people according to the capacity of space at one time. This criterion is now set for trade fairs in such a way that the exhibition halls and other areas must allow social distancing of participants by 1.5 m, which the Brno Exhibition Center fully allows. The basic rule is to prove immunity of participants based on the system of "vaccination – recovered from disease – test", which is already a common rule for visiting restaurants, social or mass events, including trade fairs throughout Europe. And it was the IDET / PYROS / ISET trade fairs that we used as argument in negotiations with hygienists as an example of an event where the majority of participants was vaccinated in priority regime, or are company employees.

It is interesting that in the field of security and defence technology, exhibiting companies, unlike other sectors, approach participation without major concerns. This was probably helped by the IDEX trade fair in the UAE in February, albeit with very strict measures and logistical difficulties for participants. There are exhibitors who want the fair without any restrictions, and exhibitors who are concerned about the health of their employees. The rules for a relatively safe event based on the participation of people who prove their immunity or infectivity are a compromise between the two views.

However, we do not want restrictions that go against the essence of the fair, which is meeting people and shaking hands. Visitors and exhibitors of the exhibition center must prove immunity or infectivity upon entry on the basis of a Covid Certificate or a current test. The same applies to operational staff. This is a measure that we are taking on the basis of extraordinary health measures issued by the Ministry of Health. Anyhow, it makes common sense and is a responsible mode in the interests of all participants.

The post-Corona release of the IDET is not without hindrance. Cross-border travel is not fully recovered, the recognition of vaccinations between countries is not resolved, air travel connections are limited, it is practically impossible to travel from some countries or a quarantine period upon return is required. This complicates the participation of international visitors, including army delegations, which were invited in cooperation with the Ministry of Defence and Brno Trade Fairs. For the most part, their country of origin of the invitees is "red" or even "black" on the Covid countries scale. A special arrangement for holders of diplomatic passports or persons of special interest must be used.

For various reasons, some companies do not participate this year, mainly due to the decisions of foreign headquarters, but are replaced by others. The resulting scope of the fair is thus standard, despite the post-corona virus mood. An important role is played by the on-going modernization of the Czech Armed Forces, the police force and the fire rescue service. We are constantly seeing the need for having well-equipped security forces and a functioning rescue system. In every IDET editorial we remind the geopolitical and security challenges arising. It is no different this year either, as we see many security challenges around.

The IDET / PYROS / ISET trade fair makes it regularly possible to present the latest defence and security technologies in one place at one time. As a result, the practical use of new technology will certainly contribute to making the world and our lives a little safer again.

Jiří Kuliš CEO, BW Trade Fairs Brno



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# The Future of Electro-Optical Systems for Armored Vehicles: What's New at EVPÚ Defence?

This year marks 20 years since EVPÚ Defence started to produce its first pan tilt devices and monitoring systems. Thanks to an exceptionally flexible approach to the needs of its clients, the company soon established itself on both the Czech and foreign markets. Since then, EVPÚ Defence has entered into successful long-term cooperation not only with the Czech Police and Army, but also with Flir Systems (now Teledyne Flir), one of the world's largest defence and security players. In recent years, it has been gradually expanding its product portfolio to include electro-optical devices for military applications.



EVPÚ Defence regularly participates in the IDET defence and security exhibition – in fact, this tradition started back in 2007, when the company first exhibited their products in Brno. At this year's IDET edition, visitors will be able to see EVPÚ Defence's innovative products designed to increase the safety and efficiency of armored vehicle crews.

The year 2019 saw EVPÚ Defence's CMS-1 commander sight winning the prestigious Silver IDET NEWS award. This year there is a new version of the multisensor system which allows the commander of an armored vehicle to get a complete overview of the situation on the battlefield using a day camera, a cooled thermal imaging camera and an eye-safe laser rangefinder. The new modification of the system offers a higher level of ballistic resistance and a high-quality video thanks to its use of a HD camera. Remote controlled weapon stations are also

Remote controlled weapon stations are also a part of EVPÚ Defence's recent focus on the

military segment. It is with this type of product that the company will try to build on its previous success at the IDET NEWS awards. The light modular concept of the new weapon stations, produced in Uherské Hradiště under the names MANTIS and MANTIS MINI, allows their installation on a wide range of armored vehicles or vessels and thus makes them suitable for both land and sea applications. Using these systems, the operator can monitor the vehicle surroundings and search for and fire at ground and low-flying air targets. All these tasks are controlled from the operator's workstation inside the vehicle which significantly reduces the overall risk that the crew is exposed to. Reconnaisance, aiming and shooting tasks are performed using an electro-optical container which consists of a day camera, a thermal imaging camera and a laser rangefinder, with the possible addition of an aiming camera. The combination of these sensors in a sealed and rugged environmental enclosure ensures full functionality day and night, in combat conditions and in any weather.

EVPÚ Defence now introduces remote controlled weapon stations that are more compact, lighter and offer more accurate positioning and fire control. They will be available in two versions for the integration of 7.62 mm and 12.7 mm machine guns.

