



**VII INTERNATIONAL FORUM  
«ARCTIC: TODAY AND THE FUTURE»**

PROJECT\*

**PROGRAMME  
OF THE FORUM**

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# DAY 1

## DECEMBER 4, 2017

Project 28.11.2017

### "REFERENCE ZONES: REGIONAL MODELS AND THE ROLE OF THE STATE"

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December, 4

10.00-12.00

#### PLENARY SESSION

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Hall 3

In 2017 the Russian Government approved a new version of the state program "Social and Economic Development of the Arctic Zone of the Russian Federation" and also a draft federal law "On Supporting Development Zones in the Arctic Zone of the Russian Federation" is under development. It is assumed that the main mechanism for the development of the Arctic region will be the support zones, which envisage the development of the territory as an integral project on the principle of ensuring the interconnection of all sectoral activities at the planning, goal-setting, financing and realization stages. Implementation of pilot projects for the direct creation of support zones is scheduled for 2018-2020, and their operation for 2021-2025.

Within the framework of the plenary session, it is planned to discuss the readiness of the Arctic regions to launch and operate the reference zones, as well as coordinate the activities of federal and regional authorities in this process.

#### Issues for discussion:

- ✦ Presentation of the project of the Kola support zone
- ✦ Presentation of the project of the Archangelsk support zone
- ✦ Presentation of the project of the Nenets support zone
- ✦ Presentation of the project of the Yamalo-Nenets support zone
- ✦ Presentation of the project of the Vorkuta support zone
- ✦ Presentation of the project of the Taimyr-Turukhansk support zone
- ✦ Presentation of the project of the North Yakutia support zone
- ✦ Presentation of the project of the Chukotka support zone
- ✦ Prospects for the creation support zone in the Republic of Karelia

#### Disputants:

<b>EGOR BORISOV</b>	Head of the Republic of Sakha (Yakutia)
<b>MARINA KOVTUN</b>	Governor of the Murmansk Region
<b>ROMAN KOPIN</b>	Governor of the Chukotka Autonomous District
<b>IGOR ORLOV</b>	Governor of Arkhangelsk Region
<b>ALEKSANDR USS</b>	Acting Governor of Krasnoyarsk Region
<b>ALEKSANDR TSYBULSKII</b>	Acting Governor of the Nenets Autonomous District
<b>SERGEI GAPLIKOV</b>	Governor of the Republic of Komi
<b>ARTUR PARFENCHIKOV</b>	Head of the Republic of Karelia

# "FEATURES OF CONSTRUCTION IN POLAR CONDITIONS"

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December, 4

12.30-14.00

## WORKING SESSION

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Hall H22-H23

Climate change, the melting of permafrost soils and the impact of man-made factors adversely affect the infrastructure and stability of the foundations of buildings and structures in the Far North. For this reason, the Ministry of Construction of Russia plans to develop new regulations for construction in the Arctic zone of the Russian Federation by 2020.

The working session will be devoted to discussing the reasons for the degradation of the permafrost zone, the most promising solutions in the field of construction in permafrost conditions, the development and implementation of new construction materials, and the regulation of their application.

### Issues for discussion:

- ◆ Features of construction and operation of buildings and structures, and also transport infrastructure in the Arctic
- ◆ Application of new building materials with high performance properties
- ◆ Introduction of new rules for the operation of buildings in permafrost areas
- ◆ Global warming and permafrost thawing: risk assessment for construction sites

**Moderator:** IGOR SHPEKTOR, President of the Union of Arctic Circle and High North Towns, Chairman of the Commission on Housing and Public Utilities, Construction and Roads of the Civic Chamber of the Russian Federation

### Disputants:

<b>ELENA SIERRA*</b>	Deputy Minister of Construction, Housing and Utilities of the Russian Federation
<b>ALIGIUSHAD KERIMOV</b>	Director of the Science and Research of Permafrost Center "EcoFundament"
<b>M. RYBIN</b>	Advisor of Office on Building Defense Objects of Construction Department of the Ministry of Defence of the Russian Federation
<b>ANDREI ALEKSEEV</b>	Head of the Mechanics of Frozen Soil and Foundation Analysis Laboratory of N.M. Gersevanov Research Institute of Bases and Underground Structures (NIIOSP) of JSC Research Center of Construction
<b>IURII ZAKHARINSKII</b>	Acting Deputy Chairman of the Government of the Krasnoyarsk Region
<b>ALEKSANDR PESTRIAKOV</b>	Chairman of the Norilsk City Council
<b>VLADIMIR PROKOPEV</b>	Chairman of the Standing Committee on Land Matters, Natural Resources and Ecology of the State Assembly (Il Tumen) of the Sakha Yakutia Republic
<b>VLADIMIR KONUSEVICH</b>	Head of Building Projects Department of the JSC "Nilgrafit"
<b>SERGEI AMELCHUGOV</b>	FSAEI HE Siberian Federal University, School of Engineering and Construction

# "ELIMINATION OF ACCUMULATED ENVIRONMENTAL DAMAGE IN THE ARCTIC: ON THE WAY OF BUSINESS AND GOVERNMENT COOPERATION"

December, 4

12.30-14.00

Hall 4

## PANEL SESSION

During the years of human activity, the Arctic has undergone a strong anthropogenic impact. At present, 102 objects of accumulated harm to the environment have been identified on the territory of the Arctic zone. The problem of hazardous waste disposal and the elimination of accumulated environmental damage is given great attention within the Special Federal Programmes "Elimination of accumulated environmental damage" and "Clean country". However, an integrated solution of this problem is possible only if favorable conditions are created for participation of business in the clean-up of the Arctic.

### Issues for discussion:

- ▶ State policy in the field of liquidation of accumulated environmental damage objects
- ▶ Improvement of legislation in the sphere of toughening of liability for abandoned objects, causing damage to the environment and determining the owner of such objects
- ▶ Elimination of accumulated damage from industrial and military activities in the Arctic zone

**Moderator:** **ILDAR NEVEROV**, Chairman of the Committee on Environmental Management and Ecology of "Business Russia"

### Disputants:

<b>SERGEI DONSKOI*</b>	Minister of Natural Resources and Environment of the Russian Federation
<b>VLADIMIR BURMATOV</b>	Chairman of the State Duma Committee of the Federal Council of the RF on Ecology and Environmental Protection
<b>VLADIMIR SYSOEV</b>	the First Deputy Chairman of the State Duma Committee of the RF on Natural Resources, Property and Land Matters
<b>NIKOLAI VALUEV</b>	the First Deputy Chairman of the State Duma Committee of the RF on Ecology and Environmental Preservation
<b>VLADIMIR PUSHKAREV</b>	Deputy Chairman of the State Duma Committee of the RF on Regional Policy and Problems of the North and Russian Far East
<b>ANDREI PETROV</b>	Counselor (Department Head) of Environmental Security of the Main Office of Military Logistics of the RF
<b>EVGENII NIKORA</b>	Deputy Governor of the Murmansk Region
<b>ROMAN POLSHVEDKIN</b>	First Deputy Minister of Industry, Natural Resources, Energy and Transport of Komi Republic
<b>ANDREI KOROLEV</b>	Deputy Director on Science Work of National Research Center "Kurchatov Institute"
<b>VLADIMIR LUZIN</b>	General Director of the FSUE "RosRao"

<b>VLADIMIR KHANDOBIN</b>	Head of the “Liquidation of the Arctic Nuclear Legacy” Group of the FSUE “RosRAo”
<b>SERGEI FOKIN</b>	Director of the FSBI “VNII Ecology”
<b>SERGEI KAMYSHANOV</b>	General Director of the ZAO “Arctic-Consulting-Service”

## "DIGITAL ECONOMY OF THE ARCTIC REGION"

December, 4

12.30-14.00

Hall 8

### WORKING SESSION

On July 28, 2017, the federal government approved the program "Digital Economy of the Russian Federation". Transformation of economies into a "figure" is a matter of global competitiveness and national security of the country. In the Arctic, there is a significant potential for the development of innovative areas of the digital economy, and the introduction of modern solutions in economic activities has a fundamental importance for the dynamic development of the region and improving the quality of life of the population. The transfer of the activities of government bodies and private companies into electronic format, the widespread introduction of digital technologies at enterprises will help to optimize management and business processes in the Arctic. Will the digital economy become an additional growth driver for the polar regions? The participants of the working session are to answer this question.

