

2023 ANNUAL FINANCIAL STATEMENT

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SHAREHOLDERS

SHAREHOLDERS

REPUBLIC OF AUSTRIA

Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology [BMK]) with 50.46%

ASSOCIATION FOR THE PROMOTION OF RESEARCH AND INNOVATION

(Federation of Austrian Industries) with 49.54%

CORPORATE BODIES

MANAGEMENT

Prof.ⁱⁿ Dlⁱⁿ Mag.^a Dr.ⁱⁿ Brigitte BACH, MSC as of 1 October 2023 Prof. Dr. Wolfgang KNOLL until 30 June 2023 DI Univ. Prof. Dr. Andreas KUGI as of 1 July 2023 DI Anton PLIMON until 30 June 2023 Mag. Alexander SVEJKOVSKY as of 1 July 2023

Authorized Officers

DI Dr. Christian CHIMANI Prof.ⁱⁿ Dr.ⁱⁿ Elke GUENTHER DI Dr. Wolfgang HRIBERNIK Mag.^a Beatrice KORNELIS, LL.M. Dipl.-Ing. Univ.-Prof. Dr. Andreas Kugi until 30 June 2023 DI Helmut LEOPOLD Mag. Alexander SVEJKOVSKY until 30 June 2023 Univ.-Prof. Dr. Manfred TSCHELIGI DI Andreas VRABL, MA, MSc DI Dr. Matthias WEBER, MA

SUPERVISORY BOARD

Chairman DI Dr. Peter SCHWAB, MBA

Deputy Chairpersons Mag.ª Isabella MERAN-WALDSTEIN DIⁱⁿ Katja SCHECHTNER, MSc

Supervisory Board

Dr.ⁱⁿ Beate EL-CHICHAKLI as of 10 March 2023 Christian GÄRTNER, MSc Mag.ª Hanna GLATZ Mag. Andrew LINDLEY DI Harald LOOS Dr. Thomas MATYUS as of 12 September 2023 Mag.ª Elisabeth MRAKOTSKY-KOLM DI Mag. Wolfgang PELL Mag. Dr. Rupert PICHLER until 9 March 2023 Dr. Klaus PSEINER until 22 September 2023 Dr.ⁱⁿ Birgit RATZER Dr.in Ursula SAUER Mag. Anton SCHANTL Henriette SPYRA, MA, BA DIⁱⁿ Christina TAMAS until 11 September 2023 Mag.ª Karin TAUSZ as of 23 September 2023 DI (FH) Hubert UMSCHADEN

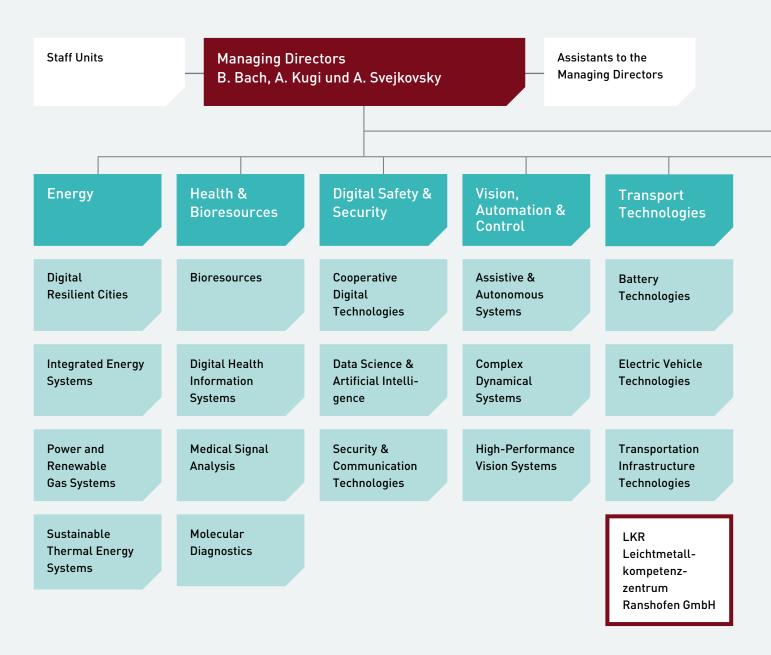
STRUCTURE REPORT AND ORGANISATION CHART

STRUCTURE REPORT AND ORGANISATION CHART

The Management Board of the AIT Austrian Institute of Technology GmbH was newly appointed in the 2023 reporting year. The management now consists of three people: Prof.ⁱⁿ Dlⁱⁿ Mag.^a Dr.ⁱⁿ Brigitte Bach, MSc, Univ.-Prof. DI Dr. techn. Andreas Kugi and Mag. Alexander Svejkovsky. Other organizational changes concerned the dissolution of the Competence Unit SVS – Sensing and Vision Solutions of the Center DSS – Digital Safety & Security and the partial transfer of topics to other units of the Center. The "Biosensor Technologies" unit was closed in 2023 and the topic of smell sensing in this unit was spun off.

Also in the reporting year 2023, the Center for Innovation Systems & Policy was restructured and now consists of two competence units, "Industrial & Innovation Dynamics" on the one hand and "Transformative Governance" on the other. This measure is a reaction to the increasing order volume as well as the diversification within the project portfolio in order to continue to meet the management requirements in the Center. The AIT Strategy 2024–2026 was developed and adopted by the responsible committees in the 2023 reporting year. In line with the strategy, a medium-term plan was drawn up, which formed the basis for the performance agreement signed in January 2024 in accordance with the Research Funding Act (FoFinaG). The institute therefore has an up-to-date corporate strategy and secured basic financing for the next three years.

AIT ORGANISATION CHART





Center



Administrative Area

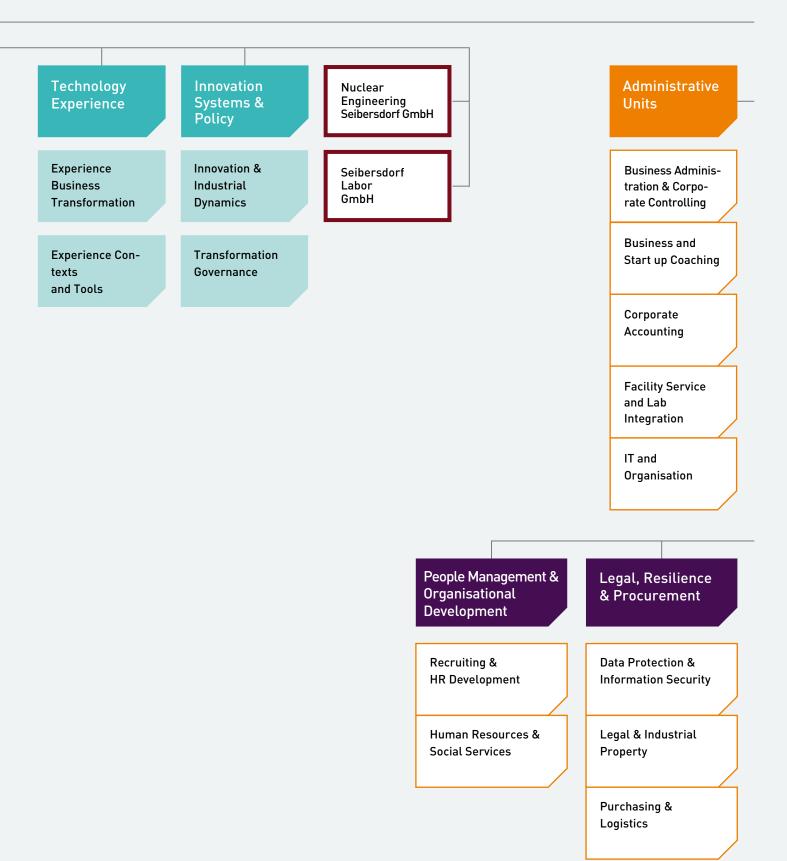
Administrative Unit

Competence Unit

Subsidiary

Status: January 2024





REPORTS FROM THE CENTERS

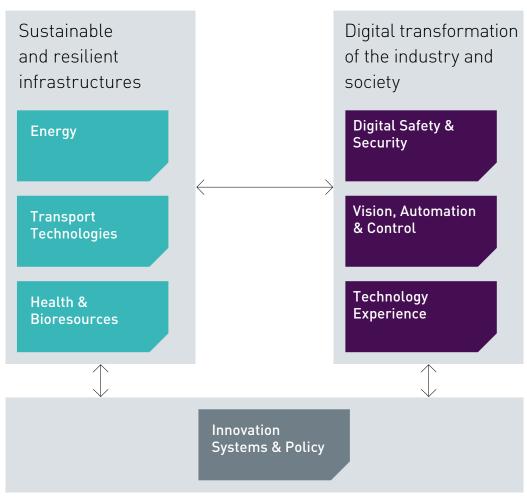
REPORTS FROM THE CENTERS OVERVIEW OF THE CENTER HIGHLIGHTS

The AIT's research strategy focuses on the development of methods, algorithms, technologies and solutions in the two interwoven research areas:

- <u>Sustainable and Resilient Infrastructures</u>, in particular in the areas of energy, transportation and health, as well as
- Digital Transformation of Industry and Society.

These are implemented by the seven AIT Centers, whose portfolio and highlights for 2023 are described in the following sections.

The challenges associated with these research priorities are multi-layered and complex, affect a wide variety of elements in different sectors and are determined by numerous parameters. Only a systems perspective makes it possible to understand this complexity and interdependencies and thus develop innovative, efficient, resilient and sustainable solutions. In order to meet the requirements of a systemic approach and to achieve the ambitious research goals of the AIT, the Centers collaborate closely.



The research focus <u>sustainable and resilient infrastructures</u> focuses on the energy and transportation system of the future as well as selected topics for the future healthcare system. In the focus area of <u>digital transformation of industry and</u> <u>society</u> concepts, methods, algorithms and technologies are researched in the three focus areas of "digital security and cyber security", "computer vision, automation and control technology" and "human-machine interaction and user experience". Many solutions developed in these focus areas can also be used to advantage in the AIT's infrastructure focus areas, since modern digitisation and automation solutions, including artificial intelligence and innovative sensor technologies, are of central importance for the design of future infrastructure systems.

Therefore, those aspects of digitisation and automation that require in-depth domain knowledge in order to exploit their full potential are addressed directly in the focus areas of energy, transport and healthcare systems. At a strategic level, which encompasses the entire research portfolio, AIT also conducts inter- and transdisciplinary research on innovation systems and policy to understand, analyse, and further develop design principles for innovation ecosystems, industrial transformation, transformative innovation policy and the socio-technical future in Europe.

The basis of our success is a highly motivated, interdisciplinary team from different specialist fields with different perspectives, long-term, trusting strategic partnerships with universities, industry and the public sector as well as a first-class, state-of-the-art lab infrastructure.

REPORTS FROM THE CENTERS

REPORTS FROM THE CENTERS ENERGY

In 2023, the Center for Energy was able to implement important elements from the expiring strategy period and thus substantially strengthen its strategic positioning on the market and in the relevant scientific communities. The Center for Energy pursues a mission-oriented approach for a competitive system transformation with the aim of decarbonisation and climate neutrality in three different application domains:

- Development of sustainable and future-oriented <u>energy</u> <u>supply systems</u>, that cover the entire chain of renewables from generation (e.g. PV, wind, geothermal, etc.) to distribution and consumption (industry, commerce, mobility, households) via various energy sources (electricity, heat, gas) with a special focus on sector coupling and hydrogen-based technologies and systems. This also includes market mechanisms and regulatory aspects to ensure a clean and affordable energy supply.
- Improving the carbon footprint and increasing competitiveness in <u>energy- and resource-intensive industries</u> through efficient low-carbon technologies, processes and industrial decarbonisation pathways for large-scale industrial sites.
- Transformation of <u>cities and urban regions</u> into more sustainable and resilient living environments, taking into account the effects of climate change on urban systems in various areas (climate, energy, mobility) through innovative digital technologies.