EVPÚ Defence produces not only complete weapon stations, but also several different types of electro-optical containers, also called gunner sights, which are designed to be integrated into weapon stations. These devices are used in short, medium and long range applications. Sensors housed in a hardened vibration-resistant housing ensure the system's ability to see in all weather and light conditions. The great advantage of EVPÚ Defence's gunner sights is their compact size and universal dimensions, which allow them to be fitted with various combinations of sensors.

Protective systems designed for armored vehicles include the GATRIA modular awareness system and the LAWAREC laser and radar irradiation detection system. The GATRIA system offers combat vehicle commanders an unlimited situational overview, which plays a crucial role in all ground combat operations, a clear and sharp image day and night and reliable protection of the crew and vehicle. The LAWAREC system protects the vehicle from observation and recognition by laser and microwave means as well as laser--aimed and guided weapon systems.

Visitors will be able to see not only the above-mentioned systems and products, but also a number of other electro-optical devices during the IDET exhibition, which takes place from 6 to 8 October 2021. The EVPÚ Defence team is looking forward to your visit!





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# Rheinmetall's Lynx a Strong Contender for IFV Programmes on Three Continents



Armed forces around the world are renewing their tracked vehicle capabilities to keep pace with the evolving demands of modern warfare. Rheinmetall's Lynx KF41 stands at the forefront of global infantry fighting vehicle (IFV) developments and has established itself as a leading contender for the renewal of armed forces striving to overcome present and future battlefield threats. From the USA through Central Europe to Australia, the Lynx continues to impress decision-makers with its unique capability set.

## Lynx enters next stage of huge U.S. OMFV programme

The U.S. military's Optionally Manned Fighting Vehicle (OMFV) programme is a benchmark project for modern fighting vehicle developments. The modernisation effort to replace nearly 3,800 Bradley fighting vehicles involves the development of a new OMFV concept providing the army with a game-changing fighting platform featuring modular open systems architecture.

Rheinmetall's Lynx has been designed since its inception to promote the ma-

ximum possible level of modularity and flexibility, making it a strong contender for the OMFV programme. American Rheinmetall Vehicles was recently awarded a developmental contract for the Phase 2 Digital Design stage of the project.

The Rheinmetall subsidiary will work together with leading U.S. military industry innovators such as Raytheon Technologies, L3Harris Technologies, Textron Systems and Allison Transmission to develop a unique Lynx concept for the programme. "Team Lynx" will work together with the U.S. army on the digitally engineered design of the OMFV model, which should enable the rapid insertion of new capabilities as they become available, enabling Lynx to stay ahead of the curve of global battlefield developments.

Team Lynx is meanwhile building up its U.S. industrial capacity to ensure the proposed Lynx concept will be a fully "Made in the USA" product. The development of industrialisation plans echoes Rheinmetall's commitment to the involvement of domestic companies in projects worldwide. The company has already established a number of partnerships with Czech companies which will prove lucrative for the local economy if Lynx is selected for the Czech army's IFV renewal programme.

"Lynx's selection for the next stage of the U.S. OMFV programme confirms its readiness for present and future battlefields," says Oliver Mittelsdorf, Senior Vice President Sales at Rheinmetall. "The programme requires a vehicle with a high level of modularity and adaptability. Lynx features these attributes to an unmatched degree thanks to its open mechanical and electronic architecture and spare weight capacity allowing future additions. Such considerations are also key in the Czech Republic's IFV renewal programme."

## Lynx vies to join BOXER in Australian force development

Australia has already put its trust in Rheinmetall with the selection of the company's BOXER CRV for the country's Land 400 Phase 2 programme. The Land 400 Phase 3 programme, also known as the Mounted Close Combat Capability programme, will meanwhile see the Australian armed forces strengthened with up to 450 IFVs and 17 support vehicles.

Lynx is now among the last two contenders in the final selection stage of the programme. Here Lynx's modularity is once again a key advantage, with the Australian army requiring turreted fighting variants as well as non-turreted variants fulfilling recovery, repair, combat engineer and ambulance functions. Extensive risk mitigation trials are now underway to determine the army's final choice, including firepower, survivability and mobility testing.

## Lynx shows its teeth in Czech and Slovak trials

Trials for the Czech Republic's major IFV modernisation programme took place earlier this year, testing the operational and technical capabilities of the contenders'. Multiple requirements were examined during demanding tests including life firing, mobility in various terrains, as well as other operational and functional tests.

The Lynx has meanwhile demonstrated its capabilities across the border in Slovakia. Static and dynamic demonstrations of the IFV's lethality, survivability and mobility were given earlier this year at the Slovak Technical and Testing Institute in Záhorie, witnessed by Slovak Defence Minister Jaroslav Naď and other high-ranking representatives. Rheinmetall was the first potential supplier to display its vehicle's capabilities, and Lynx impressed with its extremely high levels of agility and responsiveness.

"Lynx is proving its worth in trials on three separate continents," said Oliver Mittelsdorf. "With our innovative IFV already selected by the Hungarian army for its IFV renewal programme, more and more armed forces are realising that Lynx is a choice for the future as well as the present. Performances in trials bear out Lynx's unique capabilities, and if the Czech Republic chooses Lynx, the country's armed forces will feel the benefits for decades to come."



