



***2014 Annual Report***  
*of Rostec Corporation*

*Rostec: A company of highly qualified,  
world-class professionals.*

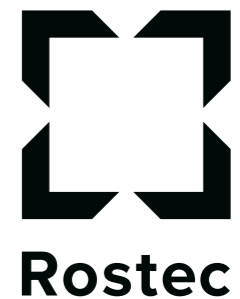
In supporting the advancement of Russian industry, Rostec brings together the best traditions of Russian engineering, the latest technological innovations, and its significant expertise in the strategic development of mechanical engineering.

Rostec Corporation is successfully restoring the relationship between science and industry by developing advanced technologies, introducing advanced know-how, and promoting effective cooperation between Russian industrial enterprises.

Rostec's experienced and highly qualified specialists enable the creation of unique products, opening new export opportunities for Russia.

Rostec Corporation's global objective is securing for Russia a leading position in high technology and mechanical engineering.

*APPROVED*  
*by the Supervisory Board*  
*of Rostec Corporation*  
*(Minutes from \_\_\_\_\_ 2015, No. \_\_)*



*Rostec Corporation*

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# *ANNUAL REPORT* *for 2014*

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CEO  
OF ROSTEC CORPORATION  
**S.V. CHEMEZOV**  
2015

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CHIEF ACCOUNTANT  
OF ROSTEC CORPORATION  
**N.V. BORISOVA**  
2015

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## Introductory note

from D. V. Manturov, Chairman  
of Rostec Corporation Supervisory Board



**In 2014, Rostec Corporation carried out its operations in difficult conditions related to international competition, as well as the economic sanctions imposed by the US and the European Union against a number of its subsidiaries.**

*However, the Corporation has continued to steadily expand its export markets. Rostec developed joint ventures with the Italian companies Pirelli and AgustaVestland and strengthened cooperation with the Chinese corporation Shenhua. KAMAZ assembly plants were established in Azerbaijan, Kazakhstan, and Latin America.*

*Joint projects in Algeria, Uganda, Zimbabwe, South Africa, and other countries are currently in progress.*

Rostec also continued to implement tasks assigned by the state, such as structural reform, developing promising sectors, and improving global competitiveness.

Rostec has successfully solved import substitution problems, especially in the field of high-tech products and equipment, by increasing the share of products manufactured exclusively from components produced in Russia.

Rostec successfully developed projects in the field of rare earth metals (REM), which is a strategic raw material for military and nuclear industries, as well as electronics and rocket production. These projects are designed to strengthen the role of Russia in the world REM market in the coming years and to ensure the independence of its own industry.

One of the most important Rostec activities has been creating conditions for the long-term development of the corporation's industrial infrastructure and sources of growth. The restructuring of leading countries' economies will continue for about five years, after which they will need to begin a new cycle of economic growth. The Russian industrial sector, and in particular Rostec, is facing an important task: to strengthen its competitiveness in this new environment and to raise Russian industry to a new level of technological development.

In my opinion, Rostec's primary results for 2014 are the successful changes it made in all key areas of activity, as well as its search for new development opportunities and the development of innovative technologies that will lay the foundation for the longterm success of the corporation.

# 2014

IN FIGURES

## 101.4

billion rubles –  
total investment  
volume

## 2.176

million rubles –  
output per  
employee

## 443

people –  
the total number of  
employees

**D.V. MANTUROV**

MINISTER OF TRADE AND INDUSTRY OF THE  
RUSSIAN FEDERATION

# Introductory note

from S. V. Chemezov, CEO



In 2014, Rostec successfully continued the process of forming a world-class industrial corporation. Despite political and economic difficulties, Rostec managed to maintain a high level of basic economic indicators, such as revenue and profit. Reforms in the management of holding companies were carried out, the system of motivating their leaders was improved, and important new projects, including international ones, were launched. Thus, the corporation's chosen strategy for development has proved its effectiveness on the ground.

In 2014, Rostec paid particular attention to its holding companies. They should become not only centers of value, but also industry leaders and highly competitive, world-class companies. Most of our holdings already manage their own enterprises, whose shares were transferred to the holdings by the corporation. Thus, Rostec has renounced direct intervention in the ongoing activities of its holding companies, choosing to rely instead on modern market mechanisms.

Improving the holdings' operational independence as well as their degree of responsibility for the results of their operations has required the introduction of a new model of corporate governance that relies on the best global practices and increases the companies' efficiency as well as their transparency for the transferred assets' management. The main objective of the corporate governance reform is the capitalization increase of the holdings.

A control system based on target values was developed in order to increase the motivation of holding companies' senior management. Boards of directors were formed according to this new principle, which reduced the number of state workers and senior executives in the corporation and increased the number of independent directors from among the representatives of the business and scientific communities.

In the past year, the company launched new large-scale projects, including international ones, such as agreements on the construction of a fourth airport for the Moscow aviation hub in Ramenskoye. Together with the Chinese corporation Shenhua, Rostec will implement energy projects aimed at developing the Far East. Moreover, one of the corporation's organizations won a tender for the construction of an oil refinery in Uganda.

Despite the difficult foreign policy situation, relationships with major international corporations, including those in the West, successfully expanded throughout 2014. However, Rostec also began focusing on new markets in the Asia-Pacific region, Southeast Asia, Latin America, Africa, and the Middle East. Binding agreements were signed for a number of projects in China and South-East Asia and plans for the development of joint projects were finalized.

Percentage of innovative products  
24%

Percent of civilian products  
28%

## 2014

IN FIGURES

964.5  
billion rubles –  
consolidated  
revenue

33.9  
billion rubles –  
consolidated  
net income

14.84  
billion USD –  
volume of  
exports

At the same time, Rostec furthered the process of import substitution. New large-scale programs, particularly in the fields of engine-building, software, and electronic components, were developed. First of all, we must eliminate our dependence on foreign developments in the military arena, which is a matter of national security.

*The volume of state defense orders for Rostec's enterprises increased by more than 60% when compared with 2013. Rosoboronexport has exported arms and military equipment worth 13.2 billion USD, exceeding the planned targets.*

An important result of 2014 was the increase in the share of revenue from sales of civilian products. The second-generation YotaPhone smartphone, a unique Russian development recognized by the international professional community, was released. Diversified production and the release of new civilian products provided further financial stability to the corporation's ventures.

In order to increase productivity, Rostec paid great attention to investment in human capital and training young professionals who will make technological breakthroughs and bring Russian industry to a new level. Rostec's enterprises require employees capable of operating the most cutting-edge equipment. In strategically important sectors, including defense, this is a task of national importance. Rostec actively cooperates both with universities and with institutions of secondary vocational education. In particular, this work led to the victory of the Rostec team in WorldSkills, the national championship of cross-industry blue-collar occupations, in the fall of 2014.

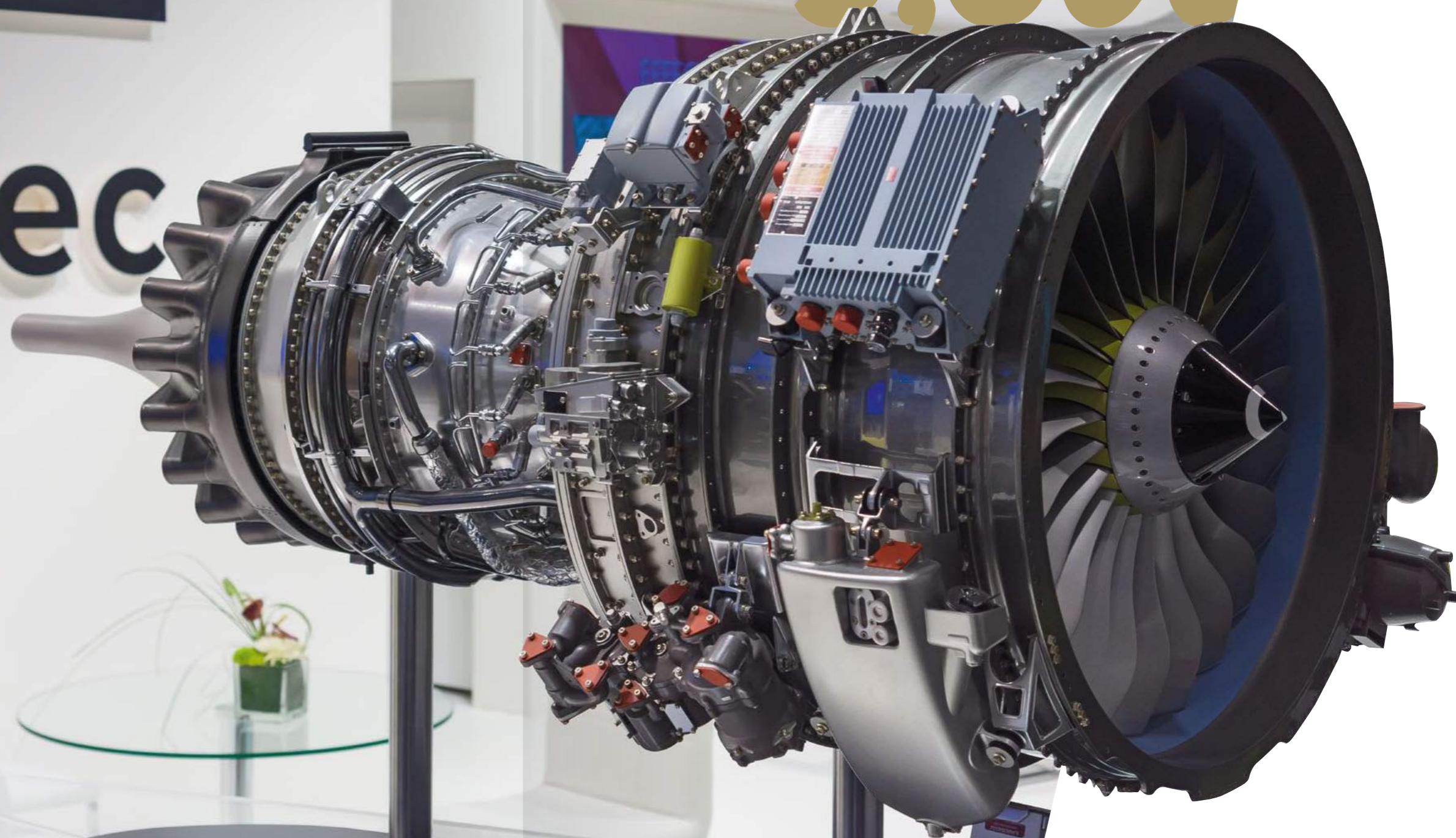
Our country must respond to the challenges of industrialization, which requires hard work and maximum dedication from all employees of Rostec organizations. The future of Russian industry will in many ways depend on the performance of Rostec.

S.V. CHEMEZOV  
CEO



*General information  
about Rostec Corporation*

Rostec



9.500

*SQ. M.  
total area  
of Rostec expositions  
at international exhibitions*

# 1 General information about **Rostec Corporation**

The Corporation was established by the Federal Law of **November 23, 2007, No. 270-FZ, “On the State Corporation Rostec for Assistance in the Development, Production, and Export of High-Technology Industrial Products,”** which declared, the corporation a legal entity formed by the Russian Federation and with the organizational and legal identity of a state corporation.

## FULL NAME OF THE CORPORATION IN RUSSIAN –

Государственная корпорация по содействию разработке, производству и экспорту высокотехнологичной промышленной продукции «Ростех»;

## ABBREVIATED NAME IN RUSSIAN –

Государственная корпорация «Ростех»;

## FULL NAME OF THE CORPORATION IN ENGLISH –

State Corporation Rostec for Assistance in the Development, Production, and Export of High-Technology Industrial Products;

## ABBREVIATED NAME IN ENGLISH –

Rostec Corporation.

## INFORMATION ON STATE REGISTRATION:

Certificate of state registration: series 77, No. 011483840, issued by the Office of the Federal Tax Service for the city of Moscow on December 3, 2007;

Main state registration number (OGRN): 1077799030847, date of assignment December 3, 2007; INN/KPP: 7704274402/770401001.

## INFORMATION ON THE AUDITOR OF THE CORPORATION:

Name:

Limited Liability Company RSM Rus; OGRN: 1027700257540; INN/KPP: 7722020834/772901001. 119285, Moscow, Pudovkin St., 4.

## CONTACT INFORMATION:

Legal address:

119991, Moscow, Gogolevsky Boulevard, 21, building 1.

Actual address:

119048, Moscow, Usachev St., 24.

Phone: (495) 287-25-25;

Fax: (495) 987-65-74, 987-65-73;

Web address: [www.rostec.ru](http://www.rostec.ru).

## THE PURPOSE OF ROSTEC

is to promote the development, production, and export of hightechnology industrial products by providing support in domestic and foreign markets to Russian companies, developers and manufacturers of high-tech industrial products, and subsidiaries, in which Rostec’s prevailing share in their authorized capital or in accordance with the agreements concluded between them allows it to influence the decisions taken by these subsidiaries (hereinafter – Rostec’s subsidiaries), by attracting investments to the subsidiaries in various industries, including the military-industrial complex, as well as by participating in social and other socially significant projects in the interest of the state and society in accordance with this Federal Law and other federal laws, as well as the decisions of the President of the Russian Federation.

## THE MAIN FUNCTIONS OF ROSTEC

in implementing these functions are defined by the Federal Law № 270-FZ and the decisions of the President of the Russian Federation (The Decree of the President of the Russian Federation as of July 10, 2008, No. 1052, “Issues of the State Corporation for Assistance in the Development, Production, and Export of High-Technology Industrial Products Rostekhnologii” (hereinafter – The Decree of the President of the Russian Federation No. 1052), the Order of the President of the Russian Federation as of March 4, 2014, No. 46-RP, to entrust the State Corporation for Assistance in Development, Production, and Export of High-Technology Industrial Products Rostekhnologii with the functions of the customer to ensure the implementation of engineering studies and preparation of project documentation for the construction of regional perinatal centers in the Russian Federation, etc.).

## *The purpose of Rostec*

*is to promote the development, production, and export of hightechnology industrial products by providing support in domestic and foreign markets to Russian companies, developers, and manufacturers of hightech industrial products...*



The name of the corporation was changed in accordance with a Federal Law from July 21, 2014, No. 259-FZ, “On amendments to the Federal Law ‘On Rostec Corporation and specific Legislative Acts of the Russian Federation’”.

# 1<sup>1</sup> History of Rostec



*On July 10, 2008,*

**THE RUSSIAN PRESIDENT SIGNED A DECREE** transferring **426 enterprises** to Rostec.

Among the assets transferred to Rostec were:

- 148 companies in pre-crisis and crisis states,
- 28 companies under bankruptcy,
- 17 companies not engaged in any economic activity,
- 27 companies that had partially lost their property or had a significant risk of loss.

The total debts of these enterprises amounted to 630 billion rubles. There had destroyed production chains, worn out fixed assets, and demonstrated an acute need for effective management.

## 2007

/

## 2008



*establishment*

*On November 23, 2007,*  
**Russian President V. V. Putin** signed the Federal Law No. 270-FZ, “On the State Corporation Rostec for Assistance in the Development, Production, and Export of High-Technology Industrial Products.”



*structure*

# 426

*enterprises  
are part  
of Rostec*



*finances*

# 511

*billion rubles —  
Rostec's revenue  
in 2009*

## 2009

/

*Rostec's revenue*

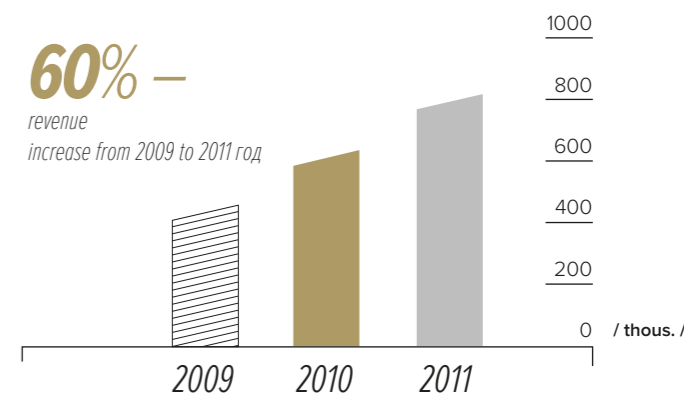
amounted to **511 billion rubles**, the tax payments to budgets of all levels was **62 billion rubles**, and the output per employee did not exceed **1 million rubles**

# 62

*billion rubles —  
Rostec tax payments  
in 2009*

# 60%

*revenue  
increase from 2009 to 2011 год*



# 633

*billion rubles —  
Rostec's revenue  
in 2010*

## 2009

/

## 2010

*Rostec's revenue*

amounted to **633 billion rubles**, tax payments to budgets of all levels was **76 billion rubles**, the consolidated financial result of Rostec's subsidiaries turned positive for the first time, and the net income for the year amounted to **15 billion rubles**

# 76

*billion rubles —  
Rostec tax payments  
in 2010*



finances

46

billion rubles —  
net income  
in 2011

931

billion rubles —  
Rostec's revenue  
in 2012

75

billion rubles —  
R&D investments  
and modernization of  
production in 2012

225

billion rubles —  
Rostec's export  
revenue in 2012

38.5

billion rubles —  
net income  
in 2012

2012

2011

### *In two years, Rostec's revenue*

increased **by 60%, up to 817 billion rubles**. By comparison, growth in industrial production in Russia as a whole over the same period was 15%. The employee output increased almost two-fold.

817

billion rubles —  
Rostec's revenue  
in 2011

### *On December 21, 2012,*

the rebranding of Rostec was announced. Rostec's corporate identity was changed, and a new logo and slogan, "A Partner in Development," were presented.

The Rostec Supervisory Board has decided to optimize the Rostec structure and reduce its number of holdings to 13. In particular, the assets of holding Aviapriborostroeniye were transferred to Concern Radio-Electronic Technologies, the assets of Mechanical Engineering Design Bureau to the holding High Precision Systems, and the assets of Sirius and Orion wereto Roselectronika.

At year-end, Rostec's revenue amounted to 931 billion rubles. Net profit was 38.5 billion rubles, export revenue reached 225 billion rubles, and state orders made up 196 billion rubles. Since 2009, investments in research and development and modernization of production have increased more than twofold, reaching 75 billion rubles by the end of 2012. The rate of average wages at the Rostec's enterprises significantly increased.

1

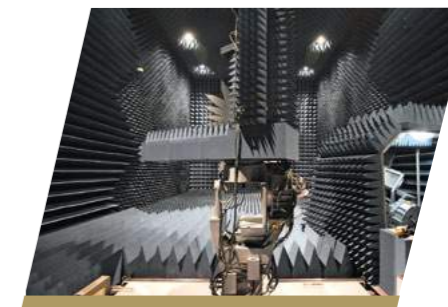
trillion rubles —  
Rostec's revenue  
in 2013

40

billion rubles —  
net income  
in 2013

### *Long-term strategies have been worked out*

Long-term development strategies for the majority of holding companies have been formed. A number of major projects have been launched, including the production of rare earth metals and composite materials. A portfolio of international contracts has been built up and the geography of exports has been expanded.



2013

2014



### *The Russian President signed amendments*

to the Federal Law No. 270-FZ, which changed the corporation's name to Rostec Corporation. Under the Decree of the President of Russia from January 14, 2014, No. 20, Radio Engineering Concern Vega, Concern Sozvezdie, Concern Automation and Management Systems have become part of Rostec.

The first stage of the corporate governance reform has been completed: new Boards of Directors with the participation of independent directors have been formed, and updated model charters of the Corporation's holding companies have been developed and approved.



# 1<sup>2</sup> Supervisory board

THE SUPERVISORY BOARD IS THE SUPREME GOVERNING BODY OF THE CORPORATION AND IS RESPONSIBLE FOR STRATEGIC DEVELOPMENT ISSUES. UNDER THE DECREE OF THE PRESIDENT OF RUSSIA, THE FOLLOWING MEMBERS OF ROSTEC'S SUPERVISORY BOARD WERE APPOINTED:



**Denis  
MANTUROV**

MINISTER OF INDUSTRY AND TRADE OF THE RUSSIAN FEDERATION,  
CHAIRMAN OF THE SUPERVISORY BOARD

- >> 2003–2007 – CEO of OBORONPROM Corporation.
- >> 2007–2008 – Deputy Minister of Industry and Energy of the Russian Federation.
- >> 2008–2012 – Deputy Minister of Industry and Trade of the Russian Federation.
- >> From 2012 to the present – Minister of Industry and Trade of the Russian Federation.



**Anton  
VAINO**

DEPUTY CHIEF OF STAFF OF THE PRESIDENTIAL ADMINISTRATION OF RUSSIA

- >> 2007 – First Deputy Chief of Protocol of the President of the Russian Federation.
- >> 2007–2008 – Deputy Chief of the Government of the Russian Federation
- >> From December 27, 2011 – Minister of the Russian Federation – Chief of Staff of the Government of the Russian Federation.
- >> From May 22, 2012 to the present – Deputy Chief of Staff of the Presidential Administration of Russia.



**Anton  
SILUANOV**

MINISTER OF FINANCE OF THE RUSSIAN FEDERATION

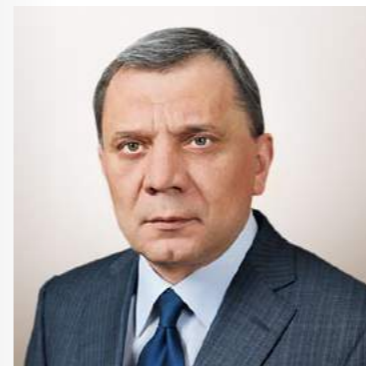
- >> 2005–2011 – Deputy Minister of Finance of the Russian Federation
- >> From September 2011 – Acting Minister of Finance of the Russian Federation.
- >> From December 2011 to the present day – Minister of Finance of the Russian Federation and introduced in the Security Council of the Russian Federation.
- >> From January 2013 – Dean of the Financial and Economic Department of the Financial University under the Government of the Russian Federation.



**Yuri  
USHAKOV**

AIDE TO THE PRESIDENT OF THE RUSSIAN FEDERATION

- >> 1998–1999 – Deputy Minister of Foreign Affairs of the Russian Federation (was in charge of cooperation with the UN, as well as legal and humanitarian issues).
  - >> 1998–2008 – Russian Ambassador to the United States and Permanent Observer of the Russian Federation to the Organization of American States in Washington, DC..
  - >> 2008–2012 – Deputy Chief of the Government of the Russian Federation.
  - >> From 2012 to the present – Aide to the President of the Russian Federation.
- Honored employee of the Diplomatic Service of the Russian Federation, honored employee of the Foreign Ministry of the Russian Federation, holds the diplomatic rank of ambassador extraordinary and plenipotentiary.



**Yuri  
BORISOV**

RUSSIAN DEPUTY MINISTER OF DEFENSE

- >> 1998–2004 – CEO of Science and Technology Center Module..
- >> 2004–2007 – Head of the Directorate for the Electronic Industry and Control Systems of the Federal Agency for Industry
- >> 2007–2008 – Deputy Head of the Federal Agency for Industry.
- >> 2008–2011 – Deputy Minister of Industry and Trade of the Russian Federation.
- >> 2011–2012 – First Deputy Chairman of the Military-Industrial Commission under the Government of the Russian Federation
- >> From 2012 to the present – Russian Deputy Minister of Defense.



**Sergey  
CHEMEZOV**

CEO OF ROSTEC CORPORATION

- >> B 1975 – graduated with an honors degree from the Irkutsk Institute of National Economy. Later graduated from the Higher Courses of the Military Academy of the General Staff of the Armed Forces of the Russian Federation.
- >> 1980–1988 – worked in Luch Experimental-Industrial Association, later serves as the head of Luch in the GDR.
- >> 1988–1996 – Deputy CEO of Foreign Trade Association Sovintersport.
- >> 1996–1999 – Head of the Foreign Relations Office of the President of the Russian Federation
- >> 1999–2001 – rCEO of Promexport.
- >> 2001–2007 – First Deputy CEO, CEO of Rosoboronexport.
- >> From 2007 to the present – CEO of Rostec Corporation

**MILITARY RANK**

Colonel-general

**CHAIRMAN OF THE BOARD OF DIRECTORS OF A NUMBER OF LARGE RUSSIAN COMPANIES, INCLUDING:**

VSMPO-Avisma,  
KAMAZ,  
Rosoboronexport,  
Uralkali.

Full member of the Academy of Military Sciences, Doctor of Economics, Professor.

**Igor  
LEVITIN**

AIDE TO THE PRESIDENT OF THE RUSSIAN FEDERATION

- >> Member of the Board of Directors of the Open Joint Stock Company United Aircraft Corporation (UAC). Member of the Board of Directors of Russian Railways.
- >> From May 20, 2004 – Minister of Transportation of the Russian Federation.
- >> 2008 – appointed Chairman of the Board of Directors of Aeroflot.
- >> 2012–2013 – Aide to the President of the Russian Federation.

**Larisa  
BRYCHEVA**

AIDE TO THE PRESIDENT OF THE RUSSIAN FEDERATION, HEAD OF THE STATE LEGAL DIRECTORATE OF THE PRESIDENTIAL EXECUTIVE OFFICE. STATE COUNCILOR OF THE RUSSIAN FEDERATION OF THE 1ST CLASS. HONORED LAWYER OF THE RUSSIAN FEDERATION

- >> 1993–1999 – Head of the Presidential Administration, Head of the Executive Office of the President of the Russian Federation in the Federal Assembly, Deputy Head of the State Legal Directorate of the President of the Russian Federation.
- >> 1999 – Head of the State Legal Directorate of the President of the Russian Federation.
- >> 2004 – Aide to the President and Head of the State Legal Directorate of the President of the Russian Federation. Reappointed to these positions in 2012.
- >> 2006 – Member of the Board and member of the Presidium of the Presidential Council for Priority National Projects and Demographic Policy (reapproved for these posts in 2008).
- >> 2008 – approved as member of the Council and member of the Presidium of the Presidential Council for Anticorruption, Deputy Chairman of the Presidential Commission for the Reform and Development of Civil Service.

**Alexander  
FOMIN**

DIRECTOR OF THE FEDERAL SERVICE FOR MILITARY-TECHNICAL COOPERATION, MEMBER OF THE COMMISSION FOR EXPORT CONTROL OF THE RUSSIAN FEDERATION

- >> 2001–2005 – Deputy Head of the Department, Head of the Department of Rosoboronexport.
- >> 2005–2007 – Deputy Director of the Federal Service for Military-Technical Cooperation.
- >> 2007–2012 – First Deputy Director of the Federal Service for Military-Technical Cooperation.
- >> From 2012 to the present. – Director of the Federal Service for Military-Technical Cooperation.

**1<sup>3</sup> Managing  
board****Sergey  
CHEMEZOV**

CEO OF ROSTEC CORPORATION

- >> In 1975 graduated with a honors degree from the Irkutsk Institute of National Economy. Also graduated from Higher Courses of the Military Academy of the General Staff of the Armed Forces of the Russian Federation.
- >> 1980–1988 – worked in the Luch experimental-industrial association, and also as the Head of Luch in the GDR.
- >> 1988–1996 – Deputy CEO of the Foreign Trade Association Sovintersport.
- >> 1996–1999 – Head of the Foreign Relations Office of the President of the Russian Federation.
- >> 1999–2001 – Head of Promexport.
- >> 2001–2007 – First Deputy CEO, CEO of Rosoboronexport.
- >> From 2007 to the present – CEO of Rostec Corporation.

**MILITARY RANK**

Colonel-general

**CHAIRMAN OF THE BOARD OF DIRECTORS OF A  
NUMBER OF LARGE RUSSIAN COMPANIES, INCLUDING::**

VSMPO-Avisma,  
KAMAZ,  
Rosoboronexport,  
Uralkali.

**SCHOLARLY ACTIVITY**

Doctor of Law, Professor.

Full member of the Academy of Military Sciences, Doctor of Economics, Professor.



**Vladimir  
ARTYAKOV**

FIRST DEPUTY CEO OF ROSTEC CORPORATION

- >> 2000–2006 – Deputy CEO of Rosoboronexport..
- >> 2005–2007 – Chairman of the Board of Directors of AVTOVAZ, President of AVTOVAZ Group.
- >> August 2007 – May 2012 – Governor, Chairman of the Samara regional government..
- >> May 2012 – appointed Deputy CEO of Rostec Corporation.
- >> From February 2014 to the present – First Deputy CEO of Rostec Corporation.



**Nikolay  
VOLOBUEV**

DEPUTY CEO OF ROSTEC CORPORATION

- >> 2004–2006 – Deputy Head of the Federal Customs Service of Russia.
- >> 2006–2007 – Director for Special Commissions of FSUE Rosoboronexport.
- >> From 2007 to the present – Deputy CEO of Rostec Corporation.



**Igor  
ZAVYALOV**

DEPUTY CEO OF ROSTEC CORPORATION

- >> In the first 10 years of his career, was promoted from a foreman to a department head at the Science and Research Institute of Machine Building.
- >> 1999–2002 – Deputy Chairman of Vnesheconombank, member of the Board of Directors.
- >> 2002–2007 – Deputy Chairman of the Board of Bank VTB (Vneshtorgbank).
- >> From 2007 to the present – Deputy CEO of Rostec Corporation.



**Dmitry  
SHUGAEV**

DEPUTY CEO OF ROSTEC CORPORATION

- >> Until 2008 – Chief of Staff to the CEO of FSUE Rosoboronexport.
- >> 2008–2009 – Chief of Staff to the CEO of Rostec Corporation.
- >> From 2009 to the present – Deputy CEO of Rostec Corporation.



### Sergey SKVORTSOV

DEPUTY CEO OF ROSTEC CORPORATION

- >> **2005–2013** – main partner of Troika Dialog and President of Troika Capital Partners, which manages private equity and venture capital investments.
- >> **March 2013** – appointed Managing Director for Investments of Rostec Corporation.

Sergey Skvortsov has overseen the implementation of 30 large-scale projects related to foreign direct investment in the Russian economy.



### Sergey KULIKOV

CHIEF OPERATING OFFICER OF ROSTEC CORPORATION

- >> **2001–2008** – worked at Rosoboronexport.
- >> **2008–2009** – Deputy Chief of Staff to the CEO and Aide to the CEO of Rostec Corporation.
- >> **2009–2013** – Chief of Staff to the CEO of Rostec Corporation.



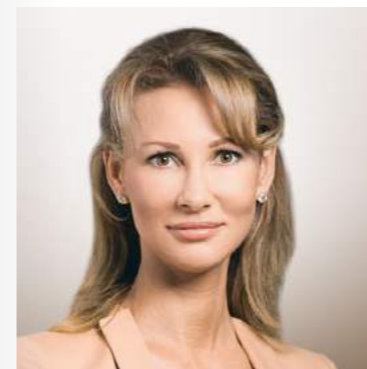
### Yuri KOPTEV

CHAIRMAN OF THE SCIENTIFIC-TECHNICAL COUNCIL OF ROSTEC CORPORATION

- >> **1992–2004** – CEO of the Russian Space Agency and CEO of the Russian Aviation and Space Agency.
- >> **2004–2008** – Director of the Military-Industrial Complex Department of the Ministry of Industry and Energy of the Russian Federation.
- >> **2008–2009** – Head of the Group of Advisers of Rostec Corporation.

#### SCHOLARLY ACTIVITY

Honored Employee of the Aerospace Industry of the Russian Federation; Honored Scientist of the Russian Federation



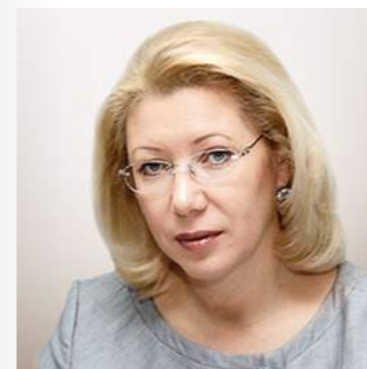
### Alla LALETINA

HEAD OF THE LEGAL DEPARTMENT OF ROSTEC CORPORATION

- >> **2007–2010** – Director of the Legal Department of SiburTyumenGaz (JSC SIBUR Holding, JSC).
- >> **2009 – November 2013** – Deputy CEO for Corporate and Legal Matters of Tobolsk-Polymer (JSC SIBUR Holding, JSC).
- >> **From November 2013** – Head of the Legal Directorate of Rostec, Head of the Legal Department of Rostec Corporation.
- >> **From November 29, 2013** – Chairman of the Arbitration Court of Rostekhnologii Corporation.

#### SCHOLARLY ACTIVITY

Doctor of Law, Professor.



### Natalya BORISOVA

CHIEF ACCOUNTANT OF ROSTEC CORPORATION

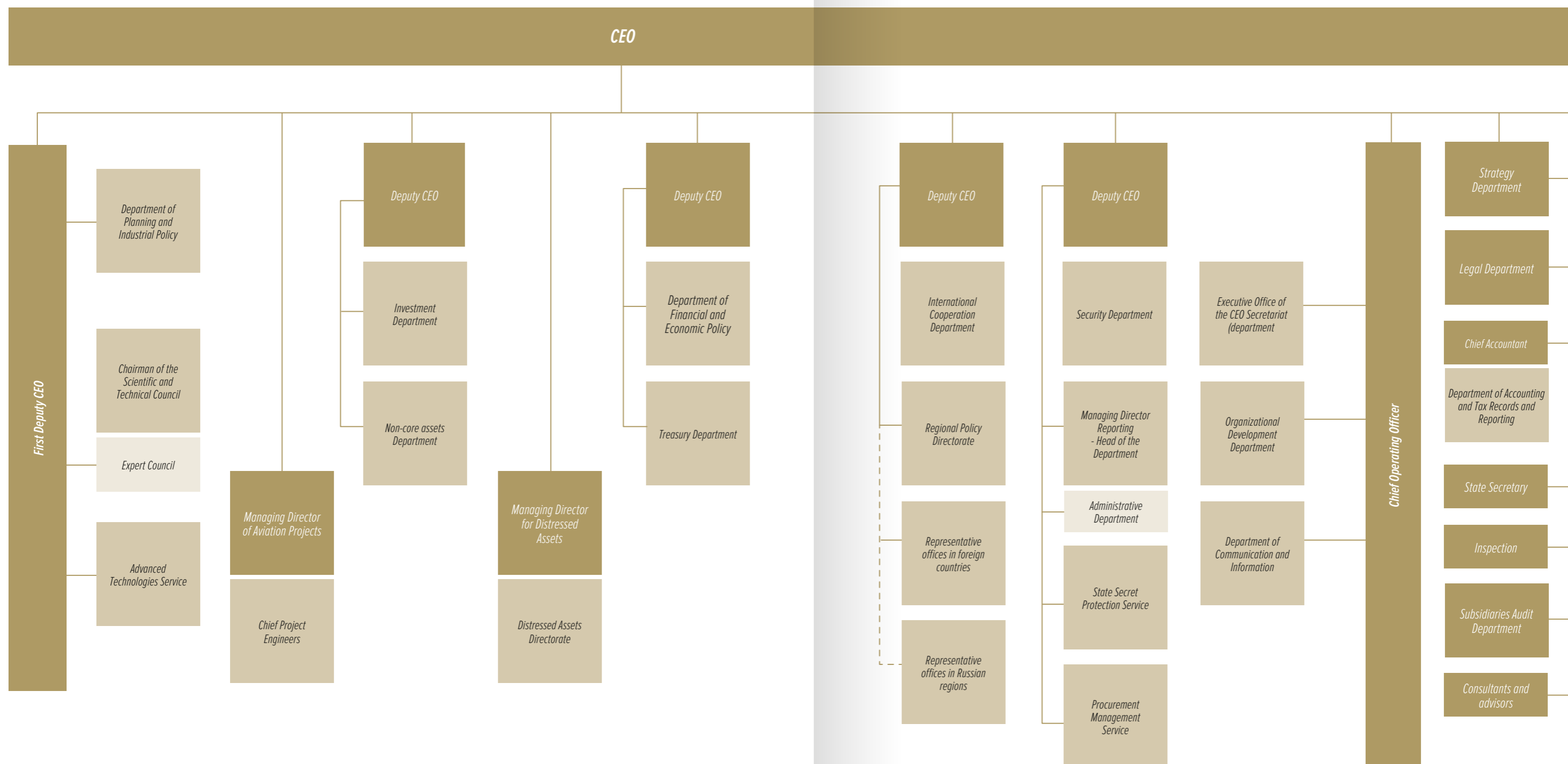
- >> **Since the establishment of Rostec in 2007 to the present** – Chief Accountant of Rostec Corporation.

#### SCHOLARLY ACTIVITY

Candidate of Economic Sciences, Professor, Honored Economist of the Russian Federation.

# 1<sup>4</sup> Corporate structure

## 1<sup>4.1</sup> Central office structure



## 1<sup>4.2</sup> Asset management structure

**ROSTEC INCLUDES 15 HOLDING COMPANIES** (integrated structures) formed on a sectoral basis in the defense and civilian industries, 32 direct management companies, and 14 infrastructural subsidiaries.

**THE TOTAL NUMBER OF ROSTEC SUBSIDIARIES EXCEEDS 700.**

# 1<sup>5</sup> Strategic goals and objectives

**Rostec's goal** is to promote the development, production, and export of high-tech industrial products

**BASED ON THE MAIN GOAL**, the supporting goals that have been formed are categorized as either special or commercial. Special goals are related to state tasks to ensure defense capabilities and national security, or to achieve strategic goals for the country's development. Commercial goals are characteristic of commercial organizations and are related to the competitiveness and investment attractiveness of Rostec's enterprises and holding companies.

## **Special goals include:**

- *producing high-quality weapons and military equipment, surpassing global competitors in performance;*
- *preserving and strengthening of the position of the Russian Federation on the world markets for arms and military equipment.*

## **Commercial goals include:**

- *preserving the leading position on high-tech product markets;*
- *capitalization of companies.*

**IN ORDER TO ACHIEVE THESE GOALS AND CARRY OUT THE MISSION**, the following strategic priorities (objectives) are planned:

- building an effective business model for the corporation;
- improving the competitiveness of its holding companies;
- ensuring the investment attractiveness of the holding companies (integrated structures).

## Building an effective business model for the corporation

### **1. BUILDING A CORPORATION OF DEVELOPMENT IN ACCORDANCE WITH INTERNATIONAL BEST PRACTICES**

In order to achieve the target model and improve the corporation's management efficiency, the goal setting, target systems, and approaches to the management of holding companies will be differentiated, based on the direction and effectiveness of their activities. For this purpose, the organizational separation of various approaches to asset management has been implemented, with the following units formed:

- a unit engaged in the management of the corporation's assets, including the development and increase of effectiveness of strategically important and financially stable companies;
- a unit working with distressed assets to restructure distressed and non-core assets.

Moreover, powers and responsibilities will be redistributed between the corporate center and holding companies, as well as direct management organizations, in order to strengthen the independence of the latter.

### **2. ENSURING THE BALANCE OF GOALS, POWERS, AND RESPONSIBILITIES**

Transitioning to the corporation's target model requires the harmonization of responsibility and authority within the corporate structure. In particular, plans are in place to modernize the corporation's participation as part of implementing the federal program, "Development of the Military-Industrial Complex of the Russian Federation from 2011-2020".

While keeping administration of the monetary funds at the level of the corporate center, it is planned to delegate the responsibility and control over the implementation of federal target programs to the level of the parent organizations of holding companies (integrated structures).

Along with the use of budgetary financing, recipients will be held responsible for attracting extra-budgetary funds for these purposes. The low profitability of most of the corporation's subsidiaries within the military-industrial complex makes it almost impossible to provide independent co-financing of program activities from profits alone. To solve this problem, Rostec is taking steps to ensure the receipt of funds in the required amount from other sources, including the fund for innovation and investment development belonging to Rostec and its holding companies (integrated structures), formed from the revenues from the sale of non-core assets and other income.

## Improving the competitiveness of Rostec holding companies

### 1. STRENGTHENING THE STRATEGIC FOCUS ON NEW MARKETS AND SEGMENTS

In order to improve the competitiveness of its holding companies, Rostec must strengthen its strategic focus on new markets and segments. In addition to its existing primary products (electronics, avionics and aircraft equipment, conventional arms, ammunition, helicopters, engines, and cars), the product portfolio will be diversified through new areas that can achieve a higher growth rate and/or respond to a larger demand (medical equipment and pharmaceuticals; biotechnologies; machinery and equipment for key economy sectors; energy saving equipment; telecommunications equipment; and advanced materials, especially composite materials). Moreover, to increase the competitiveness of Rostec's holding companies, it is necessary to diversify the production of dual-use technologies as well as to expand some of the defense industries into civilian areas. Diversification will allow the corporation to enter more competitive and less politicized and thus risky markets.

Diversification into civilian areas can happen through: automobile production and gas turbine engine building; electronic components and products based on light-emitting diodes; automated and information systems; and products based on optical and optoelectronic systems.

### 2. IMPROVING THE OPERATIONAL EFFICIENCY OF ROSTEC HOLDING COMPANIES

Improving the competitiveness of Rostec holding companies requires increasing their efficiency by reducing costs, increasing the efficiency of the financial resources' use, reducing the time to market, and increasing the production flexibility and product quality. For this purpose, Rostec is implementing the following steps:

- transitioning to new operating models;
- building a centralized management system for financial flows of the corporation's subsidiaries as part of the single corporate treasury;
- improving the efficiency of value chain elements;
- increasing technological levels;
- providing personnel development.

Transitioning to new operating models means increasing the proportion of non-critical business that can be efficiently (with minimal risk and at a lower price) outsourced to third parties. Modern models of machine building involve managing the company's assets so that they can flexibly respond to changes in demand. Another related element of this approach is a global network of suppliers that

minimizes the number of so-called single suppliers where possible. As part of the holding companies' activities, increased attention will be devoted to engineering services, as well as after-sales service.

### 3. BUILDING A CENTRALIZED MANAGEMENT SYSTEM FOR THE FINANCIAL FLOWS OF THE CORPORATION'S SUBSIDIARIES

under the single corporate treasury will help to transition a decentralized management model for money flows and financial risks to the corporation and its subsidiaries to a centralized model, which will:

- reduce the overall credit portfolio of the Group;
- reduce external financing maintenance costs;
- reallocate resources at the level of holding companies, which will ensure funding for the most important state projects and activities;
- implement a monitoring system for the target use of financial resources, especially budget financial resources;
- monitor the execution of payment schedules and budgets of the corporation's organizations at the corporate level, and more.

