



HIGHER SCHOOL OF ECONOMICS  
NATIONAL RESEARCH UNIVERSITY

# Institute for Statistical Studies and Economics of Knowledge



10 years  
HSE Institute for Statistical  
Studies and Economics  
of Knowledge

**The Institute for Statistical Studies and Economics of Knowledge (ISSEK)** is a large research institution operating under the auspices of the National Research University – Higher School of Economics (HSE). ISSEK was founded in 2002 for providing scientific research on statistics, socio-economic development in science, technology, and innovation (STI), education and training, information and communication technologies (ICT). ISSEK research places HSE as a Russian centre of expertise in the field of statistics and new economy.

## **RESEARCH**

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- ❖ Advancement of theory, methodology and practices of statistical measurements in the areas of STI, education, and Information Society
- ❖ Comparative analysis of trends in STI, education and Information Society in Russia and other countries
- ❖ Organisation of problem-oriented statistical, socio-logical and expert surveys
- ❖ STI policy studies
- ❖ Foresight and priority setting for STI, social and economic development at national, regional, sectoral, and corporate levels
- ❖ Development of innovation strategies, programmes and roadmaps for companies, industries and regions
- ❖ Methodological and organisational support to Russian technology platforms and regional innovation clusters
- ❖ Organisational, information and consultative support to participation of Russian universities and research organizations in the EU Framework Programmes for Research and Technological Development

## **EXPERTISE AND CONSULTANCY FOR PUBLIC AUTHORITIES**

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- ❖ Advancing national statistics, methodological support to federal statistical surveys in STI, education, and Information Society
- ❖ Foresight of STI development in the Russian Federation
- ❖ Providing recommendations for STI policy-making
- ❖ Measuring business climate and assessing economic trends in various sectors

ISSEK has contributed to the development of the following federal and sub-national documents:

- ❖ Recommendations for the Strategy for Socio-Economic Development of the Russian Federation until 2020 (in the framework of the expert group «Transition from Stimulating Innovation to the Innovation-based Growth»)
- ❖ Strategy for Innovation-based Development of the Russian Federation until 2020
- ❖ State programmes of the Russian Federation «Development of Science and Technology» and «Development of Education»
- ❖ Strategy for Development of Science and Innovation in the Russian Federation until 2015
- ❖ Concept for the Long-term Social and Economic Development of the Russian Federation until 2020
- ❖ Concept for the Long-term Foresight of Science and Technology in the Russian Federation until 2025
- ❖ Strategy for Social and Economic Development of Moscow City until 2025
- ❖ Strategy for Social and Economic Development of Samara region until 2030, etc.

ISSEK scholars represent Russia in expert groups of international organizations – OECD, European Commission, Eurostat, UNESCO, UNIDO, et al.

## **CENTRE FOR STATISTICS AND MONITORING OF SCIENCE AND INNOVATION**

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The Centre's activity is focused on advancing statistics and performing monitoring studies in STI.

The Centre's activities and projects include:

- ❖ Development of a monitoring system for the economy of science
- ❖ Inventory of Russian research and development (R&D) organizations
- ❖ Performance assessment of STI activities of research organisations, universities and companies at national and sub-national levels
- ❖ Comparative analysis of STI development in Russia, OECD member states, BRICS and other countries
- ❖ Development of nanotechnology statistics in Russia
- ❖ Establishment of a monitoring system for innovation development programmes of large state-owned companies
- ❖ Problem-oriented statistical surveys:
  - ◆ development and use of critical technologies
  - ◆ R&D and innovation activities of universities, integration of science and education
  - ◆ innovation activities of SMEs
  - ◆ globalisation of R&D
  - ◆ commercialisation of intellectual property rights and technology transfer
  - ◆ fixed assets and experimental base of R&D
- ❖ Assessment of STI impact on the achievement of the social and economic development goals of the Russian Federation
- ❖ Monitoring of budgetary and non-budgetary expenditures on R&D by S&T priority area

- ❖ Technology assessment, business technology audit and benchmarking for companies

The Centre undertakes international projects:

- ❖ Statistical Framework for Measuring Emerging, Enabling and General Purpose Technologies (OECD)
- ❖ Statistical Monitoring of Processes of the New Economy Formation (European Commission, Italian National Institute of Statistics), etc.

