



# Skolkovo Foundation Objectives and results

January, 2013



# Background of creation of Skolkovo innovation centre

Russia's Progressive Deceleration in Applied Science, Patenting and Production of Innovative Products

Outflow of Scientists and Engineering Businessmen (up to 250,000 Individuals per Year)

Time Delay and Poor Effectiveness of Existing Mechanisms of Support of Innovative Activity

Lack of education for technology entrepreneurs



”

...it is necessary to create a first-rate research and development Centre in Russia ... [with] the attractive conditions for leading scientists, engineers, programmers and managers ... along with new technologies which will be competitive on the global technological market...

D. Medvedev

From the Letter of the Russian Federation  
President to the Federal Assembly in 2009



# Skolkovo Foundation's Mission

Creation of an ecosystem favourable for entrepreneurship and research development in the following areas:

- energy efficiency and power saving
- nuclear technologies
- space technologies and telecom
- biomedical technologies
- strategic computer technologies and software



# Skolkovo Foundation is the source of new levels of Russia's economy development

People, intellectual capital and ideas is Skolkovo's main value

Budgetary financing + decision-taking flexibility

The foundation intends to accelerate the creation of a new economy by means of a set of tools

Launching pad for young business with high market potential

Governmental control is replaced by collective regulatory bodies



I am sure that the new model of growth must consist of economic freedom, private property and competition, up-to-date market economy instead of state-controlled capitalism

V. Putin

From the Letter of the Russian Federation President to the Federal Assembly in 2012



# Skolkovo is a new word in the global innovation practice

**Participants and partners** — concentration of young intellectual business and the largest companies' research centres

**Environment** is a combination of effective urban construction strategies and technological hub attracting youth and setting milestones for personal growth

**Live  
Laboratory  
Skolkovo**

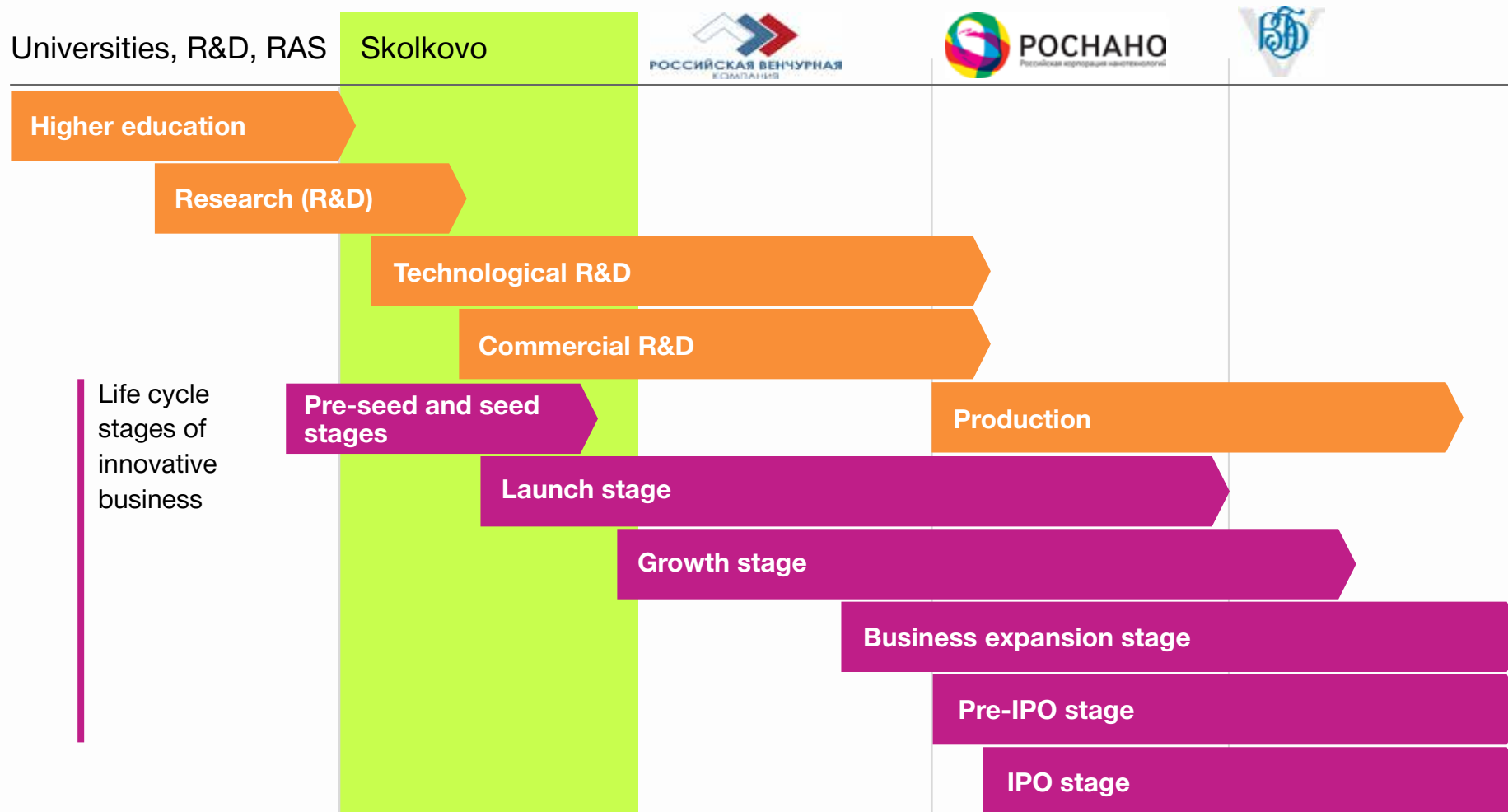
**University**, uniting the best practices and potential of the Russian science and education with modern global trends

