

## **Russian Federation**

Brief national report about the participation in the International Decade for Natural Disaster Reduction (IDNDR)

### **Section A: Organizational Basis and Prerequisites of Participation of the Russian Federation of IDNDR**

#### 1. The structure of the National Committee of the Russian Federation on IDNDR

The National Commission of the Russian Federation on IDNDR was created by a Government decree NO. 26 on 15 Jan 93 to co-ordinate the participation of ministries and organizations in the International Decade for the reduction of danger of acts of nature. The Commission is composed of 26 representatives of ministries and different organizations concerned. There are two representatives from the Ministry of Civil Defence, Emergency Situations and Liquidation of Consequences of Acts of Nature. The Ministries listed below have one representative:

- Ministry of foreign affairs
- Ministries of protection of environments and natural resources
- Ministry of agriculture
- Ministries of sciences and technical policy
- Ministry of railroads
- Ministry of communications
- Ministry of internal affairs
- Ministry of health
- State Committee on architecture and constructions
- State Committee of sanitary and epidemiological supervision
- Committee on fishery
- Federal service on meteorology and monitoring of environment
- Federal mining and industrial supervision
- Federal service of forestation
- Russian space agency
- Federal supervision of Russia on nuclear and radiology safety
- Russian academy of sciences
- Russian academy of medical sciences
- Russian academy of agricultural sciences
- Mass media
- Other organizations

#### 2. Internal Structure of the National Commission

The Committee is headed by Mr. S. Shoigu, Minister of the Ministry of Emergency Situations of Russia. The personal composition of the Committee is determined by a special decree of the Government. The tasks, functions, duties and responsibilities of the members are also specified.

For operational questions there is a presidium of the Committee formed of 11 persons, i.e., Chairman, his 6 deputies and heads of sub-commissions.

There are seven subcommissions:

1. Programme of participation of the RF in IDNDR (15 persons) with a section on problems of IDNDR (17 persons);
2. Fundamental Scientific Research (23 persons);
3. Applied Scientific Research (19 person);
4. Preventive Measures (14 person);
5. Measures of Emergency Relief (21 persons);
6. Systems of Early Warning and Distribution of Information about Natural Disasters (18 person);
7. Standards and public regulations (12 persons).

Sub-commission activities are regulated by specific acts and rules.

### 3. Major Natural Hazards in Russia

Disaster Type	Location	Number Population Affected
Floods	Western Russian Rivers, Siberia, Ural and Far East	Approx. 9.0 million
Earthquakes	Nothern Caucasases, Southern Siberia, Area of Baikal Lake, Kamchatka, Kuril Islands	Approx. 12,5 million
Uragans Wind storms	European part of the Volga Valley, Ural, Siberia, Far East, Sakhalin, Kamchatka	Approx. 65 million
Landslides Mudflows Slope collapses	Kamchatka Sakhalin Kuril Islands	Approx. 3.0 million
Tsunami	Kamchatka Sakhalin Kuril Islands	Approx. 0.4 million

Desertification	Southwestern Russia, the Volga Valley, Southern Ural and Siberia	Approx. 40 million
Avalanches	Northern Caucasus, Khibin Mountains, Altay, Southern Ural and Siberia	Approx. 20 million
Forest and Peat Fire	35% of the territory	Approx. 20 million

4. Natural Disasters which Occurred in 1993

Type of Disaster	Location	Affected population People killed	Material damage/loss Billion Rubles
Earthquakes (Total 35)	Kamchatka Kabardino-Balkaria Kuril islands Irkutsk Province Daguestan		
Floods (Total 33) Rouring rains (Total 42)	Sverdlovsk Province Buriatia Altay South Ural Sakhalin Krasnoyarsk Province Omsk Province	15 people	53 58 15.5 5.5 2.5 0.747 5
Landslides (Total 19)	Daguestan Karachev- Cherkesk,	3 Deaths	0.12
Avalanches (Total 6)	Kabardino-Balkaria	59 Deaths	1.2

Uragans Wind storms (Total 49)	Kaliningrad Province	2 Deaths	2
	Pacific Coast	5 Deaths	40
	Krasnodar Province		14
	Buriatia Perm Province		1,5
	Mari, El Khabarovsk Province		0.82 0..035
	Sverdlovsk province		0.04 0.08
Forest fire	Stavropol province, Irkutsk province, Chita province,		0.01
			0.0623
			0.01