### 4. IMPROVING THE EFFICIENCY OF VALUE CHAIN ELEMENTS

means constructing world-class manufacturing systems. Basic principles for this goal include: cost reduction, quality assurance, production flexibility, and various mechanisms to ensure their implementation, such as "lean production", the "just in time" concept, and "Six Sigma" methodologies. Moreover, the corporation is developing competences in project management to help holding companies successfully implement projects for launching new products in the market (reduce the time to market) and for massive re-equipment, which most enterprises will require in the coming years.

A series of measures to stimulate sales and optimize procurement is being implemented. In addition, the centralization of a number of service and supporting functions (for example, insurance and security services and more) and complete outsourcing (for example, the corporation's car fleet) will help reduce costs. At the same time, cost-effectiveness and risks are taken into account when making decisions for each of the outsourced processes (those transferred to infrastructural subsidiaries).

To ensure the development, modernization, manageability, and competitiveness of the corporation's holding companies, the most advanced information technologies are required: software and hardware systems, automation systems, and communication services. In this regard, Rostec has created a unified policy for developing information technologies, which will help manage the growth of IT enterprises and holding companies in accordance with its strategy.

Today, there is a significant technological gap between the world leaders and most of the key developmental areas of the corporation's holding companies, as their basic equipment is extremely worn-out. Increasing the technological level requires the active renewal of fixed assets, as well as the implementation of large-scale research and development work. Investment is needed in major areas, such as the development of the automotive

industry, helicopter industry, engine building, avionics and aircraft equipment, and radio-electronics.

### 5. PERSONNEL DEVELOPMENT

is realized through the establishment of a multilevel system of continuous education. This system includes measures for personnel retention, developing basic educational departments, creating and developing training centers for retraining and advanced training of engineering and technical personnel and the regular labor force, as well as establishing high-profile postgraduate and doctorate programs in cooperation with universities. The system of continuous education of employees of the corporation and its subsidiaries will include both long- and short-term courses conducted by universities and organizations that have leading roles in innovation. Top domestic and foreign lecturers and innovative business practices will be involved in this work. Classes will be held in the form of lectures, seminars, workshops, and business games.

The continuous education system will be implemented through the following avenues:

- creating a new multi-level training program for employees of Rostec and its subsidiaries in the fields of innovative economics and business (including advanced training on issues of technology commercialization, innovation management, attracting investments to innovation projects and their management, and promotion of products in domestic and foreign markets);
- improving the existing programs for professional education and the training of new and retraining of existing engineering and technical personnel;
- implementing academic training for specialists and managers in post-graduate and doctorate schools.

### 6. OPTIMIZING THE ASSET PORTFOLIOS OF HOLDING COMPANIES

Improving the competitiveness of holding companies will involve the optimization of their asset portfolios, the creation of development strategies, and the sale or restructuring of non-core and distressed assets.

The formation of the holding company's target portfolio is based on the following principles:

- consideration of synergy effects. Forming the holding company's portfolio must ensure maximum coordination of synergy between its divisions. Major areas for synergy among the corporation's subsidiaries include those related to technology (implementing similar technologies to meet the needs of different customer segments), production (positive effect of the economies of scale on production and the production capacity optimization), and clients (the formation of comprehensive proposals to clients);
- balance of the holding company's portfolio. The formation of the holding company should take into account the need to balance its portfolio in terms of its current state of assets (market position and financial condition), prospects for development (the balance of "mature" and developing businesses in the portfolio), and the diversification of risks (market, industry, and regional);
- narrowness of the holding company's portfolio. In order to concentrate resources and competences in the formation of a holding company, it is necessary to limit the number of market areas (segments), in which the holding company operates.

## Ensuring the investment attractiveness of holding companies

IN ORDER TO ENSURE INVESTMENT ATTRACTIVENESS, ATTENTION WILL BE DEVOTED TO CORPORATE GOVERNANCE STANDARDS AND INVESTOR RELATIONS. A MANAGEMENT SYSTEM FOCUSED ON THE CREATION OF VALUE AND RISK MANAGEMENT IS ALSO BEING ESTABLISHED.

### 1. STANDARDS OF CORPORATE GOVERNANCE AND INVESTOR RELATIONS

According to the strategy, the corporation will reduce the degree of its interference in the activities of its holding companies, moving away from direct control of operations and toward strategic management. To improve its efficiency, unified standards of corporate governance are being developed and implemented, which will lead to the creation of a corporate governance code for holding companies. An efficient system of corporate governance improves transparency and reduces risks for the corporate center, while also significantly increasing the value of the holding companies on the market.

To control the effectiveness of the corporate governance systems in general and the Board of Directors in particular, processes and procedures for the internal audit and control of the Board of Directors' decisions are being established. For this purpose, corporate standards of internal control are developed at the level of the corporate center, which will then be used at the holding company level as well.

### 2. A MANAGEMENT SYSTEM FOCUSED ON THE CREATION OF VALUE

Achieving the corporation's development strategy goals and increasing the investment attractiveness of the holding companies requires implementing a management system focused on the creation of value at the level of the holding company. For this purpose, the system of strategic planning that adheres to the same principle and meets the demands of the corporation is being implemented among the holding companies, which allows for the creation of a clear system of goals and objectives for each holding company. Then, the top level targets of the corporation and its holding companies are disseminated to lower level targets, namely objectives and activities from the corporate center to the individual organizational units, holding companies, enterprises, and finally to individual employees. Thus, a management system focused on the creation of value allows for the actions of employees and business units to contribute directly to achieving specific goals as part of the corporation's development strategy. In addition, the performance management system is permanent, meaning that this process will take place regularly in the holding companies and the corporate center.

### 3. BUILDING A SYSTEM TO PREPARE THE CONSOLIDATED FINANCIAL STATEMENTS OF HOLDINGS ACCORDING TO INTERNATIONAL FINANCIAL REPORTING STANDARDS

One of Rostec's main development strategies is to increase the investment attractiveness of its holding companies (integrated structures) through the creation of a system of consolidated financial statements that comply with international financial reporting standards (IFRS). A number of the corporation's holding companies (integrated structures), including Concern Radio-Electronic Technologies, Ruselectronics, Shvabe, Russian Helicopters, and UEC, have already started to compile consolidated financial statements in accordance with IFRS.

To manage the process of preparing the consolidated financial statements of holdings and establishing consistent approaches, the corporate center has developed a number of standardized methodological documents, such as: "Perimeter of consolidation of the corporation's subsidiaries and associates," "Unified accounting policies," and "Methodology of preparing the corporation's consolidated financial statements in accordance with the IFRS." To ensure the stable functioning of the system, the above documents are updated on a regular basis.

The system of preparing the holdings' consolidated financial statements in accordance with the international financial reporting standards (IFRS) developed by the corporate center is a strategically important and tactically necessary process, the implementation of which will improve the information transparency, comparability, and accuracy of the holdings' statements, provide objective information about their activities, give an adequate assessment of the results achieved, predict further development, and meet the information needs of users. Finally, this will all facilitate the adoption of cost-effective solutions.

### 4. BUILDING A RISK MANAGEMENT SYSTEM

Effectively implementing the corporation's development strategy and improving the investment attractiveness of holding companies within the activity programs requires a range of measures to control key risks and reduce their negative effects, and thus significantly influence the results of the Corporation's development strategy activities. Risk management constitutes a part of the strategic management of the corporation and its holding companies. Key elements in this field include: analysis and risk assessment; developing and implementing risk management activities (prevention, equalizing, mitigating problems, and more); and monitoring the process and its results.

## 1<sup>6</sup> Key figures for 2014



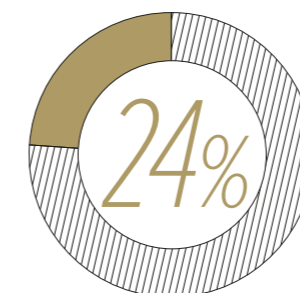
**964.5**  
billion rubles –  
consolidated revenue

**33.9**  
billion rubles –  
consolidated net income

**14.84**  
billion USD –  
volume of exports



**101.4**  
billion rubles –  
total investment volume



percentage of  
innovative products



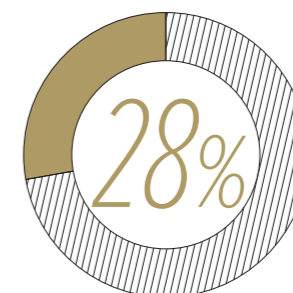
**37,140** rubles  
average monthly wages



**443,369**  
total number of  
employees



**2.176**  
million rubles –  
employee output



percentage of  
civilian products

# Commentary from A. S. Laletina regarding sanctions

## The sanctions imposed by Western countries

against the Russian Federation in connection with the Ukrainian crisis inevitably affected Rostec and its subsidiaries. At the same time, the sanctions are not the same for all companies.



Head of the Legal  
Department

ALLA  
LALETINA

**IN ASSOCIATION WITH LEADING GLOBAL LAW FIRMS**, both the ways to negate possible negative effects of sanctions and the prospects of challenging the inclusion of a particular organization in the sanctions list have been analyzed. When adopting relevant decisions, the corporation is ready to act to protect its interests and those of its subsidiaries.

Previously concluded international contracts have been carefully studied for the possibility of a contracting party to refuse to perform its obligations due to the sanctions. Since sanctions may qualify as force majeure, under certain circumstances, a contracting party can be released from liability for failure to fulfill obligations under the contract.

It is obvious that, in this case, legally protecting the interests of Rostec and its subsidiaries is the top priority. In this regard, an active exchange of experiences with other sanctioned domestic companies is underway. It should be noted that the possibility of challenging limitations imposed by national and supranational jurisdictional authorities is also under consideration.

Despite the introduction of sanctions, Rostec and its subsidiaries continue to cooperate with foreign partners in the framework of existing agreements.

In regard to future projects, our western colleagues await further political developments, so they are currently not very active in terms of pursuing new partnerships. At the same time, our Asian partners have expressed a sharp increase in interest in cooperation.

From a legal perspective, our foreign partners bear the responsibility of monitoring and enforcing the sanctions regime; but in reality, the current situation forces us to structure international projects so as to ensure that our partners are in strict compliance with the rules of the sanctions. As for the restrictions on receiving funding from the Western financial institutions, Rostec and its subsidiaries are pursuing financing from the Russian market, so there are no liquidity problems due to the introduction of sanctions.

## Sanctions imposed by the US:

All American individual and legal entities are prohibited from carrying out any new financial transactions, as well as transactions for granting new loans for a period of more than 30 days for the corporation's organizations.

This prohibition applies to all subsidiaries, in which the corporation alone, or together with other persons included in the sanctions list, holds more than 50% of shares.

In regards to BAZALT, Concern Sozvezdie, Concern Kalashnikov, KBP, and KRET, the sanctions suggest the following:

- freezing all accounts and assets in the US;
- prohibiting transactions in the US and with US officials.

## Sanctions imposed by the EU:

Individual and legal entities from the EU are prohibited from:

- supplying, selling, and/or transferring dual-use products;
- providing financial or brokerage services related to dual-use products to Concern Kalashnikov, Concern Sirius, RT-Stankoinstrument, RT-Chemcomposite, Tula Arms Plant, Machine Engineering Technologies, High Precision Systems, and Basalt.

Organizations controlled by these entities are not subject to EU sanctions.

Individual and legal entities from the EU are prohibited from providing financing with a repayment period of more than 30 days to OPK Oboronprom and the companies under its control (ownership of more than 50% of shares).

## Rostec's losses from sanctions.

The sanctions are not aimed directly at Rostec and its subsidiaries, as the corporation does not receive funding from abroad.

Sanctions can negatively affect:

- the investment attractiveness of the corporation's projects and the capitalization of its brand;
- the profit received by Rostec from the ownership of equity positions and shares in its subsidiaries, due to the impossibility of obtaining financing from the US and the EU;

- the lack of access to new technologies that could theoretically contain dual-use elements.

Sergey Chemezov, CEO of Rostec Corporation, has also been named to the sanctions list.



## Reforming Rostec corporate governance

88.7 billion rubles  
— the total value of contracts  
finalized by Rostec subsidiaries  
as part of Federal Target Programs  
in 2014



## 2 Reforming Rostec corporate governance

### Commentary from Alla Laletina, Head of the Legal Department of Rostec Corporation

*There have been two major stages in the history of Rostec. The first stage was the actual formation of the corporation: collecting and integrating of a wide variety of enterprises, research institutes, and production facilities. A single centralized management system was necessary to gain control over the assets and build the structure of the holding companies.*

*OAt that time, the corporate structure was based on a single approach to managing all the holding companies and defining its leadership's scope of powers. This method initially proved its effectiveness.*

*However, now is the time to give greater responsibility to the holding companies and their managers. Earlier, before their transfer to the holding companies themselves, enterprises' shares were included in the integrated structures and owned by Rostec. During this time, it was necessary to develop and build the governance system of the holding companies, to evaluate the management's qualifications, and to assist them in solving problems, if necessary.*

*Rostec has now entered a new stage of development. The holding companies' structures have been determined, and the transfer of shares of Rostec subsidiaries to them is underway. Accordingly, the system of corporate governance and control also needs to be changed. The old model featuring the centralization and participation in the operating activities of the holding companies is being abandoned for equity control, which can also be exercised through the Boards of Directors.*

*The management system uses three basic models of corporate governance, all of which differ primarily in the amount of authority granted to the CEO and the Board of Directors, as well as the level of the corporation's influence over the holding companies' operations.*

*There is also a fourth model of management intended for holding companies with private investors. A good example is Concern Kalashnikov, 49% of which is owned by private investors. In this case, the system of corporate governance is determined by the terms of the shareholders' agreement, and not the internal rules of Rostec.*

*Under the new system of corporate governance, the holding companies will operate as the value creation centers and recognizable global brands. This corporate reform is intended to benefit their capitalization and to increase their value.*

*The first stage of the corporate governance reform is almost over. The Boards of Directors have been formed, and the new model charters have been developed and approved. Yet the development of the corporate governance system is a dynamic process. In the future, there will be continuous monitoring of how the new model works in practice and how the holding companies operate.*

### **The main instruments for Rostec subsidiaries' corporate governance include:**

- Boards of Directors of Rostec subsidiaries;
- Institute of Independent Directors;
- Various committees under the Rostec subsidiaries' Boards of Directors;
- Institute of the Corporate Secretary.

### **IN 2014, THERE WAS A SIGNIFICANT CHANGE IN THE SYSTEM OF CORPORATE GOVERNANCE**

of the holding companies and Rostec subsidiaries. The formation of the corporate governance system is based on the existing corporate laws of the Russian Federation and also take into account the corporate governance principles of the Organization for Economic Cooperation and Development (OECD), the recommendations of the corporate governance code, and the best practices of corporate relations, in order to implement the objectives and priorities defined by the corporation's development strategy.

In accordance with Rostec's development strategy, the corporate governance system involves increasing the independence of holding companies and establishing stable, world-class industrial companies on their foundation.

Thus, a transition is underway from an operational management to corporate control of Rostec's organizations, the basic principle of which is delegating to the management of subsidiaries more authority and greater accountability for their decisions.

The main management tool and the foundation for corporate control implementation is the work of the management bodies of the holdings and companies (Shareholders' Meeting, Board of Directors), which implies a significant increase in the level of professional management.

### **THE MAIN PRINCIPLES OF ROSTEC SUBSIDIARIES GOVERNANCE**

The holding companies are in different financial and economic situations and different stages of development. The degree of independence, authority, and responsibility with respect to Rostec is based on the capability of the holding companies to carry out their activities independently and effectively, which determines the need for a differentiated approach to Rostec subsidiaries' corporate governance.

A point-based ranking system has been used to categorize Rostec subsidiaries under the corporate control model. Implementing the ranking method in the differentiated corporate governance system ensures constructive competition between management organizations of companies. Granting the heads of higher-rated organizations the right to act independently and take decisions under delegated authority is an important non-financial motivator that can reveal management capabilities and increase the management's accountability for its decisions.

A particular category in the corporate governance model is assigned to each Rostec subsidiary for a period of one year. After this year, the assigned corporate governance model can be reviewed as per results of being re-ranked.

### **To minimize management risks and to implement the comprehensive control of Rostec subsidiaries' activity, a system of multi-level control has been implemented:**

- Auditing Commission (Auditor);
- External Auditor;
- Internal Control Service;
- Board of Directors;
- Audit Committee under the Board of Directors;
- Structural unit of Rostec overseeing the corporate governance of its subsidiaries;

- Structural units of Rostec whose functions include governance of its subsidiaries regarding the execution of state defense orders and federal target programs, property management, auditing, financial and economic activities, and the monitoring and management of risks related to such activities;
- Committees under the Boards of Directors of Rostec subsidiaries;
- Institute of the Corporate Secretary.

## 2<sup>1</sup> Boards of Directors for Rostec subsidiaries

**The Board of Directors** is a collegial body that oversees the general management of the economic entity.

### THE FUNCTIONS AND OBJECTIVES OF THE BOARD OF DIRECTORS

play a key role in improving the entity's efficiency and ensuring its sustainable business development. The distinguishing industry features of Rostec and its subsidiaries dictate that, in the process of implementing these functions and objectives, the Board of Directors' members (hereinafter – corporate directors) when necessary can be more involved in the company's operations than the “classical” approach to corporate governance allows. At the same time, the Board of Directors or individual corporate directors, including the Chairman of the Board of Directors, should not and cannot fill in for the organization's management or duplicate its functions.

*In order to increase the efficiency of the Board of Directors, in 2014 Rostec subsidiaries began developing the Institute of Independent Directors, which seeks to:*

- *ensure the Board of Directors contain people who can act in the interests of the organization independently and without any conflict of interest;*
- *enlist the services of the external high-level specialists who, while not employees of the entity, can carry out an independent examination of the decisions taken and make appropriate recommendations and proposals for the development of the organization;*
- *ensure a reasonable balance of interests of the organization, its shareholders (participants), management, and other interested parties;*
- *strengthen the organization's reputation in the eyes of customers, partners, investors, the larger business community, and public entities, by promoting leading business practices that increase trust in its operation.*

## 2<sup>2</sup> Standing committees of the Boards of Directors

### A standing committee of the Board of Directors

is an expert and advisory body of the BOD that functions as an important tool for corporate directors.

### THE STANDING COMMITTEE MEETING IS A PREPARATORY STAGE

to discussing issues at a BOD meeting, where binding decisions are adopted. The standing committee oversees in-depth studies of draft decisions of the BOD and discusses possible consequences of such decisions.

In 2014, a reform of the standing committees of the Board of Directors was carried out: new approaches to forming the standing committees were introduced, and operational standards were approved. Moreover, it was decided to form four main standing committees attached to the Board of Directors:

- Strategy Committee,
- Audit Committee,
- Budget Committee,
- Human Resources and Remuneration Committee.

*The committees are formed by the decision of the Rostec subsidiary's Board of Directors in accordance with the internal regulations of the holding company, in the standing committee's competency, objectives, and procedures. The operations of all standing committees are interrelated and based on the BOD's operation plan. The principles of the standing committees' formation and procedures are established by the regulations on the Board of Directors and the regulations on the standing committees, approved by the organizations' Boards of Directors.*

**THE STANDING COMMITTEES' COMPETENCE** includes considering issues related to and developing recommendations for the following main operation areas.

Name of the committee	Main operation areas
<b>Strategy Committee</b>	<p>Priority operation areas of the organization and holding company (hereinafter – HC (IS), medium- and long-term development strategy of the organization and HC;</p> <p>Programs (business plans) for financial and economic activities of the organization and HC;</p> <p>Investment activities of the organization and HC</p>
<b>Budget Committee</b>	<p>Financial, economic, and budget management of the organization and HC;</p> <p>Budget, finance, and credit policy of the organization and HC;</p> <p>Corporate solutions with a significant influence on the financial condition of the organization and HC.</p>
<b>Human Resources and Remuneration Committee</b>	<p>Evaluating the operating effectiveness of the Board of Directors and its standing committees, the members of the Society's executive bodies and other key management employees of the organization approved by the Board of Directors;</p> <p>Forming an effective and transparent system of remunerating members of the Board of Directors and executive bodies, as well as other key management employees of the organization;</p> <p>The human resources policy of the organization and holding company, strengthening the occupational structure and the system of planned succession of the members of the management and executive bodies, as well as other key management employees.</p>
<b>Комитет по аудиту</b>	<p>The system of internal control, audit, and risk management;</p> <p>Ensuring the compliance with regulatory requirements and informing the chief executive officer of the company about any violations in this area;</p> <p>Working out recommendations on the reliability of the accounting (financial) statements.</p>

## 2<sup>3</sup> Corporate secretaries

**Protecting the rights and interests of Rostec** as a shareholder includes the strict observance by an organization's bodies and officials of the corporate procedures established in current legislation, company charter, and other internal documents of the organization, as well as a high level of performance discipline.

**OF PARTICULAR IMPORTANCE IS THE STRICT ORDER AND HIGH QUALITY OF PREPARING AND CONDUCTING** corporate events as the general shareholders' and the Board of Directors' meetings, as well as company information disclosure. The introduction of the corporate secretary's position in the parent organizations of the holding companies will help to solve these problems.

*The corporate secretary is a special person whose purpose is to promote the efficient operation of the organization's administrating authorities and to ensure that the organization's management and officials observe the requirements guaranteeing the exercise of the rights and legitimate interests of its shareholders.*





## Overview of Rostec subsidiaries

# 15

*sectoral*  
holding companies,  
32 direct management companies,  
and 14 infrastructural organizations  
comprised Rostec Corporation in 2014



## 1. IN THE FIELD OF HELICOPTER CONSTRUCTION, INDUSTRY, DEVELOPMENT AND ENGINEERING



### Russian Helicopters Holding, JSC

A leading global manufacturer of combat, medium, and heavy helicopters, Russian Helicopters through its enterprises produced around 35% of the global combat helicopter fleet and 50% of the medium military transport helicopters. As for the global civilian helicopters fleet, the holding's products account for a record 71% of helicopters with a maximum takeoff weight of over 20 tons and 69% of helicopters with a maximum takeoff weight between 7 and 20 tons. The holding's enterprises include developers of unique technologies embodied in the world's bestselling and award-winning helicopters: the Mi-8/17, the world's most widely operated helicopter; the Mi-26T, the world's top helicopter in terms of load capacity; and the Ka-32A11BC, a multipurpose coaxial helicopter.

The holding company consists of 19 subsidiaries and related organizations.

### Main results of Russian Helicopters Holding, JSC /2014/



# 165.3

billion rubles of revenue



# 20.5

billion rubles of net income



# >42,000

– total number of employees



### CEO

**Alexander MIKHEEV**

- >> Graduated from the Moscow Institute of Civil Aviation with a specialty in aircraft operation; completed graduate school (postgraduate military course) at the Military Academy of the General Staff of the Russian Armed Forces and received a Candidate's Degree of Economic Science from the Finance Academy at the Government of the Russian Federation.
- >> Since 2001 has worked as Deputy CEO of Rosoboronexport.

In 2014, more than 8,500 Russian-made helicopters operated in more than 100 countries around the world. Russian Helicopters controls 85% of the Russian helicopter market and 14% of worldwide helicopter sales.

### Board of Directors:



**Dmitry LELIKIV**



**Alexander DYNKIN**



**Alexander MIKHEEV**



**Alla LALETINA**



**Sergey SKVORTSOV**



**Vikram SHIV**



**Vitaly BARANOV**



**Yuri SLUSAR**



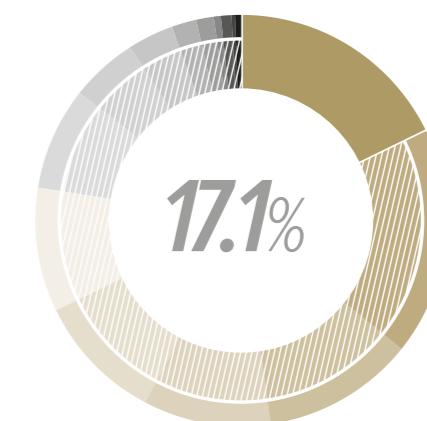
### Chairman of the Board of Directors

**Vladimir ARTYAKOV**

FIRST DEPUTY CEO OF ROSTEC CORPORATION

- >> From 1997 to 1999 worked in the Office of the President of the Russian Federation.
- >> From 2000 to 2006 – Deputy CEO of Rosoboronexport. Chairman of the Board of Directors of AVTOVAZ and President of AVTOVAZ Group.
- >> From August 2007 to May 2012 worked as Governor and Chairman of the Samara Region government.

### Russian Helicopters' share in the total revenue of Rostec Corporation



2. IN THE FIELD OF ENGINE BUILDING FOR THE MILITARY AND CIVILIAN AVIATION, SPACE PROGRAMS, ELECTRIC AND THERMAL ENERGY PRODUCTION FACILITIES, GAS-PUMPING AND MARINE GAS TURBINE UNITS.



## United Engine Corporation (UEC) Holding, JSC

UEC is a leader of Russian engine building industry and brings together more than 85% of assets in the industry. It produces the most popular models of engines for space, civilian, and military aircraft, helicopters, marine engines, gas turbines for pumping oil and gas, and power plants.

The holding company consists of 23 subsidiaries and related organizations.

### Main results of UEC Holding, JSC /2014/



# 163.8

billion rubles – revenue



# (17.4)

billion rubles –  
net income (loss)



# >80,000

– total number  
of employees

### CEO

#### Vladislav MASALOV

>> Graduated from the Faculty of Finance and Economics of the State Financial Academy at the Government of the Russian Federation in Finance and Credit.

>> Worked as Deputy CEO for Economics and Finance, Deputy Managing Director and Director for Economy and Finance of NPO Saturn, OJSC and CEO of Gas-Turbine Engineering RPC Salut.

Net income (loss) – (17,413) billion rubles, generated by negative exchange rate difference resulting from the revaluation of liabilities denominated in foreign currency and the expenses for servicing the credit portfolio.

### Board of Directors:



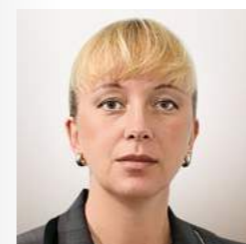
Kirill  
**GAIDASH**



Dmitry  
**LELIKOV**



Vladislav  
**MASALOV**



Ekaterina  
**NIKITINA**



Yuri  
**SLUSAR**



Alexey  
**FYODOROV**



### Chairman of the Board of Directors

#### Vladimir **ARTYAKOV**

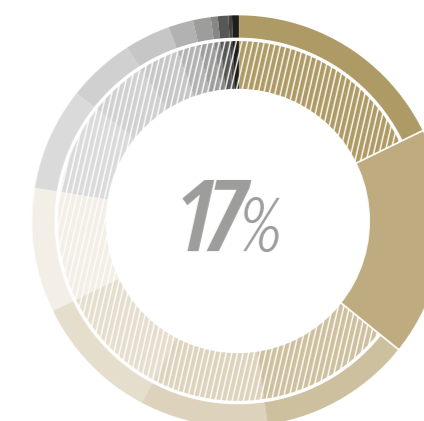
FIRST DEPUTY CEO OF ROSTEC CORPORATION

>> From 1997 to 1999 worked in the Office of the President of the Russian Federation.

>> From 2000 to 2006 – Deputy CEO of Rosoboronexport. Chairman of the Board of Directors of AVTOVAZ and President of AVTOVAZ Group.

>> From August 2007 to May 2012 – Governor and Chairman of the Samara Regional government.

### UEC's share in the total revenue of Rostec Corporation



3. IN THE AUTOMOTIVE INDUSTRY AND THE PRODUCTION OF AUTOMOTIVE COMPONENTS.

## RT-Auto

*RT-AUTO, JSC*



*CEO*

**Sergey  
KOGOGIN**

>> Graduated from the Faculty of Physics of Kazan State University in Radio-physics. Candidate's Degree in Economic Sciences.

>> Worked as Deputy Prime Minister, Minister of Economy and Industry of the Republic of Tatarstan.  
Since 2002 – CEO of KAMAZ, OJSC.

Unites Rostec Corporation's automotive industry assets.

The holding company consists of 7 subsidiaries and related organizations.

The main results of **RT-AUTO** /2014/  
(taking into account KAMAZ, OJSC)



**110.2**

billion rubles – revenue



**(1.7)**

billion rubles –  
net income (loss)

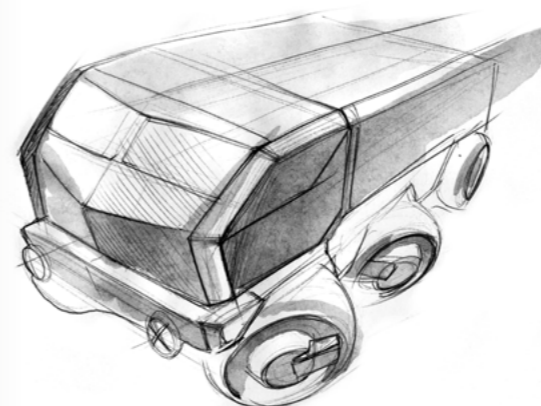
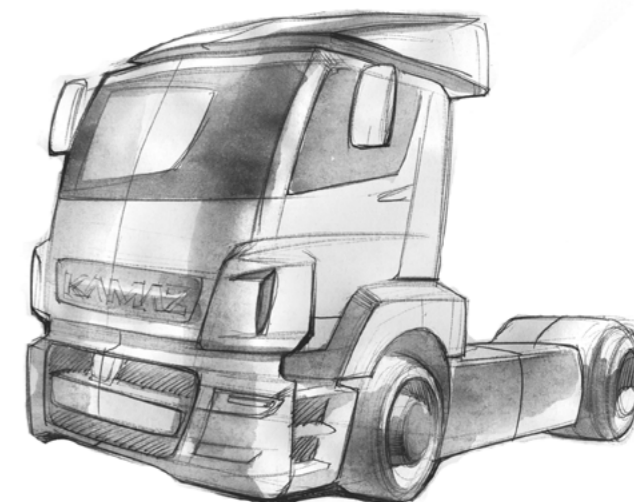
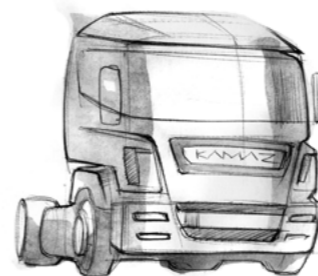
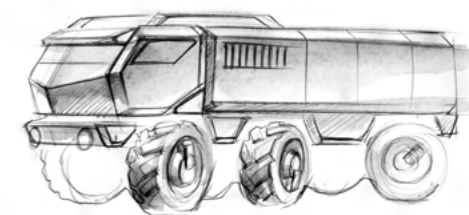
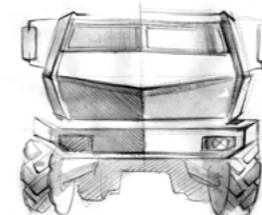


**>35,000**

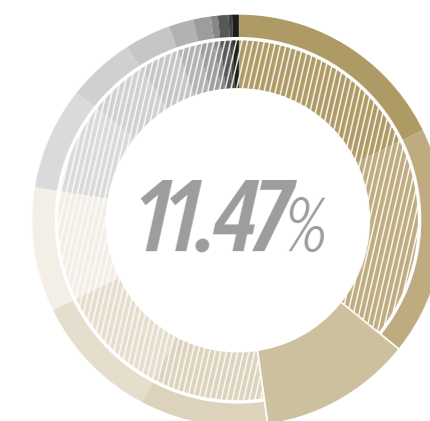
– total number of employees

*Board of Directors:*

not elected



*RT-AUTO's share in the total revenue  
of Rostec Corporation*



4. IN THE FIELD OF ELECTRONIC WARFARE SYSTEMS, STATE IDENTIFICATION EQUIPMENT, MULTIPURPOSE MEASURING EQUIPMENT, AIRCRAFT EQUIPMENT, AND RADIO-ELECTRONIC EQUIPMENT.



**Concern Radio-Electronic Technologies, JSC (KRET)**

KRET produces a wide range of products in the following areas: airborne radio-electronic equipment; electronic warfare and intelligence equipment; radio detecting and ranging equipment; state identification systems and equipment; special measuring instrumentation; and electrical connectors and cable products. KRET products make up approximately 40% of the market for military aircraft avionics and about 60% of the market for avionics for military and transport helicopters.

The holding company includes 94 subsidiaries and related organizations.

**Main results of KRET, JSC  
/2014/**



**90.9**  
billion rubles – revenue



**7.2**  
billion rubles – net profit



**>54,000**  
– total number of employees



**CEO**

**Nikolay  
KOLESOV**

- >> Graduated from Kazan State Financial and Economic Institute in Industry Planning.
- >> Worked at Kazan Optical and Mechanical Plant, where he was promoted from a radio equipment regulator to the chief of the mechanical assembly production.
- >> For 10 years worked as CEO of Elekon.
- >> Elected to the second and third convocations of the State Council of the Republic of Tatarstan. Appointed Governor of the Amur Region.

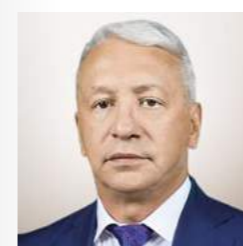
## Board of Directors:



**Kirill  
GAIDASH**



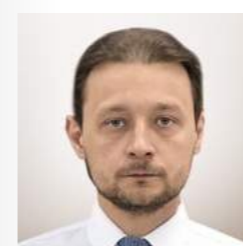
**Viktor  
GRIGORIEV**



**Nikolay  
KOLESOV**



**Yuri  
KOPTEV**



**Alexander  
RUBAN**



**Sergey  
KHOKHLOV**

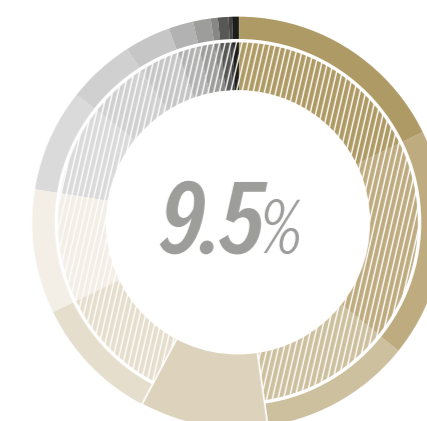
## Chairman of the Board of Directors

**ALEXANDER  
GORBUNOV**

CEO OF PROMINVEST  
(ROSTEC CORPORATION)

- >> Graduated from the Leningrad Institute of Water Transport, the North-West Academy of Public Administration, and Higher Courses of the Military Academy of the General Staff of the Russian Armed Forces.
- >> Held various positions in the federal civil service of the Russian Defense Ministry.
- >> State Councilor of the Russian Federation of the 3rd class.

**KRET's share in the total revenue of  
Rostec Corporation**



**5. IN THE FIELD OF HIGH-PRECISION SYSTEMS AND ARMAMENTS OF TACTICAL COMBAT ZONES, OPERATIONAL-TACTICAL AND TACTICAL MISSILE SYSTEMS FOR THE ARMY, AND PORTABLE AIR DEFENSE AND ANTI-TANK MISSILE SYSTEMS.**



## SPA Holding HIGH PRECISION SYSTEMS, JSC

The holding company focuses on the development, production, modernization, repair, and sale of weapons and special equipment in several areas: operational and tactical missile systems, air defense missile systems, including portable missile and short-range gun and rocket-artillery systems for the Army, Air Force, and Navy (Iskander-M, Pantsir-S1, and Igla-S); antitank missile systems and assault weapons systems (Kornet, Chrysanthemum, Konkurs); guided artillery armaments (Krasnopol, Kitolov); weapons systems for armored vehicles and combat units for light-armored vehicles (Berezhok, Bakhcha, Arena and Drozd active protection systems); informational support equipment; and other armaments.

The holding company includes 19 subsidiaries and related organizations.

### Main results of SPA Holding HIGH PRECISION SYSTEMS, JSC /2014/



**90.4**  
billion rubles – revenue



**11.1**  
billion rubles – net profit



**>25,000**  
– total number of employees



**CEO**

**Alexander  
DENISOV**

>> *Candidate's Degree in Economic Sciences, retired Lieutenant General. Spent 37 years in the Russian Armed Forces, worked as the First Deputy Director of the Federal Service for Military-Technical Cooperation, Head of the Federal Agency for the Supply of Weapons, Military and Special Equipment, and Material Resources.*

### Board of Directors:



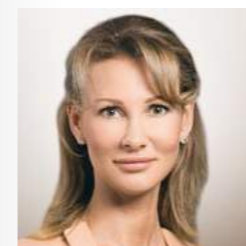
Alexander  
**DENISOV**



Oleg  
**EVTUSHENKO**



Natalya  
**BORISOVA**



Alla  
**LALETINA**



Vladimir  
**LITVIN**



Igor  
**SHERMET**



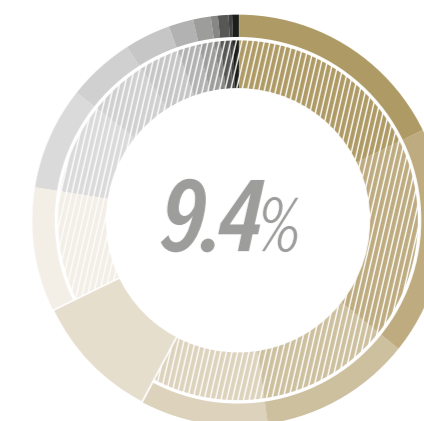
### Chairman of the Board of Directors

**Alexander  
KOTENKOV**

>> *Graduated with honors from the Law Faculty of the Humanities Academy of the Russian Armed Forces.*

>> *Worked as Plenipotentiary Representative of the President of the Russian Federation in the Federation Council, Plenipotentiary Representative of the President of the Russian Federation in the State Duma, and Head of the Public-Legal Directorate of the Russian President.*

### HIGH PRECISION SYSTEMS's share in the total revenue of Rostec Corporation



6. IN THE FIELD OF COMMUNICATIONS EQUIPMENT, AUTOMATED CONTROL SYSTEMS, ELECTRONIC AND RADAR INTELLIGENCE, AND ELECTRONIC WARFARE COUNTERMEASURES SYSTEMS FOR COMMUNICATION AND CONTROL.



## SPA United Instrument Manufacturing Corporation, JSC

The new holding company was established in 2014 by uniting three large holdings companies: Sozvezdie, Vega, and Management Systems.

The company's strategic goal is to establish the hightech development of competitive products in the fields of communications equipment, automated control systems, and electronic warfare and robotic systems that meet the needs of the Armed Forces of Russia, as well as in the field of competitive civilian and dual-use products with high export potential.

The holding company includes 61 subsidiaries and related organizations.

### Main results of SPA United Instrument Manufacturing Corporation, JSC /2014/



**89.7**  
billion rubles – revenue



**2.6**  
billion rubles – net profit



**>40,000**  
– total number of employees



CEO

**Alexander YAKUNIN**

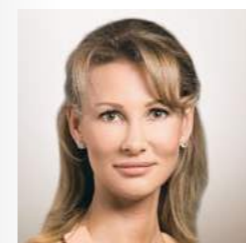
>> Graduated from the Physics Department of Moscow State University named after M. V. Lomonosov and the Russian Academy of Civil Service under the President of the Russian Federation, defended his master's thesis at the Military University of the Russian Defense Ministry.

>> Promoted from a department head as Ruselectronics to the Director of the Department of the Radio-Electronics Industry of the Ministry of Industry and Trade of the Russian Federation.

### Board of Directors:



Natalya  
**BORISOVA**



Alla  
**LALETINA**



Vladimir  
**LITVIN**



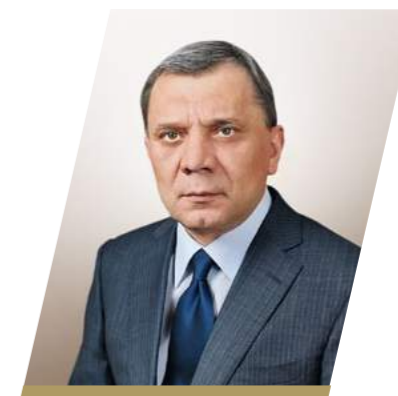
Denis  
**SVERDLOV**



Yuri  
**SLUSAR**



Alexander  
**YAKUNIN**



### Chairman of the Board of Directors

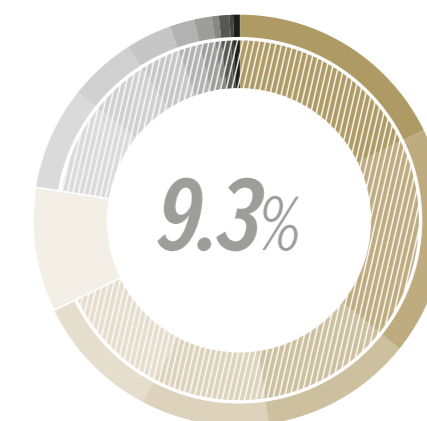
Yuri  
**BORISOV**

DEPUTY MINISTER OF DEFENSE OF THE RUSSIAN FEDERATION

>> Graduated from Suvorov Military School in the city of Kalinin, the Radio-Electronics Higher Command School of Air Defense in the city of Pushkin, and Moscow State University named after M. V. Lomonosov.

>> Doctor of Engineering Science. Worked as Deputy Head of the Federal Agency on Industry.

### UIMC's share in the total revenue of Rostec Corporation



## 7. IN THE FIELD OF AMMUNITION AND SPECIAL CHEMICALS.



### JSC "Tecmash"

Tecmash is a specialized manufacturer of multipurpose artillery ammunition and artillery rounds; various rocket launchers; unguided, small-caliber ammunition; advanced aircraft bombs; and other military products.

The armies of more than 100 countries worldwide utilize the highperformance modern weapons manufactured by Tecmash.

The holding company includes 48 subsidiaries and related organizations.

### Main results of JSC "Tecmash" /2014/



**73.3**  
billion rubles – revenue



**6.3**  
billion rubles – net profit



**>45,000**  
– total number of employees



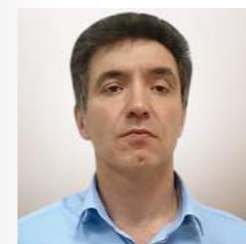
CEO

**Sergey RUSAKOV**

>> Graduated from Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs of the Russian Federation in State and Municipal Management. Worked as a Consultant to the Deputy CEO of Rosoboronexport and CEO of the Scientific Research Institute of Machine Building.

