LUXEMBOURG INDUSTRY AND RESEARCH CAPABILITIES FOR SECURITY AND DEFENCE 2025



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of Foreign and European Affairs,
Defence, Development Cooperation
and Foreign Trade

Directorate of Defence





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The security situation on the European continent has shifted dramatically. Our societies, founded on a rules-based international order, are facing a level of threat unseen in decades. Luxembourg, alongside the EU and NATO, must strengthen their deterrence and defence. We need to step up and rearm, in particular by reinforcing the European pillar of NATO.

This unprecedented rearmament effort can only succeed with a strong and resilient defence industry. By establishing a solid Luxembourg defence technological and industrial base (LDTIB), we will be well-positioned to develop and produce the required state-of-the-art defence capabilities. International cooperation and the innovative drive of our national actors will be crucial for the success of this endeavour.

Luxembourg has the necessary expertise to integrate seamlessly into both EU and NATO defence value and supply chains. Over the years, our defence technological and industrial base has grown and matured, in particular in high-tech niche areas, and is continuously adapting to meet the ever-changing demands of the defence sector. Luxembourg can and will contribute to the development of cutting-edge capabilities that meet the needs of Euro-Atlantic security and defence.

I invite you to discover the fourth edition of this catalogue, which encompasses 109 national entities with proven expertise in high-tech fields such as cybersecurity, advanced materials, space technologies and autonomous systems.

Yuriko Backes Minister of Defence



© Michel Brumat / Luxinnovation

Since 2020, the national innovation agency Luxinnovation has been working closely with the Luxembourg Directorate of Defence to foster the growth of a national defence community and support the development of cutting-edge security and defence technologies.

The fourth edition of the catalogue, "Luxembourg Industry and Research Capabilities for Security and Defence", offers a detailed overview of a defence community that has matured significantly in recent years, thanks to sustained efforts and initiatives.

One of Luxinnovation's key missions is to facilitate companies' access to national and European research and innovation funding programmes, as well as to NATO's innovation and procurement programmes. The agency also helps companies integrate into European defence value chains.

Through various national (Joint Defence Call), European (European Defence Agency's Capability Technology "CapTech" working groups, Hub for European Defence Innovation, European Defence Fund) and NATO (NATO Innovation Fund, DIANA-Defence innovation accelerator for the North Atlantic, NATO Support and Procurement Agency - NSPA, NATO Communication and Information Agency) initiatives and programmes, we are helping Luxembourg's research and industrial players become part of the European defence ecosystem.

Throughout the pages of this catalogue, you will discover the profiles of national technology stakeholders across various fields that are all contributing to the development of innovative products and solutions that strengthen Luxembourg's defence capabilities.

This catalogue serves as an invaluable tool for any potential partner around the world seeking to explore international research collaborations and business development opportunities in Luxembourg, and to establish mutually beneficial partnerships.

Mario Grotz CEO, Luxinnovation

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USER GUIDE

The catalogue is organised by alphabetical order. The entities are presented in fact sheets summarising their activities and services or products, around five capability domains: land, naval, air, cyber and space.

OPERATIONAL DOMAINS















www.positiveimpakt.eu info@positiveimpakt.eu

+IMPAKT LUXEMBOURG

+ImpaKT is an innovative and forward-thinking consultancy company based in Luxembourg, committed to implementing circular economy practices that drive systemic change and create positive impact. It helps the transition to a resilient and profitable future by integrating circular economy practices that turn companies' challenges into opportunities. At the core of its approach lie data, transparency, and knowledge transfer, which are essential drivers of this transformation. That is why +ImpaKT develops data-driven strategies designed to deliver measurable and future-oriented results for both public and private organisations.

- Circular economy training and education.
- Circular economy strategy development for greater resilience (including green procurement).
- Digital Product Passport (DPP) for improved traceability and operational efficiency.
- Circularity measurement and carbon footprint for improved product design.

SME



www.3dprint.lu info@3dprint.lu

3DPRINT.LU - AMSOL

With 21 years of combined experience, 3DPrint is a leading 3D printing company in Luxembourg and the Greater Region. Its solutions make it easy for all customers to access additive manufacturing on demand. 3DPrint sources 3D printed parts from single copies to serial production in high-performance materials ranging from plastic to metal. By using the latest additive manufacturing and 3D scanning technologies, its customers can overcome the constraints of traditional manufacturing.

- 3D Printing 3D printing, also known as additive manufacturing transforms digital designs into physical objects, layer by layer and it is a versatile solution with a range of advantages.
- 3D Scanning Highly accurate and reliable solution for creating digital representations of physical objects through 3D scanning, which is the most precise and cost-effective way to digitalise objects.
- CAD Design & Engineering With its experience in Additive manufacturing and innovative CAD software, 3DPrint offers a tailored service for Governmental Bodies. small businesses or guide experienced engineers in the domain of AM.
- Product Development With its engineering and design service, 3DPrint ensures not only functionality but also aesthetics of its product. The Product designers take care of ergonomics, product semantics and appearance.
- Workshop / educational training / courses The practical guide for 3D printing, from interactive workshops on the world of additive manufacturing and 3D scanning to in-depth courses for professional users in the industry.





www.4QT.lu operations@4qt.lu

4QT

4QT makes high power electric drivetrains for heavy equipment, including batteries, motors, hybrid systems, and controllers as drop-in solutions. Its systems offer increased autonomy, in addition to other tactical advantages including zero-noise, low-thermal operation, and peak power.

- 4QT iREX hybrid drive for heavy equipment (6T+): Diesel- heavy equipment (6T+): Fully electric powertrain as direct drop in to existing vehicles and new developments. Offers >40% increased autonomy, weight savings, and optional tactical advantages around noise emissions, heat emissions, powering of ancillary systems, and increased peak power. Suitable for vehicles with loaded capacity of 6T and above.
- 4QT iBEX electric drive for electric powertrain as direct drop in to existing vehicles and new developments. Offers tactical advantages around noise emissions, heat emissions, powering of ancillary systems, and increased peak power. Suitable for vehicles with loaded capacity of 6T and above.
- 4QT drone drives: Hybrid systems for long-range drone propulsion. Offers reduced weight, increased autonomy, and tactical advantages around noise and heat emissions.
- Tailored engineering solutions depending on your power and system requirements.

SME

ACTinBlack[®]



www.actinblack.com info@actinblack.com

ACTINBLACK EUROPE

Since its inception in 2013, ACTinBlack (ACT) has continuously exceeded the industry standard in the research and development of advanced Night Vision Optics and Devices. Headquartered in Luxembourg, ACT provides superior customer service and solutions to its global market in rapid response time. As a company that was founded on the principles of innovation, accessibility and commitment, it is ACT's vision to outfit its clients with the proper Night Vision solutions they need to ACT-in-Black.

Night Vision System

Thermal Vision Systems

SWIR Vision Systems





www.adwaiseo.eu information@adwaiseo.eu

ADWÄISEO

adwäisEO is specialised in digital services dedicated to geospatial data handling. In particular, the company operates components of the Payload Data Ground Segments of Earth Observation satellites, offering services to Space Agencies and commercial satellite operators for archiving, preserving, (re-)processing and disseminating satellite data.

Thanks to cutting-edge expertise in EO data and ICT the company offers high performing and cost-effective solutions such as multi-Petabytes archives, intuitive geoportals and efficient processing solutions on its own clusters and private Cloud, as well as public Clouds (in a distributed manner Cloud) and/or HPC environment.

Dual-Use R&D in geospatial intelligence: global and systematic daily exploitation of public EO HR data for surveillance (i.e., detection of anomaly of LU/LC) then referral to VHR satellites for final classification/recognition and identification project and demonstration for a NATO country. Internal Dual-Use R&D on the organisation of data sets for ISR data fusion.

LARGE





www.airtech.lu sales@airtech.lu

AIRTECH EUROPE

Airtech Europe is a division of Airtech Advanced Materials Group, the largest manufacturer of vacuum bagging and composite tooling materials for prepreg/autoclave, resin infusion, and wet lay-up processes up to 426°C. Airtech is also very active in the additive manufacturing of composites by 3D printing "large scale" tools and parts and producing resins (granulates and filaments) for 3D printers. The company is providing innovative and high-quality composite solutions to a wide range of industries, including aerospace, wind energy, marine, automotive, and general composites.

Additive manufacturing and 3D printing tooling services for composites: large-scale tooling in the form of trim fixtures, holding fixtures, layup molds, various tooling and parts. Airtech also manufactures a full line of Dahltram* fiber reinforced granulates and filaments for 3D printing of composite tooling and parts.













AM 4 AM

AM 4 AM is developing and producing advanced materials for 3D printing. Thanks to its innovative process, high performance metal powders with unprecedented properties are delivered at low cost and with low resources consumption.

- "HiperAL" Lightweight/ strength materials: High mechanical strength aluminium powder designed for additive manufacturing.
- Advanced materials development: process providing conventional additional properties such as ballistic, magnetic shielding, heat resistance, etc.
- Materials for cold spray and on site reparation: AM 4 AM is involved in the development of new materials for cold spray applications in order to provide on-site reparation solution for military operations.

SME



AMPHINICY TECHNOLOGIES









www.amphinicy.com info@amphinicy.com

AMPHINICY TECHNOLOGIES

Amphinicy Technologies (AT) is a valued provider of complex, tailor-made software solutions for the satellite industry. The company operates from two offices: Luxembourg (since 2002) and Zagreb (Croatia). Amphinicy Luxembourg (ATL) provides SatCom's enterprise solutions for commercial and governmental sectors and currently employs +25 people.

ATL's primary field of expertise is in the ground segment solutions - SatCom Virtualisation, Monitor and Control, Mission Operations, Simulations, (Independent) Validation and Verification, Cybersecurity, and 5G/3GPP integration.

- P2P-FSO ATL is a part of the international consortium for the EDF project. The project is establishing secure and super-fast optical communication between land and maritime vehicles. Amphinicy Luxembourg oversees cybersecurity provisions (both on the protocol and firmware level).
- BLINK ultra-fast, fully virtualized demodulator for Earth Observation data acquisition. The first and by far the fastest modem of a kind.
- ViSAGE feasibility study (under the ESA ARTES C&G program) kicked off in Nov 2022, focused on virtualisation and 5G compliant orchestration of ground segment for SatCom. Cybersecurity and Ground Segment resilience are part of it
- MONICA M&C solutions for the Ground segment in satellite communication. Can be used as a COTS solution or as a customized framework for super-secure governmental missions. It supports various security mechanisms (e.g. encryption, multitenancy, etc.).







www and lu info@ang.lu

ANG

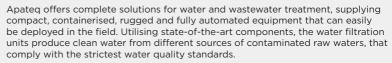
Based in Luxembourg, ANG is a seasoned expert in the precision engineering sector, with a focus on manufacturing high-quality mechanical components. With decades of experience serving the industrial needs of Luxembourg and the greater region, ANG has honed its skills in machining and thermal treatment processes, including stress-relief annealing. This expertise positions ANG as a reliable partner for the European defence industry, ensuring top-tier precision and quality in every component produced. The company's commitment to adopting advanced technologies and pursuing EN9100 certification further demonstrates its readiness to meet the stringent demands of defence sector clients.

- Precision Machined Components: ANG specialises in producing high-precision machined components, crucial for defence applications where accuracy and reliability are paramount. Utilising state-ofthe-art machining technology, ANG delivers parts that meet the most rigorous standards required in defence equipment manufacturing.
- Stress-Relief Annealing Services: Offering stressrelief annealing, ANG plays a key role in enhancing the structural integrity of metal components used in defence applications. This process significantly improves the mechanical properties of metals, ensuring durability and reliability in demanding military environments.
- Plasma Nitriding Services: ANG provides plasma nitriding, Compliance: As ANG is in a surface hardening process vital for enhancing the wear and corrosion resistance of metal parts used in defence applications. This advanced treatment ensures that components can withstand extreme conditions, thereby extending their operational life in defence equipment.
- Advanced Automation in Parts Manufacturing: Embracing automation, ANG offers rapid and efficient production of defence components. This capability is crucial for meeting the high-volume and time-sensitive demands of defence projects, while maintaining consistent quality and precision.
- EN9100 Certification the process of obtaining EN9100 certification, it ensures adherence to high-quality standards in the aerospace and defence industries. This certification highlights ANG's commitment to excellence and its capability to meet stringent industry regulations and quality standards.

SME

Apateg - PWT







- The products offered by the company are tailor-made to meet the most stringent water treatment requirements, no matter what the polluted water source might be.
- Wastewater treatment systems
- Drinking water systems
- Containerised equipment
- Rugged construction water treatment systems

www.apateg.com info@apateq.com

LARGE







corporate.arcelormittal.com contact.luxembourg@ arcelormittal.com

ARCELORMITTAL

ArcelorMittal is one of the world's leading integrated steel and mining companies with a presence in 60 countries and primary steelmaking operations in 15 countries. It is the largest steel producer in Europe, among the largest in the Americas, and has a growing presence in Asia through its joint venture AM/NS India. ArcelorMittal sells its products to a diverse range of customers including the automotive, engineering, construction and machinery industries, and in 2024 generated revenues of \$62.4 billion, produced 57.9 million metric tonnes of crude steel and, 42.4 million tonnes of iron ore.

Our purpose is to produce smarter steels for people and planet. Steels made using innovative processes which use less energy, emit significantly less carbon and reduce costs. Steels that are cleaner, stronger and reusable. Steels for the renewable energy infrastructure that will support societies as they transform through this century.

With steel at our core, our inventive people and an entrepreneurial culture at heart, we will support the world in making that change.

ArcelorMittal has its global headquarters in Luxembourg. At the national level, the group has 8 sites throughout the country, including the administrative centers in Luxembourg City and Esch-sur-Alzette, various steel production units for long and wire products as well as distribution and steel service centers. ArcelorMittal also runs a R&D Centre in Esch-sur-Alzette.

