



Ministry of Science and
Higher Education
Republic of Kazakhstan

INCREASING THE GLOBAL COMPETITIVENESS OF SCIENCE AND UNIVERSITIES OF KAZAKHSTAN

January 19, 2023



**DECREE OF THE PRESIDENT OF
THE REPUBLIC OF
KAZAKHSTAN**
June 11, 2022



"In order to strengthen the coordination of scientific activities in the country, the relevant ministry should be divided into two departments, one of which will deal with issues of higher education and science"



Functions and authority of the Ministry of Education and Science:
educational field, protection of children's rights, language policy, science, quality assurance in the field of education and science, digitalization of education

Ministry of Enlightenment

Transferred functions and authority:

- ✓ pre-school, secondary, technical and vocational, post-secondary education,
- ✓ Additional education,
- ✓ protection of children's right,
- ✓ quality assurance in the field of pre-school, secondary, technical and vocational, post-secondary education,
- ✓ digitalization of pre-school, secondary, technical and vocational education.

Ministry of Science and Higher Education

Transferred functions and authority:

- ✓ higher and postgraduate education,
- ✓ science,
- ✓ language policy,
- ✓ quality assurance in the field of higher and postgraduate education,
- ✓ digitalization of higher and postgraduate education.
- ✓ 88 out of 211 functions of the Ministry of Education and Science are transferred to the Ministry of Science and Higher Education



UNIVERSITIES AND THE STUDENT BODY

CURRENT SITUATION

Functioning – 119 universities, student body – 626,2 thousand students, *(of these, 229,5 thousand people (37%) are on public funding);*

Issue – 188,3 thousand people;

Teaching staff – 36,4 thousand people;

Graduates' average employment during the year – **68,9%**;

7 099 places in dormitories have been introduced.

FORECAST

Students' number will increase to **800 thousand** in 2025

Shortage of classrooms will be about **200 thousand**

Current need for beds in dormitories - **87 thousand**



MODERNIZATION OF THE CONTENT OF HIGHER EDUCATION

Academic freedom has been expanded within the framework of the State general education standard of education

Online education has been introduced

The applied Bachelor's degree (pilot) has been launched – on the basis of 8 universities

Integrated GPA (pilot) has been launched – based on 4 universities

71% of educational programs have been updated

“Silver universities” has been created on the basis of more than 70 universities

2 universities transformed into research universities

A system of advanced staffing has been developed within the framework of the “Mamandygym-Bolashagym” project



In 2022:



400 000 children
Went to the first grade



In 2023-2029:

3.5 trln tn (7.5 bln \$)
Budget spending on HE

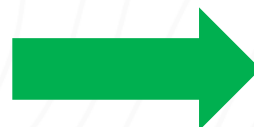


1 500 000
Babies born 2020-2021-2022

In 2022:



623 000
HE students



By 2030:



More than 1 000 000
HE students



2 bln people

In the greater region of
Central Asia and Eurasia

**Over 1 bln
people**

Younger age of 25



1

ACCESSIBILITY OF HIGHER EDUCATION

- Differentiation of grants
- Introduction of a new educational account
- A balanced approach to classification

2

ADVANCED PERSONNEL TRAINING MODEL

- Improving the algorithm for developing educational programs
- Synchronization of the higher education system with the labor market
- Implementation of the Concept of lifelong Learning

3

DIGITALIZATION OF HIGHER EDUCATION

- Transformation into a digital university
- Collaboration with the IT industry and educational digital platforms

7

NEW MODEL OF EDUCATION QUALITY ASSURANCE

4

INTERNATIONALIZATION

- Creation of branches of leading foreign universities
- Opening branches of universities of the Republic of Kazakhstan abroad
- Expanding the geography of cooperation

5

AUTONOMY OF HIGHER EDUCATION INSTITUTIONS

- Increasing the responsibility of university leaders
- Revision of the KPI system
- Development of corporate governance
- Academic freedom of universities