>> Member of the Board of the Russian Engineering Union.

### Board of Directors:



Igor  
**ALEXEENKOV**



Andrey  
**SMOTRITSKY**



Alexander  
**KULIKOV**



Sergey  
**RUSAKOV**



Vasily  
**PONOMAREV**



Kirill  
**FEDOROV**

### Chairman of the Board of Directors

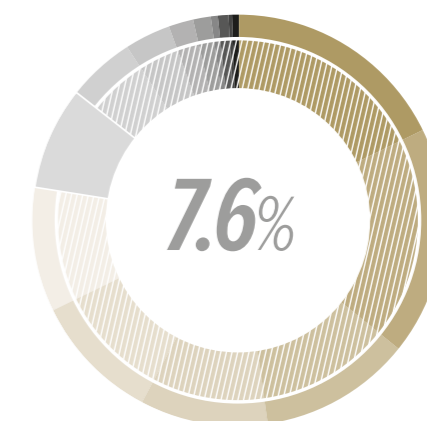
Alexander  
**GORBUNOV**

CEO OF PROMINVEST (ROSTEC CORPORATION)

>> Graduated from the Leningrad Institute of Water Transport, the North-West Academy of Public Administration, and Higher Courses of the Military Academy of the General Staff of the Russian Armed Forces.

>> Held various positions in the federal civil service of the Russian Defense Ministry. State Councilor of the Russian Federation of the 3rd class.

### Tecmash's share in the total revenue of Rostec Corporation



**8. IN THE AREA OF MICROWAVE ENGINEERING, SEMICONDUCTOR DEVICES AND MATERIALS, ELECTRONIC PRODUCTS, ELECTRONIC MATERIALS AND EQUIPMENT FOR THEIR MANUFACTURING, AUTOMATED AND INFORMATION SYSTEMS, AND COMMUNICATIONS SUBSYSTEMS AND EQUIPMENT.**



## Ruselectronics, JSC

Ruselectronics, one of the largest holdings of Rostec Corporation, specializes in the development and manufacture of electronic products, electronic materials and equipment for their manufacture, and devices and materials for microwave engineering and semiconductors. The holding company produces more than 50% of Russian electronic components, commands 8% of overall domestic electronics production, and provides more than 10% of jobs in the industry. It has a high market value in the area of electronic components for weapons, military, and special equipment.

Key competencies:

- solid-state and vacuum microwave devices, as well as accompanying equipment;
- radiation-resistant electronic components base;
- opto- and photo-electronic devices;
- development and design of microelectronic hardware components.

The holding company includes 120 subsidiaries and related organizations.

### Main results of Ruselectronics, JSC /2014/



**48.3**  
billion rubles – revenue



**3.2**  
billion rubles – net profit



**>35,000**  
– total number of employees



#### CEO

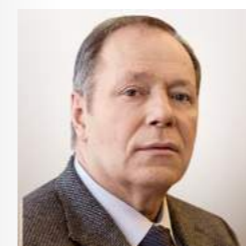
**Andrey  
ZVEREV**

- >> Graduated from Moscow Corporate Institute of Centrosoyuz as an Economist-Organizer. Candidate's Degree in Economic Sciences.
- >> Member of the Public Chamber of the Russian Federation. Chairman of the Public Council under the Ministry of Industry and Trade of the Russian Federation. Member of the Board of the Russian Engineering Union.

### Board of Directors:



Kamil  
**GAZIZOV**



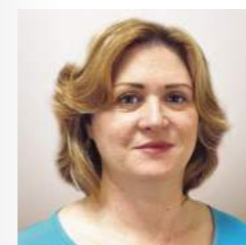
Vladimir  
**LITVIN**



Andrey  
**ZVEREV**



Kirill  
**GAIDASH**



Zhanna  
**SKORINA**



Sergey  
**KHOKHLOV**



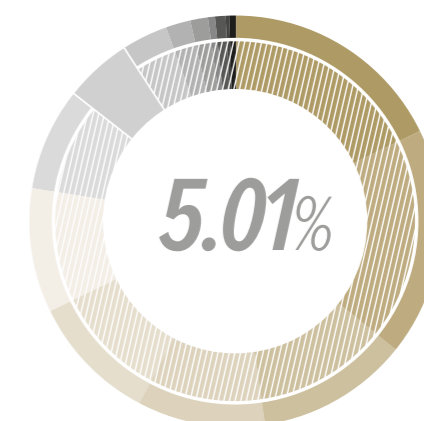
### Chairman of the Board of Directors

Denis  
**SVERDLOV**

ADVISOR TO THE CEO OF ROSTEC CORPORATION

- >> One of the founders and CEO of Skartel (Yota).
- >> Worked as Deputy Minister of Communications and Mass Communications of Russia.

### Ruselectronics' share in the total revenue of Rostec Corporation



9. IN THE FIELD OF OPTICAL, OPTOELECTRONIC, AND OPTOMECHANICAL INSTRUMENTS FOR MILITARY AND CIVILIAN PURPOSES.



## Shvabe Holding, JSC

Shvabe is engaged in the development and serial production of optical and laser systems, advanced optical materials and technologies, science-intensive medical equipment, aerospace systems for Earth monitoring and remote sensing, instruments for scientific research, energy-efficient lighting technologies, nanomechanics, and other high-tech products.

The holding company includes 64 subsidiaries and related organizations.

### Main results of Shvabe Holding, JSC /2014/



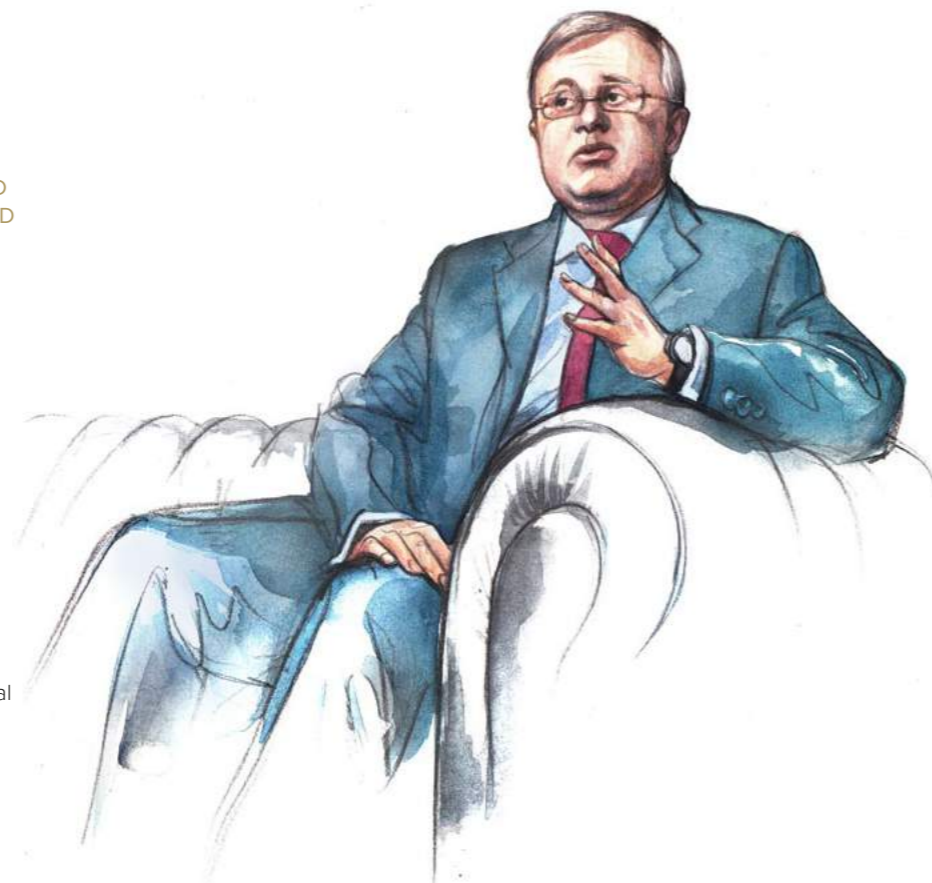
**33.2**  
billion rubles of revenue



**0.7**  
million rubles of net income



**>19,000**  
– total number of employees



CEO

**Sergey  
MAKSIN**

- >> Graduated from the Technical School of Electrical Communication in the city of Sverdlovsk with a specialty in automatic and electrical communication.
- >> Since 1990, promoted from 4th-category packer to the CEO of Ural Optical and Mechanical Plant (part of Shvabe).

### Board of Directors:



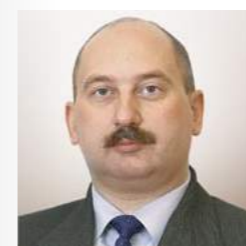
Vasily  
**AKIMOV**



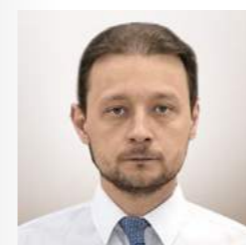
Kirill  
**GAIDASH**



Sergey  
**MAKSIN**



Igor  
**NAGORNY**



Alexander  
**RUBAN**



Alexander  
**FOMIN**

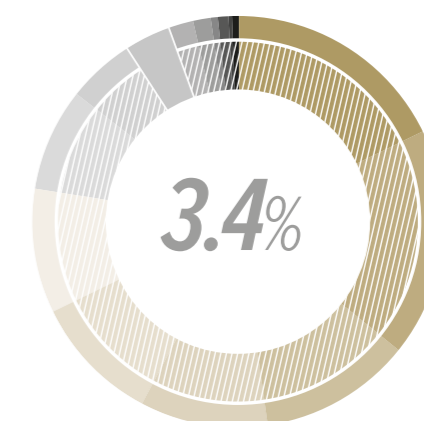


### Chairman of the Board of Directors

Ilya  
**KLEBANOV**

- >> Graduated from Leningrad Polytechnic Institute named after M. I. Kalinin as an Engineer- Electrophysicist.
- >> Worked at the Leningrad Optical-Mechanical Association as an engineer and later CEO.
- >> Worked as Vice-Governor of St. Petersburg, Minister of Industry, Science, and Technology of the Russian Federation, and the Russian President's Plenipotentiary Representative in the Northwest Federal District.

### SHVABE's share in the total revenue of Rostec Corporation



**10. IN THE FIELD OF AVIATION UNITS, POWER SUPPLY SYSTEMS, AND PARACHUTE SYSTEMS.**

**TECHNODINAMIKA**   
Standard of vanguard

**Holding Aviation Equipment, JSC**  
(renamed in 2015 as  
**Technodinamica**  
**Holding, JSC**)

The companies within the holding company specialize in developing, manufacturing, and after-sales service of systems and units of civilian and military aircraft and helicopters, as well as in producing a range of products for the aerospace and oil and gas industries, transportation, and more.

The holding's design bureaus are currently developing more than 200 projects for the latest aircraft types (MS-21, SSJ-100, Ka-62, and others).

The holding company includes 33 subsidiaries and related organizations.

**Main results of JSC Technodinamika Holding, JSC /2014/**



**17.6**  
billion rubles of revenue



**1.5**  
billion rubles of net income



**>30,000**  
– total number of employees



**CEO**

**Maksim  
KUZYUK**

>> Graduated from Moscow Institute of Physics and Technology with a specialty in applied mathematics and physics, received an MBA degree at the International Institute for Management Development (IMD) in Switzerland. Acquired international experience working in The Boston Consulting Group.

>> Since 2011 has worked as crisis manager for JSC SPA Izhmash (Kalashnikov).

**Board of Directors:**



**Yuri  
SLUSAR**



**Maksim  
KUZYUK**



**Zhanna  
SKORINA**



**Evgeny  
ALEKSEEV**



**Vasily  
AKIMOV**



**Alexander  
TULYAKOV**



**Chairman of the Board of Directors**

**Alexey  
FEDOROV**

MANAGING DIRECTOR OF AVIATION  
PROJECTS OF ROSTEC CORPORATION

>> In 1974 graduated from Irkutsk Polytechnic Institute.

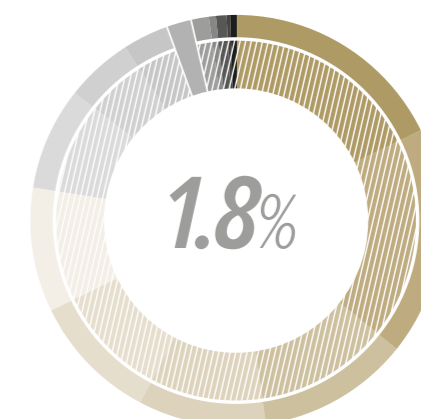
>> In 1989 completed Business School at the University of Oklahoma (USA).

>> 1997–1998 – CEO of Federal State Unitary Enterprise Aviation Military-Industrial Complex Sukhoi.

>> 2004–2007 – CEO and General Designer of Federal State Unitary Enterprise Russian Aircraft Corporation MiG.

>> November 2006 – January 2011 – President of United Aircraft Corporation, OJSC.

**Technodinamika's share in the total  
revenue of Rostec Corporation**

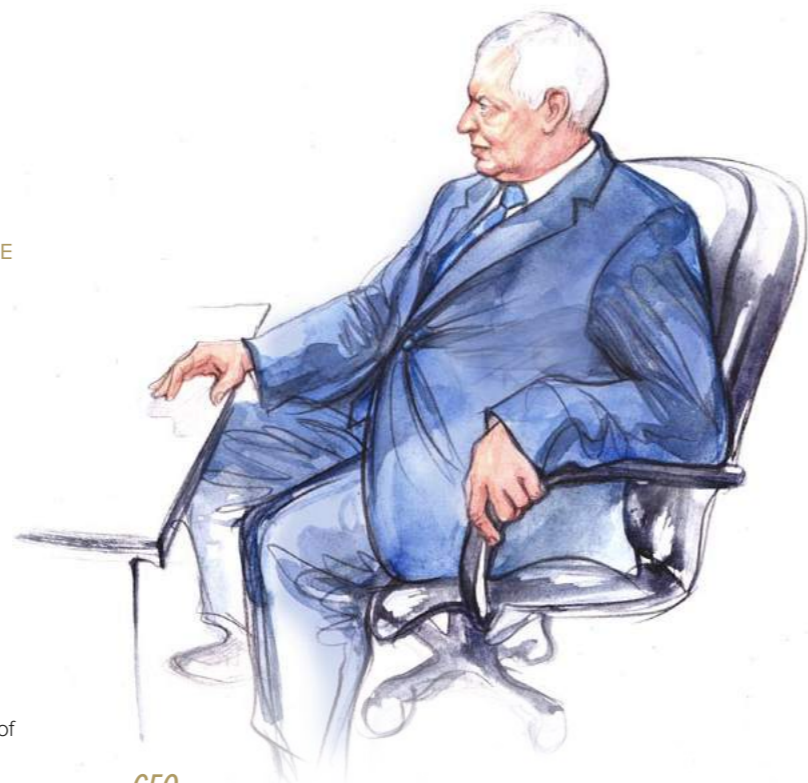


**11. IN THE FIELD OF CRYPTOGRAPHIC SYSTEMS AND EQUIPMENT, SPECIAL-PURPOSE INFORMATION AND TELECOMMUNICATION SYSTEMS, AND SPECIAL-PURPOSE AUTOMATED CONTROL SYSTEMS.**

## Concern Automation, OJSC

The country's leading company in the field of the development, production, warranty and aftersales service, and modernization of cryptographic information protection facilities (CIPF), developing special-purpose communication and control systems using CIPF, technologies and methods of cryptographic information protection, automated control systems, and hardware and software systems.

The holding company includes 8 subsidiaries and related organizations.



**CEO**

**Sergey  
BUKASHKIN**

- >> Doctor of Technical Sciences, Professor, member of the Russian Academy of Cryptography, recipient of the prize of the Russian Federation Government in the field of Science and Technology.
- >> Graduated from Riga Institute of Civil Aviation.
- >> Promoted from an Assistant to First Vice-Rector for Educational Work of the Riga Institute of Civil Aviation Engineers. Worked as Deputy Director for Science and Director of the Federal State Unitary Enterprise Scientific-Research Institute of Automation.

### Main results of Holding Concern Automation, OJSC /2014/



**11.8**

billion rubles of revenue



**0.5**

billion rubles of net profit



**>8,800**

– total number of employees

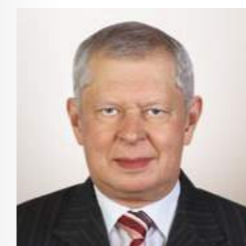
### Board of Directors:



Mikhail  
**KRITENKO**



Sergey  
**KHOKHLOV**



Sergey  
**BUKASHKIN**



Nikolay  
**VOLOBUEV**

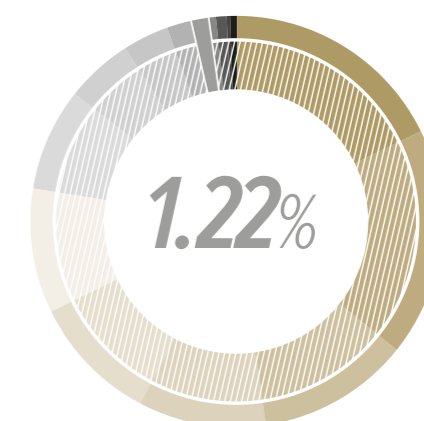


### Chairman of the Board of Directors

Alexander  
**TSARENKO**

- >> Graduated from Chelyabinsk Polytechnic Institute.
- >> For more than 20 years served in state security organizations of the Russian Federation. Worked as Head of the Main Directorate for Special Programs of the President of the Russian Federation and Deputy CEO of SPU-TsKBTM Corporation (Russian Space Agency).

### Concern Automation's share in the total revenue of Rostec Corporation



**12. IN THE FIELD OF ADVANCED MODELS OF SPECIALPURPOSE WEAPON SYSTEMS FOR MILITARY USE, INCLUDING AUTOMATIC COMBAT WEAPONS AND AMMUNITION**



## Holding Concern Kalashnikov, JSC

Concern Kalashnikov is the largest Russian manufacturer of combat, hunting, and sporting weapons. The most famous products of the company include the Kalashnikov automatic assault rifle, which is recognized as the best small arm of the twentieth century and is used by military forces of Russia and more than one hundred foreign countries. Moreover, the company supplies Russian special forces with sniper rifles and produces weapons for law enforcement bodies. The Russian national biathlon team uses the concern's sporting weapons. Along with the production of small arms, the concern produces grenade launchers, precision-guided weapons (Kitolov-2M and Krasnopol guided artillery systems), aircraft guns, facilities for maintenance and repair of guided weapons, control and testing machines, and other special equipment. In the long term, the concern intends to begin producing new products, including civilian and military boats and unmanned aerial vehicles.

The holding company includes 2 subsidiaries and related organizations.

### Main results of Holding Concern Kalashnikov, JSC /2014/

(adjusted to include Izhevsky Mekhanichesky Zavod)



# 7

billion rubles of revenue



# (4.3)

billion rubles of net loss  
(adjusted to include Izhevsky  
Mekhanichesky Zavod)

This negative result is due to the revaluation of foreign currency liabilities and establishing the Concern's mandatory valuation allowances. The loss of Izhevsky Mekhanichesky Zavod was due to the land revaluation. Without including these factors, the financial result of the Concern according to the operating activities for 2014 was positive for the first time since the founding of the company.



# >11,000

– total number of employees



CEO

**Alexey  
KRIVORUCHKO**

- >> Graduated from the Institute of Management, Economics, Law, and Informatics with a specialty in law, and the Russian Academy of Public Service under the President of the Russian Federation with a specialty in public administration.
- >> Worked as Advisor to Deputy CEO for Logistics of Aeroflot – Russian Airlines, Senior Vice President for Sales and Marketing of AVTOVAZ, and CEO of Aeroexpress.

### Board of Directors:



**Roman  
GUDA**



**Andrey  
BOKAREV**



**Boris  
MASTERENKO**



**Alla  
LALETINA**



**Natalya  
BORISOVA**



**Vladimir  
LITVIN**



**Alexander  
KULIKOV**



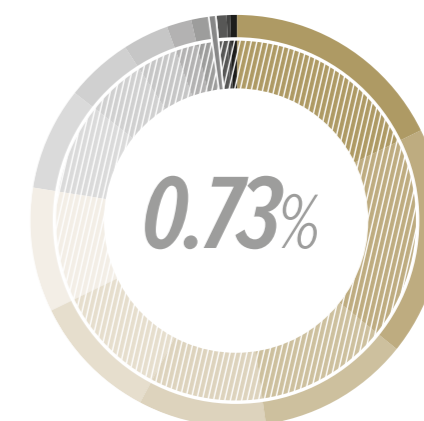
### Chairman of the Board of Directors

**Alexander  
NAZAROV**

MANAGING DIRECTOR OF ROSTEC CORPORATION

- >> Graduated with an honors degree from the Higher Military Educational Institution of the Defense Ministry and the Administration Academy of the Interior Ministry of the Russian Federation, Candidate's Degree in Legal Sciences.
- >> Served in the law enforcement bodies of the Russian Federation.
- >> Since 2011 has worked as Advisor to the CEO of Rostec Corporation.

### Concern Kalashnikov's share in the total revenue of Rostec Corporation





**Rostec**  
RT-Chemcomposite

## Holding RT-Chemcomposite, JSC

RT-Chemcomposite's main areas of activity include research and innovative developments in the field of polymer composite materials (polymer composites) and finished products from these materials; serial production of high-tech products for the aerospace, aviation, military equipment and weapons, land- and water-based transportation, energy, fine and basic chemistry production, coke and by-product process; development of equipment that uses high-frequency currents; and the production of boron and its compounds. The holding company is a leader in the Russian industry for manufacturing products from polymeric composite materials.

The holding company includes 17 subsidiaries and related organizations.

### Main results of RT-Chemcomposite, JSC /2014/



**5.4**  
billion rubles of revenue



**0.4**  
billion rubles of net income



**>4,500**  
– total number of employees



#### CEO

**Kirill SHUBSKY**

- >> Graduated from Moscow Institute of Management named after S. Ordzhonikidze with a specialty in organization of production management.
- >> Since 2009 has overseen the management of Concern Composite Materials and Technologies.

### Board of Directors:



Vasily  
**PONOMAREV**



Elena  
**GEORGIEVA**



Kirill  
**SHUBSKY**



Andrey  
**SMOTRITSKY**



ARA  
**ABRAMYAN**



Alexey  
**KUZMITSKY**



Larisa  
**CHURSOVA**



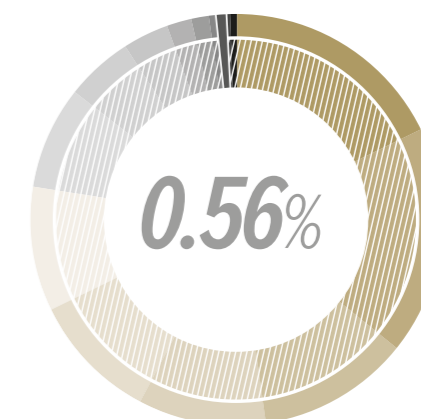
### Chairman of the Board of Directors

Sergey  
**SOKOL**

ADVISOR TO THE CEO OF ROSTEC CORPORATION

- >> Graduated from Moscow State Institute for International Relations (Faculty of International Relations), Candidate's Degree in Political Sciences.
- >> Began his career at the Russian Embassy in Ecuador. Worked as Deputy Governor of the Krasnoyarsk Territory and later the Irkutsk Territory. For 2 years served as CEO of RT-Chemcomposite.

### RT-Chemcomposite's share in the total revenue of Rostec Corporation



#### 14. IN THE MACHINE TOOL AND TOOL-MAKING INDUSTRY.



### Holding Stankoprom, JSC

At the initiative of Rostec Corporation and the Russian Ministry of Industry and Trade, Stankoprom brings together state production, research, and commercial organizations of the machine tool industry located in 8 regions of Russia.

The decision to form Stancoprom, JSC was dictated by the need to create a system integrator for the technical re-equipment of enterprises representing strategic industries, as well as to implement a consistent technological policy, consolidate competences, and establish relevant productions in Russia.

The holding company includes 11 subsidiaries and related organizations.



#### CEO

**Valery  
POZDNYAKOV**

- >> Graduated from Kazan Higher Tank Red Banner Command School and the All-Russian Distance-Learning Financial and Economic Institute.
- >> Held the positions of CEO of Fortrans and Head of the department for Work with Defense and Atomic Energy Enterprises of Eurofinance-Mosnarbank.
- >> Headed Oboronpromleasing and LLC Stankoimport.
- >> 2013-2014 – First Deputy CEO of Stankoprom, JSC.

#### Main results of Holding Stankoprom, JSC /2014/



**4.4**  
billion rubles of revenue



**(0.9)**  
million rubles of net loss



**3,996**  
– total number of employees

#### Board of Directors:



Vasily  
**AKIMOV**



Evgeny  
**ALEKSEEV**



Alexey  
**KUZMITSKY**



Gleb  
**NIKITIN**



Nikolay  
**PANICHEV**



Andrey  
**SMOTRITSKY**

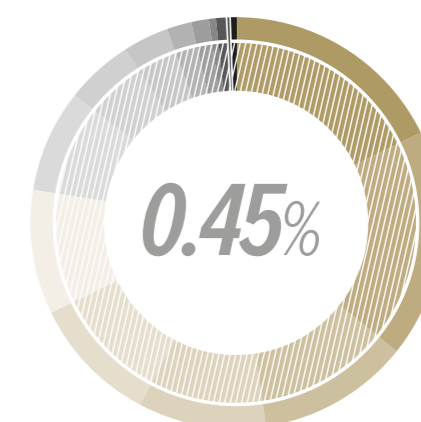


#### Chairman of the Board of Directors

**Sergey  
MAKAROV**

- >> Graduated from Moscow Aviation Institute, received a Master's Degree in Finance at the Graduate School of the University of London.
- >> Headed the finance department of Oboronprom. Worked as Managing Director of Vneshtorgbank, Vice President of Rosneft, and President of Stroytransgas, OJSC.
- >> 2013–2014 – CEO of Stankoprom, JSC.

#### Stankoprom's share in the total revenue of Rostec Corporation



# 15. IN THE FIELD OF THE DEVELOPMENT AND PRODUCTION OF IMMUNOBIOLOGICAL PRODUCTS.

## Holding National Immunobiological Company, JSC

A pharmaceutical holding engaged in the development and production of immunobiological medicines, National Immunobiological Company unites core competencies necessary for the development, production, and delivery to customers of immunobiological medicines required for protecting the population of the Russian Federation from various types of infectious pathogens. The holding is an integral part of state policy, ensuring a comprehensive approach to solving problems related to biological safety and sanitary-epidemiological health, as well as the sovereignty of Russia in terms of biological safety.

The holding company includes 9 subsidiaries and related organizations.

### Main results of Holding National Immunobiological Company, JSC /2014/



# 3.1

billion rubles of revenue



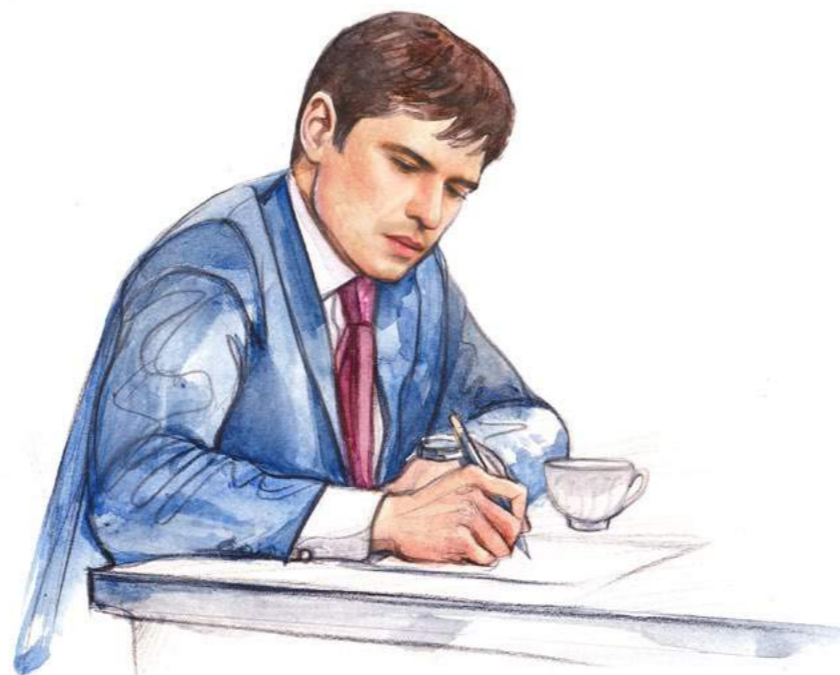
# 0.03

billion rubles of net profit



# >5,000

employees (FSUE Microgen)



### CEO

**Nikolay SEMENOV**

- >> Graduated from Moscow Power Engineering Institute (Technical University).
- >> Worked in the Russian Ministry of Health as Director of Innovation Policy and Science, and as Director of the Department for Analysis, Forecasting, and Development of Health and Medical Science.

### Board of Directors:



Nikolay  
**SEMENOV**



Anton  
**KATLINSKY**



Alexander  
**GINTSBURG**



Yuri  
**OLEFIR**



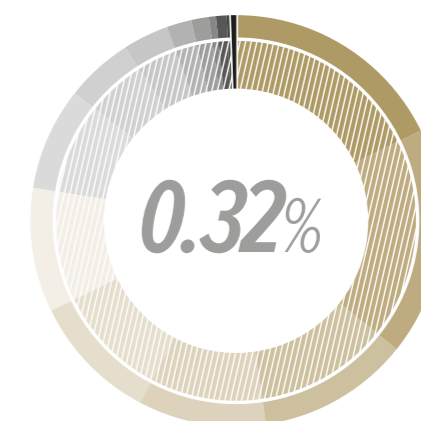
### Chairman of the Board of Directors

**Alexander NAZAROV**

MANAGING DIRECTOR FOR DISTRESSED ASSETS OF ROSTEC CORPORATION

- >> Graduated with honors from Higher Military Educational Institution of the Russian Defense Ministry and Administration Academy of the Ministry of Internal Affairs of the Russian Federation. Candidate's Degree in Legal Sciences.
- >> For more than 24 years served in the armed forces and law enforcement bodies of the Russian Federation. Worked as Advisor to the CEO of Rostec Corporation.

### National Immunobiological Company's share in the total revenue of Rostec Corporation



# Key direct management organizations of Rostec

## 1. Rosoboronexport, OJSC

*CEO*  
Anatoly  
**ISAYKIN**

### PRIMARY AREAS OF WORK:

- Russia's only state intermediary for the export/import of the entire range of military and dual-purpose products, technologies, and services.

## 3. Centre of aviation medicine, OJSC

*CEO*  
Tatyana  
**SHAKHOVA**

### PRIMARY AREAS OF WORK:

- ambulatory examination and treatment, providing healthcare through home visits;
- disability examination and registration of sickness certificate;
- in-flight medical examinations;
- preliminary periodic medical examinations of employees whose work is related to occupational hazards;
- preventive medical examinations; hygienic training with certifications; registering and issuing personal medical books.

## 2. Aviatekhpriyemka, JSC

*CEO*  
Sergey  
**BURMATOV**

### PRIMARY AREAS OF WORK:

- quality control and incorporation of products used in the manufacture of aviation, aerospace, defense, and dualpurpose equipment
- monitoring the quality of military, civil, and dual-purpose products made by Rostec subsidiaries;
- quality control of materials supplied to the rocket and space industry (in agreement with Russian Space Agency).

## 4. Central Hospital for Flight Staff, OJSC

*CEO*  
Tatyana  
**SHAKHOVA**

### PRIMARY AREAS OF WORK:

- hospital and ambulatory medical examinations of flight personnel to ensure health safety;
- preventive inter-commission treatment of flight personnel in order to prolong career longevity; • providing mass healthcare.

## 5. GINTSVETMET Institute, OJSC

*INTERIM CEO*  
Vitaly  
**POTYLITSYN**

### PRIMARY AREAS OF WORK:

- scientific research in the field of non-ferrous metals, including gold and platinum metals and rare earth metals; developing technologies for the production of basic materials for the electronic industry; and processing industrial waste and dumps from mining enterprises.

## 7. Zelenaya Roshcha (Green Grove) Spa Hotel, OJSC

*CEO*  
Zaurbek  
**DZHELIEV**

### PRIMARY AREAS OF WORK:

- spa-resort services;
- medical services;
- tour services, cultural and entertainment activities, sports and recreation services.

## 6. GIPROTSVETMET, OJSC

*CEO*  
Vitaly  
**POTYLITSYN**

### PRIMARY AREAS OF WORK:

- scientific research into the development of the mineral resources base for mining production; developing project documentation for the construction and reconstruction of mining, processing, and metallurgical enterprises.

## 8. Neftegazavtomatika, OJSC

*INTERIM CEO*  
Konstantin  
**STANISLAVCHIK**

### PRIMARY AREAS OF WORK:

- promoting and coordinating advanced innovative technologies, equipment, and materials for the fuel and energy industry developed by Rostec subsidiaries.

## 9. TSNIITOCHMASH, OJSC

*CEO*  
Dmitry  
**SEMIZOROV**

### PRIMARY AREAS OF WORK:

- development and production of weapons and ammunition.

## 3<sup>2</sup> Development of important Rostec projects

### 1. RT-Business Development

#### RT-BUSINESS DEVELOPMENT WAS FOUNDED IN 2014.

Currently, the company's assets comprise shares of companies such as YotaHolding Limited, Yota Devices, LLC Avia Capital Services, LLC National Informatization Center, and VSMPO-AVISMA, OJSC. The company also plans to acquire 100% of LLC RT-Global Resources as well as minority shareholdings in OJSC Megafon and OJSC Aeroflot-Russian Airlines.

The decision to create the company was motivated by the desire to ensure the professional management of these assets, as well as to give impetus to the development of the corporation's most promising business areas using a variety of financial instruments. These areas include innovative and high-tech industries such as telecommunications, electronics, IT, production of advanced materials, as well as traditional sectors, such as resources, transportation, and infrastructure.

*By using its experience and assigning appropriate representation in the management of major companies, Rostec can provide substantial assistance to companies with regard to interacting with public authorities, mergers, consulting, and many other services. The new company's operations will lead to a significant increase in the value of enterprises, as its minority shareholdings will be under the control of RT-Business Development.*



CEO  
Sergey  
KULIKOV

### 2. RT-Global Resources

**RT-GLOBAL RESOURCES LTD WAS ESTABLISHED** as a Rostec subsidiary specializing in initiating and managing commodity and infrastructure projects. The company's main goals include not only establishing a single center of competence for investment planning, supporting, and managing these projects, but also in attracting private and banking finance. One of RT-Global Resources' key goals is to ensure maximum efficiency at all stages, including in the design phase, implementing capital investment, and exploiting deposits and infrastructure.

#### PRIORITY AREAS OF WORK INCLUDE:

- preparing and developing foreign commodity projects;
- implementing a package approach to coordinating access to deposits with the export supply of products manufactured by Rostec Corporation and its partners, as well as for technology transfer;
- ensuring the dynamic development of Russian commodity projects of Rostec Corporation with funding from extrabudgetary sources;
- participating in infrastructure, service, and logistics projects for commodity sector maintenance by using innovative technologies and equipment manufactured by Rostec subsidiaries.

#### PRIORITY SECTORS FOR PROJECT IMPLEMENTATION:

##### Oil and gas sector

- developing traditional and non-traditional deposits;
- oil processing;
- sales of oil and petroleum products

##### Metallurgy

- precious metals;
- minerals for the power industry;
- rare earth minerals;
- non-ferrous metals;
- minerals for fertilizer manufacturing

##### Infrastructure and related projects

- electric power generation;
- transportation infrastructure;
- pipelines;
- import substitution;
- real estate and construction

#### 2014 RESULTS

In accordance with the long-term strategy for consolidating commodity and related projects within the corporation, as well as a result of the diversification of corporation activities, the company has developed distinct investment criteria and procedures. One major achievement for 2014 is initiating the fullscale implementation of a project to establish a strategic player in the mining and production of rare earth metals. In collaboration with IST Company Group, a new group of engineering companies has been formed, and deposits with monazite concentrate in the Sverdlovsk Region and the license to develop the Tomtor deposit in Yakutia have been organized. Moreover, with the support of the Ministry of Industry and Trade of the Russian Federation, a number of research and development efforts involving the search for unique technological solutions for the project have been carried out, and the preparation of infrastructure for its implementation has begun.

In a consortium with VTB, OJSC and Tatneft, OJSC, RT-Global Resources, LLC won a tender for the construction of an oil refinery in Uganda worth more than 3 billion USD. The project has an important regional and geo-political significance, as it will involve a number of Equatorial African countries in addition to Uganda.

As part of establishing a new player in the Russian coal industry, projects for developing the Ogodzhinsko-Sugodinskoe deposit in the Amur Region and the construction of a coal terminal in the port of Vera in the Far East have been analyzed. As a result, design work for port construction has begun and the procedure for obtaining a license for the deposit has been initiated.

Rostec's management has also approved the creation of a specialized scientific-engineering center based on Giprotvetmet, Gintsvetmet, Federal State Unitary Enterprise GIGKhS, and Viogem, as well as one of the largest Russian engineering companies, **Rosengineering, CJSC**.



CEO  
Andrey  
KOROBV

### 3. National Center of Informatization (NCI)

**IN 2014, ROSTEC AND ROSTELECOM DECIDED TO ESTABLISH ON A PARITY BASIS THE NATIONAL CENTER OF INFORMATIZATION (NCI).** The two largest state companies joined forces to offer government agencies the most modern and popular services and products in the field of information technologies. In the end, all citizens of the Russian Federation will use and benefit from these technologies.

NCI was chosen as a business partner of FGUP (federal state unitary enterprise) FSUE Russian Post to establish business services and develop the geographic information system for the housing and utilities infrastructure. A number of pilot projects have been implemented in Tula and Ivanovo. An additional 30 services are currently under development as well.

Since 2014, in conjunction with the Ministry of Health of the Russian Federation, a program to establish a single federal operator and center of competence in the sphere of healthcare has been successfully implemented. It was to this end that NCI supported the key subsystems of the Unified State Automated Health Information System in 2014. The implementation of the project in conjunction with the Ministry of Health of Russia will significantly increase the availability and quality of health services for all of the citizens of the Russian Federation. A similar project will be implemented for Russian education, science, and

personnel training, leading to beneficial services for end-users, including an Electronic University, Electronic Career Center, and Electronic Job Market.

Another area of focus is developing a new market for Russia, the much sought-after trusted services in an electronic environment (Electronic Government). This project can help implement important business initiatives as a "trusted third party", as well as services such as access to information about individuals that is stored in state information resources, Electronic Passport, and more.

*A very important and promising area of development is offering services that make public transportation even easier to use. In 2014, relevant organizations of St. Petersburg were contracted to work on the automated system for managing urban and suburban passenger transportation. Public transportation solutions proposed by NCI will ensure the quality control of transportation services, disseminate information about services, and monitor service charges.*

NCI is ready to offer solutions related to the further informatization of the electoral processes through the "Vybery" State Automated System, which will increase elections' transparency at all levels. Another important possibility is the automation of the municipalities' work. On one hand, this will eliminate the "digital inequality" between different territorial units, and, on the other hand, it will create favorable conditions for socio-economic development of regions. This will also help to establish a single quality standard for all municipal services.

In the future, the above-mentioned IT-projects and solutions could be offered to Latin American, Asian, and African countries for further implementation in the framework of exporting Russian information technology.

Finally, this will help to create a global platform of IT-solutions demanded by both businesses and the state, which will provide projects with a stable structure and constant growth of value for shareholders by replicating suggested practices for all of the parties involved.



**CEO**  
**Alexey**  
**SIVIDOV**

### 4. RT-Inform

**RT-INFORM WAS CREATED BY ROSTEC AS A CORPORATE SUPPLIER OF HARDWARE, SOFTWARE, AND IT-SERVICES IN ORDER TO REDUCE THE CORPORATION'S OWN EXPENSES IN THIS AREA.**

The company's main objectives are to improve the efficiency of the procurement process in the sphere of information and communication technologies through the consolidation and formation of a single information space for Rostec and its subsidiaries. It also helps meet the required target level of IT infrastructure and information security, as well as introduce information and communication systems and implement centralized services based on a single data processing center (DPC).

*RT-Inform will become the main center of competence for information technologies and information security for all Rostec holding companies and enterprises. The creation of such centers of competence was determined by the standardization and centralization of the corporation's IT-functions. To accomplish the assigned tasks, in 2014, a competence center was established at RT-Inform. Its organizational structure includes a Maintenance Department, Architectural Design Center, Design and Analysis Center, and Resource Center.*

#### THE COMPANY'S PRIMARY AREAS OF WORK INCLUDE:

- creating a single data processing center (DPC) for Rostec and then providing IT-services for the entire infrastructure of Rostec's central staff based on the established DPC (a single infrastructure project);
- participating in the implementation of the automated system of a single corporate treasury (SCT);
- creating a system for the collection and consolidation of the financial plan for the corporation's income and expenses;
- creating a single procurement system for Rostec's central staff;
- updating the electronic document management system;
- creating the reference data management concept;
- implementing at least ten IT-projects for the benefit of Rostec's holding companies and subsidiaries.

In the future, the company will continue to purchase hardware and software to meet the needs of Rostec's subsidiaries. Consolidating the volume of purchased IT-products, resulting in a discount, will help minimize costs. At the same time, the high quality of purchased products will be ensured by the following factors:

- controlling the brand and other parameters of purchased hardware (owing to the formation of a single technical policy for the corporation's organizations in the sphere of IT);
- carrying out multi-stage tender procedures with the prequalification of suppliers;
- increasing the awareness of the corporation's organizations about alternative manufacturers of IT-equipment and software;
- developing and implementing regulations and procedures aimed at improving the efficiency of trade and procurement activities.

According to results from the fourth quarter of 2014 alone, the company managed to reduce by 8% the IT-expenses of Rostec holding companies and subsidiaries for the purchase of IT equipment and software.



