



NACIONALNI INŠTITUT ZA BIOLOGIJO
NATIONAL INSTITUTE OF BIOLOGY



STRATEGY

STRATEGY OF THE NATIONAL INSTITUTE OF BIOLOGY

Adopted by the NIB Management Board on _____

Table of Contents

Introduction.....	2
Mission	3
Vision	4
NIB values	4
Key Strategic Pillars and Goals	5
Strategy for achieving goals	6
Plan for Achieving the Goals	6
Strategic Pillar A: Scientific Excellence	6
Strategic Pillar B: Societal and Economic Impact	7
Strategic Pillar C: A Quality Institutional Environment	9
Development Goals	12
Implementation Framework	13

Introduction

The Strategy of the National Institute of Biology (NIB)¹ defines our priorities and strategic direction for fulfilling our mission and achieving our vision, and positions us to respond to global trends and societal challenges. In a period of rapid technological development and profound social shifts, humanity is faced with numerous global environmental challenges, including a pronounced environmental and biodiversity crisis as well as questions of water and food security. The intense pace of global development often exceeds society's ability to adapt appropriately, which brings many challenges in the fields of education, work, research and the safeguarding of the principles of equality. In this dynamic context, it is crucial that all stakeholders empower, include and educate society to successfully face new realities.

Through its expertise and embedding in the national, European and international research arenas, NIB responds to current scientific and societal challenges and, with its results, contributes to a knowledge-based and inclusive society. Thanks to its diversity, interdisciplinarity and adaptability, it responds rapidly and effectively to crisis and other significant situations, in cooperation with various stakeholders.

NIB researchers work in diverse scientific fields, ranging from research on the biology of inland waters and the sea, biotechnology and systems biology, microbiology, to research on

¹More information about NIB: www.nib.si

organisms and ecosystems, toxicology with an emphasis on genetic toxicology, and cancer biology.

NIB provides scientific and expert support to policy-makers and participates in the preparation and implementation of national, European and international legislation. Through cutting-edge research, breakthrough innovation and the development of top-level human resources, NIB is inseparably linked with industry and the wider economic sector. It transfers knowledge through patents, contractual cooperation, licensing and the establishment of spin-off companies, generating economic value, creating high value-added jobs and fostering social progress.

NIB's high-tech, scientific, research and development potential is built on the excellence of its staff and on modern research infrastructure. Our employees are our greatest asset. Therefore, our human-resources policy emphasises a professional staff selection process and a deep commitment to the personal and professional growth of every employee. We strive for equal opportunities for employees of all ages and at all levels of the organisation. Independence and ethics in research are firmly anchored in the awareness of every employee. NIB is a member of the Euraxess network, thereby supporting and contributing to the shaping of the European Research Area.

With the modernly designed infrastructure of the Marine Biology Station Piran (MBP) and the new Biotechnology Hub (BTH) – an example of high-tech construction that respects the principles of low-carbon, energy-efficient, green and sustainable building – NIB enhances the excellent infrastructural equipment of the research arena in Slovenia and beyond its borders. At the same time, BTH-NIB enables accelerated integration into national and European infrastructure networks, thereby strengthening developmental and innovation potential. The multiplicative effects of connecting biological disciplines with modern technology and sustainability-oriented operations also provide a basis for employee satisfaction and the development of top-level human resources.

NIB employees support the practice of open science in the publication of research findings, scientific data and infrastructure cooperation, as we are aware that research has its greatest multiplier effect when it is accessible to all societal actors that contribute to better and more efficient science and to innovation in the public and private sectors. Through communication with various stakeholders, we strive to understand their needs and to offer effective solutions. Our employees are actively involved in university studies at several universities; we organise and run scientific/expert courses and workshops for international and national experts in our fields of work. Through media, thematic events, popular monographs and articles, we also pass on our knowledge to the wider public in an inclusive way.

Through its sustainability-oriented operations, NIB supports and guides the protection of nature and the environment and develops guidelines for a green society. With our orientation towards digital transformation and improved information management, we optimise our operations and ensure our embedding in the digital transition of society.