### Issues for discussion:

- ✦ State policy in the development of the digital economy
- ✦ Features of the development of the digital economy in the Russian Federation
- ✦ Introduction of digital technologies in economic activities
- ✦ Information infrastructure of the Arctic region

**Moderator:** ANASTSIA OSITIS, President of the International Academy of Communications

### Disputants:

<b>DMITRII ALKHAZOV*</b>	Vice Minister of Telecom and Mass Communications of the Russian Federation
<b>PAVEL MALKOV*</b>	Director of the Department of State Management of the Ministry of Economic Development of the Russian Federation
<b>ELENA DYBOVA</b>	Vice-President of the Chamber of Commerce and Industry of the RF
<b>OLEG EFREMOV*</b>	Director of the Information Technology and Communications Department of the Yamalo-Nenets Autonomous Region
<b>SVETLANA LIPINA</b>	Director of the Strategic Management and Spatial Development Centre of the Council for the Study of Production Forces of Russian Foreign Trade Academy
<b>LIUDMILA KHAIMINA</b>	Director of the Higher School of Information Technologies and Automated Systems of the Northern (Arctic) Federal University
<b>VIKENTII KOZLOV</b>	Leader of the Working Group of the International Telecommunication Academy on Arctic

<b>NIKOLAI STOROZHUK</b>	Director of the LO ZNIIS
<b>VIKTORIYA PIMENOVA</b>	Head of the Board of the Federal Service for Supervision of Communications, Information Technology and Mass Media of Komi Republic

## "ENSURING OF AFFORDABLE FLIGHTS WITHIN THE ARCTIC"

December, 4

12.30-14.00

### WORKING SESSION

Hall 7

Because of the lack of alternative means of transportation air transport is the only year-round connection with the outside world for a significant part of the Arctic zone. However, air traffic remains inaccessible for the population of the polar regions. Among other things this is related to the high cost of flights, the insufficient number and aging of the ship fleet, and also the state of the airfield infrastructure.

The participants of the discussion will discuss the problems of small aviation development in the macroregion, and the features of regulation and support mechanisms for air traffic in the Arctic zone, and the innovations in the field of aircraft construction for the needs of the Far North.

### Issues for discussion:

- ✦ State support of air communication in the Arctic
- ✦ Development and reconstruction of the airport network
- ✦ Formation of regional aviation route network
- ✦ Tariff regulation of air traffic
- ✦ Development of small Arctic aviation
- ✦ Technology, development and innovation in aircraft and helicopter construction. Creation of aircraft working on natural gas.
- ✦ The state and modernization of the aircraft fleet in the Russian Federation

**Moderator:** **ANTON KOREN**, General Director, Center for Strategic Development in Civil Aviation, JSC

### Disputants:

<b>OLEG KLIM*</b>	Deputy Head of the Federal Air Transport Agency
<b>MIKHAIL BOGATYREV*</b>	Deputy Director of the Department of Aviation Industry of the Ministry of Industry and Trade of the RF
<b>ALEKSANDRA ROFE</b>	Deputy Minister of Transport and Road Industry of the Republic of Sakha Yakutia
<b>DMITRII SAVITSKII</b>	Deputy General Director of Products for Aeronautical System and Products of Dual Use of the JSC "Almaz – Antey" Air and Space Defence Corporation"
<b>SERGEI ANTSIFEROV</b>	General Director, Vityaz Avia Corporation
<b>VADIM MIKHEEV</b>	Head of the Department Competitive Analysis of Prospective Projects on Helicopter's Equipment and Marketing, Russian Helicopters, JSC
<b>B. KOLPAKOV</b>	Director of organization development of JSC NordStar Airlines
<b>ALEKSANDR LABARDIN</b>	Head of State-owned Federal State Institution "ASSTC "Vytegra"

# "INTERNATIONAL COOPERATION IN THE ARCTIC: CREATING A RELIABLE FUTURE"

December, 4

12.30-14.00

## PANEL SESSION

Hall 9

In recent years, the Arctic has increasingly attracted the attention of the world community. Not only the polar countries are interested in it, but also far beyond their borders countries too. The economic and political interests of Russia, other Arctic states, and also a number of countries of the European Union and the Pacific region are closely intertwined in this region.

Intense activity in the field of mining and processing of minerals gives new impetus to a multitude of projects in the field of transport, ecology, and security that are unfolding in the macroregion.

Competition between major players is growing, but national interests in the Arctic, including Russian ones, can be fully realized only if there is close cooperation and interaction with partners in the region.

An important tool for the development of international cooperation and the preservation of peace and cooperation in the Arctic is Russia's participation in the work of the institutions of international partnership, and also cooperation in the implementation of major infrastructure projects.

### Issues for discussion:

- ✦ Russia's participation in the activities of the Arctic Council and other institutions of international partnership in the Arctic
- ✦ International business projects in the Arctic region
- ✦ Ensuring security in the development of the Arctic
- ✦ Cooperation in the field of sustainable development of the Arctic
- ✦ Cross-border cooperation of Russian regions within the Arctic Zone of the Russian Federation with Arctic countries
- ✦ The Arctic agenda of "third countries"
- ✦ Russian presence on Spitsbergen

**Moderator:** ALEKSANDR IGNATEV, Chief Editor of a Journal "Arctic Herald"

### Disputants:

<b>VLADIMIR BARBIN</b>	Ambassador of Russian Ministry of Foreign Affairs of the Russian Federation
<b>SERGEI PETROVICH</b>	Deputy Director of the Second European Department of the Ministry of Foreign Affairs of the RF
<b>ELENA TIKHONOVA</b>	Minister of the Economic Development of the Murmansk Region
<b>GILLES BRETON</b>	Chairman of the Canada Eurasia Russia Business Association (CERBA)
<b>S. SMIDT</b>	Special Advisor of the Arctic and North America Department of Ministry of Foreign Affairs of Denmark
<b>DAG MALMER HALVORSEN</b>	General Consul of Norway in Saint Petersburg
<b>ALEKSANDR PILIASOV</b>	Director of the Economy of the North and Arctic Center of the Council for the Study of Production Forces
<b>TIMUR MAKHMUTOV</b>	Deputy Programme Director of Russian Council on International Affairs
<b>ANDREI MINEEV</b>	Research officer of the Development of Business in the Northern Regions Center of the Northern University (Norway)

# "INVESTMENT ACTIVITY IN THE ARCTIC: PROBLEMS AND INCENTIVE MECHANISMS"

December, 4

12.30-14.00

Hall 10

## PANEL SESSION

The increase of investment activity in the Far North is one of the key challenges of the new State Program "Social and Economic Development of the Arctic Zone of the Russian Federation". Large-scale projects in the macroregion are associated with high capital costs and long payback periods. Enterprises that extract minerals in the Arctic face complex mining, geological and environmental climatic conditions of development, bear the costs of the need to create transport, energy and social infrastructure in the development of new fields.

The effective interaction between business and government is necessary for the most efficient implementation of investment projects in the Arctic zone of the Russian Federation. At the panel session, it is planned to discuss the conditions and procedure for granting of state support to Arctic enterprises.