**Technopark** is a complex business hub for leading the Russian startup community to the world's business environment



# Place of Skolkovo Innovation Centre in Russia's innovation infrastructure

The existing development institutes cover all aspects of the process of development of an investment product — from idea to IPO. Skolkovo's role consists in formation of new projects and companies rather than working with existing ones





# Difference of Skolkovo from other development institutes

1

Unlike colleges and universities, RDI and RAS, the Skolkovo Foundation does not perform independent research or perform any development studies. The Foundation's task is to accompany and support research workers and developers.

2

Unlike other development institutes (Rusnano, RVC, VEB), the activity of Skolkovo Foundation is not commercial:

- As a non-profit organization Skolkovo provides financial grants
- Skolkovo provides support for companies involved in research and development activities, both at the R&D stage and product promotion and marketing stage
- Skolkovo provides support for innovative R&D and start-ups in technology
- Skolkovo is a platform for international cooperation in R&D and technologies exchange
- Skolkovo does not act as an investor, it provides money on a gratuitous basis
- Skolkovo does not finance manufacturing or any further stages
- Skolkovo is not limited exclusively by Russian technologies and encourages bilateral cooperation in the area of technology development
- Skolkovo does not act as a sales agent



# Foundation's councils and committees

## Scientific Advisory Council

Headed by Nobel prize winners Zh. Alfyorov (Vice President of RAS), R. Kornberg (Professor of Stanford University)

Coordinates research activity and gives recommendations concerning expert reviews and advance research works

4 meetings are held per year

## Industrial Advisory Council

Chairperson — E. Akho (Executive Vice President of Nokia Corporation)

Integrates Russia's and international largest companies with a strong innovative trend

Proposals and recommendations for communications with the Foundation and innovation stimulation in Russia

## Urban Council

Chairperson — J. Pistre (Valode & Pistre Architectes), Co-Chairperson — V. Golubitsky (President of Renova-StroyGroup)

Criteria of forming the Urban concept of IC Skolkovo

Recommendations for architectural design, construction, operation

## Grants Committee

2/3 — independent members

Issuing grants for the Participants, reports on project execution stages, makes decisions on granting tranches

Regular GC official meetings

GC are being held once every 3 weeks (according to the plan of 2013)

## Tender Committee

A half of full-time Committee members are independent

With the participation of the staff of the Foundation and invited members of the Committee (the structure is formed by the Order of the President of the Foundation)

Preparation, coordination and performance of purchasing procedures (on a mandatory basis, for orders costing more than 100 million RUR), including other functions





