BRIEF REPORT

of Science State and Development Prospects
in the Republic of Belarus based on outcomes of 2009

In 2009, the main efforts of the research and innovation complex of Belarus were focused on implementation of the State innovative development program of the Republic of Belarus, the Program of social and economic development of the Republic of Belarus, the Step strategy until 2015 to increase the share of science-intensive and high-tech products in the total volume of Belarusian export by at least 200%, the Strategy of performance of scientific researches for the period until 2015 aimed at innovative evolvement of the Republic of Belarus and development of scientific products competitive in international markets, the State program of intellectual property protection, the Program of social and economic, research and innovative development of the National Academy of Sciences of Belarus, the program of economic modernization of Belarus, the concept of the State innovative development program of the Republic of Belarus, the Complex forecast of scientific and technological progress, as well as on other decisions of the Head of the State and the Government of the Republic of Belarus.

Switch of the economy of Belarus to innovative way of development under conditions of globalization and country's continuous deepening into world business relations, and increase of economic openness are imperative for maintenance of stable economic growth rates in mid-term and long-term perspectives. In the days of globalization of the world economy, the foundation of successful positioning of a country, a region or a branch lies in the constant innovative updating aimed at achievement of maximum production capacity, competitive ability, and development of human capital. According to existing estimates, from 50 to 90 % of GDP growth in developed countries are determined by innovations and by technological progress; innovations become an obligatory condition and a primary driving force for development of all sectors of industry and tertiary activities.

Quite ambitious goals were laid down in the concept of the State innovative development program of the Republic of Belarus for 2011–2015 approved by the Government of the Republic of Belarus: development of innovative, high-tech, ecologically safe economy competitive in the world market, providing resource and energy preservation and assuring stable social and economic development of the Republic of Belarus as well as improvement of quality of life of Belarusian people.

The state program will be focused on solution of the most crucial for the Republic problems related to formation of well-balanced economy, in-

crease of export share, including growth of high and medium technology products, import optimization and assurance of positive balance of trade.

High concentration of production in the industry is an important feature of the Belarusian economy. Organization of innovative activities at such companies and assurance of their deep integration with scientific branch is one of the main goals.

Specialization in particular domains of technologic competence in environment of simultaneous cooperation in scientific and technical activities and integration with transnational corporations shall become the top-priority development direction.

Systematic restructuring of the national economy shall be performed subject to the priorities of scientific and technical activities.

To assure competitive ability of goods and services in domestic and international markets, it is necessary:

– to anticipatingly develop science-intensive and high-tech segments of industry and production, i.e. microelectronics, tool engineering, precision engineering, information technologies;

– to expand production of consumer goods, and, first of all, of different kinds of household appliances and electronics experiencing less significant medium-term and long-term demand fluctuations and characterized by higher speed of financial means turnaround;

– to increase the specific share of export-oriented production facilities.

SCIENTIFIC AND TECHNOLOGICAL POTENTIAL

Members of state scientific companies of different branches and departmental subordination as well as those of establishments of higher education form the core of the scientific and technological potential of Belarus.

In 2009, there were 446 companies conducting research and development activities in the Republic. In comparison to 2008, their number increased by 117 units. That resulted from positive reorganization processes taking place in the scientific and research field and search for its optimal structure under conditions of growing requirements to effectiveness of researches and developments presented by the public.

The main number of companies (302 units) conducting research and development activities is concentrated in Minsk. Among them, there are

scientific establishments of the National Academy of Belarus, branch scientific and research institutes and establishments of higher education. In comparison to 2008, their number in Minsk increased by 99 units and in regions — by 18 units.

Insignificant "presence" of the High School in the country's scientific potential is a specific feature of the institutional model of Belarusian science. In 2008, 41 companies conducted researches and developments in the system of the Ministry of Education, while in 2009 — 49 companies, including establishments of higher education. As of the end of 2008, the number of researchers in that sector totaled to 1709 people, and in 2009 — to 1708 people.