### Issues for discussion:

- ▶ Creating favorable conditions for investment activities in the Arctic zone
- ▶ Improving legislation and reducing administrative barriers for enterprises investing in the Arctic region
- ▶ Building an effective system for attracting investors to the Arctic zone of the Russian Federation

**Moderator:** **ANDREI KLISHAS**, Chairman of the Federal Council Committee of the RF on Constitutional Legislation and State Building

### Disputants:

<b>IGOR EGOROV*</b>	Head of the Department of Regional Development of Ministry of Economic Development of the RF
<b>PAVEL VOLKOV</b>	State-Secretary – Deputy Minister of the Russian Federation for the Development of the Russian Far East
<b>DMITRII IURKOV</b>	Member of the State Duma Committee of the RF on Budget and Taxes
<b>ALEKSEI VELLER</b>	Member of the State Duma Committee of the RF on Economic Policy, Industry, Innovative Development and Entrepreneurship
<b>ELENA BEZDENEZHNYKH</b>	Vice-President of the Group of Companies Norilsk Nickel
<b>IGOR KUSTARIN</b>	Director of the "Development of the Regions" Direction of the Agency for Strategic Initiatives
<b>MIKHAIL OSIPOV</b>	First Deputy Chairman of the Government of Sakha-Yakutia Republic – Minister of Economy of Sakha-Yakutia Republic
<b>DENIS GUDKOV</b>	Director of the Arctic Legal Centre
<b>NATALIA GALTSEVA</b>	Deputy Director of North-Eastern Scientific Center of N.A. Shilo North-East Interdisciplinary Scientific Research Institute (Magadan)

# "SCIENCE AS A BASIS OF THE ARCTIC DEVELOPMENT"

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December, 4

15.00-16.30

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Hall 4

## PANEL SESSION

### It is planned a meeting of a public commission IPO "Association of Polar Explores" on "Science and High School" direction within the section

The development of the Arctic zone of the Russian Federation is impossible without the formation of a unified complex of fundamental and applied research that aimed at solving Russia's priority tasks in the macroregion, and also without creation of an effective system on training of personnel considering the specification of the region. The priority of Russian science in the Arctic is the study of natural and man-made threats, the creation of a Russian import substituting base, the research and preservation of a unique natural environment. The basis of this work should be the analytical coordination program "Integrated scientific research of the Arctic and Antarctic". An important factor of developing scientific and educational space of the Arctic zone of the RF is network cooperation of organizations involved in training of personnel and researching in the interests of the Arctic zone of the RF.

#### Issues for discussion:

- ✦ Mechanisms for supporting Arctic scientific research: government programs, grants, etc.
- ✦ Business and Science in the Arctic: opportunities for private support for basic scientific research
- ✦ Scientific cooperation in the implementation of strategic research
- ✦ The first results of the National Arctic science activities and education consortium
- ✦ Mechanisms for integrating resources for the implementation of integrated scientific projects
- ✦ Report on activity of a public commission on "Science and High School" direction for 2017

#### Disputants:

<b>IGOR DENISOV</b>	Deputy General Director, Head of Advanced Research Foundation on Physics and Technical Specialization
<b>NATALIIA GOLUBEVA</b>	Deputy Head of Coordination and Activity Support of Organization in Scientific Sphere Board of the Federal Agency for Scientific Organizations (FASO Russia)
<b>NATALIA MIKHALCHENKOVA</b>	Deputy Chairman of the Government of the Republic of Komi – Minister of Education, Science and Youth Policy of the Republic of Komi
<b>ELENA KUDRIASHOVA</b>	Rector of Northern (Arctic) Federal University named after M.V. Lomonosov
<b>VIKTOR DEMIN</b>	Pro-rector of the FSBEI HPO "National Research Tomsk State University"
<b>KONSTANTIN ZAIKOV</b>	Director of the Strategic Research Arctic Center, M.V. Lomonosov Northern (Arctic) Federal University

<b>TATIANA SKUFINA</b>	Alternate Director of the FBFI Institute for Economic Studies of the Kola Scientific Center of RAS
<b>ALEKSANDR SABUROV</b>	Leading Expert of the Strategic Research Arctic Center, M.V. Lomonosov Northern (Arctic) Federal University Secretary of the National Arctic Scientific and Educational Consortium
<b>OLEZIA RIAZANOVA</b>	Head of the Geo-ecology and Sustainable Environmental Management Laboratory of MGIMO University of the Ministry of Foreign Affairs of the Russian Federation

## "DEVELOPMENT OF SOLID MINERALS IN THE ARCTIC: NEW PROJECTS AND TECHNOLOGIES"

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**December, 4**

**15.00-16.30**

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**Hall 7**

### WORKING SESSION

Rich deposits of diamonds, nickel, cobalt, copper, coal, gold and other minerals are concentrated in the Russian Arctic. According to general estimates, the cost of mineral resources in the Arctic subsoil is about two trillion dollars.

However, the degree of exploration of minerals in the macroregion still remains at a low level.

At the working session, it is planned to discuss the actual problems of exploration, extraction and processing of solid minerals, the issues of attracting investments in capital intensive projects for the development of Arctic fields.

### Issues for discussion:

- ▶ Assessment of the reserves of solid minerals in the Arctic zone
- ▶ Integrated development of solid mineral deposits of the Arctic Zone of the Russian Federation
- ▶ Perspective Arctic projects for the development of deposits of solid minerals
- ▶ Ensuring environmental and industrial safety in the extraction of solid minerals
- ▶ Innovative technologies for the development of deposits of solid minerals in complex mining and geological conditions

**Moderator:** **STEPAN ZHIRIAKOV**, Deputy Chairman of the Federal Council Committee of the RF on Agrarian and Food Policy and Environmental management

### Disputants:

<b>ALEKSANDR LUKIN</b>	General Director of JSC "The First Ore Mining Company"
<b>ALEKSANDR SMIRNOV</b>	First Deputy General Director of the FSBI "VNIIOkeangeologia"
<b>ALEKSANDR ISHCENKO</b>	Member of the State Duma Committee of the RF on Natural Resources, Property and Land Matters
<b>ALEKSANDR VOLKOV</b>	Institute of Mining Geology, Petrography, Mineralogy and Geochemistry
<b>GENNADII KALABIN</b>	Research Institute of Comprehensive Exploitation of Mineral Resources RAS

<b>IURII ZAKHARINSKII</b>	Acting Deputy Chairman of the Government of the Krasnoyarsk Region
<b>NATALIA GALTSEVA</b>	Deputy Director of North-Eastern Scientific Center of N.A. Shilo North-East Interdisciplinary Scientific Research Institute (Magadan)

## "BUILDING AN EFFECTIVE SECURITY ARCHITECTURE IN THE ARCTIC"

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**December, 4**

**15.00-16.30**

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### PANEL SESSION

**Hall 9**

Ensuring national security in the Arctic zone of Russia is one of the key state tasks that requires interaction and coherent work of all authorities, law enforcement agencies and representatives of civil society. This is stated in the "National Security Strategy of the Russian Federation". In addition, as Russian President Vladimir Putin noted, it is possible to form a sustainable security architecture in the Arctic that meets modern challenges only through joint efforts, taking into account the interests of all parties involved in the development of this region.

### Issues for discussion:

- ✦ Major challenges and new threats to security in the Arctic zone of the Russian Federation
- ✦ Construction of an integrated system of security and protection of territories, population and critically important objects of the Arctic zone of the Russian Federation
- ✦ Providing navigation and operation of the Northern Sea Route with security
- ✦ Formation (modernization) of the non-stationary system of territory protection and seaports water area
- ✦ Development of a unified state system for preventing and eliminating emergencies in the Arctic zone of the Russian Federation
- ✦ International and cross-border cooperation in the field of security in the Arctic
- ✦ Safety issues of domestic and international transportation in the Arctic zone of the Russian Federation

**Moderator:** **GEORGII KARLOV**, Member of the State Duma Committee of the RF on Security and Anti-corruption

### Disputants:

<b>EDUARD CHIZHIKOV</b>	Head of the FSBEI of HE Saint-Petersburg University of State Fire Service of Emercom of Russia
<b>ALEKSANDR GRISHCHENKO</b>	Acting Head of Main Directorate of Extradepartmental Protection of the Federal National Guard Service of the Russian Federation
<b>ALEKSANDR MIKHEEV</b>	Deputy Head of the Direction – Head of the Main Operations Directorate Group of the General Staff of Armed Forces of the RF
<b>SERGEI SARITSKII</b>	Deputy Head of the Federal service for transport oversight
<b>ALEKSANDR BREVNOV</b>	Deputy Head, General Directorate for Transport of the Ministry of the Interior of the Russian Federation
<b>ANDREI ZVIAGINTSEV</b>	Deputy Head of FSFI Sea Rescue Service of Russian River and Sea Fleet

<b>MAKSIM KUZIUК</b>	General Director of the OJSC Concern RTI System
<b>ROMAN GUDOV</b>	Director of the Corporate Security Department of the Norilsk Nickel
<b>IURII PODOPLEKIN</b>	First Deputy General Director on Science of the JSC «Concern «Granit-Electron»
<b>ALEKSANDR SERGUNIN</b>	Professor of the Department of Theory and History of IR of School of International Relations of SPSU

## "THE USE OF ROBOTS AND UNMANNED TECHNOLOGIES IN THE ARCTIC"

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**December, 4**

**17.00-18.30**

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### WORKING SESSION

**Hall 8**

The use of robotic equipment in the Arctic is due to the severe natural and climatic conditions of the region. Today, Russian scientists are developing samples of automated complexes that can be used for underwater (ice) works on the Arctic shelf, for monitoring the environmental situation, and for prospecting for minerals.

