APPLIED POLICY SEMINAR

Policies for Innovation and Knowledge-based Development in the 21st Century

Smart Specialization and Strategies for Sustainable Development

NATD
national agency for technological development
технологиялық даму жөніндегі ұлттық агенттік

National Innovation System of Kazakhstan: Regional Aspect

Zhumatay Salimov,
Deputy Chairman,
National Agency for Technological Development,
Kazakhstan

Geneva - 2014

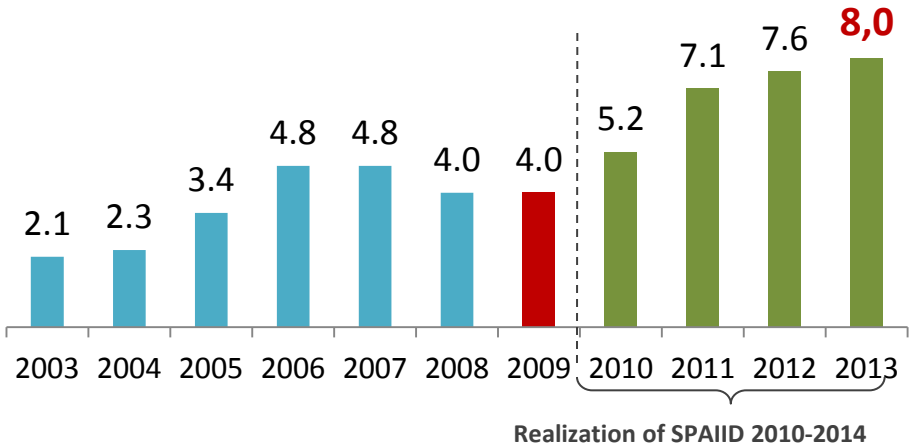
DEVELOPMENT OF NATIONAL INNOVATION SYSTEM of KAZAKHSTAN

	2003 - 2009	2010 - 2014	2015 - 2019
Legal basis and programs	➢ Law «About state support of innovation activity» ➢ The first strategy for industrial-innovation development until 2015 ➢ Program on establishment of National Innovation System for 2005-2015 .	➢ Law «About state support of industrial innovation activities» ➢ Law «About innovation cluster «Park of innovation technologies» ➢ State Program of Accelerated Industrial Innovation Development 2010-2014 ➢ Conception of Innovation Development of Kazakhstan until 2020	➢ Amendments to some legal acts on stimulation of innovation activity ➢ State program of industrial-Innovation development 2015-2019
Infrastructure	➢ Park of information technologies ➢ 8 technoparks ➢ 1 sectoral design offices	➢ Nazarbayev University ➢ Park of Innovation technologies ➢ **8** technoparks ➢ **4** sectoral design offices ➢ **21** office of commercialization ➢ **5** international centers for technology transfer	➢ Development of intellectual - innovation clusters ➢ Sales of industrial parks and design offices to private sector ➢ Creation of innovation workshops, fablabs, co-working centers ➢ Development of technology transfer network
Instruments	➢ Funding of science programs ➢ Project funding ➢ Venture funding	➢ Funding of science programs ➢ Project funding ➢ Venture funding ➢ **9** types of innovation grants ➢ Technological business incubation ➢ Targeted technological programs	➢ Funding of science programs ➢ Support for venture funds ➢ Increasing sums of innovation grants ➢ Support for innovation infrastructure ➢ Targeted Technological Programs ➢ Online centers of competences
Result	**In 2009** ✓ Innovation activity of enterprises **4%** ✓ Innovation production in GDP **0,51 %** ✓ Kazakhstan in GIC WEF funding - **72**	**Plan for 2014:** ✓ Innovation activity of enterprises **10%** (2013 – **8%**) ✓ Innovation production in GDP **1%** (2013 - **1,7%**) ✓ Kazakhstan in GIC WEF ranking **48** (2013 – **50**)	**Plan for 2019:** ✓ Innovation activity of enterprises **20%** ✓ Innovation production in GDP **2,5 %** ✓ Kazakhstan in the GIC WEF ranking - **40**