6

INFRASTRUCTURE DEVELOPMENT

- Creation of 20 centers of academic excellence
- Construction of ENU-grad and KazNU-grad
- Creation of a research hub on the basis of Satpayev University
- Providing students with places in dormitories



- Provide access to more than 200 thousand school graduates by 2025
- Differentiation of grants from 30% to 100% depending on the Unified National Testing
- Introduction of low interest credit at 2-3% per annum

1. Annual increase in the number of graduates

In 2022:

First graders 400 000

Alumni 170 000

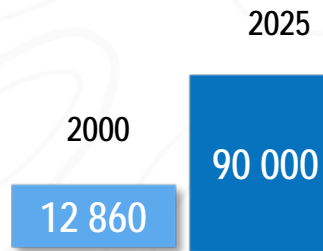
Students 623 000

In 2023

Alumni 400 000

> Students 1 000 000

2. Annual increase in the volume of educational scholarships (public funding)



Increased by **7** times

- undergraduate - 75 761
- master's - 13 253
- doctoral - 1 890

Annual increase
By **5000** to **2025**

UNIFIED SOLIDARY EDUCATIONAL ACCUMULATIVE SYSTEM

Introduction of differentiated grants

- "Daryn" - 120-140 points
- "Basic" - 75-119 points
- "Qamqor" - 50-74 points

Low interest crediting implementation

- Issuance of a loan through second-tier banks at 2-3% per annum
- Attorney Agent - JSC "Financial Center"

Integration with the Social Wallet project

- Implementation of a social wallet for all levels of education
- Implementation of a mobile app

RESULT

the coverage of Higher Education System in Kazakhstan aged 18-22 has increased from 37.8 to 64.1% in 20 years



GOAL: TO CREAT A REGIONAL ACADEMIC MOBILITY HUB FOR THE REGION

2023-2029

OPENING BRANCHES OF LEADING FOREIGN UNIVERSITIES

- 12 branches by 2029
- Dual degree/Joint degree programs
- Faculty development
- Joint/Split Master/PhD programs

2023-2029

ACADEMIC MOBILITY AND EXCHANGE

- Launch of «Study in Kazakhstan» app+platform
- Global programs
- 1400 foreign faculty exchange

2023-2025

CENTRAL ASIAN HIGHER EDUCATIONAL AREA

- Permanent regional Bureau
- Open Kazakh University branches in the region (2 in 2022)
- Rector Council of CAHEA

CENTRAL ASIAN HIGHER EDUCATIONAL AREA DEVELOPMENT PERSPECTIVES



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On the initiative of the Republic of Kazakhstan, the **Central Asian Higher Education Area** was created in 2021 by Kazakhstan, Kyrgyzstan, Tajikistan adopting the Turkestan Declaration
Purpose: to unite the educational space of Central Asian countries, setting priority areas for development on mutually beneficial terms.
October 2022, a **joint statement** was adopted on the establishment of a **permanent Bureau of the CAHEA** in the Ministry of Education and Science of the Republic of Kazakhstan.

Bureau of the CAHEA main responsibilities:

