

UKRAINE RECOVERY PLAN AND UKRAINIAN GLOBAL INNOVATION STRATEGY UNTIL 2030

Directorate of Innovation and Science Liaison with the Real Sector of the Economy

Ministry of Education and Science of Ukraine

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UKRAINE RECOVERY PLAN

SCIENCE AND INNOVATIONS

- **Goal 1.** System for organising the defence scientific and scientific and technical activity ensures the implementation of science intensive technologies in the field of defence and security
- **Goal 2.** The governmental science management system is efficient and data-based, ensures development and implementation of long-standing and systemic public policy. The science financing system is multi-channel and efficient
- **Goal 3.** Development and implementation of the complex government strategy for the development of science and technologies in synergy with economy
- Goal 4. Scientific personnel potential is capable and conducts quality research and development
- Goal 5. Scientific infrastructure is efficient and modern, and enables quality research
- Goal 6. Ukraine is integrated into the European and Global Research Area



UKRAINE RECOVERY PLAN

SCIENCE AND INNOVATIONS

Key challenges

- outflow of personnel due to the war, low social prestige of profession of a scientist, low level of labour remuneration, and lack of the incentive career trajectories in the research sector;
- outdated and insufficient research and innovation infrastructure;
- insufficiently developed international cooperation and integration into the Global and European Research Area;
- absence of a government strategy for the development of science, which would clearly determine the role of science in the national social and economic development;
- insufficient capacity of the public administration bodies in the field of science and innovations in terms of efficient implementation of the policy;
- low efficiency of the governmental science and innovations management system (partly outdated, contradictory regulatory framework, inadequacy of available management tools, financing, assessment of the quality of the science to achieve the goals, of the public policy in the field of science, lack of a quality system for determining national priorities in science and innovations, lack of a favourable scientific and innovative climate in the country);
- low level of financing of the scientific activity;
- system for organising the defence scientific and scientific and technical activity inconsistent with the present-day needs and challenges;
- lack of the inter-agency coordination;
- insufficient development of digital tools for data collection and analysis in the field of science and innovations.

Key opportunities

- use of science and innovations as a driver of social and economic development;
- creating prerequisites for integration into the European Research Area by synchronising scientific policies and practices;
- establishing a partnership between public institutions,
 HEI, scientific institutions and non governmental associations and business with a view to the
- developing a modern model of scientific and innovative development at all levels;
- preserving and developing the scientific potential.

Key constraints

- hostilities in Ukraine;
- lack of ability to predict developments in the context of martial law;
- lack of comprehensive information and analytics required for making quality management decisions on the scientific field;
- lack of funding and limited public resources.



Creation of an International Coalition to Support Science, Research, and Innovation in Ukraine



- Coordination of international efforts to support the development of science, technology, and innovation in Ukraine.
- Ensuring access to financial, infrastructural, and technical resources for Ukrainian research institutions, universities, and innovators.
- Promoting collaboration between Ukrainian and international researchers through joint projects, exchanges, and grant opportunities.
- Supporting Ukraine's integration into the European Research Area and the global research and innovation ecosystem.
- Fostering innovation and technological development for Ukraine's economic recovery and sustainable growth.

MEMORANDUM ON THE ESTABLISHMENT OF

THE INTERNATIONAL COALITION FOR SUPPORTING SCIENCE, RESEARCH, AND INNOVATION IN UKRAINE

Recognizing the critical role of science, research, and innovation in the recovery and modernization of Ukraine during and after the challenges caused by the war,

Acknowledging the importance of global cooperation and partnership in advancing research and innovation for Ukraine's sustainable development and its integration into the international scientific community,

Emphasizing a commitment to the principles of open science, ethical research practices, and equal access to resources and opportunities, governments, international organizations, funds, academic institutions, signed this memorandum (hereinafter referred to as the "Members") considered to establish the International Coalition for Supporting Science, Research, and Innovation in Ukraine "R&I Coalition for Ukraine" (hereinafter referred to as the "Coalition").