# Key elements of the Skolkovo Innovation Centre

## Key development factors 2020

Skolkovo Foundation

Expertise, grant support, coordination of Ecosystem elements

### Venture investments



- \$500—1,000 million venture stock funding

### Technopark and intellectual property centres



- 10 common use centres
- Research support and business development services

### Skolkovo institute of science and technology



- 1,200 students
- 200 professors
- 15 research centres

## Skolkovo innovation ecosystem

### R&D companies



- 50 R&D centres
- \$500 million investments

### Project participants



- 1,000 companies
- >100 intellectual property assets, on an annual basis

### Innograd



- 389 hectares of the innovation centre area
- 1,316,000 m<sup>2</sup> of buildings



# Skolkovo Key elements of Skolkovo Ecosystem functions



## Industrial and venture capital partners

- Provide demand for research and developments
- Funding and counselling for participants
- Participation in the formation of innovative priorities
- Ensuring labour force market liquidity



## Participants

- Conduct of research and commercialization of their results
- Creation of intellectual property assets
- New jobs and value chain



## Technopark + Intellectual Property Centre

- Ensuring access to state-of-the-art infrastructure and office premises for participants
- Assistance in determination and implementation of the protection strategy of IP assets
- Creation of intellectual products and promotion of innovative activity results



## Skolkovo Institute of Science and Technology

- International research university for Master and PhD students
- Scientific Expertise Centre and example of development of R&D on industrial orders



## Innograd

- Physical infrastructure
- Creation of conditions for the innovation-productive community



## Foundation

- Association and organization of interaction of Key elements of Skolkovo Ecosystem
- Distribution of knowledge about research and business
- Expertise
- Grant support



# Key elements of Skolkovo Ecosystem

## Companies-participants

A participant's status is defined in clause 1 of the Russian law 244-FZ

Awarding a status is regulated by the rules, the 3rd edition of which is approved by the Board of the Foundation on June 21, 2012 and agreed on with the Board of Trustees of the Foundation on September 12, 2012



### Participants

- Get legal status for 10 years
- Employed only for research
- Get tax and customs privileges (until the threshold revenue and income values are achieved)
- Access to the Skolkovo's research infrastructure and commercialization services
- Grant applications
- Take part in regular cluster activities

### Facts & results

**793 companies** (based on 4,075 applications received)

**87 applications** submitted for invention or utility patents;  
**20** — for PC software registration

In 2012 participants reported **1.2 billion RUR** in revenues

Total attracted **12,700 employees**

The participants are located in **44 regions** of the country

The participants received the approval for **184 grants** for **9 billion RUR**, including **3 billion RUR** for grants aiming at the research creation and development

The participants raised **6.2 billion RUR** of private co-investments (including **1.1 billion RUR** from accredited venture stock funds)



# Key elements of Skolkovo Ecosystem

## Technopark and Intellectual Property Centre (IPC)

LLC Technopark Skolkovo and LLC Intellectual Property Centre are branch companies of Foundation

They are detached for separating the services (a part of a newly-created innovative ecosystem) from the Foundation's regulatory and grant activity.



### Technopark

- Provides access to office premises and state-of-the-art research infrastructure in the form of Common Use Centres
- Ensures recruitment of scientific, engineering and other skilled human resources
- Provides assistance in preparation of business plans and other materials to attract investors and enter markets

### IPC

Provides assistance in determination and implementation of the protection strategy of IP assets

### Facts & results

**62 patent** investigations were performed

Total prepared and submitted **143 applications** for the registration of intellectual property assets (including trade mark registration)

**49 companies** are located in Technopark, **15** — in the Hypercube

**3 Common Use Centres** were opened, including **2** for the third parties' funds

The design of the Technopark complex of buildings with the total area of **146,000 m<sup>2</sup>** is proceeded to completion.