Highlights in Portfolio Development

In the scientific field, several attractive PhD programmes with renowned universities were successfully set up. A case in point the current successful doctoral programme in the topic area of artificial intelligence for energy system planning and operation with Delft University of Technology under the leadership of AIT Principal Scientist Prof. Dr. Jochen Cremer. Over the next four years, six PhDs will develop new methods and tools under the mutual supervision of AIT and TU Delft in order to significantly advance the transformation of the energy system and provide new types of tools for the energy industry. The PhD topics focus on energy data platforms, the reconfiguration of the grid topology, redispatch markets, electricity price forecasts, complexity and uncertainty in energy systems and system flexibility. With his appointment as Professor of Power Electronics at the Montanuniversität Leoben, Dr Markus Makoschitz was appointed AIT Principal Scientist in December 2023.

In his research work, Prof Dr Makoschitz focuses on the two areas of wide-bandgap semiconductors and mediumvoltage power electronics, for example in combination with the topics of megawatt charging and highly efficient and compact single-phase and multi-phase systems (DC-DC converters, DC-AC converters). Together with Graz University of Technology, a new PhD programme for the development of innovative hydrogen technologies with a focus on reversible high-temperature electrolysis was launched in early 2023. With this programme, the two institutions want to accelerate the development of innovative and efficient technologies for producing green hydrogen and to further strengthen their collaboration. In the research area of heat pumps, there is intensive strategic collaboration with the Royal Institute of Technology <u>KTH</u> in <u>Stockholm</u> chaired by Prof Dr Hatef Madani. In addition to joint project activities, this collaboration also includes a new PhD programme focusing on the development of new types of heat pumps for micro district heating systems in densely populated areas and addresses issues of design, choice of refrigerants, safety, acoustics and life cycle costs. Another PhD programme is being set up with Vienna University of Technology (TU Wien) on the topic of Energy Security 2030+ and is also due to start in 2024.

A key step in the further development of the Center's research infrastructure is the expansion of the experimental service portfolio in the topic area of hydrogen and sector coupling. With the AIT H2LAB, a test and development infrastructure for hydrogen and hybrid power plant technologies that is unique in Austria is to be realised at the AIT Tech Campus Seibersdorf. For this purpose, multi-purpose test fields with supply containers for electrical supply, gas supply, and digital control interfaces will be set up. These test fields enable the evaluation of components and systems, especially from the areas of electrolysis, fuel cell, battery storage, and power electronics. The establishment of the AIT H2LAB will take place in several stages of expansion with the possibility of future scaling. Technical planning and tendering took place in 2023, with commissioning expected at the end of 2024. In the thermal sector, the planning of the new test bench for air heat pumps with a heating capacity of up to 100 kW for applications in large-volume buildings and apartment blocks progressed in 2023. The tender for the implementation services will start in January 2024.

An important element of strategy implementation in 2023 and in the years to come is the innovation programme NEFL - New Energy for Industry, which is geared towards six fields of innovation at a technological (e.g. renewable energies, energy storage, processes) and systemic level (infrastructure, business models, policy). To date, 23 co-financed scientific projects (17 with the participation of the centre) have been launched with a focus on decarbonising the industrial energy system. A key milestone in 2023 was the development of decarbonisation scenarios (Business-as-Usual, Pathway to Industry, and Zero Emission) for industry with the aim of providing impulses as to where projects should be placed in the Austrian industrial landscape and which strategies and measures could be taken to decarbonise the industrial energy system. This fundamental work was widely visible in the stakeholder community and serves as a basis for future project developments at the Center. As part of an innovation lab under the "Transformation of Industry" research, technology, and innovation programme, the successor instrument NEFI+ is currently being developed and underlines the Center's strategic positioning in this field.

The following highlights from the 2023 research portfolio should be mentioned: The aim of the national FFG project <u>Medusa</u> (https://projekte.ffg.at/projekt/4032453) is to develop a multi-megawatt medium-voltage fast charging station or infrastructure for buses, heavy goods vehicles, lorries, vans, etc., which also enables distributed fast charging with lower outputs and optimises CO_2 emissions through the integration of renewable energy systems. As part of the project, the concept of a fast-charging station directly connected to the medium-voltage grid with a charging capacity in the multi-megawatt range was investigated and successfully implemented.

This successful development led to a promising industrial exploitation for the Center with an industrial partner based on a contract development with a licence model. The national <u>SECURES</u> project (www.secures.at) analysed challenges and opportunities for Austria's future electricity system in order to ensure a reliable, sustainable and cost-efficient electricity supply in times of climate change. The assessment in the project focuses on security of supply, including an analysis of the flexibility requirements and the corresponding options for meeting these requirements, as well as on economic efficiency, taking into account the investments. The results of this project achieved very positive responses in the relevant stakeholder community in 2023 and strengthened the visibility of the Center. The EU project StoRIES (www.storiesproject.eu) is a European lighthouse project with the aim of creating a Europe-wide ecosystem for research infrastructure for storage technologies. The close collaboration between research and industry should make it possible to simplify access to research infrastructure and identify missing research services in the area of storage development. The DecarbPharm contract research project is developing decarbonisation paths for the sites of companies in the Austrian pharmaceutical industry. Plant models, process analyses and optimisation calculations are used to identify the potential for integrating renewable energies and increasing efficiency in covering heating and cooling requirements and to identify technological changes for the pharmaceutical industry.

Finally, a technology spin-off from the Center should be mentioned: 2023 saw the foundation of the AIT spin-off <u>Infrared City GmbH</u> which offers AI-based software solutions for climate-resilient urban development. This spin-off is the result of the scientific work of the AIT City Intelligence Lab (CIL).

REPORTS FROM THE CENTERS TRANSPORT TECHNOLOGIES

Emission-neutral mobility is a goal of national (e.g. Mobility Masterplan 2030 for Austria) and international (e.g. European Green Deal) roadmaps. The AIT Center for Transport Technologies (previously the Center for Low-Emission Transport) thus focuses on technological developments to save energy, increase efficiency and avoid climate-damaging emissions. The light metals aluminium, magnesium and titanium are optimised for structural applications to reduce the weight of vehicles and for recyclability, and innovative processing technologies for energy-efficient and sustainable production are being researched. New material concepts for future battery technologies - preferably without critical raw materials - are being researched for the electrification of vehicles, and their production is being optimised with regard to energy efficiency, sustainability and recyclability. Furthermore, the drivetrain of electrified vehicles is being optimised, power consumption is being drastically reduced through innovative heating/cooling/air conditioning concepts and the size of the high-performance electronics is being reduced through new semiconductor components in order to achieve a higher degree of functional integration. In order to take a holistic look at emission-neutral mobility, the Center is working on extending the life cycle of infrastructure facilities by developing measurement procedures for the monitoring of transport infrastructure and methods for the precise determination of road conditions. The assessment of road safety risks, particularly for vulnerable road users, rounds off the Center's activities in this area.

Highlights in Portfolio Development

The integration of <u>additive manufacturing</u> in modern processing chains requires the development of new types of materials. In titanium alloys in particular, the thermal gradient during solidification results in columnar crystallites up to several millimetres in size. This has a negative effect on mechanical properties and leads to anisotropy. Alloying elements that cause strong constitutional undercooling, such as nickel, can provide an effective countermeasure. The investigations carried out have demonstrated a <u>phase</u> <u>transformation characteristic previously unknown</u> in this system, a phenomenon known as spinodal demixing. The utilisation of this novel phase transformation characteristic enables microstructural modulation at the nano level in the <u>titanium-nickel alloy system</u> through targeted heat treatment strategies.

The Center's road safety team received the prestigious European <u>Excellence in Road Safety Award</u> in the "Data" category and the <u>Jaques Barrot Award</u> in 2023. The award-winning, innovative <u>Mobility Observation Box</u> solution measures <u>road safety</u> according to objective criteria and thereby makes it comparable. It allows high-precision, data protection-compliant video recording of all road users' movements, and is energy self-sufficient at all locations. During the measurement, all road users are recorded, automatically classified and the direction of movement and safety-relevant parameters are recorded. The data collected forms the basis for a risk-based assessment procedure using <u>artificial intelligence</u>: Conflicts are thus made visible before accidents actually happen. The main aim of the research in current projects together with industrial partners is the development of new types of air conditioning and heating systems for battery-electric and fuel cell-powered trucks, with a particular focus on driving comfort. The use of innovative refrigerants such as CO, and efficient infrared heating panels combined with improved energy management significantly reduces the energy consumption of the truck and increases its range. The newly developed systems are designed to ensure a reduction in energy consumption of up to 30 % for air conditioning and up to 40 % for heating. The systems are scalable and independent of vehicle class and can therefore be widely used in the automotive industry (e.g. buses, cars). In 2023, a major EU project (>27 million EUR) was won under the leadership of the Center to scale up this technology for heavy goods vehicles.

Electricity storage has become a key component of research and the value chain in Europe in the wake of electromobility and the climate transition. Scaling topics in cell production and quality requirements for cell components have emerged as important issues in industry, which AIT is confronted with as a key research and development partner in almost all battery projects. Materials of the future, e.g. magnesium batteries and sodium as a lithium substitute, as well as the circular economy play a dominant role here - sustainable solutions are being sought, which are being researched at AIT in production and materials research. The trend towards solid-state batteries and the resulting increased focus of the Center's research are also reflected in the European research calls and roadmaps. The public debate on the multitude of new technical solutions and the increased attention on the topic of sustainability have also led to prominent coverage of these AIT topics in the Ö1 Mittagsjournal and the Ö1 programme Punkt 1, both very prestigious formats with a broad impact in Austria.

REPORTS FROM THE CENTERS HEALTH & BIORESOURCES

The Center for Health & Bioresources develops technologies and innovative solutions as part of a "One Health" concept with an integrative and transformative systems approach for humans, farm animals/plants and the environment. The Center's key areas range from molecular systems to healthcare systems. In the process, the focus is on topics relating to diagnostic biotechnology, algorithms and medical device software as well as digital platforms for health data management. For bio-based agricultural systems, solutions for a resource-conserving circular agriculture and healthy nutrition are being developed. In addition to scientific and technical expertise in the specialist areas, the Center's employees also have in-depth knowledge of the regulatory field, the associated market segments and experience in founding spin-offs. Thanks to their research expertise combined with a state-of-the-art R&D infrastructure, researchers are able to carry out validations in a targeted manner, achieve progress up to semi-industrialised development, and move directly from lab or test bench environments to real test environments.

Highlights in Portfolio Development

As a minimally invasive diagnostic method, <u>liquid biopsy</u> enables information about diseases to be obtained quickly and specifically. This involves analysing molecular biomarkers from body fluids (e.g. blood, saliva) in order to obtain information about the presence and genetic characteristics of diseases. Eine mögliche frühzeitige Erkennung ist oft auschlaggebend für eine erfolgreiche Behandlung und gestattet letztlich eine personalisierte Behandlungsstrategie durch Überwachung des Therapieverlaufs. As part of the Profilux customer project, a liquid biopsy procedure that allows earlier and more specific diagnosis of lung cancer was successfully developed.