Article 1: Purpose of the Coalition

The purpose of the Coalition is to:

- Coordinate international efforts to support the development of science, technology, and innovation in Ukraine.
- Provide access to financial, infrastructural, and technical resources for Ukrainian research institutions, universities, and innovators.
- Foster collaboration between Ukrainian and international researchers through joint projects, exchanges, and grant opportunities.
- Support Ukraine's integration into European research area and the global research and innovation ecosystem.
- Promote innovation and technological development for Ukraine's economic recovery and sustainable growth.

Article 2: Objectives and Activities

To achieve its purpose, the Coalition shall:

- Develop and implement joint projects in priority scientific fields.
- Propose and provide funding and technical assistance for the restoration and modernization of Ukraine's research infrastructure.
- Organize training programs, conferences, and seminars for Ukrainian scientists and innovators.

STRATEGY FOR THE DEVELOPMENT OF INNOVATION ACTIVITIES UNTIL 2030

The goal of the Strategy is to build a national innovation ecosystem to ensure the rapid and high-quality transformation of creative ideas into innovative products and services, increase the level of innovation in the national economy, which involves creating favorable conditions for the development of the innovation sector, increasing the number of implemented developments, enhancing the economic returns from them, and attracting investments into innovation activities.

WINWIN - STRATEGY FOR THE DIGITAL DEVELOPMENT OF INNOVATION ACTIVITIES IN UKRAINE UNTIL 2030

The Strategy for the Digital Development of Innovation Activities in Ukraine until 2030 was developed to implement the Action Plan for the implementation of the recommendations of the European Commission presented in the Ukraine's Progress Report under the EU Enlargement Package 2023.

WINWIN Strategy Roadmap

2025-2026

- Improving the legislative framework
- Supporting scientific research and development
- Developing infrastructure for startups
- Promoting technology transfer

2027-2029

- Expanding access to financing for innovative businesses
- Stimulating cooperation between science and business
- Education that develops creativity and

2030

- Analysis of previous experience to identify effective measures.
- Development of a strategy to further strengthen innovation potential.

UKRAINIAN GLOBAL INNOVATION STRATEGY 2030

THE STRATEGY OUTLINES THE VISION OF UKRAINE AS A COUNTRY OF INNOVATIONS, WHERE AN ECOSYSTEM HAS BEEN CREATED FOR THE FREE DEVELOPMENT OF BREAKTHROUGH IDEAS

STRATEGY MISSION IS TO CREATE NEW OPPORTUNITIES FOR UKRAINIANS: FOR INDIVIDUALS, BUSINESSES, INVESTORS, SCIENTISTS, RESEARCHERS AND INNOVATORS

IMPLEMENTING THE STRATEGY WILL CONTRIBUTE TO DEVELOPING AN ENVIRONMENT WHERE EVERYONE CAN PARTICIPATE IN THE INNOVATIVE DEVELOPMENT OF UKRAINE

INNOVATIVE INFRASTRUCTURE

A developed base of innovation and science parks, accelerators, business incubators and other infrastructure that provide innovators with access to R&D and development

ADVANCED TECHNOLOGIES

Increased productivity of the traditional industries through the introduction of Al, XR, blockchain and other advanced innovative technologies

TALENTS

A large number of highly skilled professionals who are motivated to conduct their own research, think creatively and create innovations

ACCESS TO FINANCING

Extensive government grant programs and a strong venture capital market that provide equal funding opportunities for generators of innovative ideas

INTERNATIONAL COOPERATION

Open opportunities for crossborder cooperation that facilitate the exchange of experience and knowledge with developed countries

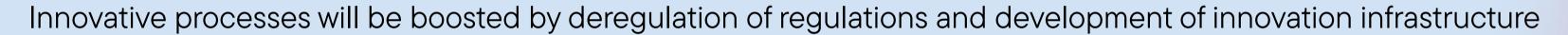
STRATEGIC AREAS FOR DEVELOPMENT OF INNOVATIONS

STRATEGIC FOCUS 1 - HUMAN CAPITAL DEVELOPMENT HUMAN CAPITAL



Highly qualified specialists will form the basis for innovation in Ukraine

STRATEGIC FOCUS 2 - NATIONAL SYSTEM OF INNOVATIONS





STRATEGIC FOCUS 3 - ECONOMIC INCENTIVES FOR INNOVATION

Ukraine will promote the implementation of R&D-projects through public funding and by attracting venture capital investments