# Key elements of Skolkovo Ecosystem

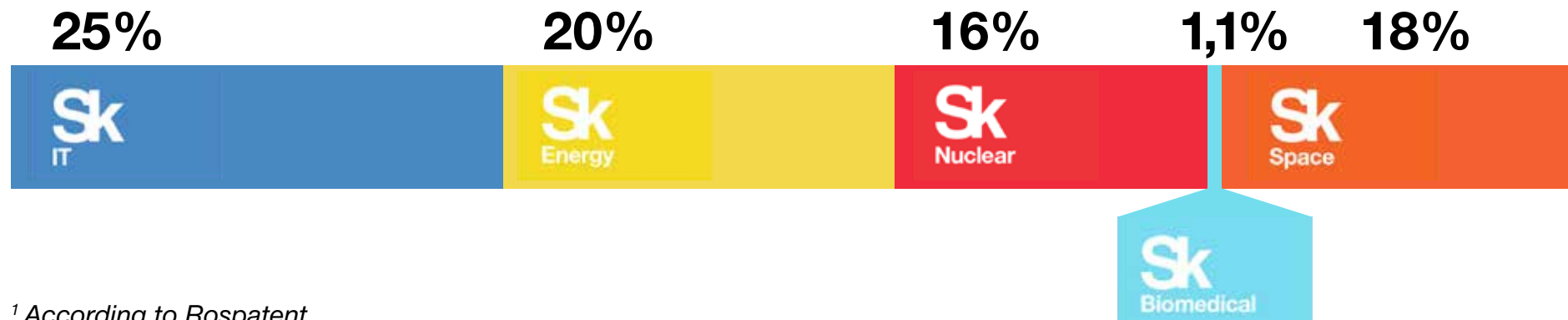
## Technopark and intellectual property centre (IPC)

- 107 patent applications are filed by Skolkovo participants in 2012
- Currently 20 patent applications are under registration process
- 2012 patent office average review period was about 14 months

143 applications were received

for an invention or a utility model:	<b>87</b>
Russian	<b>63</b>
international (PCT)	<b>24</b>
For an invention or a utility model	<b>20</b>
for trademark registration	<b>36</b>

The share of patent applications of Skolkovo resident in the total applications in Russia filed by the Russian applicants<sup>1</sup>:



<sup>1</sup> According to Rospatent



# Key elements of Skolkovo Ecosystem

## Industrial partners



Industrial (corporate) partner is a large corporation (international or russian)

It occupies leading positions in R&D in its industry, assuming obligations to open a R&D Centre and/or a corporate venture stock fund in Skolkovo RC



### Facts & results

**24** agreements to start R&D Centres in Skolkovo with the agreed budget of **27 billion RUR**

**2,659** jobs will be created before 2015 by Skolkovo corporate R&D centers

**2 billion RUR** — approved funding from corporate venture stock funds



# Key elements of Skolkovo Ecosystem

## Venture partners



### Venture partner

During the accreditation procedure, take obligations to consider investments into Skolkovo participants for a particular amount, within a 2—3-year period.



### Facts & results

**49** funds signed up  
(**19** international)

Accreditation agreements  
have been signed for the  
total amount of  
**19,6 billion RUR**

**14** funds acted as  
co-investors for  
grants for the total  
amount of  
**1,1 billion RUR**

**81** participants received  
support by accredited  
venture stock funds



# Key elements of Skolkovo Ecosystem

## Skolkovo institute of science and technology (Skoltech)



World-class technology university established in cooperation with MIT

Partner was approved by the Board of Trustees of the foundation in 2011

### Role of MIT in partnership

- International quality level assurance of the University's processes and HR
- Best professors recruitment
- Development and transfer of educational programs and courses

**SkolTech**

Skolkovo Institute of Science and Technology



### Mission and objectives

Russia global educational, scientific and economic potential development. Skoltech is aiming to decrease the brain-drain from Russia.

More than 3,000 master and phd students leave russia every year

Relying to unique talents when creating a new university in Skolkovo: attracting outstanding international scientists to Skolkovo

100 out of 200 skoltech professors will be international scientists.

Training prospective and successful PhD students and creating global competitive research program in scientific, technological, engineering and innovation areas in cooperation with the world's leading industrial resources





# Key elements of Skolkovo Ecosystem

## Skolkovo institute of science and technology (Skoltech)



Unique institute of science and innovations

Research is based on fundamental developments, aiming to innovations which lead to breakthrough ideas.