Notwithstanding the taken measures, the improvement of conditions for professional staff to stay in the science cannot be noted yet in Belarus. This is proved by the fact that, regardless certain stabilization of the number of researchers, qualification and age disproportions among scientific staff still intensify.

PERFORMANCE OF THE ATTESTATION SYSTEM OF SCIENTIFIC STAFF OF THE HIGHEST QUALIFICATION

In 2009, the Supreme Attestation Commission awarded academic degrees to 624 candidates, which is insignificantly (by 0.4 %) higher of the value of 2008 (621 people). Grand Doctor of Science was awarded upon 51 candidates to the academic degree, while Doctor of Science — upon 573 candidates.

Among those, who defended their theses in the Republic of Belarus in 2009, there were 22 people from Vietnam, Jordanian, Iran, Yemen, China, Lebanon, Libya, Morocco, Palestine and Poland (in 2008 — 21 persons).

The most important elements of international cooperation in the field of attestation in 2009 were:

– organization and performance in Belarus of the 10th Conference of the International Association of the state agencies for attestation of research, academic and teaching staff of the highest qualification (June 9–10, 2009);

– referral of Belarusian citizens to Dissertation Councils in Russia for presentation and defense of their theses in case of unavailability of councils for evaluation of such theses in the Republic of Belarus and inability of organization of one-time presentations (1 candidate to Grand Doctorate Degree and 2 candidates to Doctorate Degree);

– involvement of foreign citizens into participation in the work of councils for evaluation of theses (24 persons), as well as in the capacity of opponents (31 persons), opposing companies (with reference to 6 theses) and additional experts (with reference to 1 thesis);

– training of highly qualified scientific staff for foreign countries.

FINANCING OF RESEARCH, SCIENTIFIC AND TECHNICAL INNOVATION ACTIVITY

In 2009, the total amount of expenses allocated for scientific researches and developments all over the Republic totaled to 1 049 553 million rubles (in 2008 — 1 084 737 million rubles).

In 2009, such an important index of science development as the research intensity of GDP calculated based on the total amount of internal expenses (the method of OECD countries) totaled to 0.65 % (in 2008 — 0.75 %, in 2007 — 0.97 %). In comparison to 2007, that value went 33 % down.

The index of research intensity of GDP, as per volume of performed researches, developments and services of scientific and technical nature (the method of CIS countries) in 2009 totaled to 0.77 % (in 2007 — to 0.73 %, in 2008 — to 0.85 %).

In absolute terms, the volume of internal expenses for performance of scientific researches and developments in 2009 totaled to 882.9 milliard rubles (in 2008 — to 962.4 milliard rubles), including internal current expenses —equal to 839.5 milliard rubles (in 2008 — 774.8 milliard rubles).

The primary source of means used for financing of internal expenses for scientific researches and developments in 2009 was the budget covering 61.8 % (in 2008 — 52.9 %) of the total amount of internal expenses. Own resources of scientific companies totaled to 12.7 % (in 2008 — 27.4 %, in 2007 — 38.6 %) of the amount of internal expenses for scientific researches and developments. The specific gravity of means for researches and developments financing provided by foreign sources (means of foreign investors, including foreign credits and loans) in 2009 totaled to 8.5 % (in 2008 — 5.5 %, in 2007 — 5.3 %).

In 2009, 484 358 million rubles, or 57.7 %, were spent for developments (in 2008 — 458 805 million rubles, or 59.2 %), 225 585 million rubles, or 26.9 %, — for applied researches (in 2008 — 201 846 million rubles, or 26.1 %), 129 517 million rubles, or 15.4 %, — for basic researches (in 2008 —

114 171 million rubles, or 14.7 %). It should be noted that over the three recent years, the share of basic researches in the total amount of internal expenses for researches and developments has gradually decreased (in 2006 — 17.7 %, in 2007 — 15.8 %, in 2008 — 14.7 %), while in 2009, internal expenses for basic researches increased and totaled to 113.4 % in comparison to the same in 2008.