# We are Looking Ahead, We Want to Offer Solutions that Meet Today's Requirements, Says the CEO of STV GROUP a.s.

Own production of grenades, small-calibre ammunition according to NATO standards in 9 mm and 5.56x45 mm calibre and large-calibre ammunition for new CAESAR howitzers, as well as the transfer of licence for the production of light armoured vehicles. These are currently the key projects of the Czech company STV GROUP a.s. "We are no longer just repairers of old equipment. We keep up with the times and offer solutions that are on a comparable level with Western NATO countries," says David Hác, the chairman of the company's board of directors. At IDET 2021, the company will present both its production and the offer of its foreign partners.

#### As the largest Czech ammunition manufacturer, you are involved in the order of new self-propelled howitzers of 155 mm calibre. How important is this order?

From my point of view, it is quite fundamental, even groundbreaking. It is a milestone for both the Czech Armed Forces and STV GROUP a.s. It is a generational transition from the equipment and ammunition of the Warsaw Pact era to the modern standard used in other NATO countries. The army will receive one of the most modern howitzers. Our task will be to build a national production capacity for 21<sup>st</sup>-century munitions.

We are glad that the Army of the Czech Republic perceives us as a strategic partner, which is the only one on our territory with the ability to produce large-calibre ammunition. But it's not just about STV GROUP. The state-owned EXPLOSIA and the Military Technical Institute will also participate in the national 155 mm calibre ammunition project. Our common goal is to provide Czech soldiers with a stable supply of ammunition from Czech production capacities. Last year, in my opinion, clearly showed us that it is very tricky to rely on partners from abroad during crisis periods.

## In what other areas could you cooperate with the Czech Army?

In the field of ammunition, I would like to mention the large framework agreement for our Czech RPG-7 armoured vehicles, which will be implemented in the coming years. We also have the Križná containerised munition, which is used for remote deployment of anti-tank mines, in military trials. We also cooperate with the leading German manufacturer DIEHL Defence to acquire the capability to produce a spectrum of grenades ranging from hand grenades to medium calibre 40x46 mm grenades for under-barrel grenade launchers to 40x53 mm grenades for automatic grenade launchers. However, we intend to expand our portfolio of Czechmanufactured ammunition to other calibres and types.

In the field of military armoured equipment, we have the exclusive representation of the American company Oshkosh Defense. The company offers our soldiers the JLTV light assault vehicle, which will become the basic combat vehicle not only of the US Army but also of our other allies for the next few decades. We also work with Elbit Systems, an Israeli company that offers a wide range of highly sophisticated technology, including drones. But in addition, we are also finalizing an agreement with the Turkish manufacturer Otokar that would allow us to start licensed production of the COBRA II light armoured vehicle in the Czech Republic for Central Europe, and at the same time create a service base for the entire Central European region. We must not forget our repair capabilities, which we are investing in and developing. Our ambition is therefore to participate in the servicing of the new CAESAR howitzers and the new infantry fighting vehicles. We are now the main partner of our army for howitzers and BVP repairs and we want to remain in this position by focusing on improving our capabilities.

#### Although STV GROUP a.s. is mainly a manufacturer of ammunition, your portfolio also includes Fenix Protector, which focuses primarily on military equipment.

It has to be said that the area of equipment for our army and police is the newest in our business. However, we see great potential for the future and we are working to gain the ability to compete with established European manufacturers. Since last year, we have been supplying low-profile carriers for tactical equipment to the Czech Armed Forces, and at the same time, our modular ballistic vest VOBU 2018 is currently undergoing army trials. If all goes well, Czech soldiers will receive bulletproof vests in the middle of next year that will not only fulfil their primary purpose, i.e. protection at the highest level according to US NIJ standards but will also be as comfortable as possible for the end-users. Each soldier will receive this essential element of individual protection, which they will be able to tailor to the specifics of their mission. We are also pleased that last year we won the tender for the supply of new ballistic helmets with ballistic visors for the Police of the



Czech Republic.



Výhradní zastoupení Oshkosh Defense pro ČR a SR

# Oshkosh JLTV: The Ideal Assault Vehicle for Czech Paratroopers?

Among the candidates for a new light assault vehicle for members of the 43<sup>rd</sup> Airborne Regiment is the successor to the HMMWV in the US armed forces, the Oshkosh Joint Light Tactical Vehicle (JLTV).The main advantages are the excellent driving capabilities, ballistic protection of the crew, as well as compatibility with C4ISR systems for better orientation on the 21<sup>st</sup> century battlefield. The Oshkosh JLTV will be presented to the Czech public at IDET 2021, where it will also be on display in dynamic demonstrations on an outdoor polygon. The exclusive representative of Oshkosh Defense for the Czech and Slovak market is STV GROUP a.s.

The outdated "Cayman" vehicles that the Czech paratroopers have at their disposal nowadays are simply not sufficient for the needs of the NATO immediate reaction forces, which is what the 43<sup>rd</sup> Airborne Regiment is. The main requirements for the new transport vehicles are the already mentioned significantly higher level of ballistic protection, but also the transportability of standard transport aircraft introduced in NATO forces and, last but not least, the ability to use modern communication systems.