If Arctic robots are in the development stage, unmanned technologies are already used by scientists, military and representatives of extractive companies. However, this does not happen systematically.

The working session will discuss the prospects for using unmanned vehicles and robotics for large-scale projects in the Arctic zone of the Russian Federation.

### Issues for discussion:

- ✦ Development trends and features of unmanned aerial vehicles in the Arctic
- ✦ Russian developments that increase the efficiency and safety of the study of the polar region
- ✦ Arctic Robotics: areas of application and development of domestic manufacturers
- ✦ Prospects for the use of underwater robots in the Arctic

### Disputants:

<b>VLADIMIR VORONOV</b>	Head of Advanced Research Centre, Kronshtadt Group
<b>GEORGII BEZRUK</b>	Head of a Science and Research Testing Department (marine robotics) of the Main Science and Research Center of Robotics of the Ministry of Defence of the Russian Federation
<b>VALERII KONURKIN</b>	First Pro-rector of FSAEI FVE "Institution of Further Training of Administrative Officers and Specialists of Fuel and Energy Complex"
<b>MIKHAIL KANEVSKII</b>	Chief Executive of the Concern "International Aeronautical Systems"
<b>VLADISLAV ZANIN</b>	Commercial Representative of Oceanos, JSC
<b>D. GUSHCHINA</b>	Acting Director of the OJSC "NGO "Experimental Design Bureau named after M.P. Simonov"
<b>KSENIIA CHIKKUEVA</b>	Head of Engineering , Robotics tools and Unmanned Aerial Vehicles of the FSI "Specialized Fire and Salvage Unit of the Federal Fire-Fighting Service of the Republic of Karelia"
<b>VIKTOR DEMIN</b>	Pro-Rector of the National Research Tomsk State University

# "ENERGY CONSERVATION OF THE ARCTIC: PROBLEMS AND POSSIBILITIES OF SMALL GENERATION"

December, 4

15.00-16.30

## PANEL SESSION

Hall H22-H23

Traditional schemes of electricity supplies to the Arctic Zone of the Russian Federation are extremely limited. The energy system of the macroregion is characterized by a multitude of separate energy nodes, the disconnectedness of consumers and the uneconomical nature of the fuel supply. The unresolved energy problems and the existing contradictions between the plans for the development of industry and the generation of the Arctic can significantly reduce the socio-economic development of the region.

In 2017, Russian President Vladimir Putin instructed the federal government to paid special attention to the creation and use of renewable energy sources, the development of microgeneration based on renewable energy sources. The new solutions that the region needs are exactly in this area.

### Issues for discussion:

- Rational energy supply and energy supply for all types of production
- Creation of a system of effective support of small energy development
- Use of renewable energy sources
- Atomic stations of low power. Floating Nuclear Power Plant Development Potential
- Economic attractiveness of energy alternatives
- Increasing the efficiency of the use of local energy resources

### Disputants:

<b>ALEKSEI TEKSLER*</b>	the First Deputy Minister of Energy of the Russian Federation
<b>VIKTOR ZUBAREV</b>	Member of the State Duma Committee of the RF on Energy
<b>DANIL SAVVINOV</b>	Minister of Housing And Utilities Infrastructure and Energy of Sakha Yakutia Republic
<b>VASILII USTINOV</b>	Head of the Nuclear Transport Energy Technology Complex, National Research Center "Kurchatov Institute"
<b>PAUL LOGCHIES</b>	Director, OOO Windlife Kola LLC
<b>SERGEI LIPIN</b>	General Director, JSC NTEC
<b>DMITRII KONOVALOV</b>	Director of the Commercialization of Innovative Projects and Researches Office of Voronezh State Technical University
<b>VLADIMIR VELKIN</b>	Associate Professor of "Nuclear Power and Renewable Energy" of Ural Federal University
<b>VIKTOR ELISTRATOV</b>	Director of Scientific and Educational Center "Renewable Energy and energy generation plants" SPbPU
<b>VALERII VYBYVANETS</b>	Adviser of General Director of the Luch Scientific Production Association
<b>PAVEL MARIANDYSHEV*</b>	Director of the Higher School of Power Engineering, Oil and Gas, Northern (Arctic) Federal University

# "SOCIAL POLICY OF THE GOVERNMENT AND COMPANIES IN THE ARCTIC"

December, 4

15.00-16.30

## WORKING SESSION

Hall 10

According important indicators of level and quality of life the Arctic regions lag behind other subjects of the Russian Federation. The result of this fact is the exodus of the population from the regions of the Far North, the shortage of qualified personnel and the outflow of labor force. It is necessary to create favorable conditions for a comfortable living in the Arctic, a serious modernization of the social infrastructure and many other things in order to overcome the socio-economic imbalance. Not only the Government, but also enterprises that carry out economic activities in the macro region, must be involved in this process.

### Issues for discussion:

- ▶ Creating favorable conditions for comfortable living in the Arctic
- ▶ Developing the social infrastructure of the Arctic zone of the Russian Federation
- ▶ Social responsibility of companies operating in the Arctic zone
- ▶ Stimulating internal labor migration and reducing the outflow of qualified personnel

**Moderator:** NIKOLAI KHARITONOV, Chairman of the State Duma Committee of the Federal Council of the RF on Regional Policy and Problems of the North and Russian Far East

### Disputants:

<b>IULIJA ZVORYKINA</b>	Director of the Autonomous Non-Profit Organization "Institute of Research and Examination of Vnesheconombank"
<b>ALEKSEI LIASHCHENKO</b>	Member of the State Duma Committee of the RF on Financial Market
<b>VALENTINA PIVNENKO</b>	the First Deputy Chairman of the State Duma Committee of the RF on Regional Policy and Problems of the North and Russian Far East
<b>PROKOPII NIKOLAEV</b>	Chairman of the State Duma Committee of Sakha Yakutia Republic on the Arctic Affairs
<b>IURII PETROV</b>	Director of the Data Bases Department of NAO "Siberian SAC"
<b>MATVEI NAVDAEV</b>	Advisor of the Head of the Federal Youth Agency, Director of the International Youth Educative Forum "Arctic. Made in Russia"
<b>DENIS VASILEV*</b>	Deputy Head of the Federal Service for Labour and Employment
<b>ALEKSANDR AKIMOV</b>	Deputy Chairman of the Council of the Federation Committee on the Federal Structure, Regional Policies, Local Self-Governance and Affairs of the North
<b>GENNADII TOLSTYKH</b>	Head of Labour Social Problems Center of the Academy of Sciences Republic Sakha

# "THE ROLE OF SHIPBUILDING ENTERPRISES IN THE DEVELOPMENT OF THE ARCTIC"

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December, 4

17.00-18.30

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## WORKING SESSION

Hall 9

The successful operation of the Northern Sea Route is closely linked to the development of domestic shipbuilding, and the development of the Arctic's resource potential and the extension of the time frame for the use of the Northern Sea Route is possible only if there is a powerful modern fleet. Severe conditions of the Arctic Ocean demand the observance of a number of standards and the introduction of innovative technologies for the creation of reliable ships and platforms. Arctic shipbuilding is one of the leading in Russia. At the same time, the development of shipbuilding is impossible without measures of state support, active attraction of investments, interaction between business and authorities to determine the needs of the industry.

