Report of the Russian National Committee for the IHP to the 22nd Session of the Intergovernmental Council for the IHP of UNESCO (June 2016)
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Introduction
The present report is prepared at the State Hydrological Institute based on materials received from the following agencies and organizations:

- State Hydrological Institute of Roshydromet (SHI)
- State Oceanographic Institute of Roshydromet (SOI)
- State Hydrochemical Institute of Roshydromet
- All-Russian Research Institute of Hydrometeorological Information of Roshydromet
- Caspian Marine Scientific and Research Center of Roshydromet
- Federal Agency for water resources (RosVodResursy)
- Moscow State University
- Institute of Geography RAS
- Russian State Hydrometeorological University (RSHU)
- Institute of Water Problems RAS
- Institute of Water and Ecological Problems SB RAS
- Institute “Hydroproject”

The Report is prepared according to the structure, format and volume developed at the UNESCO IHP Secretariat.

1. Activities undertaken in the period June 2014 – May 2016

1.1 Meetings of the IHP National Committee

Decisions regarding the composition of the IHP NC of Russia

The NC of Russia (hereinafter the NC) exists since International Hydrological Programmes of IHD/IHP were launched by UNESCO. The personal composition of the NC, however, has been renewed periodically. The present NC composition was nominated by the Russian Government in 2003. The Chairperson of the NC is the Head of Roshydromet Dr. Alexander V. Frolov, the deputy Chairpersons are Academician Victor M. Kotlyakov from the Institute of Geography RAS, and Dr Vladimir Yu. Georgievskiy, Director of the State Hydrological Institute of Roshydromet (in accordance with the decision of the NC of 19.10.2011 and the appointment order № 635 of 29.11.2011 issued by the Head of Roshydromet). At present the Committee consists of 20 members – scientists and specialists known both in Russia and all over the world, representatives of different ministries, departments, organizations and institutions working actively in the fields of hydrometeorology, water resources, water management, education and training.

Major topics addressed

In 2014-2016 the NC performed activities in accordance with the following plan:

1. In 2014 a joint meeting with the participation of the members of the NC and chairman of NC of Serbia - Prof. Y.Despotovich was held at the department of hydrology Geography Faculty of the Moscow State University. Issues of the most important events in the field of hydrology and water resources were discussed during the meeting, as well as a common position of the NC on key issues of the international cooperation in these areas was developed. NC of Serbia and NC of Russia submitted a report on the basic perspective directions of the research.

2. In 2015 a joint meeting in the framework of the Fourth All-Russian Conference "Fundamental Problems related to water and water resources" had been prepared and held by the NC. The meeting was attended by the representatives of NC as well as the Chairmen of the IHP NC Slovenia, Serbia, Slovakia. During the meeting reports on the current activities of IHP National Committees and plans for further cooperation were presented by the participants.

3. In accordance with the decision of the Roshydromet Chief Executive, the Meeting of representatives of the National Committees for IHP UNESCO, members of the regional group II – Central and Eastern Europe – named “Development of the Action Strategy and Cooperation Form of the National Committees for IHP UNESCO aimed at implementation of the Theme 1 of IHP’s eighth phase (IHP-VIII) Water-related Disasters and Hydrological Change in the regions of the Central and Eastern Europe” was arranged and held in September 2015. Following the results of the meeting, the recommendations (both in Russian and English) have been developed (see i.1.2.2).
1.2 Activities at international level in the framework of IHP
1.2.1 Status of IHP activities and contribution to IHP-VIII

During the reporting period, the NC implemented activities at national and international levels on the following IHP-VIII Themes:

- **Theme 1: Adapting to the impacts of global changes on river basins and aquifer systems**
  - **Focal Area 1.1** – Global changes and feedback mechanisms of hydrological processes in stressed systems
  - **Focal Area 1.2** – Climate change impacts on the hydrological cycle and consequent impact on water resources
  - **Focal Area 1.3** – Hydro-hazards, hydrological extremes and water-related disasters
  - **Focal Area 1.4** – Managing groundwater systems’ response to global changes
  - **Focal Area 1.5** – Global change and climate variability in arid and semi-arid regions