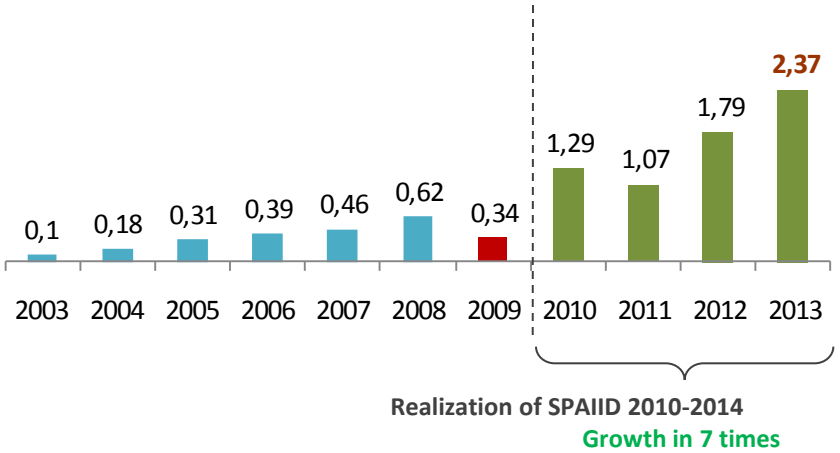
INNOVATION ACTIVITY IN KAZAKHSTAN

In 2013 Kazakhstan reached historical maximum in the growth of key indexes of innovation activity

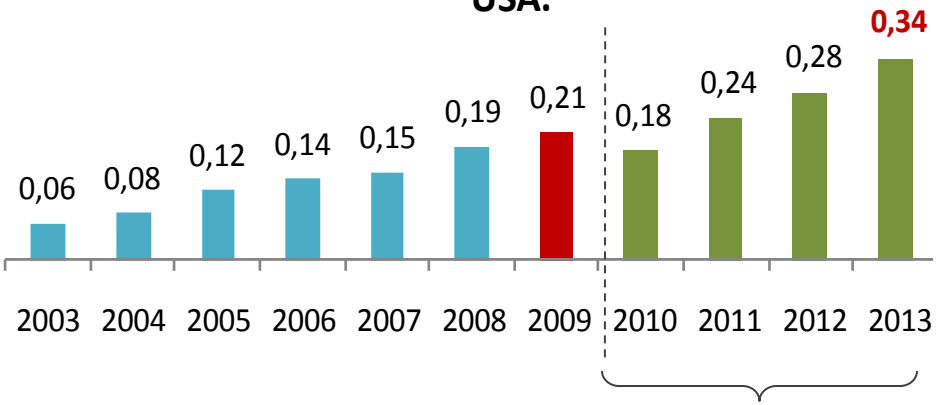
Innovation activity of enterprises, %



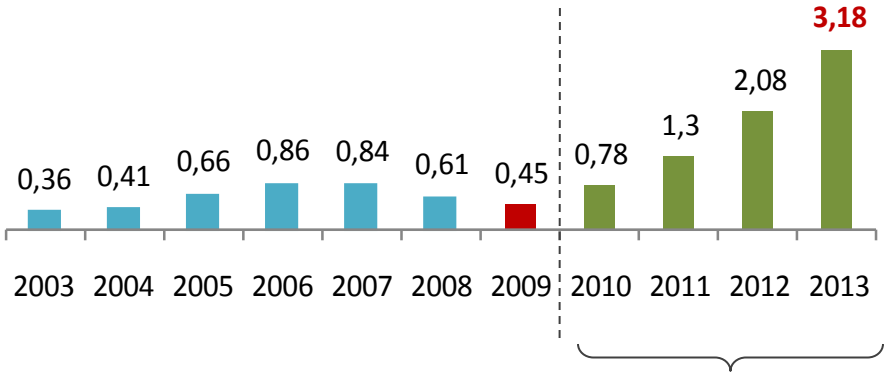
Expenditures of enterprises for technological innovations, bln.dollars USA.



Internal expenditures on R&D, bln. dollars USA.



Capacity of innovation production, bln.dollars USA.