The NIB Strategy is aligned with the development of the national system of scientific evaluations and includes regular self-evaluation as well as monitoring of societal impact. Particular attention is given to renewing the research community, to the shared use of research infrastructure, and to integration into European research networks. Through clearly defined sustainability indicators, we monitor our contribution to the green transformation and to social responsibility.

NIB also places particular emphasis on quality and standardisation, which is evidenced, among other things, by the introduction of an ISO 9001 quality management system, accreditation under the ISO 17025 standard, laboratories with recognised Good Laboratory Practice, a Biosafety Level 2 laboratory for work with genetically modified organisms, and the appointment of a national metrology standard.

Mission

NIB's mission is to create new knowledge in the field of biological sciences in order to understand life processes, to preserve biodiversity and a healthy environment, to achieve a higher quality of life and to support sustainable development. We connect interdisciplinarily across the fields of nature and environmental protection, biotechnology, informatics, pharmacy and medicine, agriculture, forestry, fisheries and food, tourism and maritime transport, and spatial planning.

We carry out our mission through:

- breakthrough basic research in biological and related natural-science disciplines and the publication of research results in top-tier scientific publications;
- the application of our research to meet the needs of international, European and national organisations and economic partners with the aim of fostering sustainable development;
- participation in education at the undergraduate, postgraduate and postdoctoral levels;
- communicating science to various target groups and to the public.

Vision

Building on its already established international recognition, NIB strives to further strengthen its position as a leading, independent research and development institution that paves the way for progress in the biological and related natural sciences. We see NIB as an important European reference point and a key regional anchor that creates breakthrough knowledge and develops advanced technologies. We are focused on providing effective solutions for key societal challenges and on strengthening our contribution from the local community to the global level. In this regard, we particularly highlight our contribution to improving people's quality of life and to the development of a modern, inclusive and just society based on knowledge, responsibility and solidarity. This includes more intensive engagement with environmental and biodiversity crises, ensuring sustainable food and water security in our region and beyond, improving human health, and the responsible governance of the rapid development of biotechnology and digitalisation.

By building a highly motivated, top-level team in a supportive and ethical working environment, and by developing exceptional talents for high value-added positions in the public and private sectors, we deepen our commitment to scientific excellence and continuous improvement. Through proactive cooperation and open dialogue with society, decision-makers, local stakeholders and industry, NIB translates top-level science into concrete benefits at all levels. Our aim is to build on existing impacts, further strengthen our innovation potential, and make a significant contribution to a healthier planet and a sustainable, prosperous future for local communities, Slovenia, the wider region and the global community.

NIB values

- **Honesty (integrity) and ethics:** persistent search for new knowledge about the studied phenomena, consistent verification of facts, and transmission of knowledge in a credible and intellectually fair manner, including respect for other researchers' intellectual work and citation rules.
- **Open science/openness/independence:** the free discovery and transmission of knowledge, scientific research, development, and pedagogical work include all researchers' and other collaborators' independence. The right to freely create, research, and transfer knowledge.

- **Cooperation:** the ability of team and project work in order to achieve multiplicative and synergistic effects in creative creation both inside and outside the institute.
- **Trust and respect:** mutual respect and understanding are the primary platforms for establishing all employees' commitment to the NIB's common goals and principles.
- **Excellence:** commitment to achieving high-quality standards in all aspects of NIB operations, including scientific research and development and innovation excellence, pedagogical work and staff development excellence, business excellence, and socially responsible and sustainable operations. Because excellence is not the end goal, we are constantly striving to make progress through continuous critical evaluation and improvement in all areas.
- **Initiative/creativity:** ability to generate new knowledge, original intellectual reflection, and innovative solutions to challenges in a constantly changing environment.
- **Responsibility:** care for the development of new knowledge and skills, as well as their transmission, dissemination, and application, necessitates responsibility for economic and environmental sustainability. Social responsibility is based on the implementation, internationalisation, and modernisation of research and development, educational-academic, and business standards in order to achieve societal well-being, with a focus on digitalisation. Environmental responsibility obligates us to protect all aspects of the natural environment, including climate change. We also take responsibility for our mutual relationships, which are founded on mutual respect, understanding, and a sense of belonging. Our business operation is unambiguous and transparent.
- **Balance:** employee care is a priority commitment, so in addition to business success, NIB strives for employee quality of life by facilitating the reconciliation of work and private life and establishing individual priorities between work (career, job) and lifestyle (health, family, comfort, personal development), which is related to employee health, satisfaction, and personal development.
- **Equal opportunities:** a commitment to equality of status, rights, and opportunities, including prejudice elimination, the guarantee of equality and equal opportunities, cooperation and inclusion, compassion for others, and the prevention of all forms of discrimination.