### Issues for discussion:

- ✦ State support of the Arctic shipbuilding industry
- ✦ Mechanisms of PPP in the construction of the fleet for the Arctic
- ✦ Development by Russian shipbuilding companies of new technologies and projects for the needs of the Arctic
- ✦ The needs of transport companies in the renewal of the transport fleet
- ✦ Prospects for the icebreaking fleet development
- ✦ Providing vessels with hydrocarbon projects

**Moderator:** **EVGENII ZAGORODNII**, Vice-President on Commercial Shipbuilding, JSC "United Shipping Corporation"

### Disputants:

<b>ELENA KVASNIKOVA</b>	Head of Strategic Planning and Managing Office of the Department of Shipbuilding Industry and Marine Facilities of the Ministry of Industry and Trade of the Russian Federation
<b>OLGA KUZNETSOVA</b>	Minister of the Development of Industry and Entrepreneurism of the Murmansk Region
<b>KONSTANTIN KUKSIN</b>	General Director, JSC "Central Design Bureau "Neptune"
<b>ALEKSEI KADILOV</b>	General Director, Baltic Shipyard (OOO "Baltiysky Zavod – Sudostroyeniye")
<b>ALEKSEI DONSKOI</b>	General Director of the JSC Engineering Center of Shipbuilding
<b>EVGENII APPOLONOV</b>	General Director of Lazurit Central Design Bureau Joint-Stock Company
<b>ALEKSEI KARCHEMOV</b>	Head of practice of sea / transport law of the Law Offices "Egorov, Puginsky, Afanasiev & Partners"

# "CONSTRUCTION OF A NEW HEALTH CARE MODEL IN THE ARCTIC"

December, 4

17.00-18.30

## PANEL SESSION

Hall 7

The social and economic development of the Arctic and the pace of its development largely depend on the quality of life of both the indigenous population and the newcomer, who needs acclimatization and adaptation. The Northerners, in particular, indigenous peoples have a lower life expectancy, a higher incidence rate, including common non-communicable diseases.

Features of health care in the Arctic zone of the Russian Federation are determined by the harsh climate, difficult transport access and low population density. Under such conditions, traditional models of the medical care organization illustrate its ineffectiveness, so it is necessary to develop and implement new approaches that fully take into account the specifics of the northern regions.

### Issues for discussion:

- ✦ Modernization of existing health care facilities and optimization of their network
- ✦ Development of distance medicine
- ✦ Prevention of diseases and implementation of healthy lifestyle programs
- ✦ Introduction of new approaches and medical technologies to improve the quality of life of the inhabitants of the Arctic Zone of the Russian Federation
- ✦ Medical assistance to seamen and specialists in the oil and gas industries
- ✦ Ensuring adaptation to arctic conditions
- ✦ Development of sanitary aviation
- ✦ Staffing with medical personnel

### Within the section it is planned a meeting of the public commission IPO "Association of Polar Explorers" on "Arctic Medicine" Direction

#### Moderators:

**IGOR BOBROVNITSKII**, Leader on Management of Health Care and Environmental Medicine Scientific Field, FSBI "Center of Strategic Planning and Control of Biomedical Risks" of the Ministry of Healthcare of the Russian Federation, Chairman of ASPOL Public Commission on the Specialization of "Arctic Medicine"

**LUBOMIR AFTANAS**, Alternate Director of State Scientific-Research Institute of Physiology and Basic Medicine

#### Disputants:

**DMITRII KOSTENNIKOV** State Secretary – Deputy Minister of Healthcare of the Russian Federation

**TATIANA KUSAIKO** Member of the Federation Council Committee on Social Policy

**FEDOT TUMUSOV** Deputy Chairman of the State Duma Committee of the RF on Health Care

**LUBOMIR AFTANAS** Alternate Director of State Scientific-Research Institute of Physiology and Basic Medicine

<b>IGOR BOBROVNITSKII</b>	Leader on Management of Health Care and Environmental Medicine Scientific Field, FSBI “Center of Strategic Planning and Control of Biomedical Risks” of the Ministry of Healthcare of the Russian Federation, Chairman of ASPOL Public Commission on the Specialization of “Arctic Medicine”
<b>SERGEI ALEKSANIN</b>	Chief Medical Officer of the EMERCOM of Russia, Director of the Federal State Institute of Public Health ‘The Nikiforov Russian Center of Emergency and Radiation Medicine’, the Ministry of Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters
<b>IGOR MOSIAGIN</b>	Chief Medical Officer of the Chief Command of the Russian Navy
<b>SVETLANA MALIAVSKAIA</b>	Pro-rector on Scientific and Innovative Work of Northern State Medical University
<b>SERGEI TOKAREV</b>	Head Doctor of the SBHI YNAO Medical Precaution Center
<b>MAKSIM CHASHCHIN</b>	Head of Scientific and Research Laboratory on Arctic Medicine of the FSBEI of Higher Education of North-Western State Medical University named after I.I. Mechnikov

## "PRODUCTION OF HIGH-TECH PRODUCTS FOR THE NEEDS OF THE ARCTIC"

December, 4

15.00-16.30

### PANEL SESSION

Hall 8

Innovative technologies - driver of social and economic development of the polar macroregion. Their introduction into all spheres of human activity in the Arctic will facilitate the implementation of large-scale projects of business and the state.

As a result of sanctions for Russian companies, access to many western technologies and equipment was blocked, that could not but affect the rate of development of the Arctic zone of the Russian Federation. Domestic companies need high-tech equipment. Within the framework of the session it is planned to discuss modern developments of Russian scientists and the success of import substitution of Arctic technologies.

### Issues for discussion:

- ▶ Innovative technologies of Russian developers for the needs of the Arctic macroregion
- ▶ Import replacement of equipment and technologies for the Arctic
- ▶ Introduction of new technologies and scientific and engineering support of large oil and gas projects in the Russian Federation
- ▶ Arctic technologies of dual purpose

**Moderator:** **ANTON ZUBKOV**, Head of the Block on Development and International Business Project of the State Atomic Energy Corporation ROSATOM

### Disputants:

<b>VASILII OSMAKOV*</b>	Deputy Minister of Industry and Trade of the RF
<b>ROMAN PETRUTSA*</b>	Director of the Industrial Development Fund
<b>DMITRII BULAVIN</b>	Managing Director of the ANCO “Technological Development Agency”

<b>IGOR MAKUSHEV</b>	Chairman of the Military Scientific Committee of the Armed Forces – Deputy Head of the Central Command of Armed Forces of the RF, lieutenant-general
<b>MAKSIM MEIKSIN</b>	Chairman of the Committee on Industrial Policy and Innovations
<b>ANDREI VASIUTA</b>	Minister of Industrial Policy of the Republic of Crimea
<b>NATALIA ANDREEVA</b>	Director on Strategic Development of the CJSC “RusGazDobycha”

## "OIL AND GAS OF THE RUSSIAN ARCTIC: PROSPECTS AND PROBLEMS OF DEVELOPMENT"

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**December, 4**

**17.00-18.30**

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**Hall 4**

### PANEL SESSION

The Ministry of Economic Development of Russia has formed a list of 145 projects that are being carried out or planned for implementation in the Arctic zone of the Russian Federation. Most of them (38.9%) are connected with the extraction and processing of minerals, primarily hydrocarbons. They are also the most capital-intensive and large-scale.

The unfavorable situation on hydrocarbon prices at the world market slowed down the implementation of some projects in the Russian Federation. Under sanctions, the problem of shortage of domestic technologies and equipment for development of oil and gas deposits in the polar region is still topical. The situation was complicated by the new restrictive measures of the USA, imposed on August 2, 2017, concerning oil production in the Arctic. All these questions and many others will be raised during the working session.