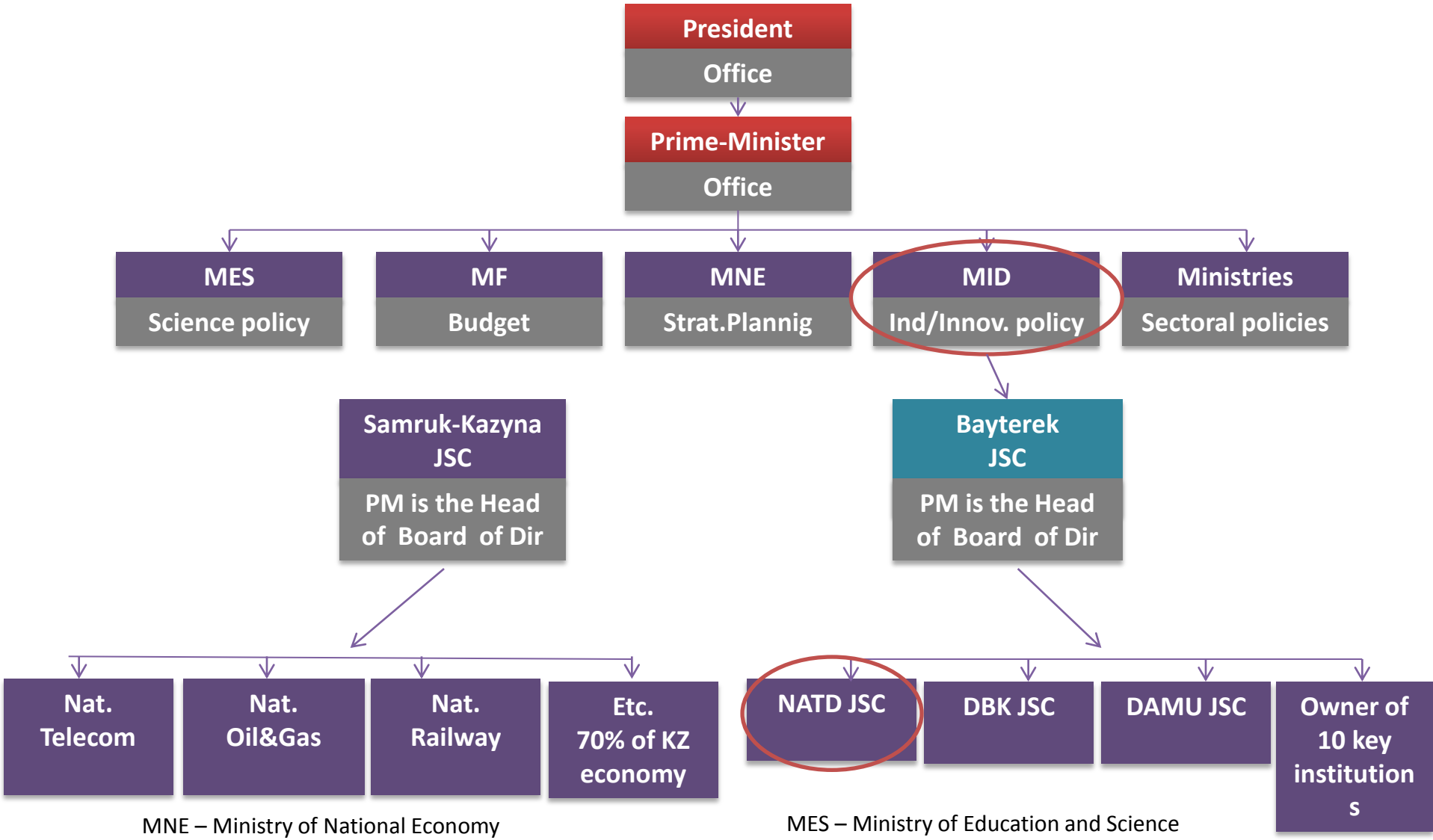
RANKING OF KAZAKSHTAN IN GCI WEF

50th position among 148 countries

Sub-indexes on innovations and technologies	2011-12	2014-15	+/-
General Index	72	50	+22
Technological readiness	87	61	+26
Innovation potential	116	85	+31
Adaptation of technologies by companies	113	90	+23
Quality of research institutes	121	99	+22
R&D Expenditures of companies	107	68	+39
Cooperation between industry and academia in R&D	119	88	+31
Access to scientists and engineers	106	83	+23

Factors driven economy (group 1)	Transitional level (group 1-2)	Effectiveness driven economy (2 group)	Transitional level (group 2-3)	Innovation driven economy (group 3)
37 countries: Kyrgyzstan India Ghana Bangladesh Yemen Mali Tajikistan etc.	16 countries: Alger Azerbaijan Bolivia Honduras Moldova Philippines etc.	30 countries: Armenia Egypt Ukraine China Paraguay Romania Indonesia etc.	24 countries: Argentina Brazil Hungary **Kazakhstan** Latvia Malaysia Poland Russia etc.	37 countries: Australia Austria Finland Japan South Korea USA Norway Qatar etc.