## **CENTRE FOR SCIENCE, TECHNOLOGY, INNOVATION, AND INFORMATION POLICIES**

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The Centre undertakes studies for STI policy-making and policy implementation.

Centre's experts contribute to the development of policy recommendations for national and regional public authorities, companies; draft regulatory legal acts, strategic and programme documents in the following areas:

- ❖ Advancing the efficiency of STI, institutional reforms
- ❖ Development of a performance evaluation system for R&D organisations
- ❖ Integration of science and education
- ❖ Mechanisms for regulating STI activities of universities; establishment of technology-intensive SMEs
- ❖ Development of economic and legal models for national research centres, centres of excellence, open innovation centres, research and educational centres
- ❖ Tax incentives for innovation
- ❖ Establishment of autonomous institutions in science and education
- ❖ Drafting innovation development programmes for large state-owned companies

- ❖ Research and methodological support to Russian technology platforms
- ❖ Advancement of legislative framework for innovation and technology transfer

Among the activities implemented by the Centre there are:

- ❖ Studies of innovation process actors' behavior
- ❖ Monitoring innovation activity of enterprises and R&D organisations
- ❖ Studies of STI funding; advancing the network of STI support foundations
- ❖ National report «Innovation-based Development as a Basis for Modernising the Russian Economy»

Among the Centre's international projects are:

- ❖ Comparison of National Innovation Systems of BRICS Countries
- ❖ The Third Mission of Universities (UNIDEV project), etc.

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The **Research Laboratory for Economics of Innovation** was created within the Centre in 2010 under the supervision of Professor Ian Miles (University of Manchester, UK). The laboratory is aimed at the development of the theory for economics of innovation and elaboration of the applied instruments and concepts for the evidence-based innovation policy.

The Laboratory's main research areas are:

- ❖ Innovative behavior of enterprises
- ❖ Performance of R&D organisations
- ❖ Emerging technologies and markets
- ❖ Intellectual services markets
- ❖ Competences and skills for innovation
- ❖ Innovative behavior of the consumers

## **INTERNATIONAL RESEARCH AND EDUCATIONAL FORESIGHT CENTRE**

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The Centre develops Foresight methodology and performs future studies in S&T, innovation and socio-economic area.

The Centre is a strategic partner of international organisations, research centres and universities for performing Foresight studies. Its Advisory Board (Chairman – Professor Luke Georgiou, University of Manchester, UK) involves leading international scholars. The Centre's experts database consists of over four thousand leading Russian and international experts.

The Centre actively interacts with public officials, CEOs of large and medium enterprises, business associations, civil society organisations. The Centre applies advanced project management techniques.

Among the Centre's outcomes are:

- ❖ Long-term Foresight studies and roadmaps for the prospective areas of science and technology, innovation markets and products, sectors of economy, and Russia's regions
- ❖ Methodology and organisation of activities for the development and revision of the priority areas for science and technology development, the list of Critical Technologies of the Russian Federation
- ❖ Innovation-based development programmes for large companies
- ❖ System of long-term strategic foresight and monitoring for JSC «RUSNANO»
- ❖ Identification of the innovation-based development priorities for the natural resources sector of the Russian Federation

**The Research Laboratory for Science and Technology Studies** was created in the structure of the Centre in November 2010 under the supervision of Jean Guinet, former Head of Country Studies and Outlook

Division of the OECD Directorate for Science, Technology and Industry. The Laboratory is aimed at undertaking Foresight and STI policy studies.

The key research areas are:

- ❖ Methods and instruments for analysis of science and technology and related policies (Foresight, bibliometric and patent analysis, etc.)
- ❖ Monitoring and evaluation of STI policies (global trends, Grand Challenges, priorities, instruments, etc.)

## **CENTRE FOR STATISTICS AND MONITORING OF EDUCATION**

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The Centre provides research and methodological support to education statistics, monitoring and analytical studies in the field of education.