Oshkosh's cutting-edge JLTV platform does all of this. It combines the seemingly incompatible - the mobility of an off-road vehicle with the crew protection of heavier MRAP vehicles. The vehicle has been specially designed to increase the crew's chances of survival against a wide range of threats. The JLTV is already lightly armoured at its base A-Kit vehicle configuration. With its B-Kit configuration, JLTV reaches the similar levels of protection as an MRAP vehicle.

At the same time, the vehicle was designed from the beginning to be transportable by C-130, Airbus A400 and other aircraft, but also in a helicopter undercarriage. On top of that, Oshkosh JLTV adds its own patented TAK-4i independent wheel suspension system. This allows each wheel to have an impressive 51 centimetres of wheel travel, giving the vehicle uncompromising off-road capability.

The Oshkosh vehicle's powerplant is the proven Gale Banks Engineering 866T diesel powerplant, which is an Army modification of the General Motors L5P Duramax 6.6-liter powerplant. It produces approximately 340 horsepower, which it transmits to all four wheels via an Allison 2500SP six-speed automatic transmission. The operating weight of the car is approximately 4600 kg. The top speed is 110 km/h and the range is approximately 480 km per tank. The overall length is 6.2 m, the car measures 2.5 m in width and 2.6 m in height to the cabin ceiling.

One of the roles of the new assault vehicle is logically to provide fire support to the transported troops. A number of weapon systems, including remotely controlled turrets, can thus be mounted on the Oshkosh JLTV platform, further enhancing crew safety.

The development of the vehicle under the JLTV programme took almost ten years. During this time, Oshkosh outperformed the competition in terms of both reliability and durability. To date, the U.S. Department of Defense has ordered 18,352 vehicles in

various configurations under the contract with an objective order over 64,000 JLTVs. Over 13,000 units have been produced and delivered by Oshkosh. Itis likely that thousands more vehicles will be ordered by the US Army in the coming years in its current configuration as well as possibly in new variants such as Ambulance, Troop Carrier and Command & Control. The quality of the vehicle is also evidenced by the fact that the JLTV platform has already found its way into the armed forces outside the United States including a growing list of key NATO allies. The exclusive representative of Oshkosh Defense for the Czech and Slovak market is STV GROUP a.s. As part of its exhibition, the Oshkosh JLTV will be on display at this year's IDET fair, where it will be demonstrated during dynamic demonstrations on the Brno Exhibition Centre polygon.



# Agados is Presenting Another Model from the Family of Mobile Field Kitchens

The offer of mobile kitchens PK4 Kaga, larger PK6 and ultralight kitchen AGA ULT is complemented by another model by Agados, the largest domestic trailer manufacturer. The new modern field kitchen AGA FK2013 offers extreme mobility even in rough terrain and quick commissioning.





Mobile kitchens are designed for the efficient production of a lot of hot food in field conditions. It is used in the military or rescue operations. Agados has been expanding the range of special products for the components of the integrated rescue system, the armed forces, as well as civil societies for a long time. In the past, mobile kitchens from the workshop of the company settled in Velké Meziříčí have also won a number of awards in professional circles. The main motivation for the production of the first field kitchen was the fact that the last product of this kind was used by the Czech armed forces for 60 years. There is great interest in them not only from the Czech environment, but mainly from abroad.

The new AGA FK2013 kitchen will be presented for the first time this year at the International Defence and Security Technology Fair IDET in Brno from 6 to 8 October. In the past, mobile field kitchen PK 4 KAGA by Agados was awarded the Golden IDET 2017 at this trade fair. The new type of field kitchen is again

characterized by extreme mobility. It is possible to transport it in fields, roads, or very rough mountain terrain. The kitchen offers quick and easy commissioning, easy operation and maintenance. Everything is adapted to the extreme conditions in which the kitchen is used. The field kitchen is light, compact and it is a comprehensive and tested solution, including the power generator. A wide range of gastronomic components ensures the possibility of preparing a wide range of dishes for up to 200 people (the number of portions depends on the type of dish). It also meets all the highest hygienic requirements. All work surfaces and gastronomic equipment are made of high quality stainless steel and are easy to maintain. The workspace is protected by a shelter system, which provides shelter for the personnel and protection from the weather influences, and is also equipped with efficient lighting and roof ventilation hatches. The integrated diesel unit ensures the operation of the kitchen even in remote places.

The mobile kitchen has a double-skinned cooking unit with hydraulic tilting with a volume of 150 litres, which is complemented by a 20-liter water heater. The set also offers two frying pans with a lid with a volume of 25 litres. Optionally, a convection oven with a capacity of 150 litres can be added. Oil, gas, wood can be used as a heat source. In transport mode, the kitchen has dimensions  $(1 \times w \times h) 4,990 \times 2,050 \times 2,160 \text{ mm}.$ Depending on the equipment, its weight is 1,150 to 1,600 kg (max.). The trailer includes a height-adjustable drawbar. Other special projects of the company include a tank, a freezer box, water treatment plants or a lighting tower suitable for illuminating accident sites. The company also developed an amphibious off-road trailer.

www.agados.cz



# Tatra Trucks Succeeds in Obtaining New Contracts for the Armed Forces

Tatra Trucks exports half to three quarters of its production, thanks to significant orders by armed forces and positive references from all corners of the world. In addition, the Tatra Trucks company maintains its position as a major supplier for the Army of the Czech Republic.