Long products

- Bars and rods in all strength range used for structural framework or drive/engine parts of militarily vehicles (e.g. chassis, transmission, crankshaft, bearings, pistons) and suspension system (e.g. suspension spring) or bars for forging application (weapon systems, canon, ammunition).
- High carbon wire rods for steel cord and military tire application.
- Rebars and prestressed wires used for construction and infrastructure.

Industeel

- Amstrong®:
 High strength steel for
 structures for military
 applications like transportation
 of heavy equipments, artillery
 and personnel: Trucks, cranes,
 loaders and all material
 handlings machinery.
- Mars®: High hardness (up to 650 HBW in the case of Mars* 650) protection steels offering the optimal combination of ballistic resistance and fabricability properties for their various uses.
- Safe®: Ballistic protection steel with superior flatness. Optimised chemical composition together with its carefully controlled heating, rolling and heat treatment sequences give an optimal combination of weldability, bendability and ballistic protection performance.

Flat

Relia©:

Abrasion resistant steel with high hardness.

For decades our quarto plates

Quarto Plates:

are used as base material to build ships: from small vessels to the world's largest cruise ships passing by diverse military vessels (fregates, support vessels, submarines, ...). The reliability and superior quality of our quarto plates offer improved strength, workability, and weldability.

They are certified by all major

certification bodies.

• Amstrong©:

High strength steel for structures for military applications like transportation of heavy equipments, artillery and personnel: Trucks, cranes, loaders and all material handlings machinery.





www.artec3d.com defence@artec3d.com

ARTEC 3D

Artec 3D is a global leader in handheld and portable 3D scanners and has been at the forefront of developing innovative 3D technology since 2007. The company manufactures high-quality, yet easy-to-use portable 3D scanners, smart, userfriendly 3D software and an SDK that provides the best integration possibilities, whatever the application.

- Supporting defence research Creation of highly accurate programmes.
- Identification of non-visible defects and recovery of the samples of military machinery.
- digital models of any equipment, which will enable the design and development of new technologies and systems.
- Digital twin creation.

Analysing data for reverse engineering of an equipment or part: creating customised details, improving the aerodynamic profile, speeding up manufacturing design project workflow, quality inspection.

SME

BeyondEx



BeyondEx transforms geospatial and satellite data analysis through Al-powered natural language interactions. The company creates intuitive, user-friendly solutions that democratise complex data insights both for civilian and defence applications. Its solution enhances situational awareness and strategic intelligence capabilities, making advanced analytics accessible to all levels of expertise.







www.beyondex.space contact@beyondex.space

- Border Surveillance: Automated detection of anomalies and threats using Al agents.
- Tactical Decision Support: Al-powered overview of strategic areas.
- Critical Infrastructure Monitoring: Proactive risk assessment and change detection
- Rapid Disaster Response: Real-time damage insights and resource allocation.

LARGE





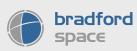
www.bluehorizon.space info@bluehorizon.space

BLUE HORIZON

Blue Horizon is a life-science company which aims at becoming a global leader in bio engineering developing and using earth and space technology for the benefit of mankind. Blue Horizon works on a combination of micro species (algae, bacteria, fungi, lichen) for Earth and space applications. In most cases, the applications are supported by AI based remote sensing tools.

- Land Mine detection by bacteria and remote sensing.
- Reduction of forest fire risks.
- Stabilisation of sand with biological soil crusts to fight against desertification.
- Reduction fire risks.
- Increasing organic soil carbon.
- Usage of organic waste as material.

SME





www.bradford-space.com info@bradford-space.com

BRADFORD SPACE

Bradford Space is a subsystems design and manufacturing company that specialises in propulsion, attitude and avionic subsystems for satellites from small sats and constellations to the largest flagship missions.

> Propulsion systems, both off-the-shelf and bespoke, enabling reacting mobility on orbit.

systems well-suited for both civil and defence needs.

Avionics and attitude control
Expertise and capabilities to meet the specific requirements of military users.

LARGE





www.cebi.com testing.lu@cebi.com

CEBI TESTING SERVICES

Cebi Testing Services performs a wide range of tests for the aerospace and defence industries. Using state-of-the art equipment, Cebi's engineers and technicians offer a complete portfolio ranging from 3D printing and material analysis to mechanical, environmental, climatic and electromagnetic testing.

The proximity to Cebi's R&D offices allows additional engineering support. From initial ideation to final confirmation, it is ensured that every step of the clients R&D journey is data-driven.

- Cebi's range of product testing tackles most complex R&D issues:
- Endurance Life and Accelerated Aging Tests.
- Design Verifications and Validations.
- Vibration and Dynamic Stresses and Corrosion Tests.
- Water and Dust Intrusion Resistance.
- Materials Analysis and Electromagnetic Compatibility.

ARGE



CERATIZIT

Ceratizit is a high-technology engineering group specialised in cutting tools and hard material solutions. Activities in defence industry consist in developing and manufacturing hard materials as components and tools used for high-performance defence equipments.



Development and manufacturing of tools (dies and punches) for ammunition casing forming.

manufacturing of Tungsten

Development and

- Development and manufacturing of hammers for Carbide cores for ammunitions. rotary forging of gun barrels.
- Development and manufacturing of waterjet nozzles for ceramic defence components manufacturing.

www.ceratizit.com offer.hardmaterials@ceratizit.com





www.circuli-ion.com info@circuli-ion.com

CIRCU LI-ION

Circu Li-ion is a European battery upcycling company. It has developed an automated battery upcycling solution, enabling reuse and clean recycling streams of End-of-life batteries.

- Saving critical minerals in the EU: Through its battery disassembly solution, Circu-Li-ion enables clean recycling streams and the reuse of battery components (cells, modules, plastics etc.). By reusing most components, the company ensures to decrease the dependency of critical minerals from other countries.
- Waste disposal and Safety issues: the automated robotic disassembly solution, based on machine learning algorithms and AI, is able to disassembly battery packs to cell level. This could be used for military applications (artillery, drones etc.), enabling a safe waste disposal, without the need of exporting critical infrastructure.
- Data: the collection of battery data in every step of the process enables the creation of a global battery database. This Database ensures that critical battery and critical mineral data is collected and stored on European servers.

SME







www.clarence-cloud.com contact@clarence-cloud.com

CLARENCE

Clarence, the joint venture between Proximus Luxembourg (leader in convergent ICT and telecom services) and LuxConnect (a key player in the datacenter sector), offers a unique disconnected sovereign cloud solution to governments, national and international defence organisations and regulated companies with highly sensitive data. Its main mission is to offer an innovative solution anchored and operated from within Luxembourg, by Luxembourg engineers, while guaranteeing the confidentiality and security of information and data, and providing total autonomy of operation in the hands of each Clarence client.

The innovative solution platform is particularly geared to artificial intelligence, as it provides a full technology stack of AI tools inherited from Google, which acts as a technology supplier of Clarence without being involved in any operation of Clarence's ecosystem.

The fully disconnected sovereign Al-enabled cloud of Clarence allows for indefinite number of usecases combining sovereignty of sensitive data and Al processing of such data in a closed environment.

Two typical showcases can be mentioned:

- Use of AI and GenAI to check and interpret documents and different information sources (voice, video, script) for extracting relevant information to support and organise military operations as well as to allow efficient adverse detection.
- Use of AI & data processing to allow full exploitation of defence classified data without any compromise of sovereignity.
- Allow sovereign and efficient local data processing in the field of military operations, thanks to local tactical appliances of Clarence.
- Training and classified information sharing through defence-dedicated chatbot.





www.clearspace.today

CLEARSPACE

Clearspace, founded in 2018, aims to remove space debris and provide in-orbit services to satellites before they become space debris. The company offers a range of technologies and services, including disposal, inspection, assembly, repair, and recycling, to promote sustainable space operations. Operating from Low Earth Orbit to Geostationary Orbit, ClearSpace serves both institutions and commercial operators. The Luxembourg team focuses on developing and commercialising GEO in-orbit services, with a significant mission planned before 2030 to extend the life of a commercial satellite.

- Inspection services: getting in the close vicinity of space objects in order to examine its physical and dynamic state enables the detection of anomalies or assessments of consequences of a failure, collision or attack in space.
- Life extension services: performing rendez-vous and docking to a functioning satellite running low on propellant thanks to a Servicer which provides station-keeping
- manoeuvres of the combined satellites for several years and takes over the attitude and orbit control system (AOCS) of the client satellite. The assisted disposal (end of life removal) service is complementary.
- Refuelling services: performing rendezvous and docking to a functioning satellite running low on propellant and refuel it with a Servicer through a dedicated interface (this means the

client's satellite needs to be priorly prepared).

- Rendez-vous system (guidance, navigation and control + sensors): the algorithms and sensors needed to do rendez-vous with another object in space in order to perform far to close range operations.
- Capture/Docking system: the technology that enables to safely capture another satellite.

SME







www.codipro.net info@codipro.net

CODIPRO

Codipro designs and manufactures patented safety swivel lifting rings. Using a single, double or triple articulation, Codipro's swivel lifting rings can be used in all directions and in all positions. From single items to large batches, from standard to specific, Codipro has been providing its 50 years of experience to professional lifting equipment distributors. They are patented, comply with the strictest safety standards and are particularly suitable for lifting and rotating heavy loads.

- Steel lifting rings
- Stainless Steel lifting rings
- Quick lift rings
- Offshore lifting rings
- Lifting systems for molds
- Lifting rings for the safety of people
- Custom-made realisations





www.compellio.com hello@compellio.com

COMPELLIO

Compellio is a software company headquartered in Luxembourg, providing patented (USPTO) global infrastructure components for bridging the gap between web2 and web3 computing. Its mission is to deliver high-performance dual-use solutions that combine the best capabilities of both centralised & decentralised worlds, with the aim to break the siloed design approach of mainstream DLTs and create scalable services for public and private organisations.

Since 2018, Compellio's team has implemented blockchain-based solutions for large EU institutions, industry players, academic institutions, and SMEs. It also involved in joint research with MIT Connection Science and participates in EU Horizon projects targeting advanced Web3 R&D.

Cybersecurity, data provenance, software supply chain solutions: Unlock new trust capabilities by strengthening the software supply chain through secure software development practices, verifiable data sharing, and enhanced forensics/recovery from cyberattacks. Trace the steps of the software supply chain (updates, version control, contributors, audit conformance test/statements, etc.) and control the way they structure, immutably register, and compare data.

Circular and sustainable supply chain solutions: New multi-sector Digital Product Passport (DPP) solution that combines blockchain, verifiable credentials, and decentralised identity technologies to deliver enhanced levels of accountability and transparency within complex supply chains. Generalised framework that can be used to register and trace information related to sustainability claims, ESG disclosures, audit reports, and supply chain collaboration workflows

SME

ConsectCom



www.connectcom.lu info@connectcom.lu

CONNECTCOM

ConnectCom's aim is to shape and operate best-in-class radio communication technologies enabling organisations to keep their operations and assets safe. ConnectCom's focus centers around "connecting and protecting", in order, to provide innovative communication and surveillance solutions for public safety, industry and defence.

Products and solutions include wireless networks for public safety organisation (police, fire brigades etc.), ad-hoc or deployable secure solutions for mobile units (defence, special forces), network or visual identification and protection solutions.

Radio communication systems and networks: Dual use networks for small, mid and large area coverage with underlying encryption standards (digital or analogue technologies). • Radio communication subscribers: The handheld fix and mobile devices following MIL standards for use in the radio communications networks.

- Bridges and interfaces between heterogeneous radio communication systems and networks: Interfaces that enable the seamless interconnection of satellite or ground networks.
- Engineering and test capabilities for such developments.









www.ctisvstems.com cti@ctisystems.com

CTI SYSTEMS

With over six decades of expertise, CTI Systems is recognised for designing and building tailored, highly automated handling and storage solutions for heavy materials, aimed at boosting the efficiency, sustainability and profitability of its valued customers active in a wide range of industries.

Its solutions comprise cutting-edge aircraft access systems, integrated assembly lines, automated heavy transport and surface treatment facilities, enabling a smart handling and storage of aircraft parts and engines, trailers, profiles, coils, slabs, and many other heavy materials.

CTI Systems' product portfolio further includes automated guided vehicles, floor and overhead conveyor systems, manipulators, turntables, lift stations and other specialised machinery.

- Teleplatforms-aircraft access
 Aircraft engine handling in solution: Teleplatforms operate in all crane-covered hangar areas.
- The Aerial Jib Platform (AJP): The advanced access during aircraft paint process. The AJP is the ideal option in hangars that are unsuited to the use of roof-mounted teleplatforms since they are fixed to the hangar floor during operation.
- engine overhaul or within test beds: Dedicated workstations in combination with customised transfer cranes and monorails.
- Assembly lines: From initial concept to full-scale implementation, CTI delivers comprehensive assembly line solutions that meet the specific challenges of handling large, heavy, or specialised components. Its systems are designed to integrate your production environment,

ensuring a smooth, reliable workflow that meets high productivity and quality standards.

Paint systems including shot-blasting, pre-treatment, E-coat, powder and wet coating: CTI Systems designs surface treatment systems that offer exceptional flexibility, seamlessly integrating with a facility's manufacturing. storage, and handling functions to optimise the entire coating process.

SME







www.cybersecurityspeed.com info@cvbersecurityspeed.com

CYBER SECURITY SPEED

Cyber Security Speed specialises in cutting-edge security solutions, focusing on Operational Technology, Industrial Control Systems, and Security Operations Centers tailored for the defence sector. Its expertise in safeguarding critical infrastructure against emerging threats positions the company as a key ally for military and defence organisations. Through rigorous assessment, implementation, and monitoring, Cyber Security Speed ensure the integrity, confidentiality and availability of sensitive operations. Its dedicated team combines strategic insights with the latest technologies to deliver robust, scalable solutions that address the unique challenges faced by the defence industry.

