



Kaluga
Region



КФК

Некоммерческое
партнерство



LOCALIZATION PROBLEMS AND SEARCHING FOR POSSIBLE SOLUTIONS: KALUGA PHARMACEUTICAL CLUSTER EXPERIENCE

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KEY PROBLEMS FOR INVESTORS AFTER INVESTMENT STAGE



1. Staff: providing the production of highly qualified personnel including training and retraining, creation of a reserve
2. Logistics: supply chain of raw materials and finished products cost optimization, access to state services in the sphere of foreign economic activity, ensuring special storage and transportation conditions including «Coldbringer chains»
3. Expansion of the number of local suppliers in various stages of localization (cleaning, staff catering, supply of raw materials, packaging, waste utilization, etc.)

1. STAFF

Federal problems:

There are **no approved federal educational standards** in the direction of «Industrial pharmacy» in Russia. There are now only profiles in the field of training «Materials Science and Technology of Materials», «Chemistry, Physics and Mechanics of Materials».

A small number of specialized universities and their unequal location in Russia

Fragmentation of secondary professional education system, absence of «dual training» widespread practice.

Regional problems:

Lack of profile university

A large concentration of pharmaceutical industries in the region in the long term could create tension on the labor market and cause salaries increase of highly qualified specialists

SOLUTION

Creation the Center of pharmaceutical industry employees practical training



The principle of dual training (theory + practice in cluster companies)

Technical and educational world level base

Maximum consideration of investors requirements to high-quality staff training

«Cleanrooms» and the test chamber (Class 3 according to ISO)



RESULTS OF PROJECT



1. **Creation** of the Department «Pharmaceutical and radiopharmaceutical chemistry» based on National research nuclear university «MEPhI», **expansion of licensed programs list** of Bachelor "Nanomaterials for Biology and Medicine", "The pharmaceutical and radiopharmaceutical Materials", Magistracy in "Advanced technologies in the pharmaceutical materials science" **with the direct involvement** of companies investing in the development, programs implementation and monitoring.
2. **Modular principle** of programs construction allows to use resources of the university, scientific and industrial organizations of the cluster, regional engineering center in pharmaceuticals and biotechnology and form staff competencies for all stages of the technological process.
3. Use of modern technological equipment in learning process **reduces investors** costs to adapt personnel, and closed placement to the production sites allows **training without separation from production**.
4. Training opportunities at the Center up to 150 people at the same time most consider the investors needs in personnel training and significantly reduces the tension in labor market.

2. DEVELOPED LOGISTICS



Logistics operators:



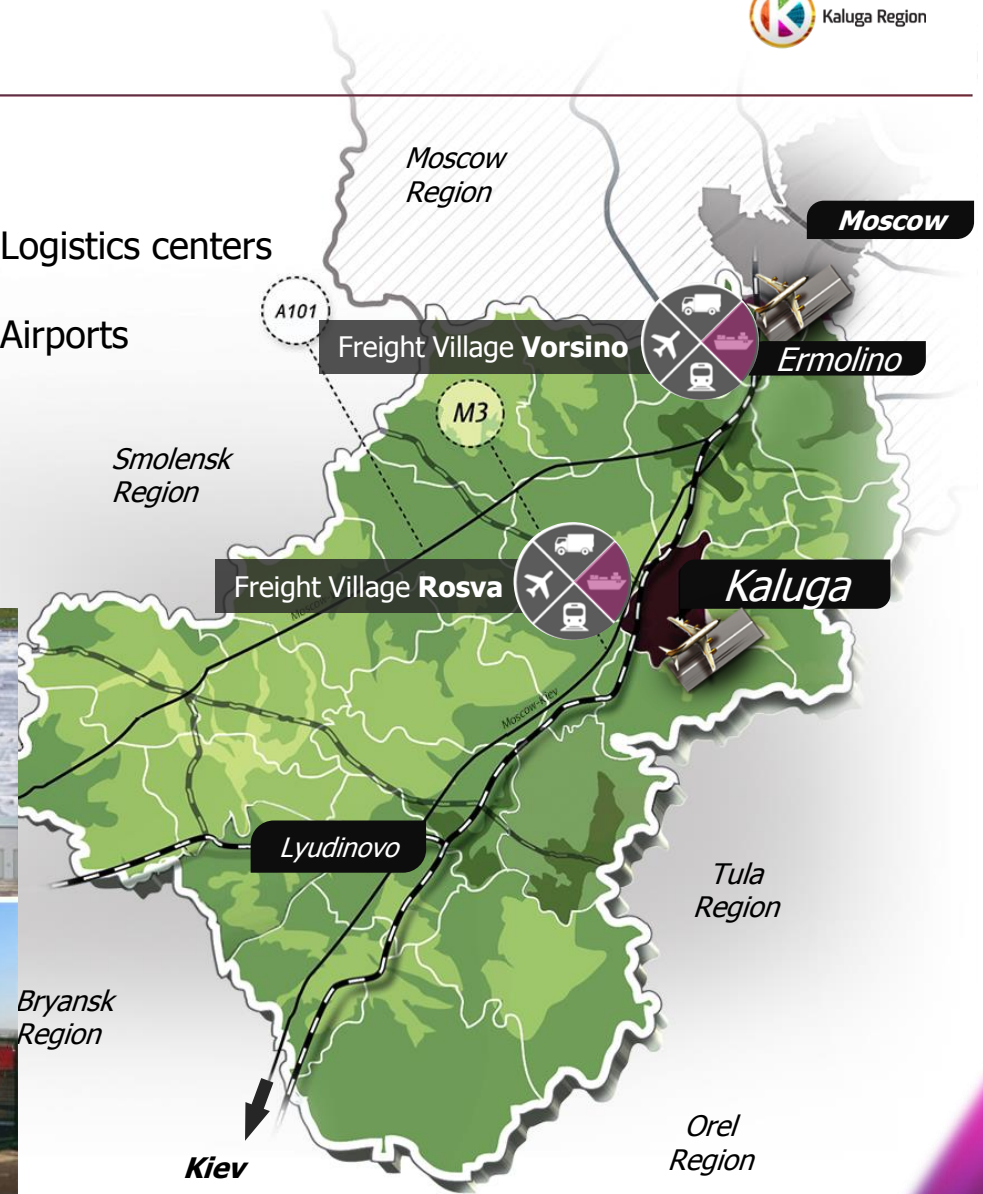
Freight Village RU

FV Vorsino - 600 ha
FV Rosva - 64 ha



Logistics centers

Airports

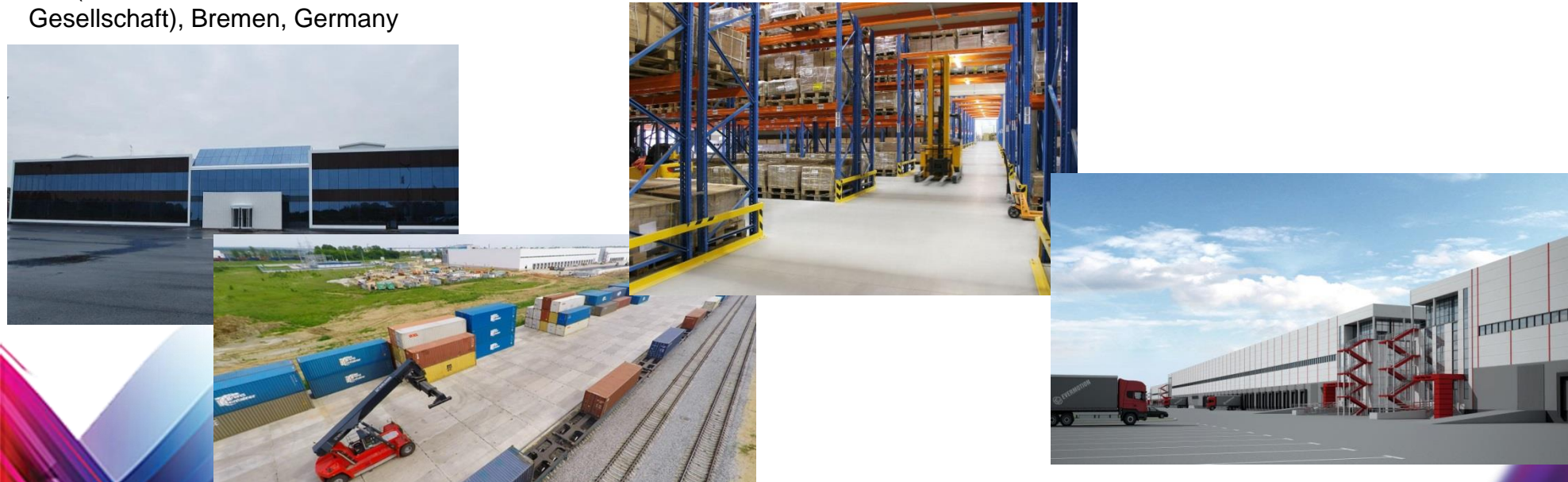




Certificate of the Association of German Freight Villages (DGG - Deutschen GVZ-Gesellschaft), Bremen, Germany