In terms of production volume, the most important current project is the supply of vehicles for the Belgian army. The contract was awarded to DAF, but Tatra Trucks and Tatra Defence Vehicle (TDV) will cooperate in a significant way. The DAF CF-series vehicles for the Belgian army are based on the Tatra Phoenix model line. As part of the deliveries, Tatra Trucks will produce 636 vehicles in the 4x4 version and 243 vehicles in 8x8 configuration, all of which will have chassis of the Tatra concept with a central backbone tube and independent swinging half-axles suspension. Out of a total of 352 vehicles will be equipped with armoured cabs developed and manufactured in the TDV company. Deliveries will be completed in 2025.

Tatra Trucks is also refreshing activities on the Indian market. In recent years, the Tatra Trucks company has managed to obtain contracts for the supply of Tatra vehicles in decomposed CKD sets, which are being compiled in India. It was almost 200 CKD sets, this year the representatives of Tatra Trucks negotiated the sale of hundreds more CKD sets in the following years. In recent years Tatra Trucks has also succeeded in the Turkish market, where it has supplied dozens of chassis for special vehicles. There is a chance to obtain follow-up contracts because Tatra Trucks participates in other military tenders. This year, Tatra Trucks also produces dozens of chassis for an Egyptian customer and is in negotiations to cooperate on the supply of armoured vehicles.

The Czech Army also got new military Tatra trucks during recent months. Tatra Trucks fulfilled the order of the Czech army for 71 trucks with 6x6 chassis and is completing the delivery of 31 trucks with 8x8 chassis equipped with hook loaders. It is also possible that the Czech Army will exercise an option for other vehicles of these versions, which could mean the production of dozens more examples. The development and production of TITUS armoured vehicles are also underway in TDV company, the Czech Ministry of Defence has ordered 62 TITUS vehicles and Tatra Trucks supplies 6x6 chassis for them. In addition, Tatra Trucks is preparing to fulfil the Czech Army programs of new Caesar 8x8 self-propelled wheeled howitzers and Spyder air-defence systems, for which it is to supply the various types of chassis. This year Tatra Trucks will also produce the first vehicles for new 3D mobile radars MADR and for special communication jammer STARKOM vehicles also ordered by the Czech Army.

In recent months, the Ukrainian army



has tested the Czech self-propeled howitzer DANA M2 during life tests. The DANA M2 from Excalibur Army has shown itself in a very good light in Ukraine, by the way even thanks to the Tatra chassis on which it is built.

Currently, in cooperation with Ukrainian partner Ukrinnmash, the first deliveries of the fleet of Tatra vehicles for the Ukrainian armed forces are already underway as part of the first orders for the Neptune project. In addition, Tatra Trucks, together with Ukrinnmash, are preparing other projects involving various Ukrainian manufacturers of special superstructures. Ukraine is reportedly planning to place various missile systems and other superstructures on nettle chassis and other missile systems on Tatra chassis.

In this context, we can also mention the reports that have been appearing in the Ukrainian media in recent months. They concern plans of the Ukrainian army to unify wheeled platforms for various combat and non-combat applications, and Tatra vehicles have been described as a hot candidate for modernization of Ukrainian land forces. At the end of last year in Ukraine also conducted military tests of several missile artillery systems of Ukrainian production. The common element of these tests was the use of Tatra chassis.



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# CZ, General Partner of NATO Days 2021, Celebrates its 85<sup>th</sup> Anniversary

Ceska zbrojovka, the largest manufacturer of small arms in the Czech Republic and one of the most important arms companies in the world, will celebrate 85 years since its founding in 2021. To mark this occasion, it will release two CZ limited anniversary edition firearms.

Construction of a small arms factory in the Moravian town of Uhersky Brod began in mid-summer 1936 as part of a large-scale transfer of Czechoslovak strategic production capacities to the eastern regions of the country. At the time, it was just one of many projects that Czechoslovakia was working on in preparation for war with Nazi Germany. As it was one of the smallest projects, implementation proceeded quickly, with the new factory starting operations at the beginning of 1937. It has long been known that this event was not only one of the important milestones in the development of Ceska zbrovjovka, but also an important event for the world's arms industry.

Originally a small state run enterprise that was established as a branch factory of the armory in the Czech city of Strakonice, which was located in South Bohemia, it was given the task of producing machine guns for airplanes. Soon afterwards, it experienced dynamic growth due to its secure position in the market. Following the end of 1948, it gradually concentrated its activities on the production of small arms in the then country of Czechoslovakia. By the 1950s, the small arms factory in Uhersky Brod had already become a key supplier to domestic armed forces, with its firearms also exported in large numbers to commercial markets all over the world. Many of its products at that time could be described as legends: the vz. 58 and vz. 61 Skorpion submachine guns, Slavia air rifles and "alarm guns", CZ vz. 50/70 and CZ 75 pistols, ZKM rimfire rifles and ZKK centerfire rifles.