RDI SYSTEM GOVERNANCE STRUCTURE – MACRO LEVEL



MNE – Ministry of National Economy
MF – Ministry of Finance

MES – Ministry of Education and Science
MID – Ministry of Investments and Development

JSC “National Agency for Technological Development”

Established in 2003 as JSC “**National Innovation Fund**”
In 2012 reorganized into the JSC “National Agency for Technological Development” under the Ministry of Industry and New Technologies of Kazakhstan
Since middle of 2013 a new shareholder – JSC “National Management Holding “Bayterek”

Mission:

Support of innovation activities and development of high-tech enterprises in the Republic of Kazakhstan

Main activities:

- Investments in innovative companies and venture funds
- Administration of instruments of state support for innovation activity
- Management of innovation infrastructure
- Analytical and expert support of innovation activities
- Popularization and promotion of innovation activities
- International cooperation

REGIONAL INFRASTRUCTURE

8 regional technoparks

5 engineering design offices

5 venture funds

5 Regional offices for innovation development

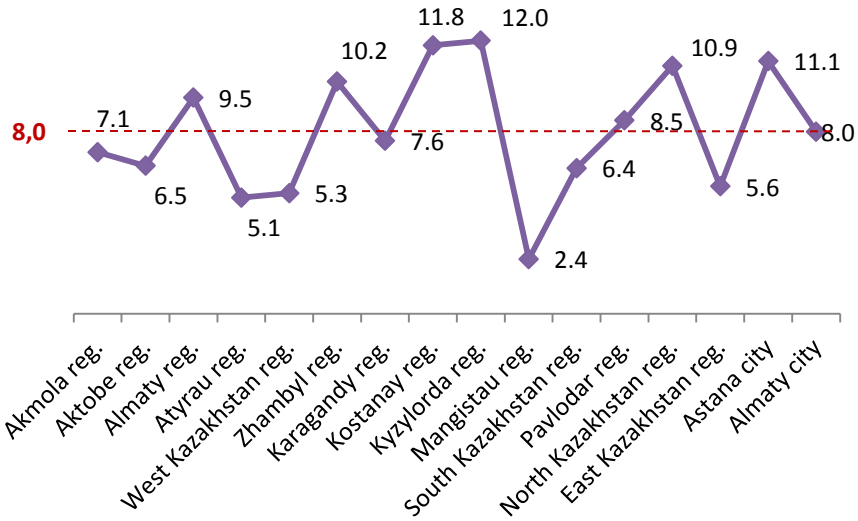