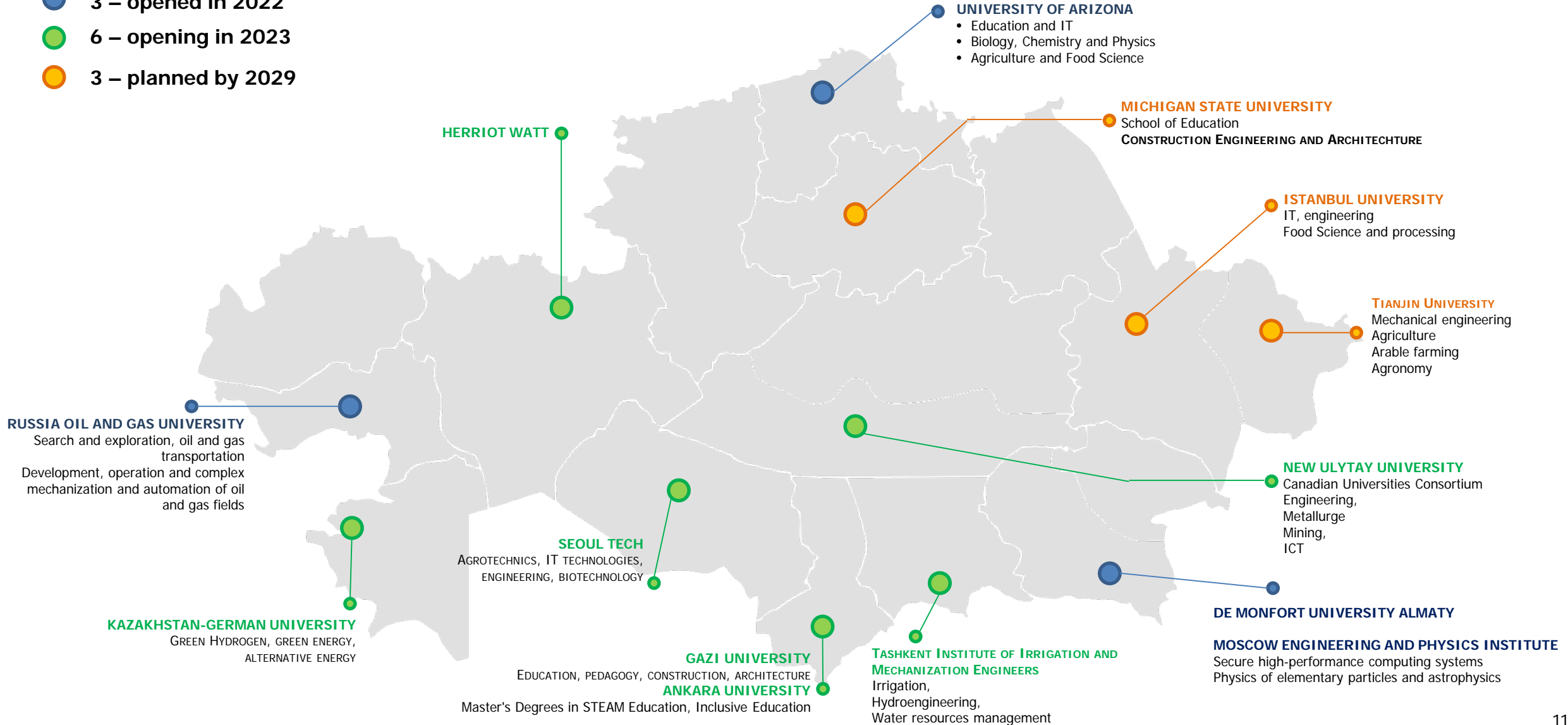
- ✓ expand regional cooperation
- ✓ unite the scientific, intellectual and creative potential of higher educational institutions throughout Central Asia
- ✓ create a free space for students and academic staff of universities to move freely for learning, sharing knowledge, experience and participating in joint research
- ✓ cooperation between the universities of Central Asia within the framework of the created Alliance of Universities of the Central Asian countries



BRANCHES OF FOREIGN UNIVERSITIES IN KAZAKHSTAN



- 3 – opened in 2022
- 6 – opening in 2023
- 3 – planned by 2029





Favourable environment for your business

ENGLISH COMMON LAW **JURISDICTION**

WORLD CLASS **REGULATION STANDARDS**

0% TAX EXEMPTION UNTIL 2066

SPECIAL **LABOR AND VISA REGIMES**

VIBRANT **FINANCIAL AND BUSINESS ECOSYSTEM**



The World's Best Regulation Standards



REGULATORY ENVIRONMENT

Registration of an independent regulator of financial and non-financial services on the AIFC territory.