Key Strategic Pillars and Goals

KEY STRATEGIC PILLAR		STRATEGIC GOALS	
A	Scientific Excellence	1	Conduct cutting-edge and socially relevant research that contributes to the understanding of biological processes and addresses key societal challenges.
		2	Foster the involvement of researchers in education and training at the undergraduate, postgraduate and postdoctoral levels, including doctoral programmes.

KEY STRATEGIC PILLAR		STRATEGIC GOALS	
		3	Implement and promote the principles of open science across all research activities.
B	Societal and Economic Impact	4	Ensure effective cooperation with the public sector and reference laboratories, and the transfer of research results into the formulation and implementation of public policies.
		5	Strengthen partnerships and knowledge exchange with industry in order to foster innovation, technological development and economic value.
		6	Effectively communicate scientific findings to the professional and general public and contribute to greater scientific literacy and societal engagement.
		7	Create an inspiring and supportive working environment that attracts, develops and retains top-level talent.
C	A Quality Institutional Environment	8	Optimise the organisational structure and processes for greater efficiency, adaptability and responsiveness to changes in the environment.
		9	Establish and reinforce a culture of continuous improvement and quality assurance across all areas of NIB's operation.
		10	Provide and maintain top-level research infrastructure and enable its accessibility for internal and external cooperation.
		11	Strengthen NIB's global presence and influence through strategic partnerships, networking and researcher mobility.
		12	Introduce sustainable operational practices that reduce environmental impact and promote responsible use of resources.
		13	Ensure long-term financial stability and organisational resilience.
		14	Uphold the highest standards of research ethics and integrity.

Strategy for achieving goals

Plan for Achieving the Goals

Strategic Pillar A: Scientific Excellence

The aim of Strategic Pillar A is to conduct top-level, impact-oriented research that pushes the frontiers of scientific knowledge, addresses key societal challenges, fosters the involvement of researchers in education and training, and upholds the principles of open science.

Key approaches

To maintain and strengthen scientific excellence, we will use the following key approaches:

Strengthening interdisciplinary cooperation and embedding in the national and international research environment:

- Submitting basic-research project applications at the national, European and international levels.
- Active participation in international research and infrastructure networks, initiatives and platforms.
- Participation in international R&D projects with various institutions, including research centres, universities and companies.
- Presenting research results at national and international scientific meetings.
- Providing comprehensive support for ERC project applications, with the aim of long-term development of new research fields.
- Actively recruiting and integrating researchers from abroad, providing support with project applications and administrative procedures upon arrival.
- Actively encouraging and providing dedicated support for applications in which NIB acts as coordinator within Horizon Europe and similar competitive schemes.

Strengthening competences for publishing in high-impact journals and applying the principles of open science:

- Supporting employees in publishing research in top-tier journals, with an emphasis on open access.
- Integration into national and European platforms for the storage, processing and exchange of data.
- Providing accessible internal tools for research data management.
- Helping researchers to improve their skills in preparing scientific articles, expert reports and data publications.
- Establishing and upgrading systemic solutions for research data management at NIB that ensure open access, traceability and transparency (FAIR principles).

Developing future generations of scientists:

- Active participation in undergraduate, postgraduate and postdoctoral education.
- Training of doctoral students (“young researchers”) through postgraduate study to the completion of the doctorate.
- Development of postdoctoral staff through various career-advancement schemes.
- Delivering lectures and mentoring in study programmes at Slovenian and foreign universities and higher-education institutions.
- Recognising teaching as an important part of an academic career and a criterion for promotion.
- Encouraging doctoral students to qualify as mentors after completing their doctorate.
- Support during the procedures for pedagogical habilitation.
- Enabling international mobility of doctoral and postdoctoral students and of teaching staff.
- Encouraging employee involvement in university governance and in the development of study programmes.