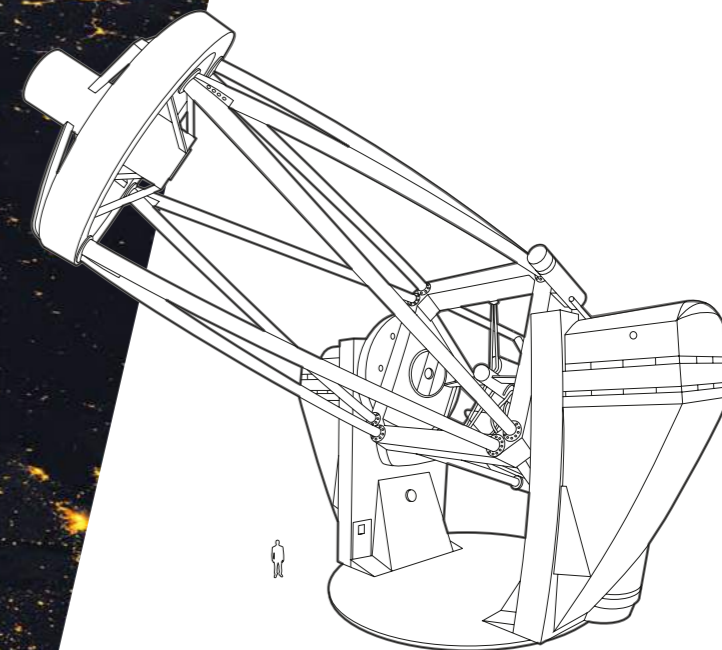
**CEO**  
**Kamil**  
**GAZIZOV**



*Geography  
of work*

*The Corporation exports  
civil and military products*

*TO OVER 70 COUNTRIES*



## 4<sup>1</sup> Market presence

High tech Rostec products  
are exported to  
70 countries.



## 4<sup>2</sup> Focus on Asian, African and Latin American markets

**Rostec's export program focuses on the developing countries in Asia, Africa and Latin America,** which are priority Russian markets.

*Export to China: no growth between 2011 and 2013, the average amount is*

**35** billion USD

*Export to India: no significant growth between 2010 and 2013, the amount is about*

**7** billion USD

### AS THE TABLE SHOWS,

there have been no significant changes in the geography of Russian export in the last decade. A general summary is as follows:

- Over a half of Russian exports go to EU countries;
- APEC countries account for less than 20% of Russian exports;
- China (the world's most important emerging economy) accounts for just 7% of Russian exports;
- Exports to the USA, Japan, and Turkey are negligible.

### RUSSIAN EXPORT PROFILE BY COUNTRIES, % (SOURCE: ROSSTAT)

	2005	2010	2011	2012	2013
<b>Non-CIS countries</b>	<b>86.5</b>	<b>85</b>	<b>84.6</b>	<b>84.9</b>	<b>86</b>
EU countries	55.2	53.3	51.6	52.8	53.8
Germany	8.2	6.3	6.6	6.7	7
Italy	7.9	6.9	6.3	6.2	7.5
Netherlands	10.2	13.6	12.1	14.7	13.3
Poland	3.6	3.8	4.1	3.8	3.7
United Kingdom (Britain)	3.4	2.9	2.7	2.9	3.1
Finland	3.2	3.1	2.6	2.3	2.5
France	2.5	3.1	2.9	2	1.7
APEC countries	12.4	16.9	17.9	17.4	18.8
China	5.4	5.2	6.8	6.8	6.8
USA	2.6	3.1	3.2	2.5	2.1

## 4<sup>2.1</sup> Russian export profile

### The Russian Federal State Statistics Service

**(Rosstat) reports** that there is a significant growth potential for Russian exports to Asia, Africa and Latin America.

**ROSSTAT REPORTS THAT AMONG THE ASEAN COUNTRIES THE LARGEST RUSSIAN** export partners are Vietnam, Thailand, and Singapore.

*Exports to Vietnam: no changes since 2010,*

**1.3** billion USD

*Russian exports to Thailand between 2011 and 2013 dropped from*

**2.1** to **1.2** billion USD

*Export to Singapore in*

**1.9** billion USD.  
*It is the primary Russian export partner of all countries of region*

*Exports to Egypt in 2013 dropped to*

**2.5** billion USD (compared to \$3.2 billion in 2012).  
*Still there has been growth since 2010 (when Russian exports to Egypt amounted 1.9 billion USD)*

	2005	2010	2011	2012	2013
Japan	1.5	3.2	2.8	3	3.7
Turkey	4.5	5.1	4.9	5.2	4.8
Switzerland	4.5	2.2	2.2	2	1.7
CIS countries	13.5	15	15.4	15.1	14
EurAsEC countries	7.5	7.7	7.9	8.2	7.7
Custom Union			7.6	7.8	7.2
Belarus	4.2	4.6	4.8	4.8	3.8
Kazakhstan	2.7	2.7	2.7	3	3.3
Kyrgyzstan	0.2	0.2	0.2	0.3	0.4
Tajikistan	0.1	0.2	0.1	0.1	0.1
Uzbekistan	0.4	0.5	0.4	0.4	0.5
Ukraine	5.1	5.8	5.9	5.2	4.5

## 4<sub>2.2</sub> Economic profile of Asian, African, and Latin American countries

**Recently, statistical data has shown a steady increase** of Asia, Africa, and Latin America's share in the global GDP while the share of developed economies is reducing. The following table lists the corresponding figures in %:

GLOBAL GDP RANKING, PPP (SOURCE: IMF)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
China	8.8	9.3	10	10.8	11.6	12.7	13.3	14	14.7	15.3	16
India	4.2	4.4	4.5	4.7	4.8	5.2	5.5	5.6	5.7	5.8	5.9
ASEAN countries	3.2	3.3	3.3	3.4	3.4	3.5	3.6	3.6	3.7	3.8	3.9
Indonesia	1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5
Malaysia	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Philippines	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Singapore	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4
Thailand	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.8	0.8
Vietnam	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Latin America and Caribbean	8.4	8.3	8.4	8.4	8.6	8.5	8.6	8.6	8.6	8.6	8.6
Sub-Saharan Africa	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6
EU	3.4	2.9	2.5	2.1	1.7	0.9	0.2	9.9	9.2	8.7	8.4
Germany	4.5	4.3	4.3	4.2	4.1	4.1	3.9	3.9	3.8	3.7	3.7
USA	23	22.7	22.1	21.4	20.9	20.4	19.9	19.6	19.5	19.3	19.2



The table shows that in a decade China has nearly doubled its global GDP share. India has also demonstrated a substantial (1.5 times) growth.

*ASEAN countries are increasing their global GDP share (from 3.2% in 2004 to 3.9% in 2014). From 2008-2014 Indonesia, the region's largest economy, increased its share by 0.2% (from 1.3% to 1.5%). Malaysia, another large economy in the region, has virtually not changed its global GDP share. The growth in the region is not uniform, but the total presence of the countries in the global economy is low.*

Latin America's share has been nearly the same since 2004.

African countries are only gradually increasing their global GDP share, though rather uniformly. In this region Nigeria shows the highest growth rate. Note that it is a natural resource-producing country, and most of its GDP (90%) depends on oil prices. Accordingly, its economic performance indicators (including GDP) may highly fluctuate as oil prices drop.

*The share of EU countries and the USA in the global economy has been slowly shrinking but is still very substantial (about 40%). In 2004-2014 the share of Germany EU's biggest economy has been dropping steadily from 4.5% to 3.7%.*

The corporation exports civil and military products to over **70** countries

**When GDPs are expressed in adjusted prices,** the indicators are even more telling. The figures are available in the following table:

GLOBAL GDP RANKING, PPP, BILLION USD (SOURCE: IMF)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<i>China</i>	1,944,674	2,287,258	2,793,159	3,504,605	4,547,716	5,105,769	5,949,648	7,314,482	8,386,677	9,469,124	10,355,350
<i>India</i>	721,589	834,218	949,118	1,238,478	1,223,206	1,365,343	1,708,541	1,880,102	1,858,748	1,876,811	2,047,811
<i>ASEAN countries</i>	684,013	766,387	922,805	1,099,735	1,286,016	1,274,727	1,588,152	1,838,985	1,954,240	2,012,447	2,055,612
<i>Indonesia</i>	257,032	285,773	364,363	432,265	510,494	538,613	709,342	845,573	877,801	870,275	856,066
<i>Malaysia</i>	124,750	143,540	162,749	193,614	231,072	202,284	247,539	289,336	304,957	313,158	336,913
<i>Philippines</i>	91,371	103,074	122,211	149,360	173,603	168,485	199,591	224,143	250,240	272,067	289,686
<i>Singapore</i>	112,697	125,429	146,014	178,259	190,318	190,164	233,292	272,316	284,299	295,744	304,105
<i>Thailand</i>	161,340	176,352	207,089	246,977	272,578	263,711	318,908	345,672	365,966	387,253	380,491
<i>Vietnam</i>	5,332	6,293	7,275	8,639	10,352	10,414	11,255	12,890	14,134	15,511	16,899
<i>Latin America and Caribbean</i>	2,205,678	2,682,420	3,148,794	3,714,637	4,326,293	4,054,915	4,931,687	5,640,507	5,632,628	5,775,307	5,697,295
<i>Argentina</i>	151,823	181,358	212,510	260,074	324,407	305,769	367,561	444,605	475,211	488,213	4,044,831
<i>Brazil</i>	663,734	882,044	1,089,255	1,366,853	1653,539	1,622,311	2,142,905	2,474,636	2,247,745	2,242,854	2,215,953
<i>Venezuela</i>	112,451	145,513	183,478	230,364	315,600	329,419	295,591	316,482	381,286	373,978	342,067
<i>Chile</i>	99,270	123,059	154,723	173,088	179,577	172,127	217,306	250,793	266,266	276,975	263,115
<i>Columbia</i>	117,082	146,566	162,590	207,416	243,982	233,822	287,018	336,346	369,789	381,822	387,692
<i>Sub-Saharan Africa</i>	544,389	635,908	726,551	840,363	956,455	907,607	1,090,624	1,241,729	1,275,684	1,317,916	1,401,672



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<i>South Africa</i>	219,419	246,951	261,176	285,805	273,453	285,416	365,165	404,343	382,340	350,779	354,150
<i>Nigeria</i>	87,845	112,248	145,430	168,675	209,196	170,651	231,597	248,187	264,196	286,470	316,035
<i>Zimbabwe</i>	8,081	7,702	7,122	6,881	5,900	8,157	9,445	10,956	12,472	12,951	13,607
<i>Uganda</i>	8,438	10,038	11,011	13,549	16,377	16,546	17,181	18,212	21,243	23,053	25,583
<i>EU</i>	13,248,489	13,858,494	14,772,247	17092,077	18,460,114	16,453,584	16,365,531	17,686,417	16673,318	17371,618	18,451,080
<i>USA</i>	12,277,025	13,095,425	13,857,900	14,480,350	14,720,250	14,417,950	14,958,300	15533,825	16,244,575	16,799,700	17,528,382
<i>Germany</i>	2,195,700	2,224,400	2,313,900	2,428,500	2,473,800	2,374,200	2,495,000	2,609,900	2,666,400	2,737,600	2,831,339
<i>Total (global GDP)</i>	<b>43,003,428</b>	<b>46,556,396</b>	<b>50,454,884</b>	<b>56,838,619</b>	<b>62,308,296</b>	<b>59,063,465</b>	<b>64,524,898</b>	<b>71,422,737</b>	<b>72,687,658</b>	<b>74,699,258</b>	<b>77,608,736</b>

The table shows that in a decade China's GDP has increased fivefold, and India's GDP has almost tripled. ASEAN countries have tripled their total GDP in a decade (note that this is also true for each individual ASEAN country, so their development is rather uniform).

Latin America's GDP has grown 2.5 times in 10 years. The fastest growing economies are Brazil, Venezuela, and Columbia (over 3 times). Argentina and Chile have also shown impressive growth (2.5 times).

In 10 years, African countries have increased their GDP by 2.5 times. For Nigeria and Uganda the amount is over three times. On the other hand, as we mentioned before, the economies in the region are resource extraction-oriented so their GDPs greatly depend on current raw prices.

EU countries and the USA have been also increasing their GDPs, but at a much slower rate.

## AVERAGE GLOBAL GDP RANKING, PPP, BILLION USD (SOURCE: IMF)

	2009	2010	2011	2012	2013	2014	Average Growth in 2009-2013
China	9.2	10.4	9.3	7.6	7.7	7.5	<b>8.8</b>
India	8.5	10.3	6.6	4.7	4.3	5	<b>7.9</b>
ASEAN countries	1.8	7	4.5	6.2	5.1	4.9	<b>4.9</b>
Indonesia	4.6	6.2	6.5	6.3	5.8	5.4	<b>5.8</b>
Malaysia	-1.5	7.4	5.1	5.6	4.6	5.2	<b>4.4</b>
Philippines	1.1	7.6	3.6	6.8	7.2	6.4	<b>5.4</b>
Thailand	-0.6	15	6	1.9	4	3.6	<b>5</b>
Singapore	-2.3	7.8	0	6.5	2.9	2.5	<b>2.9</b>
Vietnam	5.4	6.4	6.2	5.2	5.4	5.6	<b>5.7</b>
Latin America and Caribbean	-1.3	6	4.5	3	2.7	2.5	<b>3</b>
Argentina	0.8	9.2	8.9	1.9	4.2	0.5	<b>5</b>
Brazil	-0.3	7.5	2.7	1	2.3	1.8	<b>2.5</b>
Venezuela	-3.2	-1.5	4.1	5.6	1	-0.5	<b>0.9</b>
Chile	-0.9	5.6	5.7	5.4	4.2	3.6	<b>3.9</b>
Columbia	1.6	4	6.6	4.2	4.2	4.5	<b>4.2</b>
Sub-Saharan Africa	2.6	5.6	5.5	4.9	4.9	5.3	<b>4.8</b>
South Africa	-1.5	3.1	3.6	2.5	1.9	2.3	<b>2</b>
Nigeria	7	8	7.3	6.6	6.3	7.1	<b>7</b>
Zimbabwe	8.2	11.4	11.9	10.5	2.9	4.2	<b>8.2</b>
Uganda	4.1	6.2	6.2	2.8	6	6.4	<b>5.3</b>



## CONCLUSIONS:

*The growth rates in China and India are slowing down but are still among the world's highest and are the highest among large GDP countries.*

*ASEAN countries are showing similar signs of slowing down. Since 2012 the GDP growth for nearly all countries in the region (except for Singapore) has slowed down. Still, Philippines, Indonesia, Malaysia, and Vietnam are maintaining high GDP growth rates (4 to 6% annually) even during the global recession.*

*The growth in Latin America is not very high. Chili and Columbia are noteworthy. For the last five years they have grown by 3.9 % and 4.2%, respectively. In the last three years the GDP growth in Brazil and Argentina has substantially slowed. The figures for 2014 are 1.8% and 0.5%, respectively.*

*There has been strong growth in Africa, but its overall presence in the global economy is still very low. Nigeria has been growing at a rate of about 7% annually for the last five years but its macroeconomic indicators will most probably decline soon, due to dropping oil prices. South Africa shows the slowest GDP growth rate in the region. For the last three years it has not exceeded 2.5%.*

## 4<sup>2.3</sup> Rostec export priorities

As can be seen from Rostec's export program indicators for 2014, its corporate holdings are already focused on the most promising Asian, African, and Latin American markets. The corporation will follow this export model in the coming years as well.

### IN SOUTH EAST ASIA

Due to the sanctions imposed by the USA and EU countries against Russia the most sensitive area is securing financial resources for our deals, as well as financial support for certain projects.

*With its huge financial resources and capabilities, the People's P.R. China is certainly able to provide the required financing to Russian companies.*

Moreover, China can become a reliable technology partner while high tech cooperation with a number of other countries is limited. Still, Rostec is equally developing its cooperation not only with China but also with other South-East Asian countries like South Korea that possesses many advanced technologies.

An important benefit is that business management strategies in Russia and South-East Asia are similar.

*In both China and Russia it is common to establish large government-controlled manufacturing corporations.*

It is easier to come to an agreement for two corporations sharing the same management policy. This is a substantial advantage.



### AFRICA

Russia's largest and long-standing partners in military technical cooperation in Africa are Mediterranean countries while Sub-Saharan countries currently account for just 2% of Russian defense products and services. However, many African countries are armed with weapons manufactured in the USSR and delivered in the second half of the 20th century. Soviet-made armaments have earned a good reputation in Africa, and many of them are still operational.

Russia's well-established reputation can and should be utilized to expand its defense and civilian cooperation in the region. The Soviet equipment in service requires expansive quality maintenance and repairs. For this reason we are offering a range of flexible cooperation options including munitions upgrades and logistics services.

*The Republic of South Africa (RSA) is the most powerful country in the region in terms of its economic and military development. The country has its own domestic defense companies; moreover, the world's largest transnational defense corporations operate there. South Africa spends about 5 billion USD in defense annually. This can be compared to 8.3 billion USD for all the other countries in the region combined.*

South Africa intends to expand its leadership role in Africa by deploying its army in peacekeeping operations, disaster control, and humanitarian aid missions.

### IN LATIN AMERICA

Latin America's position in the global economy and politics has been changing lately. Between 2003 and 2010, region's economy grew (5% annually on average) due to wage hikes and lower unemployment. After that the growth rates sharply dropped for four years. Due to a decline in demand and price drops for the raw commodities produced in Latin America (coal, iron, soya, gold, and coffee) and the USA's transition to a new monetary policy.

Still the region's debt burden is relatively low, the banks are stable, and the foreign exchange reserves are high. For this reason a moderate growth rate is expected. Concerning economic cooperation, now the most promising countries are now: Argentina, Brazil, Venezuela, Columbia, Mexico, and Chile. Their share is the global raw commodities export is substantial, and they have extensive research and production capabilities.

*A good indicator of the strengthening of high tech cooperation between Russia and Latin America is that the largest Russian resource-producing and manufacturing companies, including Rostec, can be found in markets there.*

In the late 2014 the prospects for Rostec operation in the region were discussed in Moscow as a part of the business seminar "Developing Cooperation between Russia and Latin America." The corporation updated its high-tech products and services proposals and confirmed its interest in joint projects.

Rostec will further develop its strategic and conciliatory relations with countries in Asia, Africa, and Latin America. The corporation is engaged in negotiations concerning not only product deliveries, but also establishing joint high tech product development and manufacturing projects.

## 4<sup>3</sup> Key international achievements

**Despite the sanctions imposed by the USA and EU countries against Russia,** in 2014 the corporation continued boosting its cooperation with international partners. During the given period, existing relations were strengthened, and new relations were established.

### CHINA

In September, 2014, Rostec signed a memorandum of understanding with China Shenhua Energy Company, the largest coal mining enterprise in the world. The memorandum agreed to cooperation in the fields of investments, joint coal deposits development and infrastructure construction in the Far East. Moreover, Rostec will build generating capacities at the deposits, as well as high voltage power lines to export electricity to China. The total amount of investments into these projects will amount to about 10 billion USD.

*“Rostec is promoting cooperation with Chinese partners in a number of fields”, **emphasized Sergey Chemezov.** “Strengthening our relations is beneficial for both parties. The Rostec and Shenhua partnership is a result of comprehensive efforts to expand the Russian energy presence in the Asia-Pacific Region.”*

In November, Rostech and AVIC (Aviation Industry Corporation of China) signed a strategic cooperation agreement to implement joint projects in the fields of fixed wing and rotary aircraft, aircraft engine and materials development, airborne avionics, and more. The key projects under the agreement include:

- joint development of a new heavy helicopter;
- contributing to the development of a joint wide body civilian airliner;
- development and joint promotion of next-generation airborne avionics, and more.

The following documents were also signed in 2014:

- an agreement with CETC International for electronic components delivery, development, and manufacturing;
- a memorandum with Nanjing LES Information Technology for the joint installation of airport and air traffic control equipment;
- an agreement with ZTE Corporation for digital trunking products, smart city solutions, smart transportation, and smart antenna systems.

Moreover, in 2014 Rostec companies continued their intensive cooperation with Chinese partners in the fields of Chinese chemical facilities retrofitting (RT Chemcomposite), semifabricated titanium and aluminum products delivery for aircraft production, and power engineering (VSMPO AVISMA).



### INDIA

In February, 2014, memorandums of understanding were signed between Azimut and Orion (RusElectronics companies) and Tata Power LED (India). The companies are working on joint bids to supply ground navigation systems for civilian airports, as well as infrastructure security systems.

The negotiations have resulted in over 20 cooperation initiatives from Indian companies including four proposals concerning dualpurpose and civilian products:

- Hyderabad Pollution Controls Ltd.: a proposal for cooperation in the field of flue gas desulphurization units manufacturing;
- Plasmagen Biosciences Pvt. Ltd.: a proposal for cooperation with Russian companies in the field of human blood supplies and manufacturing blood plasma products;
- Premier Explosives Ltd.: a proposal for licensed antihail rocket manufacturing;
- Tesscorn Technologies Pvt. Ltd.: a proposal for delivering microwave devices to India.

### MYANMAR

On December 17–18, 2014, Rostec participated in a business mission overseen by the Russian Ministry for Economic Development. The corporation presented itself to Myanmar ministers of industry and trade, defense, internal affairs, and economic development.

### LATIN AMERICA PERU

Rostec is boosting its cooperation with Latin America. In early 2014 the government of Peru announced a deal to purchase a batch of Mil 171SH military utility helicopters. This is one of the largest contracts in the history of the two countries' defense cooperation.

As a follow-up to the cooperation between AVTOVAZ and Automotive Company S.A. for the promotion of Lada cars in the local market, about 400 cars were sold, and 11 dealerships and 6 service centers were established.

KAMAZ participated in the bidding to deliver 615 KAMAZ trucks to Peru.

### AFRICA: UGANDA

In 2014 RT Global Resources, a Rostec subsidiary, won the second round of a bid to choose an investor/operator to design, back, build, and operate an oil refinery in Uganda. The bidding was held by Uganda's Ministry of Energy and Mineral Development.

*“If the demand for petroleum products was correctly calculated, the project payback period will be short. This is even more so, as the petroleum products market in Uganda has a 10% annual growth” – **Andrey Korobov,** Director General, RT Global Resources*

The project is intended to meet the demand for oil products in Uganda and neighboring countries, and to deliver such products to Rwanda, Burundi, South Sudan, and eastern regions in the Democratic Republic of Congo (these are considered primary markets), as well as to western Kenya, and northern Tanzania.

The refinery construction project is designed to be implemented in two stages. In the first stage a facility processing 30,000 b/d (1.5 MTPA) will be commissioned by early 2018. In the second stage, the output will reach 60,000 b/d (3.0 MTPA) by 2020.

**ZIMBABWE**

Rostec, in collaboration with Vi Holding, an industrial and investment group, and The State Bank for Development and Foreign Economic Affairs (Vnesheconombank) is implementing an integrated project for platinum metals deposit development in Darvendale Valley (Zimbabwe) as a public-private partnership, for which an intergovernmental agreement was signed in September, 2014.

Rostec is a technological partner of the consortium, and will deliver advanced technologies and equipment for the project.

*"I'm confident that starting to implement the existing projects will be a good sign to launch new strategic cooperation projects in various industries. Our counties have a substantial potential for cooperation," said **Denis Manturov**, Minister of Industry and Trade of the Russian Federation*

In 2014 a detailed geological survey of key deposit sites was completed. The reserves were confirmed as meeting international standards. The first construction stage of a process plant will take up to 3 years and is planned to begin in 2015. The required investments will amount to about 500 million USD. The total amount of investments in all the three project stages will be about 3 billion USD. The payback period will be 6 years. When fully completed the project will be among the top 5 global platinum companies.

**ALGERIA**

In November, 2014, JSC Technopromexport won a bid to construct diesel power stations in Southern Algeria (net cost is about 250 million USD). In addition, talks are ongoing to establish a joint venture to manufacture, maintain, overhaul, and utilize guided and unguided munitions. Rosoboronexport, OJSC, NPO Splav, OJSC, OJSC KBP, and NPK TechMash, OJSC are representing Rostec at the talks.

**SYRIA**

In August, 2014, a delegation from Syria visited Russia to hold negotiations with Technopromexport, OJSC, Azimut, OJSC, Kamaz, OJSC, United Engine Corporation, OJSC, LLC RT GR, RT Chemcomposite, OJSC, ORPE Tekhnologiya, OJSC. The negotiations resulted in signing a declaration of intent to deliver RT Chemcomposite, OJSC products to Syria.

*At an INC economic meeting in Sochi in October 2014, RT GR discussed the possibility of cooperation with Syrian partners in the fields of geological survey and oil and gas deposit development in the Homs province. In addition, the partners expressed their willingness to cooperate in oil and gas, mining, power industries, and corresponding infrastructure construction.*

**USA**

In regard to strengthening Rostec's international business, it should be mentioned that in July 2014, VSMPO AVISMA, a Rostec company, extended its contract with Boeing Aircraft to supply rolled titanium until 2022 in the previously agreed annual amounts.

*«We highly value this cooperation, and we are going not only to boost production, but also continue our joint efforts to increase the output of machined parts," emphasized **Mikhail Voevodin**, Director of VSMPOVISMA.*



VSMPO AVISMA, a partner of Boeing, has supplied raw materials and titanium parts through a number of long-term agreements since 1997, when the first contract with the Russian titanium supplier was finalized. In 2009, VSMPO-AVISMA and Boeing founded Ural Boeing Manufacturing (UBM) with equal shares of property, a joint ventures in equal shares in Verkhnyaya Salda. Three brand new, advanced UBM facility produces machined titanium parts for the Boeing 787-8 and the 787-9 Dreamliner.

In October, deliveries of the Mi 17V-5 military utility helicopters were completed for the Afghan National Army. Kazan Helicopters, a subsidiary of Russian Helicopters, manufactured the helicopters. 63 aircraft were delivered to Afghanistan under the contract signed in 2011 between Rosoboronexport and the US Department of the Army.

*The contract for rolled titanium deliveries between VSMPO-AVISMA and Boeing has been extended to* **2022**

# 4\_4 Participation in exhibitions

Within the framework of military technical cooperation in 2014, Rostec coordinated joint Russian military products showrooms at 13 international exhibitions

Military products:

Exhibition name	Date and location
<b>SINGAPORE AIRSHOW 2014</b> International Aviation Exhibition	February 11–16 Singapore
<b>DEFEXPO INDIA 2014</b> International Exhibition of Land and Naval Armaments	February 6–9 Delhi, India
<b>FIDAE 2014</b> International Air & Space Fair	March 25–30 Santiago, Chile
<b>DSA 2014</b> Defiance Services Asia Exhibition	April 14–17 Kuala Lumpur, Malaysia
<b>SOFEK 2014</b> Special Operations Forces Exhibition	May 6–8 Amman, Jordan
<b>KADEX 2014</b> International Exhibition of Weapons Systems and Military Equipment	May 22–25 Astana, Kazakhstan
<b>EUROSATORY 2014</b> International Land and Air Defence and Security Exhibition	June 16–20 Paris, France
<b>MILEX 2014</b> International Exhibition of Arms And Military Machinery	July 9–12 Minsk, Belarus
<b>FARNBOROUGH INTERNATIONAL 2014</b> International Aerospace Exhibition	July 14–20 Farnborough, Britain
<b>ADEX 2014</b> Azerbaijan International Defense Industry Exhibition	September 11–13 Baku, Azerbaijan
<b>AFRICA AEROSPACE AND DEFENSE 2014</b> International Military Exhibition	September 17–21 Capetown, South Africa
<b>EURONAVAL 2014</b> International Naval Defense & Maritime Exhibition	October 27–31 Paris, France
<b>AIRSHOW CHINA 2014</b> International Aviation and Aerospace Exhibition	November 11–16 Zhuhai, China
<b>INDO DEFENCE 2014</b> International Defense Expo & Forum	November 5–8 Djakarta, Indonesia



In 2014, Rostec oversaw the joint Russian defence products showrooms at international exhibitions abroad pursuant to the Federal Service for Military Technology Cooperation’s order No. 71-od dated June 6, 2012.



INTERNATIONAL EXHIBITIONS		
Year	Floor space in sq. m	Количество российских участников
2012	8,000	230
2013	6,060.5	142
2014	9,500	206

Recently, there has been a trend to attend less exhibits in Europe and more in South-East Asia and Latin America. At some exhibitions the amount of exhibit space has nearly doubled. The Russian showrooms at the DSA and Indodefence exhibitions in South-East Asia have seen the largest growth. Rostec’s global reach is also expanding due to Russian companies’ interest in entering new markets. In 2014, for the first time ever Russia presented at the ADEX 2014 International Defense Industry Exhibition in (Baku, Azerbaijan).

The designs of Rostec showrooms has also been improving and has reached the level of best European companies. The showrooms have become more open and easily accessible and are full of models, simulators, and multimedia presentations.

9,500 sq.m  
the total space of Rostec showrooms  
at international exhibitions

## 4<sup>5</sup> Significant international projects of Rostec and its subsidiaries

### ITALY

In December 2014, Rostec, NK Rosneft, OJSC, and Finmeccanica signed the document, "On key conditions for the strategic partnership between AgustaWestland, NK Rosneft, OJSC, and Russian Helicopters."

The document says that the parties intend to assemble the AgustaWestland AW189 helicopters at CJSC Helivert. Up to 160 search and rescue and offshore helicopters will be manufactured by 2025 for JSC Rosneft's offshore field development projects.

*«The fact that Rosneft, a leader of the Russian oil industry, has joined the project, will give momentum to the joint venture development and lead to higher production volumes," said **Sergey Chemezov**, Rostec CEO.*

Helivert and its subsidiaries, which can be set up if necessary will be required to assemble, deliver, and maintain the helicopters, as well as provide crew training, which can be established if necessary will.

Under the project the parties are going to gradually increase the share of domestically manufactured components to 70% by 2025.



### BRAZIL

Cooperation with WEG Electric Corporation as part of the BRICS framework is aimed at phasing out electrical engineering imports from the USA and Europe.

Projects overseen by United Engine Corporation, JSC, VSMPOAVISMA, OJSC, KAMAZ, OJSC, and OJSC UIMDB are at their final preparation stages. VO Technopromexport, OJSC, JSC KRET, NPK Tehmash, JSC, Stankoprom, JSC, Concern Kalashnikov, OJSC, Izhevsky Mekhanichesky Zavod, OJSC, and OJSC Koshkin KBAL have expressed interest in cooperating with WEG.

### JAPAN

In July, Rostec and Mitsubishi Heavy Industries Environmental and Chemical Engineering Corporation, the Titanium Valley Special Economic Zone, and MashProm signed an agreement of intent regarding solid municipal waste recycling.

### GERMANY

An agreement to extend the Memorandum of Cooperation between Rostec and Rohde & Schwarz GmbH & Co. from April 11, 2011 (No. pt/117100-2995) was signed on September, 25, 2011.

*«The ultimate goal of our partnership with Rohde & Schwarz is the domestic manufacturing of competitive radio measuring devices," said **Nikolay Kolesov**, KRET CEO.*

### USA

In October 2014, a turbo generator manufacturing facility was commissioned as a joint venture of General Electric, Inter RAO, and United Engine Corporation, a Rostec company.

*The facility construction is a new chapter in the Russian power engineering development. The new units will significantly boost the efficiency of local power stations.*

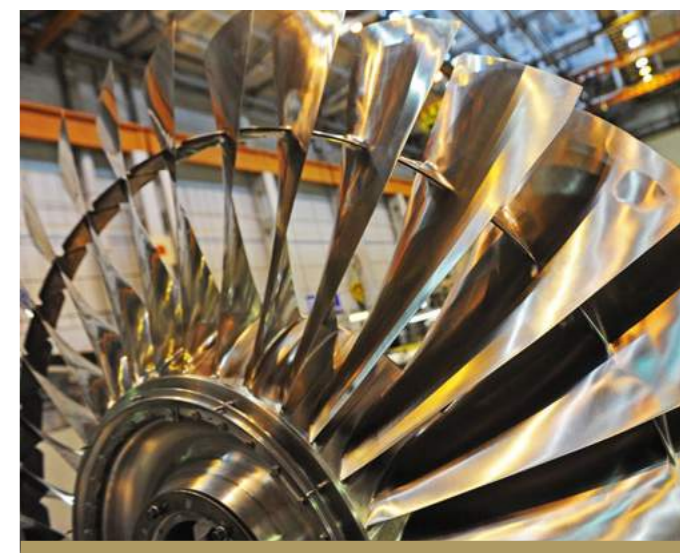
In July, VSMPO-AVISMA Corporation, the largest Russian titanium products manufacturer, and Boeing (USA) extended a contract for the supply of rolled titanium through 2022.

*«Our cooperation is expanding. Soon we will jointly develop the new Boeing 777X project, which will contain much more titanium from Salda», said **John Byrne**, Vice President of Boeing's Civil Aviation Division.*

Under the extended contract, VSMPO-AVISMA will continue to deliver titanium to Boeing and its suppliers for civil aircraft production.

### CHINA

Within the framework of cooperation between Rostec and China Poly Group Corporation, on October 31, 2014, a cooperation agreement was signed by Stankoprom, Poly Technologies, and DMTG to establish a joint venture to manufacture machine tools in Russia (Kimry, Tver Region).



## 4<sup>6</sup> Communication

**One of the prominent events in 2014** was the decision to adopt the name Rostec for the corporation. On July 23, Russian President Vladimir Putin signed into Federal Law “On the State Corporation Rostekhnologii.” The State Duma passed the law on July 1. It was ratified by the Federation Council on July 9th, 2014.

The new law also modified corporate objectives. For instance, Rostec began to help establish high-tech facilities and participate in socially important projects for the good of the nation and society.

### CORPORATE TRANSPARENCY POLICY

The corporation continues its transparency policy launched in 2012. Systematic work is being carried out as part of the approved Rostec public relations guidelines. The corporation and its holdings operated in a controlled information space: most news releases are pre-planned and are consolidated in the unified coverage schedule.

In 2014 a clear for assessing key performance indicators was adopted to automatically monitor track the efficiency of global brands. A unified approach to public relations was also developed. As part of its public relations strategy, Rostec is promoting strong and independent brands among its holdings. The corporation realizes that, today, brands are competitive differentiators that drive the growth of assets capitalization. Companies with strong brands win on the global market.

Based on previous rebranding experiences (Optical Systems and Technologies Research and Production Group has now returned to its historical Shvabe brand, and Concern Radio-Electronic Technologies has adopted the brief, strong, and vibrant KRET brand with heightened awareness), in 2014 Izhevsk Machine Building Plant was renamed Kalashnikov Concern. It now supports three brands: Kalashnikov, Baikal, and Izhmash.

Other holdings will also be renamed, as transparency and a strong, wellknown brand are real competitive differentiators on global and domestic markets.

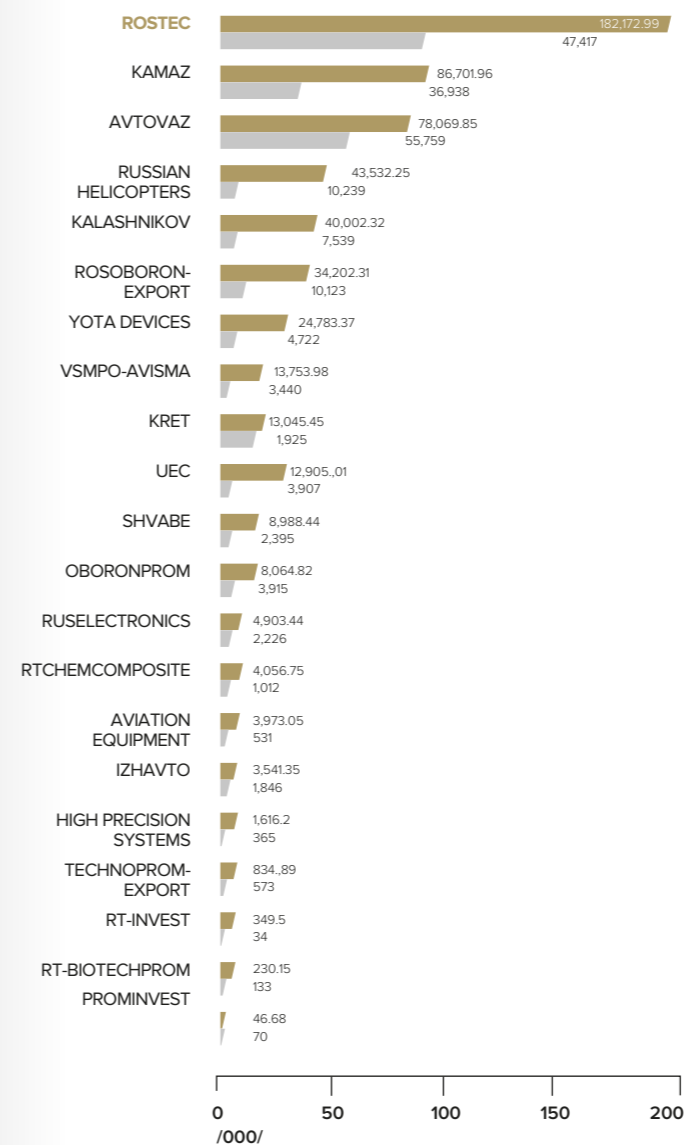
### KEY INDICATORS OF CORPORATION MEDIA COVERAGE

In 2014, media coverage indicators for Rostec and its companies grew both quantitatively and qualitatively. In the last year the number of media references increased by 154% to 229,000. The references in the international mass media grew by 84%. The total media coverage index (information favored index) grew by 1.7 times to 926,000 points. The number of positive references exceeded the number of negative ones fivefold (77,455 and 15,555, respectively).

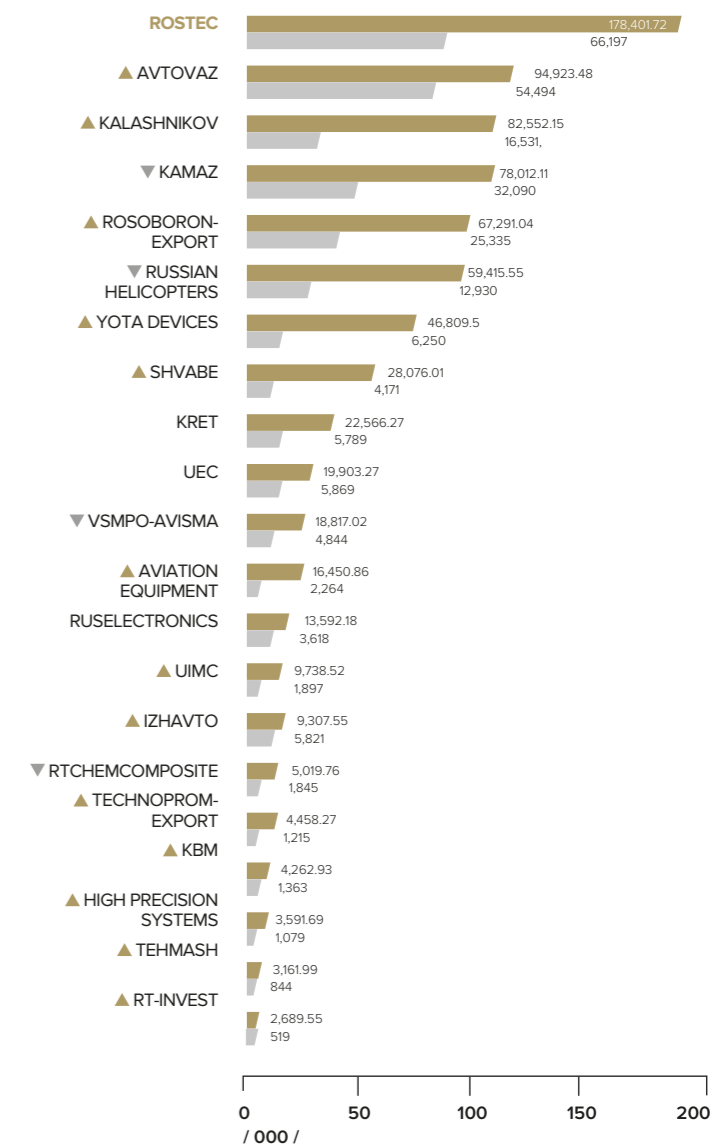
The high indicators for individual holdings and organizations (Kalashnikov, AVTOVAZ, Yota Devices, KRET, Aviation Equipment, United Instrument Manufacturing Corporation [UIMC]) are due to various media events, and efficient press service performance. Rosoboronexport, Russian Helicopters, Yota Devices, Shvabe, KRET, United Engine Corporation (UEC) featured substantial growth of media references. United Instrument Manufacturing Corporation's high indicators are noteworthy.

### RATINGS OF THE CORPORATION'S COMPANIES

2013



2014



Mass media has naturally expressed interest in advanced manufacturing technology developments, global expansion, and changes to the ongoing deliveries and contracts caused by the US and EU sanctions. Notably, contracts with Chinese partners have also come to the media spotlight.

New technological developments were particularly popular in 2014. Yota Devices contributed most in this regard, thanks to the unveiling of its second generation Yota Phone. The gadget's official release was widely covered in the Russian and international press. Notably, Russian President Vladimir Putin presented the Yota Phone 2 to Chinese leader Xi Jinping as a gift.

## Competitive Position

When compared to the largest international manufacturing companies, Rostec has made it to the Top 20 of global engineering corporations in terms of Google queries, leaving United Technologies Corporation, Honeywell International, Rosnano, Rusatom, and others behind.

Notably, Russia's image as a country is closely intertwined with Rostec's corporate image as a national manufacturer: they share keywords like "Russian", "national", "domestic". Most keywords refer to outstanding product quality and advanced features. The innovative approach is clearly highlighted ("modern", "new"), as well as groundbreaking improvements to the product line ("development", "modernization"). Integrating various companies from different industries into a single structure is perceived as a pillar of high quality.

### SANCTIONS

Sanctions emerged as an unparalleled event in 2014. Although the sanctions have been widely covered in media there was no critical rhetoric concerning risks to Rostec's reputation or losses. This can be attributed to the agile performance of the press service, excellent coordination of media communication, and expressing a solid and clear position, citing facts about the actual effect of the sanctions on Russian industry, ongoing commentary, and fast responses to statements made by Western politicians.

All this has led to a positive shift. The sanctions are represented as a driver for developing domestic technologies, and reducing import dependency. Russian and international audiences believed that including Rostec in the sanctions was "unfair" and supported the development of long-term business relations with Western companies, which affect millions of people around the world.