STRATEGIC FOCUS 4 - GOVERNMENT POLICY FOR SECTORAL SUPPORT TO INNOVATION INITIATIVESTECHNOLOGY INDUSTRIES ARE TO BE PRIORITIZED AND TAKEN INTO ACCOUNT IN THE STRATEGY

CONCENTRATION OF AVAILABLE RESOURCES TO SUPPORT 14 MOST PROMISING TECH SECTORS WILL CREATE THE BASIS FOR THE NATIONAL INNOVATION ECOSYSTEM OF UKRAINE

The national innovation ecosystem is focused on the development of 14 technological industries, each of which has its own peculiarities and unique characteristics. The fundamental principles and universal tools for supporting the development of innovations are applied equally to all industries, which are designed to provide a solid foundation for innovative economic development

DEFENCE TECHNOLOGY (DEFENCE TECH)

MEDICAL TECHNOLOGIES (MEDTECH)

BIOLOGICAL TECHNOLOGIES (BIOTECH)

TECHNOLOGIES IN GOVERNANCE (GOVTECH)

AGRICULTURAL TECHNOLOGIES (AGROTECH)

EDUCATIONAL TECHNOLOGIES (EDTECH)

SEMICONDUCTOR TECHNOLOGIES (SEMICONDUCTORS)

CYBERSECURITY (SECURE CYBER SPACE)
GREEN TECHNOLOGIES (GREENTECH)
IMMERSIVE TECHNOLOGIES (XR)
ARTIFICIAL INTELLIGENCE (AI)
UNMANNED VEHICLES (UV)
SPACE TECHNOLOGIES (SPACE TECH)
FLUID ECONOMY

X PLAN 2025-2030

Simplifying procedures for innovative projects	06 Establishment of a state innovation bank / Launch of a strategic innovation fund	Simplifying access to the stock market	16 Developing strategies for the development of critical technologies
02 Implementation of WINWIN priority areas in Diia.City	Formation of a network of technology transfer centers	Creating platforms for collaboration between science and business	17 Implementation of a system for assessing the social impact of innovations
03 Launch of regulatory sandboxes	08 Launch of public-private co-investment programs	13 Development of innovation infrastructure networks	18 Monitoring the effectiveness of deregulation
04 Creating a legislative framework for Science.City and innovation clusters	O9 Creating mechanisms for returning investments to the state	Launching sectoral programs to support business development in priority sectors	19 Regular review of regulatory barriers
05 Development of mechanisms for public-private partnership in innovation	10 Tax incentives for R&D	15 Creation of long-term financing mechanisms	20 Assessment of achievement of strategic missions



THE MISSION OF THE DIRECTION

Ukraine is a full-fledged participant in the global space market, integrating advanced technologies, promoting international cooperation and ensuring strategic development of space infrastructure for scientific, defence and commercial needs

DEVELOPMENT
OF SMALL
SATELLITES

PRODUCTION
OF SPACE
TECHNOLOGY

INTEGRATION OF SPACE
TECHNOLOGIES INTO DIGITAL
INFRASTRUCTURE

DEVELOPMENT OF GROUND INFRASTRUCTURE

PARTICIPATION IN INTERNATIONAL SPACE PROGRAMS



LEGAL AND REGULATORY FRAMEWORK

PRIORITY

- A new version of the Law of Ukraine 'On Space Activities' harmonized with European legislation is approved (by the O4 of 2025)
- The National Space Program, which provides support for start-ups and commercialization of innovations, is approved and launched

OTHER TASKS

- ✓ Implemented a quality management system in accordance with EN9100/AS9100 standards in 10+ key space industry enterprises
- Harmonization with international standards

INFRASTRUCTURE

PRIORITY

- ★ WINWIN SpaceTech CoE established
- 3+ laboratories / production facilities upgraded to meet international standards

OTHER TASKS

- ✓ Small satellites
- ★ Space communications
- A test site for space start-ups was launched to test components, modules and technologies
- A cloud-based platform for space mission simulations and data exchange between industry enterprises was deployed
- 2+ space technology centers at universities established to support research and development of space innovations