The web-based modelling environment "CATANA" was developed for the purpose of designing DNA nanostructures and recombinant <u>proteins</u>. <u>Al-based algorithms</u> support this process and make it possible to create recombinant fusion proteins, predict protein structures based on the amino acid sequence and manipulate DNA origami structures The high-ranking scientific journal "Nucleic Acids Research" has published an article presenting the scientific novelty to a broad research community. In order to be able to offer these complex and computer-aided design options as a service for academic and industrial partners in the future, a spin-off is currently being planned as part of the AIT spin-off strategy. As part of a major customer project, a new <u>Al-based algorithm</u> was developed for recognising different <u>sleep stages</u> in patients with implanted subcutaneous electrodes. The electrodes are used in particular for ultra-long-term recordings of brain wave activity and can be worn for several years. The development was both a scientific and a commercial success. Based on the results of a funded research project, the algorithm was further developed together with our industry partner into a product for medical data analysis in the field of neurology, which will be submitted for <u>MDR</u> <u>certification</u> in 2024. The algorithmic approach and the results achieved were also published in a high-ranking scientific journal ("Neural Networks").

In Austria (250,000 patients per year), the treatment of chronic wounds is a care problem for patients who are mostly of advanced age and have chronic diseases such as diabetes. The treatment can extend over a longer period of time (months to years) and requires repeated medical checks or interventions - an ideal area of application for telemedical care. In the "Telewound Management" project, which was subsidised by the Styrian Health Fund, the essential components for telemedical care were created. This includes the development of a treatment pathway, the conceptualisation and testing of a telehealth service, the development of a registration interface via the local patient index and the development, implementation, and approval of an ELGA document for the chronic wound. These developments will improve cooperation between the professions involved in wound care with the aim of reducing visits to outpatient clinics, supporting wound care in private practices, and actively involving patients and their carers. In particular, all relevant information can now be summarised chronologically, digitised and made available via a telemonitoring episode report.

Principal Scientist Winfried Neuhaus has been awarded an <u>honourable distinction</u> by the Austrian Society for <u>Alterna-</u><u>tives to Animal Testing</u> for his outstanding commitment in this field. His scientific expertise, his professorship for alternatives to animal testing at Danube Private University Krems and his presidency of the European Society for Alternatives to Animal Testing (EUSAAT) position him as a global pioneer in this field.

The Houska Prize, awarded by the Bank Austria and Creditanstalt (B&C) Foundation, promotes business-related research and innovation. The aim of the foundation is to make a contribution to strengthening Austria as a business location by awarding the prize and to honour outstanding research work. A team from the Center was awarded 2nd prize in the "Non-university research" category for the "EndoBoost" project. In this project, microbial technologies were developed to replace or reduce the use of agrochemicals in plant production. The AIT was in particular able to carry out pioneering work on a specific group of microorganisms, the so-called endophytes, which colonise the interior of plants. The AIT team played a key role in the discovery of endophytes and developed endophyte-based technologies, some of which are already on the market. It is particularly noteworthy that endophytes significantly support the plant growth, health, and stress resistance of their host plant and that the use of endophytes is a <u>sustainable alternative</u> to agrochemicals.

REPORTS FROM THE CENTERS DIGITAL SAFETY & SECURITY

Industry is currently confronted with multifaceted challenges. Labour and skilled labour shortages, rising energy prices, supply bottlenecks, the necessary flexibilisation of production processes and, last but not least, the demand for resourceefficient and sustainable production are currently determining the situation and will probably continue to do so in the medium and long term.

The Center for Digital Safety & Security is working on state-ofthe-art information and communication technologies to build and use these in a highly secure and reliable manner in the context of the comprehensive digitisation and global networking of our systems. In doing so, the Center focuses on the following key technology areas:

- Distributed IT systems and the Internet of Things (IoT)
- Cybersecurity for IT and industrial control systems
- State-of-the-art cryptographic methods (post quantum encryption)
- Highly secure and highly available software and systems
- Data science, artificial intelligence and blockchain technologies
- Quantum and photonics technologies
- Highly reliable next-generation wireless technology (5G)
- Latest sensor technologies and biometric systems for the protection of critical infrastructures and digital identities
- Digital solutions for a modern environmental management and crisis and disaster management

Highlights in Portfolio Development

In the area of <u>Data Science und AI</u>, the Center has been able to build a critical mass of scientific expertise and technology development capacity to utilise AI in combating <u>Fake News</u> and <u>disinformation</u> by implementing a strong portfolio of national and collaborative European research projects. Furthermore, a successful strategic collaboration with the Bavarian Ministry of Justice was implemented and the Center was able to position itself as a key solution provider in the newly founded German-Austrian Digital Media Observatory (GADMO) in Germany. The Center was able to demonstrate its important role as a stakeholder in the national IT innovation community by winning the Austrian <u>eAward</u> 2023 for its "FSD Fake Shop Detector" AI technology in the "Machine Learning and AI" category.

In order to support the <u>EU's data sovereignty goals</u> and promote the development of a new data-driven ecosystem, the Center was able to significantly advance the <u>Gaia-X Hub</u> <u>Austria</u> on behalf of the BMK (Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology) and the BMF (Federal Ministry for Finance) to accelerate European data ecosystems for economic, ecological and social value creation This recognised achievement in the international Gaia-X community is reflected in the successful organisation of international community events such as the Market-X event in Vienna and the Alpbach Lab on data sovereignty, as well as the successful initiation of several EU Data Space projects, which form the basis for an Austrian data market ecosystem. The Center is well positioned in the EU programme for <u>quantum communication infrastructures [EuroQCI]</u> thanks to its core competence in <u>quantum key distribution (QKD)</u> <u>technology</u> and has successfully established technology leadership in this area in the EU by building up a portfolio of EU projects and by supplying technology to ESA (European Space Agency) as part of its strategic satellite programmes. One of the most important goals in 2023 was the successful conception and implementation of the national project initiative to realise a national pilot project for a QKD communication infrastructure in the context of the EU initiative, thereby bringing together the most important relevant national players in quantum communication from science, industry and authorities (QCI-CAT).

In the <u>field of ultra-reliable wireless communication</u>, a <u>6G lab</u> has been set up at the Center, which focuses on highly reliable and secure wireless communication systems for safety-critical applications in areas such as public transport, Industry 4.0 and the automotive industry. One particular success was the establishment of the world's first <u>6G test</u> <u>system with software-defined radio components</u> (SDR, Software Defined Radio) in 2023.

As part of the cybersecurity research agenda, the centre has successfully positioned itself as a leading <u>stakeholder in</u> <u>cybersecurity services for industrial, critical infrastructures</u>, as confirmed by its collaboration with the International Atomic Energy Agency (IAEA) and the United Nations Office for Combating Terrorism (UNOCT). In 2023, the IAEA presented its new strategy and the services offered globally to the member states and explicitly referred to the Center's expertise and services. Based on the developed digital twin for cyber security processes for critical infrastructures, the Center conducted the national cyber security exercise 2023 (KSÖ simulation game) for the Austrian operators of critical infrastructures and authorities in order to prepare the national players for the new NIS-2 cyber security law. To support compliance with the increasingly complex security requirements for digital systems, the Center developed an innovative Safety & Security by Design IT system development methodology and a corresponding tool ("ThreatGet") and agreed a strategic cooperation agreement with an industry partner for the global distribution of this technology. Furthermore, the Center achieved cyber security certification from the cyber security lab (TISAX - Trusted Information Security Assessment Exchange) to enable future project work on higher security requirements in the automotive industry and with authorities in the area of classified data processing.

In the area of the national <u>security research community</u>, the Center has repeatedly positioned itself as a recognised and important player and facilitator for the national research programmes for digital security <u>KIRAS</u> and <u>FORTE</u>, which bring together public authorities, industry, SMEs, research and social sciences and strengthen the competitiveness of Austrian organisations for activities in the EU ecosystem. In order to act as an integral part of a global innovation ecosystem in the field of digital security, the Center implemented the <u>International Digital Security Forum</u> (IDSF), a global dialogue forum in which more than 500 people from over 240 organisations from 35 countries took part in 2023. The IDSF is an important conference format that was developed in close cooperation with Austrian authorities such as the FMEIA, FMEF, BKA, FMI and FMLV.

REPORTS FROM THE CENTERS VISION, AUTOMATION & CONTROL

Labour and skilled labour shortages, rising energy prices, supply bottlenecks, the flexibilisation of production processes and, last but not least, the demand for resource-efficient and sustainable production are currently determining the situation and will probably continue to do so in the medium and long term. As an experienced and reliable partner, the Center for Vision, Automation & Control supports companies with intelligent automation and digitisation solutions and helps with the implementation of the digitisation strategy and the European Green Deal. With comprehensive expertise and technologies in the fields of image processing, automation and control as well as the use of artificial intelligence methods, the Center covers the entire automation chain, starting with the collection of information by intelligent sensor systems all the way through to AI-based decision making by autonomous systems. The Center's research work results in innovations that increase the flexibility, adaptivity, and resilience of production processes and machines while improving energy and resource efficiency and minimising production costs.

In addition to the obligation to protect nature and conserve its resources, the team is particularly keen on making human beings the focus of future automation systems in order to provide them with the best possible support and meet their needs. In this connection, research is being conducted in the scientific lighthouse project "AI-Enabled Automation" together with the Center for Technology Experience, Profactor, and the Vienna University of Technology on AI-based automation solutions for sustainable production, concepts for synergetic cooperation between humans and robot systems in automated assembly and disassembly (e.g. repair tasks) and assistance and autonomy functions for automated work machines and commercial vehicles.

In 2023, key partnerships with international companies and research institutions were expanded and the Center's position in the research landscape was consolidated. R&D contracts lasting several years, significant research funding commitments from national and international funding bodies, and several best paper and technology awards marked the past year. Numerous technology presentations for partners from research and industry as well as stakeholder groups and the public took place at events and trade fairs. The Machine Vision Lab at the Vienna location with innovative image processing technologies for industrial use and the Large-Scale Robotics Lab at the Tech Campus Seibersdorf, the open-air test site for the development of autonomous work machines, also attracted a great deal of interest.

Highlights in Portfolio Development

The Center is a world leader in the development of High-Performance Image Processing and Inspection Systems, in particular for the optical quality inspection of banknotes. In 2023, a new generation of optical inspection sensors was developed together with central banks and industry leaders, and long-term collaborations were established in the areas of inspection, standardised interfaces and digital services. In many areas of industry, high-precision inspection has become crucial for high-quality and sustainable production. Combined 2D and 3D image processing methods were used for inline quality control in the production of metal and plastic products as well as printed circuit boards. They enable the automated optical inspection of products with demanding surface properties. The inspection systems excel in their fast image capturing and adapted Deep Learning methods in order to discover previously undiscovered flaws and to avoid flawed production. Precise inspection systems for high-precision plastic products were successfully realised, with high detection speed and resolution being decisive for the success of the project. New methods for testing rotationally symmetrical products with reflective surfaces have been developed for the metalworking industry. These allow wear and ageing to be assessed and contribute to the longer use or reuse of high-quality metal products.

In the area of Assistance and Autonomous Systems (commercial vehicles, work machines, unmanned aerial vehicles), the team's research focuses on the further development of multimodal sensor technology and data analysis for environment detection, localisation, and navigation. Special attention is paid to the use of AI methods for the classification of objects and safe operation under harsh environmental conditions. The results support increased efficiency and sustainability in logistics and transport, in municipal applications, and in agriculture and forestry, and are intended to relieve the burden on personnel. This allowed automated transport vehicles to be tested in an open mine site for the first time in Austria. The subject of research with international companies and in funded projects is the automated reloading of goods and the loading of containers and trailers onto freight trains.