The Centre is engaged in the following areas:

- ❖ Analysis of trends and prospects for education in Russia, cross-country comparisons
- ❖ Social attitudes to education-related issues
- ❖ Life-long learning trends
- ❖ Methodology and instruments for education statistics; development relevant systems of indicators
- ❖ Monitoring of the economy of education
- ❖ Analysis of occupational and qualification structures of employees
- ❖ Assessment of education efficiency and its input in national and regional social and economic development.

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The Centre's experts have contributed to the development of the following documents:

- ❖ Concept for modernisation of education statistics in the Russian Federation
- ❖ A complex system of education indicators in the Russian Federation

- ❖ Methodology for ranking Russia's regions by education indicators
- ❖ Unified statistical system for surveying educational establishments

Centre's international projects:

- ❖ OECD Thematic Review of Tertiary Education. Country Background Report for the Russian Federation
- ❖ The study of access to higher education, etc.

## **CENTRE FOR STATISTICS AND MONITORING OF INFORMATION SOCIETY**

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The Centre specialises in methodology and instruments of Information Society statistics; monitoring studies, analysis of production and use of ICT.

The Centre's outcomes include:

- ❖ National Information Society and E-government ranking system
- ❖ Rankings reflecting ICT development in Russia's regions, E-government usage by federal and regional public authorities
- ❖ A system of indicators for the sectors of telecommunications, ICT and mass communications
- ❖ Integrated statistical surveys on the use of ICT in the economy, social sphere, public administration, and households
- ❖ Methodology for assessing performance in the ICT sphere

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The Centre's international projects are:

- ❖ Development of Methodologies of ICT Statistics for Russia: Implementation of International Standards (UNIDO, European Commission), etc.

## **CENTRE FOR BUSINESS TENDENCY STUDIES**

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The Centre performs monitoring of the social and economic reforms in Russia by undertaking regular business tendency surveys.

The Centre's outcomes are:

- ❖ Entrepreneur Confidence Index in manufacturing, construction, trade, services sector, etc.
- ❖ Index of Economic Behaviour (HSE Index) – a composite indicator, which reflects business climate in the Russian economy.

## **CENTRE FOR ANALYSIS OF SOCIAL AND ECONOMIC INFORMATION**

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The Centre develops methods, software, and support systems for decision-making; develops and maintains databases for analysis of statistical data, modeling and forecasting, e.g.:

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- ❖ «Statistics and Monitoring of Knowledge Economy» – a system for storage and analysis of statistical data in STI, education, and Information Society
- ❖ «Scientific publications and citation» – a system for monitoring Russian and international science based on international publication activities of researchers

## **CENTRE FOR INTERNATIONAL PROJECTS**

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The Centre provides information, organisational and consultative support to international science and technology cooperation; assures management of international projects; holds international conferences, seminars, and presentations. The National Contact Points «Mobility» and «INCO» were established within the Centre to promote participation of Russian researchers and research teams in the EU Framework Programmes.

The Centre's deliverables presented internationally are:

- ❖ Database of the leading Russian R&D organisations engaged in international cooperation
- ❖ Assessment of the Russian organisations' capacity to participate on a full-scale in the EU Framework Programmes, etc.

## **PUBLICATIONS**

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ISSEK publishes regularly Russian and English language statistical data books and analytical reports containing unique data: «Indicators of Innovation in the Russian Federation», «Science and Technology Indicators in the Russian Federation», «Indicators of Education in the Russian Federation», «Indicators of Information Society», «Russian Innovation Index», etc.; series of publications based on the results of empirical and analytical studies. The «Foresight-Russia» (<http://foresight-journal.hse.ru>) journal has been published since 2007 covering STI studies and Foresight methods and instruments.

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## **EDUCATIONAL ACTIVITY**

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ISSEK staff have developed and taught courses for graduate and post-graduate students:

- ❖ Socio-economic analysis of STI  
(in English)
- ❖ Strategies and policies for STI  
(in English)
- ❖ Long-term STI Foresight
- ❖ STI Statistics
- ❖ Innovation Management

ISSEK experts hold master-classes and training on forecasting, Foresight studies and strategic management for companies, universities and research organisations.

## **Contact information**

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