21 commercialization offices

9 special economic zones

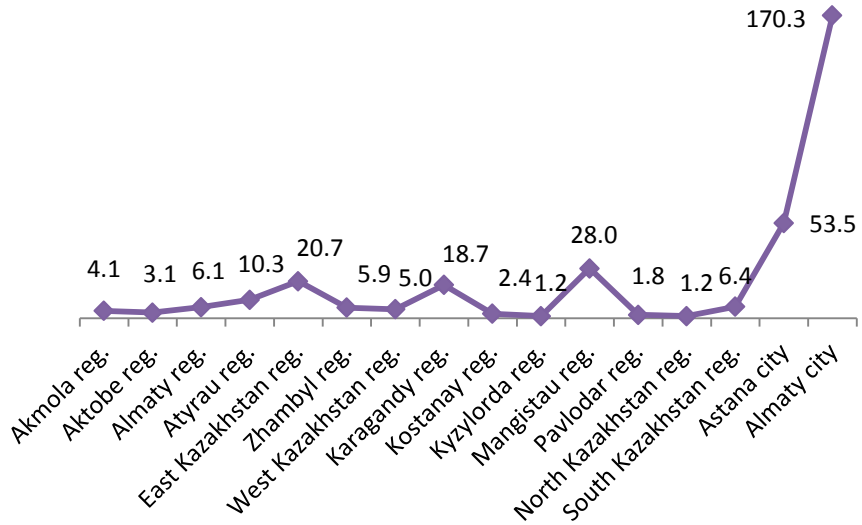
16 social-entrepreneurial corporations

INNOVATION ACTIVITY OF REGIONS

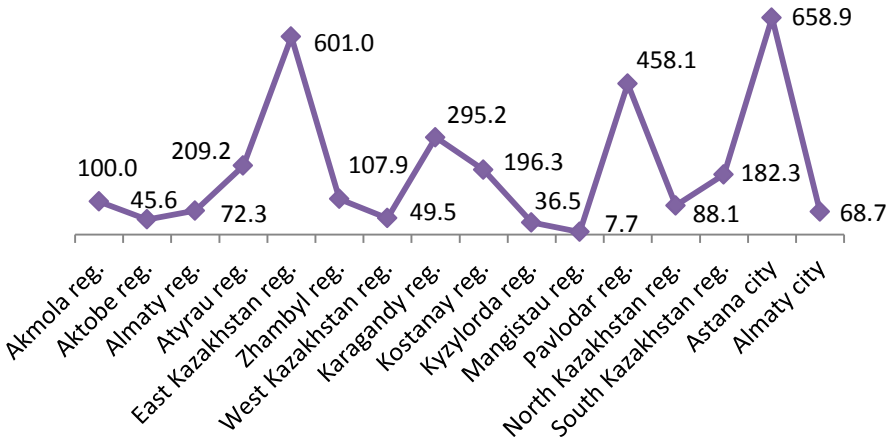
Innovation activity of enterprises, %



Internal expenditures on R&D, mln. dollars USA.



Capacity of innovation production, mln. dollars USA.



Key aspects of regional development of innovations

Weaknesses:

1. Different level of innovation activity;
2. Weak links between regions;

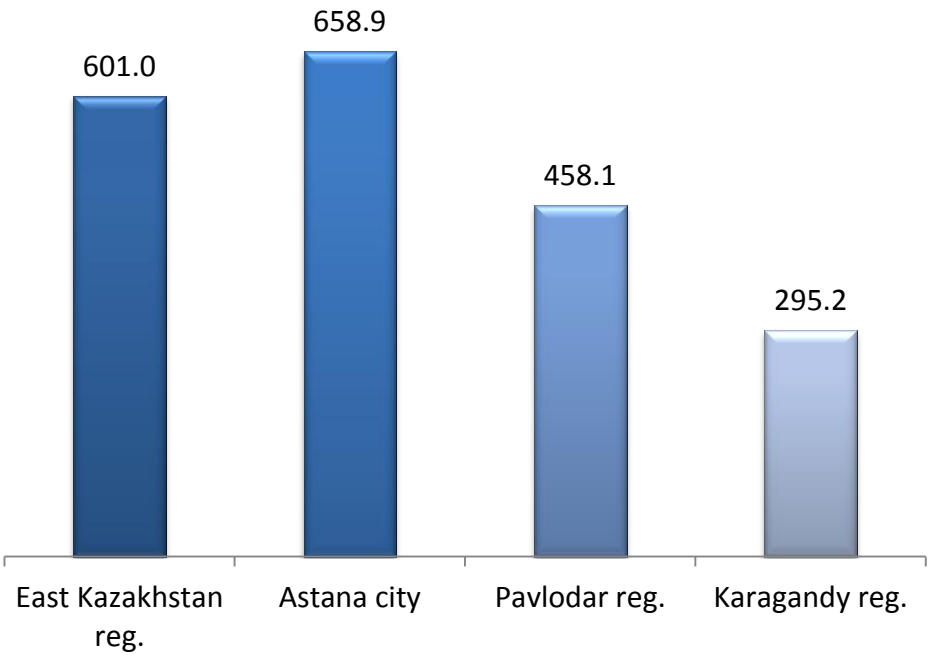
Strenghts:

1. Establishment of new elements of infrastructure;
2. Increasing funding for science and innovations, including by private sector;
3. Examples of positive results of implementation of regional innovation policy;
4. New innovation clusters in Almaty and Astana.

EXAMPLES OF REGIONAL DEVELOPMENT OF INNOVATIONS

Capacity of innovation production, mln. dollars USA

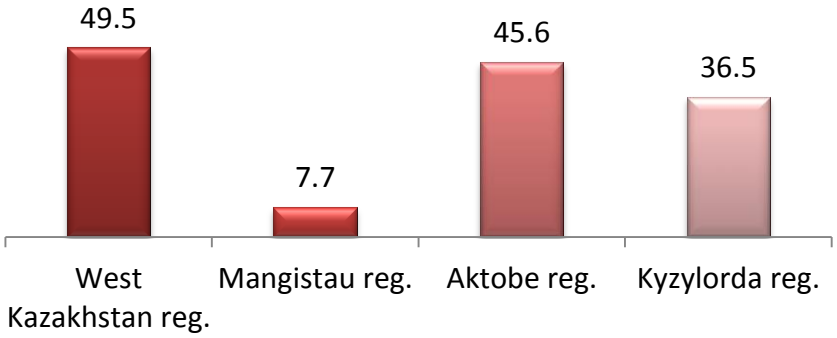
Leaders



Key aspects:

- active support of local administration;
- development of processing industry;
- functioning of innovation infrastructure (technoparks, regional offices for innovations).