The total volume of works performed by scientific companies in the recent years can be characterized by stable growth dynamics. In 2009, the volume of works totaled to 1163.9 milliard rubles, including researches and developments — 1030.3 milliard rubles, scientific and technical services — 79.1 milliard rubles.

In 2009, the major volume of performed works was provided by scientific companies of the National Academy of Sciences of Belarus: 357.7 milliard rubles (in 2008 — 344.0 milliard rubles). It is followed by the Ministry of Industry with 194.8 milliard rubles (in 2008 — 256.4 milliard rubles), the State Military-Industrial Committee with 165.4 milliard rubles (in 2008 — 159.7 milliard rubles) and the Ministry of Education — 134.6 milliard rubles (in 2008 — 154.6 milliard rubles).

Structure analysis of actual expenditures of the means from the republican budget for the science with reference to work types and directions showed that in 2009, as opposed to the values of 2008, the major changes affected the section "Research and Development works performed under Presidential, Governmental national economic and social programs, and state scientific and technical programs". If in 2008, the share of expenses under this section made up 37.7 % of the amount of total volume of actual expenses of the means from the republican budget for the science, then in 2009, it went up to 43.0 %. Expenses under the section "Basic and applied researches" went up as well: in 2009, the share of expenses under this section went up from 28.3 to 32.9 % of the total amount of actual expenses.

PERFORMANCE RESULTS OF STATE PROGRAMS OF BASIC AND APPLIED SCIENTIFIC RESEARCHES

In 2009, implementation of 38 State programs of basic and applied scientific researches was continued and implementation of 2 State programs of applied researches was started. At the stage of their development, the goals and tasks for every program were coordinated with potential users of the results of scientific researches, whereupon 85 standard agreements on mutual interest in performance of programs and implementation of

their results have been signed: 7 — under the State program of fundamental researches, 21 — under the State program of oriented fundamental researches, 15 — under the State program of applied researches, 42 — under the State complex program of scientific researches — between their state customers and 46 Ministries, other republican agencies of state administration, corporate groups, industrial organization and establishments of higher education.

Subject to the resolution of the Council of Ministers of the Republic of Belarus as of 31.08.2006 No. 1117, 33 State programs of fundamental scientific researches were included as sections into 11 State complex target and technical program for 2006–2010 developed for the purposes of the order of the Head of the State.

By the decision of the Government of the Republic of Belarus, 16 state programs of scientific researches were introduced into the sections of research, scientific and technical provisioning of state development programs of motor branch, radioelectronics, technical reequipment and modernization of foundry, thermal, electroplating and other energy-consuming production facilities, development of healthcare, national actions aimed at prevention and elimination of drinking and alcoholism, forestry development as well as the state program "Peat".

In 2009, about 200 companies of the republic participated in implementation of such programs; among them, there are 72 organizations of the National Academy of Sciences of Belarus, 40 — the Ministry of Education, 23 — the Ministry of Industry, 18 — the Ministry of Healthcare, 7 — the Department for Presidential Affairs of the Republic of Belarus and other companies under the aegis of the President of the Republic of Belarus, 5 — "Belneftehim", corporate group, 5 — the Ministry for Emergencies, 5 — the Ministry of Agriculture and Food, 5 — the State Military-Industrial Committee, 1 — the Ministry of Natural Resources and Environmental Protection, 20 companies of other departamental subordination and legal entities not subordinated to any departments.

Following proper procedure, program financing was provided by the Ministries and other republican agencies of state administration, the National Academy of Sciences of Belarus, state companies subordinated to the Government of the Republic of Belarus subject to directions of application of the means from the republican budget envisaged for research, scientific and technical, and innovation activity in the financial year, and lists of state customers with reference to the directions approved by the Council of Ministers of the Republic of Belarus. The executors had to

provide own resources of executing companies, other companies and organizations for the performance of works under programs with out-of-budget financing, performance of number of research stages at the expense of contractual works, international projects, as well as equipment, obtained on the account of such means. Subject to the data of the state statistical reporting, means from such resources were attracted under 20 programs in 2009, i. e. 10 State complex programs of scientific researches, 3 State oriented basic researches and 7 State programs of applied researches.