Today's Ceska zbrojovka Uhersky Brod was founded in 1992, and due to its increased focus on export, managed to overcome the difficult 1990s and prepare for further development at the beginning of the new millennium. After 2006, under the ownership of a Czech majority shareholder, it quickly transformed into a modern and highly efficient company with a radically updated portfolio. The new generation of CZ firearms received an enthusiastic reception from its customers and Ceska zbrojovka was definitively placed among the elite manufacturers in its field. One of its greatest achievements was a return to the ranks of automatic firearm suppliers to Czech and international armed forces.

From its current portfolio of firearms, we would like to highlight the "striker fired" CZ P-10 series pistols, modern models of the timeless CZ 75 (including the successful CZ SHADOW 2 sport pistol), modular CZ 457 series rimfire rifles, CZ SCORPION EVO 3 A1 submachine guns, and CZ BREN 2 assault and battle rifles (semi-automatic models are also available for the commercial market). Regarding CZ centerfire rifles, a major next generation update is being prepared for release in 2021.

In 2018, Ceska zbrojovka became part of the international holding group CZG - Ceska zbrojovka Group SE, which aims to become a world leader in the production of small arms and to achieve sales of one billion euros by the end of 2025. An important step towards this goal was the recent acquisition of the famous American company Colt. Even after this major expansion, Ceska zbrojovka remains the largest manufacturer in the CZG Group, with its products exported to almost 100 countries around the world. Its strong position on the market contributed to impressive financial results in 2020 that set new records (CZG achieved sales of CZK 6.82 billion, EBITDA rose to CZK 1.47 billion, and operating profit achieved CZK 1.1 billion), despite the restrictions that resulted from the COVID-19 pandemic. The first two quarters of 2021 were also very promising.

To mark its important anniversary this year, Ceska zbrojovka will release two exclusive, limited editions of successful CZ firearm models: 2,000 CZ 557 85<sup>th</sup> Anniversary rifles and 2,000 CZ 75 SP-01 Shadow 85<sup>th</sup> Anniversary pistols. Both editions retain all advantages of these modern legends, with the bonus of special touches that commemorate the company's 85<sup>th</sup> anniversary.



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CZ CELEBRATES ITS 85<sup>th</sup> ANNIVERSARY



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- Track Systems and Running Gear Components
- Fire Suppression Systems
- Power Management Systems
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Company has an extensive experience with every kind of approach: Build-to--Print, Industrial Design, Make to Spec, Prototyping and Reverse Engineering. Among others, Ray Service is a renowned integrator of systems delivered by a range of world's best cable components manufacturers, e.g. TE Connectivity, ITT Cannon, Habia Cable, Positronic, Brady or Kissling. That allows them to play great part on a highly competitive military, aerospace, and industrial technology market.

Most recently they significantly participate in projects of research, development and modernization of the Czech Armed Forces.





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# New "AURA CRM" System

AURA, the largest Czech exporter of information systems for military logistics, has started to fully use its new AURA CRM information system focused on the building of long-term customer relationships and business case management. AURA has used here the architecture it has tested during the development of the globally successful software for the support of materiel codification for military logistics, MC CATALOGUE, which is used in 20 countries around the world.

#### Why new AURA CRM?

The impetus for the creation of a new information system was an insufficient tool for the registration of contacts and business cases, so-called WALO, whose functionality was no longer adequate in terms of covering key processes, automation and demanding security requirements. The WALO system also lacked the mailroom for printed mail, interconnection with email clients and data mailboxes, and efficient recording of activities and tasks. The sales department processes were not supported by WALO at all.

AURA was therefore looking for a solution that would allow to register and manage everything in one place. "The primary objective of the introduction of a new product was to provide the company with a tool that meets its needs as a modern 21st century company. A tool that fully supports demanding requirements of its users with an emphasis on business case management and long-term customer relationships, with the support of associated business processes. Our need has become more urgent with a significant increase of foreign orders in recent years," says AURA Managing Director, Ing. Zdeněk Buřival. requirements, we were unable to select a suitable system. It mostly didn't meet our demanding requirements for security, management of permissions to the level of individual records or integration with Google Workspace. Moreover, the systems often did not enable, in addition to automatic assigning of email messages to contacts and business cases, their individual management and setting of access rights.

Therefore, we decided to build on our WALO system and create a new tool that would suit us perfectly. We made use of more than 30 years of experience in the development of complex information systems in the field of military logistics and close cooperation with their users.

Main advantages of the new AURA CRM information system are the support for management of long-term and complex business cases with the registration of contacts, communication with customers and business partners and all other related information such as contracts or invoices; and, the last but not least, security.

#### What has the new solution brought us?

The new AURA CRM system fully supports

our long-term relationships with customers, especially by recording the history of business cases, including the contacts related to them.

Using a comprehensive permission structure down to the level of individual records, AURA CRM enables only authorised people to quickly access all necessary information and documents related to specific business cases and contacts, including their performance. All in one place in one system.

AURA CRM offers structured registration of e-mail communication as well as printed files, supporting the cooperation of the secretariat and responsible staff in sending and receiving mail and faxes. Besides, it can create complex structures and links between the contacts – individuals as well as organisations.

A comprehensive overview of the progress of business cases and fulfilment of tasks helps the AURA teams to coordinate better and perform work duties more efficiently. The creation and use of AURA CRM has definitely paid off for the company, which will be certainly confirmed by its success in future domestic and international activities.