49 AIFC General Legal Framework Acts,
34 AIFC Financial Services Framework Acts

FINANCIAL SERVICES FRAMEWORK

27 financial services

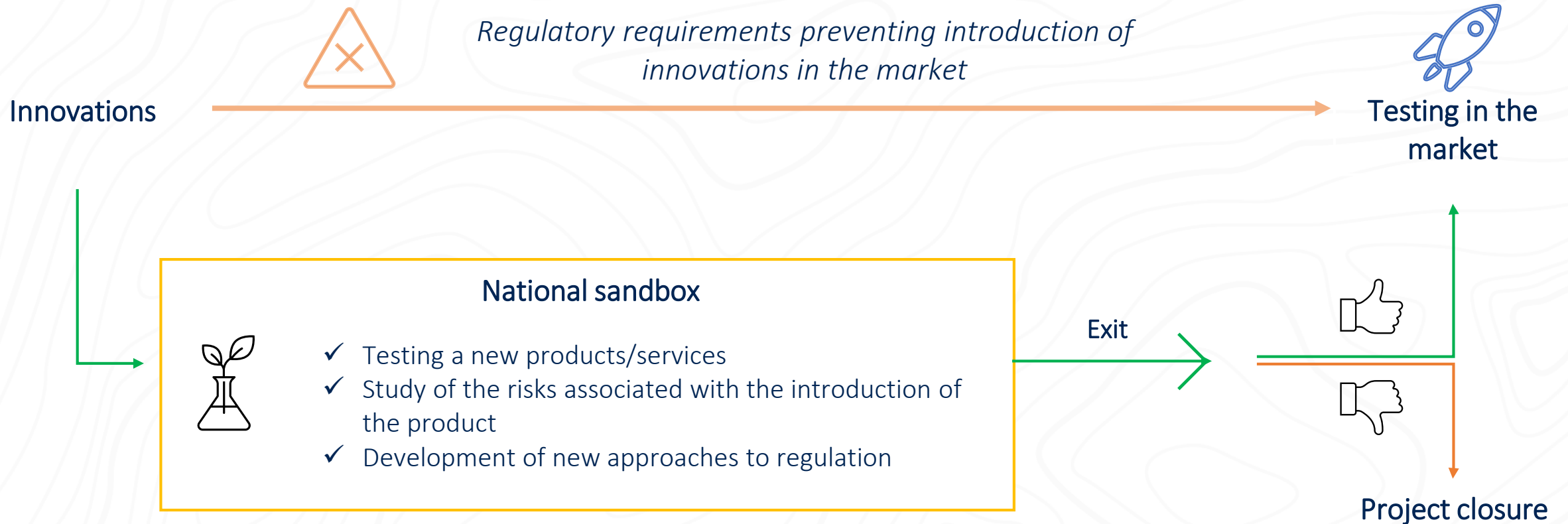
8 market activities

5 ancillary services



National sandbox

The national sandbox allows experimenting with innovations in a controlled regulatory environment. Regulatory requirements that prevent the introduction of new products/services are waived within the regulatory sandbox.





Creation of 20 academic excellence centers

Purpose: Creation of a modern academic and research ecosystem of universities integrated into the national and regional context

Plans: Funding starts from 2024 (Pilot from 2023)

Opening new universities

- ❑ Creation of a technical university in Zhezkazgan
- ❑ Creation of an academic campus in Qonayev city with an innovation center
- ❑ Opening of branches of leading Kazakh universities in Qonayev city

NEW DORMITORIES

PROBLEMS:

- Lack of lands for construction
- Changing the purpose of existing lands and buildings for student dormitories
- Cost increase of building materials
- Lack of interest among entrepreneurs in the building of dormitories

SOLUTIONS:

- ❖ Improving the Public Private Partnership mechanism
- ❖ Attracting private investment for the building of dormitories
- ❖ Building of dormitories through the expansion of the authorized capital of universities
- ❖ Increasing dormitory places to 50 thousand by 2025.

Qonayev Academic Campus is a special territory for domestic and foreign subjects of the scientific and educational sphere:



- Area 97 ha;
- **Residents** - universities (relocation of Kazakh universities, opening of foreign branches), research institutes and corporate R&D centers, technology start-ups, service organizations.