The study highlighted that over 300 projects of new cars, equipment and devices were developed, as well as about 100 systems, complexes, Automated Control Systems, Automated Databases, Computer-aided design programs and software, about 1060 new materials, substances and tools, about 260 technological processes and about 135 new production technologies.

In the course of 2009, over 730 protection documents have been received and over 765 applications for items of industrial property have been filed.

About 20 medals and over 80 diplomas have been awarded for participation in international expos, and 2 medals and 25 diplomas — for participation in republican trade-shows.

Two state customers — the National Academy of Sciences of Belarus and the Ministry of Education — made the main contribution (over 90 %) into quantitative indices received with reference to such programs.

Following the results of head companies' estimates, 785 results of works under these programs were implemented (or rights of use to them were transferred) in production processes, their maintenance and control, among them, there were over 100 items with economic and over 270 items with social or ecologic effect. Executors of these programs carried out over 1130 economic treaties, contracts and agreements (including over 50 contracts on organization and introduction of innovations at production facilities, about 200 — on output of newly invented products developed by executing companies carrying out programs' tasks, about 430 — on conduct of consecutive research and development activities, and process development works, over 330 — on performance of works in the field of scientific servicing, certification and other testing of products), whereupon the amount of works totaled to 27 914 million rubles. Moreover, more than 590 contracts, agreements and treaties were performed beyond the scope of financing, as well as about 330 international projects and grants with financing equal to 11 128 million rubles were provided.

PERFORMANCE RESULTS OF STATE SCIENTIFIC AND TECHNICAL PROGRAMS, SCIENTIFIC PROVISIONING OF PRESIDENTIAL, NATIONAL ECONOMIC AND SOCIAL PROGRAMS

In 2009, 27 state scientific and technical programs, 7 industrial scientific and technical programs, 5 regional scientific and technical programs were performed, scientific provision for 1 Presidential program and 17 state programs was provided.

Financing of all types of scientific and technical programs in 2009 totaled to 296 988.9 million rubles, including means from the republican budget in the amount of 175 358.4 million rubles, or 59.2 %, other means — 121 630.5 million rubles, or 40.8 %, there are means from innovative funds and companies' own resources among them.

In view of situation at external markets worsening for Belarus, decrease of demand for its products, volumes of products developed under state national and technical programs and regional national and technical programs in 2009, as opposed to 2008, dropped down, with that volume of products developed under regional scientific and technical programs dropped down by 2.3 times. The scope of developments under industrial scientific and technical programs went up by 2.3 times, some products were developed under Presidential programs. In total, the volume of newly developed product output with reference to all types of scientific and technical programs in 2009 totaled to 1 208 220.1 thousand US dollars, which is slightly less than the volume in 2008.

The volume of product output under developments of State scientific and technical programs in 2009 totaled to 1 194 906.8 thousand US dollars, which approximately equals to that of 2008.

PERFORMANCE RESULTS OF THE STATE INNOVATIVE DEVELOPMENT PROGRAM OF THE REPUBLIC OF BELARUS FOR 2007–2010 PERIOD

In 2009, 36 state customers, including republican agencies of state administration and other companies subordinated to the Government of the Republic of Belarus, regional executive committees, Minsk city executive committee, the National Academy of Sciences of Belarus and the administration of the Hi-Tech Park took participation in the process of implementation of projects of the State Innovative Development Program (SIDP).

In 2009, subject to the SIDP implementation plan, 715 projects were performed, including clearing of 213 facilities for operation. During this period, 31 new production facilities and the most important enterprise, 83 new production lines at existing companies were created based on modern technologies, as well as 99 production lines were upgraded. Introduction and production of new products were provided following 87 assignments under state scientific and technical programs.

