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Program to support pilot innovative clusters as a way to enhance regional innovation systems in Russia

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Content

1. **Background of cluster policy in Russia**
2. **Selection of the pilot innovative clusters: procedures and results**
3. **Planned measures to support the pilot innovative clusters**

1.Background of cluster policy in Russia

1. Problems

Insufficient demand for innovation

- Low level of innovation activities of companies: around 10%
- Low rate of innovation expenditures as a percent of sales: 1.5% (in Sweden - 5.4%, Germany - 3.4%)
- Stable share of innovative products in total sales (5%) in spite of growing expenditures on innovation

Low efficiency of R&D sector

- Science (fundamental and applied) is traditionally isolated from the universities and enterprises
- Universities accumulate only about 7% of overall spending on science in Russia
- Almost ¾ of organizations performing R&D are state-owned ones

Source: Strategy - 2020: A new model of growth - a new social policy (2012). The final report on the results of the expert work on the issues of social and economic policy in Russia until 2020. In Russian. http://2020strategy.ru/data/2012/03/14/1214585998/1itog.pdf

2. Policy measures (last decade)

- Increasing funding for science (1.6 times for the period 2006-2008)
- Additional support for universities: development of innovation infrastructure, stimulation innovative start-ups appearance, attraction of world-renowned scientists, cooperation of universities with enterprises (overall budget more that 3 bn euro).
- Federal development institutions were formed (Russian Venture Company, JSC "RUSNANO", the Russian Foundation for Technological Development (RFTD), State Corporation “Bank for Development and Foreign Economic Affairs (Vnesheconombank)”, Skolkovo innovation center , etc.)
- Coercion of large state-owned enterprises to innovate (about 60 companies that are forced to spend a fixed percent of their earnings oninnovation)

Policy measures (last decade) - 2

- Development of innovation infrastructure for SMEs in the regions (technology parks, business incubators, technology transfer centers, prototyping and design centers, etc.)
- Technology platform formation (32 platforms in one of the 12 spheres)

Source: Strategy - 2020: A new model of growth - a new social policy (2012). The final report on the results of the expert work on the issues of social and economic policy in Russia until 2020. In Russian. http://2020strategy.ru/data/2012/03/14/1214585998/1itog.pdf; The Ministry of Economic Development of Russia (2010). Innovative Russia - 2020. The strategy of innovative development of the Russian Federation for the period up to 2020 (draft). Moscow 2010. Russian. http://www.economy.gov.ru/minec/activity/sections/innovations/doc20101231_016

3. Demand for high-efficiency policy

Taking account of specific innovation profiles of the regions and the involvement of the regions in the drafting and implementation of federal policies

Coordination of innovation policy measures for support different actors (universities, research organizations, large businesses, SMEs, venture capitalists and business angels, etc.)

Improving the efficiency of interaction between actors of the regional innovation systems, including trust building

Cluster policy

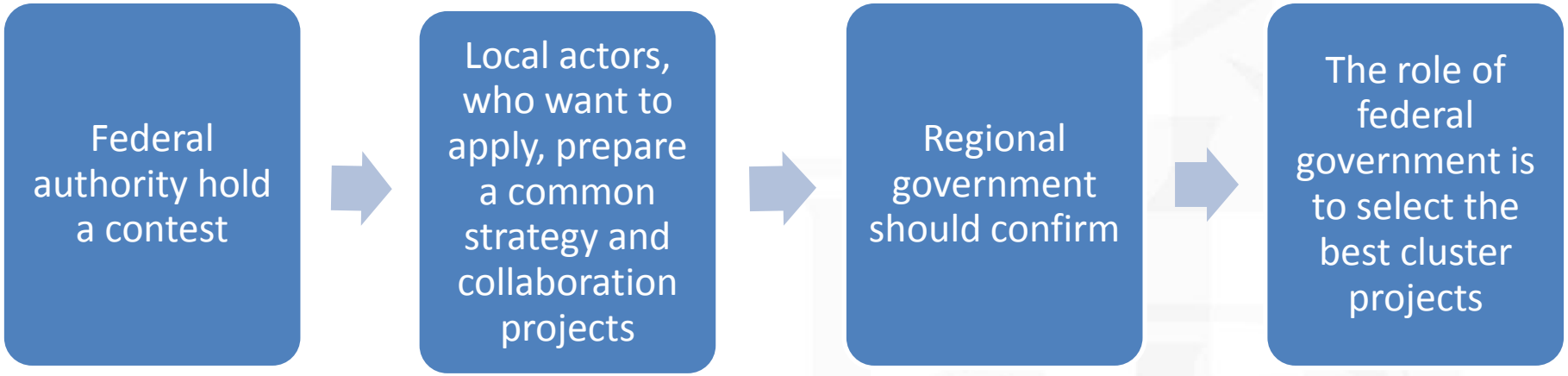
2. Selection of the pilot innovative clusters: procedures and results