PARTNERSHIPS

PRIORITY

- 5+ memoranda of cooperation with European space agencies (ESA, CNES, etc.) signed
- 3+ agreements with international companies for joint R&D projects signed

OTHER TASKS

- Ukrainian companies are integrated into 2+ European space programs, such as Horizon Europe or Galileo
- Space innovation forum organized in Ukraine to attract international partners



ECONOMIC RESULTS

PRIORITY

- Attracting investments in the space industry through public-private partnerships
- Grant programs for SMEs in the space sector are introduced

OTHER TASKS

- Opening markets: stimulating the production of space components in Ukraine for domestic and foreign markets
- Create a special fund to finance small space projects
- ★ 10+ new space startups created through acceleration programs
- Export (potentially)

HUMAN RESOURCES RESULTS

PRIORITY

- 200+ new specialists in the space industry trained through specialized programs at universities
- ★ Launch programs to train cybersecurity specialists for space technologies

OTHER TASKS

- Development of training programs for working with satellite platforms and mobile media
- 20+ international experts were engaged to work in Ukrainian companies
- ★ 500+ new jobs created in the industry through new projects

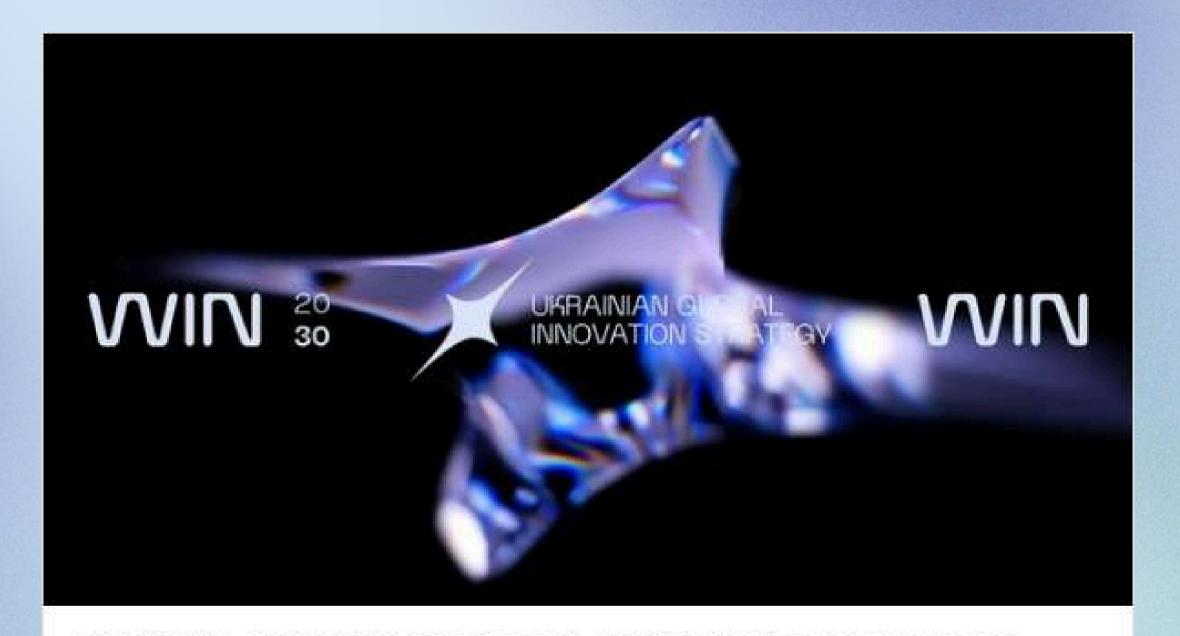
SCIENTIFIC RESULTS

PRIORITY

- 5+ new space technologies developed, including control systems for small satellites and modules for space missions
- A pilot project was implemented to use AI to analyze remote sensing data

OTHER TASKS

- ★ Launched a retraining program for engineers from other industries to integrate into space projects
- ★ 100+ scientific papers published in international journals, in particular in the field of space systems and technologies
- ★ 30+ patents in the space sector, including innovations in rocket engines, materials and communication systems
- ★ Al research in space



WINWIN. UKRAINIAN GLOBAL INNOVATION STRATEGY

We are creating a platform for the free development of breakthrough ideas that bring us closer to victory and provide the basis for Ukraine's economic growth. We act because we cannot afford to lose

💉 winwin.gov.ua



DEVELOPING INNOVATION SYSTEM: PERFORMANCE AND PLANS



FUNDING MECHANISMS AVAILABLE FOR INNOVATION ACTIVITIES

Competitive selection of R&D works and projects under the Horizon 2020 framework program providing financial support

The total funding of 31 approved applications is EUR 1,393.35 thousand (in 2024), 8 of them has innovation focus.