#### 5. National Socio-Economic Conditions

Population:	150 million
Gross National Product:	Rubles 90,000 billion
Per capita Income:	Rubles 48.9 thousand

#### 6. Co-operation with Other Countries in the Field of Reduction of Danger of Natural Disasters

In January 1993, the countries of the CIS signed an Agreement of Co-operation in the field of prevention and mitigation of consequences of emergency situations caused by natural and industrial disasters. This agreement provides the principles of co-operation and the mechanism of decision making in case of major disasters.

Agreed in principle, bi-lateral agreements have been worked out for co-operation and mutual aid between Russia and the Republics of Byelorussia, Kazakhstan and Georgia. Similar agreements are being prepared by the Republic of Kyrgyzstan, Turkmenistan, Uzbekistan, Armenia and Azerbaijan. Russia takes part in rendering humanitarian assistance to other countries. During 1992-1993, such operations were carried out in Kyrgyzstan, Tadjikistan, South Osetia, in the area of conflict between Georgia and Abkhazia, in addition to Turkey, Afghanistan, Nicaragua, Chernogoria, Albania, Cuba, and Yugoslavia. Russia, having competent specialists, resources and technology, provides assessments and expertise in the field of reduction of disaster vulnerability.

## 7. International Assistance

Russia is interested in obtaining the following:

- The development of a network of monitoring and control, the creation of a new means of monitoring the preparation of a list of hazards, maps and other data on hazards zoning;
- The preparation of co-ordinated plans of action, as well as standards, rules and procedures for disaster and relief management focusing on the improvement of disaster management, individual and collective protection;
- Scientific and technical co-operation, information exchange in forecasting and modelling of natural hazards, use of independent international expertise for disaster assessment;
- Training and methodical materials for a national system of educating the population, specialists and high-level personnel for actions in emergency situations;
- The use of foreign experience in the preparation of laws, public regulations and standards for the Russian Federation in the field of natural disaster mitigation.

### **Section B: Perspectives and Current Activities within the Framework of IDNDR**

#### 1. Steps Undertaken for the Achievement of the Three Main Objectives of the Decade

##### a) Integrated assessment of the risk of natural disasters at the national level

The wide spectrum of natural disasters in Russia predetermines the necessity to work in various directions. The National Commission attaches specific attention to the problem of earthquakes as the most destructive and dangerous and of which the Kamchatka Peninsula area is most seismic-prone. Of repeated frequency are damaging floods. There is also a high probability of drought, resulting in significant material damage to the national economy.

The annual material damage inflicted to the economy by floods, drought, wind storms, and avalanches totals Rubles 3-4 billion (1990 figure) and in other years this figure has reached Rubles 10-15 billion.

##### b) Plans to reduce disaster risk at the national and local levels

The National Commission has prepared Programmes for the participation of the Russian Federation in the Decade. This will form a basis for annual planning of practical measures, and research and development work, and ensure progress

towards natural disaster mitigation.

Concrete themes of this work, which support the tasks and objectives of the Decade and are included in the National Scientific and Technical Programmes are: *Safety of the Population and Economic Infrastructure with a View of Natural Risks and Industrial Catastrophes, Global Climate Changes, Global Changes, Complex Research of World Ocean* in the federal programme and *Ecological Safety of Russia*, as well as other programmes. Russia has a system of planning and organizing the mitigation of emergency situations. It covers all levels of state management and local self-management. It is co-ordinated in terms of schedule, subcontractors and funding and includes:

- Plans for realizing sectoral and regional federal programmes,
- Sectoral plans for scientific, technical and development work
- Plans for international co-operation

This set of plans determines the activities of Russia in IDNDR.

c) System of warning of natural disasters

Taking into account the importance of managing emergency situations caused by technical failures, accidents, natural and ecological disasters, the Government of the Russian Federation promulgated a decree 18 April 1992, No. 26, concerning *the creation of the Russian system of warning and actions in emergency situations* (RSWAES). A major objective of this system is to improve co-ordination of governmental activity and organizations concerned with emergency management.