### ROSTEC CORPORATE WEB SITE AND OFFICIAL ACCOUNTS

In 2014 the official Rostec web-site served as one of the key sources of corporate information. Compared to the previous year, the total number of visitors grew by 2.5 times and amounted to 2,063,485. The number of unique visitors also increased almost threefold (up to 1,344,658), while page views increased 1.8 times (up to 5,224,303).

There was gradual growth of user interest in visiting the site. Within the period under consideration, there were several user activity surges caused by significant and extensively covered events.

The total site audience exceeds 3 million. The site's key advantage as compared to other corporate sites is a live newfeed in 6 languages. It posts breaking news in cooperation with news aggregators and portals, the most efficient news traffic handling strategy. In the future the system will have a publication and tagging system that will increase not only quantitative but also qualitative indicators about the value of the site as a resource.

Most site visitors are native Russian speakers. Still, they come from different locations around the globe. There is a significant audience in Latin America.



A Rostec banner network has been launched with the aim of forming a single showroom for products and to connect the corporate site and those of its holdings into a unified system. In just half a year after the launch of the corporate site the total number of links to it reached about 25,000. The total audience of all the linked sites for the same period was about 2 million users.

Social networks were among the key contributors to the audience growth of the Rostec site. In total, they provided nearly 30% of the site traffic. In 2014 the highest number of links were on Facebook (12.4%), Vkontakte (8%), and Twitter (7%). The time of such visits and number of page views exceeded the average values for the traffic from search engines. Also, Twitter has become the primary source of news, with a positive impact on the blogosphere.

Over 30% of Rostec's audience on core social networks belongs to the most active age group, aged 25-35 years old. Reflective of the high content quality, the number of our followers in the 35-55 years age bracket exceeds that of the 18-24 bracket that is most dominant on social networks.

Over 10% of the site audience is made up of senior citizens 55-65 years old. The total number of Rostec followers on social networks by the end of 2014 was 266,979.

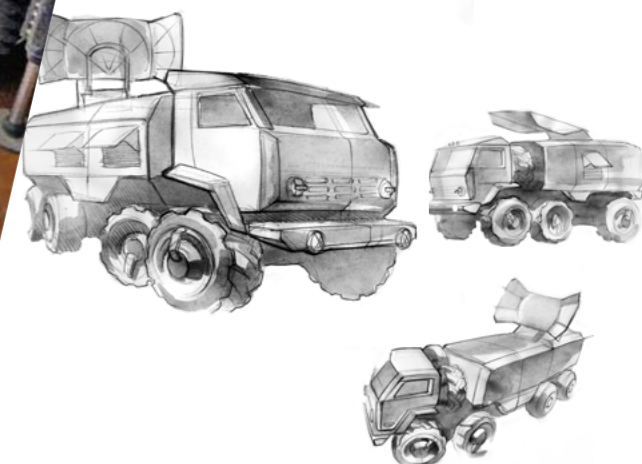


*Rostec  
production*

*Exports of defence  
products in 2014  
amounted to*

**13.2**

*billion USD  
Rosoboronexport*



# 5<sup>1</sup> Rostec contributions to Russian industry

## Rostec’s industrial facilities in Russia dominate the following markets:

- Military and civilian helicopters
- Aircraft engines and components, airborne avionics, parachutes
- Tactical ballistic missile systems, multiple launch rocket systems
- Short range air defense systems
- Small arms and close combat weapons
- Ammunition and explosives
- Optomechanical and optoelectronic devices control systems, communication, electronic and radar intelligence, electronic warfare equipment
- Cipher equipment
- Electronic warfare devices and IFF transponders
- Electronics components, vacuum tubes
- Trucks
- Cars

In 2014, the corporation’s defense companies operated in compliance with the Russian Federation National Defense Industry Development Policy for 2020 and Beyond, the Russian Federation National Research Development Policy for 2020 and Beyond, and Russian Federation Policy in the field of science and technology development for 2020 and beyond и далее по тексту and the National Armaments Program for 2011–2020, Government Defense Orders for 2013 and 2014-15, Russian international military cooperation programs, and the Federal Target Program (hereinafter FTP) “Development of the Defense Industry in 2011-2020,” and other federal target programs.

### ROSTEC’S ENTERPRISES PRIMARILY FOCUS ON:

- Manufacturing
- Research and development

The corporation’s subsidiaries offer:

- Development, manufacture, and upgrades of armaments, military, and special purpose equipment
- Military equipment aftersales service, maintenance, and recycling
- Development, manufacture, and maintenance of civilian products

The following table lists the key product development, manufacturing and service areas grouped by industries.



Armaments, military, and special purpose equipment	Civilian products	Export products
--	-------------------	-----------------

Aviation		
<ul style="list-style-type: none"><li>• Airborne Equipment</li><li>• Aircraft components, electric, and life support systems</li><li>• Parachute drop equipment</li><li>• Ground support equipment</li><li>• Extensive range of helicopters</li><li>• Engines for military fixed-wing and rotary aircraft</li></ul>	<ul style="list-style-type: none"><li>• Comprehensive integrated systems and equipment</li><li>• Transportation components and systems</li><li>• Medical equipment</li><li>• Sport parachutes</li><li>• Unified cargo drop systems</li><li>• Avionics</li><li>• Engines for civil aircraft</li></ul>	<ul style="list-style-type: none"><li>• Export versions of armaments and components</li><li>• Airborne systems and components</li><li>• Parachute systems</li><li>• Ground support equipment</li><li>• Helicopters and engines</li></ul>
Ammunition and Military Chemical Products		
<ul style="list-style-type: none"><li>• Various artillery rounds</li><li>• Small-bore ammunition</li><li>• Multiple launch rocket systems and rockets</li><li>• Bombing and close combat weapons</li><li>• Pyrotechnic products and materials</li></ul>	<ul style="list-style-type: none"><li>• Gas turbine generators and gas compressor units</li><li>• Industrial explosives and fuses</li><li>• Pyrotechnic products</li><li>• Energy, oilfield, mining equipment</li><li>• Pharmaceuticals</li><li>• Medical equipment</li><li>• Home appliances</li><li>• Paint materials</li></ul>	<ul style="list-style-type: none"><li>• Export versions of armaments and components</li><li>• Gunpowder and cartridges for sporting and hunting arms</li><li>• Special purpose medical equipment</li><li>• Oil and coal extraction equipment</li><li>• Pyrotechnic product</li></ul>
Conventional arms production		
<ul style="list-style-type: none"><li>• Army tactical missile systems</li><li>• Precision weapons</li><li>• Optomechanical and optoelectronic devices</li><li>• Small arms and ammunition</li></ul>	<ul style="list-style-type: none"><li>• Instruments and medical equipment</li><li>• Metallurgy</li><li>• Two-wheeled motor vehicles</li><li>• High tech components for agricultural, highway engineering, construction, and municipal machinery</li><li>• Civilian weapons and ammunition</li><li>• Optical equipment</li><li>• Geodesic equipment</li><li>• Machine tools and tooling</li></ul>	<ul style="list-style-type: none"><li>• Export versions of armaments and components</li><li>• Hunting arms (smoothbore, riflebore, combined)</li><li>• Sporting arms (smoothbore, riflebore, airguns)</li><li>• Pistols and revolvers</li><li>• Various cartridges</li></ul>
Radioelectronic industry		
<ul style="list-style-type: none"><li>• Special purpose communication and control systems and components</li><li>• Radio measuring devices</li><li>• Electronic warfare devices</li><li>• State identification equipment</li><li>• Airborne radio electronic equipment</li><li>• IT and telecommunications equipment</li><li>• Electronics and microwave equipment</li></ul>	<ul style="list-style-type: none"><li>• Communications equipment</li><li>• Security systems</li><li>• Various radars</li><li>• Medical equipment</li><li>• TV and radio broadcasting equipment, digital broadcasting systems</li><li>• Navigational equipment</li></ul>	<ul style="list-style-type: none"><li>• Export versions of armaments and components</li><li>• Frequency and timing references</li><li>• Electric metering systems</li><li>• Electronics products</li></ul>

Automotive industry

- *Prodcuton of various kinds of cars*

Metallurgy

- *Production of prefabricated steel structures*
- *Machinery*
- *Recycling*

Medical industry

- *Medical and surgical equipment, instruments, prosthetics manufacturing*

Chemical and petrochemical industry

- *Explosives and civil chemical products manufacturing*
- *Design and manufacturing of composite materials and products*
- *Cellulose containing waste recycling*
- *Production of biofuel, products for agriculture, pharmaceutical and food markets, chemical industry*
- *Implementing friction welding technology, delivering electric drives for valves, sucker rod pumps, oil, oil products, and electricity metering systems*

Beyond manufacturing

- *Haulage, logistics, and other services*

Other areas od activity

- *Design and construction of power and manufacturing plants, as well as community facilities*



Under the Federal Constitutional Law No. 6-Fk3 from March 21, 2014, the Republic of Crimea and Sebastopol, a federal city, were incorporated into the Russian Federation.

**THE CORPORATION HAS EXECUTED COOPERATION AGREEMENTS** with the local administrations of these constituents of the Russian Federation. The corporation is also carrying out the following activities on assignment from the Russian Government:

1. Integrating the defense companies in the Crimea Federal District into the corporation. These include:
  - SUE Feodocia Optical Company:integration with Shvabe, JSC
  - SUE Aeroelasticity Research Institute (Feodosiya): integration with Aviation Equipment, JSC
  - SUE Sebastopol Aircraft Company: integration with RRussian Helicopters, JSC
  - Uranis Radio Systems, OJSC (Sebastopol): integration with Concern Sozvezdie, JSC.

2. Placing government orders through Aeroelasticity Research Institute, Feodosiya Optical Company, Sebastopol Aircraft Company, and Uranis Radio Systems.

3. Utilizing the infrastructure of the Sebastopol sea fishing port for military cooperation, and for the delivery of dual purpose, non-defense products (under cooperation agreement No. 00744/11/c/Mv from December, 2, 2014, between RT-Logistics and the Government of Sebastopol).

4. Power facilities construction in the Crimea Federal District, electric grid upgrade. pursuant to an order by Dmitry Medvedev, Russian Prime Minister, (minutes No. 11 from November, 5, 2014), Rostec has participated in the activities supporting the development of the North Caucasian Federal District (NCFD).

**CONCERNING THE RADIOELECTRONIC INDUSTRY DEVELOPMENT IN NCFD:**

- A draft project for the reorganization of the NCFD radioelectronic industry by establishing an integrated research and production cluster was approved at a NCFD industry development workgroup of the Government Commission (minutes No. 6 from February 4, 2015);
- Financial recovery programs for NCFD loss-accruing companies (total debt is 250 million rubles) have been developed and are ready for approval at a meeting of a strategic businesses at the bankruptcy prevention workgroup of the Russian Ministry of Industry and Trade.

**CONCERNING THE DEVELOPMENT OF THE MINING PROCESSING INDUSTRY IN NCFD:**

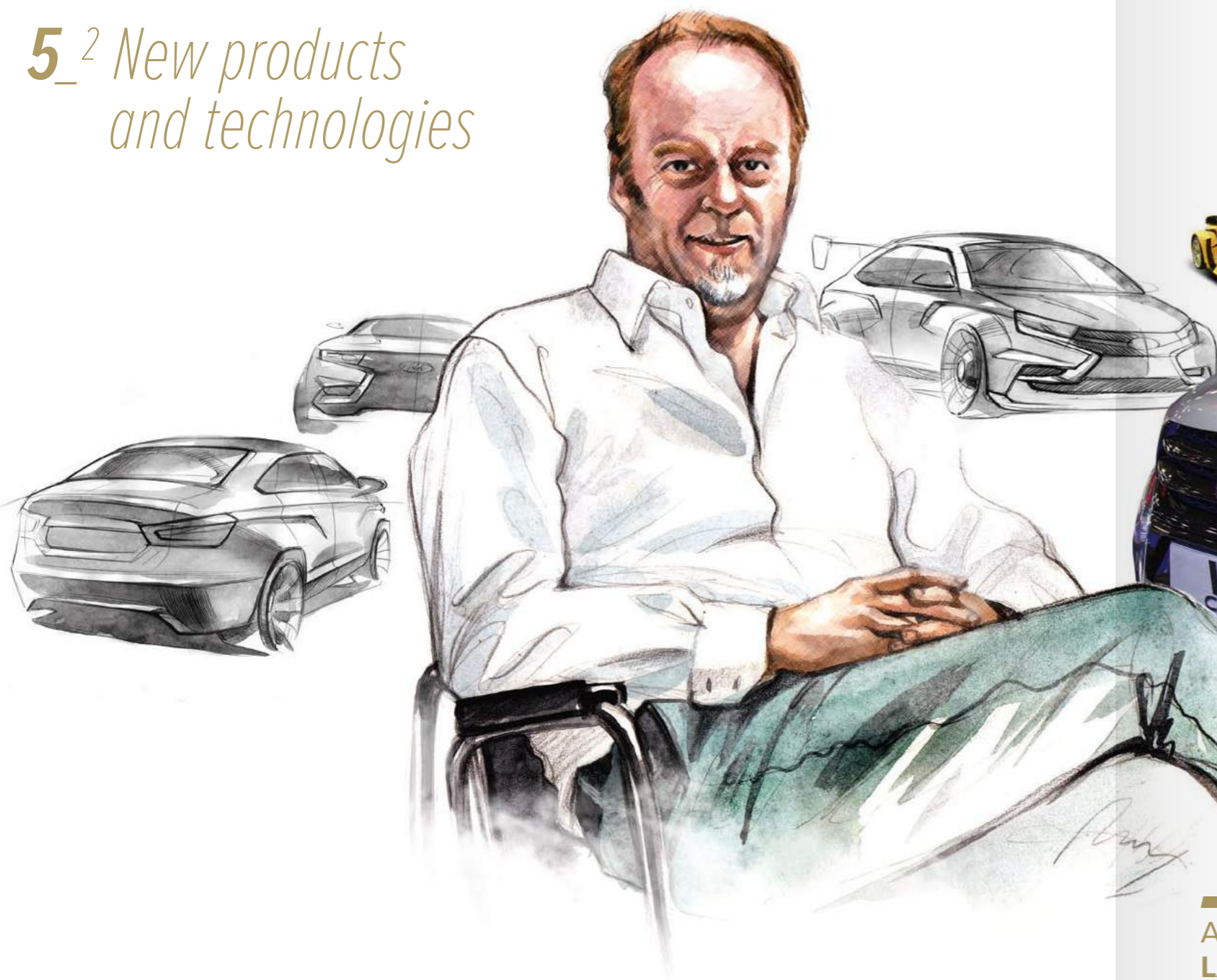
- The corporation in partnership with relevant organizations (LLC RT Global Resources OJSC Giprotsvetmet, OJSC Kabardino-Balkarian Tungsten and Molybdenum Company, RJC) has audited the Tyrnyaus Unified Facility project proposed by the Kabardino-Balkarian Republic's government•
- Basic steps have been identified to support the project, with RTGlobal Resources announcing its interest in developing the Tyrnyaus iron ore refinery.

**CONCERNING MACHINE TOOLS PRODUCTION AND DEVELOPMENT IN NCFD:**

- To phase out imported metalworking tools within the framework of a public-private partnership, Stankoprom requested and received proposals from the key NCFD manufacturers(Hydrometallurg, Pobedit, Terekalmaz);
- Stankoprom and Terekalmaz signed a cooperation agreement for the retrofitting of the diamond tools production site in order to increase output. The proposed investments amount to 450 million rubles.

The share of imported tools is about 70% (diamond tools) and 90% (hard alloy tools).

## 5<sup>2</sup> New products and technologies



*"The future of LADA is now. In 2014 we begin marketing LADA's new image, and logotype. But all of this began back in 2012. At the time, we made a move to create a new design strategy. We studied all global auto brands. We wanted to understand why some cars had their own strong identity, and why some were more unique than others. Then we wanted to create our own image: something really bold."*

**STEVE MATTIN,**  
CHIEF DESIGNER, **AVTOVAZ**



### AVTOVAZ LADA VESTA

**Lada Vesta is the new face of AVTOVAZ and is reflective of its modern corporate identity. The car is based on the brandnew Lada B platform developed by AVTOVAZ experts in partnership with Renault-Nissan.** Vesta is the first production model featuring "XRAY DNA", a new Lada style presented as a concept car in 2012.

**Lada Vesta will be manufactured in Izhevsk. Serial production will begin in the fall of 2015.** One of Russia's best paint lines, as well as a flexible assembly line, are already operational. A welding facility is currently under mounting.

**A Lada Vesta prototype was first revealed at the Moscow International Automobile Show.** Visitors acknowledged that the new car was one of the most spectacular prototypes.

**BrandLab assisted with selecting a new name for the model.** AVTOVAZ believes that the new name is easy to memorize and sounds good: Vesta is a female name mentioned in the myths of many nations, including early Slavs. The name is associated with home, comfort, spring, and renewal."

Vesta will have with three gasoline engine options from 87 to 114 hp. Two transmissions will be available: manual and automatic. Both are original AVTOVAZ designs.

**The car will be offered in three grades: standard, normal, and de luxe.** The standard Lada Vesta has a tilting steering column, ABS, ESP, and three L-shaped headrests. The basic configuration includes an ERA GLONASS emergency response system.

## Concern Automation

Development of an advanced troop control and communications vehicle based on the Tiger M light armored **all-terrain vehicle**.



**Concern Automation has developed a troop control and communications vehicle (TCCV) based on the GAZ 233114 (Tiger) armored vehicle. Thanks to its equipment the TCCV can be used at a range of strategic, operational, and tactical levels as a part of a forward control center.**

The vehicle is able to simultaneously control troops, and communicate with officers at other fixed and mobile control centers at every level of the Russian Army. The TCCV offers high performance and a choice of communication tools including secure channels. It is used for troop control, communications, and analysis.



*“Among the existing secure communication systems TCCV is the most flexible and mobile forward control center because it is based on Tiger M, the light armored allterrain vehicle, and is equipped with new communication systems.”*

**Alexander AGEEV,**

DEPUTY CEO  
CONCERN AUTOMATION



## Russian Helicopters

### Mi-8AMTSh-V



*“Each new helicopter is the result of the application of research and engineering activities of many experts. It is a combination of very different, sometimes conflicting concepts, and is the product of great efforts by both individuals and huge teams. To make a good helicopter, one needs not only competence and experience, but also the drive to be creative.”*

**Sergey SOLOMIN,**

FIRST DEPUTY CEO, CHIEF ENGINEER,  
ULAN UDE AIRCRAFT COMPANY



**In 2014, the holding delivered 40 Mi-8AMTSh utility and attack helicopters to the Russian Army as part of a state defense order. The helicopter is based on the famous Mi-8 military helicopter design.**

**The new version is more maneuverable,** particularly at low altitudes, thanks to the Russian VK-2500-03 high-powered engines from Klimov. **The TA-14 APU can be started at higher altitudes and is more efficient.** Thanks to it, the the Mi-8AMTSh has an extended selfpowered capability. The turnaround time has also been reduced.

**The helicopter is equipped with modern, high-quality radio communication systems.** The cockpit has multifunctional displays showing digital terrain maps and advanced flight electronics. The navigation system supports GPS and Glonass. The modern avionics facilitates excellent information intake by the flight crew.

**The service life of the Mi-8AMTSh has also been extended.** This means significant savings in maintenance costs for the entire lifecycle of the aircraft. The new helicopter's time between service has increased from 1,500 to 2,000 flight hours, as has its overall service life, from 25 to 35 years. The total cost of ownership over the entire lifecycle has dropped by about 25-30% as compared to the original version.

*The service life of the new Mi-8AMTSh helicopter, launched in 2014, has been extended from*

**25 to 35** years



## Shvabe

Serial production of the **MAIA-01** multifunctional anesthetic inhalation machine



**Shvabe has developed and launched serial production of** the domestically produced MAIA-01 anesthetic machine, which features worldclass capabilities. For this effort, the developers have been awarded the E. S. Yalamov Prize for “the best research and development project”.

**MAIA-01 is designed for inhalational anesthesia with** any breathing circuit and can be used for all kinds of surgeries, as well as for both artificial and unassisted respiration.

**A key feature of the MAIA-01 is** its integrated motor-driven respirator. This makes it possible to forego any compressed gases, and thus enables all modes of ventilation to be used during surgery. Additionally, MAIA-01 has a built-in, high-precision electronic gas meter to use expensive anesthetics as xenon. The unit also has an optional patient monitor to support LOW FLOW and MINIMAL FLOW modes.



*“We have developed the first Russian anesthetic machine that meets all global standards and have also launched its serial production. Currently our equipment is already helping to save lives across the country”.*

**Yuri  
STERLIN,**

PROGRAM MANAGER, HEAD OF  
THE LABORATORY FOR RESPIRATORY  
MACHINES

Upgrading and enhancing the resolution of the primary mirror of the **LAT telescope**, which has an aperture six meters in diameter.



**Shvabe is upgrading the primary mirror of the** Large Azimuthal Telescope (LAT) using advanced precision technology for the processing and monitoring of large optics. The high-precision (on the nanometer level) astronomic mirror is one of the unique instruments from Shvabe that contributes to the accomplishment of astronomical projects around the world.

**LAT is the largest telescope in Eurasia, with a 6-meter** aperture. It was built in 1975 at the Special Astrophysical Observatory of the Russian Academy of Sciences in the Karachay-Cherkessia Mountains. From 1975 to 1993, it was the world's largest telescope.



*“When the mirror is installed back onto the telescope after completing the machining at Lytkarino, its angular resolution will be below 0.2”, which is much better than the current available resolution of 0.6”. This will make the telescope one of the ten most accurate instruments in the world.”*

**Alexander  
SEMENOV,**

SENIOR ENGINEER,  
LZOS

The Large Azimuthal Telescope (LAT) has a **6**-meter primary mirror that was upgraded by Shvabe in 2014

# MC 21-300 jet airliner

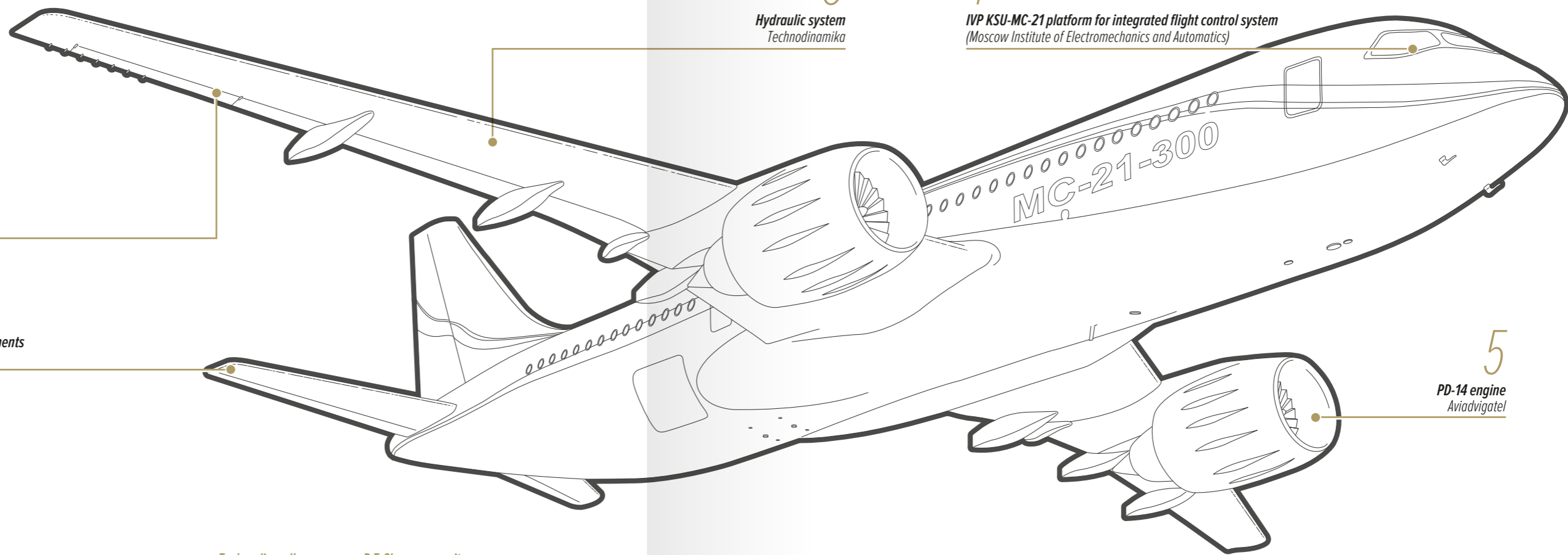
1  
Fuel system, drain valves  
Technodinamika

2  
Empennage polymer composite components  
RT-Chemcomposite

3  
Hydraulic system  
Technodinamika

4  
IVP KSU-MC-21 platform for integrated flight control system  
(Moscow Institute of Electromechanics and Automatics)

5  
PD-14 engine  
Aviadvigatel



Pos.	UEC	KRET	Technodinamika	R T-Chemcomposite
1	PD-14 engine Aviadvigatel	IM-21-2 multifunctional display (UIMDB, Utes)	Landing gear, wheels, brakes	Polymer composite materials are used in the empennage spars, ribs, and large integrated stringer panels of the tail fin and horizontal stabilizer and in the PD-14 engine acoustic panels, reversing flaps, and core engine panels (JSC ORPE Tekhnologiya)
2		Control panels (UIMDB, Utes): - PT-3 trackball - MFP U-2 - PUI-17 - PSAU	Electric system	
3		ISRP-21 integrated instrumentation backup system (UIMDB, Utes)	Hydraulic system	
4		Components of the ShVD-21 air data measuring system (Aeropribor-Voskhod, UIMDB, Utes)	Fuel system, drain valves	
5		MFPO software modules (NIIAO): - air navigation - indication and alerts - air data measuring system taxiing control - monitoring and maintenance - general aircraft equipment management	Auxiliary power system (APU)	

Pos.	KRET	Technodinamika
6	IVP KSU-MC-21 platform for integrated flight control system (Moscow Institute of Electromechanics and Automatics)	Oxygen system
7	General aircraft equipment management system components (UIMDB, Utes)	Inert gas generating system
8		Fire extinguishing system components
9		Flight control system
10		Integrated cabin air conditioning system components
11		Emergency slides



## High Precision Systems

### Pantsir-S



**The Pantsir-S1 combined anti-aircraft system** is ideal for all armed forces and defense facilities that provides protection against all types of modern and advanced means of air attack, including precision weapons and aircraft, within a 20-km range and up to 15-km in altitude. Within that range the Pantsir-S1 can destroy any existing and future means of air assault. Missiles can be fired at up to four targets simultaneously. The system has 12 missiles and 1,400 artillery rounds.

**Pantsir's performance is comparable to other advanced smart weapons. The system is intended for protecting** industrial and defense facilities, and to provide cover for S-300 and S-400 anti-aircraft missile systems. In 2014, Pantsir was widely deployed to protect important sites. It played a key role in protecting the Olympic venues in Sochi and the World Soccer Championship facilities in Brazil.



*"We deliver customers a weapons system made up of up to six combat vehicles connected to each other by a tactical operations center. Each vehicle can track four targets at once. So, a division of four vehicles can destroy at once as many as 16 targets. Three such divisions are sufficient for the entire air defense system of a small country, and it does not require a lot of money."*

**Valery SLUGIN,**

DEPUTY DIRECTOR, KBP  
CHIEF DESIGNER, HIGH PRECISION SYSTEMS



## Concern Kalashnikov

Parts manufactured with MiM technology are widely used **in firearms production**



**In 2014, Concern Kalashnikov introduced** small arms parts manufactured with MiM (metal injection molding) technology. The new process reduces manufacturing costs and time by eliminating a number of unnecessary operations. It also improves quality.

**MiM processing technology includes the creation of** complex metallic parts by molding them with an injection-molding machine from a mixture of metallic powder and polymer filler. The filler is then removed. The process makes precision parts with minimum subsequent machining. Metal consumption is also greatly reduced.



*"As Concern Kalashnikov introduces new technologies, it is cutting costs and joining the ranks of the most advanced firearms manufacturers."*

**Andrey KULIKOV,**

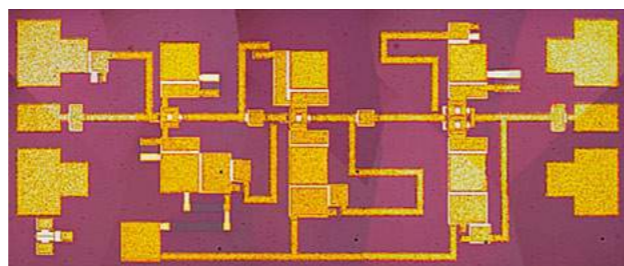
CHIEF MANUFACTURING ENGINEER,  
CONCERN KALASHNIKOV





## Ruselectronics

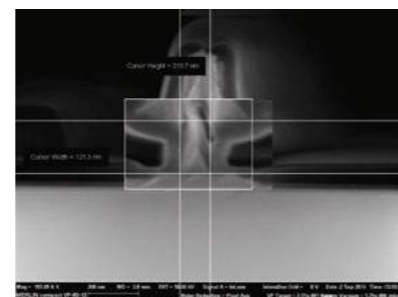
### Development of a radiation-resistant EHF amplifier



*“GaAs-UHF technologies are routinely used in satellite, wireless, and mobile communication systems, as well as in radio-astronomy and other applications needing ultra low-noise amplifiers with a high gain. They operate in a wide frequency range, enabling high gain and low distortion factor in amplifiers and generators with a wide dynamic range so the output power is at maximum.”*

**Alexander KRUTOV,**

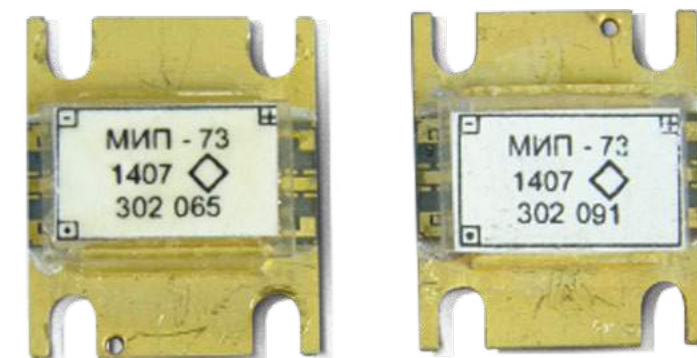
HEAD OF THE LABORATORY, **RPC ISTOK NAMED AFTER SHOKIN**, CHIEF DESIGNER, **VYSOTKA-17 PROJECT**



**In October 2011, a prototype of** a radiation-resistant EHF amplifier ordered by the Ministry of Industry and Trade received formal approval. The amplifier is intended for ground and airborne electronic warfare equipment, as well as space satellites. According to specifications, the design was developed concurrently with the commissioning of serial production. As a result, two types of UHF radiation-resistant low-noise amplifiers have been developed. The unit's weight does not exceed 1 mg. Its dimensions are 1.88×0.82×0.11 mm.

**The necessity performance characteristics were achieved by** using modern gallium arsenide pseudomorphic heterostructures, as well as precise machining. **For high radiation resistance,** the gate is metallized with churlish titanium, platinum, and gold alloys. The unit is shock-resistant, as well as resistant to environmental, chemical, and biological hazards.

### Development of four nitrite gallium UHF module types



**In 2014, research and development into** 4 types of solid, high-dynamic UHF amplifiers (the Odnotsvetnik-21 project) was completed. The units will be used as components of advanced weapons.



*“Today we are seeing the emergence of a new generation of technologies that enable breakthroughs in the performance of solid-state power amplifiers. Ruselectronics’s research and development capabilities can implement many GaN-based technologies independently of foreign assistance.”*

**Alexey DOROFEEV,**

CHIEF DESIGNER, **ODNOTSVETNIK-21**

**The development took place concurrently with production commissioning.** As part of a research and development project, four types of nitrite gallium UHF modules (M421364-1, M421364-2, M421374, and M421375) have been created. Their world-class specifications will soon be used in advanced military radioelectronic systems.

**The Odnotsvetnik-21 project has created a** world-class UHF electronics component. The new amplifier will reduce the dimensions and weights of the Khibina-M, Krasnukha-4, Gimalayas, and Tarantul electronic warfare receivers by tenfold, while also improving the noise factor. It will also phase out imported components in a number of communication systems.



*“The two-screen layout and a 50-hour battery life has opened many new market opportunities for the YotaPhone2. We at YotaDevices are confident that any daring idea can be implemented, and that an innovative business can be launched in Russia. We just have to replace stereotypes and doubts with ambitions.”*

Vladislav **MARTYNOV**,  
CEO, **YOTA DEVICES**



YOTA DEVICES  
**YOTAPHONE 2**

**The second-generation YotaPhone hit the market in 2014. The new gadget from Yota Devices has all the features of a modern smartphone: unparalleled software, a modern look, and a second screen on the back.**

**The new smartphone not only surprises with its two screens; it also has advanced hardware.**

The developers took into account user feedback about the first model and implemented their suggestions in the second-generation smartphone. The design is more sleek and ergonomic, and the unit has become thinner and lighter, while also growing in size. YotaPhone's specifications have also been improved too: it now has a 4-core Qualcomm Snapdragon 800 processor (2.3 Hz), a 5" primary AMOLED Full HD 1920x1080 screen, and a second EPD 4.7" HD 960x540 screen, which is now fully touch-enabled. Both YotaPhone screens are protected with super-hard Gorilla Glass 3. The smartphone has a NFC module and supports wireless charging. It weighs just 144 g.

**100**  
hours:—  
lifespan of the EPD  
screen in reading  
mode

Russian experts developed the phone's architecture and design. The unit implements about a dozen of patented technologies.

There is also a special version with a domestically developed data encryption feature that makes the smartphone extremely secure.

At the end of 2014, Forbes called the Russian smartphone the "breakthrough of the year".

Over ten international business and mass media outlets selected the second-generation YotaPhone as the most innovative device presented at Mobile World Congress (MWC).



KRET

## Strapdown inertial navigation system (SINS)



**The development and manufacturing of strapdown inertial navigation systems** is one of KRET's primary businesses.

The concern's enterprises are developing a new generation of SINS for modern domestic fixed-wing and rotary aircraft such as the Mi-28N Night Hunter, Su-35 and Tu-160 military aircraft, and the PAK FA fifth generation fighter.

**For the PAK FA project KRET has developed** the SINS SP2M upgraded strapdown inertial navigation system. It processes navigational and flight information, identifies coordinates and motion parameters without satellite assistance, and is integrated with the Russian military orbit group and Glonass satellites.

**The concern is implementing an innovative 14.5 billion-ruble project** to launch serial production of these systems, a one-of-a-kind effort in Russia. The project is intended to supply Russian manufacturers with strapdown inertial navigation systems for ground vehicles and aircraft. By 2020, KRET will be making 1,500 units a year.



*"The deep integration between SINS-SP2M and space systems will improve the performance of the PAK FA in net-centric warfare when army, air forces, and navy are united in a single network."*

Alexey  
**KUZNETSOV,**

SINS CHIEF DESIGNER



## Machine Engineering Technologies

## Fireworks at Sochi Olympics 2014



**The Sochi Olympics was the most noteworthy event in Russia in 2014.** The enormous Olympics fireworks were developed with the assistance of Applied Chemical Research Institute (ACRI), a subsidiary of Machine Engineering Technologies. ACRI is a leading Russian center in the research, development, manufacturing, and recycling of civilian and military pyrotechnical products.

**An additional four subsidiaries of** Machine Engineering Technologies also worked on the Olympics fireworks: Novosibirsk Mechanical Plant ISKRA, Cheboksary Production Association named after V. I. Chapaev, Murom Apparatus Producing Plant, and GosNII Kristall.



*"Only Machine Engineering Technologies enterprises produce professional fireworks in Russia. For this reason, Rostec companies were invited to make the Olympics fireworks. We performed with excellence and impressed the entire world with a vivid and unforgettable show."*

Nikolay  
**VAREHYKH,**

CEO, APPLIED CHEMICAL  
RESEARCH INSTITUTE





## M1842 (KAMAZ-5490) freight truck



**The M1842 was nominated as “truck of the year” in 2014.**

This is a significant technological breakthrough for KAMAZ’s commercial vehicles business.

**The cab was developed jointly with Daimler AG.** Its modern design offers greatly improved aerodynamic performance and an improved driving experience.

**Russian trucking companies have started buying up the KAMAZ-5490 (M1842) semitrailer truck.** Its specifications and appeal match those of European-made Iveco Stralis, MAN TGX, Scania R380, Mercedes-Benz Axor 1840LS, and Volvo FH16 trucks.

In 2014, operating costs per kilometer of this KAMAZ truck slightly exceeded 19 rubles. The next closest competitor, Iveco Stralis, costs 20.5 rubles, with 21 to 25 rubles for the others.

The cost per ton-kilometer of the KAMAZ-5490 is also lower at 0.65 rubles. For European-made trucks, this cost is much higher, from 0.9 to 1.5 rubles per ton-kilometer. Also, the Russian truck is the cheapest option on the international freight market for trucks. All these trucks, including Russian KAMAZ trucks, have a 1 million kilometer service life. All these trucks can also carry up to 36 tons.

*“The freight truck is a double debut for KAMAZ: this is KAMAZ’s first vehicle in this new market segment, the only one, in which the company was not represented. Moreover, the M1842 is the first KAMAZ vehicle designed completely with 3D modeling.”*

**Evgeny MAKAROV,**

CHIEF PROJECT  
DESIGNER

## KAMAZ-65206 semitrailer truck with hybrid powertrain



**With its new designs** and a new lineup of models, in 2014 KAMAZ preserved its status of the largest player on the Russian truck market. The KAMAZ-65206 semitrailer with a hybrid powertrain and 6x6 axle configuration is designed for long range hauls and can carry trailers weighing up to 46 tons. The hybrid engine reduces fuel consumption by 7-23%, depending on road conditions.

**The truck is equipped with a Cummins ISL 380 engine** compliant with Euro 5 environmental standards, and a 12-gear automatic ZF Trakson transmission with a hybrid module. It makes truck handling easier and supports driving with electric power only, as well as energy recovery and storage.

**Additionally, the truck has an ondemand full drive** with permanent magnet reversible electric machines to improve stability and maneuverability in treacherous driving conditions, as well as an energy storage unit with Li-Ti elements.

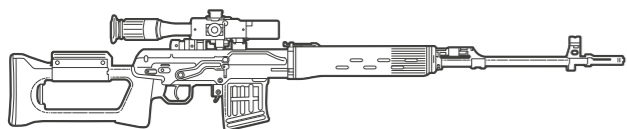
*“The hybrid powertrain installed in the KAMAZ-65206 semitrailer truck saves fuel, and the on-demand full drive provides excellent maneuverability and stability in treacherous driving conditions.”*

**Igor VALEEV,**

CHIEF DESIGNER OF HYBRID  
VEHICLES

# Ratnik infantry combat system

**AK-12 5.45-mm machine gun,**  
Concern Kalashnikov



**7.62-mm Dragunov modernized precision rifle (SVD-M),**  
Concern Kalashnikov



**AK-103-3 7.62-mm machine gun,**  
Concern Kalashnikov



**9-mm special purpose modernized precision rifle (VSSM) with scope sight (OPSO).**  
Developed by TsNIITOCHMASH and Shvabe

**Unified night scope sight for standard caliber small arms (UNPR),** Shvabe

**Compact binoculars (MOB),** Shvabe

**Day and night wearable reconnaissance device (VNPR),** Shvabe

**Small arms scope sight,** Shvabe



## List of Rostec subsidiaries involved in the Ratnik research and development project

No.	Component name	Developer	Role in development or manufacturing
1	9-mm special purpose modernized precision rifle (VSSM)	<b>TsNIITOCHMASH,</b> Klimovsk	Development and manufacturing
	9 mm special purpose modernized machine gun (ASM)		Development and manufacturing
	5.45-mm improved fire accuracy cartridge		Development
	7.62-mm precision rifle cartridge with armor-piercing bullet		Development
	General-purpose shelter (UC)		Development and manufacturing
2	Unified night scope sight for standard caliber small arms (UNPR)	<b>Shvabe-Devices,</b> Novosibirsk	Development and manufacturing (project 1P86-1, company's own investments)
	Unified night scope sight for standard caliber small arms (UNPR)		Development and manufacturing
	Unified thermal imaging sight for precision rifles and standard caliber machine guns (UTPR-N)		Development and manufacturing
3	7.62-mm Dragunov modernized precision rifle (SVD-M)	<b>Concern Kalashnikov,</b> Izhevsk	Development and manufacturing
	5.45-mm machine gun		Development and manufacturing (government testing stage, company's own investments)
	7.62 mm machine gun		Development and manufacturing (government testing stage, company's own investments)
4	30-mm automatic modernized antipersonnel grenade launcher (AGS-30M)	<b>KBP Instrument Design Bureau,</b> Tula	Development and manufacturing
	Extended range round (GPD-M)		Development
5	Compact binoculars (MOB)	<b>Shvabe-Tech Lab,</b> Kazan	Development and manufacturing
	Day and night wearable reconnaissance device (VNPR)		Development and manufacturing
	Day and night portable reconnaissance device (VPPR)		Development and manufacturing
6	Unified thermal imaging sight for precision rifles and standard caliber machine guns (UTPR-N)	<b>Cyclone Central Research Institute,</b> Moscow	Development and manufacturing (government testing stage, company's own investments)
	Unified thermal imaging sight for precision rifles and large caliber machine guns (UTPR-K)		Development and manufacturing
7	Unified scope sight for precision rifles, standard and large caliber machine guns (UOPR)	<b>Krasnogorskiy zavod im. S. A. Zvereva,</b> г. Красногорск	Development and manufacturing
8	Laser target designator (LTD) for day-and-night sighting system (DNPK)	<b>Shvabe-Photodevice,</b> Moscow	Development and manufacturing



United  
Instrument Manufacturing  
Corporation

UIMC

## P-430 radio relay stations system



*“The system has successfully passed government tests, which showed that the R-430 can be used as basic secure digital radio relay communication equipment for the Russian Army and other law-enforcement agencies.”*

Viktor  
**ROSHCHIN,**

HEAD OF THE DEPARTMENT,  
SVYAZ RESEARCH CENTER

As troop and weapons command systems develop, there is a need for faster and more diverse communications. The new digital relay stations system (RSS) has a range up to 1,500 km and can operate even in the face of strong interference from enemy electronic warfare equipment. The stations transmit and retransmit digital data; identify and input tactical and service information; provide secure point-to-point, linear, and conference communications; monitor and control of a multihop link; and more. The system consists of four types of mobile radio stations (R-430LE-1, R-430LE-2, R-430UE, R-430PE) supported by the radio relay equipment, which operates in six frequency subranges from 390 MHz to 40 GHz with bit rates from 512 kbit/sec to 155 mbit/sec.