1. The concept of a cluster

- objective endowment and relative significant allocation of labor force (turnover, investment) in specific industry and region
- variety of participants: large companies, SMEs, universities and scientific organizations, organisations for collaboration.
- **self-identification, common strategy designing, organizational efforts and collaborative projects.**

2. The key role of regional authorities

"Top-down-top" approach for the selection the pilot clusters



3. The contest

Competition stimulates cooperation among localized actors even if they loose

The data from Innoregio show that 40 percent of clusters, whose applications were rejected, nevertheless realized their project afterwards. And 61 percent of them received financial support from other government programs. Eickelpasch A., Fritsch M. (2005) Contests for cooperation – A new approach in German innovation policy // Research Policy. № 34. P. 1269–1282

Significant share of rejected applications. In Russia during one month 94 applications from the regions were submitted.

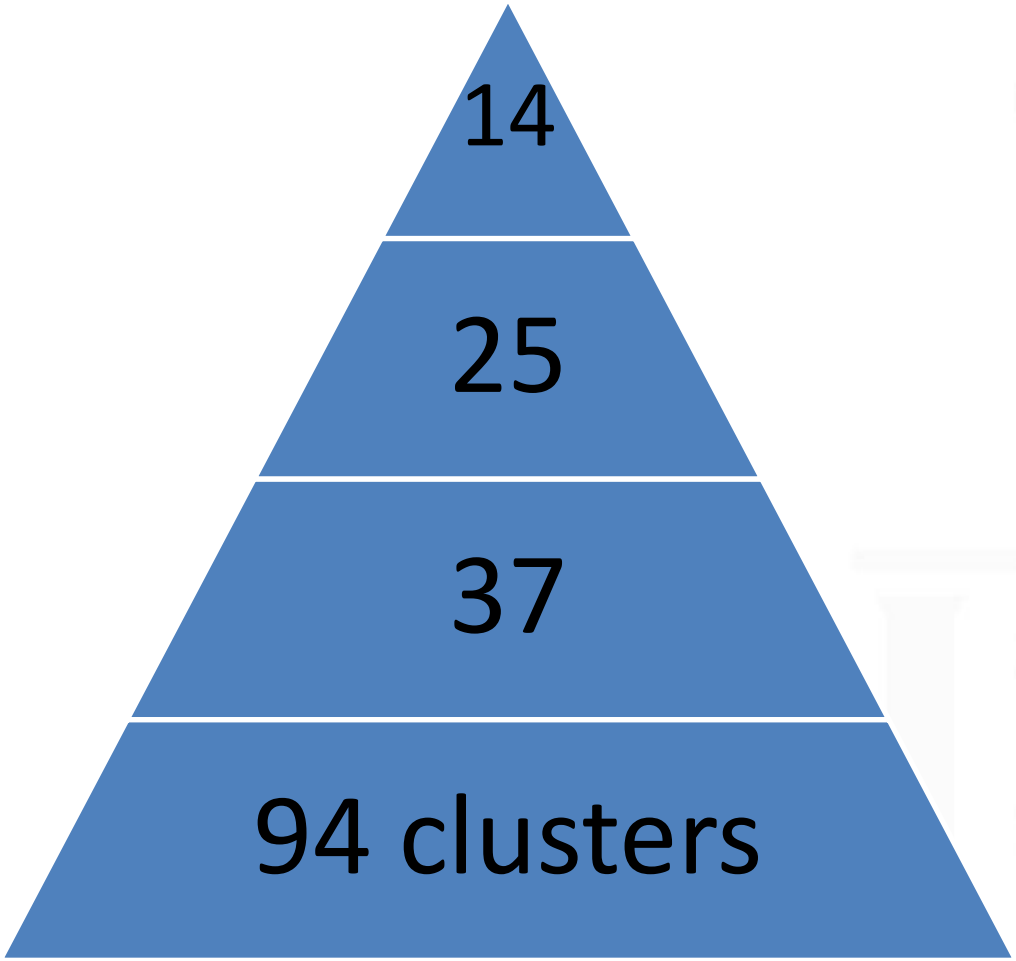
Program	Share of rejected applications, %
BioRegio	76
InnoRegio	95
Competitiveness poles	32
Russian cluster program	85 (73 with the second group)

