



**National State University
«Higher School of Economics»**

RUSSIAN TECHNOLOGY PLATFORMS – CURRENT TASKS AND OPERATIONAL APPROACHES

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НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ
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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

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

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

INNOVATION STRATEGIES OF STATE-OWNED ENTERPRISES

Agenda setting, prioritization, policy formulation

Policy implementation and coordination

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

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

Indirect measures (business-side)

Tax incentives

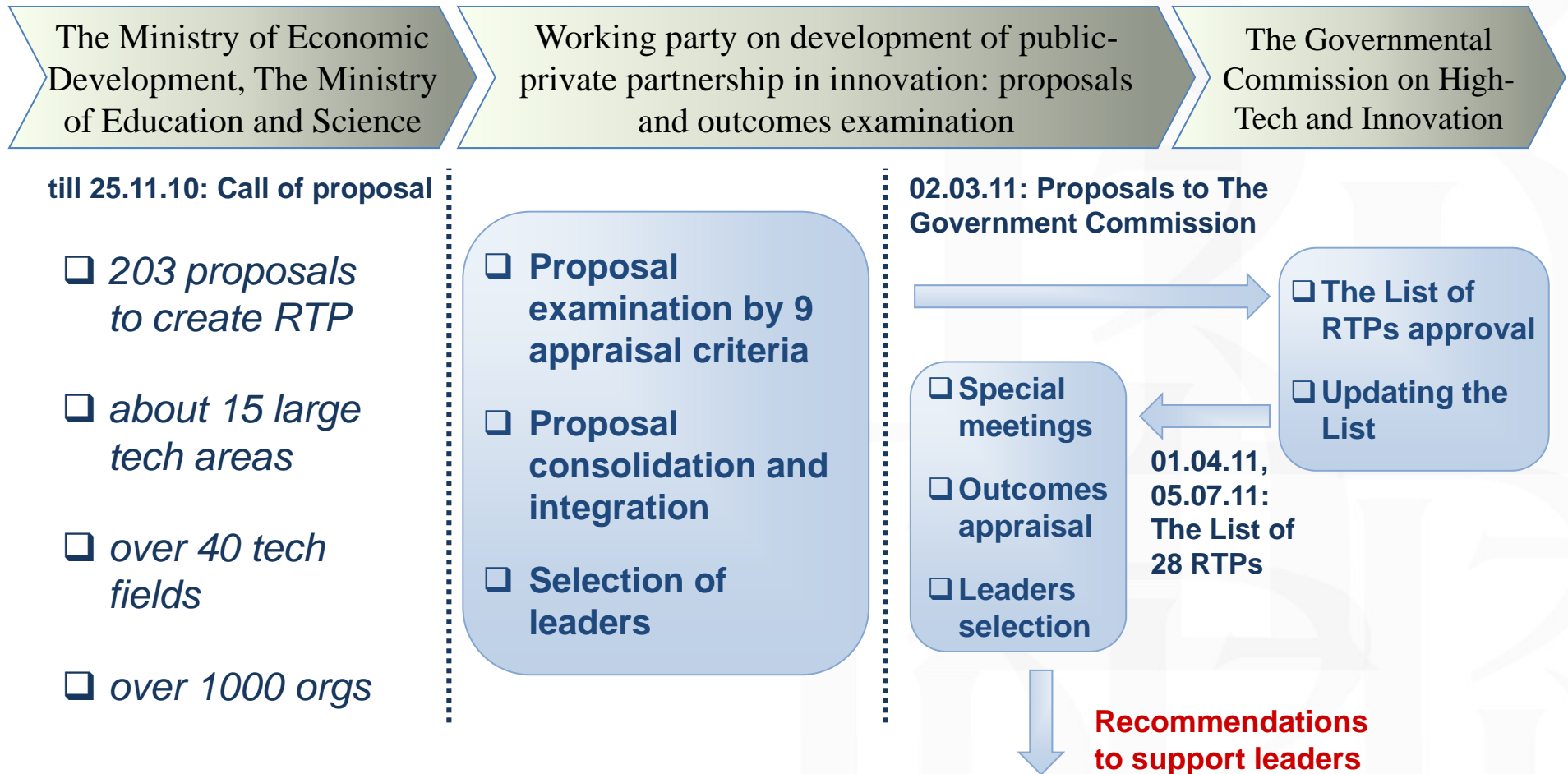
Custom privileges

Export incentives



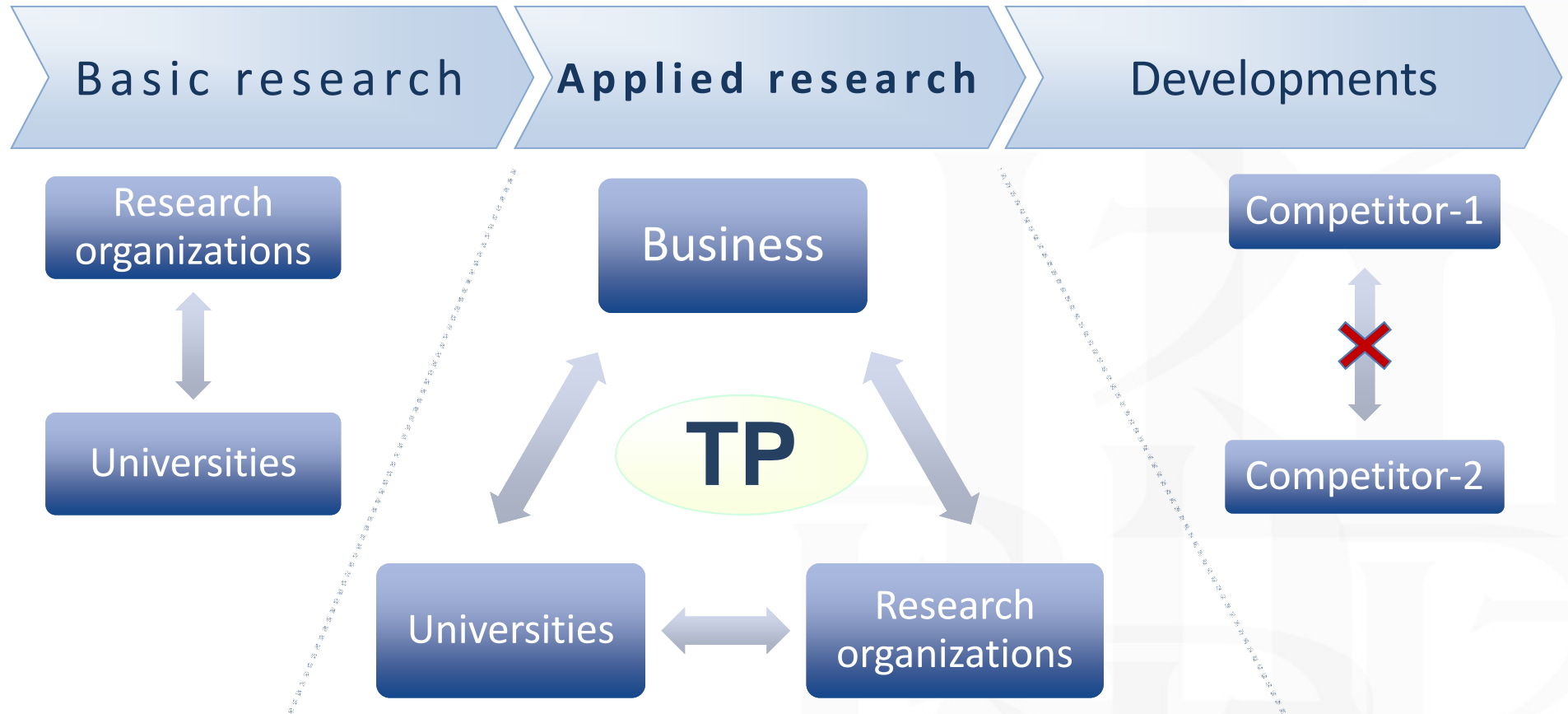
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The List of Russian Technology Platforms: *2010–2011 creation campaign*





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



- + establishing communication and dialogue, networking
- + formulation of proposals to develop regulation



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



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Russian Technology Platforms:

In practice two types dominate the picture

Focus on **definite projects implementation**

Large companies participation

Focus on **precompetitive research**

The government as a **part of the R&D projects**

Focus on developing of **large priority areas**

SMEs on the business side

Focus on **communication**

The government **creates favorable conditions**

TPs with high business concentration ratio

TPs with low business concentration ratio



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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
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 processing
16. Ocean Exploration

**Monopoly
Platforms**

1. Medicine of Future
2. Bio-industry and Bio-resources – BioTech2030
3. Bioenergy
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



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Organizing Cooperation between Russian and European Technology Platforms: *First Steps*

- To develop **working plan** of cooperation between Russian and European Technology Platforms
- To hold **targeted workshops** to discover prospects for cooperation between particular Russian and European Technology Platforms in the same or close technological fields
- To arrange **visits** of Russian Technology Platforms leaders to secretariats of European Technology Platforms
 - Introduction to the working practice of European Technology Platforms, establishing science and business contacts



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Thank you!

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