Strategic Pillar B: Societal and Economic Impact

The aim of Strategic Pillar B is to actively transfer knowledge and technologies to society and the economy, contribute to addressing societal challenges, support sustainable development and the preservation of biodiversity, foster new directions of economic growth through research and innovation, and strengthen scientific literacy and public engagement.

Key approaches

NIB employees recognise that knowledge transfer – through teaching, public engagement and practical application – is a central responsibility, on a par with developing new knowledge and insights. Our expertise enables us to respond rapidly in emergency situations related to the

protection of nature, environmental protection, food safety and human health, and to provide solutions for societal and economic challenges. Our achievements promote Slovenia in the world. Achieving such an impact requires close cooperation with a diverse range of key stakeholders, including line ministries (e.g. agriculture, environment, health, defence, the economy), public agencies, the European Commission, industrial partners (from pharmaceuticals to biotechnology and beyond), international associations and research networks.

We will strengthen our societal and economic impact through the following key approaches:

Achieving excellence in cooperation with public administration and reference laboratories:

- Effectively supporting the public sector by drawing on our in-depth understanding of scientific findings and our high responsiveness. We will maintain a strong tradition in fields such as monitoring of waters, biodiversity and ecosystems, plant health, GMO detection, civil protection and disaster relief, and metrology.
- Maintaining top-level performance in carrying out the roles of European and national reference and official laboratories.
- Continuously strengthening cooperation with the European Commission, national reference laboratories and public administration in addressing new challenges (new plant diseases, GMOs, invasive species, environmental pollution).
- Expanding the organisation of inter-laboratory tests and developing reference materials for laboratories worldwide.
- Developing new methodologies and approaches.
- Providing effective support in the implementation of legislation and administrative tasks, comparable to the best global practices.
- Ensuring excellent cooperation with competent authorities through the regular transfer of information and an understanding of their needs.
- Supporting decision-makers in shaping legislation and identifying new fields in which NIB can offer scientific and expert assistance.
- Actively encouraging knowledge transfer and cooperation with end users, including companies and contracting authorities in public procurement.

Strengthening cooperation with industry:

- Recognising links with the economy, technology transfer and commercialisation as key elements of NIB's social responsibility. The Technology Transfer Office (TTO) manages intellectual property and develops business relationships.
- Using a systematic approach to market analysis and identifying potential users of our knowledge and technologies.
- Maintaining relationships with existing partners in order to better understand their changing needs.
- Seeking solutions and guidelines for a sustainable economy and development.
- Regularly evaluating the market potential of research results, including possibilities for establishing new spin-off companies.
- Organising training on intellectual property, patenting, negotiation and business strategies.
- Seeking financial sources for research and development related to products that are close to market.
- Strengthening cooperation in the national Knowledge Transfer Consortium and establishing links with international TTOs.
- Providing financial support to raise the technology readiness level (TRL) of research results to at least TRL 3 (Proof of Concept) or business readiness level (BRL), including support for national projects with industrial partners.
- Supporting activities that lead to the establishment of new companies or the commercialisation of knowledge.

- Actively encouraging patent applications and innovation, with dedicated support for commercialisation activities.

Ensuring effective transfer of knowledge to the professional and wider public:

- Transferring expert knowledge to the professional public through internationally recognised publications, conference presentations, seminars and educational courses. We organise international project meetings and scientific meetings and events.
- Promoting and communicating science to society as a key task that strengthens the visibility of science and of NIB's activities.
- Carrying out numerous communication activities: media contributions, open-door days, the Researchers' Night, thematic round tables, seminars, and support for citizen-science initiatives. NIB also publishes expert monographs and films for the wider public.
- Training employees in effective science communication and strengthening the public-relations function.
- Systematically publishing research results through a range of media channels.
- Continuous improvement of the NIB website.
- Organising topical thematic events, exhibitions and engaging public lectures (NIB seminars).
- Direct reporting from research expeditions and active engagement of the public through citizen science.

Strategic Pillar C: A Quality Institutional Environment

The aim of Strategic Pillar C is to provide a stable, ethical, inclusive and stimulating institutional environment with top-level infrastructure, effective management and sustainable practices that enable the achievement of the highest results.