4. Comprehensive criteria for the selection

	Current situation	Perspective (2017)	Quality of action plan
Scientific and educational potential	7 indicators (4 quantitative ; 3 – qualitative)	2 (1;1)	2 (0;2)
Production (sales) potential	12 (4;8)	6(3;3)	4(1;3)
Life quality, level of transport and logistic, power, engineering, housing and social infrastructure on the territory of cluster location	5 (4;1)	2 (1;1)	2 (1;1)
The level of organizational development	3 (0;3)	0	1 (0;1)

In total, there are 46 quantitative and qualitative indications for complex assessment of cluster development projects through established criteria

5. Two-stage procedure for the selection



The 14 clusters (from 25 pilot ones) are first planned to get a special subsidy.

The applications that was selected through the process of presentation of each clusters, questions and discussions.

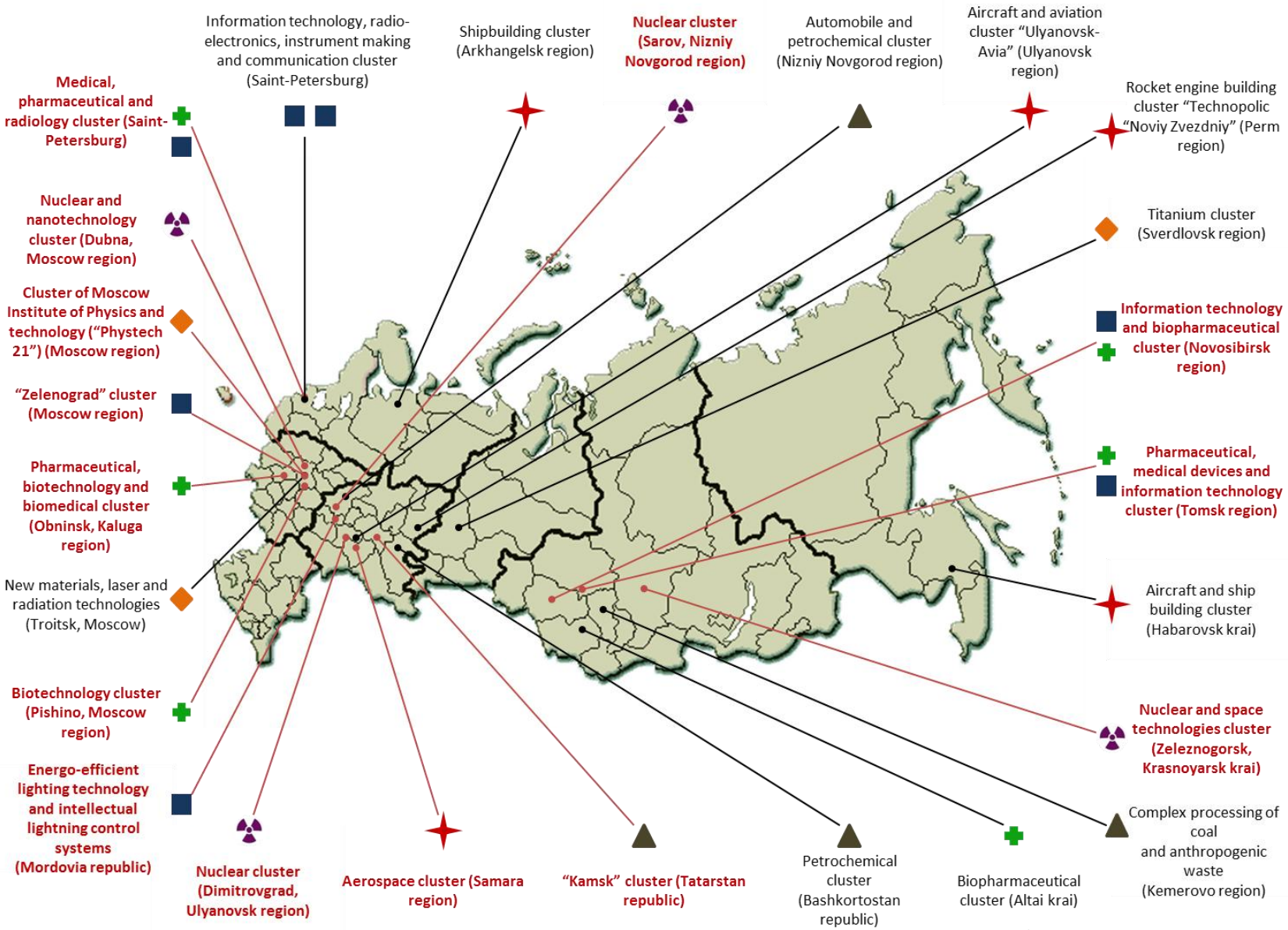
The applications that got the highest grades from the experts during on-line evaluation