In the Large-Scale Robotics Lab at the Tech Campus Seibersdorf, various loading scenarios for pallets and tree trunks were simulated and the interaction of an automated forklift and crane with a truck was successfully tested. In the field of sustainable agriculture, the Center's technologies are used to distinguish weeds from crop plants and remove them mechanically, while in forestry, the condition of the protective forest is recorded using unmanned aerial vehicles. In addition, the EU research project "egeniouss" led by the Center is developing a highly accurate image-based localisation and navigation system as a supplement to satellite navigation in areas with insufficient availability of satellite data. The technology is designed to be made accessible to professional and private users. The Center was able to further expand its excellent market position in the automation and digitisation of heat treatment and forming processes in the metal industry. In order to precisely control the product temperature and increase energy efficiency, tailor-made solutions based on mathematical models and optimal control algorithms were successfully implemented in several plants for continuous and batch ovens. Other areas of research included the optimisation of plate flatness in heavy plate rolling mills and virtual production in wire rolling mills. The focus was on improving process accuracy and product quality through innovative approaches such as image-based classification systems and modelling of wear processes. Furthermore, intelligent algorithms have been developed that support resourcesaving production and the efficient operation of mechatronic automation components. Hybrid modelling and verification processes as well as adaptive and online-learning control algorithms have made it possible to develop solutions that enable the simple configuration of different variants, reduce commissioning costs, reduce performance losses due to manufacturing tolerances, and extend the service life of the components. In order to drive forward the digital and green transformation of foundry operations in Austria, the DG Assist project is developing an innovative assistance system that ensures the sustainable and agile production of cast components, reduces the burden on operating personnel, and cuts energy and material consumption. In the area of "Federated Learning" for the automation of mobile work machines, the Center is working on bringing together models and knowledge about the behaviour of several machines in the cloud. This enables machines to share collected knowledge and detect faults in operating behaviour.

REPORTS FROM THE CENTERS TECHNOLOGY EXPERIENCE

Along the strategy elements "Contextual Next Generation Human Centricity" and "Future Hybrid Contexts", various focal points underwent further development and were positioned accordingly in 2023. The examination of complex interaction contexts ("Challenging Contexts") from the perspective of future interaction approaches and new interaction qualities provided valuable contributions and solution approaches. This is connected to the consideration of future "human-AI synergy" and new possibilities in the synergy of man and machine, including in cooperation with the Centre for Vision, Automation & Control as part of the AI-Enabled Automation lighthouse project. The Center positions itself as a research service provider for two areas of human-machine interaction, namely in the field of automation and assistance in primarily industrial, but also other value-added processes, and in the field of experience aspects in the technological support of social change towards a sustainable society and economy. Furthermore, the Center focuses on the development of innovative interaction solutions for challenging contexts, in particular in the area of hybrid concepts with the use of virtual/mixed reality to enable a fusion of elements of the real world with the virtual world and seamless interaction with each other. One focus was the portfolio development of innovative human-machine interface (HMI) solutions in the context of Industry 5.0 as well as the further development of new experience factors in the area of human-centred design (e.g. the "meaningful" parameter).

Highlights in Portfolio Development

In the Future Interface area, the EU project MoSaiC (https://mosaicproject.safe-europe.eu) developed innovative interaction concepts for collaboration between humans and semi-autonomous systems, flying drones, and ground robots. In synergy with the EU project TeamUP, which will start in 2024, these developments will help to expand the portfolio in the field of human-robot interaction. With the work on innovative human-machine interfaces (HMIs) in the EU project RARE (www.raresguare.eu) and the FFG projects opt1mus and DG-Assist, the HMI focus could be deepened in 2023. The development of the first prototype of "Sense the Machine", which makes the interaction between workers and machines tangible using multimodal interactions such as vibration and light, represents a major milestone. The results will be presented in the publication "Sensing the Machine: Evaluating Multi-modal Interaction for Intelligent Dynamic Guidance" at the Intelligent User Interface (IUI) Conference 2024.

In the Extended Reality (XR) research area, the focus was on future training opportunities and the design of hybrid worlds. The MED1stMR project(www.med1stmr.eu) further developed the first mixed reality prototype for a virtual training system for medical first aiders. In the previous phase, the focus was on the integration of real objects, which was presented at the renowned Computer Human Interaction (CHI) Conference 2023. In 2023, the focus was placed on the inclusion of artificial intelligence. This was used both for communication between patients and first aiders and for controlling the scenarios. The MED1stMR project was named the best digitisation project in the education and social affairs category at the <u>eAward 2023</u> business awards ceremony. In the area of contract projects, the research portfolio on multisensory XR training was successfully utilised: Successes include projects to combine virtual reality and tourism based on the research results for multi-sensory experiences.

In the area of Human-Centered Business Innovation, the LogoLog project (Vienna Business Agency) was successfully acquired. This project aims to develop a digital chatbot based on Viktor Frankl's theories to strengthen resilience. Future users will be able to communicate with the digital assistant in a multimodal way, using wearables (including smartwatches) to determine relevant biosignals to measure stress and resilience. The publication "Supporting Resilience Through Virtual Reality: Design and Preliminary Evaluation of a VR Experience Based on Viktor Frankl's Logotherapy" (presented at INTERACT2023) forms a solid foundation for future work in the field of resilience and technology experience. Thanks to the Center's positioning in the field of digital innovations and future interface design, an industry project was won in which offer processes for small projects were reconsidered from the customer's perspective and interaction prototypes were designed.

In the field of Experience Measurement, the Center was able to further develop its portfolio of methods for measuring and optimising the experience of virtual training technologies, particularly in the area of occupational safety. Furthermore, the portfolio of methods was expanded so that diversity-sensitive perspectives enable the in-depth recording and promotion of digital agency, personalisation approaches respond to the diversity of users and stigmatisation is counteracted in order to strengthen social justice and cohesion. As part of the FWSafeXR contract research project (Federal Ministry of Agriculture, Regions and Tourism), a virtual training programme was developed to reduce accident rates in forestry work. The innovative combination of safety-relevant topics in forestry work (preparation, situation assessment, handling chainsaws, first aid, etc.) with their simulation in extended reality (XR) technology is worth emphasising.

A large-scale evaluation study with more than 70 participants not only clearly demonstrated the effectiveness of the XR-training, but also captured and modelled the interplay between the technical quality of the training, the user experience and the learning success of the trainees.

In the field of Capturing Experience, the FFG project biscuit4all (www.biscuit4all.info) investigated the identity aspects of climate-conscious behaviour and how people with a sustainable identity interact with their social environment. Based on these findings, individual engagement strategies are developed that appeal to different identities. Furthermore, the results show promising strategies for collective engagement, as family and joint socialisation and the dissociation from "unsustainable people" reveal dynamics for the formation of "sustainable social groups". The publications "Effective Remote Automated Vehicle Operation: A Mixed Reality Contextual Comparison Study" and "Assertive Takeover Requests: Immediate and Sustained Effects on Stress and Performance" reflect the Center's expertise and positioning in the field of human-centred automation, particularly with regard to interaction with automated vehicles. The publication "Where should I put my Mark? VR-based Evaluation of HRI Modalities for Industrial Assistance Systems for Spot Repair" (RO-MAN 2023) provided a new research approach in the field of human-robot interaction and the design of intuitive interfaces for collaborative robots in industrial environments.

REPORTS FROM THE CENTERS INNOVATION SYSTEMS & POLICY

The Center for Innovation Systems & Policy analyses innovation processes and systems as well as industrial and political strategies for innovation and transformation. The reorganisation of the Center into two Competence Units – Innovation & Industrial Dynamics and Transformation Governance – brought about important changes in 2023, which are intended to enable a further expansion of the research focus on the characterisation of innovation and industrial dynamics; the analysis of innovation ecosystems; industrial transformation; and a forward-looking and transformative research, technology, and innovation policy.

Highlights in Portfolio Development

In 2023, the Research Infrastructure for Science and Innovation Policy Studies (RISIS, www.risis2.eu), in which the Center is one of the key partners and contributes, among other things, the EUPRO database developed at the Center (https://zenodo.org/records/10390401), focused on consolidating itself as a European infrastructure to ensure stable and sustainable further development. The international RISIS Conference 2023 organised by the Center provided a comprehensive review of the results to date, based on the use of the linked data on research and innovation activities available in RISIS. An outlook for the future was also provided, particularly with regard to the transformation of RISIS from a European project to a non-profit organisation in its own right. In this context, individual key topics will also be addressed in various spin-off projects. This will be closely linked to the establishment of the European Higher Education Sector Observatory (EHESO) in the coming years, for which the Center has taken over the scientific coordination.

Besides this consolidation of the Center as a central hub for the generation and analysis of data and indicators on research and innovation activities, issues relating to industrial transformation moved further to the forefront last year. The concept of Industry 5.0 has become increasingly important in this context in recent years. The skills and qualification requirements needed for this in particular are a key factor for the realisation of Industry 5.0 projects and are the focus of several major European projects (e.g. Bridges, www.bridges5-0.eu) and research initiatives (e.g. the European Manufacturing Survey) at the Center. Through the development and use of new AI-based methods, future needs for new skills and abilities as well as requirements for professional qualifications will also be identified in collaboration with Austrian companies. The Center is simultaneously involved in the development of a <u>European</u> roadmap for Industry 5.0 with a focus on human-centricity as one of the pillars of Industry 5.0. The concept of human-centricity places people at the centre of the design, development and implementation of technological solutions and organisational practices that not only meet functional requirements, but also improve human well-being, skills, competencies and working conditions.

The conclusion of the four-year framework agreement on <u>Foresight on Demand</u> (FOD) for the European Commission and the European Environment Agency, coordinated by the Center, represents a milestone with regard to embedding foresight in the further development of European research and innovation policy and other policy areas. In particular, the preparation of the <u>second strategic plan of Horizon</u> <u>Europe</u> and the ongoing discussions on the forthcoming tenth EU Framework Programme for Research and Innovation have been shaped by the Center's recent foresight activities. Key elements of Foresight on Demand are now to be further expanded as part of the further consolidation of the foresight community in the European Research Area and in a renewed framework agreement. As part of the EU project <u>Ethics for Technologies with High</u> <u>Socio-Economic Impact</u> (TechEthos, www.techethos.eu) coordinated by the Center, an analysis was carried out of how ethics and social values can be taken into account at an early stage in the design, development, and use of new technologies and how various stakeholder groups can be involved. New types of scenario and serious gaming methods were trialled for this purpose and the results obtained were used to develop ethical guidelines for dealing with new technologies.

Another central focus of the Center last year was on the current challenges of a transformative and mission-oriented innovation policy at both national and European level. On the one hand, the aim was to establish national governance structures and processes for these new approaches to R&I policy, which require changes both in terms of cooperation between different policy areas and with regard to the involvement of industry, cities, citizens and other groups of stakeholders. On the other hand, new paths are being taken in the development, monitoring and evaluation of funding programmes. For instance, the Center led the Green Transition evaluations of Horizon 2020 and Horizon Europe, the accompanying evaluation for the further development of the energy research programme in Germany and played a key role in the evaluation of the framework programme in the area of digital transition.