### Issues for discussion:

- ✦ Resource potential of oil and gas fields on land and the Arctic shelf
- ✦ Implementation of projects for oil and gas production in the regions of the Arctic zone
- ✦ The Russian Arctic shelf is the future of oil and gas production?
- ✦ Ways to reduce the cost of oil and gas production in the Arctic
- ✦ Prospective markets for Arctic hydrocarbons

**Moderator:** **IGOR ANANSKIKH**, the First Deputy Chairman of the State Duma Committee of the RF on Energy

### Disputants:

<b>OREST KASPAROV</b>	Deputy Head of Federal Agency for Mineral Resources
<b>TATIANA MITROVA</b>	Director of Energy Centre, Moscow School of Management Skolkovo
<b>ANDREI PATRUSHEV*</b>	Deputy CEO for Offshore Development, Gazprom Neft PJSC
<b>OLEG SOCHNEV</b>	Deputy Director for Technique and Technology localization department, Rosneft
<b>ILGAM ZAMANOV</b>	Deputy General Director on Forward Planning of the LLC “Gazpromneft-Yamal”
<b>ANATOLII BREKHUNTSOV</b>	General Director of the Siberian Scientific Analytical Center
<b>ILIA OBRAZTSOV</b>	Deputy General Director on Geology of the JSC «SEVMORNEFTEGEOFIZIKA»
<b>ÅKE ROHLÉN</b>	Acting Director of Arctic Marine Solutions AB

## DAY 2

### DECEMBER 5, 2017

#### "ARCTIC TIME: SOCIAL AND ECONOMIC DEVELOPMENT OF THE POLAR REGION"

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December, 5

10.00-11.00

#### PLENARY SESSION

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Hall 3

The development of the Arctic is one of the priorities of Russia's state policy, which contributes to acceleration of the country's economic growth and improves the quality of life of the population. Sustainable social and economic development of the polar regions is based on the system interaction between the state, business, science, financial institutions, non-profit organizations and civil society. The realization of key investment projects and the solution of social problems in the macroregion depend on its coherence and efficiency of work.

The actualization of the state program for the development of the Arctic zone of Russia, the expansion of the Russian Federation land area, the development of hydrocarbon deposits on the shelf of the eastern Arctic, the launch of a new transshipment terminal in Murmansk and much more have positively affected the social and economic situation of the polar region in 2017. At the same time, there are many unresolved problems that the authorities and society will discuss at the plenary session on the first day of the forum.

#### Issues for discussion:

- ✦ Strategic directions of state policy in the Arctic
- ✦ Improvement of Arctic legislation
- ✦ Environmental policy of the state and environmental protection of companies in the Arctic
- ✦ Mechanisms for regulating investment activities in the Arctic
- ✦ Creation of conditions for business in the Arctic regions
- ✦ Scientific and technological support of the development of the Arctic zone of the Russian Federation
- ✦ The role of public institutions in the macroregion development
- ✦ Prospects for international cooperation in the Arctic

# "INTERNATIONAL COOPERATION IN THE FIELD OF SCIENCE AND EDUCATION"

December, 5

12.00-14.00

Hall 9

## WORKING SESSION

Cooperation in the field of Arctic research is now becoming increasingly relevant due to the fact that only a scientific understanding of the macroregion will allow it to be more effectively absorbed and not exhausted. A special emphasis on the development of scientific research and the provision of intellectual presence in the region is a fundamentally new attribute and key condition for the effectiveness of Arctic strategies as a new direction of the state policy of the Arctic countries. At the same time, the organization of scientific research should meet the difficulty and complexity of the tasks set for the development of the Arctic.

In 2017, Russian Prime Minister Dmitry Medvedev signed a draft agreement to strengthen international Arctic scientific cooperation. The purpose of the agreement is to strengthen cooperation in the field of scientific activities to improve the impact and effectiveness of the development of knowledge about the Arctic.

### Issues for discussion:

- ▶ Development of international research and educational projects - increasing the mobility of students and researchers
- ▶ Creation of a unified database on the ecosystem of the region
- ▶ Expedition activity
- ▶ Cooperation in the field of climate change recommendations and its consequences
- ▶ Consolidation of resources of Arctic research communities
- ▶ Deepening and integration of observations in the Arctic

**Moderator:** VLADIMIR PAVLENKO, Vice-President of the International Arctic Scientific Committee

### Disputants:

<b>IGOR GANSHIN*</b>	Director of the Foreign Department, Ministry of Education and Science of the Russian Federation
<b>OLGA EVKO</b>	Head of the Work with Countrymen, Youth and Regional Cooperation Board of ROSSOTRUDNICHASTVO
<b>MIKHAIL PRISIAZHNYI</b>	First Deputy of Minister of Education and Science of Sakha Yakutia Republic
<b>MARINA KALININA</b>	Advisor of Rector of the NArFU on International Cooperation, Vice-President of the Arctic University on International Cooperation
<b>JÖRN THIEDE</b>	Research Advisor of Geomorphological and Palaeographic Researches of Polar Regions and World Ocean Laboratory of Saint Petersburg University
<b>ANATOLII VINOGRADOV</b>	Director of the Federal Research Centre, Kola Branch of Geophysical Survey of RAS
<b>OKSANA GONTAR</b>	Deputy Director on Scientific Work of the FBFIS Polar-Alpine Botanic Garden-Institute named after N.A. Avrorin KSC RAS
<b>GENNADII DETTER</b>	Senior Scientific Researcher of the Arctic Research Centre

# "HISTORICAL AND CULTURAL HERITAGE OF THE RUSSIAN ARCTIC"

December, 5

12.00-14.00

WORKING SESSION

Hall H25-H26

## Within the section it is planned a meeting of the public commission IPO "Association of Polar Explores" on "Spiritual, Natural and Cultural Heritage" Direction

The Russian Arctic has a unique history: here pass the first ways of polar explorers traveled in search of the Northeast Passage; a large-scale scientific study of the nature of the Arctic Ocean began and developed; for the first time people began to develop the region's immense wealth; the Arctic keeps the memory of the people's feat during the Second World War. The remaining objects are materialized, tangible evidence of the history of the development of this region, giving the Arctic heritage very important educational and educational functions.

The "Strategy for the development of the Arctic zone of the Russian Federation and ensuring national security for the period until 2020" notes that research in the field of history and culture in the Arctic is seen as one of the tools to document the existence of the rights of the Russian Federation to separate the northern seas areas.

### Issues for discussion:

- State policy in the field of study and protection of historical, cultural and spiritual heritage of the Russian Arctic
- Russian Arctic during the Great Patriotic War. The popularization of the history of Arctic convoys
- Legal issues of protection of the cultural heritage of the Russian Arctic

**Moderator:** ALEKSANDR POTEKHIN, Executive Secretary of the Spiritual, Natural and Cultural Heritage Commission of ASPOL, Chairman of the North-West Mass Media Association, Director of "TASS North-West" Saint Petersburg Regional Information Center

### Disputants:

<b>VLADIKO IAKOV</b>	Naryan-Mar and Mezen Bishop
<b>SARGYLANA IGNATEVA</b>	Rector of the FSBEI HE Arctic State Institute of Arts and Culture
<b>ALEKSANDR KIRILOV</b>	Director of the National Park "Russian Arctic"
<b>OLGA IAGODINA</b>	Director of the NPO Reconstruction of Old-time Crafts of the Kemsk Volost
<b>IRINA USTIN</b>	Director the MBI "Museum of Local Lore "Pomorje" of the Municipal Kemsk District
<b>ALEKSANDR BRYLIN</b>	Charmian of Amur Department of the IPO "Association of Polar Explores"
<b>VIKTOR GODLEVSKII</b>	Chairman of Local National and Cultural Autonomy of Ukrainian Board of Petropavlovsk-Kamchatski
<b>ALEKSEI ORLOV</b>	Head of Russian-language broadcasting Sputnik

# "ARCTIC CLIMATE CHANGE"

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December, 5

WORKING SESSION

12.00-14.00

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Hall 7

The Arctic is one of the four regions of the world, classified by the Intergovernmental Panel on Climate Change as the most vulnerable to climate change. The rise in temperature, the melting of ice, permafrost can have a significant negative impact on the global climate. Currently, the international community recognizes the need to jointly solve the natural and climatic problems of the Arctic. The Russian Federation as the main arctic power should become the coordinator of this process.