The system is headed by the Ministry of Civil Defence and Emergency Situations (Emercom). This has given the work national importance and places it at the level of state policy. Territorial, sectoral and functional sub-systems formed the national RSWAES. Experience obtained has confirmed the effectiveness of this arrangement. Several inter-sectoral commissions have been created in the Emercom i.e., Commission of Floods, Forest Fire-fighting, Mitigation and Emergency Relief in the Seas.

To ensure the effective protection of the population in emergency situations, an automated centralized system of emergency warning (ACSEW) has been upgraded. ACSEW is an integral part of RSWAES and represents a set of warning and communications material, (TV and radio). The existing ACSEW provides notification of 70-75% of the population and embraces federal and local units of disaster management forces.

Centres and units of notification transmit information based on an assessment and analysis of disaster information obtained from data received from the monitoring and control units. ACSEW has the necessary technical facilities to transmit information and warning to CIS countries. It is believed that in the process of developing ACSEW, technical possibilities exist for co-operation with other global systems of warning.

## 2. Resources Available for Natural Disaster Mitigation

### a) Time of reaction

Depending on local conditions, reaction time is determined by the Ministry of Emergencies of Russia. The order and reaction time of governmental bodies at all levels is determined by an order of the Ministry of Emergencies of Russia.

### b) Participating organizations

The Ministry of Emergencies of Russia, state management and local self-administrations of the Russian Federation at all levels, and any other organization concerned with the maintenance of safety and protection of population.

### c) Execution of relief and rescue work

The following organizations provide disaster relief and disaster mitigation:

- Militarised and not-militarised fire-services. Relief, reconstruction and rehabilitation services of different ministries and organizations
- Medical emergency organizations, veterinary and plants protection service
- Units and sub-divisions of the Fire service. Relief work of the Ministry of Internal Affairs
- Civil Defence Forces of the RF, as well as territorial and organizational divisions of the Civil Defence
- Units and divisions of forces of chemical protection and engineering forces prepared for disaster relief and mitigation
- Search and rescue forces of the Military Fleet of RF, Ministry of transportation of the RF and other ministries
- Forces services and specialists of the Association of relief and rescue forces of the RF

### d) Sources of financing

Disaster prevention and disaster relief activities are financed from the federal budget, as well as from other extra-budgetary sources.

## 3. Legislation in the Field of Natural Disaster Mitigation

In Russia, rules and procedures concerning emergency activities are provided under the headings of laws concerning "Security", "Legal Aspects of Emergency Situations", "State Enterprises (associations)", etc. Current legislation concerning disaster

mitigation is issued as directives, i.e. directives of the President of the RF concerning "Civil Defence", decrees of the Government of the RF concerning "the creation of a Russian system of disaster prevention and actions in emergency situations", or "the improvement of departmental services of rescue and relief in emergencies", etc.

Legislation has been established to protect population and territory from emergency situations, relief and rescue services, the status of the rescuer, material resources for emergency situation management, safety in Industry, and transportation of hazardous materials.

4. Activities for the reduction of danger of natural disasters

a) Zoning and risk assessment

1. Project title: A cartographical method of land zoning in function of the degree of risk of occurrence of natural emergency.

Status: This research work is in the planning stage at the Ministry of Emergency situations of Russia.

Participating Organizations: The Russian Research Institute on Problems of Civil Protection and Emergency Situations, Centre of Research of Natural Dangers and Disasters.

Budget and Sources of Financing: The project budget Rbl 100 thousand (in prices of 1992)

The Project Co-ordinator: The Ministry of Emergency Situations of Russia

Address: 103012, Moscow, Teatralny proezd 3. Tel: (095)925-0750, fax: (095) 924-1946.

2. Project title: the Working-out of a complex assessment of dangerous natural and man-made catastrophes at different levels of decision making.

The status: National project

Participating Organizations: Engineer-Geological and Geo-ecological Scientific Centre of the Russian Academy of Sciences, Joint Institute of Physics of Earth of the Russian Academy of Sciences, Institute of Physics of Atmosphere of the Russian Academy of Sciences, Russian State Institute of Geology (VSEGINGEO), Lomonosov Moscow State University, Scientific and Research Institute of Engineering Research in Construction, Institute of Oceanology of the Russian Academy of Sciences, Research Centre of the Federal Service of Russia on Hydrometeorology and Monitoring of Environment.