Key approaches

NIB recognises that a high-quality institutional environment is the foundation for achieving research excellence and societal impact. This includes investing in our people, optimising the organisation, maintaining top-level infrastructure, ensuring sustainable operations, and upholding the highest ethical standards.

Fostering talent development and a supportive working environment:

- We are aware that talented, highly qualified, dedicated and motivated employees are key to NIB's quality and effectiveness.
- Maintaining a system for professional recruitment, employment and career development, in line with the European Charter for Researchers and the Code of Conduct. Our practices are aligned with international standards, as also reflected in our membership of the EURAXESS network.
- Actively promoting gender equality, intergenerational dialogue and non-discrimination, supported by a Gender Equality Plan (GEP) and anti-harassment policies.
- Introducing open and transparent recruitment procedures.
- Involving employees in decision-making processes at all levels.
- Preparing and monitoring career-development strategies for all employees, aligning individual aspirations with institutional needs.
- Providing comprehensive training, including the development of leadership, communication and project-management skills, in addition to professional development.
- Enabling lifelong learning and equal opportunities for all employees.
- Maintaining a safe, professionally demanding and socially supportive working environment.
- Supporting internal knowledge transfer and structured onboarding of new employees.
- Encouraging continuing education and awarding scholarships to promising young talents.
- Strengthening employee loyalty and fostering research creativity and freedom.

Ensuring organisational excellence and adaptability:

- Operating autonomously in the scientific field while respecting legal requirements, guided by research integrity, diversity of funding sources, and oversight by the Management Board. NIB's quality system (ISO 9001) requires impartiality.
- Continuous striving for an excellent, transparent and efficient organisation that enables the realisation of strategic goals and international competitiveness. Maintaining a flexible internal structure that is resilient to external changes.
- Cooperation with related organisations (KOSRIS, Technology Park, universities, public institutions) and maintaining links with relevant ministries. Central services, the Project Office and the Technology Transfer Office provide essential support.
- Focus on employees through ongoing communication, feedback loops and addressing shortcomings, in order to improve the working environment and support career development.
- Fostering an organisational culture in which open communication, innovation and ideas can truly flourish.
- Placing work–life balance among the main priorities.
- Commitment to equal opportunities at all levels, including balanced representation in governance bodies, supported by a Gender Equality Plan.
- Ensuring appropriate management of employee workloads.
- Encouraging intergenerational dialogue and development opportunities for all age groups.
- Carrying out transparent international evaluations.
- Updating and accelerating the digital management of information, data and administrative processes in order to reduce bureaucracy.
- Optimising project support through the use of ICT, external expertise, and internal and inter-organisational cooperation.
- Strengthening the support provided by the Technology Transfer Office and the Communications Service.
- Improving cooperation between central services and research units through training and information sharing.

Embedding a culture of continuous improvement and quality assurance:

- Fostering a culture of continuous learning, improvement and quality, based on professionalism, cooperation and the exchange of experience. Quality is the foundation of all our activities.
- Regularly monitoring performance, conducting self-evaluations and preparing for external evaluations, in line with the principles of responsible research assessment (CoARA, the Leiden Manifesto).
- Our commitment to quality is externally confirmed by certifications such as ISO 9001 (since 2004), laboratory accreditation under ISO 17025 (since 2003/2011) and compliance with Good Laboratory Practice (GLP) (since 2015).
- Using an internal quality-assurance system, led by the standing Quality Committee, to monitor strategy implementation, propose improvements and ensure transparency.
- Introducing mechanisms for adopting and implementing measures based on the findings of self-evaluations (supported by the opinions of the External Scientific Advisory Board – ESAB) and on the recommendations of external evaluations, thereby ensuring a cycle of continuous improvement under the oversight of the relevant committees (e.g. the Quality Committee, the Management Board) and through regular reporting to the governance bodies. This comprehensive review process, which integrates ESAB insights and internal assessments, is also key for identifying potential strategic and operational risks, which we then address through targeted mitigation measures as part of our commitment to organisational resilience.