The Center has been able to distinguish itself scientifically through publications in a number of high-ranking international journals (e.g. International Business Review, Nature Scientific Data, Environmental Innovation and Societal Transitions) as well as through the publication of a book on transformative and agile innovation systems. Moreover, the Center consolidated its scientific visibility not only through publications, but also through the organisation of international conferences or scientific tracks at such conferences (e.g. in the areas of STI Policies; Science, Technology and Innovation Indicators, Sustainability Transitions) as well as through the appointment and participation in prominent scientific committees (e.g. the European Mutual Learning Exercise in Europe about Policies and Roadmaps to Support the Decarbonisation of the European Industry). At national level, contributions to the Austrian Panel on Climate Change (APCC) Special Report: "Structures for Climate-Friendly Living" which explore possible paths towards a climatefriendly society also deserve special mention.

SEIBERSDORF LABOR GMBH

Seibersdorf Labor GmbH (SL) is the first point of contact for high-precision laboratory analysis and complex measurement technology in Austria and is positioning itself as a market leader internationally as well with selected services. The company ensures that its clients can market their products and services in accordance with current health and environmental guidelines. To this end, the Seibersdorf Labor GmbH (SL) offers highly sensitive lab and analytical services as well as special developments for complex measurement technology in the segments of chemical analysis, radioactivity and radiation protection, radiation hardness assurance and cosmic radiation, EMC and high frequency technology as well as optical radiation. The product portfolio is complemented by a radiopharmaceutical production for oncological diagnostics and tumor therapy, with the latter product segment seeing the start of sustained growth momentum due to increasing international demand.

The Seibersdorf Academy supports the transfer of knowledge and serves as a networking basis for customers, users, and authorities with education, training courses and specialist conferences.

In 2023, some of the profits generated were again reinvested in our own research and development as well as in the continuous improvement of quality with regard to certifications and accreditations. The focus of applied research and experimental development was on the following areas:

Radioactivity and Radiation Protection

- Development of measurement methods and beam qualities
- Measurement methods and simulations for radiation
 resistance
- Method development for ultra-low-level measurement technology
- Radiation detector for pulsed radiation
- Development of radiation protection measuring instruments and probes

Chemical analysis

- Detection of doping substances and disease markers
- Method development and validation for stability studies
- New forensic methods

EMC & Optics

- Method and prototype development for the measurement of electromagnetic fields
- Processes for probe calibration
- Safety of laser and optical radiation

With its expertise, Seibersdorf Labor GmbH works for the Austrian and European economy (from small and mediumsized enterprises through to large-scale industry) and the public sector (from national task forces and authorities through to international organisations). The company stands for top quality and excellent know-how in the field of these laboratory services. Accreditations and certifications are therefore to be understood as the basis for any business activity.

The order level of Seibersdorf Labor GmbH has grown continuously in recent years, particularly in the fields of electromagnetic field measurement technology and radiopharmaceuticals. Despite the still volatile economic situation, robust growth was recorded again in 2023. The infrastructure expansion in the area of high-frequency technology (calibration center) was successfully completed in 2022, planning for the structural expansion of Radiopharmacy was started and will enter the construction phase in 2024.

NUCLEAR ENGINEERING SEIBERSDORF GMBH

The Nuclear Engineering Seibersdorf GmbH (NES), a 100% subsidiary of the AIT Austrian Institute of Technology GmbH, has two main tasks: the management of radioactive waste produced in Austria (collection, sorting, processing, conditioning, and interim storage) and the decontamination and decommissioning (dismantling) of nuclear facilities, in particular from 45 years of research and development at the Tech Campus Seibersdorf site.

Both tasks are carried out on behalf of the Republic of Austria (currently represented by the BMK), and there are long-term contracts with terms until 2033 (decommissioning) and 2045 (waste management), which also regulate the financing of the activities. The main project of the Nuclear Engineering Seibersdorf GmbH in the area of waste management in 2023 was the continuation of the reconditioning of old waste packages. No problems were encountered during project implementation, and the work could be completed according to plan. Reconditioning can realize a significant reduction in the volume of waste that must be sent for subsequent final disposal. In the area of decommissioning, the major project in 2023 was the continued operation of the soil monitoring facility and the associated initiation of routine measurement, sorting, and release of lightly contaminated materials from previous decommissioning projects. In addition, the "Decommissioning Hot Cell Laboratory" project, the last major former nuclear research facility at the Tech Campus Seibersdorf was successfully completed.

BUSINESS PERFORMANCE 2023

BUSINESS PERFORMANCE 2023 EARNINGS POSITION

The business year 2023 was closed with a positive result for the AIT Group. External revenues (= sum of contract research and co-financed revenues) reached the amount of EUR 117.4 million (previous year: EUR 103.0 million). This represents an increase of 13.9%. At the same time, it was possible to increase the work in progress compared to the previous year (increase for contract research +14%, increase for co-financed projects +17%).

Revenues from contract research were increased to above the previous year's level (EUR +5.3 million; +8.3%). Revenues from co-financed research showed an even more significant growth (EUR +9.1 million; +22.9%).

Shareholder contributions reached a level of EUR 56.1 million (previous year: EUR 53.7 million), thus showing an increase of EUR 2.4 million (+4.4%) compared to the previous year. The shareholder Republic of Austria, represented by the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, thus secures the third pillar of funding for the company's research activities and underscores the importance of the company when it comes to the topics surrounding climate change, decarbonisation, and digitisation. Other operating income of EUR 14.6 million (previous year: EUR 15.6 million) includes income from passed-on rents and operating costs of EUR 1.6 million (previous year: EUR 1.2 million) and income from other passed-on costs to third parties of EUR 0.8 million (previous year: EUR 1.4 million), release of investment grants of EUR 9.2 million (previous year: EUR 9.1 million), income from the release of provisions of EUR 1.0 million (previous year: EUR 1.8 million), income from premiums and public grants of EUR 1.1 million (previous year: EUR 1.5 million) and other operating income of EUR 0.9 million (previous year: 0.6 million EUR).

In contrast to the P&L structure according to the RÄG 2014, the presentation for the management report was maintained unchanged. This avoids mixing up the income from research contracts with the income from passed-on expenses – which has to be presented in the sales revenue according to RÄG 2014 – in the amount of EUR 6.6 million (previous year: EUR 5.9 million) and the other sales revenue in the amount of EUR 1.7 million (previous year: EUR 1.5 million).

TOTAL OPERATING INCOME	199,742	182,945
Other operating income / Other sales revenue	14,628	15,595
Total Financing Nuclear	11,633	10,600
Nuclear BMK – previously BMNT	5,851	5,325
Nuclear BMK – previously BMVIT	5,782	5,275
Total Payments of the Shareholders (Research)	56,081	53,713
Services BMK – previously BMVIT	56,081	53,713
Total Revenues from Research Contracts	117,398	103,038
Funding R&D including inventory changes	48,539	39,483
Inventory changes	7,774	8,819
Funding R&D	40,765	30,664
Revenues R&D including inventory changes	68,859	63,555
Inventory changes	1,625	318
Revenues R&D	67,235	63,237
Designation in kEUR	ACTUAL 2023	ACTUAL 2022

EXPENSE STRUCTURE AND RESULT

As a result of higher revenues and the resulting project cost structure, the company's expense structure for the reporting year 2023 shows an increase for material and purchased services of about EUR 3.1 million (reporting year: EUR 24.0 million, previous year: EUR 20.9 million). The increase in prices for the purchase of energy in particular had a cost-driving effect of EUR 1.6 million (previous year: 1.2 million EUR.

Due to the increase in the number of employees and the salary indexation based on the collective bargaining agreement, personnel expenses showed an increase of approx. EUR 13.4 million (reporting year: EUR 123.0 million, previous year: EUR 109.6 million).

Other operating expenses also increased by about EUR 1.5 million compared to the previous year (reporting year: EUR 37.5 million, previous year: EUR 36.0 million). This increase is mainly due to the increase in rents and operating costs in the financial year. Benefiting from the rise in interest rates in the financial year and partial write-ups in the bond portfolio, a positive financial result of EUR 1 million was able to be achieved. Tax expenses amounted to EUR 0.06 million.

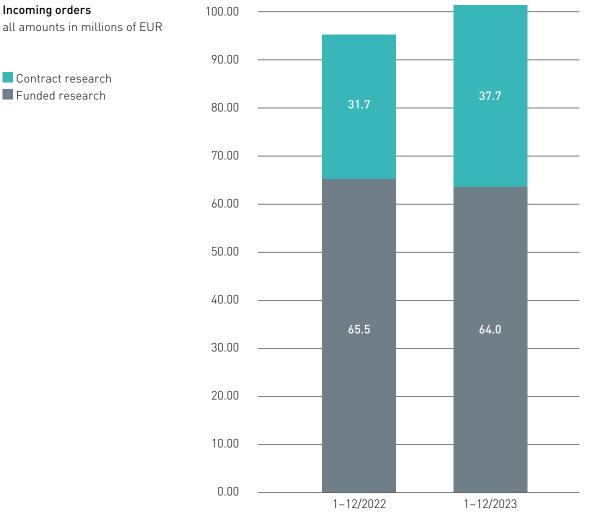
Retained income of EUR 1.5 million was allocated in the 2023 reporting year. This reserve is used to cover expenses for strategic initiatives in the 2024-2026 strategy period, particularly in the area of artificial intelligence/large language models and battery technologies.

Designation in kEUR	ACTUAL 2023	ACTUAL 2022
TOTAL OPERATING INCOME	199,742	182,945
Material costs	-8,909	-8,336
Purchased services by third parties	-15,125	-12,597
Material costs and purchased services	-24,035	-20,934
Personnel expenses	-123,081	-109,559
Amortizations	-11,650	-11,274
Other operating expenses	-37,499	-36,053
TOTAL OPERATING EXPENSES	-196,264	-177,821
OPERATING PROFIT	3,477	5,125
Financial profit	2,108	-1,475
RESULT BEFORE TAXES	5,585	3,650
Taxes on income and earnings	-689	-578
ANNUAL RESULT / PERIOD SUCCESS	4,896	3,072
Result carried forward	41,457	38,385
NET PROFIT	44,852	41,457

INCOMING ORDERS

In the year under review, orders worth EUR 101.7 million (previous year: EUR 97.2 million) were acquired. Incoming orders for the AIT Group could thus be increased by approx. 5% above the previous year's level. The acquisition of co-financed projects was slightly below the previous year's very high figure (reporting year: EUR 64 million, previous year: EUR 65.5 million), while the level of contract research projects of EUR 37,7 million rose significantly by around 19% (previous year: EUR 31.7 million). Overall, this represents a strong acquisition performance in the area of external revenues.

The representation of incoming orders and order backlogs does not take into account small projects – primarily those of Seibersdorf Labor GmbH – with a short duration and completion within the acquisition year (incoming orders small projects reporting year: 35.1 million EUR, previous year: EUR 33.5 million, of which Seibersdorf Labor GmbH: Reporting year: 28.5 million EUR, previous year: 27.3 million EUR).