All new generation RSS systems have the following common features:

- определение glonass-assisted navigation
- automated preplanning of radio links and RSS positions
- automated RSS antenna pointing to the relay stations
- a range of electric power options
- equipment installed on all-terrain vehicles.

All these features facilitate faster radio relay link deployment and increase the stability, reliability, and endurance of relay links and networks, as well as simplify operations of RSS and field communication systems. The system can be fully deployed in less than 30 minutes. Leading military experts believe that equipping the Russian military with the R-430 will provide all branches with high-speed, large data transfer capabilities over any distances and will support military operations with communication channels.

## Borisoglebsk-2



In 2014, the first batch of the latest Borisoglebsk-2 electronic suppression systems was delivered as part of a large-scale Russian Army reequipment program. Borisoglebsk-2 is the primary weapon for tactical electronic warfare units. The system's detection and suppression frequency range has been more than doubled,

while the detection speed has been improved by over 100 times. The system is intended for ground, aerial, mobile, and other communications interception and radio suppression in HF and UHF bands. The system includes three suppression stations and a control station installed on up to APCs. The system includes up to nine vehicles. As compared to the previous version, the new model offers better performance, including: an extended frequency range of the communications interception and radio suppression equipment, faster frequency sweeping, quicker reaction to unknown frequency identification, higher radio source location accuracy, and better suppression throughput. The software provides a unified user experience that facilitates personnel transfers between stations.

*“For the first time, all the equipment follows a single communications interception and radio suppression algorithm to identify primary enemy electronic warfare targets. Borisoglebsk-2's specifications are equal to or exceed those of the world's top comparable systems.”*

Mikhail  
**ARTEMOV,**

CEO,  
ELECTRONIC WARFARE AND SPECIAL COMMUNICATIONS RESEARCH CENTER

# Armata T-14 battle tank

The tank is intended for mobile warfare within tank and motorized infantry units as the primary multifunctional weapon capable of operating under nuclear and other WMD strikes.

1  
Fire extinguishing systems  
Elektromashina

2  
Radio station  
Concern Sozvezdie

3  
Multichannel gunner instrument,  
panoramic tank commander sight  
Shvabe

4  
Gun stabilizer Kovrov  
Electromechanical Plant

5  
Tracers for armorpiercing  
composite and  
shaped charge shots  
NIIPKh

No.	XK (MC)	Holding Company	Components, parts, and other elements
1	Tehmash	SPLAV	combustible cartridge pallet for high-explosive, armor-piercing composite and shaped charge shots
2	Tehmash	Krasnoznamennets	electric primer for gunpowder charges
3	Tehmash	NIIPKh	tracers for armor-piercing composite and shaped charge shots
4	Tehmash	Kovrov Electromechanical Plant	gun stabilizer; hydrostatic drive; transmission control system; hydraulics control system; remote machine gun control system; roll and pitch sensors

No.	XK (MC)	Holding Company	Components, parts, and other elements
5	JSC Shvabe	JSC Shvabe-Devices	Multichannel gunner instrument, panoramic tank commander sight
6	JSC RT-Auto	OJSC Elektromashina	Electric components; fire extinguishing system
7	JSC UIMC	JSC Concern Sozvezdie	radio station

**TECHNODINAMIKA**  
Standard of vanguard

## Technodinamika (Aviation Equipment)

**SSJ-100** landing gear  
braces production



*“The contract between the holding and Sukhoi Civil Aircraft to deliver components for the Sukhoi Superjet 100 is an important project to phase out imports under the aviation industry development strategy to 2025.”*

**Artem  
SYSLIKOV,**

MANAGER OF INNOVATIONS,  
DEVELOPMENT, AND SALES PROJECTS

**In 2014, Aviaagregat quickly launched production** to manufacture the first pilot batch of landing gear braces for the newest Russian airliner, Sukhoi Superjet 100. The landing gear braces are manufactured jointly with the French company Messier-Bugatti-Dowty (MBD), the world's largest aircraft landing systems manufacturer.

**In 2014, the holding developed jointly with UAC** a detailed plan to launch the landing gear braces production. The project was audited and the company was approved as a Messier-Bugatti-Dowty supplier. According to the aviation industry development program through 2025, Russian aircraft manufacturers will become key suppliers of comprehensive systems for both Russian and international aircraft. **The number of imported components used in the advanced SSJ-100 and MC-21** airliners will be significantly reduced.



**Rostec**  
RT-Chemcomposite

## LSC RT-Chemical Technologies and Composite Materials

Fairings for the  
**Angara** rocket



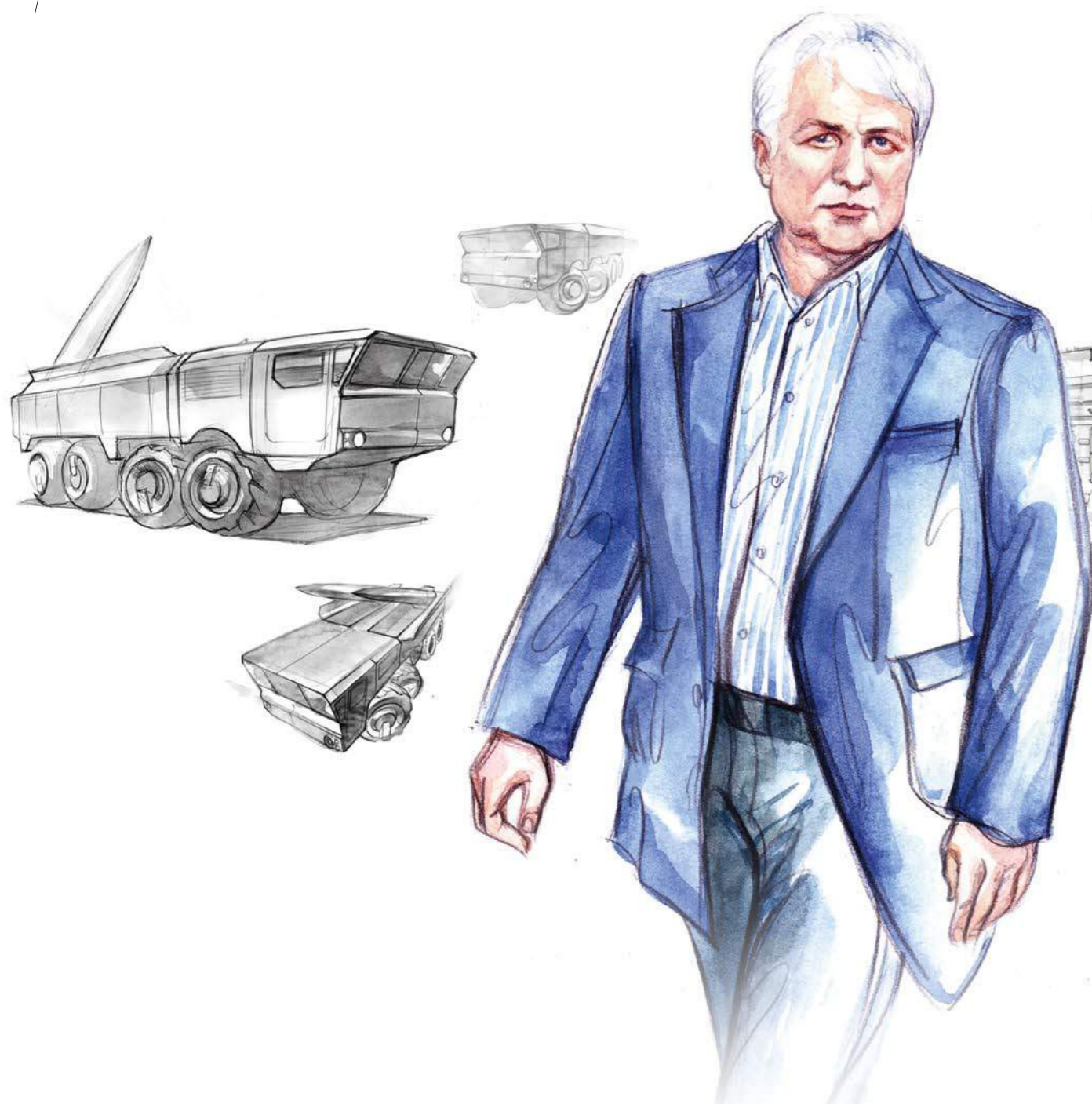
*“We constantly check the pulse of and follow research advancements in order to implement new technologies and materials. For this reason we are confident, and there is high demand for our products and skills. Production of composites in Russia will only grow, and the demand is already strong.”*

**Nikolay  
VYMORKOV,**

CHIEF MANUFACTURING ENGINEER,  
**COMPOSITE RESEARCH AND DEVELOPMENT CENTER,  
ORPE TECHNOLOGIYA**

**Angara-A5, the latest Russian rocket-launch vehicle,** successfully took off from Plesetsk on December 23, 2014. The rocket and its undetachable payload entered into geostationary orbit 36,000 kilometers above the Earth. For this unparalleled project, **ORPE Technologiya manufactured payload fairings** and a number of local polymer composite structural elements. For many years the company cooperated with Khrunichev Space Center, Angara's developer. In 2014, the company manufactured and delivered two new types of payload fairings for the new Angara 1.2 and Angara 5 rockets. Both were successfully launched in 2014.

**Additionally, in 2014 a nose fairing manufacturing technology** using modern modular materials was developed during Stage 4 of the Proton-M rocket modernization program. The new fairing will improve the Proton-M's performance and competitiveness on the international launch services market. **Notably, from 2010 to 2014, the number of fairings delivered grew from 8 to 12 units.**



*"The defense sector has always been a development driver for other industries. Leading companies have always been working on product developments now called 'innovative.' Our goal has always been not to be equal to, but rather be better than, the world's best products. We have succeeded almost every time.*

*Given the current defense sector growth and an increasing number of government orders, the defense sector is again turning into a powerful driver of development for all Russian industries, as well as the Russian economy".*

**Valery KASHIN,**  
FIRST DEPUTY CEO,  
HIGH PRECISION SYSTEMS CEO, RPC KBM



## ISKANDER-M MISSILE SYSTEM

**In 2014, the Russian Ministry of Defense received two Iskander-M mobile shortrange ballistic missile systems as part of a contract**

**Each brigade missile system includes:** launch platforms, support reloading vehicles, command vehicles, life support vehicles, a maintenance vehicle, a data processing station, and sets of highprecision guided missiles, ammunition, and training tools.

Today the Russian Iskander systems, manufactured in Kolomna, are among the best foreign mobile missile systems in their class.

**Due to its high firing rate** (two different targets can be hit within a one-minute interval) and its 280-km range, the system can fire on any target, whether surface, underground, or area targets.

**280**  
kilometers:  
maximum  
destruction  
range

**12**  
launch  
platforms  
as a brigade unit

**Iskander-M's performance exceeds that of** similar foreign systems in terms of accuracy and its ready-to-fire time. Thanks to its unique stealth technology, Iskander-M has better chances of surviving anti-missile defenses.

**Iskander-M is the most efficient weapon in its class,** leaving its top foreign competitors behind. The system has significantly expanded the capabilities of Russian rocket and artillery forces. It is expected that, in the future, it will become the primary rocket weapon of the Russian Army.

## 5<sup>3</sup> Import substitution

### The corporation's import substitution activities have adhered to approved schedules.

#### CORE AREAS:

- Revision to the design and engineering documentation for manufactured products with the aim of replacing imported components and materials with Russian-made equivalents;
- Setting up and running the manufacturing process for components and materials in the Russian Federation.

Rostec plays an active role in import substitution, which contributes to cutting the ultimate cost of domestic production as well as eliminating dependence on imports.

The latest MI-8AMTSH-V helicopters produced at Ulan-Ude Aviation Plant as part of the defense procurement and acquisition program serve as an example of the import substitution program. In order to reduce dependence on foreign suppliers, the latest Mi helicopters are equipped with advanced Russian-made equipment.

The substitution of the Ukrainian made AI-9V power supply for the Russian TA-14 equivalent produced by SPE Aerosila has become one of the priorities in the upgrade program. The TA-14 has a higher power generation capacity, increased operational time in generator mode, and a superior startup performance at high altitude (6,000 m versus 4,000 m recorded by AI-9V), thus enhancing the helicopter's capabilities for operation in highland areas and for deployment at unmanned or poorly equipped airfields.

The helicopter is propelled by even more powerful VK-2500-03 engines from Klimov (a subsidiary of United Engine Corporation), replacing the Ukrainian power supply. The Russian made VK-2500-03 engines significantly improve the aircraft's reliability, safety, and flight characteristics. In addition, an extended service life of the Russian engines will have a favorable impact on its cost effectiveness.

*«We are well aware of how vital it is to be free of dependence on foreign components, and we are intentionally striving to make ourselves more self-reliant. Furthermore, the results of that work show that, in some applications, the use of Russian equipment enables us to make noticeable improvements in the helicopter performance» – Alexander Mikheev, Russian Helicopters CEO.*

To ensure the crew's convenience and flight safety, the helicopter is outfitted with state-of-the-art Russian weather radar featuring three-dimensional imaging of meteorological targets and objects. For improved battle survivability, the helicopter is equipped with sophisticated, Russian-made metal and ceramic armor that is more durable and lighter than conventional steel armor.

The advanced, domestically produced flight/navigation and radio communications equipment, defensive weapons systems, and a wide array of additional hardware will allow the latest MI-8AMTSH-V military transport helicopter to rise to all challenges.



Produced in Russia, the onboard BMS satellite navigation system is both compatible with the domestically made GLONASS and the internationally recognized GPS. An advanced communications system, also of Russian make, gives the helicopter crew access to high-quality communications across a broad frequency range. Rostec and Rosseti approved a plan for a joint project to set up as part of Rostec a shared competence center for the production and supply of substitute equipment. A range of future R&D activities has been formed in accordance with the goals and objectives for import substitution. Efforts are underway to incorporate those activities into the Federal Target Program, "Research and Development Priorities in Building Russia's Scientific and Technological Complex by 2020."

With the help of the Russian Ministry of Industry and Trade, Holding Technodinamika (Aviation Equipment) is working on ten import substitution projects in power supply systems, specifically, an alternator, a variable frequency starter/generator, converters, and protection units – namely everything that will fully replace foreign made systems. In the mean time, the production process for power supply systems, fuel metering equipment, infrastructure, safety and security systems, landing gear, and more is expected to be designed and set into operation.

*«Import substitution is one of the key examples of the strategic goals overseen by Russia's Military and Industrial Complex. Unless we factor in risks of failing to deliver components for the production of military equipment on the previous cooperation basis, it will cause a disruption to the planning process, and we may fall by the wayside, with everything tumbling down like a house of cards» – Yuri Borisov, Deputy Minister of Defense, Executive Secretary of the Military Industrial Commission.*

In 2014, United Instrument Manufacturing Corporation rolled out a fifth-generation computer-aided control system designed for the Strategic Rocket Forces (RVSN RF) that is entirely built on domestically produced electronic-components and differs from its predecessors by featuring an innovative workstation layout.

The new workstation will enable the operator not only to control a weapons system but will also handle other data related tasks, such as receiving receive orders and preparing and issuing reports. The fifth generation system is more ergonomic and has an upgraded intelligent and easy-to-use application programming interface. All those innovations should greatly simplify an operator's job.

A decision is also being made about whether to supply Ukrainian-made power plants to the Navy, primarily intended for patrol ships and frigates that are built at the Yantar ship yard in Kaliningrad. At the Rybinsk-based NPO Saturn, a subsidiary of United Engine Corporation, retooling is in full swing. The plant has developed and is set to deliver in the near term a series of marine gas turbine engines for patrol and missile boats, corvettes, frigates, drilling platforms, floating power plants, and transport hovercraft. Necessary testing grounds are being prepared for those products. Contracted by the Russian Ministry of Industry and Trade, Saturn is also building an assembly and testing facility for marine gas turbine units. Its commissioning is a key step in the program to set up a Russian manufacturing base for marine gas turbine engines that is completely free of imports.



## 5<sup>4</sup> Military-technical cooperation, state orders, and federal target programs

**Under various programs of militarytechnical cooperation** between the Russian Federation and other states, the scope of the corporation's activities spans:

- support to exporters of defensive products;
- quality improvement for weapons, military/special-purpose vehicles and equipment;
- setting up joint ventures to develop and produce military/special-purpose vehicles and equipment;
- making defensive export products more competitive;
- improving the after-sale service system for defensive export products, including the creation of service or maintenance and repair centers for military/special-purpose vehicles and equipment in other countries;
- minimizing potential losses of the corporation's entities against the impact of economic sanctions imposed by the USA, EU, and a number of foreign states on individual entities within the corporation (Concern Kalashnikov OJSC, Concern Radio-Electronic Technologies OJSC, Concern Sozvezdie JSC, Bazalt SPA JSC, OPK Oboronprom, OJSC, A.G. Shipunov Instrument Design Bureau, OJSC), their subsidiaries, and the Russian Federation as a whole.



The Corporation has made its contribution to improving the regulatory framework covering military-technical cooperation, monitored the performance of contractual obligations for the delivery of military products to foreign customers, engaged in promotional campaigns to move high-tech products to the global market, and drafted proposals to phase out imports used in manufacturing defensive export products.

Altogether for 2014, in the face of existing economic sanctions, the corporation has managed not only to maintain the volume of exports at the 2013 level, but also to move ahead in some positions.

Rosoboronexport OJSC, operating as part of the corporation, made deliveries worth 13.2 billion USD, which was 22 million USD above target. The amount received in payment for export transactions in 2014 by Rosoboronexport exceeded 11.2 billion USD (versus 12.8 billion USD in 2013). The corporation's entities delivered military products both on orders from Rosoboronexport and on their own worth around 7.1 billion USD, which is 6% above the 2013 figure (6.7 billion USD). Deliveries of military products made through agency contracts with Rosoboronexport accounted for about 6.4 billion USD (versus 5.7 billion USD in 2013) and under direct supply contracts with fourteen technical-military cooperation entities operating within the corporation for more than 670 million USD (versus 1.03 billion USD in 2013).

The percentage of military products produced by the corporation's entities and supplied on orders from Rosoboronexport made up of 48.7% (versus 43.1% in 2013) of total exports through the state intermediary agency. The share of military products manufactured and supplied by technical military agencies to foreign customers was equal to about 9.5% of the total export output of the corporation's entities.

Owing to suspended payments by Western banks, the amount received in payment for those deliveries in 2014 fell by 18% to 6.9 billion USD in comparison with 2013.

In addition, under the framework of scientific and technical and production cooperation, the corporation's entities delivered to defense enterprises in the CIS nations products worth over 4.6 million USD.

In 2014, Rosoboronexport exported **13.2** billion USD worth of military products.

Industry	Market Share, %
Aviation Industry	59.86
Conventional arms industry	26.6
Ammunition and chemical agents industry	11.6
Radio-electronic industry	1.9
Non-military industries	0.04

During the reporting year, 77 entities within the corporation were involved in the delivery of military products to foreign customers.

Military products were delivered to 59 countries around the globe. The key importers of products made by the corporation's entities were India (25%), China (22%), Iraq (22%), Syria (5%), and Venezuela (5%). Geographically, the bulk of exports were spread out over Asia (75%), Latin America (9%), and the Middle East (7%).

CIS nations accounted for 370 million USD in deliveries of military products (versus 1.05 billion USD in 2013), including the memberstates of the Collective Security Treaty, which made up 2.4 million USD (versus 2.7 million USD in 2013).

In 2014, government customers contracted 292 Rostec entities including 158 entities under state defense procurement and acquisition programs and 134 entities under cooperation programs.

The number of entities engaged in state defense procurement and acquisition in 2014 rose by 33.3% compared to 2013 thanks to the inclusion in Rostec of new holding companies United Instrument Manufacturing Corporation and Concern Automation JSC.

State contracts have been made as required by the approved defense procurement and acquisition policies for 2014 and for the calendar period of 2015 and 2016. The bulk of contracts with government customers of the corporation were established prior to May 1, 2014.

In order to keep track of defensive procurement and acquisition contracts awarded to contractors, a monitoring process for the signing and execution of state contracts on behalf of the corporation has been initiated at the corporation.

The fulfillment of defense procurement and acquisition contracts was ensured by reporting records maintained at the corporation's entities and also through the daily monitoring of development and production activities for critical military/special-purpose vehicles and equipment.

Any outstanding issues regarding the fulfillment of defense procurement and acquisition contracts were reviewed by the Corporation's Supervisory and Management Boards.

In 2014, the corporation implemented organizational and corporate measures to expand the role and authority of head offices at holding companies regarding the fulfillment of defense procurement and acquisition contracts and federal target programs.



**9,400** defense billion rubles  
procurement and acquisition contracts  
were fulfilled by Rostec entities in 2014

Generally, the corporation's entities fulfilled all defensive procurement and acquisition commitments for 2014.

Acting under defensive procurement and acquisition programs, Rostec entities fulfilled around 9,400 contracts, including 1,100 direct contracts with government customers, with the remaining making up agreements for collaborative deliveries (factory-tofactory). However the number of signed contracts was up 54,2% against 2013.

The scope of work done under defensive procurement and acquisition programs grew by more than 60% over 2013, which attributed to several players from the radio electronic and instrument-building industries becoming part of the corporation in 2014. Excluding the contributions from the new entities, in 2014, the corporation saw a 40% increase in the scope of its defense procurement and acquisition activities as compared to 2013.

In 2014, the largest volume of work was completed in the aviation industry (40.7% of the total volume of delivered services), while the smallest was in the non-military industry (3.7% of the total amount of completed work).

In order ensure that defensive procurement and acquisition commitments were honored in 2014, the corporation worked in sync with federal executive authorities and integrated structures, including the main defensive procurement and acquisition contractors: Concern VKO Almaz-Antey JSC, Tactical Missile Corporation JSC, Corporation MIT JSC, United Aircraft Corporation JSC, United Shipbuilding Corporation JSC, SPE Uralvagonzavod JSC.



**ENTITIES WITHIN STATE CORPORATION ROSTEC PLAY AN ACTIVE ROLE IN KEY FEDERAL TARGET PROGRAMS SERVING THE NEEDS OF DEVELOPING THE DEFENSE-INDUSTRIAL COMPLEX OF THE RUSSIAN FEDERATION, INCLUDING:**

- development of the military-industrial complex of the Russian Federation for 2011-2020;
- development of Russian civil aeronautical facilities for 2002-2010 and for the period up to 2015;
- maintenance, development, and use of the GLONASS system for 2012-2020;
- national technological base for 2007–2011;
- development of civil marine facilities for 2009–2016;
- development of an electronic components base and radio electronics for 2008–2015;
- development of the pharmaceutical and medical industries in the Russian Federation for the period up to 2020 and beyond; and more.

In 2014, the corporation's entities signed around 770 contracts totaling over 88.7 billion rubles, including contracts involving equity capital of 57 billion rubles.

**ОБЪЕМ ЗАКЛЮЧЕННЫХ ДОГОВОРОВ ПО ОТРАСЛЯМ ПРИВЕДЕН В СЛЕДУЮЩЕЙ ТАБЛИЦЕ:**

Industry	Amount, billion RUB
Grand total	88.7
Aviation Industry	21.8
Ammunition and special chemicals industry	9.6
Radio-Electronic Industry	34.2
Conventional arms industry	19.3
Peace-time industries	3.8

Under the framework of activities to implement the Federal Target Program "Development of the Military-Industrial Complex in the Russian Federation for 2011-2020" (FTP-1), the corporation signed agreements to allocate subsidies as a property contribution from the Russian Federation to the corporation with the aim of funding investment projects pursued by the corporation's entities.

As FTP-1 was running its course on subsidies allocated from the federal budget, the corporation in 2014 entered into contracts for 58 endeavors totaling 14.3 billion rubles. Seven sites were commissioned and certified with relevant statements of acceptance.

In 2014, the corporation in conjunction with the Russian Ministry of Industry and Trade prepared and approved an action and management plan for 2015 for government capital investments in open joint stock companies within the Corporation as part of fulfilling 153 objectives under FTP -1 totaling 25.1 billion rubles. As part of the effort mounted by the Russian Ministry of Industry and Trade to streamline activities under FTP-1, the Corporation drafted proposals to redeploy resources required to implement priority projects under FTP-1.

In 2014, the Corporation was involved in drafting the government program for the development of the military-industrial complex for 2016-2025 (MIC GP 2025).

Representatives of the corporation were placed in interagency working groups to devise the MIC GP -2025 project. They formulated proposals for research and development work and also investment projects to upgrade and modernize the manufacturing base of enterprises that are to be included in the government program for the development of the military-industrial complex. As the proposals were being worked on, the corporation in collaboration with holding companies (integrated businesses) and enterprises of the military-industrial complex reviewed in detail the data available from the Ministry of Industry and Trade to form the government program for the military-industrial complex, its tentative composition, and the basic principles of its formation, Implementation, and funding.

Proposals for MIC GP 2025 were drafted with an eye to preserving the legacy of the existing federal programs, as well as its priority projects.

The corporation staged and conducted hearings for proposals submitted by entities of holding companies (integrated businesses) and by entities within the corporation to update the lists of research and experimental design and investment projects proposed for implementation under the new program.

Following the hearings of the proposals proposed by by the entities of the holding companies (integrated businesses) and of the military industrial complex, and after their revision, the corporation's proposals for research and experimental design works as well as investment projects for production upgrade and modernization were presented to the Russian Ministry of Industry and Trade for further inclusion into MIC GP 2025.

Acting on instructions from the government of the Russian Federation, the corporation in 2014 completed a range of activities to assure the quality of military products supplied under government defensive procurement and acquisition contracts and for export.

In 2014, Rostec entities entered into 9,400 contracts under various federal target programs worth **88.7** billion rubles

As required by FTP-1, a Rostec voluntary certification procedure was set up to assist the corporation's entities in certifying the quality management system recognized in the international market. The procedure was registered on December 30, 2014, with Rosstandart (Federal Agency on Technical Regulation and Metrology) (registration number ROSS RU.B1308.04ZhUB0 ) in the unified register of registered voluntary certification systems.

**THE ROSTEC VOLUNTARY CERTIFICATION SYSTEM COVERS THE FOLLOWING AREAS:**

- quality management systems;
- environmental management systems;
- occupational safety management systems;
- manufacturing optimization and lean manufacturing management systems;
- safety management system manual of aviation activity (SMS);
- independent evaluation system for processes;
- management system for educational services (public professional accreditation);
- management system of intellectual property

As part of the effort for economic mobilization in 2014, the corporation and holding companies took the necessary action as required by the Federal Law No. 31-FZ dated February 26, 1997, "On Mobilization and Preparation for Mobilization in the Russian Federation," and the respective resolutions of the military-industrial commission at the Government of the Russian Federation on that issue.



## 5<sup>5</sup> Product optimization and restructuring

**RUSSIAN HELICOPTERS JSC HAS COMPLETED** the manufacturing process re-engineering project at Kazan Helicopter Plant JSC. VNII Signal JSC has wrapped up the production process re-engineering project in order to bump the output of hydraulic drives for antennarotating devices.

VOMZ JSC has completed the upgrade project at the mechanical, preparatory, optical, instrumental, finishing and assembly workshops.

LZOS JSC put into operation a workshop for melting and processing a brand new high power laser glass and a workshop for the highaccuracy processing of new generation laser gyroscope bodies. PE VOMZ JSC launched an automated electroplating process complete with treatment facilities and a closed wastewater treatment system, a process facility for manufacturing large-sized body parts and a lathing and milling process facility.

**As part of operations to streamline the Corporation’s production base in 2014 16 orders were issued to classify property assets** as those not involved in the main production business and as non-core assets. A total of 1,267 assets were classified as non-core assets under these orders

- SCHWABE JSC HAS RELOCATED::**
- the assembly process run by Schwabe Photopribor JSC located in Moscow on ul. Plekhanov, 2/46, str. 5 to the production site at Schwabe-Photosystems JSC, thus vacating production floor space of 10,900 m and a land plot of 5,400 m2;
  - the production process at SPE Orion JSC from the Plekhanovskaya production site located in Moscow on shosse Entuziastov, 46/2, to the Kosinskaya production site located at Moscow, ul. Kosinskaya 9, thus vacating 54,000 m2 of floor space.

TSNIIAG JSC has put in place integrated automation solutions for end-to-end design and manufacture thus creating production areas automated up to 80-85%, shortening production cycles by a factor of 3-6 and achieving a 2-3-fold improvement in productivity.

KBP Instrument Design Bureau JSC has integrated a waste-free process for melting products out ceramic-coated cavities at the foundry area in workshop No. 3. A reverse-osmosis treated water recycling system designed to cool the equipment in the hydrotesting station was installed in workshop No.29. In recognition of its contribution to mitigating the impact on the environment or the environment over the 5 year period, in 2014, TSNIIAG JSC was listed among 100 top organizations in Russia in environmental protection and ecological management.

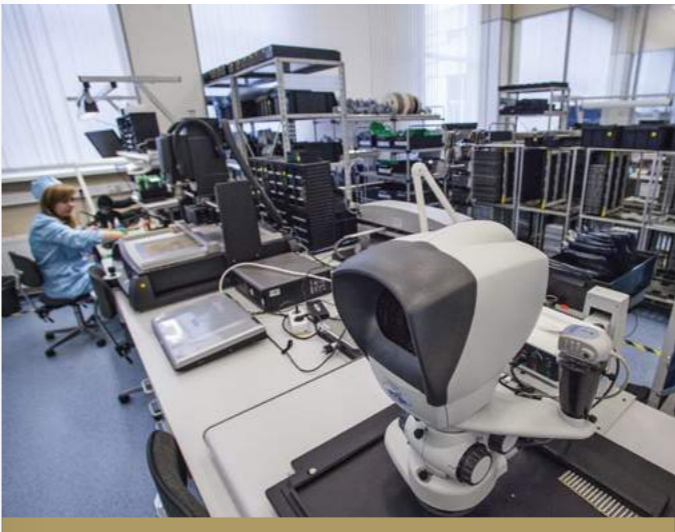
Tutaev Motor Plant JSC was going through the re-engineering process for its production facilities in order to create a streamlined, energy-efficient, and high-tech operations to manufacture competitive products, involving layout redesign and a reduced footprint for production facilities.

In 2014, NPO Elektromashina JSC continued with its re-engineering and retooling campaign on the electrical equipment production process for cross-purpose products.

In 2014, RT-Himkompozit JSC completed the upgrade campaign on the production facilities for ultra-disperse hexagonal and turbostratic nitride and boron carbide powders (two production processes) and small-size production facilities for catalysts and modifiers (five production processes).

## 5<sup>6</sup> Conversion of federal state unitary enterprises into joint-stock companies

**In 2014, reorganization activities continued to go ahead at federal state unitary enterprises (FGUP) into open joint stock companies (OJSC) whose equity stock is transferred to the corporation a property contribution on behalf of the Russian Federation**



**THE PROPERTY CONTRIBUTION TO THE CORPORATION ON BEHALF OF THE RUSSIAN FEDERATION** is made pursuant to Presidential Decrees of the Russian Federation No. 1577 dated November 26, 2007, No. 1052 dated July 10, 2008, No. 243 dated March 06, 2009, No. 621 dated May 17, 2012 and No. 20 dated January 14, 2014 requiring that 187 FGUP enterprises, should be converted into joint stock companies followed by transfer of the entire equity stock to the corporation, including 181 FGUP enterprises to be reorganized pursuant to decree No. 1052.

**THE CONTRACT AMOUNTS DIVIDED BY INDUSTRY ARE SHOWN IN THE TABLE BELOW:**

	As of as of 1/1/2014	As of 12/31/2014	For 2014
Total reorganized FGUP	163	172	9

In 2014, the Corporation proceeded as planned with its work to eliminate obstacles to forming asset groups and finalizing the privatization process for FGUP enterprises.

It should be noted here that several enterprises required an extended time for privatization due to the need to remove all land plots from the scope of assets to be privatized, including those owned by FGUP enterprises already prepared for privatization and to those enterprises being listed in the register of the militaryindustrial complex approved by the Russian Ministry of Industry and Trade.

As a result of the effort undertaken by the Corporation, Rosimushchestvo (Federal Agency for State Property Management) gave its approval to including land plots into the scope of assets to be privatized, thus enabling the privatization of the remaining FGUP enterprises together with land plots attached to them and due to be privatized.

In addition, Rostec continued to work together with the Federal Agency for State Property Management (Rosimushchestvo) and its regional agencies, the Moscow City Property Department, and other executive authorities towards providing maximum assistance in resolving issues related to the formation of asset groups at enterprises undergoing the privatization process.

That work was instrumental in settling issues with the formation of land plots of the main production sites at FGUP MZRT, FGUP NPP Tory and FGUP NPP Poisk, which added land plots in Moscow and Leningrad Region totaling over 70 hectares to the asset groups of joint stock companies.

Work to retain critical assets for FGUP enterprises continues, as registering the title for them requires a significant amount of time, as well as the appointment of a special trustee to take care of such assets, which provided the grounds for privatizing in 2014 FGUP Institute Gintsvetmet, FGUP GIKP RITM, and FGUP KBPM.

Rostec's active collaboration with Russia's EMERCOM was useful in settling the issue of enumerating civil defense protection facilities owned by FGUP GNIChTEOS, which enabled a land plot measuring 0.51 hectares located at Moscow, shosse Entuziastov, 38, to be added to the group of former assets of GNIChTEOS JSC for privatization.

Also in 2014, the asset groups of FGUP TSNII EISU (which were privatized on December 23, 2014) and GUP Kaliningrad Amber Factory were prepared for privatization and are due to be converted into joint stock companies pursuant to Presidential Decree No. 20. FGUP GTERPC SALUT is to be reorganized into a joint stock company pursuant to Presidential Decree No. 621.

*As a result of a coordinated and well-planned effort organized jointly by Rostec, Rosimushchestvo, and the heads of FGUP enterprises, all required measures have been taken to encompass the maximum number of properties and land plots due to be privatized in the manner set out in Russian law, with the aim of forming asset groups for emerging joint stock companies and also responding to the most challenging issues hampering the privatization of the land plots of the main productions sites at FGUP enterprises*



## 5<sup>7</sup> Management and production informatization. Integration of best practices

**2014 proved to be a very decisive time for everything related to information technologies at Rostec Corporation.** In accordance with best practices, the corporation has changed its approach to this area by outsourcing part of its functions related to information technology.

**TO THIS END, THE NEW INFRASTRUCTURE SUBSIDIARY** RT- Inform (for more details, please see the section "Overview of Rostec's subsidiaries") was established. In August 2014, this business unit was entrusted with the IT-infrastructure support for the corporation. One of the most noticeable consequences was a drastic reduction of 85% of the number of IT-management personnel at Rostec. The cost structure also became more transparent and the service controllability improved, primarily due to the clearly defined relationship between RT-Inform and the corporation and also to more justifiable service pricing.

In 2015, Rostec will continue to outsource its IT services. At the moment, the corporation is working on a technical policy that will contain the basic rules and standards in information technology. One of the standards will be completing the full switch to outsourcing IT services. Relying on the new technical policy, Rostec entities will make improvements to its information and communication space while emerging competence centers will work toward supporting and developing appropriate services.

In a broader context, the mission of RT-Inform is to become an information technology and security competence center for all the entities within the corporation and for other state-owned Industrial enterprises. What makes Rostec unique entity is that it both acts as a customer and a major provider of IT products. The existing scientific and technological platforms enable it to build proprietary hardware and develop complex software. This work is already underway with a focus on hardware integrated together with software. Another area is the development of applied software using existing software solutions. Generally, the corporation is more focused on domestic software.

One of Rostec's most significant proprietary developments is the Information Analysis System (IAS). IAS is a certified and secure system that collects, stores, and analyzes accounting, statistical, and management records. The hardware and software system enables a user to bring in new participants and new information streams and provides scalability and development of analysis information support. This system will combine information streams from all enterprises of a holding company, which in the long run will boost the performance of each of Rostec's enterprises and holding companies.

In 2014, Rostec's information analysis system (IAS) was given a trial run. In the near future, priority consideration will be given to greatly expanding the system's capacity to contain financial metrics and operational performance indicators for enterprises and holding companies, as well as to expanding the system functionality.



*For the 4th quarter of 2014 alone,  
IT costs incurred by the Corporation  
and its holding companies were reduced by 8%*

## 5<sup>8</sup> *Creating a single corporate treasury for Rostec organizations*

**Pursuant to orders from Russia's President V. V. Putin (PR-1032 dated May 7, 2014) and the Russian Government (ISH-P13-6008 dated August 08, 2014),** "On creating in state corporations single corporate treasuries for parent, subsidiary, and related entities," and also in agreement with the concept approved by the corporation's management, active work is underway to build an advanced finance management system by setting up a single corporate treasury within the corporation and its entities (SCT).

SCT will be organized with the objective of providing centralized management of financial flows and minimizing financial risks and operating expenses while also maximizing investment return from available financial resources.

### KEY FUNCTIONS OF SCT:

- arranging a relationship with banks that optimizes the structure of bank accounts and minimizes the bank's operating expenses and loan interest while ensuring a maximum benefit for the group of companies;
- providing operational planning and the most efficient pattern for cash flows;
- distributing resources within a group;
- investing free cash;
- exercising control, including review of budget performance, on cash flows and mandated limits, ensuring that payments are made in due course and received on time, and constantly monitoring and controlling accounts receivables and payables;
- managing financial risks, including hedging (insurance) of interest-bearing, currency, and price risks;
- developing and controlling limits for various expense items, and ensuring that the payment schedule is met;
- forming an automated SCT system that ensures the automated expansion of SCT functions and integration of treasury decisions with production and record keeping systems at adjacent business units at the corporation level.

Following the approved concept, the SCT building process within the corporation and its entities is based on a single centralized methodological decision-making foundation overseen by a legal framework that regulates the relationship between the corporation's entities in performing financial operations and the launch in all entities of a customized IT system integrated with payment systems of account banks enabling treasury business processes.

### METHODOLOGICAL SUPPORT

The following standardized methodological documents regulating business processes have been developed and approved as part of SCT:

- administrative order, "On the creation of a single treasury";
- action plan to create a single corporate treasury (SCT);
- "regulation on the single corporate treasury," – a document setting out the underlying principles, objectives, and guidelines common to all of the corporation's entities for treasury activities;

- defining the SCT structure, key business processes, and relationships between them, as well as decision-making levels, SCT controls, and participants, and their roles, responsibilities, powers, and authority;
- requirements for the formation of credit policy documents adopted by the corporation's entities;
- procedures for borrowing from the corporation;
- procedures for the corporation's operational planning and liquidity management; • Rostec's risk management policy;
- financial risk management standard, procedures for financial risk management for loans and guarantees issued by the corporation; the risk monitoring process is setup and running on issued loans and guarantees.

The management bodies of the holding companies and their entities from top to bottom adopted the decision to create a finance management system based on the principles, functions, and tasks of the SCT. In 2015, this work will continue.

### AUTOMATION

In 2014, a specialized system was selected on a competitive basis enabling automated treasury business processes. A pilot automation project also began. The first stage of the trial run was carried out through the invoicing and payment management functions of Rostec and six pilot organizations, which made their first few payments using the SGT automated system. Simultaneously, work continued to improve the functionality of the SGT automated system and configure the key business processes for the treasury.

### INTERFACE WITH BANKS

In order to protect the integrity of funds owned by the corporation's entities, reduce banking expenses, and loosen control over the use of target funds, including budget funds, in 2014 Rostec's treasury worked hard to maximize the efficiency of interface between organizations and account banks. Relevant selection criteria were defined for the most reliable banks, which were authorized for joint work with the corporation and its entities. An action plan was also approved to accumulate cash from the corporation's entities in the most financially sound Russian state banks.

Rostec entered into strategic cooperation agreements with Russia's Sberbank, VTB Bank, Gazprombank, Novikombank, and Bank of Moscow. The operating principles that defined the partnership with these banks within SCT emphasized the mechanisms of efficient collaboration, unification of service terms and conditions, and tariff

policies for organizations based on aggregate amounts of the corporation's business run through banks and also in arrangements to exchange information via an automated system within SCT. Centralized work with these banks and an emphasis on improving the efficiency of the treasury's financial management led to tremendous breakthroughs in 2014, including:

- common concessionary tariffs were unified and put into effect for servicing organizations at individual banks that help eliminate banking expenses incurred by the corporation's entities;
- the corporation adopted necessary action to make more efficient use of funds, which in 2014 yielded an additional income of over 500 million rubles solely for the benefit of the Corporation as a legal entity;
- the corporation's currency loans were refinanced into rubles, offsetting currency risks in the amount of 10 billion rubles amid the weakening ruble;
- the savings from interest on loans were extended to the corporation's entities after approval by the corporation;
- funds were withdrawn from banks whose licenses had been revoked.

### ROSTEC'S LIQUIDITY PLANNING SYSTEM

The approved procedures for operational planning and liquidity management lay a foundation for the continuous process of planning for revenues and payments, which ultimately improves the efficient use of funds, the profitability of their placement, and improved payment discipline within the corporation.

#### FINANCIAL RISK MANAGEMENT SYSTEM

Rostec recognizes that there are risks that may have an impact on its business and that of its entities.

In order to ensure a consistent approach to risk management and to fulfill the action plan approved by the Rostec Supervisory Board for 2014 and for the plan period of 2015 and 2016, the corporation is creating a financial risk system as part of SCT.

The corporation's risk management is intended to provide a reasonable guarantee of achieving the corporation's goals and objectives, as reflected in the development strategy.

#### GOALS AND OBJECTIVES OF THE RISK MANAGEMENT SYSTEM:

- reduce the number of contingencies that might adversely impact the corporation's ability to achieve its goals and objectives as defined in the development strategy;
- timely identify, analyze, assess, and monitor risks and take necessary action to mitigate risks and/or their occurrence;
- improve the efficiency of the use and allocation of resources;
- integrate risk management into the corporation's business processes; • make sure that each employee is involved in the management process;
- put in place a risk management system at every entity of the corporation.