- **Theme 2: Strengthening water governance for sustainability**
  - **Focal Area 2.2** – Capacity development for improved governance; enhanced legislation for wise stewardship of water resources
  - **Focal Area 2.4** - Managing water as a shared responsibility across geographical and social boundaries

- **Theme 3: Ecohydrology for sustainability**
  - **Focal Area 3.3** - Risk-based environmental management and accounting
  - **Focal Area 3.4** - Groundwater-dependent ecosystems identification, inventory and assessment

- **Theme 5: Water education for sustainable development**
  - **Focal Area 5.1** - Tertiary water education and professional development
  - **Focal Area 5.2** - Vocational education and training of water technicians
  - **Focal Area 5.3** - Water education in schools

The official website of NC for the IHP of UNESCO was launched in 2009 at: [www.ihp-russia.ru](http://www.ihp-russia.ru) and it is maintained and updated regularly. The site contains information on the IHP objectives and tasks, as well as documents describing the structure and governing bodies. The site is regularly updated with the IHP Secretariat newsletters and information on forthcoming IHP events.

Main contributions of the NC to the IHP-VIII (2014 – 2016) in the reporting period were numerous publications, including monographs, as well as scientific conferences and meetings (see paragraphs 1.2.2, 1.2.6, 1.6.1).

1.2.2 National scientific and technical meetings

The eighth phase of IHP *Water Security: Responses to Local, Regional and Global Challenges* (2014-2021) started in 2014. In accordance with the decision of the Roshydromet Chief Executive, the Meeting of representatives of the National Committees for IHP UNESCO, members of the regional group II – Central and Eastern Europe – named “Development of the Action Strategy and Cooperation Form of the National Committees for IHP UNESCO aimed at implementation of the Theme 1 of IHP eighth phase (IHP-VIII) *Water-related Disasters and Hydrological Change* in the regions of the Central and Eastern Europe” was arranged and held in September 2015. Following the results of the meeting, the recommendations (both in Russian and English) have been developed:

«The International Hydrological Decade was launched 50 years ago, which then evolved into UNESCO International Hydrological Programme. Those 50 years of successful cooperation in hydrological studies increased worldwide knowledge on hydrology, and put in place mechanisms of cooperation contributing to the resolution of water related issues, culminating in many scientific disciplines conducting water research. Many international associations and activities concerning water were developed in connection to participation in IHP UNESCO. During the 4th Russian Conference of hydrologists entitled “Fundamental problems related to water and water resources”, the IHP Committee of the Russian Federation invited the representatives of IHP-UNESCO Electoral Group II to attend the formal celebration of the 50th Anniversary.

Over the last two decades, the common strategy of Group II countries in the fields of hydrology and water resources has been mostly based on the development of specific aspects of those countries under the circumstances of radical changes occurring in their social and economic areas. For most countries, these changes have had common negative effects, such as reduction of hydrological networks...
and their technical backwardness, decreased quality of observations, sharp reduction in budgets of scientific and technical institutions, the reduction in the extent of scientific research and funding of international cooperation, and practical cancellation of experimental research and of free data, information and publication exchange. Consequently, this limited the possibilities to actively participate in international cooperation, particularly in WMO and UNESCO.

The common problems necessitate the exchange of experience in problem solving faced by scientists and experts in hydrology, production of measures for mobilisation of resources, and common efforts to strengthen international cooperation activities, particularly concerning the projects with the highest level of scientific and practical interests.

The meeting of National Committees’ representatives of IHP UNESCO’s Group II (hereinafter: meeting) was convened in order to coordinate the activities of National Committees regarding IHP-VIII, improve international cooperation in the fields of hydrology and water resources, promote discussions regarding the tasks of IHP-VIII (2014–2021), and produce plans of common activities in the interest of the individual countries.

The meeting was attended by the representatives of IHP’s National Committees of Serbia, Slovenia, Slovakia, Russian Federation, and by collaborators and members of scientific and project institutes, and higher education institutions.