Sources of Financing: The federal budget

The Project Co-ordinator: Academician V. Osipov, Engineer-Geological and Geoecological Scientific Centre of RAS.

Address: 101000 Moscow, a/Ja 145, Ulansky per. 13, /2 Tel: (095) 923-3111, fax: ( 095 ) 923-1886.



3. Project title: Working-out of a conception of risk maps and techniques for land-use zoning of Russia taking into account natural and industrial catastrophes.

The status: Scientific and research work of the programme entitled "Safety"

Participating Organizations: IGC of the RAS, Institute of Physics of Earth of the RAS, International Institute of Earthquake Forecast and Mathematical Geophysics of the Russian Academy of Sciences, Institute of Geography of the Russian Academy of Sciences

The sources of financing: The federal budget

The Project Co-ordinator: The Ministry of Science and Technical Policy of the Russian Federation

Address: 103905, GCP Moscow, Tverskaja str. 11. Tel: (095) 229-2038.

4. Project title: Working-out of tsunami disaster maps in the Kuril-Kamchatka area. Analysis of tsunami precursors.

The status: Scientific research work of programme entitled "Safety".

Participating Organizations: Institute of Water Problems of the RAS, Roshydromettsentre, Institute of Oceanology Shershov, Institute of High Temperature, Institute of Programme Systems of the RAS, Moscow Institute of Civil Engineering.

Sources of Financing: The federal budget

The project Coordinator: Ministry of Science

Address: 103905, GSP Moscow, Tverskaya str. 11, Tel: (095) 229 2038.

5. Project title: Atlas of natural hydrometeorological phenomena. Maps of mudflows and avalanches on the territory of the RF

The status: Scientific and research work on hydrometeorology and monitoring of environment (Roshydromet)

Participating Organizations: Voyeykov Main Geophysical Observatory of the Roshydromet, State Hydrological Institute of Roshydromet, Scientific-Industrial Centre "Antistikhia"

Budget and Sources of Financing: Rbls 10 million a year from the federal budget.

The Project Co-ordinator: Voyeykov Main Geophysical Observatory

Address: 194018 Sankt-Peterburg, Karbyshev str.7, Tel: (812)247 4390

- b) Monitoring, forecasting and warning

6. Project title: Working-out of scientific methodological basis of assessment of risk of catastrophical hydrological and atmospheric processes (floods, tsunamis, hurricanes, typhoons, smogs, thunderballs etc.). Justification of requirements for the creation of a homogenous state system of early warning and forecasting of natural hydrological catastrophes

The status: National project

Participating Organizations: Institute of Physics of Atmosphere of the RAS, Institute of Water Problems of the RAS, Shirshov Institute of Oceanology of the RAS, Roshydrometsentre

Sources of Financing: The federal budget

The Project Co-ordinator: Academician G. Golitsyn, Institute of Physics of Atmosphere of the RAS

Address: 109017 Moscow, Pyzhevsky per. 3, Telex: (095) 207-293 ASTRON, Fax: (095) 292 6511

7. Project title: Development and Improvement of methods of automated short-term forecast of dangerous and natural weather phenomena taking into account regional specificity

The status: Scientific-research work of a plan of Roshydromet

Participating Organizations: Roshydrometsentre, Voyeykov Main Geophysical Observatory, Far-East Hydrometeorological Institute of Roshydromet, Scientific-operational Association "Planet"

Budget and Sources of Financing: Rbl 6 million, from the Federal budget

The Project Co-ordinator: Russian Scientific and Research Hydrometeorological Centre

Address: 123242 Moscow, Bol. Predtechensky per. 9/13 Tel: (095) 252 3448.

8. Project title: Comprehensive study of tropical cyclons, development of methods of forecasting

The status: Scientific and research work of the plan of Roshydromet

Participating Organizations: Scientific and Industrial Association "Typhoon", Roshydrometsentre, Far-East Hydrometeorological Institute of Roshydromet, Russian Scientific and Research Institute of Hydrometeorological Information, World Data Centre

Budget and Sources of Financing: Rbl 9 million from the federal budget

The Project Co-ordinator: Association "Typhoon"

Address: 249020, Kaluga Province, Obninsk, pr. Lenin, 82, Tel: (095) 546 3900.