#### GOALS AND OBJECTIVES IN FINANCIAL RISK MANAGEMENT ARE ACHIEVED BY:

- building a methodological framework for financial risk management;
- creating measures to identify and evaluate risks;
- establishing risk awareness at the level of the corporation's management and personnel;
- developing and implementing risk management activities;
- monitoring risks;
- enforcing established risk management procedures.

Rostec is developing and implementing financial risk management systems.

The framework of the single corporate treasury (SCT) within Rostec Corporation and its subsidiaries serves as the basis for developing and implementing management methods for a variety of financial risks, including those related to loans, interest, allocation the corporation's free cash, and investment projects.

Risk management tools are being introduced in all SCT business processes at every level of the corporation and its entities. In 2014, the Treasury carried out the following activities in the area of financial risk management:

- drafted and adopted the corporation's internal regulations covering financial risks.
- adopted procedures for keeping track of risks, to which the corporation is exposed while issuing loans and guarantees both at the stage of taking a decision on a loan or a guarantee and during the effective period of the respective agreement.
- implemented 28 measures to mitigate risks related to loans and
- guarantees that the corporation faced as a legal entity.

In addition, in 2014 the treasury was successful in its efforts to increase Rostec's equity stake in Novikombank JSCB (from 17.6% to 57.67%), one of the corporation's major financial partners and collaborators. As a technological center, Novikombank JSCB is also working on creating a single corporate treasury.



## 5<sup>9</sup> Consolidated financial statements for Rostec and its holding companies

**Pursuant to Federal Law No. 270-FZ**, the corporation is required to prepare consolidated financial statements. These financial statements must be submitted in the manner set out in Federal Law No. 208-FZ, dated July 27, 2010, "On Consolidated Financial Statements," and as required by international financial reporting standards (IFRS).

#### IN 2014, THE FOLLOWING DOCUMENTS WERE CREATED TO FORM THE METHODOLOGICAL BASIS FOR PREPARING FINANCIAL STATEMENTS:

- Consolidation of the perimeter of the corporation's subsidiaries and associates. As of December 31, 2013, the consolidation perimeter includes 1,657 Russian and foreign organizations, including 597 subsidiaries, 446 associates, 10 joint ventures, and 603 other organizations.
- Common accounting policies. This document establishes common approaches for preparing consolidated financial statements as required by IFRS.
- Methodology for preparing consolidated financial statements as required by IFRS. This document sets out methods for transforming financial reports, consolidating data, and preparing financial statements, as well explanatory notes to consolidated financial statements, a transformation model, a data consolidation model, a guidance for evaluation of noncurrent assets and actuarial commitments of the Group;
- Project charter. This document defines the goals, objectives, duration, and scope of the project to develop consolidated financial statements as required by IFRS, a management plan for resources and communications, and rules of interaction between parties involved in the project.

In 2013, Rostec and its entities created for the first time consolidated financial statements (as a draft version) in accordance with IFRS.

#### CONSOLIDATED FINANCIAL STATEMENTS OF THE CORPORATION AND ITS ENTITIES (CORPORATION GROUP), PREPARED IN ACCORDANCE WITH ACCORDANCE WITH IFRS, INCLUDING:

- indirectly, through its subsidiaries;
- investments in associates;
- long-term liabilities to the Corporation's personnel.



**AS PART OF PREPARING** consolidated financial statements, work has been done to:

- fully assess the fair value of the corporation's non-current assets;
- fully assess the commitments under pension and social programs;
- reconcile internal turnover sales of entities within the corporation;
- develop corporate legal instruments, including those that ensure the timely preparation of consolidated financial statements for Rostec and its holding companies.

The consolidated financial statements of Rostec and its holding companies for 2013 are considered proprietary information of classification level.

**THE SCALE OF CONSOLIDATION ATTAINED BY ROSTEC**, given its diverse structure and its major social status, is unmatched either in the Russian Federation or abroad.

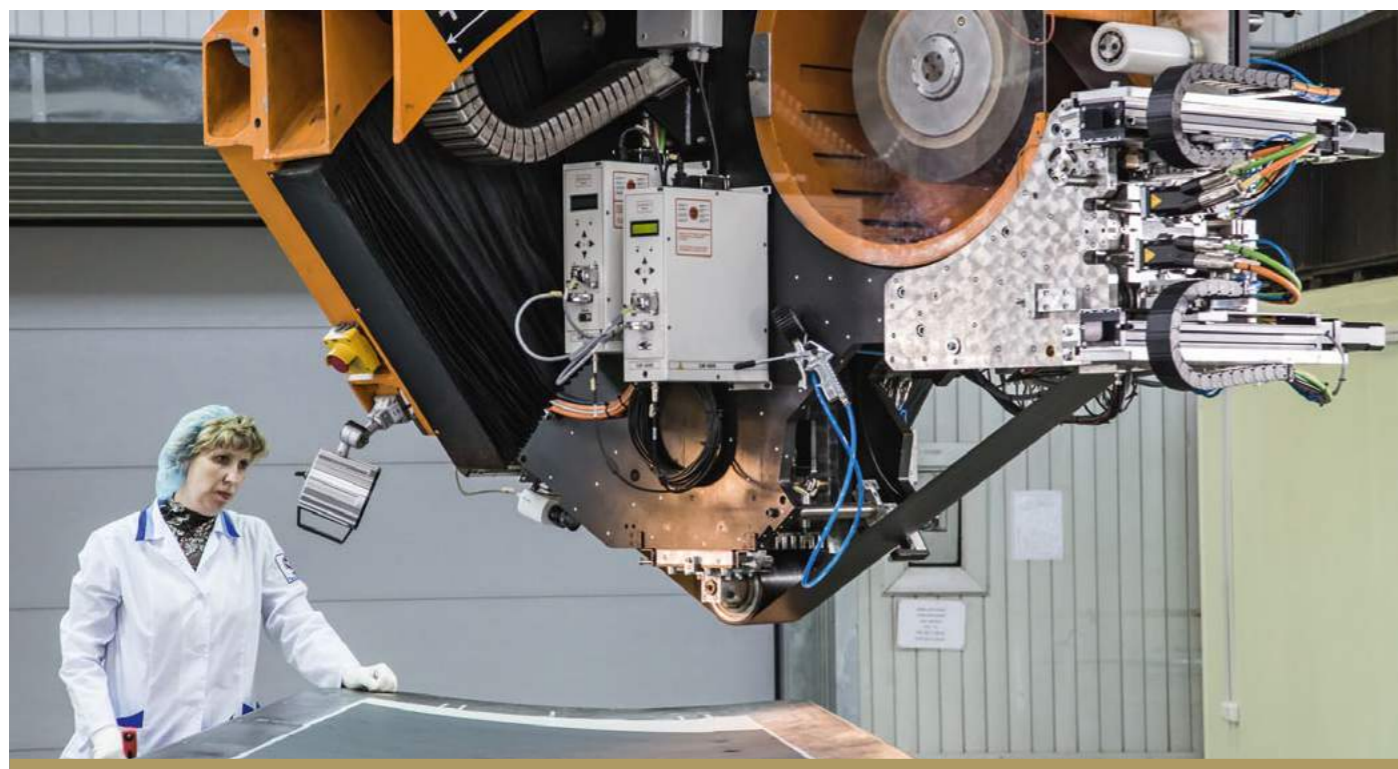
The consolidated financial statements of Rostec make it possible to:

- enhance knowledge when making adjustments for inflation or when making strategic, economic, or managerial decisions;
- achieve more realistic financial ends for the corporation and also compile information on the real value of assets;
- improve the quality and transparency of management and accounting records (financial statements) in accordance with Russian Accounting Standards;

- take timely measures to restructure the corporation's accounts receivables and payables in the best practical way;
- provide an accurate forecast for the concern's activities;
- make a comprehensive and fair analysis of the corporation's business as a whole, as well as when organized by activities of holding companies;
- run a comparative analysis of the current financial statements against previous ones in order to determine what progress has been made and to determine appropriate business alternatives;
- provide performance assessments of the management system for entities within the corporation.

The corporation began preparing consolidated financial statements in 2014 with a consolidation perimeter encompassing over 1,700 organizations, including those transferred or set for transfer as a property contribution of the Russian Federation, as authorized by Presidential Decrees No. 20, dated January 14, 2014, and No. 1052, dated July 10, 2008.

In 2014, the corporation conducted an open competitive tender to award a contract for the compulsory audit of consolidated financial statements for 2014, 2015, and 2016 in the manner prescribed by Federal Law No. 44-FZ dated April 05, 2013, "On the System of Public Procurement Contracts for Products, Works, and Services for State and Municipal Needs." Following the tender, the contract was awarded to the audit firm RSM RUS LLC.



## 5<sup>10</sup> Ecology

**The corporation and its holding companies are overseeing a number of environmental protection and nature conservation initiatives.**

KAMAZ has established a sanitary protection zone around its enterprises that will help make production operations much more environmentally-friendly and limit the adverse impact on the environment.

**NPO SATURN**, part of Unified Engine Corporation, was recognized as one of the best organizations in Russia in terms of environmental protection. The enterprise was awarded a gold medal as part of the competition "100 Best Organizations in Russia: Ecology and Environmental Management."

*Saturn's design team is working on low-emission combustion chambers. They are also looking for ways to improve the environmental performance of their gas turbine engines.*

*The enterprise has put in place an effective environmental management system that meets the ISO 14001 standard. Enterprise management has given this task top priority.*

These projects represent only a small fraction of the extensive and varied environmental activities whose ultimate purpose is to promote a good work and production culture that exhibits the highest respect for the environment.

Shvabe Holding has signed a long-term contract with the Nizhny Tagil city administration to design, construct, and maintain the entire outdoor lighting system under the State Program, "Energy Saving and Energy Efficiency Improvement through 2020."

Urals Optical and Mechanical Plant has launched an automated electroplating operation complete with treatment facilities and a closed wastewater treatment system. Ruselectronics has developed a process for producing lithium from technical brines. Currently, at the Udachny Mining Plant, ALROSA is pumping lithium brines from the pit, which are mixed with other fluids and recycled. The use of these technologies will significantly improve the region's environmental situation.

*KAMAZ's environmental program for 2009-2015 includes annual reductions of 49,000 tons of harmful emissions, 422 tons of discharged chemicals into the sewage system and waterways, and 101,000 tons of production waste.*

*The company has raised 16.5 billion rubles to implement this program, including: 9 billion rubles to make production more environmentally friendly; 7.5 billion rubles to refurbish and construct new environmental facilities; and 33 billion rubles for a range of preventive and organizational activities.*

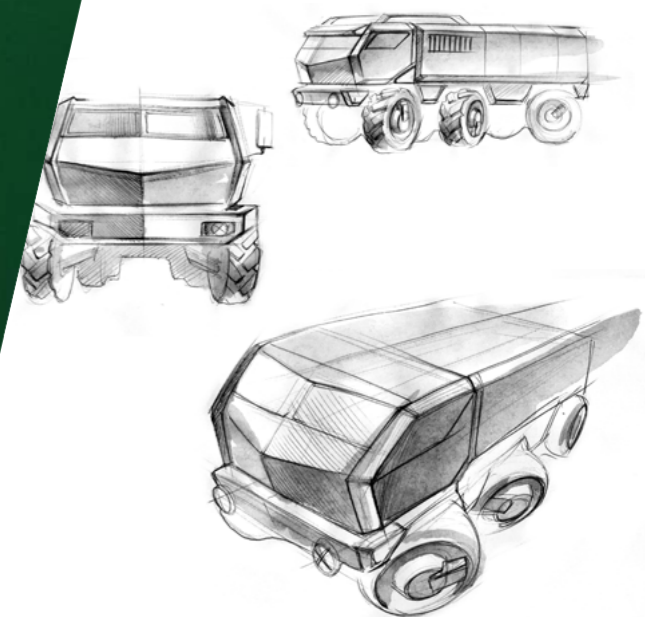
Harmful emissions will be cut down by **49,000** tons thanks to the implementation of KAMAZ's environmental program



## Investments

2.8 billion  
rubles

*allocated for research,  
design, and engineering work  
for projects implemented  
in association with leading  
national universities in 2014*



## 6 Investments

**In 2014, Rostec supported the progress of its investment programs for its holding companies** and other directly controlled entities. Completed reports for approved programs were likewise reviewed. 15 investment programs for holding companies were endorsed, with the total number of projects exceeding 600.

*Rostec's investment policy fulfills its mission as defined by Federal Law No. 270-FZ, dated November 23, 2007, "On Rostec Corporation Aims of activity of Rostec State Corporation" namely, to support the development, production, and export of high-tech industrial products by funding Russian participants in the domestic and global markets, as well as developers and manufacturers of high-tech industrial products, business entities where Rostec is in a position to influence decisions by acquiring a majority stake or entering into agreements, and also by attracting investments into business enterprises operating in different industries, including the military industrial complex.*

**TO IMPROVE THE EFFICIENCY OF REVIEWING AND APPROVING** investment programs undertaken by the corporation's entities and also in order to monitor their progress, a new investment procedure was established within the Corporation in 2014.

Also, in order to carry out high-technology projects, innovation and investment development funds were set up throughout the corporation. These funds obtain financing through the sale of non-core assets owned by the corporation.

The corporation finances investment projects through the framework of federal target programs, the benefit of which is that the final recipient has control over budgetary funds and enables prompt distribution to the final recipient.

In late 2014, in order to protect against the risks of depreciation of the corporation's funds, liquid financial instruments began to be distributed.

### RAMPORT

TVK Russia has begun the creation of an airport in Zhukovsky for low-cost airlines. A private foreign investor is expected to join this project. A letter of commitment was signed and construction work commenced on the terminal. The total budget of the project amounts to 1.3 billion rubles, including 1 billion rubles to be raised by the private investor.

### CONCERN KALASHNIKOV AND IZHEVSK MACHINE BUILDING PLANT

In 2014, Concern Kalashnikov underwent financial recovery thanks to an additional issue of shares that, among other sources, was funded by the corporation's innovation and investment fund in the amount of 400 million rubles and from the corporation's Financial Recovery Fund in an amount of 78.5 million rubles.

Also, during the year, a strategic investor funded the process of consolidating and integrating Izhevsky Mekhanichesky Zavod into the small arms holding company.

### TSENTRAVIAMED

Approval has been granted to create the multi-purpose medical center Tsentravamed. The total budget of the project amounts to about 2 billion rubles, including 1.4 billion rubles from a private investor.

### RT-INVEST TRANSPORTATION SYSTEMS

Rostec signed a concession agreement with the Russian Federation as represented by Rosavtodor to install a fee-charging system to compensate for damage to federal highways by vehicles weighing more than the maximum 12-ton weight limit. To this end, Rostec formed RT-Invest Transportation Systems.

### RUSNANO

In 2014, Rostec intensely researched the possibility of buying into the portfolio companies of Rusnano. As a result of the research work, 18 projects were selected that could be potentially integrated into the corporation's chain of production. Binding agreements will be signed in 2015, provided that a compromise is reached on the valuation of the assets.

### ESTABLISHMENT OF HOLDING COMPANIES

During 2015, efforts have been made to enhance the capitalization of the corporation's holding companies. Shares worth about 38.7 billion rubles have been transferred to the corporation. As a result, the following holding companies were founded: RT-Chemcomposite, Technodinamika Holding (formerly Aviation Equipment), Machine Engineering Technologies (Tehmash), Concern Radio-Electronic Technologies (KRET), OPK Oboronprom, and Stankoprom.

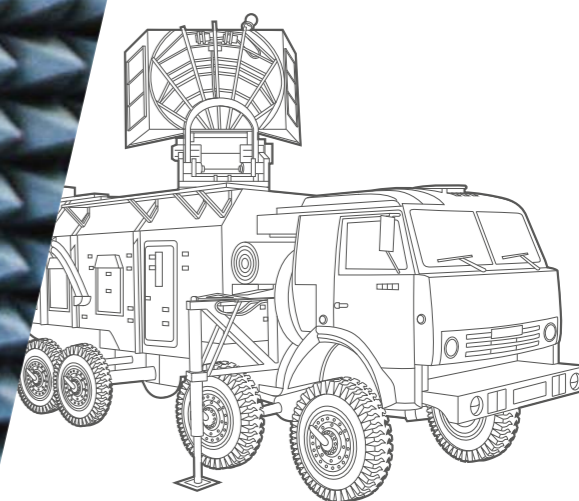




Scientific  
activities

80.2 billion  
rubles

revenue from the export of  
innovative products in 2014



## 7<sup>1</sup> Implementing Rostec's program for scientific and technological development for 2011–2015

**In order to pave the way for Rostec's long-term scientific and technical activities, which will lead to new knowledge, scientific and technological advances, and technological solutions that will secure competitive advantages** in the domestic and global hightech markets, the scientific and technical committee produced for Rostec in 2014 a prognosis for the development of science, engineering, and technology in the corporation's areas of activity until 2025 and beyond, entitled Prognosis-2025.

### THE PROGNOSIS INCLUDES:

- analysis of trends and patterns for global scientific, engineering, and technological development in the areas related to Rostec's activities;
- comparative evaluation of the corporation's current and projected involvement in science, engineering, and technology, at home and abroad;
- establishing scientific and technical targets with the potential of securing for the corporation long-term competitive advantages in the domestic and global markets of high-tech products, as well as for closing in the gap in areas critical to Russian national security;
- proposals for the corporation's key scientific and technical activities that have a considerable application potential for the development, production, and sale of competitive hightech products on the domestic and global markets;
- proposals for listing the corporation's most important and innovative products that are suitable for application in innovative projects focused on creating high-tech innovative production, as well as for organizing their mass production and marketing for commercial applications.

Based on the trends and patterns in the scientific, engineering, and technological development, the comparative evaluation of the current and assumed scientific, engineering and technological level of the corporation led to the identification of 60 priority areas of scientific and technical operations with significant applied potential for the creation, production, and implementation of competitive high-tech innovative products in the domestic and international markets.

The list of the most critical innovative products of the corporation for 2016-2020 and for the period until 2025 includes over 200 items and was compiled in light of the corporation's selected priority areas for scientific and technical activities.



Federal Law dated November 23, 2007, No. 270-FZ. "On Rostec Corporation." Rostec.

## 7<sup>2</sup> Implementing Rostec's 2011-2020 innovation development program for 2014

**The draft report on the progress of the 2011-2020 innovation development program undertaken by State Corporation Rostec** for 2014 was approved by the corporation's Managing Board on April 21, 2015 (Minutes of Meeting No. 31). The approval of the report by the Supervisory Board is expected in the first half of May.

**IN 2014, KEY PROGRAM ACTIVITIES INCLUDED** scientific research and development activities, the creation of high-tech products, technological upgrades in support of state defense orders and respective federal target programs, improved energy efficiency and environmental friendliness of production processes, and the establishment of innovative corporate infrastructure.

Priority activities included those related to skills development among Rostec personnel overseeing the management of innovation development and the formulation of guidelines on innovative development among the corporation and its holding companies.

During the reporting period, consideration was given to both the active commercialization of potential developments by the corporation's entities operating as small and medium businesses based on the wide use of open innovation mechanisms and the execution of pilot projects at holding companies to build corporate innovation infrastructure. The scope of collaboration between the corporation's entities and universities and scientific research organizations is expanding as part of research and development activities. The interface with technology platforms is evolving.

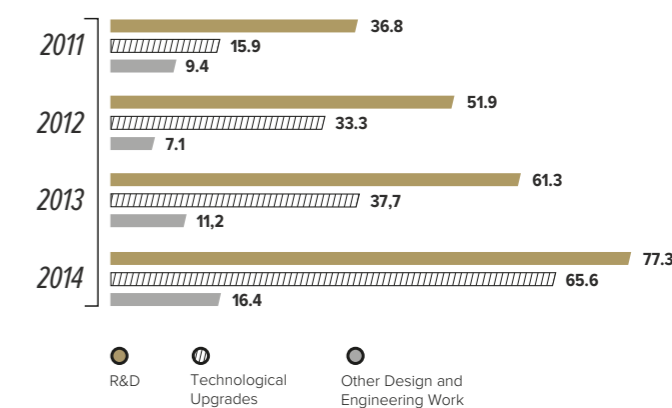


Fig. 1. The funding for program activities in 2011–2014 in billions of rubles

**80.2** billion rubles  
revenue from the export of innovative  
products in 2014

Considerable efforts from the innovation units have been devoted to setting up an effective management system for innovative activities at three levels, namely the corporation, its holding companies, and entities within the corporation's organizations, as well as and to build an "innovation team" that includes Rostec's First Deputy Chief Executive Officer, the Chairman of the Scientific and Technical Council, and heads of business units responsible for the innovative development of the corporation and its holding companies and entities.

Pursuant to paragraph 11 of Order No. DM-P36-6057, dated August 9, 2014, issued by head of the Russian Government D. A. Medvedev, federal executive authorities assisted by personnel from the Skolkovo Foundation conducted an expert review of the corporation-run program for innovation development programs for 2011-2013 at five holding companies (Aviation Equipment, Russian Helicopters, United Engine Corporation, Shvabe, and Ruselectronics) from September-December 2014. The outcomes of innovation activity and the innovative development management system being formed in the corporation were generally rated positively.

#### FINANCES FOR PROGRAM ACTIVITIES:

The amount of funding available for the program in 2014 amounted to 159.3 billion rubles, which is equivalent to 102.9% of the target amount (154.8 billion rubles). This figure includes:

- federal budget funds – 97.8 billion rubles;
- Rostec's own funds 1 – 61.5 billion rubles.

The amount of funding available for the program activities in 2011-2014 is shown in figure 1, displaying a steady and positive pattern of expenditure for R&D and technological upgrade projects over the four-year period, which is testament to the continuous improvement in innovation activity among the corporation's entities involved in the program.

The program activities continue to be primarily financed by the federal budget, with R&D activities in areas where the corporation's entities are highly active accounting for the bulk of budgetary allocations for innovative development. The distribution of federal expenditures and those incurred by the corporation's entities by the area for 2014 is shown in **figure 2**.

Direct government financial backing of R&D and technological upgrade projects, as well as other innovative development programs carried out by holding companies under the FTP framework, totaled 97.8 billion rubles (a 48% growth compared to 2013) and largely helped the corporation follow through with its innovation plans. The amount of financing for the project's program out of Rostec's own funds rose to 61.5 billion rubles (a 39% growth compared to 2013).

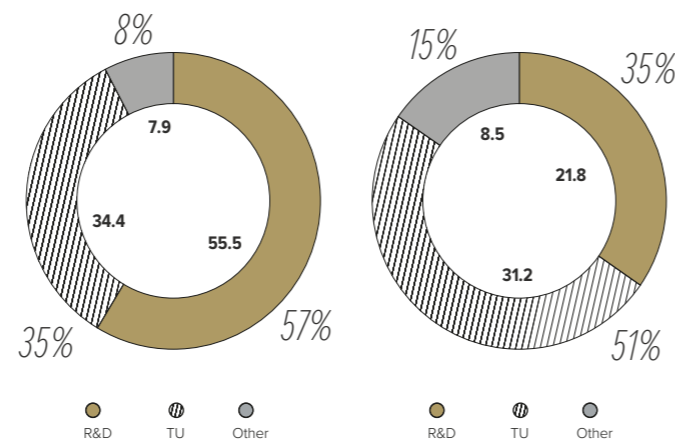


Fig. 2. Allocation of budgetary and Rostec's own funds by the areas of the program

Activities related to management technologies and information management systems, improvement of energy efficiency production operations and labor productivity, personnel skills development, the formation of an IP-rights management system, and the creation of a commercialization procedure for potential technologies were financed by the corporation's entities themselves.

In 2014, special funds were only marginally used to finance the innovation and investment development of Rostec and its holding companies.

**2.8** billion rubles were allocated to finance research, engineering, and technological work under projects run jointly with leading national universities in 2014

#### KEY PERFORMANCE INDICATORS

Most KPI parameters saw a growth over the previous year. This is indicative of a more aggressive innovation campaign within the corporation's holding companies and entities.

The following KPI items played the most significant roles in achieving the goals of the program:

- total cost to implement the program – 159.3 billion rubles (planned – 155.8 billion rubles);
- export revenue from innovative products – 80.2 billion rubles (planned – 58.0 billion rubles);
- share of innovative products (a specific percentage of innovative products, goods, works and services) in the total volume of shipped goods, completed works, and services – 24.0% (planned – 22.7%);
- total costs related to research and development financed out of budgetary and Rostec's own funds – 77.3 billion rubles (planned – 76.6 billion rubles);
- research and development costs financed out of extrabudgetary (Rostec's own and borrowed) funds – 21.8 billion rubles (planned – 20.3 billion rubles);
- research and development costs in percentage to revenue 2 – 9.6% (planned – 9.5%);
- Rostec's own and borrowed funds spent on research and development in percentage to revenue – 2.7% (planned – 2.7%);
- proportion of intangible assets to the total cost of assets – 3.4% (planned – 3.0%);
- number of patents obtained – 862 (planned – 845);
- number of engineering and technological solutions on a knowhow basis – 817 (planned – 292);
- patent utilization rate – 59.2% (planned – 58.8%);
- costs related to research and development carried out by universities on orders from the corporation's entities – 2.90 million rubles (planned – 2.78 million rubles);
- number of innovative projects implemented by the corporation jointly with universities and scientific organizations – 580 (planned – 361);
- number of Rostec personnel responsible for innovative development under innovation management programs – 862 (planned – 859).

Overall, the corporation showed a positive trend in the most vital KPI parameters from 2011-2014.

KPI values are illustrated in **Figure 3** in terms of the percentage of innovative products to revenue and the percentage of R&D costs to revenue for 2011–2014.



<sup>2</sup> Consolidated revenue of holding companies carrying out EAD activities.

<sup>3</sup> A slight reduction in the share of R&D costs (%) in the revenue as compared to a rapid growth of R&D costs in absolute terms in 2011-2014 can be attributed to the aggregate revenue growth posted by holding companies carrying out EAD activities.

#### PERFORMANCE OF PROGRAM ACTIVITIES

In 2014, program activities focused on the following main issues:

- implementing measures to improve innovation management business processes;
- acquiring new competences and skill qualifications for personnel engaged in innovation development;
- conducting applied research and development, primarily in the interests of ensuring the development and integration of advanced industrial technologies and innovative products primarily in support of FTP and defensive procurement and acquisition contract;
- technological upgrades at business entities with the objective of creating the manufacturing base for competitive high-tech products featuring new consumer properties;
- developing new technologies to enhance energy efficiency and environmental stewardship of production operations and integrate new quality control systems;
- building an advanced innovation infrastructure at the level of the corporation, its holding companies, and subsidiaries;
- creating a commercialization system for the corporation's potential technologies and IP rights;
- contracting with universities, scientific research organizations, and small- and medium-size companies to implement innovative projects for the corporation's entities;
- liaison with national institutions of development and investment funds.

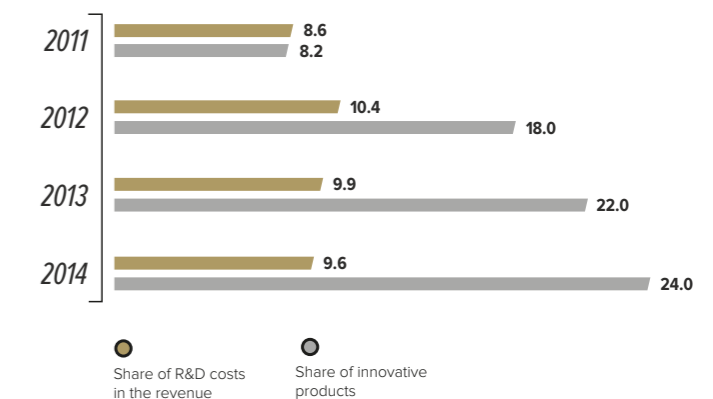


Fig. 3. KPI trends for 2011–2014, %.



<sup>1</sup> This figure includes Rostec's own funds and those borrowed that are available to the corporation's entities.

## RESEARCH AND DEVELOPMENT (R&D)

*This area of operations is critical to the innovative development of the corporation and its holding companies.*

In 2014, R&D projects were conducted across the priority areas of innovative development for the corporation's entities. Rostec organizations carried out a significant portion of R&D projects under the framework of federal target programs and defensive procurement and acquisition contracts, meaning that the innovative activities of the corporation's entities are still largely focused on the government's needs for research and development.

### THE CORPORATION'S ENTITIES ARE INVOLVED IN THE FOLLOWING GOVERNMENT PROGRAMS:

- development of the military-industrial complex of the Russian Federation for 2011-2020;
- development of the aeronautical industry for 2013-2025;
- development of civil aviation in Russia for 2002–2010 and the period until 2015;
- development of the electronics and radio-electronics industry for 2013-2025;
- development of the electronic component base and radioelectronics for 2008–2015;
- development of the shipbuilding industry for 2013–2030;
- development of the pharmaceutical and medical industry for 2013-2020;
- space activities in Russia for 2012–2020;
- development of science and technology until 2020;

- development of industry and its competitive edge until 2020;
- creation and development of the geophysical monitoring system in the Russian Federation for 2008–2015;
- maintenance, development, and use of the GLONASS for 2012-2020;
- development, restoration, and establishment of production operations for strategic, short-supply, and import-substitution materials and small quantities of chemical products for weapons, military, and purpose-built equipment and vehicles for 2009–2011 and for the period until 2015;
- development of the transportation system;
- development of the healthcare system until 2020.

The summary data for the number of R&D and technological upgrade projects carried out by Rostec entities in 2014 and their results are presented in **table 1**.

No.	Indicator	Quantity
1	Number of R&D projects delivering completed new technologies and products, including:	652
2	under government orders	423
3	initiative projects	229
4	Number of completed upgrade projects	68
5	Number of innovative technologies integrated in production operations	45
6	Number of innovative products delivered to the market	108

Таблица 1. Data on the number of projects in 2014



In 2014, as in previous years, the corporation's entities played an active role in developing basic industrial and critical technologies. The list of basic industrial and critical technologies for 2011-2020, approved on September 22, 2010, by the military-industrial commission of the Government of the Russian Federation, included 340 basic and 231 critical (total of 571) technologies falling within the operational scope of Rostec's entities. In 2011-2014, the development process was initiated under the Federal Target Program Development of the Military Industrial Complex for 2011-2020 for 487 technologies – with 215 (129 basic and 86 critical) of them being successfully completed and commissioned to create competitive high-tech products for the government's needs. The R&D data pattern for basic and critical technologies is presented in **table 2**.

The number of developed industrial technologies and their growth are generally in line with the Development of the Military Industrial Complex for 2011-2020 Program and also with defensive procurement and acquisition targets. In response to changes in the political situation, the corporation's holding companies and entities are actively making adjustments to the list of basic industrial and critical technologies slated for 2016-2025.

In addition, in 2014, 27 basic and 36 critical technologies were delivered by the corporation's entities under other government programs. In total, the Rostec entities adopted 45 new industrial technologies over the reporting period.

Planned and actual amounts of financing available for R&D program activities as broken down by industry are shown in **table 3**. Compared to 2013 (61.3 billion rubles, including 19.8 billion rubles of Rostec's own funds) aggregate costs to implement R&D projects rose by 26.1% in 2014.

The amount of expenditures allocated by the corporation's own entities for research and development remained unchanged. Innovative activities focused on the weapons/chemical agents, conventional arms, and radio-electronic clusters.

	2011	2012	2013	2014	Total
<b>Development started, including</b>	<b>178</b>	<b>70</b>	<b>111</b>	<b>128</b>	<b>487</b>
basic	109	36	66	84	295
critical	69	34	45	44	192
<b>Development ongoing, including</b>	<b>178</b>	<b>218</b>	<b>292</b>	<b>345</b>	
basic	109	137	172	220	
critical	69	81	120	125	
<b>Development completed, including</b>	<b>30</b>	<b>37</b>	<b>75</b>	<b>73</b>	<b>215</b>
basic	8	31	36	54	129
critical	22	6	39	19	86

Table 2. Data on development results of industrial technologies in MIC

	Amount of financing in 2014		
R&D financing targets in 2014, in millions of rubles	TOTAL, in millions of rubles	including, own funds, in millions of rubles	Completion rate, %
76,581.7	77,275.4	21,794.0	100.9
including split by industry:			
Aeronautical holding companies			
24,434.4	20,214.9	8,548.7	82.7
Weapons and chemical agents holding companies			
5,375.0	7,031.8	2,455.5	130.8
Conventional arms holding companies			
14,117.0	15,452.6	3,689.7	109.5
Radio-electronic holding companies			
31,954.2	33,872.4	6,917.2	106.0
Civilian industry holding companies			
701.1	703.9	182.9	100.4

Table 3. Amounts of R&D financing



## AERONAUTICAL INDUSTRY

*In 2014, the corporation's entities in the aeronautical cluster carried out 98 R&D projects, including 17 that were eventually completed. In addition, 6 basic and 4 critical industrial technologies were completed, 8 innovative technologies were integrated into production operations, and 9 innovative products were introduced to the market.*

It should be noted that, compared to 2013, enterprises in the aeronautical cluster spent significantly less federal funds on R&D projects (16.5 billion rubles versus 11.7 billion rubles) with an increase in the share of their own expenditure on research and development (6.9 billion rubles to 8.5 billion rubles). The failure to meet the R&D expenditure target is primarily attributed to the winding-down of operations and, consequently, the financing of three projects undertaken by Russian Helicopters: an advanced high-speed helicopter, a light multipurpose helicopter with a takeoff weight of 4.5 tons, and a 2.5-ton light single-engine helicopter.

The R&D work on aviation equipment led to a basic set of (fixed and rotary wing) aircraft equipment based on standardized components and systems, in a standardized basic set of onboard equipment developed in collaboration with aircraft designers for fixed and rotary wing commercial aircraft. This all enables a greater competitive edge, reduced costs, and a shortened time for aircraft construction.

In the field of rotary wing aircraft, appropriate upgrade programs were completed on time for the Mi-38, Mi-171A2, Mi-17V-5 (Mi-8MTV-5), ANSAT, Mi-28NM, Ka-52, Mi-26T2, and Ka-226T helicopters.

In the field of aviation and rocket engines, the following R&D projects had the highest priority in 2014:

- PD-14 engine project, including demonstration and trial engines, design and certification work for the base engine, and work on material qualifications;
- RD-33 MK modular engine project, featuring an improved thrust and an extended service life, which is used as part of the power plant for aircraft carrier-based MIG-29K/KUB helicopters and its variants;
- R&D work on individual systems under the advanced helicopter engine project (development of trial units of the gas generator fuel supply, prototypes of data storage units, electronic backup control unit for the gas generator);
- activities for the PAK FA and PAK DA projects that were completed in full;
- development of effective design and production technologies for high-power gas-turbine engines for land-based power plants with the aim of establishing a research advantages.

## CONVENTIONAL ARMS INDUSTRY

*In 2014, the corporation's entities in this cluster carried out 547 R&D projects, including 191 that were eventually completed. In addition, 30 basic and 9 critical industrial technologies were created, 18 innovative technologies were integrated into production operations, and 11 innovative products were introduced to the market.*

Compared to 2013, federal expenditure on R&D projects rose by 29.7%, from 9.1 billion rubles to 11.8 billion rubles, while Rostec's own expenditures on research and development declined from 5.5 billion rubles to 3.7 billion rubles.



## AMMUNITION AND CHEMICAL AGENTS INDUSTRY

*In 2014, the corporation's entities in this cluster carried out 102 R&D projects, including 30 that were eventually completed. In addition, 14 basic and 8 critical industrial technologies were created, 31 innovative technologies were integrated into product operation, and 25 innovative products were introduced to the market.*

In 2014, R&D project expenditures substantially increased compared to 2013 due to both federal funding (from 2.7 billion rubles to 4.5 billion rubles) and internal funding (from 1.3 billion rubles to 2.5 billion rubles). The following research and development priorities were carried out in 2014:

- development of smart (precision-guided) munitions of various applications;
- development of munitions with a more powerful high-explosive, incendiary, and electromagnetic effect by utilizing explosive dispersal of metal parts;
- securing scientific and technological advantages in terms of advanced technologies and designs of new and improved MKB for future-proof weapons and military equipment based on the new building concept of the Russian armed forces;
- continued work to build new-generation, high-precision multiple launch rocket systems;
- introduction of new high-performance, economically-viable, and resource-saving technological processes;
- creation of new technologically advanced designs and the upgrade of mass products using new materials and technologies;
- creation of new potential technological processes and the upgrade of production facilities at Rostec enterprises.

The most promising areas in developing competitive civilian products include design and engineering work for medical equipment (e.g. an automated diagnosis and treatment complex for life support), new air-cooling units, oil and gas equipment, and more.

## RADIO-ELECTRONICS COMPLEX

*In 2014, the corporation's entities in this cluster carried out 1,173 R&D projects, including 399 that were eventually completed. 28 basic and 8 critical industrial technologies were created, 29 innovative technologies were integrated into production, and 63 innovative products were introduced to the market.*

Aggregate expenditure on R&D projects grew in 2013 from 18.5 billion rubles to 33.9 billion rubles thanks to increased federal allocations (from 12.5 billion rubles to 27.0 billion rubles) for R&D projects for radio-electronic equipment produced by the corporation's entities.

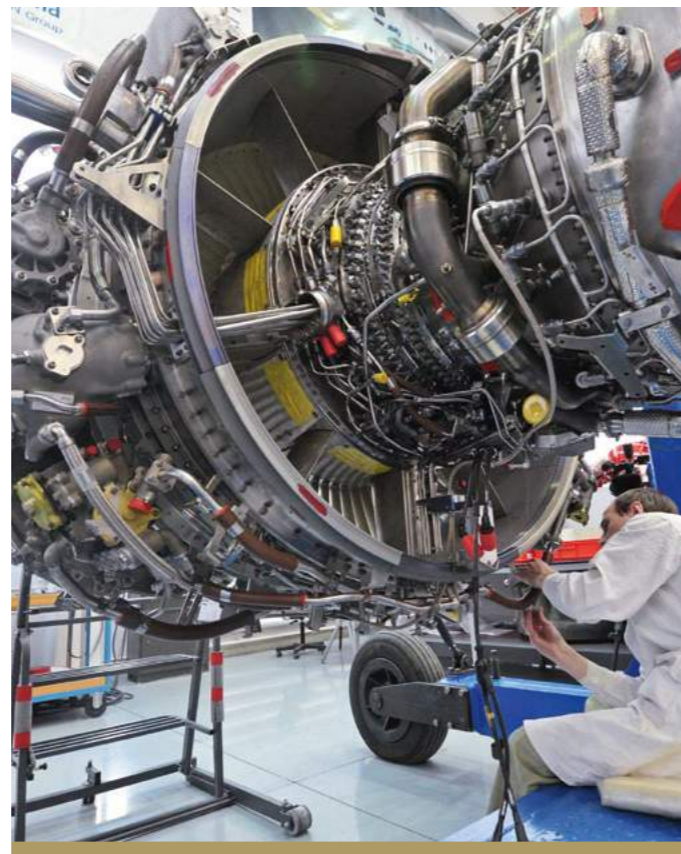
The following are examples of innovative R&D projects implemented in 2014:

- development of thermal imaging systems, OLED-based displays, and heads-up and helmet-mounted displays used by fire-rescue workers, pilots, special forces, and military personnel as part of their equipment kit;
- development of a baseline technology for creating film-based organic electroluminescent materials for radio-electronic and high-efficiency LEDs;
- development of biochemical microchips, X-Ray diagnostic units, electromagnetic hyperthermia units, UHF and EHF therapy equipment, and biochemical nanosensors for clinical tests;
- testing, certification, and preparation for mass production of integrated modular airborne avionics (IKBO IMA) for domestically-built civil aircraft to increase flight safety, ensure compliance with international aeronautical requirements, and expand operational capability of civilian fixed and rotary wing aircraft;
- Development of an onboard equipment control system, data computation system, overall control system, air data measurement system, state identification system, emergency communications, and aircraft control and navigational equipment, including various control panels, trackball units and a multi-purpose display as part of the integrated onboard avionics system project for the MS 21;

- development of a strapdown inertial navigation system (SINS-SP2), capable of independently determining aircraft location when no connection to satellite navigation or air traffic control services are available. Featuring an original architecture, based on three laser gyroscopes and three quartz accelerometers, the SINS-SP2's location accuracy is double that of existing inertial navigation systems.
- development and introduction into service of a new generation of air-based electronic warfare systems

## RARE EARTH ELEMENTS

Ruselectronics played an active role in rebuilding the rare earth elements industry in Russia. In 2014, the corporation's entities were involved in 13 R&D activities as part of federal sub-program No. 15, Industrial Development of Rare and Rare Earth Metals as part of the larger program, Development of Industry and Increasing its Competitiveness. A range of research activities included a broad scope of innovative technologies, from production and processing of raw materials leading to sub-products – concentrates of rare and rare earth metals – to production technologies for high-tech electronic and other products.



## NON-MILITARY INDUSTRIES

*In 2014, the corporation's entities carried out a total of 24 R&D projects for non-military applications, including 15 that were completed. In addition, 3 basic and 7 critical industrial technologies were developed. 3 innovative technologies were integrated into production operations.*

The following projects to create and develop new technologies were completed as a result of research and development work in composite materials:

- development of technologies for new generation structural and functional composite materials for impact-resistant, architectural glazing;
- development of automated technologies and special process equipment for solid rocket-fuel components;
- development of an Industrial production technology for radiotransparent layers for high-speed rocket fairings;

- development of new ceramic materials based on radiotransparent materials based on oxides and nitrides, as well as production technologies for antenna fairings;
- development of production technology for glass-based cell fillers for three-tiered power and medium-loaded air, land, and water transportation vehicles.
- development of a component base and production technology for new-generation, high-strength, polyester-based lightweight composite materials and high-strength, polyethylene-thread polyester/fiber glass based composite materials using nano-sized structural modifiers;
- development of new polymeric composite materials and potential competitive technologies based on them, and more.



## 7<sup>3</sup> Implementing innovative development programs

### Building innovative infrastructure, including an intellectual property (IP) rights management system

#### IN 2014, STRUCTURAL CHANGES

were introduced to the innovation management system at the corporation level. An innovation development division of the Department of Strategic Management and Innovation Development was reorganized into a Division for Innovation Development and New Projects as part of the corporation's scientific and technical council. However, the responsibilities of the innovation unit did not change much, with the guiding business processes remaining the same.

In 2014, work continued for developing the innovation team, including the naming of deputies to chief executive officers, executive managers, and personnel for business units in charge of innovation development at Rostec's holding companies. Two-week intensive innovation sessions were held in regions to help develop the team and integrate an open innovation model.