Providing and maintaining top-level research infrastructure:

- Recognising top-level instrumentation and infrastructure as a precondition for research excellence. BTH-NIB and the upgraded MBP provide top-level research conditions.
- Operating two infrastructure centres (IC Planta, IC MBP), which offer high-tech equipment to support NIB researchers and external users from the public and private sectors.
- Ensuring rational, joint use of equipment and participation in national and European research infrastructures.
- Maintaining NIB's research infrastructure for shared use and systematically enabling access for external researchers and industrial partners.
- Continuously updating and modernising infrastructure equipment in line with the development of new technologies.
- Ensuring long-term sustainable and economically rational management of the building infrastructure and equipment after the completion of BTH-NIB.

Strengthening international embedding and researcher mobility:

- Fostering scientific excellence through deep international embedding. We will strengthen our participation in Horizon Europe, Interreg, Biodiversa+, LIFE, and encourage applications to ERC calls.
- Attracting foreign researchers, expanding international cooperation and co-shaping major R&D projects.
- Active participation in European and international research platforms and infrastructures.
- Enabling the international mobility of researchers and employees, also through NIB's role as a Euraxess contact point.
- Strengthening cooperation with related institutions in Slovenia and abroad.

Introducing sustainable environmental management:

- Recognising sustainable environmental management as key to the responsible use of resources and to long-term success.
- Introducing measures to reduce the carbon footprint, ensure efficient use of energy and water, and reduce waste. This includes energy-efficient buildings (BTH-NIB, MBP), optimisation of resource use, and green public procurement.
- Consistent protection of nature and biodiversity in line with the “do no significant harm” principle (DNSH), and consideration of the environmental objectives of the EU Taxonomy in the planning, implementation and evaluation of investments, projects and internal procedures.
- Digitalisation of processes to reduce paper consumption.
- Involving employees in environmental activities and promoting awareness.
- Participation in national and international initiatives for the green transition and the promotion of sustainable mobility.
- Supporting the development of environmentally friendly technologies in cooperation with partners.
- Using concrete indicators (carbon-footprint reporting, share of green public procurement, reduction of energy consumption) to monitor progress.

Ensuring financial stability and organisational resilience:

- Recognising that financial stability and diversified sources of funding are key to success. NIB uses a diversified funding strategy (budgetary sources such as ARIS and ministries, EU projects, market activities).
- Advocating stable funding for science in Slovenia and the EU.
- Participating in the design and implementation of new financial mechanisms (e.g. the Recovery and Resilience Plan).
- Maintaining flexibility in the allocation of resources to respond to urgent societal challenges.

- Proactively seeking financial resources from market sources and improving success rates in obtaining international projects through broader cooperation and comprehensive project support.
- Recognising strategic risks – such as dependence on success in competitive calls, complex administrative procedures and a changing legal framework – NIB introduces proactive mitigation measures. These include diversifying funding sources, systematically developing talent pools, digitalising key operational processes, and active participation in policy-making, thereby strengthening long-term organisational resilience.

Upholding research ethics and integrity:

- Adherence to the NIB Code of Ethics, which is based on leading international standards.
- Ensuring that the Commission for Ethics and Equal Opportunities oversees the implementation of ethical principles. Our ethical framework is benchmarked against leading international standards, including the European Code of Conduct for Research Integrity and the Montreal Declaration.
- Continuously explaining and reinforcing ethical values through mentoring and responsible leadership.

Development Goals

NIB allocates resources for the development of scientific-research and infrastructure activities in the areas of quality, creativity, innovativeness, internationalisation, openness, knowledge transfer and cooperation with the wider environment, thereby contributing to the achievement of the goals and results and to the implementation of measures and tasks in the field of scientific-research work as defined in the strategic documents of the country and of the European Union, while taking into account NIB's mission.

NIB is aware of the importance of continuous development and engagement with current European and global policies, and takes care of its own development across all areas of activity, at the level of scientific excellence as well as societal and economic impact and international embedding.

The development goals are:

- **Support for the development of new research fields**

NIB funds the preparation of ERC project applications that promote the long-term development of new research fields, and encourages the integration of researchers from abroad with comprehensive support in obtaining projects:

- integrating foreign researchers and Slovenian researchers working abroad (hereinafter: researchers) into project applications carried out at NIB,
- support for applications of individual research projects carried out at NIB,
- integrating researchers into existing research groups, thereby providing direct access to equipment and support services,
- assistance with administrative procedures upon arrival in or return to Slovenia.