Outsiders



Key aspects:

- weak development of infrastructure;
- development of raw materials sector;
- absence of regional offices of innovations supported by local administration.

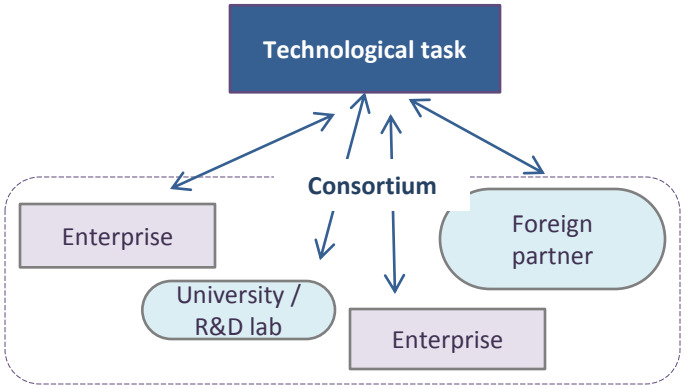
NEW INSTRUMENTS FOR DEVELOPMENT OF REGIONAL INITIATIVES

Support for regional offices for innovations

- **Methodological support from NATD;**
- **Strengthening of financial support from local administration;**
- **Strengthening of functions of regional offices.**

Innovation grants program

- **Grant for Targeted Technological Programs;**

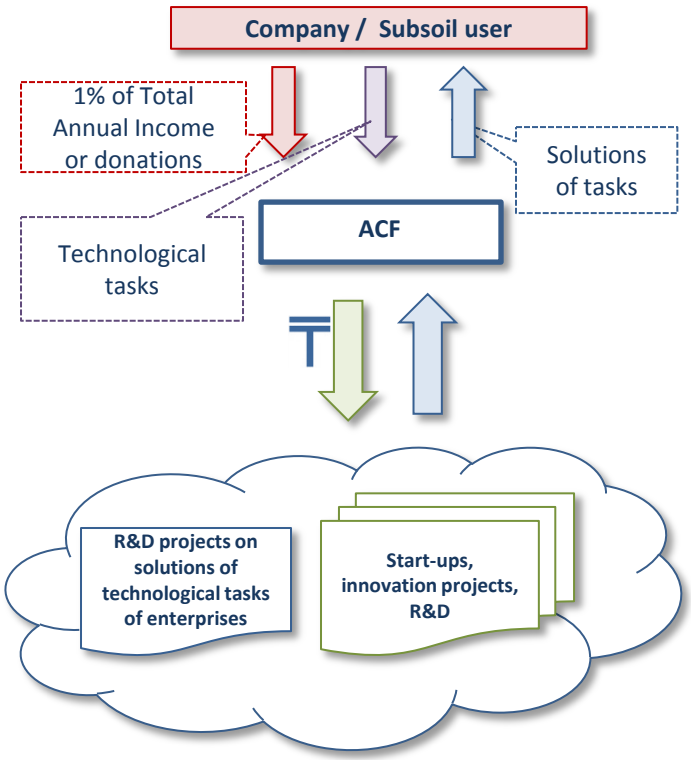


- **Grant for Establishment of Centers of Competence** (co-working, Fablab, Innovation workrooms);

- **Grant for Establishment of Centers of Excellence at universities;**

Development of innovation cluster

Establishment of innovation cluster and ACF in Almaty



CONCLUSION

1. Implementation of regional innovation policy is more successful, where support of regional institutions for innovation development is in place;
2. Role of local administration is very important;
3. Crucial need of methodological and coordination support by NATD JSC;
4. Innovation grants are the most effective instruments for support of regional initiatives, including establishment of infrastructure, cooperation, technology transfer;
5. Need for constant learning and introduction of the best world practice of development of regional innovation policy including recommendations from international organizations;
6. Innovation policy of each region should be implemented taking into account special factors of development of particular region;
7. Key factors of innovation activity is creation of innovation environment, increase of competences and demand through instruments of state support.

Thank you for attention!

We are open for a mutually advantageous cooperation!

More information on our web-site www.natd.gov.kz or on your request

Tel.: + 7 (7172) 571 -014
Mobile: + 7 777 774 57 56
E-mail: zhumatay.salimov@natd.gov.kz

REPUBLIC OF KAZAKHSTAN,
010000, ASTANA
DOSTYK AVE., 29, BUSINESS-CENTER «MOSKOW»