Under implementation of the SIDP, over 20 regulatory acts aimed at formation of the environment positive for innovative development, establishment of mechanisms of innovative development motivation and stimulation, financial infrastructure enhancement were adopted in 2009, work on establishment and streamlining of development infrastructure and support of micro-entrepreneurship that should include 52 micro-entrepreneurship support centers and 9 micro-entrepreneurship incubators as of January 1, 2010 continued.

Resulting from the performance of the SIDP implementation plan in 2009, the overall output of innovation products made up to 5 069 845.8 million rubles, which is 2.7 times higher than in 2008. With that, 2407 working places were created and updated.

Thus, the buildup of the innovative component of country's economy was assured in 2009.

7 287 038.1 million rubles were directed at the performance of SIDP assignments, including companies' own resources in the amount of 2 099 476.6 million rubles, credits provided by banks of the Republic of Belarus — 3 221 357.8 million rubles, innovative investments — 299 221.9 million rubles, means from the republican budget — 1 533 993.3 million rubles (of which 429 763.2 million rubles were means of innovative funds), means of local budgets — 113 873.5 million rubles, means from other sources — 19 115 million rubles.

The State Committee for Science and Technologies of the Republic of Belarus held approbation of the international evaluation method of contribution of innovations into economical development. According to evaluation results received base on such method, the index of innovativeness of the economy of the Republic of Belarus in 2009 was evaluated at the level of 0.3 (in Lithuania the same index totaled to 0.313, in Poland — 0.294, Sweden — 0.636), which provided the rating of our country — the 25th position in Eurotable.

In order to increase the innovative potential, the Government of the Republic of Belarus:

– adopted the concept of the State Innovative Development of the Republic of Belarus for 2011–2015 envisaging expedited creation of high-tech companies and production facilities of the V and VI technological modes;

– implements the Step strategy until 2015 to increase the share of science-intensive and high-tech products in the total volume of Belarusian export by at least 200 %;

– approved the Program of development of new types of products in 2010–2015;

– caries out the schedule of measures on incorporation of joint and high-tech companies and production facilities;

– develops the draft law of the Republic of Belarus "Concerning State Innovative Policy";

– implements methodical work on introduction of new innovative projects into the SIDP.

The SIDP implementation plan was appended with 173 new projects in 2009. The overall amount of projects on incorporation of new companies and production facilities, modernization of existing production lines performed under the program totaled to 1328 (including 179 projects carried out following the assignments of state scientific and technical programs).

According to the SIDP implementation plan, it is expected to attract 6 055 998.7 million rubles in 2010, including:

– means from the republic budget — 1 247 176.3 million rubles;

– companies' own resources — 1 193 279.8 million rubles;

– credits provided by banks and loans provided by companies of the Republic of Belarus — 1 256 977.9 million rubles;

– foreign investments — 2 145 123.6 million rubles;

– other resources — 213 441.1 million rubles.

INNOVATIVE ACTIVITY OF COMPANIES OF BELARUS

At the present time, under the conditions of continuing global financial and economic recession, there are no reasons to talk about major

technologic breakthrough in Belarusian industry, intensive use of results of researches and developments by industrial companies. Perceptivity of producing entities to innovations, especially to those of technological nature, remains low. The process of reduction of the amount of innovatively active companies, the primary type of activity of which is production of industrial products, is taking place in Belarus. For the past three years, their number has reduced from 380 companies in 2007 to 289 companies in 2009, or by 24.0 %.

Dynamics analysis of the amount of innovatively active companies, the primary type of activity of which was production of industrial products, showed the growth of innovatively active companies in Minsk by 2, or by 2.6 % in 2009, as compared to 2008. Nevertheless, in 2009, the number of innovatively active companies decreased by 84, or by 28.5 % in country's regions.