9. Project title: Development of technical means of monitoring natural, technical systems and pilot hardware specimen for engineering, technical geophysical and space monitoring

The status: National project

Participating Organizations: Institute of Physics of Earth of the RAS, Engineering Geological and Geocological Scientific Centre of the RAS, Jouk Water Resource Research and Development Institute

Sources of Financing: The federal budget

The Project Co-ordinator: Alternative member of the RAS A. Nikolayev, Institute of Physics of Earth of the RAS

Address: 123810 Moscow, Bol. Gruzinskaya 10 Tel: (095) 252 0726

c) Measures of preparedness and population protection

10. Project title: Programme of population protection in cases of natural and man-made disasters for 1994-1996

The status: Federal programme

Participating Organizations: Ministry of Health, State Committee of Sanitary and Epidemiological Supervision, Ministry of Economy, Ministry of Finance

Budget and Sources of Financing: Rble 4 billion from the federal budget.

The Project Co-ordinator: Ministry of Emergency Situations of Russia

Address: 03012, Moscow, Teatralny proezd 3, Tel:(095) 449 9504

11. Project title: Organization of medical emergency service 1994-1995

The status: Federal programme

Participating Organizations: Ministry of Emergency of the RF, Ministry of Economy, Ministry of Finance, Main Medical Military Board of the Ministry of Defence of the RF

Sources of Financing: The federal budget

The Project Co-ordinator: Ministry of Health

Address: 123182, Moscow, Stcukinskaya str. 5, Tel: (095) 190 6054

12. Project title:

The status: Programme of development of state sanitary epidemiological service of the RF

Participating Organizations: State Committee of Sanitary Epidemiological Supervision, Ministry of Economy, Ministry of finance, Ministry of Health, Ministry of Emergencies

Budget and Sources of Financing: Rbls 50 billion from the federal budget

The Project Co-ordinator: State Committee of Sanitary and Epidemiological Supervision

Address: 101474 Moscow, Vadkovsky per. 18/20 Tel: (095) 973 1717

d) Land-use and risk assessment

13. Project title: Construction in areas of extremal conditions and engineering protection of the territory

The status: Programme of the State Committee on Architecture and Construction of the RF

Participating Organizations: Project Institute of Engineering Construction, Central Scientific Research Institute of Seismological Construction, Central Scientific and Research Institute of Mater Planning, Kamchatka Scientific and Technical Centre on Seismological Construction and Engineering Protection

from Natural Disasters

Budget and Sources of Financing: Rbls 81 million from the federal budget.

The Project Co-ordinator: State Committee on Architecture and Construction

Address:103 828, GSP, Moscow, Georgievsky per. 2. Tel: (095) 292 6125

14. Project title: Engineering protection of cities and human settlements from dangerous natural and technogenic phenomena

The status: Federal programme

Participating Organizations: Kamchatka Scientific and Technical Centre on Seismological Construction and Engineering Protection from Natural Disasters, State Scientific and Research and Pilot Design Institute of Complex Problems of Building Structures

Sources of Financing: The federal budget

The Project Co-ordinator: State Committee on Architecture and Construction

Address: 103828, GSP Moscow, Georgievsky per.2. Tel:(095)292 6125

- e) Public training and information

15. Project title: Population training, preparation of specialists for national management of the administration of the RF and emergency relief forces for actions in emergency situations

The status: Federal programme

Participating Organizations: Ministry of Emergency Situations, Ministry of Education, Ministry of Science and Technical Policy, Ministry of Internal Affairs, Ministry of Energy, Ministry of Atomic Power, Ministry of Health, Ministry of Publication and Information, Ministry of Finance, Ministry of Protection of Environment, Ministry of Transport, State Committee on High Education, Federal Supervision for Nuclear and Radiological Safety, Federal Mining and Industrial Supervision of the RF, National Scientific and Research Institute on Civil Defence and Emergency Situations, Academy of Civil Protection, National State Radio and TV Broadcasting Company "Ostankino"