#### CREATION OF THE INTELLECTUAL PROPERTY RIGHTS MANAGEMENT SYSTEM

2014, work was carried out to develop a management system for intellectual property (IP) rights and to apply such rights in business activities.

The bulk of IP rights acquired by business entities in the process of R&D activities for government needs are the property of the Russian Federation acting as the public customer. Such IP rights were transferred in the reporting period to the public contractor upon the receipt of patents, certificates, or under-license agreements for the free transfer of know-how.

IP rights are identified, created, and registered in the corporation's entities involved in innovation projects to develop potential technologies. IP rights are put into effect, transferred, and commercialized at the level of the corporation's entities.

In order to improve the IP management system, an IP rights council headed by deputy chief executive officer of the corporation V. V. Artyakov was established in August 2014. The council is an advisory body to the corporation and is tasked with conducting preliminary reviews of IP rights-related issues of the corporation's holding companies and entities and proposing recommendations to the corporation's managing board and chief executive officer. The council is supervised by RT-Intellectexport, which is designated as the corporate competence center in the area of IP management.



In late 2014, pursuant to the relevant order of the Russian Government, an inventory was taken at the corporation's holding companies of intellectual properties acquired in 2010–2014 as a result of federally funded research and development work for military, special, and dual military/civilian applications. A summary of the inventory results and actions taken to secure IP rights for the Russian Federation was submitted to the Russian Ministry of Economic Development and Trade and Rospatent (Russian Agency for Patents and Trademarks).

A new form of reporting drafted by RT-Intellectexport was enacted at the corporation, namely RT-IP "Intellectual Property Reporting," which contains 10 quality and 15 quantitative indicators. Performance data on IP rights acquired in 2011–2014 (KPI for the IP scope) is presented in **table 5**.

	2011		2012		2013		2014	
Indicator	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Specific proportion of intangible assets in the total cost assets, %	–	1.4	1.4	3.8	2.2	2.7	3.0	3.4
Number of submitted requests for issue of patents	240	612	650	594	698	1135	768	821
including submissions abroad	60	12	40	15	41	41	51	28
Number of patents obtained	120	549	685	558	767	579	845	862
including abroad	5	14	18	6	26	9	40	0
Number of engineering and technological solutions in knowhow.	50	255	232	204	268	729	292	817
Utilization rates of patents, %	–	34.2	45.8	53.0	57.1	59.2	58.8	59.9

Table 5. Data on IP rights management for 2011–2014

The Corporation has established an appropriate framework for regulations and guidelines and is adopting an efficient IP rights management system at the corporate, holding company, and enterprise levels that ensures a requisite degree of protection for newly created IP rights.

#### INTERFACE WITH UNIVERSITIES AND RESEARCH ORGANIZATIONS

During 2014, the corporation's holding companies and entities actively cooperated with universities and research institutions for applied research and R&D activities. Universities and research institutions were involved as sub-contractors in research work done under government programs and R&D initiatives. Together with core universities, collaborative areas of research work and engineering studies were defined for research efforts of universities and research institutions. Corporation-funded research and engineering technological projects conducted in collaboration with universities amounted to 2.8 billion rubles. A total of 164 innovation projects were implemented jointly with universities in 2014.



### INVOLVEMENT WITH TECHNOLOGY PLATFORMS

The corporation and its holding companies are taking part in national technological platforms (TP) and coordinating activities at the following four platforms:

- Bio-industry and Bio-resources (BioTech-2030) (RT-Biotechprom, CJSC acting as a co-facilitator);
- National Program Platform (Russian Electronics acting as a facilitator);
- SHF Technologies (Ruselectronics);
- Aviation Mobility and Aviation Technologies (TsAGI, Rostec Corporation, and UEC).

In 2014, work continued under the projects of National Program Platform and SHF Technologies to select participants for technology platforms; improve their organizational structures; develop strategic research programs, regulation, and selfregulation mechanisms; promote training and skills development for research and engineering personnel; and develop innovation infrastructure and communications in the field of research and engineering innovation.

The corporation's aeronautical holding companies played an active role in preparing proposals for strategic research program and developments of Aviation Mobility and Aviation Technologies. Under the KRET project, proposals were prepared and submitted to TsAGI for the draft Development Plan of National Science and Technology In the Aeronautical Industry for the Period until 2025 and Subsequent Periods. This also provided the basis for subprogram Aeronautical Science and Technologies and the state program Aeronautical Industry Development for 2013-2025.

Cooperation with technology platforms fosters the exchange of scientific and technological data between the corporation's entities and their partners, encourages the search for new technological solutions, and promotes innovation export. The technology platform framework helps consolidate and intensify efforts to create advanced technologies, develop and market new products (works and services), secure additional resources, and contribute to research and development as agreed upon by all business, scientific, state, and civil stakeholders.

### INTERFACE WITH INNOVATION DEVELOPMENT INSTITUTIONS, INCLUDING SKOLKOVO INNOVATION CENTER

Rostec benefits from the highest level of collaboration with the Advanced Research Foundation, which supports 8 innovative projects run by the corporation's entities.

In 2014, representatives of the corporation's entities participated in activities and events conducted by national innovation development institutions, such as conferences, workshops and round table meetings, in which reports were delivered on issues related to the development of Russian industry. Cooperation with RVC takes place within the operational scope of the venture capital fund Civilian Technologies of the Military-Industrial Complex.

Collaboration with Skolkovo Innovation Center provides opportunities for research internships at the Skolkovo Innovation Center and the implementation of ground-breaking technologies in areas of interest to the corporation's entities.

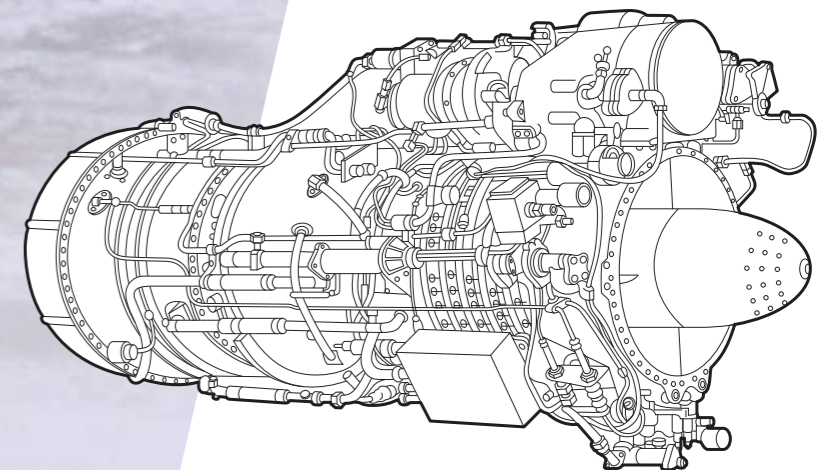


Russian Helicopters, UEC, and Ruselectronics are the most active collaborators with the Skolkovo foundation.



*Human resource  
management*

*More than*  
**443.000** *people –*  
*total number of employees  
on the payroll*



## 8<sup>1</sup> Key performance indicators and remuneration

**In 2014, the corporation approved fundamentally new approaches** to the performance management and remuneration of the corporation's executive managers that will lay the foundation for improving the motivation and executive management system:

- competitive market level of remuneration and the use of market approaches to remuneration systems to attract and retain within the corporation highly qualified personnel and to strengthen the corporation's brand as an employer;
- personnel appraisal to obtain a consistent view of each individual's abilities and skills, management and leadership competence, as well as management motivation;
- consideration of the complexity and significance of tasks efficiently handled by personnel in order to determine the amount of their remuneration;
- encouragement of executive managers to achieve mid- and long-term targets through efficient motivation instruments.

*In order to identify the key aspects of remuneration and motivation, the corporation conducted an independent study of the compensation and remuneration systems in use at major Russian diversified holding companies and production assets that are commensurate with the scope and complexity of Rostec's holding companies.*

Considering that, pursuant to the corporation's development strategy, the head office (corporate center) controls parent organizations of holding companies that are value creation centers, the integrated performance indicator structure was approved for the chief executive officer at the head offices of holding companies, Managing Board members, and personnel of the corporation's head office.

The performance indicator structure includes not only general business indicators, but also metrics specific to each head office at holding companies, as required by its development strategy and action program.



The compensation and remuneration system also takes into account that the assets classification period has been largely completed and that shares in the corporation's entities have been transferred to head offices of holding companies, thus leaving to the corporation only the management of compensation and remuneration of chief executive officers at the head offices of holding companies. The remuneration and performance indicator management tools for these chief executive officers have been transferred to their head offices, while Rostec's corporate center remains a decision-making authority in the compensation and remuneration of the corporation's personnel, head offices of holding companies, and directly controlled businesses.

*For the first time occupational occupational safety (absence of fatalities and permanent disability incidents) was initiated as a bonus cancellation measure applicable to CEO at head offices of holding companies. Preventing injuries at work is one of the best incentives to improving and optimizing production operations.*

*The production output per employee is one of the performance indicator parameters of chief executive officers at holding companies' head offices and is a leading factor in awarding annual bonuses*

More than **2.176** million rubles – output per employee in 2014. In 2009, this figure was less than 1 million rubles



## 8<sup>2</sup> Training and staff development

**Efforts to provide training and skills development to the corporation's personnel and its entities** were launched as part of collaboration with leading Russian universities in educational and research areas. The collaborative work with universities was carried out as part of long-term agreements with the aim of establishing and improving job-specific contract training for professionals and additional occupational training for personnel of the corporation and its entities.

**THE MAIN PARTNER UNIVERSITIES** are Moscow State University, the Moscow Institute (University) of International Relations of the Ministry of Foreign Affairs of the Russian Federation, Bauman Moscow State Technical University, Moscow Aviation Institute (National Research University), National Research University, Higher School of Economics, Plekhanov Russian University of Economics, St. Petersburg State Polytechnic University, Diplomatic Academy at Ministry of Foreign Affairs of the Russian Federation, and other leading universities in Moscow and throughout Russia.

The corporation's holding companies and other entities worked jointly under agreements to adopt and improve additional occupational training systems with over 200 educational institutions across all regions of the Russian Federation. Three core departments have been organized and are operating with direct contribution from the corporation's executive management and employees at Moscow universities:

- Management in Military-Technical Cooperation and High Technologies at the Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs of the Russian Federation to train managerial personnel in promoting high-tech logical products for military, civil, and joint applications and conduct scientific research on joint international projects.



- Economics and Corporate Governance of Production and Export of High-Tech Products at Plekhanov Russian University of Economics to retrain and develop skills of personnel at the corporation and its entities, as well as to conduct research and financial and economic feasibility studies for the national industry and military-technical policy;
- Innovative Management and Foreign Trade Activity to train, retrain, and improve qualifications of personnel of the corporation and its entities in high-tech innovative projects and innovative activities for industrial and cross-industrial applications.

Currently, about 8,000 personnel of the corporation and its entities are receiving training from Russian universities. In 2014, a total 120,000 personnel of the corporation's holding companies received supplementary training, including 36,380 professionals in engineering specialties. The total cost of collaboration with universities (on a social partnership basis) with the major holding companies alone exceeded 137.5 million rubles, while the overall training expenditure in 2014 was 636.6 million rubles.

In 2014, more than 80 people underwent additional occupational training at the corporation's head office at a cost of 1,314,410 rubles.

*In terms of the total amount of funds allocated to education and research projects, the corporation is one of the largest investors in higher education among the companies with a government stake, as recognized by the Russian Rectors' Union for the consistent and efficient structure of the practical training and internship system providing professional orientation to university students.*

The corporation has in place a system of practical training and internship for students under a joint program with MGIMO (Moscow State Institute of International Relations) of the Ministry of Foreign Affairs of the Russian Federation, for students from other universities and from the College of the Ministry of Foreign Affairs of the Russian Federation.

There are a total of 90 annual internship students working at the corporation's head office alone, with upwards of 5,000 at the corporation's entities.

The joint work with universities – aimed at training and developing skills for personnel, creating and improving the system of target contract training, and providing additional occupational training for personnel at the corporation and its entities – will continue to be one of the corporation's strategic areas of practical efforts in the next few years with a view to using the synergy of opportunities in education, science, and production to benefit the interests of enterprises and organizations of the military-industrial complex.

The system of continuous education for the corporation's personnel includes both long- and short-term training programs through leading universities and institutions in the area of innovation. This work involves leading national and foreign instructors, as well as innovative business practices. Classes are conducted in the form of lectures, seminars, training sessions, and business games.

### CONTINUOUS EDUCATION SYSTEM AT THE CORPORATION COVERS THE FOLLOWING KEY AREA:

- establishing at Rostec a new multi-tiered training program for personnel for the corporation and its business entities in the areas of innovative economics and business, including skills development in technology commercialization and innovation management, as well as to attract investments in innovative projects and project management, as well as promoting products in domestic and global markets;
- Improving the existing occupational training program and designing new programs for occupational training and for the retraining of engineering personnel;
- providing graduate- and doctorate-level scientific training for specialists and heads of enterprises.

In addition, Rostec plays an active role in relevant federal programs to address the problems of contemporary engineering training and raise the prestige of engineering professions.

**IN 2014, A CROSS-INDUSTRY PROFESSION COMPETITION WAS HELD IN YEKATERINBURG** under the WorldSkills Russia standard, in which young employees from Rostec and its holding companies participated. Requests to participate in the competition came from 21 enterprises of the corporation. Rostec entities competed in 6 out of 11 areas of competence. The largest teams were made up of delegations from the following holding companies: Russian Helicopters, United Engine Corporation, Ruselectronics, and Shvabe.

Rostec's entities performed well, ranking first on the medal table. The national tournament provided a stimulus to actualize personnel procurement practices for high-tech industries operating in accordance with international standards. Work was undertaken to develop national professional and training standards based on relevant international WorldSkills standards for cross-industry professions and those most in demand among Russia's business sectors.

Today, many holding companies at Rostec are on the lookout for dedicated educational and training models that provide both classroom and hands-on experiences. Thus, Ruselectronics is running a new individualized education system introducing young professionals to work at enterprises starting in the third year at university. Such programs are being adopted at 38 leading Russian universities through joint efforts.

*“The availability of a competent workforce is undoubtedly one of the key prerequisites for Russia’s technological breakthrough.” – **Nikolai Volobuev**, Deputy CEO of Rostec*

**THE FORUM “ENGINEERS OF THE FUTURE 2014” TOOK PLACE WITH THE SUPPORT OF ROSTEC.** The Russian Engineering Union organized the event for the fourth time with the help of Rostec. As traditional, the best young professionals participated in the forum as representatives from Rostec enterprises.

The forum gathered together prominent Russian scientists and public statesmen, professors from leading national and foreign technical universities, and members of the Russian parliament. The participants discussed issues related to innovation integration and production upgrade, contemporary engineering training, and exchange programs for young engineering professionals.

Delegates also acknowledged the importance of personnel training that begins in school. To this end, the largest and the most popular engineering competition among Russian schoolchildren in 2014 was **Star – Talents in Service of Defense and Security**.

This competition attracted participants from grades 6-11 from across the country. For the second year in a row, the Russian Engineering Union, under the leadership of Rostec’s CEO Sergey Chemezov, organized the event.

In addition, Rostec served as a general partner of the Russian stage of the **World Robot Olympiad (WRO)**, held in Kazan.

The Robot Olympiad already has more than ten years of history, but it was not until 2014 that the Russian stage of the competition took place outside of Moscow. Around 1,000 robot designers from across Russia, aged 6 to 20 years old, took competed in Kazan in six categories: Regular, Open, Creative, College, Soccer of robots, and **RoboTraffic**.



**120** thousand employees at the corporation’s holding companies went thorough retraining and advanced training programs in 2014.

## 8<sup>3</sup> Policies for increasing employee output and efficient personnel management

**In 2014, Rostec continued its efforts to streamline** the organizational structure of its head office, resulting in:

- the staff size has been reduced;
- an upgrade to the corporation’s management system by optimizing functions of corporation business units and enhancing the performance of the collective governing body, namely the corporation’s main apparatus, the managing board (including by reducing its composition to ten members).

*“I sincerely thank the AVTOVAZ team for their distinguished work! 2014 proved to be a tough year for the company, but we managed to improve our quality by 50% and increase labor output by 20 %.” – **Bo Andersson**, President of AVTOVAZ.*

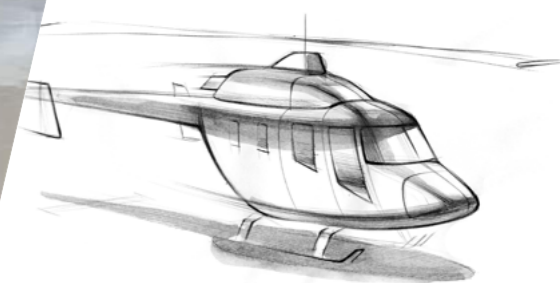
*Concern Kalashnikov has launched a large-scale operations development program intended to quadruple labor productivity, cut down production cost and working capital by half, and increase the speed of product development and marketing by four times.*





*Social  
responsibility*

**120** thousand  
Employees in the  
corporation's holding  
companies who completed  
retraining and advanced  
training courses in 2014



## 9\_ Social responsibility

**In 2014, Rostec adopted a range of measures to improve its social policy tools.**

### **1. ROSTEC'S NEWLY DEVELOPED HOUSING PROGRAM PROVIDES SUPPORT TO THE CORPORATION'S PERSONNEL IN THE FOLLOWING THREE AREAS:**

- compensating or subsidizing interest rates or initial mortgage payments;
- compensating or subsidizing lease and utility charges;
- organizational, methodological, and financial support to housing cooperatives consisting of personnel at the corporation's entities that work in the military-industrial complex (with the Russian Housing Development Foundation on collaborative basis under an agreement, to which the Corporation is a party). According to a resolution adopted by the corporation's managing and supervisory boards, in some situations housing cooperatives will be granted land for free.

The program will provide personnel with optimized interest rates that are much more attractive than those of standard market conditions. Partner banks (including Rostec's subsidiary Novikombank Bank, which provides mortgages and lending services) and banks of the Agency for Housing Mortgage Lending, with which Rostec has agreements will provide mortgages.

Work will also continue under the framework of high-priority programs such as Housing for Russian Families, which is part of the state program Providing Affordable and Comfortable Housing and Utility Services to Russian Citizens.

### **2. IN 2014, ROSTEC ALSO CARRIED OUT INITIATIVES TO DEVELOP MEDICAL AND HEALTH RESORT SERVICES FOR THE CORPORATION'S PERSONNEL.**

The corporation and its business entities took on expenses for voluntary medical insurance for their employees in accordance with the corporate programs for family members. Rostec also provided vacation packages for personnel in accordance with internal regulations of the corporation and its organizations.

In order to implement a single medical system with a complete cycle of care (preventive care, diagnostics, treatment, and aftercare), a total of 77 medical and social-care assets were designated as professional medical care providers. This system for the corporation's personnel includes the use of medical equipment, technologies, and medication produced by Rostec entities. Clusters were organized to develop this system around the key regions of the corporation's presence. This project will be fully implemented in 2015-2016.

### **3. IN 2014, THE PRIVATIZATION PROCESS BEGAN FOR THE "FIRST INDUSTRIAL ALLIANCE" NON-STATE PENSION FUND, THE MAIN FUND FOR THE CORPORATION IN IMPLEMENTING RETIREMENT PROGRAMS FOR THE BENEFIT OF ROSTEC PERSONNEL AND ORGANIZATIONS.**

The fund's reorganization will increase the efficiency of the management of obtained pension resources, diversify the range of pension products, and join the guaranteed pension savings system, which will improve the integrity of cash held by the fund's members and depositors used for pension payments.



### **4. IN ORDER TO OBTAIN ADDITIONAL SOURCES OF FINANCING FOR SOCIAL PROGRAMS UNDERTAKEN BY ROSTEC AND ITS ORGANIZATIONS, INCREASE CONTROL OVER SOCIAL EXPENSES FUNDED BY CORPORATION'S ENTITIES, AND ALLOCATE FUNDS TO THE DEVELOPMENT OF A SINGLE MEDICAL SYSTEM, THE CORPORATION INITIATED A PLAN TO FINANCE THE FUND FROM THE SALE OF NON-CORE MEDICAL AND SOCIAL-CARE ASSETS OWNED BY ROSTEC'S ORGANIZATIONS.**

The fund's resources will be used to develop social programs of the corporation and its entities, as well as to support the corporation's long-term social obligations to personnel.

### **5. IN 2014, THE CORPORATION ALSO LAUNCHED A PROJECT TO CREATE AN SOCIAL PAYMENT CARD FOR ROSTEC EMPLOYEES UNDER THE FRAMEWORK OF THE CORPORATION'S NATIONAL PAYMENT SYSTEM AND SOCIAL POLICY.**

This card will allow the corporation to control rates as part of salary projects in order to ensure the targeted transfer of social benefits to the corporation's personnel and make a high-tech payment instrument available to employees.



## 9<sup>1</sup> Support for socially significant events

**The corporation's social policy fosters an environment** favorable to attracting and retaining highly qualified personnel, raising the quality of life for personnel, and supporting young professionals. Therefore, Rostec takes part in socially prominent events on both regional and national levels. The corporation supports and sponsors sports competitions and cultural activities, develops environmental programs, and implements health care projects.

### SPORT SOCHI-2014

Rostec and its holding companies supported one of the year's most significant sporting events, the 12th Winter Olympic Games held in Sochi. Rostec equipment was used in the security for the event and the corporation itself assisted in overhauling the Zelenaya Roshcha (Green Grove) resort complex.

Rostec and its holding companies also sponsor various regional and federal championships and support professional sports teams.

### PRACTICAL SHOOTING

Rostec and its subsidiary Concern Kalashnikov provide considerable support for the development of shooting sports. In 2014, the Rostec-Kalashnikov team won the top prize in the national practical shooting championship in St. Petersburg and the silver medal in the most prestigious event in this sport, the World Championship.

In July 2014, the creation of the first women's practical shooting team in Russia was announced. It is made up of repeat winners of Russian and international shotgun shooting events. The creation of the women's team in this sport will enable Rostec not only to achieve high sporting results, but also to become more responsive to women's needs for developing and improving sporting weapons.

### CYCLING

Cycling has been rapidly expanding in Russia largely due to the implementation of a national cycling project and the success of the Katyusha national cycling team. Rostec sponsors the team and plays an active role in supporting it.



Over **2,000** participants travelled to Moscow during Rostec's hallmark event, the All-Russia Corporate Games

*Sergey Chemezov is the Chairman of the Supervisory Board of the Russian Cycling Federation. Rostec actively supports the project and the Katyusha team. The team leadership is adopting measures to expand the Russian component of the project to have a positive effect on both young and experienced Russian athletes alike*

### CSKA

In 2014, Rostec's holding company Russian Helicopters continued its collaboration with the CSKA football club. A club support agreement was signed in April. Evgeny Gliner, president of FC CSKA, emphasized the importance of the partnership as an indicator of how Russian teams are now receiving highly valuable support from major players in Russian industry.

Industry and sports have important points of contact, such as the mission of strengthening the image of Russia as a modern power through success in sports, economics, and high technologies.

### FIFA WORLD CUP

Rostec sponsored the broadcasts of the 2014 World Cup, launching a set of TV commercials for the first time. The corporation's promo video began the broadcasts of every match in the championship and helped to improve the awareness of Rostec's brand. The average percentage of the TV audience exposed to the video was 57% and its rating was 6.5%, while the total audience exceeded 200 million viewers.

Moreover, it gave a mighty boost to the HR-brand of the corporation by uniting all employees, from the CEO to workers, into a single team of fans. All organizations in Rostec felt their involvement in the events through the common brand.

### CORPORATE GAMES

The corporation is traditionally a title partner at the major sporting event Rostec – All-Russia Corporate Games. In 2014, the tournament attracted over 2,000 participants who came to Moscow from all over Russia.

The games featured competitions in the following sports: hockey, mini-football, volleyball, streetball, paintball, swimming, track and field, cycling, table tennis, carting, badminton, a tug of war, Russian billiards, pool, bowling, chess, checkers, backgammon, darts, table hockey, air hockey, weightlifting, sailing, rifle and pistol shooting, and other sports.

From August 15-17, 2014, the **Rostec – World Corporate Games** took place at the Sochi sports facilities. The event was organized and sponsored by Rostec in association with the Russian Ministry of Sports, Sports Directorate of Corporate Games, Sport Funds and FGAU Sports Events Organization and Management Administration.

Employees of major Russian and foreign companies took part in the games to promote cooperation in international sports, support mass sports and physical culture, and establish business-to-business relationships through sports and a healthy lifestyle.

### RUSSIAN ICE HOCKEY FEDERATION

For many years the Russian Ice Hockey Federation and Rostec have worked together to support **the primary and youth national hockey teams**.

### CULTURE

Rostec supports major events of significance to the country's cultural and social life. The corporation played a supportive role in the **Spasskaya Tower** military music festival in 2014.

The best military bands, performance groups, and honor guard units from Russia and other countries demonstrated their skill on Red Square in Moscow from August 30 - September 7, 2014. The weekly audience at the festival on Red Square alone exceeded 7,000 people and altogether, over 50,000 spectators enjoyed the festival (including Internet and TV audiences over 100 million people).



The **Actor's House** also began a project to refurbish its central stage and lounge area and replace elevators with the help of Rostec.

The Actor's House occasionally stages performances featuring top actors and actresses from Russian theater and cinema, as well as Rostec employees.

For several years, Rostec has helped to publish Orthodox Book Review, the official journal of the **Book Review of the Russian Orthodox Church**. This publication informs readers and publishers about useful literature, highlights hallmark events in the Orthodox book market, and presents detailed and engaging information about projects organized by the publishing council to rekindle an interest in reading books.

Rostec charity projects also included contributions to renovating the Epiphany Cathedral and the facade of the church attached to the Cathedral, the Church of Saint and Great Martyr Nikita on Staraya Basmannaya, a magnificent architectural monument in the Russian Baroque style. In addition, assistance was provided to the Moscow metochion of the Spaso-Preobrazhensky Cathedral of Valaam Monastery.

Rostec, in association with the Russian Ministry of Culture and Gazprombank, supported the **national project at the Venice Architecture Exhibition**, Fair Enough, as part of the theme Architecture's Roadmap to Modernity: 1914–2014.

#### HEALTHCARE

Rostec is involved in the **Development Program of Prenatal Facilities in Russia** in conjunction with the Russian Ministry of Health, the Federal Compulsory Medical Insurance Fund, and executive regional authorities throughout the Russian Federation. The program is designed to provide affordable and high-quality medical care for mothers and babies. A total of 32 prenatal facilities will be built between 2013 and 2016 in 30 regions across Russia where such clinics are most needed.

Following the Presidential Decree of the Russian Federation No. 46-RP, dated March 4, 2014, and subsequent agreements with respective regions of the Russian Federation, Rostec was appointed General Contractor for the engineering, procurement, construction, and commissioning of perinatal facilities in 14 regions of Russia:

- in the republics of Bashkortostan, Buryatia, Dagestan, Ingushetia, Karelia, and Sakha (Yakutia);
- in the Arkhangelsk, Bryansk, St. Petersburg, Orenburg, Penza, Pskov, Tambov, and Ulyanovsk Regions.

The capacity of the proposed facilities will range from 110 to 170 beds with floor space from 21,500 to 34,000 square meters. These facilities will include resuscitation equipment, intensive care units, and neonatal pathology units.

The facilities are due to be commissioned and begin operations by the end of 2016. The Primorsky regional perinatal facility opened in Vladivostok in 2014 and can accommodate over 200 patients daily. Rostec helped to build that facility and furnish it with advanced equipment.

*Following the completion in 2016 of the development program for prenatal facilities, maternal, infant and early neonatal mortality rates are expected to substantially decrease while increasing the percentage of admitted patients with premature deliveries labor from 40% in 2012 to 60%. The survival rates of babies delivered with an extremely low body weight in an obstetric delivery unit should also increase.*

In addition, surgery equipment was procured for operating rooms and assistance was provided for children at Filatov Moscow City Pediatric Clinic No. 13. Rostec also facilitates a blood donation program.

In July 2014, employees at Rostec's enterprises responded to the call to donate blood in order to assist Moscow city hospitals that admitted 129 patients with various injuries following the tragic subway disaster.

## 9<sup>2</sup> Social programs of Rostec holding companies and enterprises

**All business entities in the corporation have** social policies and collective agreements that can allocate up to 10% of net earnings to social initiatives depending on financial year-end performances.

#### IN ORDER TO ENSURE THE MOST EFFICIENT USE OF FUNDS

allocated by business entities to social projects, Rostec has established budget guidelines and common principles and has set up subsidiaries that seek to improve the quality and standards of the social packages available to employees.

Primary consideration is given to the development of long-term, high-profile programs that provide for vital areas of social care, such as housing, health care, spa and resort treatment, support in difficult life situations, life insurance, and health and financial aid to veterans.

*Rostec's holding companies have been repeatedly recognized as socially responsible organizations. Holding company enterprises conduct a number of programs to improve social standards for employees.*

#### UNITED INSTRUMENT MANUFACTURING CORPORATION

In 2014, employees of Concern Vega (operating as part of a holding company within the military-industrial complex) received free medical services at a clinic.

Management Systems Holding provides support to employees' families with special-needs children..

#### KAMAZ

In 2014, a total of 28.5 million rubles were spent on cultural and sporting events, bonuses to employees for excellent performance, and maintenance of recreation facilities. Last year, KAMAZ employees were given the opportunity to attend concerts by Igor Lerman's chamber orchestra and enjoy the best performances at the Kazan-based Kamal and Kachalov theaters. KAMAZ employees took an active part in cultural and sporting events in Kazan and Tatarstan.

#### VSMPO-AVISMA

In 2014, the titanium corporation invested over a billion rubles in social programs. Expenditures on medical care, sports, culture, charity, and financial aid to employees and veterans increased by 70 million rubles compared to the 2013 totals of **1, 072,015,000 rubles**.

#### RUSSIAN HELICOPTERS

The Kazan-based helicopter plant supported the Volga orphanage for several years. In 2014, the enterprise donated a Sobol minivan to the orphanage.

In addition, it has continued its efforts to help orphans secure employment in future and settle into a work routine. The Kazanbased helicopter plant participates in other charity projects, in the city's cultural and social life, assists with reconstruction of monuments, and sponsors sports teams.

#### SCIENTIFIC AND PRODUCTION COMPANY IMPULSE

Impulse provides financial aid to children at orphanages and boarding schools. To this end, a tripartite cooperation and joint work agreement was signed with the "Strengthening of the Family" Foundation and Sport City. Meetings with youth from SOS Children's Villages are held on a regular basis in order to provide career guidance, promote a healthy lifestyle, and publicize rally racing, as the enterprise has a rally team that regularly participates in urban and social events.

*With Rostec's help, 32 prenatal facilities will be built between 2013 and 2016 in 30 regions of Russia where they are most needed*

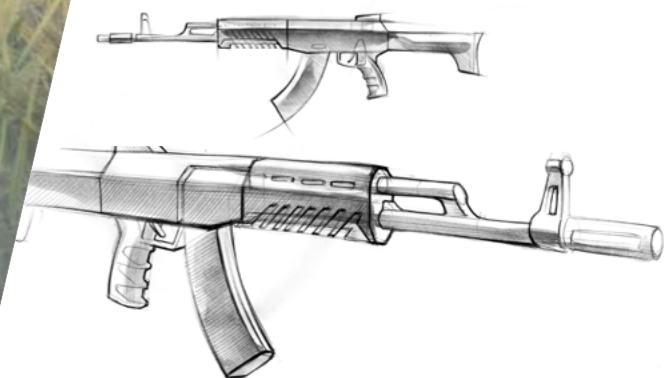


## Anticorruption

# 2.01

*billion rubles*

*The amount of losses prevented by conducting joint operations with the Russian Ministry of Internal Affairs to identify and prosecute corruption crimes against Rostec and its organizations*



# 10\_ Anticorruption

**Anticorruption activities within the corporation** are carried out on the foundation of federal laws, presidential decrees of the Russian Federation, resolutions of the Russian government, and regulatory acts approved by the Russian Ministry of Labor.

**PURSUANT TO ROSTEC'S ADMINISTRATIVE ORDERS, THE AUTHORITY TO PREVENT CORRUPTION-RELATED** crimes and other wrongdoings is vested in Deputy CEO N. A. Volobuev.

Organized as part of the Security Department in March 2014, the Anticorruption Division performs tasks to ensure implementation of requirements of federal laws and internal regulations by fighting against and preventing corruption and other wrongdoings within the corporation.

Rostec's anticorruption plan for 2014-2015 is being implemented in accordance with the national anti-corruption policy approved by presidential decree No. 226 on April 11, 2014-2015.

Joint operations with the Russian Ministry of Internal Affairs have identified and prosecuted corruption crimes against Rostec and its organizations. This has resulted in about 400 million rubles of recovered assets and compensation for damages and has saved nearly 2 billion rubles in prevented damages.

**IN ORDER TO COMPLY WITH RELEVANT FEDERAL LAWS AND REGULATIONS**, the corporation is continuously updating its own legal framework for anti-corruption initiatives. In 2014 alone, the corporation developed and put into effect 17 local regulations and administrative instruments to fight against corruption.

In particular, this included the formulation of an ethics and corporate conduct code for the corporation's employees, the approval of an authorized executive in charge of ethics, and the creation of a handbook on anticorruption laws for instruction on and daily use by the corporation's employees.



Rostec has a corporate conduct and conflict resolution commission. In 2014, the commission held 4 meetings to review issues related to improving anticorruption activities, as well as to investigate failure by 9 corporation employees to submit complete data on income and property holdings. Following the checks, disciplinary action was taken against 7 employees.

*An Anticorruption Section of the Rostec website has been created and will be continually updated with the latest information about legislative requirements*

**APPROPRIATE ACTIVITIES** no to obtain and review data on income and property holdings for 2013 from individual categories of Rostec's employees were carried out.

Pursuant to the national anti-corruption plan for July-August 2014 the Russian General Prosecutor's Office, performed an inspection of the corporation's performance of the anticorruption legislation. The findings of the Prosecutor's Office stated that Rostec had done an enormous amount of work to remedy breaches in anticorruption, as compared to 2013. A regulatory framework was established to conduct an expert review of the corporation's anticorruption efforts and other regulatory instruments of the corporation in order to identify and eliminate any conditions that might foster corruption.

The Regulation on the Selection and Qualification of Candidates Nominated for Executive Positions was brought into line with Resolution of the Russian Government No. 134, dated March 1, 2001.

Relevant changes were also made to the Corporation's Standard Provision for the lease of properties owned a business entity whose equity is held by the corporation.

*Joint operations conducted with the Russian Ministry of Internal Affairs aimed identifying and prosecuting corruption crimes against Rostec and its organization saved 2 billion rubles in prevented damages*

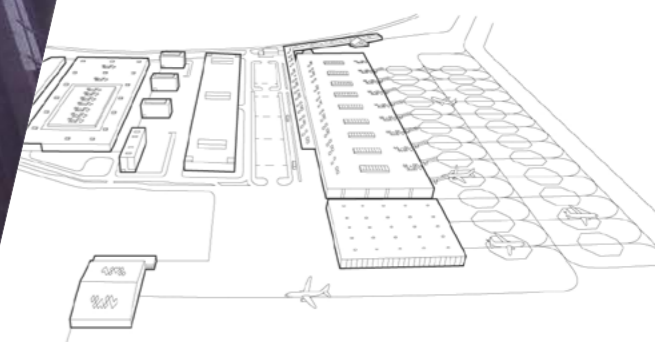




*Rostec property use*

*8 land plots and*  
**21** *real estates*

*were acquired as a  
property contribution  
from the Russian  
Federation, including  
16 buildings owned by  
the corporation by the  
end of 2014*



## 11<sup>1</sup> Land plots and real estate

### Under the Russian Government Decree No. 873, dated November 21, 2008

(as revised by Russian Government Decree No. 163, dated March 17, 2010, No. 397, dated May 18, 2011, No. 966, dated November 23, 2011, No. 733, dated July 19, 2012) and the Russian Government Order No. 2131r, dated December 30, 2009, and No. 682-r, dated April 21, 2011, 12 land plots and 27 real estates, including one property under construction, were transferred to the corporation as property contributions.

**AS OF JANUARY 1, 2014, PURSUANT TO ROSIMUSHCHESTVO'S ORDER, THE CORPORATION HOLDS** the registered titles to 10 land plots and 26 real estates transferred to Rostec as a property contribution from the Russian Federation..

In 2014, the corporation registered the title to a land plot located in Uspenskoe in **Moscow region's Odintsovo district with a total area of 24,315 m<sup>2</sup>.**

Pursuant to a resolution of the corporation's board (minutes of meeting No. 6 dated February 5, 2013) under agreement No. RT/1436-8785 on acquiring shares placed as an additional contribution to the ownership of RT-Construction Technologies, OJSC, 5 buildings and 3 plots of land were transferred.

*Therefore, as of December 31, 2014, the corporation owned 8 land plots and 21 real estates, including 16 buildings transferred as property contributions from the Russian Federation.*

**THE CORPORATION'S PROPERTIES** are used to accommodate Rostec personnel in Moscow, St. Petersburg, and Krasnodar and are also leased as needed.

Revenues from the lease of properties transferred as a contributions from the Russian Federation are to be channeled toward accomplishing the corporation's main goals and objectives.



## 11<sup>2</sup> Management of shares

### In implementing Presidential Decree

No. 1052 dated July 10, 2008, and the Russian Government Resolution No. 873, dated November 21, 2008, shares in 8 joint-stock companies were transferred to the corporation's ownership. Pursuant to Presidential Decree of the Russian Federation No. 20, dated January 14, 2014, and the Russian Government Resolution No. 365, dated April 21, 2014, the corporation was granted a shareholder's rights in 69 joint-stock companies on behalf of the Russian Federation.

### FOLLOWING PRESIDENTIAL DECREE OF THE RUSSIAN

**FEDERATION** No. 621, dated May 17, 2012, shares in the Rostov Helicopter Manufacturing Open Joint Stock Company Rostvertol and Open Joint Stock Company NPO Saturn were transferred to the corporation as a property contribution from the Russian Federation.

As of December 31, 2014, the corporation's books showed shares in 328 business entities acquired by the corporation as a contribution from the Russian Federation and other sources.

In light of the corporation's reorganization campaign to establish holding companies as part of the military-industrial complex and civilian industries, and pursuant to Presidential Decree No. 1052, dated July 10, 2008, and the Russian Government Resolution No. 873, dated November 21, 2008, as of December 31, 2014, shares in 171 joint-stock companies were transferred into the share capital of 9 holding companies in exchange for stocks of shares placed into the corporation's ownership.

In accordance with the laws the Russian Federation, the corporation may receive dividends from entities whose shares are owned by the corporation. The corporation's income in the form of dividends and a portion of profits earned by federal public unitary enterprises are to be channeled to achieving the goals and objectives of the corporation as ordered by the corporation's Supervisory Board in accordance with Federal Law No. 270-FZ, dated November 23, 2007.



# 11<sup>3</sup> Public property contributions and subsidies of the territorial entities of Russian Federation

**As of January 1, 2014, the remaining amount** of financial contributions from the Russian Federation in the form of cash amounted to 8,502,206,000 rubles.

**IN 2014, THE CORPORATION OBTAINED FUNDS** in the form of property contributions valued at 18,746,105,000 rubles from the Russian Federation and its regions, including:

- property contribution of 2,300,000,000 rubles from the Russian Federation to perform a range of activities to reorganize munitions production operations;
- 2,127,150,000 rubles allocated from the budget of the program Industrial Development and Defensive Capability Upgrading for the subprogram Tool Building Industry;
- One billion rubles allocated from the budget of the program Industrial Development and competitive Growth for the subprogram Power Electrical Engineering and Power Machine Building;
- 13,318,955,000 in subsidies from regions of the Russian Federation to construct perinatal facilities throughout Russia's regions.

**THE ACTUAL USE** of the contributions from the Russian Federation and subsidies from regions of the Russian Federation amounted to 4,610,668,000 rubles, including:

- a subsidy of 327,654,000 rubles from the Russian Federation to the activities to complete the construction work and commission of federal high-technology medical facilities and to construct and equip medical facilities in the Primorsky Territory;
- a property contribution of 129,644,000 rubles from the Russian Federation to consolidate Russian equity interests in KAMAZ;

- public property contributions to the corporation's activities performed in the interest of Khimprom will be allocated in 2015;
- public property contribution of 3,493,356,000 rubles from the Russian Federation to the corporation to finance the completion stage of the Tyazhpromexport project;
- public property contribution of 542,516,000 rubles from the Russian Federation to perform a range of activities to reorganize munitions production operations.
- contribution of 2,683,000 rubles from the Russian Federation to support high-priority and special-purpose aircraft flights;
- subsidies of 84,815,000 rubles from regions of the Russian Federation to construct perinatal facilities in Russia's regions.

**THE REMAINING BALANCE OF PROPERTY CONTRIBUTIONS** from the Russian Federation and subsidies from regions of the Russian Federation amounted to 22,637,643,000 rubles as of January 1, 2015.

*These figures do not include the use of property contributions from the Russian Federation as part of federal target programs (this information is confidential).*

# 11<sup>4</sup> Property acquired by subsidies

## Pursuant to Presidential Decree of the Russian Federation

No. 771, dated June 11, 2011, On Measures to Finance Construction and Equip Medical Facilities in the Primorsky Territory, Rostec completed the construction and outfitting of the housing and rehabilitation facilities of the medical center at the Far Eastern Federal University. A prenatal facility was also built in Vladivostok and equipped in conjunction with the Government of the Primorsky Territory.

**THE TOTAL VALUE OF THE PROPERTY** transferred into the public ownership of the Russian Federation and subsequently to operational control of the Far Eastern Federal University was 1 billion rubles.

*1.3 billion rubles of funds were allocated to the construction project of the Primorsky Territory's prenatal facility in Vladivostok. Rostec's share in the property contribution to the facility has been transferred in full into the public ownership of the Primorsky Territory.*



## 11<sup>5</sup> Donations

**In 2014**, Rostec received 1,483,868,000 USD as part of donation agreements. This money went to accomplishing the corporation's key goals and objectives, such as establishing an innovation and investment fund and a financial recovery fund, as required by federal law No. 270-FZ.