Big, economically stable companies with sufficient financial, staff and intellectual resources are inclinable to innovations best of all. The companies of high-tech branches of industry show significant progress. For example, in 2009, the specific gravity of companies and organization developing technological innovations in the total amount of companies and organization of the Ministry of Industry totaled to 49.0 %, which is close in its value to mean European level. That became possible not only due to the well-developed scientific potential of the branch, availability of qualified staff, high level of innovative expenses and focus on external markets, but also due to the support provided by the government in different forms.

It is necessary to note that the major share of companies dealing with technological innovations can be referred to the State Military-Industrial Committee — 66.7 % and to the Ministry of Transport and Communications — 55.0 %. Innovative activity of companies of "Belbiopharm", corporate group and "Belneftehim", corporate group shall also be noted. In 2009, the share of companies dealing with technological innovations in these groups totaled to 57.1 % and 51.9 % respectively.

The share of companies, where the primary type of innovative activity was acquisition of materialized technologies, i. e. devices and equipments related to technological innovations, totaled to 57.8 % (in 2008 — 71.7 %).

In 2009, the share of companies, where the primary type of innovative activity was acquisition of new technologies, totaled to 6.2 % in general all

over the Republic (in 2008 — 4.6 %, growth by 1.6 points). Nevertheless, this growth is not significant enough to provide positive dynamics of this index and its compliance to modern tendencies of innovative development of the economy.

On a national economy scale, the effect of innovative activities of industrial companies remains insignificant and does not have defining nature. In 2009, the specific gravity of innovative products provided to companies, the primary economic activity of which was production of industrial products, in the total amount of provided products totaled to 10.2 %.

In 2009, the specific gravity of delivered innovation products in the total amount of delivered products totaled to: in the Ministry of Communication and Informatization — 51.1 %, in the Ministry of Industry — 28.1 %, in "Belneftehim", corporate group — 18.0 %, in the Ministry of Information — 8.1 %, in the State Military-Industrial Committee — 5.7 %, in the Ministry of Architecture and Construction — 5.8 %, in "Belbiopharm", corporate group — 8.5 % and in "Bellesbumrom", corporate group — 5.8 %.

General low performance level of innovations significantly weakens competitive positions of Belarusian manufacturing companies in external markets. The major part of their export is represented by products untouched by technological modifications.

INNOVATIVE FUNDS

In 2009, based on the Law of the Republic of Belarus "Concerning the Republican Budget for 2009", 26 republican agencies of the state administration and other state companies subordinated to the Government of the Republic of Belarus, as well as the National Academy of Sciences of Belarus and the Belarusian Republican Union of Consumer Societies (spending units), formed innovative funds on the account of fixed amounts of deductions from the production cost of products, goods (works, services).

With consideration of the resources from the Republican budget in the amount of 379 395.8 million rubles directed to innovative funds subject to the law, 2 192 274.6 million rubles were spent in the reporting period.

In 2009, 1 585 024.6 million rubles were spent in the direction of the use of finances. The major part of the resources of innovative funds was directed to financing of the expenses related to capital investments. 1 062 267.8 million rubles, or 67 % of the total amount of expenses of innovative funds in the reporting period were directed for such purposes.

With consideration of resources of innovative funds, energy preservation in 2009 totaled to 142.7 thousand tons of reference fuel resulting from measures taken under industrial programs of energy preservation.

107 495.4 million rubles, or 6.8 % of expenses of innovative funds were directed at the implementation of research and development, design and experimental, technology and experimental works on development and introduction of production of new types of science-intensive products.

In 2007–2010, 169 007.2 million rubles, or 10.7 % were spent on the performance of measures of the State innovative development program.

27 514.0 million rubles were directed for reverse financing of the works via the Belarusian innovative fund. As a result of the performed works, in 2009, a new production of household appliances, including micro-wave ovens, was introduced at "Horizont-Midea", joint enterprise: over 147 thousand products of total value equal to 20.0 milliard rubles were produced and 152 working places were created. Modernization of "Electroapparatura", OJSC and "Ecran", OJSC carried out under the project allowed organization of new product output for the amount of over 14 milliard rubles.

