National State University
«Higher School of Economics»

New Instruments for STI Policy in Russia

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Science, technology and innovation policy tools: *emerging strategy*

- The President Commission on Modernization and Techno-logical Development of Russian Economy
- The Government Commission on High Technology and Innovation

- The Ministry of Economic Development
- The Ministry of Education and Science

National S&T Foresight with a horizon of 2030

National S&T Priorities and Critical Tech's

Network of Foresight centres at the leading technological universities

Direct funding (supply-side)

- Federal Targeted Programs
- National Research Centers' programs
- Development Institutions
- Basic Research Program of State Academies of Science
- National Research Universities' Development Programs

Cooperation and networking

- University-industry cooperation to build high-tech firms
- Development of universities' innovation infrastructure
- Attracting world class researchers to leading universities

T E C H N O L O G Y P L A T F O R M S

Indirect measures (business-side)

INNOVATION STRATEGIES OF STATE-OWNED ENTERPRISES

- Tax incentives
- Custom privileges
- Export incentives

Agenda setting, prioritization, policy formulation → **Policy implementation and coordination**

The List of Russian Technology Platforms and State-owned enterprises' Innovation Strategies:
2010–2011 creation campaign

- *47 companies presented concepts of their strategies*

December 2010: Concepts of strategies

- Strategy evaluation
- Meetings with stakeholders
- Recommendations to make them better

July 2011:Proposals to The Commission

- Approval of strategies
- Evidence-based Decisions

Approval

- Monitoring
- Discussing
- Evaluating

The Ministry of Economic Development, The Ministry of Education and Science

Working party on development of public-private partnership in innovation: proposals and outcomes examination

The Governmental Commission on High-Tech and Innovation

till 25.11.10: Call of proposal

- *over 180 proposals to create RTP*
- *about 15 large technology areas*
- *over 40 particular technology fields*

- Proposal examination by 9 appraisal criteria
- Proposal consolidation and integration
- Selection of leaders

02.03.11:Proposals to The Government Commission

- Special meetings
- Outcomes appraisal
- Leaders selection

01.04.11: The List of RTPs

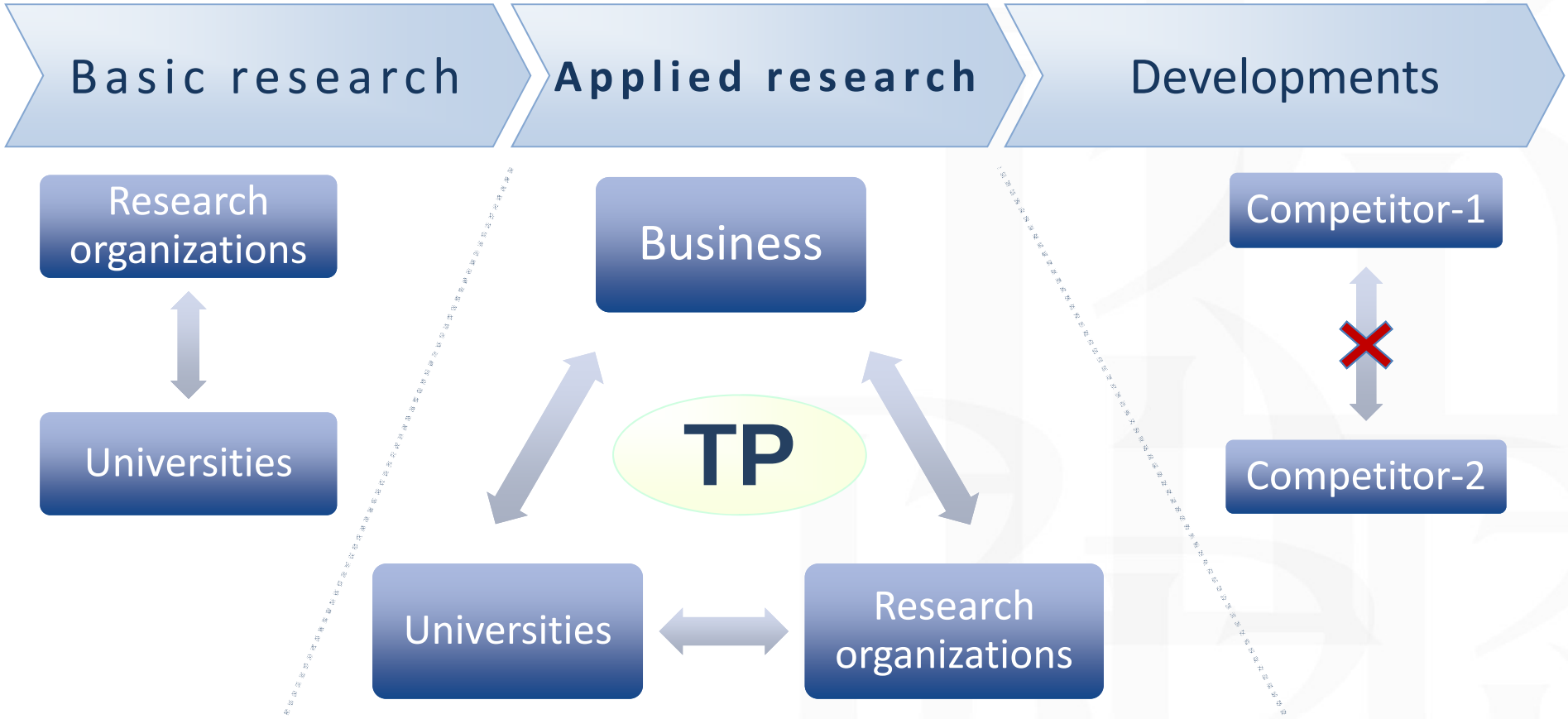
- The List of RTPs approval
- Updating the List

Recommendations to support leaders

Innovation strategies of state-owned companies: *enhancing innovation activity*

- 47 the biggest state-owned enterprises
- Who is next?