Competitive selection of R&D projects to be funded under the State order is conducted annually by the Ministry of Education and Science of Ukraine

Following the competition, state funding amounting to EUR 4,447.48 thousand will be allocated in 2025-2026 for 22 scientific-technical (experimental) developments, aimed at addressing issues related to national security and defense, Ukraine's rapid post-war recovery, and transformation of its economy.



FUNDING MECHANISMS AVAILABLE FOR INNOVATION ACTIVITIES

Experimental project establishing a network of startup schools, incubators, and accelerators based on universities and research institutions was launched (Cabinet of Ministers of Ukraine Resolution No. 430 of April 23, 2024).

6 winners have been identified, who will receive up to EUR 35.71 thousand each for the development of startup schools-incubators-accelerators at their base, to be implemented between 2024-2026. The project is financed from the Horizon 2020 framework program.

Prize of the Cabinet of Ministers of Ukraine for the Development and Implementation of Innovative Technologies (Government Resolution No. 701 of August 1, 2012, and approved the Regulations for the Award).

The award rate is **EUR 4.76 thousand per technology team**.



INTERNATIONAL COOPERATION

MoES - EIC (UASEED's) initiative:

- Supports Deep-tech Acceleration programs of consortium members;
- Leads the implementation of Ukrainian innovation knowledge-intensive infrastructure mapping under the innovation ecosystem initiative. Which operates under WP5 Pan-European Integration (EU-UA Gateway).

MoES supports European Institute of Innovation & Technology (EIT) initiatives:

- Innovation support programs targeting Ukraine,
- matchmaking and ecosystem development events,
- KIC InfoDays,
- a regional roadshow, presenting community opportunities and financial and non-financial support.

MoES supports UNECE initiatives:

 Innovation for Sustainable Development Review of Ukraine (I4SDR) – A project for comprehensive analytical research on the sustainable development of innovation in Ukraine, implemented by UNECE at the request of the Ukrainian government, with the Ministry of Education and Science being the main coordinator.







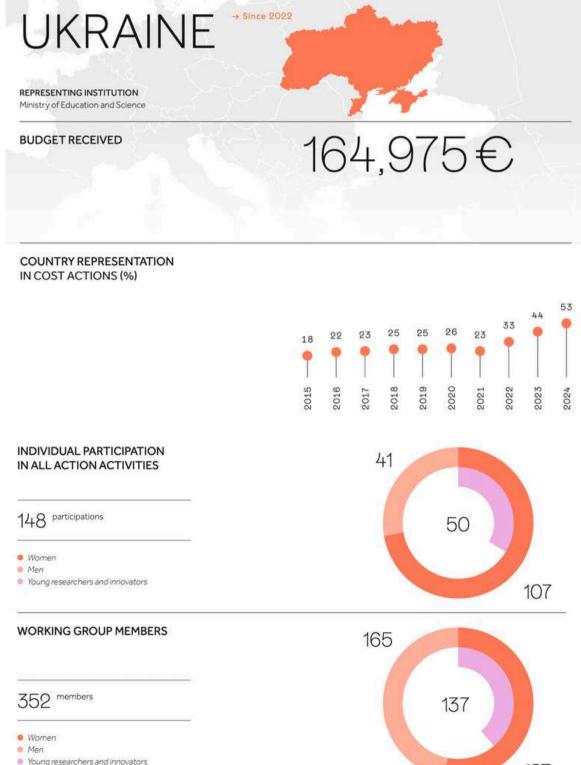


INTERNATIONAL COOPERATION

European Cooperation in Science and Technology (COST)

On March 30, 2022, Ukraine became the 39th full member of the COST Association, which helps to connect research initiatives across Europe and beyond and enables researchers and innovators to grow their ideas in any science and technology field by sharing them with their peers. COST Actions are bottom-up networks that last four years and boost research, innovation, and careers. Ukrainian engagement statistic: Actions led by Ukrainians - 5; Currently Working group members - 352; Currently Management committee members - 110; Actions involving Ukrainian representatives - 53%; Ukrainians networking activities involvement: 12 short-term scientific missions, 18 internships, 2 trainings, and 1 short-term scientific mission were implemented in Ukraine.