- Advanced ICS/OT Security Solutions: Advanced Industrial Control Systems (OT) security solutions are designed to protect critical infrastructure and key resources.
- Custom SOC Services for Defence: Tailored Security Operations Center (SOC) services specifically designed for military and defence applications.
- Cyber Threat Intelligence for Defence Sector: Actionable insights into potential threats targeting the defence sector. Proactive defence strategies and operational security measures against state-sponsored actors and advanced persistent threats (APTs) by analysing trends and indicators from a wide range of sources.
- Secure Communication Systems: Providing secure communication systems that offer end-to-end encryption and are designed to meet the rigorous standards of the defence sector.
- Drone Defence Systems: Dual-use technologies capable of protecting military installations and critical infrastructure from unauthorised drone activities. These systems detect, track, and neutralise potential dronebased threats.





www.cysec.com info@cysec.com

CYSEC

Cysec, a software provider, delivers advanced cybersecurity solutions focused on comprehensive data protection. They specialise in securing data during transmission, storage, and processing within third-party infrastructures, including cloud, edge and space environments. The company's innovative software enhances data sovereignty and control through cryptographic isolation, empowering organisations to safeguard their sensitive information against evolving threats.

- ARCA Trusted OS: A hardened Linux-based operating system for container-based workloads and platforms. This OS is designed to be trustworthy and protects data in all sates (at rest, in transit and in-use).
- ARCA SATCOM VPN: A VPN solution for securing satellite communication networks, enhancing link performance and immune to packet loss. This VPN relies on communication protocols
- and algorithms making it particularly robust and effective when used through links subject to packet loss.
- ARCA Satlink: A cryptographic library dedicated to the SDLS protocol that aims to protect TM-TC communications between a ground station and a satellite. This cryptographic library can be deployed on the ground and on board for the secure management of a fleet of satellites.
- CYSAT: Cysec is the proud organiser of CYSAT Paris, a major European event dedicated to cybersecurity in the space industry. Smaller CYSAT events are also organised along the year in Europe, North America and

SME





www.datadesign.engineering info@datadesign.engineering

DATA DESIGN ENGINEERING

Data Design Engineering is a forward-thinking enabler of high tech AI adoption and exploitation, leveraging extensive experience across diverse industries. Specialising in on edge device offline AI capabilities, space and earth observation, natural language processing, prediction analysis, image processing, voice cloning, and more, we bring cutting-edge solutions to the forefront. Its intelligence on edge-device offline technology refers to embedding AI-based operational models within robots or other unmanned equipment, enabling them to operate independently even under offline conditions.

- On Edge Device Offline AI: Embedding AI-based operational models within robots or other unmanned equipment, enabling them to operate independently even under offline conditions. This technology leverages compressed Large Multi-Model (LMM) AI systems embedded within small, power-efficient edge devices to enable fully autonomous operations. It supports real-time decisionmaking, planning, and human interaction without reliance on external cloud infrastructure. making it highly secure, costeffective, fully operational even in an offline status
- 2D-3D Single Image Conversion: It is an AI-driven solution that automatically converts 2D images from

- optical cameras or SAR (Synthetic Aperture Radar) into 3D Digital Elevation Models (DEMs). Unlike traditional methods requiring multiple angles or diverse datasets, this innovative approach uses a single 2D image, offering a cost-effective, efficient, and real-time capability for 3D visualisation.
- Al Based Radar Sensor Technology: This technology employs Al to process raw radar frequency data, bypassing the traditional method of converting this data into images. This enables the precise identification and differentiation of objects in real-time, significantly reducing operational costs and enhancing analytical efficiency.

The AI model extracts unique functional values for specific targets across multiple frequency bands and polarizations, enabling versatile applications in maritime and aerial surveillance.

- Emergency Crisis Detection & Monitoring: Advanced event detection, ripple prediction, and alternative solution generation models to proactively identify potential sourcing challenges arising from diverse events
- Intellectual Crime Detection & Monitoring: Detecting intellectual crimes such as technology theft, tax evasion, and capital flight thanks to a custom real-time social monitoring platform







DATATHINGS

DataThings edits and develops software solutions for efficient analytics of massive complex data. Its unique GreyCat technology enables the creation of domainspecific and dedicated digital twins powered by machine learning algorithms to learn from actual operations and support operational decision making. DataThings' technology finds its most powerful usage in the processing data that are relational and evolving in time and/or space. Typical use cases include live monitoring of integrated systems, (large) infrastructures management, and logistics, energy and production data analysis and predictions. Developed from scratch by DataThings with no dependencies, GreyCat alows deployments offline and on premises.

Kopr Twin: Digital Twin of Smart Electricity Distribution Grids, including low, medium and high voltage, learning from actual consumptions to provide loads predictions and grid planning.

and processing solution, to analyse data efficiently in batch and/or create live analytics services with always up-to-date machine learning

GreyCat: offline data storage
Dedicated software development: DataThings partners with their clients to bridge the gap between business specific needs and possible technological solutions, and their implementation and support.

ARGE



www.deep.eu contact@deep.eu

DEEP

hosting.

DEEP, the result of the merger of the expertise of Digora, EBRC, Elgon & POST Telecom, is the datacenter, data, cloud and ICT outsourcing partner for defence in cyber and space projects.

Part of the POST Luxembourg Group, the company has built its expertise for security, defence and space sectors on:

- international certifications such as ISO 27001 and ISO 22301 and Tier IV certification for their datacenters.
- obtaining confidential/secret accreditation or clearance for their critical people as well as infrastructures.
- sovereign cloud services thanks to its alliance with the leading European cloud provider OVHcloud.
- extensive expertise in cyber security services, catering to various sectors, including the health sector and public entitie.
- Three certified Tier IV Data Centers located in Luxembourg in the heart of Europe, the highest level of certification possible for datacenter
- Cloud Solutions Sovereign cloud and multi-cloud solutions, and cloud-native infrastructures and services.
- ICT Managed Services -Advising, designing, building, operating, maintaining and upgrading IT mission-critical infrastructures.
- Cyber Security Operation Center (SOC) - diligently monitoring and safeguarding critical infrastructure, ensuring the utmost security of both IT and Telecom environments.
- 5G networks dualuse applications, including communication infrastructure. critical infrastructure protection, security and surveillance capabilities, command and control capabilities, and the development of advanced dual-use technologies.





www.digisquad.com info@digisquad.com

DIGISQUAD

Digisquad provides specialised cybersecurity services focusing on penetration testing/ethical hacking and cyber security R&D. The company helps organisations of all sizes across the European Union identify and address vulnerabilities with a technical and innovative approach.

Advanced penetration testing: Digisquad conducts in-depth penetration testing to identify vulnerabilities in IT systems, networks, and applications. Its methodologies & development: Digisquad cover modern attack techniques including advanced threat simulation and social

engineering to enhance organisations' resilience against cyberattacks.

 Cybersecurity research engages in R&D activities to develop innovative cybersecurity solutions.

Its work focuses on threat detection, vulnerability analysis and security testing automation providing advanced tools tailored to the needs of businesses and institutions.

SME







www.dynaccurate.com info@dynaccurate.com

DYNACCURATE

Dynaccurate utilises artificial intelligence to harmonise data from different sources so that information can have common meaning preserved across different machine systems ('Semantic Interoperability'). Its technology is relevant to any knowledge graphs, distributed systems, federated data, etc. The company is particularly well versed for medical use cases. Use cases for its technologies are:

- · Data harmonisation across federated sources.
- Data harmonisation/Data MESH/Data Interoperability between different sources/devices/IoT.
- Medical/Clinical application development.

DyMap is a cloud-based SAAS which can be used off the shelf for:

 Data harmonisation across federated sources

Data harmonisation/Data MESH/Data Interoperability between different sources/ devices/IoT.

 General data interoperability support can be used to support management of Nato Stock Numbers to local catalogues, explicit management of specific physical goods, such as ammunition, medical supplies etc.

LARGE







www.earthlab.lu info@earthlab.lu

EARTHLAB LUXEMBOURG

EarthLab Luxembourg, a Telespazio group entity, has been a leader in defence sector technology since 2015, specialising in artificial intelligence and Earth observation. The company pioneers in developing advanced technological solutions with "dual use" capabilities, catering to both civilian and defence needs. Its innovative approach merges Earth observation data with cutting-edge AI and Big Data techniques to provide accurate analysis and forecasting across various critical domains. A particular focus is placed on securing peripheral networks in vital infrastructures, aiding in protection against disruptions and ensuring the reliability of essential services

Maritime Surveillance: It is crucial to analyse the surface activities and the comportment in dark-fish or preservation of protected maritime areas, E.O., GNSS, and A.I. are very important: it offers the possibility of systematically analysing all the area images. Max-ICS platform helps create or improve the A.I. models and supports the automatically scaled deployment within a public cloud.

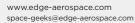
DroneAl: EarthLab has launched an innovative solution to push the use of space data and A.I. on disaster/humanitarian response and Defence: it combines E.O. open and commercial data to feed a data processing chain defined by the actors (people detection, Mines detection, etc.

Cybersecurity: Developing innovative security solutions and standards for edge networks in critical infrastructures. focusing on robust protection and integration with core production systems.

SME







EDGE AEROSPACE

Edge Aerospace offers high performance computing products to resolve spacebased processing bottlenecks. Based in Europe (Luxembourg) and USA (Florida) to enable expedient delivery and satisfy potential domestic content requirements. Computing portfolio growing and evolving: 5 types of data processing units and 3 types of switches. Founded in 2024 by former executive and technology leaders from Redwire Space, Airbus, and Made-in-Space. Qualification underway, space heritage by Q2 2025. Two defence and aerospace contracts granted in 2025. Highly responsive system engineering support throughout development and operations.

- S1 Switch: Focused on deterministic capability, used to put together on board control system. Ports - Ethernet (TSN) 4x2.5 Gbps 4x1 Gbps.
- S2 Switch: Still have space-geeks@edge-aerospace.com deterministic, but much higher connectivity and processing power. Ports - Ethernet (regular): 2x10 Gbps, 1x2.5 Gbps, 4x1 Gbps; Ports -Ethernet (TSN): 4x1 Gbps.
- S3 Switch: More capable ports, deterministic, can serve as a main payload computer. Ports - Ethernet (TSN) 1x40 Gbps, 1x25 Gbps, 4x10 Gbps, 8x1 Gbps; Ports - Ethernet (TSN): 7x1 Gbps.
- ✓ E2 DPU: Reliable, good processing performance, external Al accelerator for advanced AI/ML tasks.
- E3 DPU: Extremely powerful GPU for image and video, SW-based power consumption limit, compatible with industry standard CUDA libraries.





www.emtdlab.com explore@emtdlab.com

EMTDLAB SPACE DIVISION

EMTDLAB Space Division is an operational Space Technology venture that has developed a proprietary AI software platform to optimise shielding materials for space, defence, energy and healthcare markets.

- Structural particles radiation
 Ruggedised shielded shielding panel for spacecraft and satellites.
- Structural and functional EM shielding panels combined with ballistic and fireproofing resistance
- computing electronics for radiation intensive environment radiation shielding properties. Structural and functional panels optimised for corrosion resistance for mobile power unit batteries and transformers for EMP protection.
 - Lightweight 3D printed materials with increased

SME





www.emtronix.lu info@emtronix.lu

EMTRONIX

EmTroniX designs and produces advanced electronics and embedded software for the NewSpace and Defence industry. The company offers the most objective and Cost-effective solutions to all customer's technological needs.

EmTronix has the significant advantage of having in-house the knowledge required to handle technical and management aspects of space and defence engineering projects development.

With a strong orientation toward Radio-Frequency and Telecommunication, EmTroniX develops FPGA-based products and implements complex Digital Signal Processing systems. The company produces its own products such as On-board Computer, RF sensing Payload, Software Defined Radio, Transceivers using spread spectrum techniques and Low Noise Amplifiers.

- Mars orbiter Proximity-1 SDR autonomous transceiver. Data relay communication with Mars rover and lander elements from different agencies.
- GHOST non-intrusive In-Orbit-Test (IOT) system for efficient monitoring of wideband satellite transponders - On-ground measurement system for non-intrusive In-Orbit-Test of satellite transponders, enabling highaccuracy measurement of key performance parameters of wideband satellite transponders in presence of customer traffic, and avoiding interfering with adjacent satellites during orbital movements.
- Advanced AIS and ADS-B satellite receivers - Efficient spaceborne reception of AIS/ADS-B signals for air/maritime traffic monitoring, while offering high sensitivity, large dynamic range and immunity against Doppler shifts and message collisions.
- JURA (HERA's Juventas Radar) CubeSat - Low Frequency Radar payload to probe a double asteroid.







www.endurosat.com luxembourg@endurosat.com

ENDUROSAT

EnduroSat (Luxembourg), a specialised branch of EnduroSat Group, provides high expertise of mission management. It aims to develop and commercialise a streamlined mission management service for the future markets of earth observation (EO) and satellite communication (SatCom) as well as for satellite constellations in very low and low earth orbits (LEO/VLEO). The company benefits from considerable flight heritage as currently there are more than 500 systems flying in orbit. The satellite platforms, which are developed by EnduroSat Group are software-defined and in-flight configurable - the parameters of the satellite can be updated in orbit according to the customer's needs.

- Satellite platforms (including ESAP class satellites), communication modules, antennas, onboard computers, power modules, solar panels, structures, ground support equipment, custom modules, flatsats, constellation service, satellites as a service, SpaceDev, SpaceOps. Our satellite and space infrastucture as a service can support the following missions:
- Signal Intelligence flying multiple satellites with Software Defined Radios.
- PNT small or larger satellites flying PNT payloads.
- SAR Satellites fully integrated SAR solution whereby satellite bus + SAR payload + operational services is provided.
- VLEO EO.
- Space domain awareness.

SME

EOLIS MEDIA COMPANY / GRIDCOP PASSIVE SENSORS







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Eolis Media Company is the developer, designer and producer of a unique, patentbacked family of rugged, passive (=powerless) sensors under the brand name "GridCop" to acquire full control, monitor and manage critical infrastructures and assets, without recourse to wireless technology.

- Passive GridCop Sensors - As permanent installation or fly-away system; status monitored include intrusion. flooding, tilting/leaning, traction/movement, to/fire, etc.
- Consultancy in Infrastructure
 Infrastructure components Securisation and Monitoring -Focusing on passive means for critical infrastructure and asset monitoring.
 - (sales rep.). Fibre optic cables & components; concrete manholes (ready for containerised shipping), fully equipped and pre-configured, including GridCop sensors, fibre optic cabinets, closures and boxes.