Innovative education provides students with fundamental knowledge and understanding of the essence of the innovative process enabling them to create breakthrough ideas

Skoltech partners — World's leading technological universities

- Imperial College in London
- ETH in Zurich
- Stanford University
- Hong Kong University of Science and Technology

### Facts & results

**In October 2011**, Skolkovo Institute of Science and Technology (Skoltech) was incorporated

**In September 2012**, 20 students of the first enlistment. The Admission Committee started its operation in 2013-2014 school years. As of December 31, 2012, 500 applications were received for 50 seats

The competitions for the creation of the first 3 Skoltech research Centres have been completed. 129 applications were received from the international inter-university teams in Round 1; 143 — in Round 2. 11 Noble prize-winners took part in the competition

Total investments in the Skoltech Endowment — 3.99 billion RUR



# Key elements of Skolkovo Ecosystem Innograd



## Urban skolkovo infrastructure

**Skolkovo Innovation Centre** is a cosy town including a number of landmarks (Skoltech, Technopark, Central Zone)

**Common city environment** is based on social and professional conditions for the communications of students, professors, participants and key partners

## Facts & Results

7,000 m<sup>2</sup> “Hypercube” building was built



# Key elements of Skolkovo Ecosystem Innograd



Skolkovo territory. Stages of formation and management



The Urban Development Centre (Hypercube) with the area of 7,000 square m was built – the platform for project participants housing and communications; Hypercube building was awarded the “Golden Mark” of the international festival “Architecture-2012” and “Green Project 2012” prize



# Key elements of Skolkovo Ecosystem Innograd. The urban environment

Unique educational complex is an important part of Skolkovo brand

Greater than the sum of services — a new quality of the urban environment and new opportunities for residents and guests

## Types of educational services in Skolkovo

- Pre-school education, including support services for infant education;
- School education in accordance to government standard and international programs;
- Additional education for children and adults;
- Adaptation programs (for international guests)

## Family campus

- Public nursery
- Child day-care centre
- Elementary school
- Medical facilities
- Secondary and senior schools
- School library and cafeteria, sports complex, arts and craft workshops







# Key elements of Skolkovo Ecosystem Foundation

**3** nobel prize winners

**74** academicians of the Russian Academy of sciences and the russian academy of medical sciences

**222** professors of leading universities

**202** phds, full professors of western universities

**79** company founders

**82** CEOs

**69** consulting firms partners

## 1. Collegiality

**38%**

Experts for participant's status

**62%**

Experts of grant applications

**1 044**

experts cooperate with the Foundation

*At least 3 experts evaluate each grant applications and 5 experts — each participant's status applications*

## 2. Competency



**25% Business experts** — top managers of successful companies, professional counsellors or partners of large-scale venture stock funds



**54% Technical experts** — medium-scale managers of large or big companies



**71% Scientific experts** have publications in the leading periodicals



**33% International experts** 11% of experts from the USA, 3% — from Great Britain and Belarus, 1% — from Canada, Kazakhstan, Finland



## 3. Independence

Experts — non-employees of the Foundation; they are unknown either to applicants or employees of the Foundation working with an applicant

The Conflicts Interest Committee is created under supervision of Advisory Research Board. This committee will ensure using the world's best practices in project expertise



# Key elements of Skolkovo Ecosystem Foundation

## Status assignment process

Transparency and quality of the process:

- A random selection of independent experts
- Clear formal process
- Publication of the results on the website of the Foundation

Average timeline for making a decision for Skolkovo participant status

With preliminary approval — **40 days**,  
without preliminary approval — **29 days**

Overage amount of applications reviewed

**4075**

Number of participants

**793**

On-line application submission

Due diligence

External expertise (independent experts, random selection)

Paperwork formalities

Assigning the participant's status



# Key elements of Skolkovo Ecosystem Foundation

## Granting process

Mechanisms to ensure transparency and quality of the process

- Involvement of independent experts
- Grants Committee is composed by 2/3 of the independent members (6 out of 9)
- Clear formal process
- Mandatory requirements for co-financing of the projects for 2013 — at least 50%
- Publication of decisions on the Foundation's website

### Average

Term of making a decision to provide a grant	<b>67 days</b>
Overall amount of grant agreements	<b>176</b>
Amount of grants approved for allocation, million RUR	<b>8998,6</b>
Amount of co-investments in the innovative projects which have received the grant, million RUR	<b>6190,5</b>

Submission of an application and memorandum

Due diligence

Internal expertise

External expertise (independent experts, random selection)

Grants Committee

Execution of precedent conditions, grant payment



# Key elements of Skolkovo Ecosystem Foundation

## Grants committee

A key tool to ensure transparency and objectivity of decisions on provision of grants