At the meeting, a broad range of relevant problems was addressed, as well as the tasks concerning hydrology and water resources, by taking into account the specificities and interests of the individual countries. During the meeting, various issues concerning the on-going activities and future plans were discussed. The option of mobilising the countries' own funds and funds received elsewhere, including administration resources, coordination of activities, production of a single strategy and a concrete programme of effective cooperation were considered.

As a result of the discussions and exchange of views regarding the reports and communication of the responsible National Committee representatives, which were on the meeting’s agenda, the following recommendations were adopted:

1. Considered as the most relevant and priority directions by National Committees under the IHP-VIII “Water security: Responses to Local, Regional, and Global Challenges” (2014–2021), we need to address the resolution of problems and tasks of contemporary global and regional hydrology, under Theme 1 of IHP-VIII: “Water Related Disasters and Hydrological Changes in Central and Eastern Europe”.
2. We need to focus on solving these tasks, also based on the selected experimental river basins, including the International transboundary river basins whenever needed and possible.
3. The significance of interregional cooperation of Group II countries based on a basin-wide approach is stressed. The cooperation of all countries (not only in the framework of Group II) is important, as river basins connect many countries in both Europe and Asia, etc.
4. We should continue to provide the pathways and opportunities for setting up regional Category II UNESCO Centres for Russian speaking hydrologists and experts in water management.
5. We must stress the need for education and research in the fields of hydrology and water resources.
6. In the near future, a coordination meeting regarding the relevant issues of mutual cooperation should be held; furthermore, preparations for the 22nd session of the IHP Intergovernmental Council (2016) should be made to discuss the candidacy for the Representative of the Group II, and so the candidacy for the President of the IHP-UNESCO Intergovernmental Council and Bureau.

Also NC of Russia participated and organized the following scientific and technical activities with relevance to hydrology, water resources and water sector:

Scientific conferences
- Annual International Forum “Great Rivers”, Nizhny Novgorod (2014, 2015, 2016);
- All-Russian scientific conference "Scientific support for implementation of the" Water Strategy of the Russian Federation for the period until 2020 "was organized in Petrozavodsk, July 2015. It
was attended by more than 130 scientists and experts from Russia, as well as Kazhydromet (Republic of Kazakhstan).

Fourth All-Russian Scientific Conference with international participation "Fundamental problems of water and water resources." Moscow, September 15-18, 2015. The conference was attended by more than 140 scientists and experts from 44 organizations, representing the Russian Academy of Sciences - Ural, Siberian, Far Eastern Branches of the RAS, Kabardino-Balkaria, Karelia, Kola Scientific Center of the RAS, National Academies of Sciences of Belarus and Kazakhstan, the country's leading universities, Roshydromet and other departments, as well as design and production organizations of Russia, Serbia, Slovakia and Slovenia.

9th international conference of young scientists and talented students "Water resources, ecology and water security" (Moscow, 30 November - 1 December 2015). The conference was attended by over 70 scientists, university professors, young scientists and specialists from Russia, China, Iran, Vietnam, Uzbekistan. A total of 32 reports were presented.

Meetings of the intergovernmental commissions:

- IV (XXII), V (XXIII) meeting of the Joint Russian-Kazakhstan commission on joint use and protection of transboundary water bodies (2014, 2015).
- VII session of the Joint Russian-Azerbaijani commission on the distribution of water resources of transboundary Samur river (2014).
- VIII session of the Joint Russian-Belarusian commission on the protection and rational use of transboundary water bodies (2015).

1.2.3 Participation in IHP Steering Committees/Working Groups

In the period 18-20 June 2014 Russian delegation participated in the 21st session of the Intergovernmental Council for the IHP of UNESCO. The delegation consisted of NC members from various agencies, including Federal Agency for Water Resources, Roshydromet - State Hydrological Institute and State Oceanographic Institute, Institute of Water Problems of RAS. The delegation submitted to the IHP Secretariat a comprehensive report on the activities in the period 2012-mid 2014 prepared by the NC of Russia on the basis of materials provided by all members of the NC.