The Belarusian Innovative Fund

The primary activity of the Belarusian Innovative Fund in 2009 consisted in assistance provision in the course of implementation of innovative projects.

Financial support for innovative projects of priority directions and for development of new technologies and perspective productions based on such technologies was carried out at the expense of the budget formed on the account of industrial innovative funds and were appropriated on return basis.

As for thematic directions of innovative projects carried out in 2009, they can be divided into the following main groups: instrument engineering, radio electronics and optics, machine building (energy preserving, heat recovery systems), appliance and equipments (microwave ovens, bank cards), agricultural sector (seed processing systems, crop production waste recycling), healthcare (pharmacology, medical products) and so on.

In 2009, with the purposes of project implementation, the Belarusian innovative fund was granted with 31.6 milliard rubles from the republican budget, while only 27.3 milliard rubles were used and paid by the Treasury. Repayment of the resources into the country's budget totaled to

121.3 million rubles in compliance with the new performance schedule of works on organization of production of scientific and technical products.

The Belarusian fund carried out works under 20 projects, 5 projects of which led to startup of serial productions.

Resulting from works completed in 2009, production of household appliances, in particular, over 147.0 thousand microwave stoves for the amount of 20.0 milliard rubles was opened and 152 working places were created at "Horizont", OJSC. Production of 240.0 thousand microwave ovens is expected in 2010. In this regard, additional foreign investments in the amount of 3.9 million US dollars were attracted (for joint Belarusian-Chinese company). "Electroapparatura", OJSC produced 30.0 thousand items based on the new technology. The production of microelectronic equipment was successfully implemented at "KBTEM-OMO", Unitary Enterprise. The complex of automated system of innovative project control has been developed and introduced into experimental operation in the Belarusian Innovative Fund.

INTELLECTUAL PROPERTY PATENTING AND USE

In 2009, the National Center of Intellectual Property received 1926 patent applications for inventions, which is 11.3 % higher than in 2008. Comparing to the precedent year, the number of applications received from national applicants increased by 16.1 % and totaled to 1753 applications (against to 1510 applications in 2008), or 91 % of the total amount of applications filed in 2009. Foreign applicants filed 173 applications (in 2008 — 220), of which 76,9 % were international applications transferred to the national stage based on the RST procedure. The major amount of applications was submitted by applicants from Germany — 64 (37 %), the Russian Federation — 24 (13.9 %), the USA — 14 (8.1 %), Ukraine — 9 (5.2 %) and Japan — 8 (4.6 %).

Based on the made decision, 1297 patents for inventions were registered, with that 91.6 % of the patents were registered in the name of national applicants.

The number of registered patents for industrial samples in 2009, in comparison to that in 2008, increased by 16.7 % and totaled to 230 items (in 2008 — 197), of which 98 patents were registered in the name of national applicants (42.6 %) and 132 — in the name of foreign applicants (57.4 %).

In 2009, 2550 trademarks and service marks were registered (in 2008 — 2460). 59.6 % of the total amount of registered marks were registered in the name of national applicants. Of 1030 marks (40.4 %) registered in the name of foreign applicants, 247 (24 %) were registered in the name of applicants from the USA, 193 (18.7 %) — from the Russian Federation and 85 (8.2 %) — from Ukraine.

In 2009 Belarusian entities sold 133 EA applications for inventions, which is higher by 17 % than in 2008 (in 2004 — 46 applications, in 2005 — 54, in 2006 — 64, in 2007 — 99, in 2008 — 114).

In 2009, economic entities of Belarus received 233 certificate of the Russian Federation for trademarks, which is 40 % higher, than in 2008.

The increase of relevant indices of use of international procedures of trademark protection by Belarusian entities is noted, according to which, Belarus (6.3 applications for 1 million of residents) increases correspondent indices of Russia (6 applications) and Ukraine (3.6 applications).