- **Encouraging coordinator-project applications under Horizon and related research-and-development funding mechanisms**

NIB allocates resources for top-level EU project applications in which it acts as the coordinating institution, and organises training and workshops to support successful applications.

- **Encouraging patent applications and innovation**

NIB provides resources to support research that enables additional activities for the commercialisation of patents, in addition to the existing funding for patent applications under the Knowledge Transfer Consortium project.

- **Funding the increase of the technology readiness level (TRL) of research results to at least TRL 3 – Proof of Concept (PoC) or business readiness level (BRL),**

including applications for national coordination projects that support raising the TRL to TRL 3, generally with the involvement of an industrial partner

NIB supports the advancement of research results to TRL 3+ and facilitates applications for national coordination projects aimed at extending projects to at least TRL 3, typically in cooperation with an industrial partner.

- **Support for activities that lead to the establishment of new companies or the commercialisation of knowledge**
- **Encouraging knowledge transfer and other forms of cooperation with users** (companies, public procurement by ministries)
- **Improving the quality of the internal support environment for the conduct of scientific-research activities**

The development goals strengthen research potential, foster innovation and increase NIB's international competitiveness. The institute also strives to create suitable conditions for the formation of new research groups and new research fields.

Implementation Framework

The successful implementation of the NIB Strategy is based on a robust framework that links strategic goals with operational planning, transparent financial mechanisms, and consistent monitoring and evaluation processes, including independent external advice. Such a framework ensures that our strategic ambitions are translated into concrete measures and measurable results, and fosters continuous improvement and organisational resilience.

1. Planning and implementation cycle:

- The long-term strategy is operationalised through five-year work programmes, which set out for each strategic goal concrete measures, key performance indicators (KPIs, as defined within the framework of key strategic pillars A, B and C) and designated responsible owners.
- These programmes are further broken down into annual work plans, which precisely define resources, activities and planned results for the coming year.
- Responsibility for implementing the plans and achieving the defined goals lies with the heads of the organisational units, in cooperation with NIB's management and the relevant internal committees.

2. Financial framework:

- The implementation of the strategy is supported by funds allocated within three pillars defined by the Slovenian Scientific Research and Innovation Activities Act:
 - **Programme-research pillar:** funds research programmes and the training of doctoral students.
 - **Infrastructure pillar:** supports research equipment, infrastructure and key support functions.
 - **Development pillar:** funds activities related to innovation, new research fields, patenting, internationalisation and knowledge transfer.
- Internal bodies, such as the Stable Funding Commission, ensure the transparent allocation of these funds in line with strategic priorities, and ensure that resources are directed towards the goals defined in this strategy.

3. Monitoring, evaluation and continuous improvement:

- Progress in achieving the strategic goals is systematically monitored through measurable key performance indicators (KPIs) defined for each strategic pillar (A: scientific excellence, B: societal and economic impact, C: a quality institutional environment).
- NIB plans periodic institutional self-evaluations (aligned with the five-year programme cycle), through which it comprehensively assesses performance, identifies strengths and pinpoints areas for development.
- Crucially, the self-evaluations are supported by independent assessment and recommendations from the External Scientific Advisory Board (ESAB), which is

composed of internationally recognised experts. ESAB provides a critical external view, objectivity and alignment with international best practice.

- The findings of internal monitoring, ESAB reviews and external evaluations (e.g. evaluations by the national agency ARIS) feed directly into an action plan for improvements. The internal Quality Committee plays a key role in overseeing the implementation of these improvements.
- This regular process of internal review and external validation also serves as a basis for the preparation of institutional reports required by national authorities, including the ARIS self-evaluation (SEv) and periodic evaluations (PEv, IEv).

4. Adaptability and sustainability:

- The implementation framework is designed to be adaptive, allowing NIB to respond to changing scientific trends, emerging funding opportunities and new societal needs.
- It is grounded in the principles of continuous improvement, cross-departmental cooperation and long-term sustainability, including a commitment to seeking sustainable solutions in all key NIB decisions and approaches, ensuring NIB's resilience and lasting relevance as a key public research institution.