Total amount of received applications till 20 April (one-month period)

6. Results. Specialization of the pilot clusters in Russia

Specialization of a cluster	Number of pilot clusters*
nuclear technology	5
aerospace and aviation	5
biotechnology, pharmaceutics, medical devices	6
information and telecommunication technology, electronics and lightning	6
new materials	3
chemical production including petrochemistry	4

*Some pilot clusters have broad specialization and are included in two specialization categories simultaneously



Notation conventions:

First group (14) of the pilot clusters that first of all are planned to get a special subsidy besides all other forms of government support.

Second group of the pilot clusters that won't get the subsidy on the first stage of the cluster program but will be supported through all other instruments.

Specializations of clusters:

- Nuclear and radiation technologies
- Aerospace, aviation, shipbuilding
- Pharmaceuticals, biotechnology and medical devices
- New materials
- Chemistry and petro chemistry
- Information technologies and electronics

7. Key indicators of the pilot clusters' development

Index	Present value (bn euros)	Predicted value (bn euros)	Rate (%)
Total sales (except natural resources)	47 (2011)	95 (2016)	105 (growth rate)
Private investment	16 (2009-2011)	39 (2012-2016)	146 (the ratio of the average annual private investment in 2012-2016 to average in 2009-2011)
R&D expenditures	28 (2007-2011)	24 (2012-2014)	145 (the ratio of average annual R&D expenditures in 2012-2014 to average in 2007-2011)

Source: Ministry of Economic Development of Russia.

3. Planned measures to support the pilot innovative clusters

1. The volume of support is consistent with famous cluster programs in Germany and France

The name of the cluster program	Budget (million euros)	Term of promotion	Budget support per cluster
Russian cluster program	**532 (plan)**	**2013-2017**	**38.0**
BioRegio (Germany)	90	1995-2002	22.5
BioProfile (Germany)	50	1999-2006	16.7
InnoRegio (Germany)	253	1999-2006	11.0
Les pôles de compétitivité (France)	3000	2005-2011	42.3
Spitzencluserwettbewerb (Germany)	200	2012-2016	40.0

2. Focus on consulting, marketing, networking, not on large infrastructure projects

Directions of federal government support for the pilot clusters in 2013:

- purchase of new equipment
- additional education and training
- cluster management activities and external consultancy
- consultancy for the preparation of investment projects in the sphere of innovation
- participation in international fairs, forums, round tables, etc.

Two main goals: Practice of collaboration + Success stories in the short-run (little quick wins).

Significant role of the Regional Cluster Development Centers

- Since 2010 the Ministry of Economic Development of Russia has started to finance the formation and maintenance of the Cluster Development Centers in the regions (Samara, Tomsk, Penza, Kaluga, Astrakhan, Voronezh, etc)
- The goal of Cluster Development Centers is to support of self-organisation of SMEs, enhance internal and external interactions, help with collaborative projects formation. Other goal is to stimulate SMEs' entering as suppliers in clusters formed by FDI of MNC

3. First-priority support from current state programs and institutions

Special subsidy from federal budget to regions' budgets for financing the pilot clusters' projects (first group) – 532M Euros for all 14 clusters for the period of 5 year

Interaction with Skolkovo Foundation:

- Expansion of some of the instruments, developed for the Skolkovo, to pilot clusters' participants
- FDI attraction through Skolkovo Foundation

First-priority support for all the 25 pilot clusters with current programs and federal institutions specialized in infrastructure development and fostering innovations