LARGE





www.euro-composites.com

EURO-COMPOSITES

Euro-Composites, a Luxembourg based private owned company is one of the global leading manufacturers of lightweight composites products for Defence applications. Since its foundation in 1985, the company has acquired a high level of experience in composites mainly for aerospace, land and marine business.

The product range consists of various types of honeycomb, panels, formed and/or machined parts as well as ready-to-install parts for high-tech composite solutions. Being NADCAP, AS9001 and EASA 21 qualified, as well as by Airbus, Boeing and other spacecraft and aircraft manufacturers worldwide, Euro-Composites can look back to more than 30 years of experience in composites.

- Blast/Ballistic protection panels Sandwich panels for protection against explosions and ballistic threats as structural components of floor, door or wall elements for aircraft or land vehicles.
- Structural components as sandwich composite constructions for radar and antenna systems for use on land and at sea.
- Radomes for radar/antenna systems.
- Structural components for UAVs.
- Components with signal reduction and electromagnetic shielding.
- Projection screens, structural applications and body constructions for simulators.
- Shelter systems and mobile lightweight containers.
- Transport boxes and composite components for weapon systems.

LARGE





www.eurodyn.com defence@eurodyn.com

EUROPEAN DYNAMICS LUXEMBOURG

European Dynamics is a leading Information Technologies service provider and software developer, operating internationally as a group of companies, with offices and antennas in Athens, Berlin, Basel, Brussels, Copenhagen, Kaatsheuvel, London, Luxembourg, Milano, etc.

The group designs, develops, supports and operates complex IT systems and commercialises a wide range of software products, using state-of-the-art technologies.

- Command and Control platform for border/maritime surveillance with intelligent modes
- Crisis/ Emergency management platform integrating e-collaboration, document management, incident management and training features.
- Al-based Risk Management System for applying and estimating comprehensive security metrics and indicators collected by various system analysis.

LARGE





www.eviden.com

EVIDEN

Eviden designs and supplies digital systems to the defence industry for force coordination, decision support and operational readiness. Since 2019, It has been participating in the EDIDP and EDF programmes using its R&D centres in seven European countries.

Eviden contributes to these programmes in the fields of collaborative combat, digital soldier, tactical communications, defence electronics, cyber defence, intelligence, digital platforms and emerging technologies (Quantum, AI, security).

Eviden's systems cover combat information (SICS, CAMO), data exploitation (ARTEMIS), tactical LTE communications (AUXYLIUM). cryptography, and cyber security.

SME





www.exobiosphere.com

EXOBIOSPHERE

Exobiosphere is a biotech company leading high-throughput testing and biomedical research in space. The company leverages space environment properties like microgravity to deliver precise disease modeling, accelerate drug discovery, and enhance therapeutic development. While focused on space-based research to tackle challenges in oncology, neurodegeneration, and aging-related diseases, Exobiosphere's expertise also extends to defence. Its autonomous space-grade technology has enabled it to conceive innovative defence solutions, including a CBRN platform based on human tissue responses. Headquartered in Luxembourg. Exobiosphere collaborates with global pharmaceutical companies, research institutions, and space agencies to integrate space-driven innovations into medicine and defence.

 Signal - Next-generation CBRN detection system: A fully autonomous solution for detecting CBRN hazards, powered by human organoid biosensors and Al-analytics, designed for deployment in military bases, critical partnerships@exobiosphere.com infrastructures or remote conflict zones.

Space-based biomedical research for defence: Research services on wound healing. and muscle and bone regeneration, exploring microgravity deleterious effects on these physiological responses to accelerate therapies that enhance military performance and medical care







www.f3c-systems.eu contact@f3c-systems.eu

F3C SYSTEMS

F3C Systems is a trusted cybersecurity partner, specialising in protecting businesses against today's most advanced digital threats. With deep expertise across risk management, compliance, and cyber defence, the company helps organisations build resilient security strategies tailored to their needs. F3C Systems team combines technical excellence with real-world experience to deliver end-to-end solutions—from threat detection and incident response to infrastructure hardening and regulatory alignment. Whether you're looking to strengthen your security posture or meet evolving compliance requirements, F3C Systems empowers you to stay ahead of cyber risks with confidence and control.

SME







FACTIVEN

FACTiven provides sofware solutions for space data protection and traceability, to combat deepfakes, misinformation and cyberattacks, and enable data to be used with confidence, even across distributed systems and in data fusion contexts. By fortifying the veracity and authenticity of space data, the company empowers organisations to make informed decisions in security and defence contexts.

SafeDataPath: cutting-edge data traceability and protection solution designed to ensure trustworthy data, particularly in distributed data processing systems and data fusion scenarios. Defence against misinformation and cyberattacks.

LARGE







www.faymonville.com sales@faymonville.com

FAYMONVILLE DISTRIBUTION

Faymonville Group is the leading full-range manufacturer of special vehicles for heavy load transport and special transport.

It produces semi-trailers, lowbed trailers, modular vehicles and self-propelled vehicles that can be used to transport anything exceptionally heavy, long, wide or tall! It manufactures everything itself 100% in-house, from the first sheet to the finished vehicle. As a result, it boasts a flawless level of manufacturing, effective quality and process control.

Semi-trailers / Trailers

SME







www.firis-system.com contact@firis-system.lu

FIRIS

Firis specialises in geospatial digitisation using drones and 100% autonomous rolling stock for automated acquisition of confined spaces. It is constantly looking for new challenges so that it can continue to provide its customers with innovative solutions that improve their processes.

Integration and usage of LiDARs (including on UAS/drones and UGV/robots platforms), Laserscans and RGB-D/360° cameras in its civil workflow, covering 3D scans, As-Built and CAD re-mapping missions.





www.flawlessphotonics.com innovation@flawlessphotonics.com

FLAWLESS PHOTONICS

Flawless Photonics is an innovator in photonics, revolutionising optical fibers, lasers, and sensors, using proprietary techniques in automation and miniaturisation. Its enabling technology, optimised for the unique requirements and rigours of space, allows the production of optical fibres, without generating light scattering defects that limit lasing power and transmission over long fibre lengths.

Fibres and optical components enabling applications from UltraViolet to MidWave InfraRed (MWIR) are one product class enabling civil and defence applications.

MWIR lasers allow free-space optical communication, sensing, and also semiconductor manufacturing. MWIR free-space optical communication would allow not only better covert operations and detection avoidance, but also higher robustness to weather conditions compared to current optical communication.

SME





www.flenhealth.com

FLEN HEALTH

Flen Health is a 100% family-owned commercial therapeutic company based in Belgium and Luxembourg. For more than 20 years, the company has developed and commercialised innovative skin and wound healing products in Europe and Asia, achieving market leadership positions in the UK and Belgium, plus market presence in 40 countries. Flen Health has/had well-established partnerships with leading pharmaceutical companies. It has developed a highly differentiated platform technology based on enzymes that heal complex wounds by modulating inflammation and killing bacteria. Because of its all-round and straightforward application, the product is used to heal many types of complex chronic and non-chronic wounds and burns.

▶ Flaminal, for dermal complex burns and chronic wounds. It is an alginate dressing that debrides, desloughs, protects wound borders, and promotes granulation tissue formation and healing whilst killing wound bacteria in its dressing structure. Recently the product has been and is extensively used also in war zone (Israel), where it is used in the field hospitals where (non-specialised) staff applies the product to either heal the wound or stabilise it for and during further transportation to specialised care. After transportation of the patient to specialised centres, the product is either continued or skin grafting or other treatment may be indicated.

Flamigel is a hydrogel that contains a dispersed semipermeable lipid. It absorbs exudate on exuding wounds and hydrates dry wounds.





www.gomspace.com edmi@gomspace.com

GOMSPACE LUXEMBOURG

GomSpace Luxembourg was established in 2017 and is part of the GomSpace group being a leading developer and provider of small satellites and missions. The company focuses on development, deployment and support of satellite operations solutions including operational support to missions. Furthermore, its local engineering team possess complete mission design and implementation experience for unique satellite projects - currently being applied in maritime domain surveillance, Earth observation and deep space exploration.

- Mission control centres and software solutions for efficient satellite operations based on HOOP product line.
- Satellite mission operations through an onsite Satellite Operation Center.
- Design and implementation of unique satellite missions for maritime domain awareness, Earth observation and signal intelligence.

LARGE

GOOD YEAR.



Goodyear is one of the world's largest tire companies. It employs about 68,000 people and manufactures its products in 53 facilities in 20 countries around the world. Its two Innovation Centers in Akron, Ohio, and Colmar-Berg, Luxembourg, strive to develop state-of-the-art products and services that set the technology and performance standard for the industry.



- www.goodyear.com def_emea@goodyear.com
- Large variety of tires meeting military vehicle manufacturers/ governmental institutions requirement.
- Large variety of tires meeting land vehicle manufacturers requirements.
- Large variety of aviation tires meeting maunfacturers/ airlines/ military requirements.
- Technology and services connecting tires with the corresponding vehicles.





www.gradel.lu gradel@gradel.lu

GRADEL

Gradel, established in Luxembourg in 1965, is a diversified engineering company specialising in the design and manufacture of complex, custom-built machines for demanding industries. Their core activities encompass project management of special purpose machines, particularly for the nuclear, space and aeronautical sectors, where they produce Mechanical Ground Support Equipment, and the production of sputtering targets for the glass industry. Notably, Gradel has also pioneered advanced manufacturing techniques, most prominently through their Gradel Robotic Additive Manufacturing (GRAM) process, enabling the creation of ultra-lightweight composite structures. With a strong focus on engineering excellence and innovation, Gradel provides comprehensive services from design and engineering to manufacturing, assembly, and testing, supporting clients across various industrial applications.

- Field Logistics and Support: Production lines with automated guided vehicles can be used to support field logistics operations, such as the transportation and distribution of supplies and equipment. This includes the use of trailers, cranes, and other equipment to move and handle materials in challenging field environments.
- Vehicle Maintenance and Repair: Robotic Systems to support the maintenance and repair of military vehicles, including tanks, armored personnel carriers, and other ground vehicles. This includes equipment for lifting, towing, and transporting vehicles, as well as specialized tools and equipment for vehicle maintenance.
- Aircraft Maintenance and Ground Handling: maintenance and ground handling of military aircraft. This includes equipment for refueling, arming, de-arming, and loading/unloading cargo and munitions. Also includes specialized tools and equipment for aircraft inspections, repairs, and maintenance.
- Communication and Surveillance: Equipment to support communication and surveillance operations. This includes the use of equipment to support antennas, towers, and other equipment to establish and maintain communication links, as well as surveillance systems for monitoring enemy activity.

SME









www.gradellw.lu gradel@gradel.lu

GRADEL LIGHT WEIGHT

Gradel Light Weight is an engineering company pioneering disruptive technology for manufacturing lightweight composite structures. Its Gradel Robotic Additive Manufacturing (GRAM) technology impregnates any type of fiber with any resin type using a fully automated digital process. Applying topology-optimised design allows mass savings of up to 70%, while maintaining mechanical functionality. Flexible in part size and complexity, GRAM produces structures from 5 cm up to several meters in 3D space. GRAM also enables manufacturing intelligent, ultra-light components with well-defined functions. Using bio-based materials in less quantities, it can serve sustainability goals by reducing carbon and material footprint in broad applications.

Design of the lightweight structure based on topology optimisation.

 Simulation of hybrid lightweight structure, based on non-isotropic simulation rules.

 Manufacturing ultralightweight composite structures using GRAM digital process;

Applying end-to-end digital process to manufacture ultralightweight and smart components for space, aerospace, automative, and mobility sector in general (e.g. structural parts for satellites, rovers, drones, etc).







www.helical-ai.com hello@helical-ai.com

HELICAL

Helical is an AI platform that empowers users to seamlessly integrate biofoundation models into intricate workflows. It provides an essential AI toolkit and expertise, democratising access to advanced models for complex applications such as biomarker discovery, target identification, and mRNA & payload design, all without the need for specialized AI/ML teams. By unlocking signals that traditional methods overlook, Helical significantly reduces discovery times and accelerates drug discovery.

By leveraging Helical's platform that interconnects pre-built blocks, rapid development across diverse use cases becomes possible.

In defence-specific applications, this approach can be transformative:

- RNA-Based Biomarker Identification for Rapid Disease Diagnosis: Al-driven toolkit that identifies unique RNA biomarkers to accelerate the diagnosis of diseases. This enhanced diagnostic speed and accuracy is vital for bolstering public health responses and strengthening biosecurity measures.
- Synthetic Biology: Generative AI foundation models can revolutionise the design and production of biological materials and systems by reducing the traditional trial-and-error cycle. This innovation supports the creation of novel materials, drugs, vaccines, and even genetic engineering techniques for crop optimisation.

SME

LUXEMBOURG





www.hitec.lu antennas@hitec.lu

HITEC LUXEMBOURG

HITEC Luxembourg offers high technology solutions covering different business areas: satellite ground segment technology; customer specific and standard equipment for testing and measuring of physical properties; engineering; consulting; software and ICT development, and project management.

- Anchor stations for governmental/military satcom.
- EO satellite data downlink and TTC stations.
- Optical ground stations for QKD and laser communications.
- Antenna refurbishment solutions.

SME





info@hydrosat.com www.hvdrosat.com

HYDROSAT

Hydrosat is a data analytics company that is exploiting the unique capabilities of thermal infrared imagery for applications from agriculture to forestry and national security. Its world-class analytics applied to its proprietary, high-resolution thermal imagery will unlock insights that have historically gone unseen.

It provides operational intelligence of the battlefield, facility analysis based on heat signatures, early warning of droughts that could lead to unrest or drive human migration, disaster risk assessments, and post-event environmental analyses to aid recovery efforts.





www.incert.lu contact@incert.lu

INCERT G.I.E.