The delegation included:
2. V. Georgievskiy, Director of SHI, Deputy Chairman of the NC of Russia for the IHP of UNESCO, Head of the delegation;
3. O. Gorelits, Senior Scientist, State Oceanographic Institute, Executive Secretary of the NC of Russia for the IHP of UNESCO;
4. Zh. Balonishnikova, Scientific Secretary of SHI;
5. M.Bolgov, Deputy Director of the Institute of Water Problems of RAS.

Russian delegation participated actively in all plenary meetings of the 21th Session of the IHP Intergovernmental Council, its representatives reporting on all key issues of the Agenda. Consultations were held during working meetings with the Secretariat and meetings of RA II countries (East and Central European countries). Representative of NC Zh. Balonishnikova was elected to the IHP Resolution Committee of the 21th Session of the Intergovernmental Council and elected as a chairman at the first meeting Committee. Representative of NC O. Gorelits was elected to the IHP Finance Committee with mandate for 4 years.

O. Gorelits and Zh. Balonishnikova participated in daily sessions of the IHP finance committee and publications and communications committee.
1.2.4 Research/applied projects supported or sponsored by the NC

In view of implementation of the «Water strategy of the Russian Federation for the period 2020», the government of the Russian Federation approved in April 2012 a Federal Target Programme «Development of the water management complex of the Russian Federation until 2020». The main objectives of the programme are to ensure secured provision of water resources for sustainable socio-economic development of the Russian Federation, preserve and restore water bodies to a condition ensuring ecologically favorable environment for population, protection of population and economic objects from floods and other negative impacts of waters, as well as to develop and improve hydrological monitoring systems. The programme is coordinated by the Ministry of Natural Resources. For the last two years the following projects of this Federal Target Program were carried out in institutes of Roshydromet, Federal Agency for Water Resources, RAS organizations and Moscow State University within the framework of the IHP Theme 1 (contribution to the theme 1):

«Current and prospective assessment of water resources and water availability of the Russian territory to climate change» (contribution to subtopic 1.2)

As a result, the calculated and predicted characteristics of the hydrological regime of water bodies were obtained, estimation and forecast of water availability in regions and river basins of the Russian Federation were made for the scientific-methodical substantiation of actions for solving problems on the guaranteed provision of water resources for sustainable development of the Russian Federation;

«Preparing Scientific reference books” The main hydrological characteristics of rivers” for the Upper Volga, Kama and the Lower Volga basins (contribution to subtopic 1.2)

As a result a space-time compilation of hydrological information on the largest river basins of the Russian Federation was carried out, it was made taking into account climate change, which led to a redistribution of a flow within the year, and in time. Published references are used in hydrological substantiation of building design, in the development of measures on usage and protection of water bodies and addressing to solve many other scientific and practical problems of the hydrology of major national economic significance.

«Extreme floods in the Amur River basin» (contribution to subtopic 1.3)

The analysis of hydrological and hydromorphological features of high water levels in the Amur River near Blagoveshchensk, Khabarovsk and Komsomolsk-on-Amur with taking into account natural observations was prepared. The flood-proofing efficiency of the Zeya Reservoir was estimated from the hydrological point of view. The results of the statistical analysis of maximum discharges and highest water levels, taking account the historical flood in 2013, are given. Methodic for forecasting maximum ice-jam stages on the Amur River was prepared and possible changes in runoff in the Amur River basin for the coming decades were made on base of climate models.

«Evaluation of risks of natural disasters in the coastal zone» (contribution to subtopic 1.3)

Research of dangerous hydrological processes in estuaries and along the coast of the seas were made.

«Research of the impact of climate unsteadiness on groundwater resources» (contribution to subtopic 1.4)

As a result recommendations for estimation the impact of possible climate changes on groundwater resources were prepared.

«Creating a methodology for research the ice and the hydraulic processes and a phenomena in the natural and natural-technical systems of water bodies in harsh climatic zone of Russia» (contribution to subtopic 1.1)

Spatial and temporal patterns of ice-thermal and hydrological processes of water bodies in harsh climatic zones of Russia are obtained.

«Research of the transformation of water, ice and thermal rivers regime in the Volga river basin» (contribution to subtopic 1.2)

Quantitative assessment of water, ice and thermal rivers regime in the Volga river basin are obtained.
Recommendations to improve the safety of the water supply systems were prepared.