Transparency and objectivity are achieved through a number of factors

- Independent members of the Grants Committee are 6 out of 9
- Decisions are adopted by a simple majority
- Decisions are being made based on the external expert appraisal
- There is a broad expert appraisal in various industries and fields
- Openness — the applicants may be present at the session of the Grants Committee
- Publicity — the publication of the results of work and decision made
- Strict adherence to the procedure of exclusion of the conflict of interest in decision-making process

**3** academicians of the Russian Academy of Science

**2** representatives of development institution

**1** representative of the venture community

**3** employees of the foundation

### Grants

Grants applications reviewed **156**

Grants applications approved **108**

### Reports

Grant usage reports reviewed **70**

Reports approved **53**





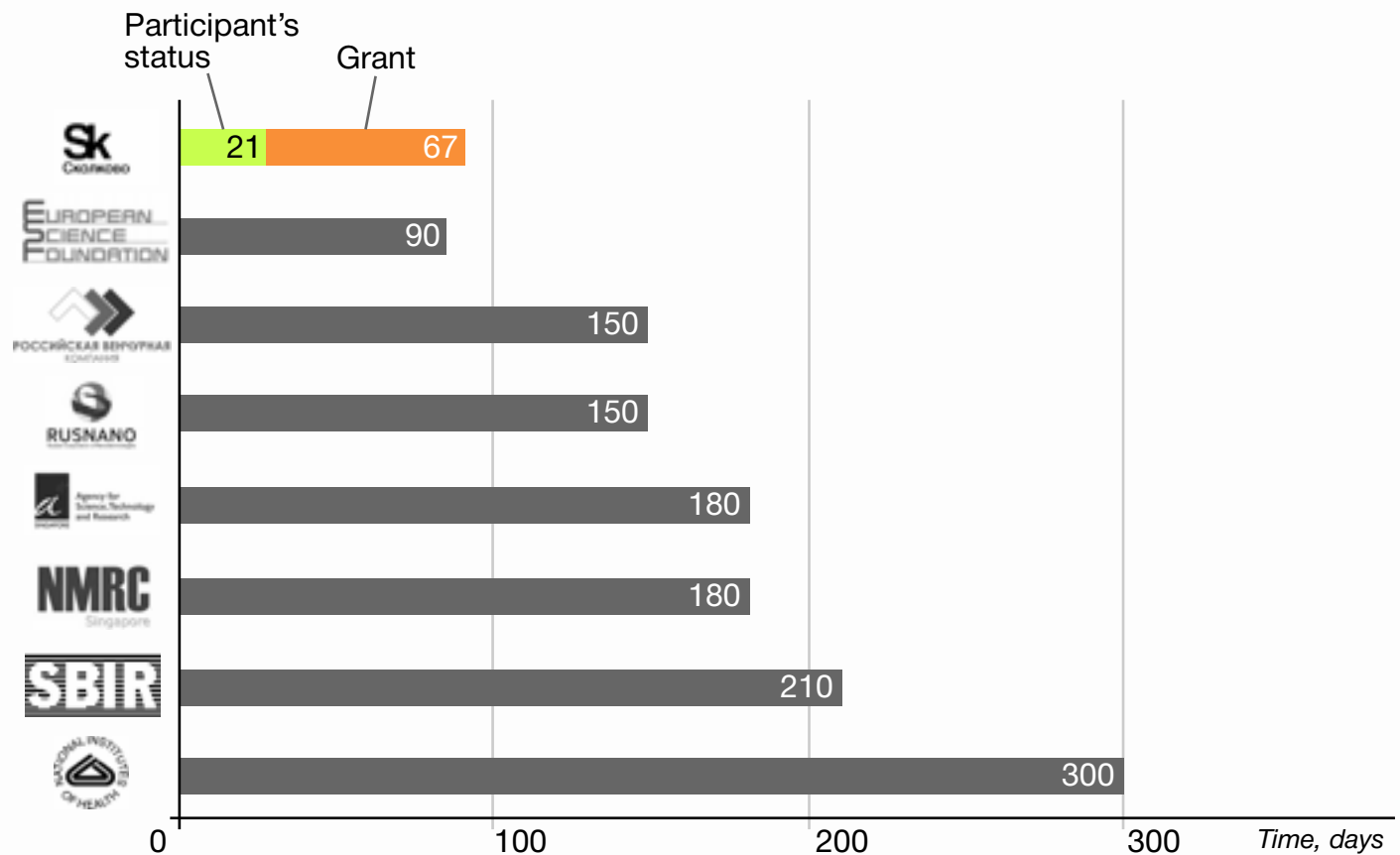
# Key elements of Skolkovo Ecosystem Foundation