The receipts from patent fees and duties of the National Center of Intellectual Property totaled to 4423.25 thousand US dollars in 2009 and to 4798.2 thousand US dollars in 2008.

INTERNATIONAL SCIENTIFIC AND TECHNICAL COOPERATION

International scientific and technical cooperation in 2009 was developed in those directions and with those countries that had already shown their prospective viability. It was aimed at increase of country's authority in the international market, wide distribution of information about scientific and technical potential of the Republic and abilities of Belarusian research, scientific and production companies among scientific and business public, promotion of Belarusian science-intensive products at international markets and attraction of foreign investments in scientific and technical field.

The primary directions of the international scientific and technical cooperation.

1. Bilateral cooperation with countries of the far abroad.

2. Cooperation under the Union State.

3. Cooperation with CIS and EurAsEC member-countries.

4. Development of diversified cooperation and interaction with leading international companies and centers.

5. Development of modern information and communication base.

6. Attraction of foreign investments and promotion of high-tech product export (the share of high-tech product export in the total amount of Belarusian share made up 4.26 % in 2009, and 3.9 % in 2008).

Priority measures for development of the scientific and innovative complex of the country were determined for the year of 2010 and for the near-term perspective.

1. Provisioning of the stable financing of research, scientific and technical, and innovative activity, including at the expense of the resources of the republican budget.

2. Development and approval of the list of research, scientific and technical programs for 2011–2015.

3. Development of:

– the State Innovative Development Program of the Republic of Belarus of 2011–2015;

– the innovative strategy of development of the national economy and the priority development directions of production facilities of the V, VI technological modes for 2011–2015;

– the strategy of technological development of the Republic of Belarus;

– the strategy of establishment of high-tech production facilities able to offer the world brand new types of Belarusian goods and services (including in the field of mining and processing operations);

– the National program of export development of the Republic of Belarus for 2011–2015;

– the Complex prognosis of scientific and technical progress of the Republic of Belarus for 2011–2030;

– the concept of the State program for 2011–2015 period "Information society".

4. Implementation of:

– the State Innovative Development Program for 2007–2010;

– the Program of social and economic development for 2006–2010;

– the State program of intellectual property protection;

– the Step strategy until 2015 to increase the share of science-intensive and high-tech products in the total volume of Belarusian export by at least 200 % ;

– the Program of production of new types of products in 2010–2015;

– the Strategy of scientific researches until 2015 aimed at innovative development of the Republic of Belarus, invention of scientific products competitive in international markets;

– the Strategy of development of the information society till 2015;

– the plan of measures on incorporation of joint high-tech companies and production facilities, development of innovative products competitive in international markets;

– the Strategy of export development of small and medium entrepreneurship of the Republic of Belarus for 2008–2010.

5. the Scientific provisioning of the introduction of the nuclear power plant into the electric power system of the Republic of Belarus.

6. Organization and formation of new structures in the field of innovative and investment activities:

– the Republican center for forecasting and expertise activities;

– the Republican center of innovation information;

– the Republican innovation center of e-business;

– the joint enterprise for issues related to information consulting;

– a joint engineering company in cooperation with foreign participants;

– the republican permanent exposition of achievements in research, research and technical, innovation fields of activity;

– the venture fund;

– the Park of advanced technologies;

– the scientific and technologic park "Polesye";

– technologic park on the basis of "Integral", OJSC.

7. Streamlining of conceptual approaches to organization of research, scientific and technical, and innovation activity, adoption of the Law of the Republic of Belarus "Concerning state innovation policy".

8. Development of regulatory acts aimed at improvement of stimulation of development and use of the results of scientific and technical activity, including items of intellectual property.

9. Performance of the priorities of the international scientific and technical cooperation — effective transfer of Belarusian high-technologies abroad in order to eliminate negative balance in the foreign trade of the Republic of Belarus, active attraction of foreign investments in Belarusian economy.