Large research projects were carried out in the framework of other government programs:

«Non-tropical hydrological cycle in the conditions of present and future climate: uncertainty and predictability» (contribution to theme 1.2)

It was investigated the influence of the uncertainty of climate projections to evaluation of the hydrological consequences of climate change on the basis of numerical experiments with the hydrological and global climate models. It is shown that with the help of the meteorological data obtained with the help of global climate models and given as input information to Lena river runoff model, the mean annual runoff characteristics in this basin for the period 1971-2005 years were calculated with sufficient accuracy.

«Parameterization of the river flow characteristics for the diagnosis of dangerous hydrological events and their environmental effects» (contribution to theme 1.3)

In the framework of activities under Theme 2 substantial progress has been achieved in development and enhancement of transboundary water cooperation. Intergovernmental agreements have been operating with Estonia, Finland, Belarus, Kazakhstan, Mongolia, Abkhazia, China and Azerbaijan in the field of protection and use of transboundary water bodies. Implementation of the agreements and plans resulted in positive dynamics of intergovernmental cooperation and representation of interests of the Russian Federation in protection and use of transboundary waters.

The following research projects were submitted:

«Scientific - analytical support of water resources management the major transboundary water objects of the Russian Federation " (contribution to theme 2.2).

As a result informational and methodological support for the work of Russian representatives in the neighboring countries joint commissions for use and protection of water resources of transboundary rivers - Selenga, Irtysh and Ural, was achieved.

UNDP-GEF Program «Integrated management of the Baikal Basin transboundary ecosystem water resources» (contribution to theme 2.4).

Predictive assessment of long-term changes in the water balance of the transboundary Selenga River basin in climatic fluctuations and changes of water consumption conditions was made. A simulation system of movement of pollutants in the Selenga River Basin was prepared.

In the framework of activities under Theme 5

In the framework of activities under Focal Area 5.1 “Tertiary water education and professional development” the students’ practices were organized:

The practice of students hydrologists of 2nd course of Moscow State University, (Faculty of Geography), in Kyrgyzstan, Tien Shan mountains, at the invitation of the National Academy of Sciences of the Kyrgyz Republic, Institute of Water Problems and Hydropower, Tien-Shan mountain scientific center (2015 and 2016).

The Practice of students hydrologists of 2nd course of Moscow State University, (Faculty of Geography) on the teaching and research Arctic station of Stockholm University Tarfala (http://www.ink.su.se/english/tarfala-research-station). Tarfala - the world's largest Arctic Research Center together with Russian Khibinskaya station included to the Interact program (http://www.eu-interact.org/field-sites/sweden-2/tarfala/). (2014)

In the framework of activities under Focal Area 5.2 the following training courses were organized:

- «Engineering hydrological calculations. Current problems and solutions» (2014, 2015, 2016), State Hydrological Institute, St. Petersburg;
- «Automatic hydrological station AGK. Acoustic Doppler current profilers. Methodological provision of hydrological means of measuring level and flow velocity» (2014, 2015, 2016), State Hydrological Institute, St. Petersburg, Valdai Branch of the State Hydrological Institute, Valdai;
- «Methods for gauging flow metering in the mode and operational options. Using automated technology "River discharge" for the calculation of the daily water consumption in the preparation of hydrological yearbook» (June 2016) State Hydrological Institute.
1.2.5 Participation in other national and international organizations and programmes

The 5th meeting of the Scientific Steering Committee of the International WMO Data Centre on Hydrology of Lakes and Reservoirs (HYDROLARE) was held in the State Hydrological Institute in 2015, and it determined the Center development direction for 2016-2017. The annual information bulletins of the Centre's activities were prepared in two languages (Russian and English) during the reporting period. With the help of the developed interface on the HYDROLARE site (www.hydrolare.net), information about the levels of lakes in the world, received via satellite altimetry, now is available.