#### By Jan Chocholáč

#### Creation of a new generation system

Current market is oversaturated with offers of various CRM systems, either directly integrated into ERP systems or standalone products, but we could not find a suitable solution that would meet our requirements for functionality and security.

We have been thinking of a new system for a number of years, it took us years of market analysis and research, and during that time we tried countless CRM systems. Even though we gave up some of our

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# Brno Exhibition Centre Will Welcome the IDET, PYROS and ISET Security Fairs

The IDET, PYROS, ISET security fairs will run at the Brno Exhibition Centre from 6 to 8 October 2021. It is an important trade fair of the latest defence and security technologies. Thanks to the combination of these three trade fairs, participants will be given an overview of the offer in several related product categories, latest information and new contacts in one place.



IDET is of crucial importance for the Czech defence and security industry. Exhibitors can comprehensively present their products to potential customers from around the world. This year's fair takes place at a time of numerous security risks. That is why security spending has been rising worldwide. In addition, the pandemic confirmed the importance of a functioning integrated rescue system.

## Business platform for the defence industry

IDET will be attended by a number of important members of the Defence and Security Industry Association of the Czech Republic. There will also be companies such as Aero Vodochody, Agados, CROY, Czechoslovak Group, Česká zbrojovka, EVPÚ DEFENCE, Meopta, Sellier & Bellot, SKUPINA, STV Group, SVOS, Trade FIDES and state enterprises LOM PRAHA, VOP CZ, Military Research Institute and Military Technical Institute. Companies such as AIR-tech PD, JISR Institute, JUFA or LPP will be newly introduced at the fair.

The partner of the fair is Lockheed Martin, a major US company operating in the field of security and aviation. The fair will be attended by foreign companies ARQUUS, DEFENTURE, General Dynamics, IAI – Israel Aerospace Industries, John Cockerill Defense, KMW, Nexter Systems, PATRIA, Rheinmetall and others. The Ministry of Defence of the Slovak Republic will also present its exposition. Companies such as BIRD Aerosystems, Fischer Panda, G&G PARTNERS or Polimaster Europe will come from abroad for the first time. The Ministry of Defence of Israel will be represented by SIBAT Israel.

#### Ministry of Defence of the Czech Republic and the Armed Forces of the Czech Republic

The theme of this year's display of the Ministry of Defence and the Czech Armed Forces are the modernization of the armed forces and 30 years since the first foreign operation in which Czech soldiers were involved. A section dedicated to the modernization will showcase the latest technology and the main directions of development of new capabilities of the Czech Armed Forces. Modern technology will be represented by Toyota Hilux passenger off-road vehicles, which will ultimately replace the obsolete UAZ and Land Rover vehicles in the coming years. State-of-the-art anti-aircraft missile kits RBS-70NG, which the military took over last autumn, or new Pandur wheeled combat vehicles in the command and staff special and liaison versions, which last year strengthened the 4th Rapid Deployment Brigade and replaced the earlier liaison technology, will also be presented. The motto of the other two parts of the indoor exposition will be new types of challenges and new capabilities of the armed forces (part devoted to cyber security) and the deployment of the Czech Armed Forces in the fight against Covid-19. As part of a trip to history, it will be possible to see the oldest chemical reconnaissance vehicle that Czech soldiers had in the Persian Gulf (1990-1991), as well as the latest lveco light armored vehicle (LOV) for chemical specialists. A movie shown on a large screen in the indoor exposition in Hall P and an exhibition on the outdoor area K will also return to the history of foreign missions. A field hospital with an ambulance and an operating room will also be available for viewing here.

#### **Start-up Innovation Pavilion**

IDET will also feature the Start-up Innovation Pavilion project, organized by the Czech Defence and Security Industry Association. Its goal is to raise the profile of start-up innovative Czech companies in the field of defence and security technologies. These companies



will have the opportunity to present their solutions directly at the fair.

#### **KB9** Cyber Security Conference

The 9th Cyber Security Conference will take place as part of IDET. It will focus on latest trends and threats in cyber security and the state of cyber security and defence in the Czech Republic. Representatives of the National Cyber and Information Security Office, Ministry of Defence and National Agency for Communication and Information Technologies, as well as experts from academia and the private sector will deliver their contributions at the conference. The conference is organized by the Czech branch of AFCEA.

#### **PYROS and ISET trade fairs**

Concurrently with IDET, the PYROS and ISET trade fairs will be held, which will present an overview of firefighting and safety technology. They are intended for professionals from the firefighting and police forces, as well as volunteer firefighters, security services, workers in the field of occupational health and safety and everyone who wants to get acquainted with new technologies and trends. The Police of the Czech Republic, the Fire and Rescue Service of the Czech Republic, the Customs Administration of the Czech Republic, the Prison Service of the Czech Republic, the Administration of State Material Reserves of the Czech Republic and the Brno Municipal Police will be featured. There will also be companies such as Audiopro, DEKONTA, DENIOS, Holík International, THT Polička or TRUCK SERVIS Čáslav.