## Application review procedures

Optimally constructed internal processes allow ensuring efficient operations

29 days for project approval,  
96 days for grant obtaining

Sources: RVC data about the average period of reviewing applications in funds with the participation of RVC, regulatory documents of OJSC "rusnano", public materials of NIH, SBIR, official websites of the development institutes, skolkovo foundation statistics





# Key elements of Skolkovo Ecosystem Foundation

Programs aimed at attracting talented youth in Skolkovo

## Skolkovo Open University (OPUS)

The main objectives are the development of entrepreneurial competences in the area of key technologies, development of working skills in international teams and stimulation of creation of innovative enterprises

### Expert council

**3** academicians

**1** professor

**1** venture investor

**1** direction of development institute (ASI)

**1** vice president of skolktech

Skolkovo Open University — is open to the future

Program participants — are undergraduate and graduate students, and young scientists of leading R&D universities

- Moscow (MSU, MSTU, MISA, MIPT, MEPhI)
- St Petersburg (StPSU, IST, StPPU)
- Tomsk (TSU, TPU, TSURECS)



ОТКРЫТЫЙ УНИВЕРСИТЕТ  
Сколково  
ОТКРЫТЫЙ БУДУЩЕМУ

## Facts & Results

220 program participants, over 25,000 online broadcasting viewers

8 youth projects were awarded the Project Participant's Status

The Program Participants became the first Skolktech students

The Program participants became the first students of Skolktech

Probation periods for the Program participants are arranged in Skolkovo ecosystem (Foundation, partners, participants, etc.)



# Key elements of Skolkovo Ecosystem Foundation

## Communications and marketing

Establishment of a stable positive perception of the brand in the target groups, involvement of audiences in cooperation

### Objectives

- Maintaining a constant interest in the Foundation operation, establish of its positive image as a symbol of the new Russia
- Great demand for innovation
- Set up media campaign entitled «Skolkovo is a catalyst of innovative development of the country»
- Attract new participants and partners

### Brand construction stages

Awareness

Perception

Involvement

Commitment

Brand awareness

Publications in Russian mass media

Publications in foreign mass media

2012	2013	2014	2015	2016
47%	53%	66%	75%	80+%
40 000	57 000	60 000	65 000	75 000
850	2 000	2 500	2 700	3 000

### Target groups and positioning lines

Public at large, Russian and foreign leaders of opinions, start-up and R&D communities, small and medium business

Positive image  
Innovations demand (RF)  
Innovation development catalyst

Large international companies, industry business and professional experts, venture stock capital

Long-term partnership  
Transparency and publicity of cooperation  
Attracting strategic investments  
Science commercialization

Entrepreneurial, financial, educational, scientific and business community

Symbiosis of science, research and implementation  
The new model of technological education

Authorities, innovation community, relevant agencies, Russian and international development institutions

Symbol of innovation development  
Integration into the Global economic context



# Key achievements of Skolkovo ecosystem elements



## Industrial and venture capital partners

- Agreements were signed on the establishment of 24 R&D centres
- 49 venture funds (including 19 foreign ones) have signed the agreements on accreditation for a total of 19.6 billion rubles
- 14 funds were acting as co-investors in the grants for a total amount of 1.1 billion rubles



## Participants

- 12,700 jobs were created
- Total revenue of participants based on preliminary data reached 1.2 billion RUR
- The participants started their sales on the markets of Russia, Belarus, the USA and China
- Applications for registration of 143 RC assets were submitted



## Technopark + Intellectual Property Centre

- 3 common use centres were opened, including 2 at the expense of the third parties
- 49 participants were located in the temporary premises of Technopark; its operation was organized