- symbiosis of academic research and higher education;
- an attractive area for relocation and a branch network of leading scientific and educational organizations;
- generator of innovative solutions for the needs of the domestic economy;
- modern scientific and laboratory base;
- comfortable environment for the commercialization of developments.



ESG-BASED INTERNAL QUALITY ASSURANCE SYSTEMS

- Quality Assurance policy
- Development and approval of programs
- Student-centered learning, teaching and evaluation
- Student admission, academic performance, recognition and certification
- Teaching staff
- Educational resources and student support system
- Information management
- Informing the public
- Continuous monitoring and periodic evaluation of programs
- Periodic external quality assurance

EXTERNAL CONTROL SYSTEM QUALITY ASSURANCE

- **ACCREDITATION BODIES**
 - are responsible for the impartiality of their accreditation activities;
 - are prohibited to do any commercial, financial or other pressure that could jeopardize impartiality.
 - guarantees society that their decisions can be trusted
- **ACTIVITIES OF ACCREDITATION BODIES**
 - are aimed to implement adequate follow-up procedures;
 - considers the quality assurance system as a continuous process;
 - are transparent to inspire trust and respect from society.

NEW REGULATORY POLICY "FROM SCRATCH" ➤

- Transition from audits to preventive measures
- Automation of the Risk assessment and Management System

3. NEW SCIENCE MODEL



Mobilization model

Funding (5 years)

109 bln
tenge (2025) bln tenge
0,13% GDP
(0,25% in 2003)

Expenditur

59%
Government
35%
Business

R&D commercialization

26%

Innovation product in GDP

2,4%
(+1,2%)

Average age

59
Research associate
69
Academician
years **years**

Open model

Economic stimulation

Super deductions for R&D expenses
до 300%

Investment preferences for projects in scientific infrastructure over 3 mln tenge

0% tax

University science support (2023)

5 Endowment funds

10 Research Universities

10 Foreign universities branches

20 Centers of Academic Excellence

5 thousand PhD Scientists training
(x3 times)

National council for science and technology

25
World-class scientists

10+
H-index

3-6 years
rotation

1% liabilities of subsoil users
~119+ billion tenge

Compliance with R&D priorities

State scientific and technical expertise

4. TAX PREFERENCES



Global



Singapore

VAT deduction 100-250%
of R&D expenses



China

Super deductions of 150%
on R&D costs and VAT
exemption



Great Britain

130-225% deduction
from R&D expenses



Spain

VAT reduction or exemption



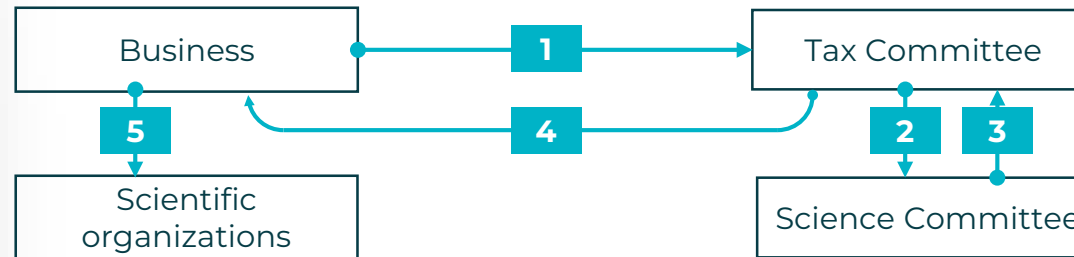
Russia

VAT exemption in the IT

Kazakhstan

50% for deductions from R&D expenses for scientific organizations

Algorithm for granting tax benefits



1. Application 2. Request 3. Expertise 4. Notification 5. Funding

Recommendations

VAT super deductions
for R&D business
expenses (up to 300%)

Inclusion in tax
administration of scientific
and technical expertise of
R&D contracts

State service
standard for tax
incentives for R&D
for business

5. GOVERNANCE STRUCTURE



National Academy of Sciences

Completed:

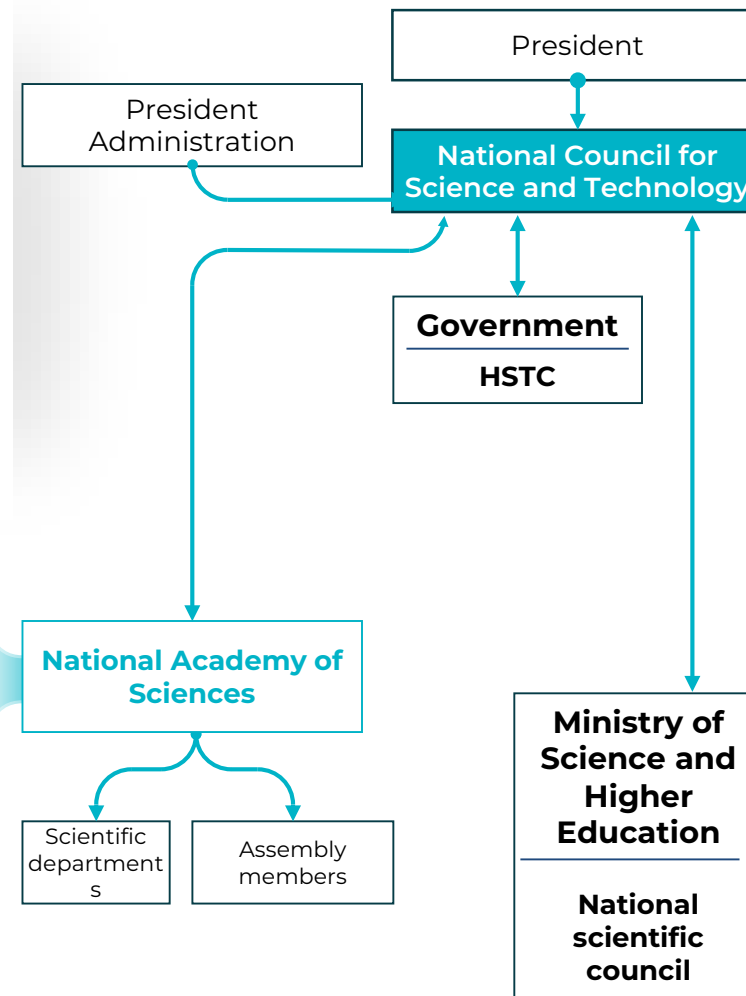
- ✓ Changes to the Law "On Science"
- ✓ The issue of budget financing
- ✓ Lifetime Scholarships for Academicians
- ✓ Reconstruction of the building "Gylym Ordasy"
- ✓ Measures to support young scientists

Source of independent expertise and training of scientific personnel ✓

The Government creates National Academy of Sciences ✓
The charter of the National Academy of Sciences fixes the functions and delegation of authority ✓

Special Decree of the President on National Council for Science and Technology ✓

National Council for Science and Technology



Functions

- ✓ Development of proposals to the Head of State on science and technology
- ✓ Assessment of the development of science in the country
- ✓ Identification of strategic priority directions for the development of science

Members

- Academicians
- Leading foreign scientists
- Domestic experts

Advantages

- Direct subordination to the National council to the President
- Efficiency of order execution
- No need to make changes to the Laws

POTENTIAL FIELDS OF COOPERATION



1 INTERNATIONAL AGREEMENTS AND MOU's

4 JOINT SCIENTIFIC PROJECTS

2 "BOLASHAK" SCHOLARSHIP PROGRAM

5 THE "500 SCIENTISTS" INTERNSHIP PROGRAM

3 ACADEMIC MOBILITY PROGRAM FOR STUDENTS AND TEACHING STAFF

6 DIGITALIZATION OF HIGHER EDUCATION

7 OPENING NEW BRANCHES OF FOREIGN LEADING UNIVERSITIES



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THANK YOU FOR YOUR ATTENTION

January 19, 2023