Budget and Sources of Financing: Rbls 30.5 billion from federal budget

The Project Co-ordinator: Ministry of Emergencies

Address:103012, Moscow, Teatralny proezd 3, Tel:(095) 449 9508

16. Project title: Training of railroad staff for rendering emergency medical assistance and actions in emergency situations

The status: Sectoral programme

Participating Organizations: National Scientific and Research Institute of Hygiene on Railroads, Moscow State University of Ways of Communications

Budget and Sources of Financing: Rbls 4,5 billion, extrabudgetary funds of the Ministry of Railroad Communication

The Project Co-ordinator: Ministry of Railroad Communication  
Address: 107174 Moscow, Novo-Basmanaya str. 2, Tel: (095) 262 3048

5. Plans for Fully Achieving the Objectives of the Decade by the end of 1999

17. Project title: Programme of participation of the RF in the IDNDR

The status: Intersectorial programme

Participating Organizations: Federal Government Bodies, Academies of Sciences, High Education Institutes and other organizations

Sources of Financing: The federal budget

The Project Co-ordinator: National Commission of the RF on IDNDR

Address: 103012 Moscow, Teatralny proezd 3, Tel: 926 3861

18. Project title: Dynamics of the lithosphere as a non-linear system and forecast of earthquakes

The status: International project of International Geodesical and Geophysical Union

Participating Organizations: Roma University (Italy), International Institute of Theory of Forecast and Mathematical Geophysics of the RAS, Institute of Applied Physics of the RAS, California University (USA)

Budget and Sources of Financing:

Project Co-ordinator: Academician V. Keylis-Borok, International Institute of Theory of Forecast of Earthquakes and Mathematical Geophysics of the RAS

Address: 113556 Moscow, Varshavskoye sh 79, build. 2 tel: 110 7795

The following actions are planned in the framework of state, federal, inter-sectorial and sectorial programmes until 2000:

- The adequate analysis of environmental phenomena aimed at obtaining reliable data for forecast models and environmental changes on earth and sea. Assessment of former natural disasters and the decision making process required for meeting changes at the national, regional and local levels.
- Restructuration of environmental protection administration to formulate new economic law systems, highly compatible with those of the international community for integration. This state policy will be realized by introducing a set of laws, regulation acts, and normative documents for new structures of the national administration and management.
- Apart from this, economical structures are being created in the country that will ensure sustainable development of the national economy in conditions of world climate change.
- The implementation of multi-lateral agreements (including CIS countries) which outline responsibilities for social, political, scientific-technical and economical co-operation in the interest of disaster mitigation. Active participation in

international fora and information exchange will help accomplish tasks regarding international agreements and conventions (in particular 44 agreements and 24 conventions concluded by now). Created within the national scientific and technical plan entitled "Safety", an International Institute of Safety of Complex Technical Systems, organized on the principles of national laboratories, will actively co-ordinate scientific work of various countries for problems of safety problems and to increase the cost effectiveness of available scientific and technical potential.

- Creation of data banks available to a wide circle of researchers, population and international community. This will contribute to the development of methods and systems of economical analysis and technosphere including space monitoring.

Annual publications in Russia:

- Summarized informative issues such as the State Report on the Environment in the RF, State Report on the Safety and Protection from Natural and Man-made Catastrophes, Atlases and maps of natural hazards, etc.
- Books, monographs, news-letters, proceedings, video-films, translated into Russian such as "STOP-DISASTERS", as well as national materials such as "Problems of Safety in Emergency Situations", Newsletters of the RAS "Science and Findings", and numerous publications from Ministries and other organizations.
- The implementation of major phases of federal, sectoral and state programmes.

The following will in general be finalized: the working-out of a basis of theory of natural disasters and the creation of a single national standard for technical and public regulations.

- High level preparedness to fight and mitigate disasters achieved through activities carried out by a created Russian System of Warning and Actions in Emergency Situations (RSWAES), an automated system of the management (ASM).

A State system of training the forces of the RSWAES and the population in emergency actions will be created. This system is planned at different levels depending on the group trained. This will taken into consideration the new concept that population must be protection at all stages of the emergency: prevention, fighting, relief and rehabilitation.