## Issues for discussion:

- ▶ International cooperation to address climate change in the Arctic
- ▶ Global Climate Change as a factor affecting Russia's economic security
- ▶ Mechanisms of state control over the environmental situation in the Arctic
- ▶ Control over the activities of large industrial companies in the Arctic

**Moderator:** ALEKSEI KOKORIN, Head of the Climate and Energy Program, WWF Russia

## Disputants:

<b>MAKSIM IAKOVENKO*</b>	Head of the Federal Service for Hydrometeorology and Environmental Monitoring
<b>ALEKSANDR BEDRITSKII*</b>	Presidential Advisor of the RF on Climate Changes Affairs
<b>VLADIMIR PROKOPEV</b>	Chairman of the Standing Committee on Land Matters, Natural Resources and Ecology of the State Assembly (Il Tumen) of the Sakha Yakutia Republic
<b>OLEG ANISIMOV</b>	Head of the Climate Changes Researches Department of Russian Federal State Budgetary Organization "State Hydrological Institute" (SHI)
<b>VLADIMIR KATSOV</b>	Director of Voeikov Main Geophysical Observatory
<b>ALEXIS McGIVERN</b>	Head of Projects of the International Union for Conservation of Nature
<b>GENRIKH ALEKSEEV</b>	Head of Cooperation of Atmosphere with Ocean Department of the State Research Center "Arctic and Antarctic Research Institute"

# "CREATION OF EQUIPMENT AND TECHNOLOGIES FOR THE DEVELOPMENT OF THE ARCTIC SHELF"

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December, 5

12.00-14.00

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Hall 4

## WORKING SESSION

The development of the Arctic shelf and its coastline is strategically important for the development of Russia and involves the elaboration, introduction of modern means and technologies for extraction of mineral resources. Considering that according to various estimates the import share in geological exploration reaches 85% and in the implementation of shelf projects is up to 90%, this is a serious challenge for domestic industrial and oil and gas engineering.

During the session it is planned to discuss the needs of companies, large-scale projects in Russian equipment and services in the field of geological prospecting, geophysical operations and mining on the Arctic shelf, as well as the possibility of reducing dependence on imports of foreign technologies. In addition, the discussants will discuss the creation of favorable conditions for the development of innovative technologies needed for the development of the continental shelf in the Arctic (for example, the admission of private companies to the shelf).

### Issues for discussion:

- ▶ Status and prospects of work on the Russian Arctic Shelf
- ▶ Technology and techniques for geological exploration on the Arctic shelf of the Russian Federation
- ▶ Features of construction and operation of ships and marine equipment for the development of the continental shelf in the Arctic
- ▶ Underwater extraction of mineral resources in Arctic waters
- ▶ Creation of conditions for the development of innovative technologies for the development of the Arctic shelf

### Disputants:

<b>RALIF GILFANOV</b>	General Director of the LLC "Gazprom Neft Shelf"
<b>ANDREI CHERNYKH</b>	Deputy General Director of FSBI "VNIIOkeangeologia"
<b>OLEG PETROV</b>	General Director of the FSBI "A.P. Karpinsky Russian Geological Research Institute"
<b>VICTOR LITVINENKO</b>	Leader of the Project Group of the Advanced Research Foundation (Advanced Submarine Robotics Laboratory)
<b>EVGENII TOROPOV</b>	Design Manager of the CDB ME "RUBIN"
<b>GENNADII ORDENOV</b>	Member of the State Duma Committee of the RF on Agrarian and Food Policy and Environmental Management
<b>ALEKSANDR RUKAVISHNIKOV</b>	Deputy General Director on Business Development of SST Group
<b>IURII SARAEV</b>	Institute of Strength Physics and Materials Science Siberian Branch of Russian Academy of Sciences

# "DEVELOPMENT OF LAND AND WATER TRANSPORT ROUTES AND PROVISION OF ARCTIC PORTS WITH ACCESS ROADS"

December, 5

12.00-14.00

Hall 10

## WORKING SESSION

One of the aims of the state policy for the development of transport infrastructure in the Arctic is the full provision of ports and the Northern Sea Route with access roads. Currently the formation of a network of railways and highways is emerging in the polar regions. The most important projects are Belkomur, the Bovanenkovo-Sabetta railway, the Northern Latitudinal Route, the construction of the Tommot-Yakuts launch complex. Providing navigation on inland waterways for the Arctic regions is the most important condition for the Northern Delivery, economic and food security of remote areas.

Within the framework of the working session, it is planned to discuss the actual problems that arise in the construction of railway and automobile infrastructure in the Arctic Zone of the Russian Federation, including the use of tools to raise funds from extra-budgetary sources, using the private concession initiative mechanism, and to increase interaction between different modes of transport.

### Issues for discussion:

- ▶ The importance of roads and railways for the development of industrial projects in the Arctic
- ▶ Railway projects in the Arctic Zone of the Russian Federation. Prospects of the Northern latitudinal railway, Belkomur, the Bovanenkovo-Sabetta railway
- ▶ Shipping support on inland waterways in the Arctic Zone of the Russian Federation
- ▶ Modernization of the road network of the Arctic region. Tools of state support of road construction in the Arctic Zone of the Russian Federation
- ▶ Involvement of investments on the basis of public-private partnership
- ▶ Specific features of various modes of transport interaction in the Arctic

**Moderator:** IULIA ZVORYKINA, Director of the Autonomous Non-Profit Organization "Institute of Research and Examination of Vnesheconombank"

### Disputants:

<b>IGOR ASTAKHOV</b>	Deputy Head of the Federal Road Agency
<b>VIKTOR VOVK</b>	Deputy Head of the Federal Marine and River Transport Agency of the RF
<b>ALEKSANDR MISHARIN*</b>	the First Vice-President, Russian Railways (JSCo "RZD")
<b>IGOR CHERNYSHENKO</b>	Chairman of the Council of the Federation Committee on the Federal Structure, Regional Policies, Local Self-Governance and Affairs of the North
<b>DITRII SOSNIN</b>	Minister of Transport and Road Industry of the Murmansk Region
<b>VIKTOR IKONNIKOV*</b>	Deputy Governor of the Arkhangelsk Region for Strategic Planning and Investment Policy
<b>ALEKSEI SITNIKOV*</b>	the First Deputy Governor of the Yamalo-Nenets Autonomous District
<b>ILDAR NEVEROV</b>	Chairman of the Committee on Environmental Management and Ecology of "Business Russia", Director of the LLC "NAO Arktikport"

<b>ALEKSANDR VYLITOK</b>	Head of the International Scientific and Educational Center “Arctic Transport Systems and Technologies” of International Transport Communications Institute of Russian Transport University
<b>ANDREI TEPLOV</b>	Head of Design Engineering Department of the Ltd. SPC «TRECOL»

## "PROSPECTS FOR THE DEVELOPMENT OF THE AGRICULTURAL COMPLEX OF THE ARCTIC ZONE OF THE RUSSIAN FEDERATION"

December, 5

12.00-14.00

Hall 8

### WORKING SESSION

The Arctic region has a high potential for export of unique food products. State support measures, attraction of private investments, organization of processing, formation of the distribution system of products are of vital importance for the development of the agro-industrial complex of the polar regions. According to experts, the development of the agro-industrial complex of the Arctic also should positively influence the small and medium business of the macroregion.

### Issues for discussion:

- ✦ Agro-industrial complex of the Arctic zone of the Russian Federation: state, problems, prospects
- ✦ New technologies, projects and solutions for the development of the agro-industrial complex of the Arctic regions
- ✦ Arctic fishing industry complex: problems and points of growth
- ✦ Reindeer husbandry as ethno-forming branch of agro-industrial complex for indigenous peoples of the North
- ✦ Hunting and traditional crafts of the Arctic Zone of the Russian Federation

### Disputants:

<b>ILIA SHESTAKOV</b>	Head of the Federal Agency for Fishery
<b>ANDREI IVANOV</b>	Minister of Fisheries and Agriculture of the Murmansk Region
<b>ANNA OSININA</b>	Deputy Minister of Agricultural Complex and Trade of the Arkhangelsk Region
<b>VIKTOR IUGAI*</b>	Director of the Department of Agriculture Trade and Food Yamal-Nenets Autonomous District
<b>EVGENII ZAGORODNII</b>	Vice-President of the JSC "United Shipbuilding Corporation" on Commercial Shipbuilding
<b>ANDREI EROFEEV</b>	General Director of the LLC "Phytointekh"
<b>LIUDMILA POPOVA</b>	Director of the LLC "Green Laboratory"
<b>NIKOLAI SKLEPKOVICH</b>	Chairman of the Board of APC "Arkhangelsk Cranberry"
<b>GAIANE PANOVA</b>	Head of Photophysiology of Plants and Bioproductivity of Agro-ecosystem Department of the FSBSI "Agrophysical S&RI"

# "INTEGRATED DEVELOPMENT OF THE ARCTIC MONO-CITIES"

December, 5

12.00-14.00

Hall H22-H23

## ROUND TABLE

There are 14 mono-profile cities in the Arctic zone. According to the rating prepared by the Center for the operation of the State Commission for the development of the Arctic in conjunction with the Institute for applied political studies, the deterioration of the socio-economic situation is observed in most polar mono-cities. The most difficult situation has developed in Kirovsk, Onega Kovdor and Revda settlement. Experts attribute the following to the peculiarities of the Arctic mono-cities: the structure of their economy is determined by the resource and raw materials base of the territory (the most common non-ferrous metallurgy and coal industry); regression of demographic indicators; deterioration of social, housing and communal and transport infrastructure; deficiency of budgets.