In 2015 it was continued cooperation with the IHP NC NC "Man and Biosphere" (MAB) in the framework of the "Seminar on the role of biosphere reserves in the basins of the great rivers", which was held under the auspices of UNESCO, the European Bureau in Venice. The seminar was attended by the representatives from biosphere reserves in the basins of the Volga river, the Danube, Ebro, Po rivers, representatives of NC and NC IHP MAB.

Most members of the NC of Russia participate in the activities of international organizations:

- Frolov Alexander V., the Chairman of Russian National Committee for the IHP of UNESCO (since 2004), the President for oceanography of the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (since 2009), the Representative of the Russian Federation in the Intergovernmental Council on hydrometeorology of CIS countries (since 2010)
- Asarin Alexander E., member of the National Committee of the International Commission on Large Dams (ICOLD)
- Balonishnikova Zhanna A., member of the International Association of Hydrological Sciences (IAHS)
- Bolgov Mikhail V., member of the National Committee of the International Commission on Large Dams (ICOLD)
- Vasilyev Oleg F., member of the Committee of the Russian Academy of Sciences for system analysis, member of National Committee on theoretical and applied mechanics, member of the International Association on Hydraulic Researches (IAHR) (since 1961, Honorary Member since 2001), member of the International Association of Hydrological Sciences (IAHS), Honorary Member of the Hungarian hydraulic society (1980), Honorary Doctor of engineering sciences of Karlsruhe University (Germany) (1988)
- Kopaliani Zurab D., member of Council of the International research and training center of UNESCO on erosion and sedimentation (IRTCES), Beijing, China, member of Council of the International center of UNESCO on natural water disasters and risk management, Tsukuba, Japan
- Kotlyakov Vladimir M., Chairman of the Russian National Committees for the International geosphere and biosphere programme for Antarctic research.
- Nikanorov Anatoly M., Acting member of the International Engineering Academy, International academy of computer sciences and systems, Ecological Academy of Russia, corresponding member of the Russian Academy of Sciences (since 1997r.), Chairman of the International commission on protection of waters from pollution, the International association of geochemistry, first vice-president of the International commission for quality of waters of the International association of hydrogeological sciences, Honorary professor of Wisconsin University, USA.
- Seliverstova Marina V., chairperson on the Russian side of the joint Russian-Finnish commission for transboundary water use, co-chairperson of the joint Russian-Estonian commission for protection and rational transboundary water use, co-chairperson on the Russian side of the joint Russian-Chinese commission for protection and rational transboundary water use.

1.2.6 Other initiatives

The Caspian Marine Research Institute (CaspMRI) as an organization of Roshydromet participates in the activities of the Coordination Committee for Hydrometeorology and Pollution Monitoring of the Caspian Sea (CaspCom). The Director of CaspMRI S. Monakhov coordinates the activities of CASPAS. In the framework of this project a regional programme of environmental monitoring in the Caspian...
Region has been developed. During the reporting period it was a meeting of participants of the Working Group, which was held in Azerbaijan in 2016.

Within the framework of bilateral agreements continued work between the Institute of Water Problems RAS and the Institute of Geography and Spatial Organization (Polish Republic) (2014-2016). Within the framework of the Agreement are carried out joint research on the topic: "The environmental impact of mountain and plain water reservoirs built on the rivers". In Russia, the object of study is the reservoir of the Upper Volga basin (Verkhnevolszhskiy, Vyshnevolotskaya, Ivankovskoe) in the Republic of Poland – water reservoirs of the Ropy river basin.

Institute of Water Problems RAS carries out work on the project «Model the Earth's natural systems - comparative snow model (Earth System Models - Snow Models Itercomparison Project (ESM-SnowMIP)). The project aims to improve the model estimates of snow dynamics in various regions of the earth's surface and more precise description of the snow, due to the influence of climate change. Compared with the previous projects SnowMIP, in this project a new and enhanced set of experimental data for the evaluation and testing of models are used.

The project "Experimental evaluation of model parameters", executed by Institute of Water Problems RAS together with the USA Laboratory of Physics soil water is aimed at developing strategies for hydrological model parameters. Currently, the processing of the results of recovery of long-term runoff hydrograph at more than 200 USA experimental watersheds on the basis interaction model of the land surface to the atmosphere developed in the Laboratory of Physics soil.