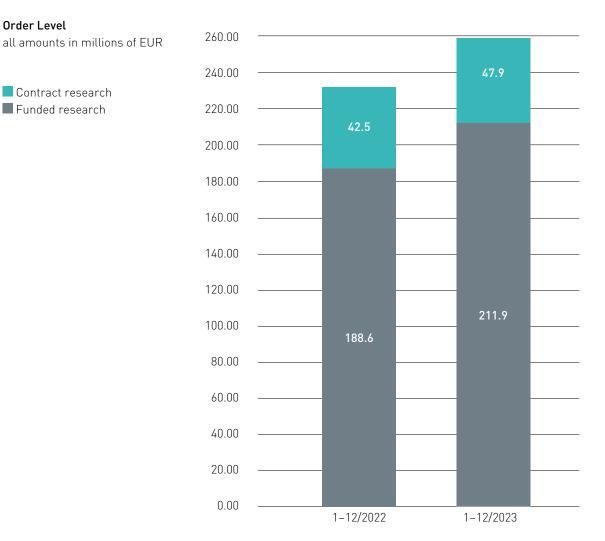


all amounts in millions of EUR

Contract research Funded research

ORDER LEVEL

The good incoming order situation in the year under review allowed order levels to increase in 2023 even despite the high revenue volume. In comparison to the previous year, these increased by about 12% (reporting year: EUR 259.8 million, previous year: EUR 231.1 million), and both contract research(reporting year: EUR 47.9 million, previous year: EUR 42.5 million +13%) and co-financed research (reporting year: EUR 211.9 million, previous year: EUR 188.6 million, +12%) saw an increase.



WORK IN PROGRESS

(unfinished projects)

Work in Progress does not only take account of the invoiced revenues (as in the case of the order level), but also the deferred project revenues due to the project work progress. In the year under review, work in progress increased by approx. 16% to EUR 142.8 million (previous year: EUR 122.7 million). In terms of project categories, the co-financed research shows an increase of approx. 17% (reporting year: EUR 107.7 million, previous year: EUR 91,9million). The growth in work in progress for contract research was more pronounced at around 14% and amounted to EUR 35.1 million at the end of the year (previous year: EUR 30.8 million).



Work in Progress

INVESTMENTS

Total investments in intangible assets and property, plants and equipment in 2023 amounted to EUR 12.7 million, EUR 3.6 million below the corresponding previous year's figure of EUR 16.3 million.

EUR 0.5 million (previous year: EUR 0.9 million) were invested in intangible assets. The acquisition of assets for land and buildings amounted to EUR 1.2 million (previous year: EUR 4.0 million). The investment in technical facilities and machinery amounted to EUR 6.9 million (previous year: EUR 6.0 million). 2.1 million EUR were spent for facility and office equipment (previous year: EUR 2.3 million), and EUR 2.0 million were received for advance payments and plants under construction (previous year: EUR 3.1 million). In addition, plants under construction and advance payments of EUR 2.7 million (previous year: EUR 7.0 million) were put into operation in the financial year.

LIQUIDITY AND FINANCIAL POSITION

As of 31 December 2023, cash and cash equivalents amounted to EUR 128.1 million (previous year: EUR 124,9 million). The liquidity level as of 31 December 2023 also includes funds for investment projects already ordered but not yet delivered.

Cash and cash equivalents are offset by liabilities from fiduciary project coordination funds in the amount of EUR 48.3 million (previous year: EUR 45.0 million).

A positive cash flow of EUR 7,838 thousand (previous year: TEUR 34,014) was generated from operating activities in the financial year. Cash and cash equivalents of TEUR -4,272 (previous year: TEUR -5,513) were used for investing activities. In the area of financing activities, repayments of TEUR -309 were made in the financial year on the financing of TEUR 6,337 taken out in the previous year. As of 31 December 2022, there were securities deposits with a book value of EUR 16.8 million (previous year: EUR 16 million).

In the reporting year, liabilities to credit institutions amounted to EUR 6.0 million (previous year: EUR 6,3 million).

As of 31 December 2023, equity amounted to EUR 62.0 million (previous year: EUR 57,1 million). After taking into account the investment grants in the amount of EUR 75.5 million (previous year: EUR 72.0 million), the sum of expanded capital resources amounts to EUR 137.5 million (previous year: EUR 129,1 million).

PERSONNEL

As of 31 December 2023, the company employed a total of 1,281.7 FTEs or an average of 1,267.6 FTEs during the financial year. Compared to the previous year's reporting date (1,241.2 full-time equivalents and 1,203.7 average full-time equivalents), this corresponds to a total increase of the workforce of 40.5 FTEs and 63.9 average FTEs.

REPORT ON MEASURES IN SUSTAIN-ABILITY MANAGEMENT

AIT DECLARATION OF PRINCIPLES AND CORNERSTONES OF THE SUSTAINABILITY STRATEGY

Objectives and measures in accordance with the requirements and specifications of the EU Taxonomy Regulation, the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standard (ESRS)

The AIT is committed to sustainability both in its service portfolio and in its own business activities. We recognise the urgency of limiting global warming to well below 2°C and of making efforts to reduce it to 1.5°C as laid down in the Paris Agreement. We are aware that this will require an economic and social change based on the best available scientific evidence. As an employer, we are also aware of our responsibility towards our employees in this context. As a player in the Austrian innovation system and the Austrian economy, we act based on the principles of transparency, reliability, and fairness.

We have therefore taken measures in line with the following points:

- The AIT strategy translates the shareholder vision and the underlying SDG – Sustainable Development Goals of the UN, as well as national objectives, into thematic research roadmaps for the development of a climateneutral, digitised, and competitive, resilient economy, as well as the technologies, systems, and infrastructures required for this. This orientation also applies to research services at a low TRL level, which are currently not covered by the EU Taxonomy Regulation.
- We are working on the expansion of global market positions in the innovative strengths of Austria as a business location, as well as on the development and expansion of Austrian technological competence in service areas of the highest relevance.
- Our services serve to secure system-critical competences to strengthen European technological sovereignty and societal resilience.
- Together with other stakeholders, we promote innovation, technology transfer and best practices in the area of environmental protection under socially acceptable conditions.

Sustainability management within the framework of an integrated system

- At AIT, sustainability management takes place in a integrated system of relevant environment, strategy, and derived goals and measures. The guidelines and lines of action of AIT shareholders, stakeholders, and the relevant environment form the background for the development of the AIT strategy.
- The strategies and measures are aimed both at the level of service delivery (research topics, human resources, culture) and the level of supporting processes (procurement, infrastructure, mobility, etc.). The objectives and measures are reflected in the corporate strategy, the management system, and the Code of Conduct and are controlled by the company's planning, management, and evaluation processes.

The starting point of AIT's strategy development is the adoption of the "owner's vision", which provides cornerstones and orientation parameters for the company's direction. The owner's vision takes framework conditions into account.

Goals, guidelines and regulations at national and international level: at international level: e.g. SDG - Sustainable Development Goals of the UN and the EU Taxonomy Regulation, at national level: RTI strategy, RTI pact, specific national strategies – such as the national H₂ strategy, etc.

The AIT strategy and the research roadmaps defined therein form the basis of service provision. The strategy is developed in a three-year cycle in accordance with the Research Funding Act (FoFinaG).

International evaluation committees and the strategic research advisory board, which, like the evaluation committees, is made up of high-ranking international personalities from the respective subject areas, are involved in the evaluation of the plans and results.

The operational implementation is ensured by AIT's planning and control process, which is based on the company's strategy and quality policy and defines the company's most important control mechanisms and reporting structures. Against this backdrop, the pillars of the AIT service delivery and value creation come into play. Human Resources Management: Clear career paths, further training and development opportunities, regular interactions (e.g. work environment surveys, development discussions, team meetings) also contribute to AIT being perceived as a place for development and creative work.

Gender & Diversity Management plays an important role at AIT and is handled in a structured manner by the AIT "Gender Task Force". The company sees this work as a valuable contribution to non-discriminatory collaboration – working with respect, appreciation, and tolerance, regardless of gender, gender identity, age, ethnic, national, or social origin, religion or belief, sexual orientation, language, disability, political opinion, and social or economic circumstances. Research management ensures the basis for regular work in all types of research projects – from contract research to independent research. Structures, rules, and processes create transparency, integrity and traceability of the work, both in terms of content and under business considerations. The compliance pillar ensures transparency and thus compliance with important standards and rules of the company (e.g., Code of Conduct, Code of Leadership, Incident Reporting System in compliance with the EU Whistleblower Directive).

With the strategy process 2024–2026+, AIT is laying the foundations for a deepening of sustainability management and comprehensive reporting in preparation for the requirements and specifications of the EU Taxonomy Regulation, the Corporate Sustainability Reporting Directive (CSRD), and the European Sustainability Reporting Standard (ESRS).

The following presentation provides a brief overview of the tiered structure of the elements and influencing factors of the AIT sustainability management:

AIT SHAREHOLDERS, STAKEHOLDERS AND RELEVANT ENVIRONMENT

RTI pact	Sustainability mana	igement ര AIT	
SDG – Sustainable Development Goals	Strategy	Service provision	
EU taxonomy	Quality Policy	Human Resources Management	Supporting processes
Shareholder Vision	Planning, Control and Evaluation	Gender & Diversity	Sustainable Procurement
		Research (Project) Management	Infrastructure Man- agement and Location Ecologisation
		Compliance	Mobility Management

REPORT ON THE SIGNIFICANT RISKS AND UNCERTAINTIES

AIT acknowledges the fact that every entrepreneurial activity involves taking risks. At the same time, a successful company knows how to use its opportunities. AIT is committed to providing resources and design options for managing opportunities and risks in order to exploit opportunities and take risks in a conscious manner.

Even though opportunity and risk management communicate with each other, they differ in their characteristics. For example, many risks have a recurring characteristic and occur whether they are recognized or not, while opportunities can often be seized only once and only within certain time frames that must be recognized as such. AIT has the freedom to seize an opportunity when it makes strategic sense. On the other hand, AIT is not free to avoid risks completely or to resolve them in every case in a contradiction-free manner.

The implemented risk management system, which was further developed and optimized in the past financial year, is used for recording and controlling.

Risk Management and Internal Control System

risk management (RM) identifies and categorises significant risks inherent in the AIT activities. It defines how these risks are to be dealt with. For example, by defining which risks are consciously accepted and managed and which risks should be avoided or outsourced. The risk management system at AIT consists of three components:

- 1. The risk strategy
- 2. Risk-related responsibilities, processes, and guidelines
- 3. Monitoring the risk management

AIT understands the Internal Control System (ICS) to encompass the totality of all the policies, process descriptions, work instructions, methods, and control measures ordered by management which serve to ensure the proper running of business operations at process level.

Internal control measures are a means to an end for AIT to achieve its objectives, and not an end in themselves. Controls are effected by employees at all levels of the organisation.

AIT regards the Internal Control System as a subsystem of risk management with strong mutual interactions. As a rule, optimizations in the ICS will have a positive effect on risk management since every improvement of the control system at process level tends to contribute to the reduction of the effort required for the dealing with risks.

RISK STRATEGY

The basis for the AIT's risk management system is the risk strategy. It is established by the Management Board and defines the risk categories to be considered along the most important business areas or the most important value-adding resources, assesses the corresponding risks and defines the further handling in terms of the following options for action: avoid risks, outsource/transfer risks, accept and manage risks.

The result of the risk strategy considerations is the strategic risk catalogue M14-MD03. The strategic risk catalogue is defined top-down by MD in coordination with Risk Management in the course of an annual review. It defines "risk owners" who have operational responsibility for the individual risk and are therefore responsible for identifying and assessing the risk. The subsequent disclosure of the current strategic risk catalogue takes place via the QM system.



Once the basic risk strategy has been determined on the basis of the strategic risk catalogue, the risk management system subsequently ensures that (further) risks are identified, assessed, managed and reported. The aim of risk management is to optimise the company's success and value in line with the defined AIT corporate strategy. Risk management thus takes place as a continuous process in all parts of the company.