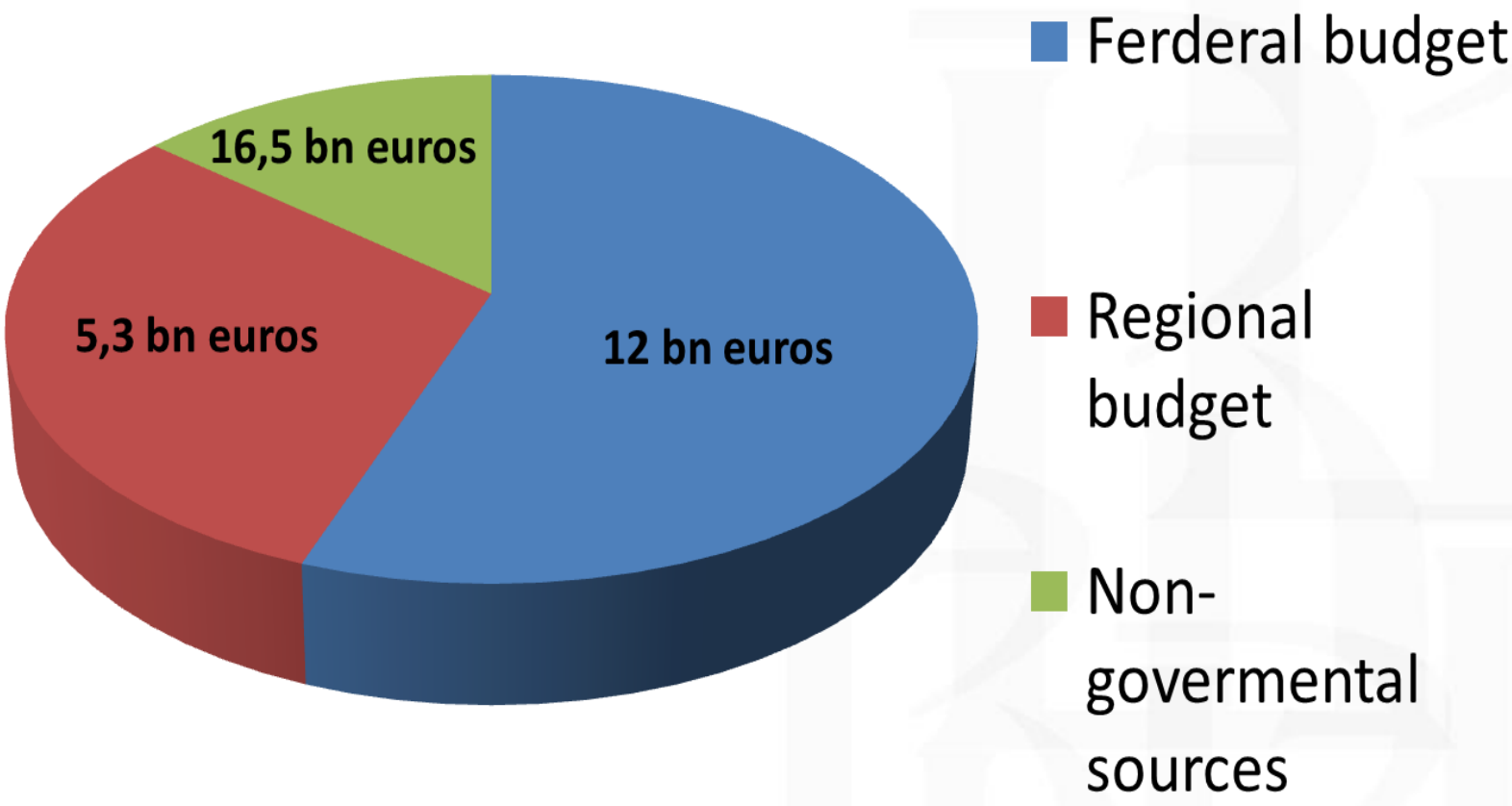
Development of transport and logistic, power, housing and social infrastructure :

- Federal special-purpose programs
- The bank for development and foreign economic affairs, Agency for housing mortgage lending, Russian Housing development foundation
- Investments plans of natural monopolies
- Innovation plans of the largest state-owned corporations

R&D and innovation support:

- Program «Science and technology development», sectoral special-purpose programs, Russian foundation for basic research
- Rusnano, The foundation for technological development, Russian venture capital, Fund for Assistance to Small Innovative Enterprises in Science and Technology
- SME support program of the Minisrtry of Economic Development of Russia

Planned structure of overall financial sources for development of the pilot clusters (first group) in Russia, 2012-2017 years



4. Complex inter-governmental co-ordination

- Strong participation of regional authorities (co-finance, cluster management)
- High-level federal facilitation (inter-ministerial commission)

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Thank you for your attention!