- A series of pilot equipment and materials for geophysical monitoring of natural and technogenic phenomena will be developed to protect population.
- Solving problems of safety in th RF will be achieved on the basis of a specially

prepared manual entitled "Manual for the Analysis and Control Risk of Disasters in Industrial Areas" and other data bank information about emergencies and procedures to control these.

### **Section C: Co-operation**

#### 1. Major Publications on IDNDR Subjects:

- O. Elo, To Reduce Risk of Disasters - the Task of UN Launched International Decade. Magazine of the Ministry of Emergency Situations of the RF "Civil Protection" NO. 5a, Moscow, 1993.
- Y.S. Tyupkin, International Decade on Natural Disaster Reduction. Magazine "Hydrotechnical Engineering", Moscow NO. 2, 1991.
- C.M. Miagkov, Problems of Geography of a Natural Risk. Proceedings of the VINITI, "Problems of Safety in Emergency Situations", Issue 4, Moscow, 1991.
- N.A. Yasmanov. O.I. Ivanov, Natural Disasters: genesis, topology, classification. Proceedings of VINITI "Problems of Safety in Emergency Situations". Issue 6, Moscow 1991.
- Brief Data about Emergency Technogenic and Anthropogenic Situations. Issue 1, 2, Civil Defence, Moscow, 1991.
- Brief Guidance on Potential Dangers and Occurrence in Russia of Emergency Technogenic and Ecological Situations, GKCHS, Moscow 1993.
- K.V Frolov, B.G. Saltykov, S.K. Shoigu, Solving Problems of Safety in the Framework of Federal Technological Program. Proceedings of VINITI "Problems of Safety in Emergency Situations", Issue 1, Moscow, 1993.
- N.I. Burdakov E.V. Gratsiansky N.A. Makhutov State Scientific-Technical Programme Safety of Population and Economic Fabrics in Face of Risk of Natural and Technogenic Catastrophes. VINITI "Problems of Safety in Emergency Situations" Issue 1, Moscow, 1993.
- A.I. Iordysh, N.G. Javvoronkova, O.P. Supataev, Conceptions of a Legislative for Prevention and Mitigation of Emergency Situations and their Consequences. VINITI "Problems of Safety in Emergency Situations", issue 1, Moscow, 1993
- M.A. Shakhramanian, V.I. Larionov, G.M. Nigmatov, A.I. Ovsianik, Probabilistic Methodology of Assessment of Consequences of Earthquakes and Necessary Means and Resources for Carrying Out Relief and other Emergency Work. VINITI "Problems of Safety in Emergency Situations", Issue 4, Moscow, 1993.
- B.I. Chernichko, Lessons of the Liquidation of Consequences of the Spitak

Earthquake. VINITI "Problems of Safety in Emergency Situations" issue 4, Moscow, 1993.

- L.O. Pokhmelnikh, "A System of Meteorological Protection of Cities and Agricultural Areas" Magazine of GKChS of the RF N02 Moscow, 1993.
  - Specificity of Psychology, Diagnosis, and Provision of Urgent Medical Care to Population Suffering from Natural Disasters and other Catastrophes, Edited by G.A. Riabov. Scientific and Practical Centre, "Medicine of Catastrophes", Moscow, 1993.
  - Catastrophe and Children, edited by academician Y.E. Isakov, the Russian academy of medical sciences and dr B.N. Varava. Scientific and practical centre "Medicine of catastrophes", Moscow, 1993
  - A. Bedritsky, Meteorological and Hydrological disasters in Russia and Tackling the Problem of Reducing their Danger. "Stop Disasters", No 13, May-June 1993.
  - Information Paper "Regional Working Meeting on Problems of Reducing Natural Disasters in CIS Countries (Kyrgyz Republic, Bishkek, 13-18 December 1993). GKChS Russia, Moscow, 1993.
2. Meetings and Conferences in the Framework of IDNDR, Planned or Implemented
- All-Union Conference "Catastrophes and Mankind", Suzdal, February 1991.
  - International Project Meeting "Instability of Large Populated Territories", Moscow, March 1993.
  - All-Russian Scientific and Practical Conference "Role of a Russian System of Warning and Actions in Emergency Situations in the Formation of a Safe Environment, Prevention and Protection from Catastrophes", Suzdal, May 1993.
  - Second International Conference of Countries of Central, Eastern and South-Eastern Europe on Co-operation in Civil Defence and Protection from Catastrophes, Moscow, May 1993 .
  - Meeting of a Working Group of an IDNDR Commission on International Association and Physics of Internal Structure of Earth, "Assessment of economic losses from Earthquakes". Moscow, October 1993.
  - Meeting on International Project "Assessment of Global Seismic Risk", Moscow, October 1993 .
  - Regional Working Meeting on Problems of the Reduction of Danger of Natural Disasters in CIS Countries, Bishkek, December 1993.