#### **IDET ARENA**

The IDET ARENA off-road polygon will offer

an attractive show. In the outdoor area, visitors can look forward to demonstrations of military, fire and police equipment. Special forces will demonstrate simulated interventions. The Czech Armed Forces will also be presented here. Members of the 102<sup>nd</sup> Reconnaissance Battalion from Prostějov and members of the University of Defence will present themselves with examples of the Commandos tactical group.

#### Hygiene and safety rules

At the IDET, PYROS & ISET fairs, hygiene and safety rules apply in order to contribute to the safe running of the event. Entry to the exhibition halls will only be allowed with a valid Covid certificate (vaccination, past disease or testing). An alternative to this is the use of self-tests that can be purchased before entering the exhibition centre. This measure becomes a European standard for visiting restaurants, hotels and other operations, including trade fairs. Additional security measures include respiratory protection according to currently applicable rules and social distancing.

#### **Practical information**

IDET, PYROS and ISET fairs open their gates at nine o'clock in the morning. On Wednesday and Thursday, they close at 6 PM, on Friday an hour earlier. Tickets are best purchased online, where they are available for CZK 250. Tickets for adults cost CZK 350 at the gate. Given the specialised nature of the fair, only people older than 16 years will be allowed to the premises on the first two days.

Latest information is available at www.idet.eu.

## Protect Parts, s.r.o.

address: Protect Parts, s.r.o. Bavorská 2780/2, 155 00 Praha 5 Czech Republic phone: +420 251 013 031 e-mail: info@protectparts.cz website: www.protectparts.cz



#### profil společnosti

Protect Parts, s.r.o. je nově vzniklou společností (založena koncem roku 2019) s ambicí stát se lídrem v oblasti obchodu s ocelovými produkty (plechy či polotovary) určenými převážně pro vojenskou a speciální výrobu, zabezpečujícími požadovanou úroveň balistické ochrany výsledných produktů. Pro naplnění uvedených ambicí a cílů společnost Protect Parts úzce spolupracuje jak s nejvýznamnějšími evropskými výrobci pancířů, tak i s autorizovanými ústavy a institucemi zaměřenými na výzkum a testování pancéřových materiálů. Společnost je vzhledem k charakteru své činnosti držitelem oprávnění obchodovat s vojenským materiálem a materiálem dvojího užití.

### hlavní produktové portfolio společnosti

- Plechy určené pro výrobu vojenské techniky, zařízení a vojenské infrastruktury
- Plechy učené pro výrobu speciálních dílů a částí infrastruktury pro ostatní bezpečnostní složky (např. střelnice, speciální výcviková zařízení), ale i pro civilní sektor (banky atd.)
- Polotovary a ucelené sestavy (výpalky, ohraněné a skružené díly, obrobky) pro výše uvedené projekty, zhotovené na základě výkresové dokumentace zákazníků

### <u>hlavní druh činnosti</u>

- Nákup a prodej plechů se zaměřením na různé druhy pancířů od nejvýznamnějších světových výrobců
- Výroba polotovarů (výpalků, ohraněných a skružených dílů, obrobků)
   v souladu s obdrženou výkresovou dokumentací
- Spolupráce s autorizovanými výzkumnými a testovacími ústavy
- Odborné poradenství jak ve fázi vzniku prototypů, tak ve fázi sériové výroby

#### zahraniční vztahy

Kromě České republiky také zákazníci ze států střední a východní Evropy (členských i nečlenských zemí EU).

#### company profile

Protect Parts, s.r.o. is a newly established company (founded at the end of 2019) with the ambition to become a leader in the trade of steel (sheets or semi-finished products) intended for military special production, ensuring the required level of ballistic protection of the final products. To fulfill these ambitions and goals, the Protect Parts closely cooperates with key armour European manufacturers, as well as with authorized research & testing institutes focused on research and testing of armour materials. Due to the nature of its activities, the company possesses a due authorization for military goods and dual-use material trading.

#### company main product portfolio

- Sheets intended for production of military equipment, facilities and infrastructure
- Sheets intended for production of special parts and parts of infrastructure for other security forces (i.e. shooting ranges, special training facilities), but also for civil sector (banks, etc.)
- Semi-finished products and complete compositions (cut, edged, twisted parts & workpieces) for the above-mentioned projects, made in accordance with obtained customers drawings

#### main activities

- Purchase & sale of sheets with a focus on various types of armour from the world's major manufacturers
- Fabrication of semi-finished products (cut, edged and twisted parts & workpieces) in accordance with obtained drawings
- Cooperation with authorized research & testing institutes Expert consulting in the phase of prototyping as well as in the phase of serial production

#### foreign relations

In addition to the Czech Republic, also customers from Central & Eastern European countries (both, EU and Non-EU members).

### Protect Parts

#### protective solutions

### Naše možnosti

- skladem pancéřové plechy od předních světových hutí
- výroba polotovarů
   díly pro vojenský a civilní sektor dle výkresové dokumentace

### – výrobní možnosti – výpalky – laser, 3D plazma

- ohraněné a skružené díly
   obrobky
- dodávky kompletních sestav

### **Our Options**

- Storage of armour plates from the world's leading producers
- Production of semi-finished parts
   parts for military & civilian sector

Production possibilities
 – cut parts – laser / 3D plasma
 – edged & twisted parts
 – drilled, milled & grinded parts

— Delivery of complete sets





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