Representatives from Ukraine in Committee of Senior Officials and Scientific Committee
The COST National Coordinator for Ukraine





ALIGNING WITH THE NEW EUROPEAN INNOVATION AGENDA

5

Flagship on funding for deep tech scale-ups

ONGOING

Flagship accelerating on and strengthening innovation in European Innovation Ecosystems across the EU and addressing the innovation divide

ONGOING

Flagship on enabling deep tech innovation through experimentation spaces and public procurement

PLANNED

Flagship on fostering, attracting and retaining deep tech talents

ONGOING

Flagship on improving policy making tools

ONGOING



ALIGNING WITH THE NEW EUROPEAN INNOVATION AGENDA

Flagship on funding for deep tech scale-ups

Science&Business platform (was launched in 2021) **ONGOING**

Collaboration with EIT, Innovation Development Fund, CRDF Global and other partners ONGOING

Funding of innovative projects within Framework Program "Horizon 2020" **ONGOING**

Flagship on fostering, attracting and retaining deep tech talents

InfoScienceBot platform (was launched in 2022) **ONGOING**

Online Mentor Science&Business - initiative to develop science-intensive projects

IMPLEMENTED



W FLAGSHIP ON FOSTERING, ATTRACTING AND RETAINING DEEP TECH TALENTS

ONGOING

Prize for the Development and Implementation of Innovative Technologies

The Prize is granted annually on a competitive basis for significant achievements in the development and implementation of innovative technologies in production and the introduction of domestic innovative products to the market.

The amount of the award is equivalent to EUR 4.76 thousand per technology team.

FURTHER STEPS

Legislation amendments were developed to digitalize the competition fully, expand the list of competition participants, especially toward innovation activity entities, update the evaluation criteria, and improve the procedure for awarding the Prize in specific nominations.

The proposed innovations include:

- Expanding the list of participants in the competition, especially towards innovation activity entities;
- Introducing an improved procedure for awarding the Prize in specific nominations;
- Simplifying the procedure for submitting competitive proposals through the full digitalization of the competition, which will be conducted in the National Electronic Scientific Information System;
- Updating the criteria for evaluating competitive proposals with the subsequent implementation of a multi-level evaluation system.



FLAGSHIP ON ENABLING DEEP TECH INNOVATION THROUGH EXPERIMENTATION SPACES AND PUBLIC PROCUREMENT

ONGOING

STATE ORDER

In 2024, a new mechanism for state order of scientific and technical (experimental) developments aimed at solving specific high-tech problems in defense, security, economy, and society was developed and implemented.

the topics, along with specific technical tasks, were formulated by 10 key ministries

up to EUR 238,1 thousand could be allocated for a single development

COMPETITION RESULTS:

State funding amounting to EUR 4,447.48 thousand will be allocated in 2025-2026 for 22 scientific-technical (experimental) projects.

both small and large businesses were eligible for funding

digitalization of the Competition in the National **Electronic Scientific Information System**



FLAGSHIP ON ENABLING DEEP TECH INNOVATION THROUGH EXPERIMENTATION SPACES AND PUBLIC PROCUREMENT

ONGOING

Experimental project Startup School-Accelerator-Incubator

KEY ASPECTS:

Six winners already selected. Total funding **EUR 240 thousand**, up to EUR 35 thousand per project.

EVALUATION CRITERIA:

- Efficiency of commercialization;
- HEI or RI innovative infrastructure facility;
- Business cooperation experience;
- Potential of a HEI or RI startup ecosystem development, taking into account the priority state needs.

WHY IS THIS IMPORTANT?

The network will provide opportunities to support new startups, scale existing ones with financial and expert support, expand business connections, and attract investors.