Incert is a public agency, which is providing products and services related to identity management of both persons and objects, cryptography, and cyber security, and is successfully representing Luxembourg within security international organisations since its creation in 2012.

Incert's continuous mission is to bring secure and trustworthy transformations through digitalisation.

Incert is running business projects on four continents, dealing with public authorities, major international companies and organisations. With a never-ending objective to create assets for securing the digital society, Incert is now offering a whole ecosystem of services and solutions providing long term answers to moving challenges.

- Public Key Infrastructure (PKI): At the heart of our operations lies the PKI technology, serving both public and private entities in safeguarding their critical operations.
- Key Management System (KMS): Customised KMS solutions are provided to a diverse range of clientele, including entities like connected car manufacturers, catering to their specific needs.
- Cybersecurity / Darknet: Delivering comprehensive cybersecurity expertise encompassing risk management, threat intelligence, incident response, and security auditing.
- Novento: Most referenced solution for orchestrating and securing international and political gatherings, boasting complete security features alongside logistical support.

Cryptography for privacy: Pioneering advancements in privacy-enhancing cryptographic technologies, such as Zero-Knowledge Proofs and Fully Homomorphic Encryption, within the realm of digital identity.

SME





www.integrasys-space.com info.sales@integrasys-sa.com

INTEGRASYS

Integrasys is a software engineering company focused on RF communication. satcom and 5G-NTN, with products/services, and specialised in satellite network design, deployment, maintenance and interference management tools for monitoring critical satellite infrastructure in the commercial and defence fields. It offers a wide range of signal monitoring products, VSAT deployment, maintenance and link budget solutions for telcos and satellite service providers, satellite operators and governments around the world, to analyse and design, monitor and manage satellite networks, and to provide anti-jamming solutions as cybersecurity technology.

- CleanRF: In-line RFI canceller that cancels both managed and unmanaged interference sources in real-time, from ground and in space.
- Beam budget: Link budget that delivers precise insights into satellite network footprints, dynamic spectrum management (monitoring and allocation), ITU regulation compliance and constellation design and planning.
- ControlSat and VectorSat: Carrier monitoring with the capacity to analyse 200 carriers radius, detecting whether per second, detecting and identifying both intentional and unintentional interferences
- Both Controlsat and Vectorsat have been updated to be 100% hardware-agnostic, seamlessly operating with the DIFI standard. This advancement is the result of a funded project developed in Luxembourg, showcasing cutting-edge innovation in satcom technologies.
- InterGeo: Interference localisation within a 5 km intentional or unintentional signals that interfere with the carrier. Its real-time recording with continuous buffering ensures faster operation and resolution.
- FWSEC: A configurable, secure lifecycle management system based on blockchain technology that protects firmware from hacking and preserves software integrity.









www.ksl-automation.com info@ksl-automation.com

K.S.L. AUTOMATION

K.S.L. Automation, founded in 2006, is located in Ettelbruck/Luxembourg. It offers consultation, project planning, mechanical and electrical construction, programming and implementation of automation requirements - all from a single source. It specialises in vacuum and plasma applications like plasma nitriding equipment, PVD equipment, DLC equipment (manufacturing and services), and electronic and software development.

- Plasma nitriding equipment and services PVD equipment and services
- DLC equipment and services
 Electronic and software
- development

SME







www.lifteurop.com info@lifteurop.com

LIFTEUROP

Lifteurop designs, manufactures and distributes standard and customised lifting equipment and accessories. The company has over 70 years of experience inherited from the leading French industrial brand STAS, which has been operating under the Lifteurop name in Europe and worldwide since 2010. Lifteurop has a team and a research department at the service of its customers and distributors.

- Lifting accessories: shackles, lifting rings, hooks, etc.;
- Wire rope slings: galvanised or stainless steel wire rope slings, Flexfort slings (= vulcanised neoprene rubber coating);
- Chain slings: GR80; GR100, stainless steel with different accessories:
- Textile slings: polyamide, polyester, etc.;
- Lifting systems: RSB systems, wire mesh slings, automatic hooks, lifting beams, magnets, etc.

RESEARCH ORGANISATION







www.list.lu info@list.lu

LUXEMBOURG INSTITUTE OF SCIENCE & TECHNOLOGY

With more than 600 skilled research professionals and world-class research infrastructure, the Luxembourg Institute of Science and Technology (LIST) is a mission-driven research and technology organisation (RTO) that develops competitive and market-oriented product/service prototypes for public and private stakeholders.

AI, cybersecurity and telecommunication

LIST develops methodologies, architectures, models, algorithms, software tools and integrated IT-based systems to achieve a more efficient, optimised, robust, scalable, secure, trustworthy and user-friendly utilisation of data, information technologies and telecommunication systems. The defence activities of LIST are supported by an AI, data analytics and visualisation technology infrastructure.

The related priorities applied for defence are:

- 5G/6G
- Automated process-based systems
- Digital twin technologies
- Explainable AI regulatory sandbox
- Interactive technologies for critical incidents

EO and integrated space applications

Leveraging expertise in multi-source remote sensing and telecommunication to monitor and predict changes to Earth's surface and subsurface, LIST provides real-time decision support for civil security and defence (e.g. situational awareness for crisis management, battlefield preparation, prediction of forced displacements, camouflage detection).

Priority areas include:

- Satellite Earth observation (radar, optical, thermal)
- Satellite communication for resilient network Infrastructure
- Drones and ground robots
- Image-to-image translations (radar-optical, coarse-high resolution)
- Multimodal and heterogeneous change detection
- Anomaly detection through time series analysis
- Assimilation of multimodal EO data into numerical prediction systems (e.g. digital twin of the Earth)
- Integrated applications, combining IoT, EO and SATCOM

Materials

The activities in the field of materials are based on four thematic pillars:

- Nanomaterials and nanotechnology
- Scientific instrumentation and process technology
- Structural composites
- Functional polymers

The priority areas within those thematic pillars cover:

- Biobased polymers and sustainable composites
- Process engineering and advanced manufacturing
- Modelling and design of structures and multifunctional composites
- Interfacial engineering and design, adhesion and compatibilisation of fibres/ matrix
- Functional coatings
- Sensors and actuators, photocatalysis and energy harvesters
- Transparent electronics and smart nanocomposites





www.lmo.space info@lmo.space

LMO

LMO is a Luxembourg dual-use space company which provides autonomous capabilities to identify, track and characterise other space objects from space. By combining artificial intelligence with sensors, LMO provides unique on-board Space Domain Awareness capability to protect and defend space assets from hazards and threats.

LMO's capability can also be used to approach, inspect and rendezvous with assets in space to enable In-Orbit Servicing of satellites.

- Payloads for space domain awareness
 combinations of sensors and artificial intelligence to identify, track and characterise other space resident objects.
- Payloads for rendezvous and proximity operations - combination of sensors and artificial intelligence to provide ideal approach and docking maneuver for an in-orbit servicing satellite

SME

Lunar Outpost



www.lunaroutpost.com info@lunaroutpost.com

LUNAR OUTPOST

Lunar Outpost provides innovative technology and services to enable a sustainable human presence in space. Its solutions comprise space robotics systems that are able to operate in the harsh conditions of the lunar surface as well as energy generation technologies for lunar surface and extreme environments, including Earth applications. Its expertise in advanced spacecraft and robotics solutions is unmatched, with currently 4 missions to the Moon with the first voyage launching this year on a SpaceX Falcon 9.

- Lunar Outpost Thermal
 Energy Storage System Earth (LOTESS-E): Energy
 generation system able to
 produce thermal or electrical
 energy by collecting solar light.
 Light weight and high energy
 conversion efficiency. Easy to
 deploy and readily available
 to support civil and military
 operations by providing
 reliable energy in remote
 and harsh Earth environment
 conditions.
- Mobil Autonomous Prospecting Platform (MAPP). Robotic platform designed for Lunar surface operations. MAPP can operate under the harshest conditions found on Earth to reliably conduct intelligence, surveillance and reconnaissance (ISR) operations to support critical military and civil missions.
- Canary: Environmental monitory system able to detect wide varieties of threatening gas species, from industrial pollution up to biological threads caused by unfriendly forces.
- Thermal control systems and components for extreme temperature survival and vehicle sustainability.





www.lunox.com

LUNOX

Due to the rapidly changing tactical requirements and emerging challenges, Lunox does not believe in that one perfect product, because every mission is unique. The company, created in Luxembourg, believes in selecting the best professional products worldwide to equip each soldier with everything they need to ensure they are prepared for their unique mission environment. Its experience in several areas of the military and a dedicated understanding and knowledge of soldiers' gear and needs drives its motivation to find the right personal equipment. Through its wide network of first-class manufacturers, together with active and former soldiers up to SF and SOF units, Lunox offers the best custom-tailored solutions for every environment that soldiers need to operate in, from dust and dirt to rain and water and in the darkest places.

- Project development and research for gear and equipment.
- Supplying tactical equipment related to everything the soldier needs.
- Providing a wide range of electro-optical equipment.

SME

LUX AVIA SERVICES

Lux Avia Services is a designer and manufacturer of UAV fixed wings, VTOL. From its base in Luxembourg, it leads a consortium of diversified UAVs producers in Europe and Ukraine. The company enables a large and refined proposal of the latest technical solutions embedded into a complementary panel of drones.



contact@luxavia-services.com

• All Lux Avia Services' flying solutions embedded into drones are anti jamming without any emission of frequencies. The company has identified new technologies and drones missing on the battlefield to defend or to strike incoming targets in the attacked territory.







www.luxdeftec.eu defence@luxdeftec.eu

LUXDEFTEC

LuxDefTec (Luxembourg Defence Technologies), is active since 2005 and specialises in defence, engineering and project management. It offers a range of sporting and defence-related products. Its engineers, innovates, creates and markets enhanced products according to requirements. These products are part of its commitment to provide advanced defence technology solutions. Its portfolio goes from single to complete systems. It possesses knowledge on how to lead successful R&D and miscellaneous engineering projects from start to finish.

 Product development, procurement, project management, distribution, logistics, system engineering, maintenance, testing in real conditions, integration and equipment evaluation ✔ LDT conducts ballistic testing at distances of 25, 50, 100, and 200 meters. Multiple calibers are possible, ranging from .22Ir to 7.62x51mm / .308win, with larger calibers available upon request. The ballistic impact testing can be recorded at various high-speed settings for fracture evaluation.

LARGE







www.govsat.lu info@govsat.lu

LUXGOVSAT

GovSat is a public-private joint venture between the Luxembourg government and world-leading satellite operator SES. Its mission is to provide secure, reliable and accessible satellite communication services for governments – addressing the demand for connectivity resulting from defence and civilian security applications. Dedicated entirely to governmental and institutional users, the GovSat-1 satellite features high-powered fully-steerable spot beams and an X-band global beam. It is equipped with anti-jamming features, encrypted telemetry and control, and uses assured frequencies. This enables an array of applications such as connectivity for theatres of operation, interconnection of institutional or defence sites, border control, ISR, as well as various types of communications for air, land and maritime missions.

- Satellite communications
- Service provider
- End-to-end solutions
- Satellite operator
 Anchoring teleport and services





www.luxprovide.lu Info@lxp.lu

LUXPROVIDE

LuxProvide runs the national supercomputer, a sovereign platform with an ISO certification in security, ensuring your data is kept safe and secure in Luxembourg, encrypted and only accessed by you on a dedicated environment. LuxProvide works closely with customers to derive value from its business data (optimising internal processes or creating new value-added services) by providing a unique platform that combines data science engineering expertise in big data and analytics, simulations and artificial intelligence.

- Our data engineers and our supercomputer can provide a range of critical services and capabilities due to our exceptional computational power and performance. Some of these services include:
- Simulation and Modeling: Supercomputers can simulate complex scenarios, such as battlefield situations, weapon performance, or the behaviour of various systems under different conditions
- Data analysis and intelligence: Supercomputers can analyse vast amounts of data from various sources including satellites, drones, sensors, and intelligence reports.
- Cybersecurity and network defence: Supercomputers can be used to develop and deploy advanced cybersecurity solutions, including intrusion detection systems, threat analysis tools, and encryption algorithms.
- Weather forecasting and environmental analysis: Supercomputers are instrumental in weather forecasting, climate modelling, and environmental analysis,

which are critical for military operations and strategic planning.

Weapon design and testing: Supercomputers can aid defence companies in designing and testing advanced weapons systems, including missiles, aircraft, submarines, and artillery.

SME

UXSPACE





LUXSPACE

LuxSpace is engaged in various space activities, from satellite development to data product. The company has successfully launched and operated satellite systems in the range of 30-150kg.

Its satellite portfolio includes small, medium, heavy versions (up to 250kg) turn key solutions for space missions, data application and services, development and provision, e.g. maritime surveillance.

Maritime surveillance - space Earth observation. based data and fusion with terrestrial services.

Space situation awareness and reconnaissance.

 RF-monitoring, mapping, detection.

LUX TRUST



www.luxtrust.com sales@luxtrust.lu

LUXTRUST

LuxTrust was created in 2005 at the initiative of the State of the Grand Duchy of Luxembourg, the Chamber of Commerce and the country's main banks to establish a unique national digital identity solution allowing uniformly secure access to banking and governmental applications. These LuxTrust identities are used for security purposes but also as electronic signatures with full legal value. Certified according to the European eIDAS regulation and compliant with the latest European regulations (DSP2, RGPD, ETSI, AML), LuxTrust offers a wide portfolio of qualified trust services (identification, authentication, electronic signature, electronic archiving, electronic registered mail, signature validation, consent management, etc.).

- Issuance of digital identities: LuxTrust, a recognized certification authority, offers a wide range of solutions and services allowing natural and legal persons to equip themselves with electronic identities.
- ▼ Trust Services Hub (COSI solution): COSI is an electronic signature service (simple/advanced/qualified) meeting the highest elDAS standards and managing all signature formats (PAdES, XAdES, CAdES) and all types of documents (Word, PDF, Excel, etc.).
- Electronic archiving (Pineappli solution): Personal or shared digital safe and conclusive electronic archiving (SAE) service accessible from a single screen. The Pineappli solution, ISO 27001 and HDS certified, is both a personal or shared digital safe to store, classify and search your data, an NF461 certified archiving solution, an access point to our trust services (signature, stamp, timestamp, etc.), a secure document transfer solution.
- Personal data and consent (IDKEEP and Fair&Smart solutions): LuxTrust offers solutions to manage personal data and enable businesses to comply with GDPR requirements.
- elDAS Trust Services: LuxTrust is one of the only trust service providers qualified according to elDAS for all the services enabling a paperless digital world.