As a part of the UNDP-GEF project «Integrated Natural Resource Management in the Baikal Basin Transboundary Ecosystem» under the contract with the Service of the United Nations Office for Project «Database for modeling and simulation of pollutants transport in the Baikal Basin» during 2013-2014 at the Department of land hydrology of the Moscow State University a system for modeling movement of pollutants in the Selenga River Basin was developed.

1.3 Educational and training courses

1.3.1 Participation in IHP courses (at IHP Centres)
N/A

1.3.2 Organization of specific courses

(see 1.2.4)

1.3.3 Organization of Category II UNESCO IHP Centre
Negotiations are under way between RSHU and the Secretariat for assigning RSHU the status the UNESCO IHP Category II Centre.

1.4 Cooperation with UNESCO-IHE Institute for Water Education
N/A

1.5 Publications – monographs, collected works, manuals and study guides

Monographs


Other Monographs

Textbooks and handbooks
Participation in international scientific meetings
1.6.1 Meetings hosted by the country
More than 40 events.
1.6.2 Participation in meetings abroad
9th EARSel SIG Imaging Spectroscopy workshop, 14-16 априя 2015, Luxemburg, Trier University
International Scientific Conference "150th Anniversary of Jovan Cvijic's both", 2015, Belgrad, Serbia
Workshop on “Parameterization of Lakes in Numerical Weather Prediction and Climate Modelling” 2015r, Portugal
German Geographical Association congress (Deutschen Kongress für Geographie 2015) 2015, Berlin, Gemeny
GSTM-2014, Mass changes over Russia from GRACE and absolute gravimetry. 2014, Potsdam.
IGFS-2014. Mass anomalies and trends over Russia from GRACE. , Shanghai Observatory, 2014. .
Gravity change over Russian rivers basins from GRACE satellites. L'Observatoire Midi-Pyrenees, Toulous, France, 2014.
IGU Regional Conference «Changes, challenges, responsibility”, Krakov, Polonald 2014.
1.7. **Other activities at regional level**

1.7.1. **Liaison and cooperation with organizations and institutes**

Cooperation at regional level in different fields of hydrology is also implemented in the framework of federal programs, RFBR grants and the RAS Presidium programs.

At the level of the CIS member states to ensure environmental safety issues of transboundary waters are solved under the Agreement on basic principles of cooperation in the field of rational use and protection of transboundary sites of CIS countries (1998).

Key provisions of the Agreements of CIS countries, as well as experience in international cross-border activities have created legal and methodological basis of bilateral agreements of the Russian Federation in the field of protection and rational use of transboundary water bodies with Kazakhstan, Belarus, Azerbaijan. In order to implement the provisions of these agreements created intergovernmental commission.

1.7.2. **Completed and ongoing scientific projects (Russia and other countries)**

In 2014-2016 were carried out numerous research projects in the federal program, sectoral and regional programs, programs of the Presidium of Russian Academy of Sciences and Department of Earth Sciences RAS.

In addition, proactive research conducted by Russian and international grant funds.

2. **Future activities**

2.1 **Activities planned until December 2016**

Organization of third meeting of the IHP National Committee of RF.

2.2 **Activities foreseen for 2016-2017**

Further implementation of number of the national scientific and technical projects in hydrology and water resources are being developed in Russia, which are supported by the NC of Russia and fully agree with purposes and objectives of the IHP-VIII. These projects are implementing by different agencies and organizations and covering the whole territory of the country or its vast physiographic and economic regions:

- Implementation of the Union State programme “Improvement of the System of Providing Information to the Population and Industries of Russia and Belarus on Existing and Projected Climatic Conditions, the State and Pollution of the Environment”;
- Multipurpose projects implemented by the organizations within RosVodResursy on development of outlook, principles and practice for more effective management of water resources and water ecosystems in transboundary river basins.

2.3 **Activities envisaged in the long term**

These activities will be considered at the meetings of NC RF in 2016 in the course of preparation of research programmes in hydrology and water resources in different agencies and organizations of Russia for 2016-2018, taking account of the main tasks of the IHP-YIII.