To ensure that the basic steps of the risk management system can function properly, AIT has made appropriate specifications on processes, functions and guidelines. AIT defines its risk management as a fixed component of corporate management. Risk management is taken into consideration in the

- Development of the corporate strategy (market considerations, business case developments, etc.)
- Considerations of the design of the organizational structure (e.g. by defining roles, responsibilities or even by defining organizational units themselves)
- Process development (e.g. as part of the offer, procurement or recruiting processes)
- Determinations on the design of the corporate culture (such as identifying incentive models, MBO, etc.)

RISK AREAS

The following is a description of the key corporate risk areas that may have a negative effect on the assets, financial and profit position of AIT.

Financial risk, information on financial instruments according to § 243 para. 3 lit. 5 [Austrian Commercial Code] The company currently does not use any derivative financial instruments. Due to the nature of its business operations, the use of derivative financial instruments

is not plannedin the future either.

Funds are invested in accordance with the AIT investment guideline, which provides for a conservative investment of funds with the involvement of the investment management of the main bank. Where possible, the investment is also made in the short and medium range. On the one hand, this ensures the availability of liquidity; on the other hand, it also allows us to respond quickly to changing framework conditions, such as the fundamentals of the EU taxonomy.

The value of the receivables is continuously assessed and monitored by the receivables management. A review of compliance with payment deadlines, limiting of credit limits and obtaining creditworthiness assessments from our clients limit the impact of potential payment defaults on the company's assets, financial and profit position.

Risk of the strategic portfolio and market risk

AIT works on the (further) development of technologies or processes whose future usability (e.g. via exploitation in contract research) must first be proven.

The resulting development risk is covered by the use of federal funds. The AIT research portfolio is thus made up of elements with varying degrees of maturity. At the same time, it represents a risk mix that makes it possible, on the one hand, to take up and finance new issues while simultaneously generating a stable income situation on the other. In exploiting the results, AIT addresses European and international markets. Both the acquisition of customers and projects in the field of contract research as well as the acquisition of third-party funding in the national and international subsidy markets happen in a competitive environment.

Against this background, a risk in terms of attainability of projected figures, the development of client groups and partner networks as well as the implementation of business models is an intrinsic part of business. The service portfolio of the AIT Group is diversified and addresses various sectors in different markets. The continuous monitoring of the order situation as well as an early recognition of trends in the relevant markets with measures that are quickly derived from these remain important tasks for AIT.

Project funding risk

A public project funding scheme deviating from the full reimbursement principle as well as changing interpretations of funding guidelines may lead to a deterioration of the funding rate. Changes in the terms of funding project accounting require a system adjustment of the cost accounting and project accounting system. In order to maintain a sound project assessment base, it is necessary to monitor the relevant environment and assess it with regard to possible commercial effects.

Information technology risks

The company has a central IT system environment, enabling the joint use of high-quality system components at the various locations. This includes, among other things, a modern security environment with a firewall, virus scanning, and remote access points with multiple protection for the detection of and defence against attacks. The data is centrally stored, automatically backed up at regular intervals, and copies are kept off-premises. All our projects are based on the generally accepted standards of the Baseline Protection Manual of the German Federal Office for Information Security (BSI) and ISO standard 27001 and are supplemented by measures reflecting the current state of the art. AIT intensively deals with the protection of the IT infrastructure from unauthorized access or from attacks, both from within and from the outside. In addition to technical and organisational measures in IT security, the company also implements targeted measures in the area of awareness training for all employees on topics pertaining to IT and information security (e.g. also when handling personal or other sensitive data).

As the company transitions from pure IT to comprehensive information security, it is increasingly looking at organisational measures as well as physical security measures to prevent the loss or misuse of company-critical data. This function of the CISO (Chief Information Security Officers) ensures that measures to increase information security are improved in a structured and sustainable manner and are broadly anchored in the company.

Legal risks

AIT counters legal risks through constant communication between the central legal department and the local attorneys, as well as through the implemented reporting system which encompasses ongoing procedures and potential risks. Possible risks were taken into account by means of balance sheet risk provisions in the annual financial statement.

Economic risks

In view of the increases that have taken place in the general price level and the uncertainty regarding the corresponding further development, AIT attempts to assess the effects of inflation on the cost structure and thus the earnings tangent through ongoing risk monitoring. To date, negative effects of inflation could be effectively reduced through measures such as price adjustments towards customers and optimisations of the use of resources. Inflationary pressures should nevertheless be seen as a risk factor due to high order backlogs with long project preparation times and project durations, especially in the highly competitive area of the European research landscape.

Geopolitical risks

In light of the international sanctions against the Russian Federation, possible effects on the business and the risk situation of the company must be monitored on an ongoing basis. The risk of further geopolitical conflicts (e.g. Middle East) is also constantly evaluated with regard to potential effects on the company so that appropriate measures can be derived at an early stage.

Personnel risks

The performance of our employees is essential for the development of our knowledge-based company. The company is competing with other companies for highly qualified specialists and executives. The further development of the AIT management culture, measures for training and further education in connection with the implementation of specific technical and scientific as well as management and support role models will position AIT more strongly as a top employer internationally. Within the framework of international and domestic cooperation projects with universities and scientific institution, AIT increases its access to well-qualified employees in the course of concrete project work. The new organisational unit "People Management & Organisational Development", which combines the topics of personnel development, recruiting, diversity & gender and organisational development and will be established from the 2024 financial year onwards, will provide additional focus.

New IT tools increase transparency and effectiveness throughout the process and complement the contribution of recruiting to strengthen the AIT employer brand. Considerable attention is given to the topic of gender and diversity management: A separate "Gender Task Force" is continuously developing the topic with employee involvement. Flexible regulations for organising the daily remote work routine ("home office"), taking into account necessary team communication and interaction, strengthen the attractiveness of AIT as an employer.

Product and environmental risks

Product and environmental risks may arise in the course of laboratory operation with hazardous materials during storage, handling, and disposal. Possible effects obtain in associated incidents with immediate effect on persons and the environment. AIT is therefore taking into account high (safety and security relevant) technical standards for the use of hazardous materials, and these are subject to consistent monitoring of quality requirements and standards.

Infrastructure and location rehabilitation risks

In recent years, intensive measures have been taken to implement the location and space concept of AIT and its subsidiaries. This applies both to the main location in Vienna and to the Tech Campus Seibersdorf, where a significant improvement in the surface structures - both technically and in terms of the usability of the surfaces was achieved through new construction. Measures remain necessary especially at the Tech Campus Seibersdorf to improve the structural condition of the buildings and the general infrastructure. In addition, extensive demolition measures will now follow to clean up the old building structure after the construction of new buildings at the Tech Campus Seibersdorf. Overall, these measures effectively counteract risks of plant downtimes and risks in the safety of the site. In addition, the development of the location in terms of sustainability and energy efficiency is being driven forward as part of these measures.

Overall risk

When analyzing the risks, no situations that would jeopardize the continued existence of the company at present and in the foreseeable future could be identified.

DESCRIPTION OF KEY FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM – ACCOUNTING PROCESS

A clear management and corporate structure obtains in the Centers, the divisions, the company, and the Group. Cross-departmental key functions are managed centrally by the company, with the individual companies of the Group having a high degree of autonomy at the same time, in particular with regard to operation-related processes.

The accounting regulations related internal control system of AIT ensures that accounting records are checked for mathematical and factual correctness. The material check for the release of bills and receipts takes place in the respective organizational units or subsidiaries and the financial and accounting procedures for all organizational units are then centrally managed at AIT – intensively supported by digitized processes and systems. This IT system-supported, centralized management of financial and asset accounting at AIT, with creditor and debtor management and the complete management of all incoming payments and outgoing payments, ensures a comprehensive functional separation of operational and financial processes across the Group.

The functions of the departments which are significantly involved in the accounting process, i.e. accounting and treasury, controlling and business administration, IT, HR, as well as legal and procurement, are clearly separated. The areas of responsibility are clearly assigned. The financial systems used are protected against unauthorized access by corresponding IT systems. Standard software is used in the area of financial and management systems.

An adequate policy and process management (e.g. for management, business, controlling, resources and support processes) has been established and is constantly being updated and developed further. The electronic incoming invoice recording with electronic approval workflow is comprehensively used throughout the AIT Group. The electronic processing of invoices and the complete approval of invoices for payment in the system ensure a high transparency and reliability as well as the maintenance of the process discipline (e.g. four eyes principle).

The ICS, in particular accounting-relevant processes, is regularly checked by the process-independent internal audit team.

The Internal Control and Risk Management System as regards the accounting process, whose essential features have been described above, guarantees with sufficient certainty that business events are accurately recorded in the books, processed, and thus properly incorporated into the external accounting.

/ / / / / / / / / / / / / / / /

INTERNAL AUDIT, FORECAST REPORT / PERFORMANCE INDICATORS

INTERNAL AUDIT DEPARTMENT

The Internal Audit Department, which reports directly to the Management Board, supervises the operational and business processes as well as the Internal Control and Risk Management Systems. In particular, the functionality and effectiveness of the Internal Control System and the Risk Management System, the compliance with applicable legal and operational policies, the regularity of all operational processes as well as measures for the protection of company assets are to be examined and assessed in this context. The audits are carried out according to the annual audit plan approved by the AIT Management Board and brought to the attention of the Supervisory Board, and supplemented by short and special audits. The audit reports make recommendations and propose measures which are subject to an ongoing follow-up according to the implementation instruction by management.

FORECAST REPORT / PERFORMANCE INDICATORS STRATEGIC DEVELOPMENT

2020 saw the adoption of the Research Funding Act (FoFinaG). AIT is listed in the Research Funding Act (FoFinaG) as a central research institution, which means that the responsible ministry (BMK [Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology]) must conclude performance agreements with AIT in a three-year cycle. The first performance agreement in this regard was signed in January 2022 and thus replaces the previous financing agreements. The performance agreement regulates the basis of the institute's funding by the BMK – in the currently agreed version for the years 2022–2023. Pursuant to Research Funding Act (FoFinaG), the next performance agreement to be concluded will cover the period 2024–2026. For the reporting year 2023, financing was implemented on the basis of the agreement for the years 2022–2023. The financing agreement contains both financial and non-financial target indicators for the company which are regularly reported on and tracked as part of the work of the Monitoring Committee of the Supervisory Board.

A selection of non-financial indicators is presented below.

INDICATORS FOR THE SCIENTIFIC SUCCESS MEASUREMENT

The following table shows a selection of indicators for the scientific success measurement of the AIT Group. In addition to those of the AIT Austrian Institute of Technology GmbH, the key figures also include those of the fully consolidated Group subsidiaries and the at-equity consolidated Profactor GmbH.

In order to meet the strictest scientific criteria, individual indicators were defined even more precisely than before and categorised in a more specific way. This extended set of indicators not only reflects the usual KPIs in science, such as publications in high-ranking journals or as part of full peer review conferences, but also shows the special positioning of the AIT Group as a non-university research institution at the interface between universities and industry, for example in the number of invited lectures for industry and public institutions or membership in many standardisation committees.

In the future, the following indicators will therefore be added from the 2023 reporting year onwards, with these also replacing some of the previously known indicators:

- In terms of publications in scientific peer review journals, the total amount will be given here in the future and analysed separately according to SCI/SCIE/ SSCI (high-ranking peer-reviewed journals) and Q1 (highest category of 4 quartiles according to CiteScore), with the Q1 category being pleasingly well represented with a share of almost 86%. However, no distinction will be made any more according to impact factor, nor is the sum of the impact factor given, as the impact factor of a journal is subject to annual fluctuations and the sum of the impact factor of all journals typically increases over the years, which means that an increase in this value does not automatically mean an improvement in the publication output of an institution per se.
- A stricter definition is used for the category of invited lectures: These are divided according to target audience and assigned their own criteria each. Due to these

stricter criteria (see footnotes 4 and 5), the value decreases accordingly for the year 2023 and thus allows future monitoring based on this now very clearly defined KPI.