SME

LUX UAV



www.luxuav.com nz@luxuav.com

LUXUAV

LUXUAV is a drone technology company based in Luxembourg, specialising in the production and development of advanced UAV solutions. With innovation at its core, the company designs and manufactures high-performance drones tailored for defence, security and commercial applications. Its mission is to reindustrialise the European defence sector by advancing modern UAV technologies and reducing dependency on critical components. It is committed to delivering state-of-the-art, reliable and secure UAV systems that enhance operational capabilities and strategic autonom.

- Short-range UAVs with advanced AI for navigation and decision-making: Leveraging battleproved technologies with impressive payload and endurance characteristics. Designed for rapid deployment in dynamic environments, they enhance situational awareness and operational efficiency in both defence and civilian applications.
- Mid-range UAVs with extended endurance: Featuring extended flight endurance and advanced autonomous navigation and recognition systems, enabling precise and adaptive data gathering. With their ability to operate in complex scenarios, they provide a cost-effective solution for large variety of missions.
- Long-range reconnaissance UAV with expanded autonomy: Offering long-endurance intelligence, surveillance and reconnaissance (ISR) capabilities with lightweight and stealth-oriented UAVs. Equipped with advanced sensors and low observability technology, they provide undetectable real-time intelligence in contested environments.







MAANA ELECTRIC

Maana Electric is a Luxembourg company developing In-Situ Resource Utilisation (ISRU) technologies. The goal is to use low value feedstock (for example desert sand) to extract chemicals such as Oxygen, Silicon, Iron, Titanium, Aluminum and others without the use of water and chemicals and with low CO₂ emissions. These materials are processed to locally manufacture products, such as solar panels to be installed locally, or for other additive manufacturing applications.

Green and local metal production (in particular silicon)

Local and cheap integration of solar panels

SME

cular plasma group





MOLECULAR PLASMA GROUP

MPG helps improve adhesion and protection with its revolutionary molecular coating technology that binds organic chemistry to surfaces. It achieves functionalities like strong bonding of inert materials, antimicrobial, hydrophilic, antistick and others. MPG's machines made in Europe can run solvent-free process and be fully automated.

- Adhesion improvement of composite materials.
- Priming to improve durability of protective coatings.
- Repellent finishes for textiles
 Antimicrobial finishes for used in garments.
 - protection against biological threats

www.molecularplasmagroup.com contact@molecularplasmagroup.com

SME











nablify.com hello@nablify.com

NABLIFY

nablify is the tactical unit organisations rely on to succeed in their "mission impossible". More than a service, nablify is their embedded partner—bridging cutting-edge engineering and scientific computing to develop smart systems. The company help clients achieve strategic goals with tailored solutions that tackle unique challenges and aspirations. Its hands-on, collaborative approach ensures ownability, scalability and sustainability. nablify builds strong, longterm partnerships, delivering measurable impact through ongoing support and continuous improvement. The company drives remarkable change with state-ofthe-art solutions powered by science and technology.

Large-scale AI applications

High-performance computing applications with sensitive data

netcompany

intrasoft



www.netcompany-intrasoft.com information@netcompany.com

NETCOMPANY-INTRASOFT

Netcompany-Intrasoft is a leading European IT solutions and services group with strong international presence and expertise, offering innovative and added-value solutions of the highest quality to a wide range of international and national public and private organisations. The company's head offices are located in Luxembourg. Netcompany-Intrasoft's Research and Innovation Development (RID) department is at the forefront of innovative IT development and contributes to the advancement of EU state of the art in disruptive technologies such as cybersecurity, internet of things, big data analytics, blockchain etc.

- A Secure Digital Military Mobility System (SDMMS) that facilitates direct and secure exchange of information between nations requesting and approving any military movement.
- Cyber Crisis and Cyber Warfare Exercise 2022 for the European Chemicals Agency.
- Provision of IT services for the development, maintenance and support of Customs and Taxation Information Systems (DG TAXUD).

Software development services for the ECRIS TCN system of the eu-LISA agency.

SME



neuraspace





www.neuraspace.com info@neuraspace.com

NEURASPACE

Neuraspace is a Software-as-a-Service end-to-end automated solution for optimising space traffic management and manoeuvring assistance by detecting and mitigating threats to assets in space. It is built on five key pillars:

- data fusion for a comprehensive space domain awareness
- artificial intelligence and machine learning
- automation for resource optimisation
- orbital dynamics for mission operations optimisation and risk management
- data and dedicated tracking services
- Neuraspace Pro Software-as-a-Service:
- Resilient Mission Design of satellites and constellations incl. mission analysis, trajectory design, manoeuvre planning, risk mitigation and end-of-life.
- Space Traffic Management in realtime: automated service (conjunction screening, analysis, classification, warning, manoeuvring planning and optimisation).
- Data
- Data and Tracking as a Service.
- Space Situational Awareness (SSA) information.

- Flight Dynamics and Mission Control: support to routine operations such as orbit prediction, prediction of orbit-related events, support of operation of the ground-station network and design of manoeuvres.
- Autonomous tasking of telescope data: software for the autonomous tasking and ingestions of data resulting from telescope observations.
- Resident Space Objects data and Space Weather data.
- Relying on multiple data sources to build a data warehouse with full traceability contributing to risk assessment and risk minimisation.





www.no-nailboxes.com info@nnb.lu

NO-NAIL BOXES

With over 60 years of experience, No-Nail Boxes manufactures collapsible plywood and steel boxes for industrial use. The company employs around 70 people to produce close to 450,000 boxes annually, of which 95% are made to measure for clients. No-Nail Boxes crates are designed according to an ISO 9001 certified process and conform to the ISPM 15 standard. They are light, user-friendly. manageable for the operator and can be personalised thanks to different imprint techniques.

Quality, protection of the environment and sustainable use of natural resources are integral parts of the No-Nail Boxes philosophy, as evidenced by the numerous labels and certifications.

- No-Nail Boxes supplies plywood folding boxes that are tailor-made for customers, adapted to their specific needs, and best guarantee product integrity and personal safety.
- FXBOX
- ISIBOX
- EUROBOX

- RIBOX
- CLIP BOX
- DG BOX

SME

NORTHSTAR EARTH & SPACE

NorthStar's Space Information & Intelligence (Si²) platform provides transformational space situational awareness services, encompassing also space EARTH & SPACE domain awareness and space sraffic management. These unique services combine data from multiple sources with vital input from dedicated space-based sensors, ensuring continuous monitoring and field of view across LEO, MEO, and GEO orbital domains, thus avoiding the gaps in coverage with ground-based surveillance, particularly over ocean areas.

On 31 January 2025, NorthStar launched the first four satellites of its SSA constellation. The company's s advanced operations and data processing enhance coverage, delivering an always on, high-precision and early warning system directly contributing to ensure space safety, security and sustainability.

www.northstar-data.com rsvp@northstar-data.com

- Conjunction warning and collision avoidance services: Timely alerts on potential space object collisions and recommendation of risk mitigation maneuvers to ensure satellite safety and operational continuity.
- Multi-source data integration: Sensor-agnostic data processing capabilities to augment the precision
- of NorthStar's space object tracking system.
- Maintain custody of high valued resident space objects: Continuous tracking high value assets of interests that pose a threat and challenge national security.
- Pattern of life monitoring: Analyses past satellite performance to predict future
- satellite behaviour leveraging machine learning and artificial intelligence models.
- Anomaly detection: Identify significant changes in tracked objects, such as maneuvers, satellite breakups, collision threats or any other anomalous behaviour which does not correspond to normal operations.

ODYSSEUS SPACE



www.odysseus.space info@odysseusspace.com

ODYSSEUS SPACE

Odysseus Space provides laser communication as a service for space-to-ground data transfer. Its unique solution Cyclops™ addresses the data bottleneck and security challenges faced by satellite operators. Founded in Luxembourg in 2019, Odysseus Space's team of 25+ people is expert in lasers, optics and space systems. The company will perform a LEO-to-ground link demonstration in Q1 2026 with a customer, and will deploy intersatellite links capabilities in 2027. Odysseus Space's objective is to provide light speed connectivity everywhere in the Solar system between all assets in space and on Earth.

Odysseus Space provides Cyclops™ as an end-to-end solution through a subscription-based model, with no upfront cost. Cyclops™ gives customers access to its network of optical ground stations, enabling data retrieval at up to 10 Gbps, and 1 TB per day. The company can supply its space laser communication terminal to integrate into customers' satellites.

SME







www.oqtec.com contact@oqtec.com

OQ TECHNOLOGY

OQ Technology Group (OQTEC) is the fastest growing 5G IoT LEO satellite operator in the world providing uninterrupted cellular coverage for assets and machines anywhere on the planet with its satellite constellation. Established in 2016, OQTEC is headquartered in Luxembourg. It provides global IoT and M2M satcom connectivity solutions based on 3GPP 4G / 5G standards catering to multiple commercial and industrial clients in the verticals of energy, mining, logistics, maritime, agriculture, government and defence. OQTEC has been successful in launching multiple missions proving its experience in telecommunications, embedded systems and cubesats.

The company has recently launched several projects as the first European company to provide satellite direct-to-smartphone connectivity based on the 3GPP 5G NR standard, inlcuding winning the EIC Accelerator in February 2025. OQTEC is thus building the necessary capabilities to be a wholistic satellite 5G network service provider for 3GPP standardised NB-IoT-NTN and NR-NTN connectivity.

- OQTEC offers a complete 4G/5G satellite-based narrowband IoT connectivity solution based on the 3GPP standards. OQ ONE is a flexible solution for commercial and enterprise customers with possibilities for wholesale distribution, global coverage (roaming with mobile carriers (World SIM Card)), and flexible data plans bundled with the hardware.
- OQTEC also offers engineering design and consultancy services for:
- Telecommunication protocol stack development
- Waveform and DSP design

- Embedded hardware and software development
- Satellite mission design, analysis and management

passbolt 💠



www.passbolt.com contact@passbolt.com

PASSBOLT

Passbolt is an open-source credentials collaboration solution designed to meet the strict security demands of defence organisations. 40,000+ organisations worldwide are using Passbolt, including governments, defence agencies, criticial infrastructure providers, IT companies and many more. Its robust end-to-end encryption protocols and flexible architecture ensure maximum protection for mission-critical passwords and secrets. Passbolt offers seamless sharing features, granular access controls and scalable deployment options, including on-premise installations on internal networks.

- On-premise deployment: Deploy Passbolt entirely within secure infrastructure for maximum control and compliance, without relying on an internet connection (i.e. air-gapped environment). This self-hosted configuration ensures all encrypted credentials remain strictly on internal network, making it ideal for high-stakes operations
- Comprehensive security, auditing and enforcement: Leverage advanced access controls, automated policy enforcement and extensive auditing to protect mission-critical credentials. Finegrained permission settings, real-time monitoring and end-to-end encryption prevent unauthorised access and support regulirements
- Secure collaboration: Safely share passwords, secrets and other sensitive data through integrated group management. Real-time updates and activity logs enable swift, accountable coordination in demanding defence environments

SME





www.pendragon-labs.com contact@pendragon-labs.com

PENDRAGON LABS

Pendragon Labs is the company designing and manufacturing UGV and robotics solutions for the defence and security sector. Its prime product is the ARTUS UGV, distinguishing itself by its self-leveling platform capabilities and excellent indoor/outdoor versatility. Based on a modular chassis, ARTUS can be tailored to a multitude of mission profiles (e.g. perimeter surveillance, medevac, emmergency services support, heavy-lifting logisitics) with dedicated sensor packages as required.

ARTUS UGV - ARTUS is an unmanned ground vehicle (UGV) with extraordinary terrain capabilities. Its slim dimensions allow effortless movement on narrow paths, in forests and in tunnels. Thanks to 4-wheel-steering and 4-wheel-drive technology with individual wheel rotation speed control it offers maximum traction and adaptability on all ground types. The automatic levelling (patent pending) ensures a stable horizontal plattform, moreover the chassis height can be adapted for loading and unloading, overcoming of rough terrain and wading through waters. ARTUS is very manoeuverable and well suited for the transport of goods, ammunition and wounded persons, as well as for reconnaisance missions in difficult terrain.

Presta Cylinders



www.prestacylinders.luinfo@prestacylinders.lu

PRESTA CYLINDERS

Presta Cylinders is a Luxembourg family-owned business in Kleinbettingen, founded in 1971. Its main activity has historically been the maintenance, repair and upgrade of light pressure vessels (gas cylinders), as well as the supply of such cylinders and their filling with propane or butane. The company has over 50 years of experience designing its own production equipment, and offers these MRO services (design, maintain, repair, upgrade) to external players, in particular in the defence sector.

- Gas cylinders (empty or filled)
- MRO of light and heavy mechanical equipment. Upgrade and improvement of such equipment
- Evaluation and testing of components and equipment
- Assembly of systems

LARGE

proximus **NXT**



www.proximusnxt.lu marketing@proximus.lu

PROXIMUS NXT

Proximus NXT Luxembourg supports all organizations in their digital transformation by providing ICT, mobile, and telecommunications solutions, as well as tailored support services. Together with its partners and clients, Proximus co-creates opportunities and enables growth in a secure and sustainable way. Thanks to its unique expertise in next-generation IT services and advanced connectivity, the company helps its clients achieve their ambitions and bring their vision to life by implementing sovereign and reliable solutions that allow them to work more efficiently.