## Skolkovo Institute of Science and Technology

- 20 participants were selected during the first enrollment into Skolkovo Institute of Science and Technology programs
- 500 applications have already been submitted for the second enrollment (50 seats)
- The final conclusions were made at the competition for the creation of 3 research centres



## Innograd

- The construction of Hypercube building was completed
- The design of key buildings — Technopark, University — is being completed

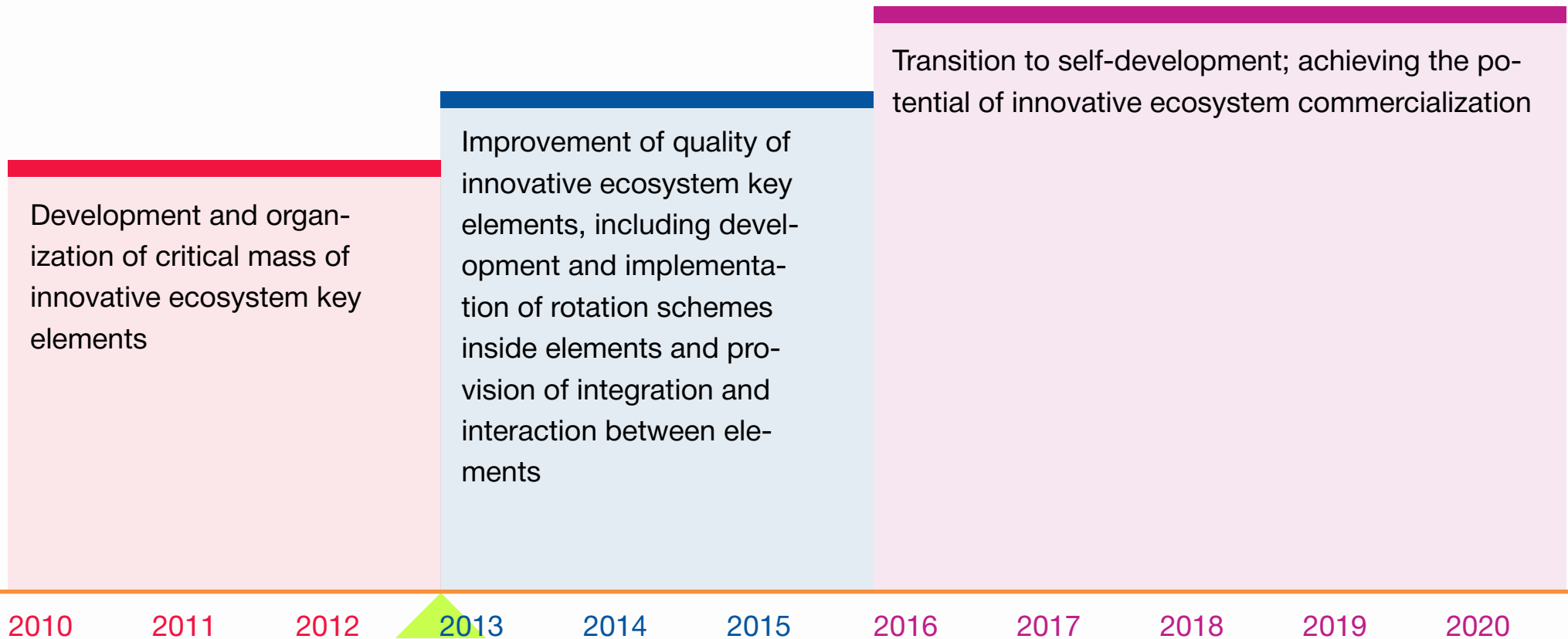


## Foundation

- 793 participants were selected (with the competition of 5 companies per seat)
- Over the entire period of the operation, the Foundation received 4,075 applications
- The participants received the approval for 184 grants for 9.0 billion RUR (5 billion RUR were provided)



# The foundation's development strategy 2020



The Skolkovo strategy developed before 2020 implies three key stages of development, the first of which is drawing to a close



## Strategic performance indicators in 2013 (running total)

The total number of jobs created **> 20 000**

Total revenue of participants **> 2.2 billion RUR**

Number of applications for intellectual property objects created **> 250**

**> 10,0 billion RUR** of private co-investments

Skolkovo institute of science and technology:

**8** research centres

**70** participants of the programs