Implementation terms:

from September-October 2024 till March 2026

FOLLOW THE LINK TO KNOW MORE





FLAGSHIP ON ENABLING DEEP TECH INNOVATION THROUGH EXPERIMENTATION SPACES AND PUBLIC PROCUREMENT

ONGOING

Science City

Science parks facilitate innovation at HEIs and RIs by enabling business collaboration to develop new technologies and products.

The "Science City" Draft Law aims to enhance their operation by supporting R&I infrastructure, offering tax and customs benefits, streamlining procedures, and allowing SPs to join Diia. City with equal benefits.

As a result, science parks get:

- Unified and open information of all SPs
- De-bureaucratization and digitization (via NAUKA.GOV)
- Simplified public procurement for private funds
- Tax and customs benefits
- Increased financial autonomy of HEIs and RIs on SPs
- SP indicators include in HEI/RI evaluations and attestations
- Easier lease of state and municipal property
- Cooperation with any partners in the market by expanding list of SP entities-members
- Physical research infrastructure development benefits
- Streaming and anti-haul mechanisms to SP

The benefits of Diia. City include:

- 0% VAT rate,
- 5% personal income tax rate,
- Permanent tax benefits for 25 years.



FLAGSHIP ON ENABLING DEEP TECH INNOVATION THROUGH EXPERIMENTATION SPACES AND PUBLIC PROCUREMENT

PLANNED

- In accordance with the Strategy, the Ministry of Education and Science is working on a joint program with the Innovation Development Fund to **co-finance science-intensive startups** in priority areas of the WinWin Global Innovation Vision. Status: competitive selection will be conducted.
- To commercialize research results and implement cutting-edge technologies in key economic sectors, it is essential to establish **technology transfer centers** across various regions of the country, based at HEIs and research institutions. Status: drafting a Cabinet of Ministers of Ukraine resolution.
- For effective coordination of the technology transfer center network, a coordination body **the Applied Research Agency** needs to be established. This agency will support innovation in HEIs and research institutions through scientificorganizational, analytical, expert, and consulting activities. It will facilitate technology transfer, commercialize research,
 promote public-private partnerships, and fund business-driven R&D based on PPP principles.
- Defense-Oriented Centers of Excellence. Creating conditions for the development of defense innovations by establishing 4 Centers of Excellence at Ukrainian universities. These centers will serve as platforms for training highly qualified specialists, conducting scientific research, and integrating modern technologies into the defense sector.



PLANNED STEPS

Legislative Framework for Innovation Development

1 Innovation Activity

A specialized Draft Law on Innovation Activity has been developed, which will establish a conceptual framework aligned with European standards. Its goals include distributing responsibilities in the innovation sector among various ministries according to their areas of accountability, defining types of state support, creating favorable conditions for startup development, and specifying the elements and actors involved in innovation activity, among other objectives.

Technology transfer

The European Commission, in its latest report on Ukraine's integration dynamics into the EU, highlights the adoption of the Draft Law "On Amendments to Certain Laws of Ukraine to Stimulate Activities in the Field of Technology Transfer". This legislation aims to regulate a seamless and efficient technology transfer process to enhance the competitiveness of national production, foster cooperation between research institutions, higher education institutions (HEIs), and businesses, and facilitate Ukraine's integration into the international innovation space. Status: Currently under consideration in the Verkhovna Rada of Ukraine.

PLANNED STEPS

Legislative Framework for Innovation Development

3

Priority areas in science and innovation

The new system of priority areas in science and innovation aims to reduce the number of state priorities in these fields (from over 540 to 10-15), focusing on defense, economic development, and innovation. The new mechanism provides for a dual funding model: baseline and competitive funding.

Baseline funding for higher education institutions (HEIs) and research institutions (RIs) will depend on the results of state accreditation, while competitive funding will be allocated based on defined priorities.

Status: A Draft Law "On Amendments to Certain Laws of Ukraine Regarding the Renewal of the System of Priority Areas in Scientific, Scientific-Technical, and Innovation Activities," has been prepared, undergone public discussion, and sent for approval to the relevant public authorities.



THANKYOU



If you are interested in collaborating, please contact us at the following address: oksana.berezhna@mon.gov.ua