- The separate listing of (invited) presentations according to target audience shows that the research results of the AIT Group are of great interest to the scientific community as well as to industry and public institutions, which in turn emphasises its special role as a non-university research institution.
- The KPI of patents filed is also supplemented by the number of patents granted and shows a downward trend in the reporting year compared to the previous year. Changes in patent regulations and in the handling of patents (e.g. in the area of microbial strains or biomarkers) and a stronger tendency in software development towards open source are leading to a necessary reassessment of the patent strategy in selected subject areas.
- The list of management functions and memberships in standardisation committees shows the significant influence of the AIT Group with regard to national and international standardisation and underlines the successful activities in the area of technology transfer for industry and society.
- Dissertations are an important element of AIT's scientific work. The key figure shows a high proportion of international doctoral students and thus the high attractiveness of the AIT both thematically and in cooperation with international universities.

FORECAST REPORT / PERFORMANCE INDICATORS

INDICATORS FOR THE SCIENTIFIC SUCCESS MEASUREMENT

Scientific & Performance Indicators	2023	2022
Publications in scientific peer review journals	366	314
of which publications in scientifically referenced journals with SCI/SCIE/SSCI	257	new indicator
of which number of Q1 publications ¹	215	new indicator
Percentage of Q1 publications in scientific peer review journals with SCI/SCIE/SSCI	85.7	new indicator
of which publications in scientific peer review journals with SCI/SCIE/SSCI with impact factor	37	new indicator
of which publications in scientific peer review journals with impact factor	294	251
of them in publications in scientifically referenced journals without impact factor	72	63
Publications as part of conferences (with review process) ²	331	299
Publications as part of conferences (without review process)	113	111
Invited Lectures ³	176	326
of which Invited Lectures at scientific conferences or institutions ⁴	49	new indicator
of which Invited Lectures for industry or public institutions⁵	127	new indicator
Presentations at scientific conferences and workshops	270	new indicator
Presentations at conferences and workshops of industry or public institutions	54	new indicator
Lectures	214	181
Patents granted (patent families)	43 (19)	82 (24)
Patents filed	26	36
Certification and standardization – Chair, Co-Chair of a committee	20	new indicator
Certification and standardization – Member of a committee	188	new indicator
Number of PhD students	166	162
Number of PhD students from the international arena	78	73
Proportion of PhD students from the international arena (%)	47%	45%
Completed dissertations	20	20
Completed diploma theses	71	56
Number of habilitated employees	29	31

¹ According to CiteScore

² Neudefinition "Peer-review": Ab Berichtsjahr 2023 werden hier nur jene Publikationen gelistet, die ein "Full paper peer-review"-Verfahren durchlaufen haben (Begutachtung des gesamten Papers durch mindestens zwei Reviewer).

³ Für 2023 gemäß Neudefinition der beiden neuen Invited-Lectures-Kategorien

⁴ New definition "Invited Lectures at conferences or institutions": From the 2023 reporting year onwards, only those lectures will be listed here for which at least the conference fees for the invited speakers have been waived.

⁵ New definition "Invited Lectures for industry or public institutions": From the 2023 reporting year onwards, only those lectures that were held on the basis of a personal invitation will be listed here.

EVENTS AFTER THE BALANCE SHEET DATE

EVENTS AFTER THE BALANCE SHEET DATE

No events of special significance have occurred after the balance sheet date that would have led to a different presentation of the asset, financial, and earnings position.

Management:

Prof.ⁱⁿ DIⁱⁿ Mag.^a Dr.ⁱⁿ Brigitte Bach, MSc

Univ.-Prof. DI Dr. techn. Andreas Kugi

Mag. Alexander Svejkovsky

Vienna, 27 March 2024



BALANCE SHEETS

- 50 Group consolidated balance sheet
- 52 Group consolidated profit and loss statement



BALANCE SHEETS

GROUP CONSOLIDATED BALANCE SHEET

1 January 2023 through 31 December 2023 EUR A. FIXED ASSETS I. Intangible assets 1,926,685.77 1. Concessions, rights II. Property, plantcand equipment 1. Land, rights to land and buildings, including buildings on 39,300,258.67 land owned by third parties 2. Technical equipment and machinery 28,563,660.35 3. Other equipment, plant and office equipment 10,520,120.84

 Advance payments made and plants under construction 	2,497,498.73	3,123
	80,881,538.59	80,008
III. Financial assets		
1. Holdings	1,933,767.25	1,329
2. Securities (book-entry securities) of		
fixed assets	16,849,830.97	16,055
	18,783,598.22	17,384

B. CURRENT ASSETS

			260,869
		545,729.29	702
		2,412,038.48	2,346
		2 (12 020 (2	0.077
		167,614,321.40	158,492
	128,143,410.63		124,888
	42,968.00		(
	18,667,840.98		16,099
2,262,143.34			1,456
268,585.90			168
16,137,111.74			14,475
	20,760,101.79		17,507
	19,325,257.24		15,982
-88,289,880.57			-82,627
103,982,139.57			96,208
-6,222,256.44			-5,860
9,855,254.68			8,261
	36,257.17		22
	1,398,587.38		1,503
	-6,222,256.44 103,982,139.57 -88,289,880.57 16,137,111.74 268,585.90	36,257.17 9,855,254.68 -6,222,256.44 103,982,139.57 -88,289,880.57 19,325,257.24 20,760,101.79 268,585.90 2,262,143.34 18,667,840.98 42,968.00	36,257.17 9,855,254.68 -6,222,256.44 103,982,139.57 -88,289,880.57 -88,289,880.57 19,325,257.24 20,760,101.79 16,137,111.74 268,585.90 2,262,143.34 18,667,840.98 42,968.00 128,143,410.63 167,614,321.40 2,412,038.48

ANNUAL FINANCIAL STATEMENT 2023

Status as of 31

December 2022

kEUR

1,938

39,570

26,573

10,741

99,330

Status as of 31 December 2023

101,591,822.58

EUR

EUR

Status as of Status as of 31 EUR 31 December 2023 December 2022 FUR **kEUR** A. EQUITY I Acquired, called and paid-in share capital 470,920.12 471 II. Capital reserves (unappropriated) 13,656,321.07 13,656 III. Retained earnings 1. Legal reserve 47,092.01 47 2. Other reserves (free reserves) 2,966,518.51 1,467 IV. Net profit 44,852,490.12 41,457 thereof profit carried forward kEUR 41,457 61,993,341.83 57,097 (2022 kEUR 38,385) **B. INVESTMENT GRANTS SHAREHOLDERS** 39,724,403.16 34.331 C. OTHER INVESTMENT GRANTS I. Investment grants by the public sector 35,713,779.06 37,710 II. Other investment grants 58,499.12 96 37,806 35,772,278.18 **D. PROVISIONS** 5,294,816.00 5.545 1. Provisions for severance payments 278 2. Provisions for pensions 307,687.26 3. Provisions for taxes 122,048.27 4 4. Other provisions 25,761,222.30 24,521 31,485,773.83 30,348 E. LIABILITIES 1. Liabilities towards credit institutions 6,028,353.80 6,337 of which with a residual term of up to one year 596,201.06 525 of which with a residual term of more than one year 5,432,152.74 5.812 2. Advance payments received on orders 21,748,559.74 21.054 213 of which with a residual term of up to one year 198,155.93 of which with a residual term of more than one year 21,550,403.81 20,841 3. Liabilities from deliveries and services 7,636,191.14 7,232 of which with a residual term of up to one year 6,876,432.53 6,435 797 of which with a residual term of more than one year 759,758.61 4. Liabilities to companies in which a participating 580,553.58 388 interest is held: 388 of which with a residual term of up to one year 580,553.58 48,727 5. Other liabilities 52,281,829.72 of which with a residual term of up to one year 12,615,717.73 10,918 37,809 of which with a residual term of more than one year 39,666,111.99 of which from taxes 485,545.21 866 of which with a residual term of up to one year 485.545.21 866 of which for social security 2,512,430.38 2,316 of which with a residual term of up to one year 2,512,430.38 2,316 Total liabilities 88,275,487.98 83,738 of which with a residual term of up to one year 20,867,060.83 18,479 65,259 of which with a residual term of more than one year 67,408,427.15 F. DEFERRED ITEMS 1. Other 14,912,626.77 17,548 272,163,911.75 260,869

BALANCE SHEETS

GROUP CONSOLIDATED PROFIT AND LOSS STATEMENT

1 January 2023 through 31 December 2023

		2023		2022
1. Revenues		EUR 75,548,746.53		kEUR 70,615
2. Funding, research grants		70,040,740.00		/0,010
a) Funding	40,707,201.82		30,664	
b) Research grants from the shareholder	56,081,413.64		53,713	
c) Service revenues	5,840,467.55	102,629,083.01	5,275	89,652
3. Change in the stock of finished products and not yet billable services	0,040,407.00	9,382,626.78	0,270	9,150
4. Other operating income		, ,		,
a) Income from the disposal of fixed assets with the exception of financial investments	39,424.03		21	
b) Income from the release of provisions	1,068,503.64		1,798	
c) Other	11,078,463.65	12,186,391.32	11,717	13,536
5. Expenses for material and other purchased manufacturing services				
a) Material expenses	-8,907,009.61		-8,332	
b) Expenses for purchased services	-15,125,357.44	-24,032,367.05	-12,597	-20,930
6. Personnel expenses				
a) Wages and salaries				
aa) Wages	-68,010.04		-56	
ab) Salaries	-93,838,283.97		-83,439	
b) Social expenses				
ba) Expenses for pensions	-1,666,010.38		-1,639	
bb) Expenses for severance payments and company pension funds	-1,833,360.04		-1,670	
bc) Statutory social security contributions	-23,960,256.07		-21,756	
bd) Other social expenditures	-1,714,835.85	-123,080,756.35	-999	-109,559
7. Amortization of intangible assets of fixed assets and property, plant and equipment		-11,650,041.14		-11,274
of which extraordinary depreciation EUR 0.00 (2022 kEUR –207)				
8. Other operating expenses				
a) Taxes, other than under item 18	-140,442.40		-102	
c) Other	-37,366,097.03	-37,506,539.43	-35,963	-36,065
9. Subtotal of items 1 to 8 (operating result)		3,477,143.67		5,125

	2023	2022
	EUR	kEUR
10. Income from investments	619,971.82	694
11. Income from securities		
in financial assets	346,887.34	314
12. Other interest and similar income	832,122.78	102
13. Income from the disposal and		
amortisation of financial investments and		
securities in financial assets	574,538.56	15
14. Expenses from financial investments	-31,788.59	-2,296
of which amortisations EUR –31,788.59		
(2022 kEUR –2,271)		
15. Interest and similar expenses	-233,903.84	-304
16. Subtotal of items 10 to 15 (financial result)	2,107,828.07	-1,475
17. Result before taxes	5,584,971.74	3,650
18. Taxes on income and earnings		
of which deferred taxes EUR -162,251.31 (2022 kEUR 120)	-689,097.76	-578
19. Result after taxes; annual net profit	4,895,873.98	3,072
20. Allocation of retained earnings	-1,500,000.00	0
21. Profit carried forward from previous year	41,456,616.14	38,385
22. Net Profit	44,852,490.12	41,457

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