- Cybersecurity: Protection of infrastructures and data with advanced security solutions.
- Telecom: Provision of high-performance and reliable fixed and mobile telecommunications networks.
- Managed Services: System management for optimal performance.
- ICT Solutions: Tailor-made technology solutions to meet specific needs.
- Cloud: Harnessing the power of innovative cloud platforms to transform business.
- Al: Leveraging data through Proximus' expertise in artificial intelligence and data analytics.

rafinex



www.rafinex.com defence@rafinex.com

RAFINEX

Rafinex develops and provides advanced numerical models for engineering design and optimisation applications, by combining best-in-class physics algorithms and Al-assistance when needed. Rafinex goes beyond current state of the art by accounting for real-life variability using uncertainty quantification methods and by considering manufacturability, thereby allowing safe and reliable usage in engineering design.

- Provision of advanced finite-element-analyses (FEA) algorithms and application engineering services for design optimisation (topology optimisation for isotropic and anisotropic structures, fluid-structure optimisation).
- Expertise in highperformance computing (HPC) and customised mathematical algorithm developments, including stochastic
- uncertainty quantification (UQ) for optimisation of land, air or space vehicles (manned or unmanned/drones) to achieve maximum performance and robustness/resilience under real-life variability operating conditions.
- Application areas include the light weighting of safetycritical components. Its stochastic optimisation enables the creation of formally robust
- optimal designs that continue to perform reliably under uncertainty and variability conditions, including damage.
- Development of sovereign and/or ITAR-free foundational mathematical algorithm capabilities.

SME







www.rcdevs.com info@rcdevs.com

RCDEVS SECURITY

RCDevs is an identity and access management software company founded in 2013 in Luxembourg, specialising in secure and scalable solutions for highly regulated environments. This ecosystem provides strong authentication, privileged access management and zero-trust security frameworks to support user and device authentication. It also enables network access control, identity federation and governance across classified networks and defence infrastructure. Designed for on-premises deployments, RCDevs products can operate independently of external cloud services, making them the perfect solution for air-gapped environments. They integrate into existing IT systems, while ensuring compliance with industry security standards. RCDevs solutions help defence agencies protect assets, reduce cyber risks and enforce strict access controls in operational environments.

- ✔ Identity and access management (IAM): Providing an IAM ecosystem that centralises identity management from various on-premise and cloud platforms, access control and policy enforcement. It supports user provisioning, role-based access control and identity governance, allowing organisations to manage users and resource access efficiently.
- Multi-factor authentication (MFA): Supporting various authentication methods such as Push login, OTP, PKI-based authentication, and FIDO2/WebAuthn. These MFA options help organisations secure user accounts, prevent unauthorised access
- and enforce authentication policies based on risk levels and device trust. The variety of authentication methods allows users to choose the solution that best fits their needs, making adoption easier while maintaining security requirements.
- Single sign-on (SSO): With federated SSO, users can access multiple applications and services with a single set of credentials. By integrating with SAML, OpenID Connect and OAuth, organisations can reduce password-related issues and simplify login processes.
- Network access control:
 Providing policy-driven
 network access control,
 ensuring that only
 authenticated and compliant
 devices can connect to
 corporate networks. It
 integrates with VPNs, firewalls
 and remote access solutions to
 enforce security policies and
 restrict unauthorised access.
- Public key infrastructure (PKI): Including a PKI system for certificate-based authentication, digital signatures and encryption. This allows organisations to use secure email, electronic document signing and encrypted communications while managing certificate lifecycles.





www.redwirespace.com sales@redwirespace.com

REDWIRE LUXEMBOURG

Redwire Space Luxembourg specialises in providing advanced robotic systems and mechanisms for space applications, with a primary focus on developing cost-effective, mission-agnostic robotic arm systems. Its flagship product, the STAARK Robotic Arm, enables satellite capture and in-space assembly operations. The company offers feasibility studies and consultancy services for robotic missions to commercial, civil, and defence entities in the EU and the US. In 2023, Redwire introduced the Solar Array Driving Assembly for LEO dualuse constellations. Redwire Space Luxembourg employs 35 professionals in Luxembourg and over 700 in the United States and Belgium, dedicated to advancing space technology and innovation.

- Robotic Arm systems for satellite capturing
- Vision Systems for rendezvous and contact support
- Solar Array Driving Mechanisms and Controllers
- Antenna Pointing Mechanisms and Controllers
- Star Trackers

LARGE

* ROTAREX



www.rotarexfiretec.com info@rotarex.com

ROTAREX FIRETEC

Rotarex Firetec is a global leader in fire suppression, with millions of installations worldwide. As a business unit of Rotarex SA, it operates in 65 countries, delivering certified, industry-setting innovations for over 100 years. Its range of complete total flooding systems protects critical infrastructure, while its local application systems reliably supports different applications including electrical cabinets, CNC machines, kitchens and vehicle engines from fire. Committed to innovation, quality and expert engineering, Rotarex Firetec designs and manufactures reliable solutions that enhance fire safety for people, buildings and equipment.

COMPACT LINE* fire suppression system efficiently protects military vehicles from fire. This proven and effective fire protection solution detects and suppresses the fire within seconds, preventing major damage to the engine and spread to the rest of the vehicle. It is ultra-compact, flexible and easy to install into any engine compartment. Due to its non-toxic water mist agent, it is safe for crew and equipment.



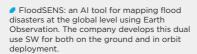


www.rss-hvdro.lu info@rss-hydro.lu

RSS-HYDRO

RSS-Hydro is a company operating internationally in the field of geospatial and modelling intelligence. It uses the latest Earth observation and computer modeling technologies to offer solutions that help our clients to innovate and respond with impact to water related risks, building resilient infrastructure. RSS Hydro also develops and commercialises ML/AI-quided disaster mapping

applications using space technologies.



Flood Modelling: RSS Hydro delivers GPU-optimised high-precision flood scenario simulations for single sites, including high-end 3D visualisation with NVIDIA scene-generation technology.

SME



SAFFAI

SafeAI is a startup innovating vision AI with synthetic data generation technology and anomaly detection. The company offers two Al-powered products: SafeEye and SafeViewer.



SafeEye is a vision-based surveillance solution that is being enhanced with technology that converts video data into text. It can be utilised as a military surveillance solution, and also serves as an industrial safety solution by providing various risk prediction features.

SafeViewer uses satellite imagery to detect and analyse objects based on customer needs. It offers resolution enhancement, image compression and object recognition features, all within an intuitive and user-friendly UI that anyone can easily use.

www.safeai.lu contact@safeai.kr

SME







Engines Components (Military = M88 engine for Rafale jet fighter - Safran_ Dassault-Aviation / Civil = Leap_CFM engines for Airbus A320 and Boeing 737).

SATURNE TECHNOLOGY

Rocket Engines (civil) / Satellites Engines (civil) / Missile propulsion (military).

Saturne Technology is an expert in metal additive manufacturing, cutting, drilling, welding, machining and laser hardfacing. Its goal is to provide a global solution

> Cooling systems for military and civil applications.

to aerospace clients that includes power laser technologies such as laser cutting and welding, additive manufacturing for mass production of: design optimisation, specifical materials (powder) development, production of prototypes and serial

> (civil = Danfoss) / submarines (military).

Naval Components

www.saturne-technology.com p.farge@saturne-technology.com

LARGE

SES[^]



www.ses.com marketing@sessd.com

SES

As a leader in global content connectivity solutions, SES owns and operates the world's only geosynchronous orbit and medium earth orbit (GEO-MEO) constellation of satellites with the unique combination of global coverage and high performance.

By leveraging its vast and intelligent, cloud-enabled network, SES delivers highquality connectivity solutions anywhere on land, at sea or in the air, and is a trusted partner to the world's leading telecommunications companies, mobile network operators, governments, connectivity and cloud service providers, broadcasters, video platform operators and content owners. In particular, SES has decades of experience providing secure bandwidth, end-to-end satellite communications solutions and hosted payload opportunities to governments and institutions. The company is headquartered in Luxembourg and listed on Paris and Luxembourg stock exchanges (Ticker: SESG).

- SES offers a multi-orbit satellite-enabled network featuring O3b mPOWER at its core.
- O3b mPOWER's Sovereign Service Portfolio gives user the control and flexibility to optimise its network on its terms.
- Route traffic through a private connection and land it at a government-secure gateway; select preferred waveform and hardware; and dynamically allocate bandwidth when and where it's needed - on land, at sea or in the air.

LARGE

SES[^]





SES SPACE & DEFENCE

SES Space & Defence is a government-focused vertical within SES, a provider of global content and connectivity solutions. The team exclusively focuses on building, managing and supporting advanced satellite network solutions for governments worldwide. SES owns and operates a geosynchronous orbit fleet and medium Earth orbit (GEO-MEO) constellation of satellites, offering a combination of global coverage and high performance services.

By using its intelligent, cloud-enabled network, SES delivers high-quality connectivity solutions anywhere on land, at sea or in the air, and is a trusted partner to telecommunications companies, mobile network operators, governments, connectivity and cloud service providers, broadcasters, video platform operators and content owners around the world.

- Uses SES's network of 70 communication satellites in two different orbits with a secure ground infrastructure and its industry-leading expertise to manage and deliver highperformance fibre-like connectivity everywhere on the planet.
- Giving government and military customers the control and flexibility to optimise their network on their terms, rerouting traffic through a private connection and landing it at a government-secure gateways, selecting their preferred waveform and hardware.







www.sgigroupe.com info@sgigroupe.com

SGI INGÉNIERIE LUXEMBOURG

SGI Groupe is an engineering consultancy based in Luxembourg since 1966. With its 100+ engineering staff. SGI plays a leading role in the construction market by providing outstanding support to architects, administration and industry in all the classical fields of engineering (Structural, MEP, infrastructures, rails, roads, bridges....).

The company is the Wood/Timber construction specialist in Luxembourg. As an innovative company, it has developed in the last years new services in sustainability, Building information modelling (BIM), Logistics and energy consultancy and project management.

SGI can handle projects in English, French and German and the company has permanent subsidiaries in central Africa.

- Civil engineering works and building planification on a long term or temporary use, including existing structures assessment and reinforcing strategies.
- Modular construction design following circular economy principles and assessment of: Industrial production capacity, and product adaptation to match local regulations.
 - Local site compliancy and work organisation.
- Structural and MEP engineering capacities in severe timing and/or logistical constraints.
- Structural qualification and finite element analysis of new materials in the construction sector as well as existing structures.
- Lifecycle assessment of construction projects, elements and equipment in various life scenarios.
- Renewable energy production, storage and autonomy scenarios, transportation, and management advice.

SME

Simaform





www.simaform.com gadm@simaform.lu

SIMAFORM

Simaform is part of the Gottschol Group, a family business established in Luxemburg since the 60's. The company is specialised in sheet metal working and metal or plastic 3D printing. Simaform offers a wide range of advanced solutions, including laser technologies (cutting, printing, welding, engraving), EDM, punching, surface finsishing, heat treatment and engineering (reverse engineering, scanning, etc.). With solid expertise and a commitment to quality, the company never stops evolving and adapting to the requirements of ever-changing markets, while maintaining family values and a spirit of innovation.

- Design office/engineering.
- 3D Printing: metal or plastic.
- Laser (welding/cutting/marking/engraving).
- EDM machines.
- Stamping.





www.skvarids.eu defence@skygrids.eu

SKYGRIDS

SkyGrids is a pioneering technology company specialising in cutting-edge laser solutions for wireless charging and secure communication. Its innovative technology enables permanent, long-range observation and situational awareness, revolutionising security and defence applications. By harnessing advanced laserbased power transmission and data transfer, SkyGrids ensures uninterrupted surveillance, enhanced operational efficiency, and mission-critical reliability for defence forces, intelligence agencies and security operations worldwide.

- Advanced unmanned ISTAR mission capability: Laser-powered drone providing permanent aerial overview to UGV for advanced unmanned ISTAR missions capabilities. Via the laser communication link, the drone furthermore acts as a secure and non-jammable communnication relay over large distances for realtime communications with the control centre
- Permanent vehicle protection and precise target acquisition: The laser-powered drone provides an uninterrupted situational overview to protect vehicles / assets and enables precise target acquisition for aerial sensors. The laser link ensures secure and non-jammable communications during critical operations.
- Long range vessel security and communication relay: The laser-powered drone combines a large situational overview for vessel security with a high-bandwith communication relay over a laser link. The autonomous drone creates a secure and flexible communication tower that offloads the crew as it stays airborne for weeks, eliminating complex logistics such as ship landings.
- Covert power and communication for special operations: Laser charging and communication provides a novel capability for covert opertations by enabling invisible power and connectivity to remote locations. It moreover enables 'dead' sensors with zero EM emission which are powered by the laser.

SME

SNOWBALL TECHNOLOGY





www.snowballtechnology.com info@snowballtechnology.com

SNOWBALL TECHNOLOGY

Snowball Technology is a cybersecurity company that provides consultancy, integration and O&M services easying the adoption and operation of modern cybersecurity cloud solutions. It designs and delivers technologies with a focus on optimising, consolidating and improving security processes to reduce risks and costs. The company is also active in the field of testing and measurement in order to assess and validate the solutions in place.

- SSE (security service edge) with Netskope.
- NDR (network detection & response) with Corelight.
- PAM (privileged access management) with Delinea
- Microsift cloud cybersecurity solutions.
- Visibility and test & measurement products and solutions with Keysight Technologies.

SOLARCLEANO

SolarCleano





At the end of 2023, more than 800 SolarCleano robots had been deployed to serve the solar industry in more than 90 countries on all continents. The company maintains its fleet of robots from its control centre in Luxembourg. Remote operation and maintenance of its robots has been developed to enable ease-of-use even in challenging environments that are difficult to access.

Autonomous Automated Guided Vehicles (AGV's).

www.solarcleano.com info@solarcleano.com

SME

SPARC INDUSTRIES SARL



www.sparc-industries.com info@sparc-industries.com

SPARC INDUSTRIES

SPARC Industries core business is the development and licensing of groundbreaking electric propulsion (EP) technologies, both hardware (EP thruster designs) and software for the analysis of EP technologies in the SSA/SDA context. To support the process, SPARC Industries developed a product level software for computational plasma engineering purposes called VSTRAP. It is commercially available; and used primarily for SPARC Industries own R&D activities.