Concentration on common area of all types of infrastructure, government services in foreign economic activity with full range of services:

- customs clearance;
- multimodal container terminal;
- Class “A” Cross-Dock warehouses;
- posts of veterinary and phytosanitary control;
- Kaluga excise customs post;
- business center with the possibility of events.



RESULTS OF PROJECT

Example of effective public-private partnership

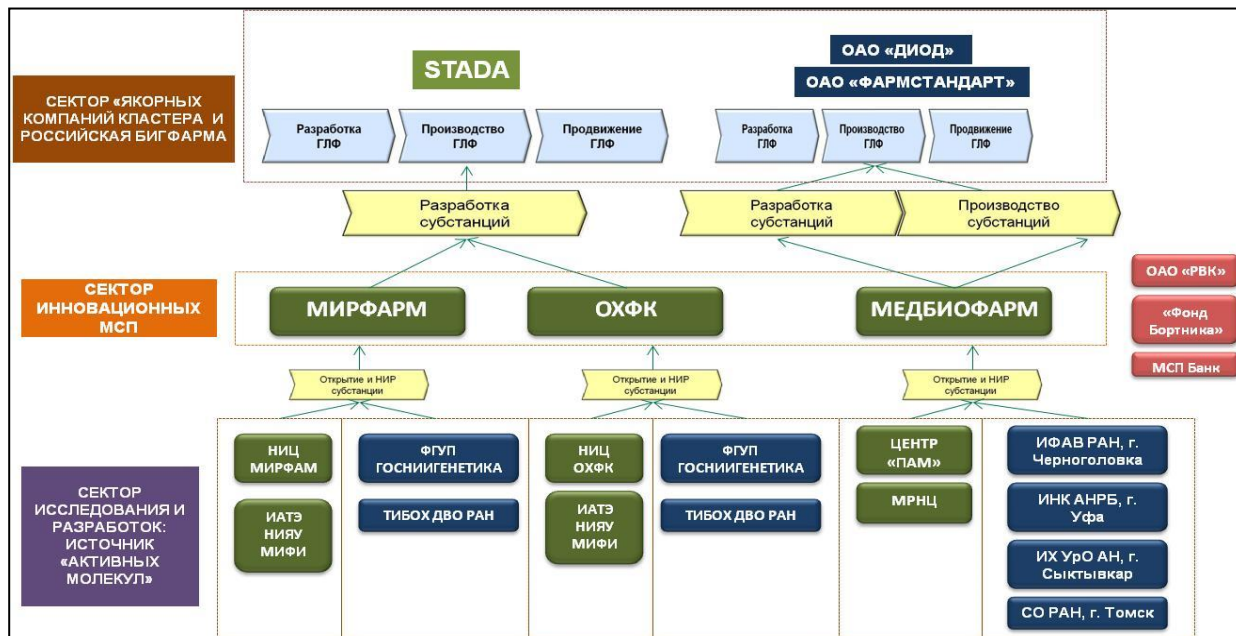


September 19, 2015 at the International Investment Forum in Sochi Group Freight Village and the Russian Direct Investment Fund agreed the basic terms of investing in the further development of the Freight Village

- **radically reducing the time** spent on interoperable technology breaks and the ability to apply and track the status of the containers on line
- **service support for investors round the clock** and assist in the development of optimum transportation routes of and supply schemes
- **low-temperature warehouses** provide the terms of thermolabile goods storage and transportation
- the possibility of **taking into account the individual needs** of the investor to the volume and quantity of the services of the multimodal center

EXPANDING THE NUMBER OF LOCAL SUPPLIERS

Creating opportunities for the formation and development of single production chain within the cluster



Localization company-leaders in the region



Группа компаний «ЭКОСФЕРА»

Factory for utilization and thermal neutralization of pharmaceutical and biological wastes of different types III-V hazard classes including medical waste Class A, B, C and D in part (except mercury).

One of the largest and most environmentally friendly facilities in the Central Federal District.



**Thank you for your
attention!**

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