- Regional Working Meeting on Problems of the rRduction of Danger of Natural Disasters in CIS Countries, (Planned in Almaty, March 1994).
3. Co-operation with Other Countries, Concerning IDNDR Tasks and Objectives
- In 1992, the CIS Countries formed an Interstate Council on Meteorology, establishing a framework for co-operation which relates to objectives and tasks of the IDNDR. On the basis of bilateral agreements, concluded by Russia with other CIS countries, an exchange of information concerning natural disasters which is taking place in neighbouring territories. In January 1993, a new agreement between 9 countries of the CIS on co-operation in the field of prevention and mitigation caused by natural and technogenic disasters emergency situations was concluded. Principles of co-operation were laid down in the agreement along with mechnisms for decision making in cases of major ctastrophes.
  - GKChS of Russia actively develop co-operation with specialized organizations of the United Nations, i.e. Department for Humanitarian Affairs, IDNDR Secretariat, UNHCR, etc.
  - By a special decision of the Government of the RF, the Ministry of Emergency Situation of the RF is the lead agency in co-operating with DHA. Draft agreements have also been prepared between the RF and the Centre for Urgent Ecological assistance concerning co-operation, prevention, relief, exchange of information regarding emergency situations, rendering services by the State Committee in the field of emergency relief, and management on a mutual basis.

#### **Section D: Assessment**

The Russian National Programme responds fully to the purposes and tasks of the IDNDR. State, federal, intersectorial and local scientific and technical programmes administer research on priority problems of disaster mitigation, based on the RSWER scientific basis of legal, economic and social regulation of the economy.

1. General assessment of programmes on reducing natural disaster risks
  - To create a Federal Project for the development of technological, legal and social aspects of national policy in the field of disaster management and design of engineering structures to withstand large-scale natural and technogenic disasters.
  - To be able to predict climate change and changes in environment which would lead to significant consequences for the economy.
  - To develop preconditions for the creation of public regulations, ensuring

reduction of negative effects of natural phenomena as well as the protection of population in regions of ecological risk.

- To create systems of detection and warning the population about geological, hydrometeorological, climatic and other disasters.
- To receive scientific, normative, historical, technological and other information on disaster risks and the organization of a system of early warning, emergency reaction, etc. corresponding to tasks and objectives of the IDNDR and interests of the RF.
- To create preconditions for reducing by two-thirds the amount of loss inflicted by natural and technological disasters.

## 2. Conclusions

The National Committee of the Russian Federation is quite pleased with the results of the first 3 years of the Decade. Organizational questions were solved at the national and international levels, and a base established from which the goals of the IDNDR can be accomplished. For the last few years, the major activities in the Russian Federation are as follows:

- Global Forum for the Protection of Environment and Survival Development, Moscow, 1990, 120 countries participated.
- International Training Seminar of UNDRO with participation of 23 countries entitled "Strategic Aspects of Disaster Management and Preparedness", Moscow, October 1991.
- Exhibition on the "Protection of Population in Emergency Situations" Moscow, 1991.
- International Conference on Co-operation in the Field of Civil Defence and Protection from Disasters, Moscow, 1993, (with participation of 22 countries).
- Creation of a uniform state system on warning and actions in emergency situations.
- Development of a series of scientific and research work in the framework of the State programme.

All the above have increased preparedness and protection of the population from natural disasters. At the same time we believe that in the second half of the Decade's future work should more effectively be carried out on the following directions:

- An exchange of information about the activities of IDNDR National Committees.
- Development in the framework of the UN an international mechanism for the

effectively fighting against natural disasters.

- Establishment of a permanent regional training centre for personnel with highest qualifications in the field of disaster mitigation and management.