- ✓ VSTRAP (dual): Computational plasma engineering tool for internal and external use; ITAR-free; Primary focus on Gridded Ion Engine technology (incl. easy-to-use GUI, lifetime assessment, end-2-end simulation, coupling to ESA's SPIS code, automated numerical stability control, and many more); Secondary focus on Hall Effect Thruster technology.
- SPARC also provide itsexpertise as R&D service / project.
- SPECTRAL (def): Software for in-depth analysis of the optical emission of an EP generated exhaust to support SSA/SDA activities. A prototype can be demonstrated upon request. Under development, open for collaboration in specific areas.

LARGE





www.spire.com governments@gov.spire.com

SPIRE GLOBAL

Spire Global is a provider of space-based data, analytics and space services, offering access to unique datasets and powerful insights about Earth so that organisations can make decisions with confidence accuracy, and speed. Spire develops, builds, owns and operates a fully deployed satellite constellation that observes the Earth in real time using radio frequency technology. The data acquired by Spire's satellites provides global weather intelligence, ship and plane movements, and spoofing and jamming detection to better predict how their patterns impact economies, global security, business operations and the environment. The company also offers Space-as-a-Service solutions that empower customers to leverage its established infrastructure to put their business in space.

- Space reconnaissance: Spire's extensive frequency coverage, geolocation and revisit capabilities provide insights to detect and geolocate GNSS jamming and spoofing, prevent piracy and dark shipping, and independently verify moving targets.
- Space services: Built on its 600+ years of space heritage, Spire offers Space-as-a-Service solutions that empower customers to leverage its established space, ground and web infrastructure to put their business in space.
- Weather observations and forecasting: Spire offers space-based weather data, weather modelling, soil moisture levels, and data on the ionosphere, providing a global view with coverage in remote regions like oceans and poles.
- Aircraft tracking: Spire's satellite constellation monitors the movements of aircraft across the globe, offering real time and historical aviation insights.

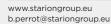
LARGE

STARION SYSTEM LUXEMBOURG



Starion Luxembourg is part of the Starion Group, a professional engineering and solutions company providing engineering expertise for space, defence and other critical infrastructures across Europe. For more than three decades Starion has been investing in the space sector, developing and operating systems and solutions tailored to its clients' needs.





• In partnership with the Luxembourg Space Agency (LSA), the European Space Agency (ESA), ESRIC (European Space Resources Innovation Centre) and other Luxembourg players, Starion Luxembourg is developing several ad-hoc competencies: an end-to-end space engineering system, a next-generation cybersecurity operational and international solution based on the distribution of quantum encryption keys, complementing thecurrent national space segment quantum communication infrastructure programme, and ultra-secure communication channels for national financial services to be used in the future.

LARGE





www.thalesgroup.com/en/global/ activities/space dsp-lu.info@thalesaleniaspace.com

THALES ALENIA SPACE LUXEMBOURG

Thales Alenia Space in Luxembourg leverages big data, artificial intelligence and cybersecurity technologies to address complex end-to-end systems' challenges, while fostering UI/UX excellence. Its expertise covers innovative design and implementation approaches with customers, proof of concept development (PoC), minimum viable products development (MVP), design and development of key digital building blocks of space systems, roll-out and operations of solutions, experimentation of new technologies and concepts.

- Thales Alenia Space's current projects encompass: Digital Twins, Secured Digital Platforms for Earth Observation, Data Valorisation engines, Advanced Visualisation software
- Drawing on over 40 years of experience and a unique combination of skills, expertise and cultures, the company delivers solutions for Telecommunications, Navigation, Earth Observation, Environmental Management, Defence, Exploration, Science and Orbital infrastructures.

LARGE

THALES Building a future we can all trust



www.cds.thalesgroup.com contact@excellium-services.lu

THALES CYBER SOLUTIONS LUXEMBOURG

Thales is a global technology leader with more than 81,000 employees on five continents. The group is investing in digital and deeptech innovations – big data, artificial intelligence, connectivity, cybersecurity and quantum technology – to build a future we can all trust. Drawing on a global team of 6,000 cybersecurity experts, Thales reinforces its local capabilities with cyber consultancy teams and a Security Operation Centre based in Luxembourg, operating 24/7 and providing real-time monitoring and rapid response to cyber threats. With additional capacities in threat intelligence and incident response, it makes Thales the top 5 European cybersecurity pure-play company by revenues and personnel, with more than 220 people in Luxembourg and Belgium.

- Cybersecurity consulting and architecture Aimed at deploying a cybersecurity strategy adapted to the business and regulatory challenges of clients by taking the threat context (risk-based approach) into account: security policies, audits, risk analyses, penetration tests, system certification.
- Cybersecurity solutions integration - Aimed at deploying technologies adapted to the challenges of organisations and at protecting their assets: protection of data, industrial infrastructure and information systems.
- Detection and response services Delivered from 11 Security Operations Centres (SOCs) around the world, these services detect attacks against monitored systems 24/7, and respond to them using Thales rapid intervention forces.

%TRACE CRYSTAL



www.tracecrystal.com info@tracecrystal.com

TRACE CRYSTAL

Trace Crystal is a deep-tech startup offering unclonable fingerprint technology for secure authentication and anti-counterfeiting. Its patented CaeSaR tag enables tamper-proof verification and real-time traceability. Vital in defence, the technology supports the Cyber Resilience Act by enhancing device authenticity, supply chain security and data integrity. By integrating advanced materials with cryptographic protocols, it links physical items to secure digital records, thus allowing defence organisations to instantly verify authenticity, ensure provenance, and access critical data. Trace Crystal's solution delivers transparency and security, making it a powerful tool in safeguarding national defence assets and maintaining operational trust across sensitive sectors.

- Unclonable fingerprint: Each item gets a unique identity that cannot be replicated;
- CaeSaR tags: A patented, highly secure tagging system that prevents counterfeiting and unauthorised duplication;
- Supply chain protection: Ensures product authenticity and integrity across high-volume industries:
- Digital unique identifiers: Links physical objects to secure digital records for checking provenance, tracking and verification.

SME

TR'AX TRAILERS







www.trax-trailers.com info@tr-ax.com

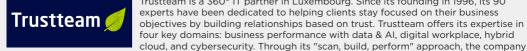
TR'AX, founded in 1986, designs, engineers and produces trailers and semi-trailers in Foetz, Luxembourg, for the recycling industry, heavy haulage and defence activities, forestry activities and the transport industry. Its 100 highly skilled employees and its experience offer the defence actors answers to all challenges regarding the transport of defence equipment such as assault tanks and armoured vehicles.

- Semi Low loader Trailer INTENSE from 3 up to 5 Axles: Specifically designed up to 82 tons, with some dedicated options for tanks and armoured vehicles (hydraulically widenable loading platform and Lifting Platform up to 40tons for example).
- Low loader Trailers INTENSE for policing, law enforcement activities: from 2 up to 5 Axles: designed for transportation of short-armoured vehicles up to 57 tons, transports of materials and containers, different uses thanks to our TR'AX Trailers ramps for versatile combinations.
- Tailor made Trailers/ Semi Trailers for specific applications (Airplane Transportation, Railways machine).

SME

TRUSTTEAM

do





www.trustteam.lu cyber@trustteam.lu guarantees comprehensive and personalised support. Offensive cyber: Strengthening security through ethical hacking and penetration testing. Identifying vulnerabilities before attackers

Cyber by design: Simple digital architectures with built-in security from inception, reducing risks and costs.

CISO-as-a-Service: Outsourced expertise to manage cybersecurity strategy and ensure regulatory compliance (NIS2, DORA, CRA)

Trustteam is a 360° IT partner in Luxembourg. Since its founding in 1996, its 90

Secure hybrid cloud: Highly secure infrastructure for sensitive data, preserving digital sovereignty.

Incident simulation: Preparing your teams through customised programmes simulating real attack vectors against critical infrastructure.

RESEARCH ORGANISATION





www.uni.lu fstm-defense@uni.lu

UNIVERSITY OF LUXEMBOURG - FACULTY OF SCIENCE, TECHNOLOGY AND MEDICINE

The Faculty of Science, Technology and Medicine (FSTM) contributes to the multidisciplinary expertise in the fields of Mathematics, Physics, Engineering, Computer Science, Life Sciences and Medicine. Through its triple mission of teaching, research and service to the society, the FSTM seeks to generate and disseminate knowledge as well as train new generations of responsible citizens, in order to better understand, explain and advance the society and environment we live in.

 Computer Science competencies on developing digital twinning, optimising materials and industrial processes through process design and control tools. Materials Science competencies in developing and characterising functional materials.

RESEARCH ORGANISATION







www.uni.lu/snt-en snt-tto@uni.lu

UNIVERSITY OF LUXEMBOURG - SNT

The Interdisciplinary Centre for Security, Reliability and Trust (SnT) is a tech research hub at the University of Luxembourg where 500+ brilliant minds work to solve real-world problems. SnT balance long-term research breakthroughs with current industry needs, focusing on four key areas: cybersecurity, space systems, autonomous vehicles and fintech solutions. Since 2009, SnT has partnered with over 60 companies to turn cutting-edge research into solutions that give businesses a competitive edge. Its scientists work on projects that shape the digital future of Luxembourg and beyond.

- Secure communications (RF, optical, multiorbit, interference management, quantum);
- Autonomous operations of drones, ground vehicles and robots;
- Space situational awareness and close proximity operations;
- Cyberattack-tolerant control of critical infrastructure;
- Al-enabled intelligence and decision making.







www.uplift360.tech info@uplift360.tech

UPLIFT360

Uplift360 is an advanced materials startup working at the cutting edge of circular economic chemical technology for recycling and regenerating high value defence assets. Uplift360 has developed breakthrough low-energy chemical processes to extract high-value fibers from composite waste—like aircraft, submarines, armoured vehicles and body armor—and reintegrate them into high-performance supply chains. The company offers manufacturers and governments a cost-effective circular economic solutions that strengthens national material supply chains. Its technology delivers superior recycled materials, expands recycling possibilities, and is agile by design.

- Recycling-as-a-service Utilising the patented CHEMR chemical recycling system, Uplift360 can extract high-value materials from end-of-life defence and security assets. These materials can be reintergrated into customer supply chains or sold into wider supply chains.
- RENEW regenerated para-aramids A low cost para-aramid fibre produced from waste aramid products. A supply chainsecured material produced in Europe with 75% reduction in carbon footprint.
- Recycled carbon fibre high purity recycled carbon fibre.
- Chemical extraction: production of monomer/ oligomeric products from end-of-life resins for re-entry into the supply chain for production of new materials.

SME

SkyRadar





VENTURESKIES - SKYRADAR

SkyRadar provides cutting-edge training equipment for military radar operators and electronic warfare specialists. Its portfolio includes Training Radars, Jammers, Digital Signal Processing units, Electronic Counter-Countermeasures, Military Radar & Tower Simulators, Air Defence Laboratories among others.

Catering primarily to military training academies and training departments, the company's solutions support both in-house and remote learning environments. The system design enables concurrent practical training of many trainees.

- NextGen 8 GHz Training Radars
- SkySim Radar and Attack Simulator
- DRFM Deception Jammers and Active Targets
- FreeScopes DSP and Visualisation Environment
- Military and Radar Tower Simulators
- C4ISR and CIEMG Training Laboratories
- Cyber-Resilience and Hybrid Warfare Training Laboratories
- Air Power and Air Defence Curricula and Train-the-Trainer Programs





www.wasdi.cloud team@wasdi.cloud

WASDI

Wasdi is a Luxembourg startup that operates a homonymous cloud platform enabling Earth Observation experts to effortlessly develop and deploy algorithms as applications. The platform offers a unified interface, seamless data access, and online tools, freeing professionals from IT-related challenges.

Wasdi also collaborates with global partners to create specialised applications for international initiatives in different areas (e.g. natural hazards, environmental monitoring and urban areas).

These vertical applications cover various domains such as natural hazards, environmental monitoring, urban areas, and include tasks like flood monitoring, water body mapping, fire assessment, and air quality analysis.

SME







www.yurigravity.com contact@yurigravity.com

YURI LUX

Yuri provides a Lab-as-a-Service offering for commercial R&D in the lower Earth orbit (LEO). The company has a five-year track record of successful launches, experiments in space and scienctfic publications. Since 2025, Yuri offers an experiment platform on proprietary multi-user-facilities called ScienceTaxis. The current product range encompasses the ScienceTaxi BioSpin - a centrifuge to compare microgravity to simulated gravity states (terrestrial, lunar, martian) - and the ScienceTaxi BioForge for 3D printing with bio-inks.

- Yuri ScienceTaxi BioSpin: An experiment platform (EP) on a multi-user facility for commercial R&D in the lower Earth orbit (LEO) to conduct biological experiments. It can also be used for drug testing. The ScienceTaxi carries 38 ScienceShells to conduct autonomous testing cycles.
- Yuri ScienceTaxi BioForge: The scientific payload of this EP includes bio-inks and cells aiming at tissue engineering. It is the first European 3D printer in space and will promote personalised medicine.
- Yuri Lab-as-a-Service: Yuri operates and maintaines a one-stop shop for R&D that can be used for drug development, drug testing in space various industries such as pharma, food and cosmetics, and humanitarian military purposes.
- Yuri Lab-as-a-Service and Science-asa-Service offering involves both EPs as pathbreaking platforms for personalised medicine with dual use options.

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The information provided voluntarily by the companies was the subject of a joint verification by Luxinnovation and the Directorate of Defence, promoting a selection of entities having an activity in Luxembourg and having technologies and innovations of interest for security and defence. Each company concerned has validated the information published about it. The objective is to provide better knowledge of/offer an introduction to the Luxembourg ecosystem without claiming in any way to be exhaustive: the interest is in no way a nominative and complete inventory of the Luxembourg companies concerned.

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THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURD
Ministry of Foreign and European Affairs,
Defence, Development Cooperation
and Foreign Trade

Directorate of Defence





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