Technology platforms: *strategic alliance with state participation for precompetitive research*



Technology platforms: *life cycle*

Organization

- group of initiators set-up
- members gathering
- TP grounding
- establishing of organization

Formulation

- determining challenges
- common vision creation
- priority setting
- goals formulation
- road-mapping development
- building research agenda

Implementation

- partnerships estiblishing
- carrying of strategic R&D
- proposing to better regulation
- running educational programs

Russian Technology Platforms:
In practice two types dominate the picture

TPs with high business concentration ratio	TPs with low business concentration ratio
Focus on **definite projects implementation**	Focus on developing of **large priority areas**
Large companies participation	**SMEs** on the business side
Focus on **precompetitive research**	Focus on **communication**
The government as **a part of the R&D projects**	The government **creates favorable conditions**

Russian Technology Platforms: *types distribution (basically unique)*

1. Closed nuclear fuel cycle with reactors based on fast neutrons
2. Controlled fusion synthesis
3. Radioactive technologies
4. High-speed intellectual railway transport
5. National Space Technology Platform
6. National Information Satellite System

Monopoly Platforms

7. Aeronautic Mobility and Aircraft Technologies
8. Intellectual Energy System of Russia
9. Environmentally friendly thermal power of enhanced efficiency
10. Advanced technologies of renewed energy
11. Small-scale Energy Distribution
12. Innovations technologies use to increase the efficiency of construction activity, automobile and railway roads security and keeping
13. Technological platform of solid minerals
14. Hydrocarbon mining and usage technologies
15. Deeper oil and gas proccesing
16. Ocean Exploration

1. Medicine of Future
2. Bio-industry and Bio-resources – BioTech2030
3. Bioenegry
4. National Programme Platform
5. National Supercomputer Technology Platform
6. Innovative Laser, Optic and Optoelectronic Technologies – Photonics
7. Development of Russian Light Emitting Diodes Technologies
8. New polymer composition materials and technologies
9. Materials and technologies of metallurgical engineering
10. Technologies of mechatronics, embedded systems of control, radio frequency identification and robotics industry
11. Ultra-high frequencies technologies
12. Technologies for environmental development

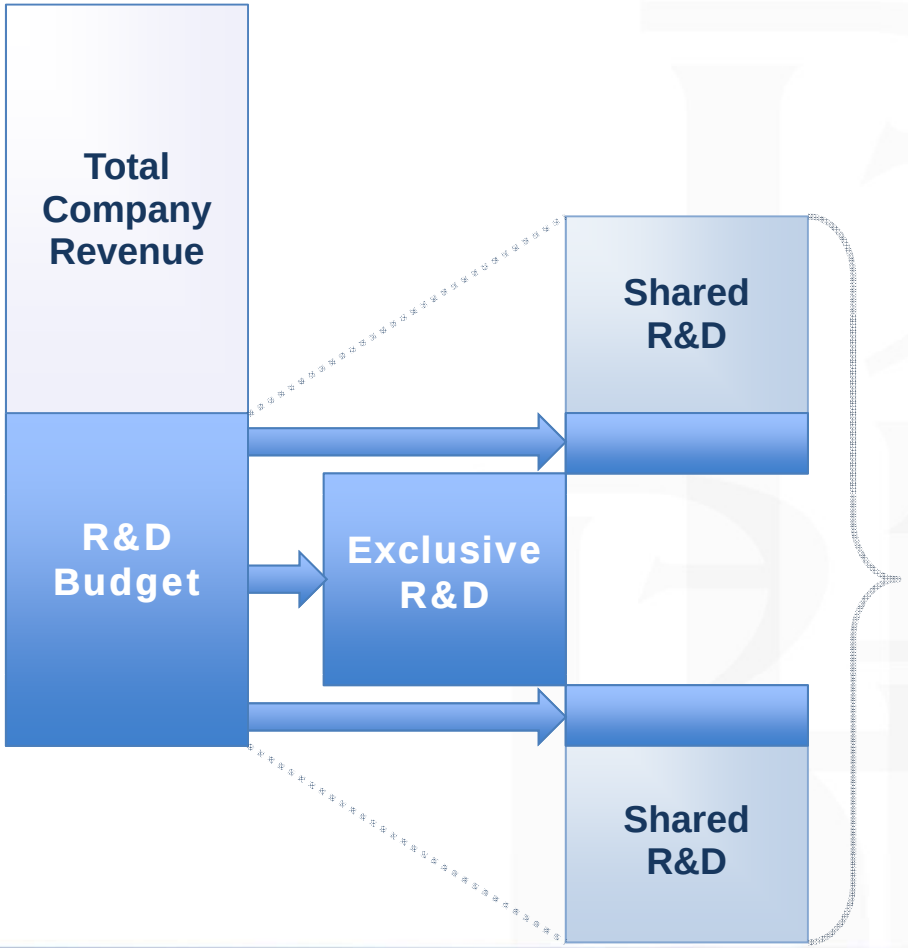
TPs with high business concentration ratio

with low business concentration

Open Innovation Centers: *new opportunities for business collaboration in precompetitive research*

R&D costs grow faster than revenues

R&D budget fixed % of revenues



1. **Shorter time to market**
2. **Sharing ideas**
3. **Sharing of facilities**
4. **Leverage of R&D budget**

Source: TNO

Thank you!

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