Within the framework of the working session, it is planned to discuss the construction of a system for supporting Arctic mono-cities, taking into account their developmental features, mechanisms for attracting investments, ways to improve the quality of life of the population of single-profile territories.

### Issues for discussion:

- ◆ Features of the development of Arctic mono-cities
- ◆ Creating conditions for improving the socio-economic status of the Arctic single-industry towns
- ◆ Strategy and mechanisms of state support of mono-profile cities
- ◆ Mechanisms for attracting investments in mono-profile territories

**Moderator:** **IGOR SHPEKTOR**, President of the Union of Arctic Circle and High North Towns, Chairman of the Commission on Housing and Public Utilities, Construction and Roads of the Civic Chamber of the Russian Federation

### Disputants:

<b>GRIGORII DOBROMELOV</b>	Director of Applied Political Research Institute
<b>EVGENII PLISETSKII</b>	Deputy Head of the Region Policy and Development of the Russian Far East Board of the Analytical Center for the Government of the Russian Federation
<b>IURII DOLGIKH</b>	Head of Vorkuta
<b>IGOR SKUBENKO</b>	Head of Severodvinsk
<b>ANDREI PONOMAREV</b>	Head of the administration of urban settlements Nickel
<b>VALENTINA AGALAKOVA</b>	Head of the Municipal Structure of Urban Locality Revda
<b>IVAN GRISHIN</b>	Acting Head of Onega Municipal District
<b>ROMAN DURIAGIN*</b>	Acting Head of Kovdor
<b>ANDREI KUZNETSOV*</b>	Head of Zapoliarny Administration
<b>DMITRII STAROVEROV*</b>	Head of Monchegorsk
<b>OLEG SAMARSKII*</b>	Head of Olenegorsk
<b>SERGEI SKRUPSKII*</b>	Head of the Administration of Berengovsky village

<b>VLADIMIR DIADIK*</b>	Head of Kirovsk
<b>NIKOLAI LEVANOV*</b>	Head of Pevek
<b>MIKHAIL GMYRIN</b>	Chairman of the Association “Arctic Municipalities”

## "TRANSPORT POTENTIAL OF THE NORTH SEA ROUTE"

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December, 5

15.00-16.30

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### PANEL SESSION

Hall 4

The sustainable development of the Arctic zone of the Russian Federation is closely connected with the transport system of the region, the main element of which is the Northern Sea Route (NSR). Navigation on it has a fundamental importance for ensuring the vital activity of the Arctic regions, increasing the transit of goods and developing mineral deposits.

Currently there are active processes in the development of the transport system of the Arctic: a legal framework is being improved to ensure the functioning of the NSR; the Polar Code entered into force in 2017; new rules for navigation and application of tariffs for icebreaking were approved. It is planned to pass a bill which would grant the right to transportation of hydrocarbons in the water area of the Northern Sea Route but only for vessels under Russian flag. However, the most important step for today is a final choice of a structure which is responsible for the development of the NSR, and also for identifying its rights which may include questions of shipping, ice-breakers providing, security, navigation and port's infrastructure of the NSR.

Within the framework of the panel session, it is planned to discuss the effectiveness of the organization of port activity in the Arctic and ways to increase the commercial attractiveness of the Northern Sea Route. Considering the increasing volumes of traffic, the issue of taking additional measures in the field of maritime safety and the formation of a modern management system for the NSR is acute.

### Issues for discussion:

- ✦ Integrated development of the Arctic transport system
- ✦ The current status and increasing the attractiveness of the NSR
- ✦ The main directions of the development of the port infrastructure of the Arctic zone
- ✦ The Northern Sea Route management system and the safety of navigation in the Arctic
- ✦ Icebreaker support of navigation on the NSR. Regulation of legal relations between participants of icebreaking
- ✦ The Northern Sea Route as an International Transport Corridor
- ✦ Increasing the organization quality of the Northern delivery

**Moderator:** **VIACHESLAV SHTYROV**, Chairman of the Federal Council Committee of the RF on Defense and Security

### Disputants:

<b>VIKTOR OLERSKII</b>	Deputy Minister of Transport of the Russian Federation, Head of the Federal Agency for Maritime and River Transport
<b>PAVEL VOLKOV</b>	State-Secretary – Deputy Minister of the Russian Federation for the Development of the Russian Far East
<b>VIACHESLAV RUKSHA</b>	General Director, FSUE “Atomflot”

<b>ANDREI LAVRISHCHEV</b>	General Director of the FSUE “Rosmorport”
<b>ALEKSEI TIUKAVIN</b>	the First Deputy Governor of the Murmansk Region
<b>NIKOLAI MONKO</b>	Acting Head of the Federal State Institution “The Northern Sea Route Administration”
<b>ANTON FILATOV</b>	General Director, OBORONLOGISTIKA LLC
<b>DMITRII PURIM</b>	General Director, Sovfracht JSC
<b>MIKHAIL ZHUCHKOV</b>	Director of Logistic Department, PJSC “Norilsk Nickel”
<b>NIKOLAI PEGIN</b>	General Director, JSC “Development Corporation of Kamchatka”

## "HR SUPPORT FOR THE ARCTIC REGION"

December, 5

15.00-16.30

Hall 10

### WORKING SESSION

Volumes and quality of training in higher education institutions do not always meet the needs of companies operating in the Arctic. At the same time, specialists who have received education in other regions are not always ready to move to a permanent place of residence in the Arctic regions. It is necessary to systematically form the conditions for improving the quality of education and the relevance of graduates, expanding targeted training of personnel, introducing practical training mechanisms with the involvement of specialists from profile Arctic enterprises.

### Issues for discussion:

- ▶ Multistage training of specialists for Arctic projects: issues of cooperation between Arctic and non-Arctic universities
- ▶ Establishment of a mechanism for targeted training for the effective distribution of graduates in priority areas of work in the Arctic
- ▶ The introduction of formats for industrial training at enterprises operating in the regions of the Far North

**Moderator:** **ALEKSANDR PILIASOV**, Director of the Economic of the North and Arctic Centre, the Council for the Study of Productive Forces

### Disputants:

<b>OLGA VASILIEVA</b>	Minister of Education and Science of the Russian Federation
<b>MATVEI NAVDAEV</b>	Advisor of the Head of the Federal Youth Agency, Director of the International Youth Educative Forum “Arctic. Made in Russia”
<b>NATALIIA KARPENKO</b>	Minister of Education and Science of the Murmansk Region
<b>IRINA SIDOROVA</b>	The Board of the Governor of Yamalo-Nenets Autonomous Region
<b>TAMARA FRALTSOVA</b>	Rector of FSAEI FVE “Institution of Further Training of Administrative Officers and Specialists of Fuel and Energy Complex”
<b>ALEKSEI KORSHUNOV</b>	First Pro-Rector of the Northern (Arctic) Federal University named after M.V. Lomonosov

<b>ALEKSANDR FEDOTOVSKIKH</b>	Member of Presidium of the Coordinating Council on Development of the Northern Territories and the Arctic of the Russian Union of Industrialists and Entrepreneurs
<b>BELLA AMKHADOVA</b>	Head of Recruitment Office of Personnel Policy Department of the Norilsk Nickel
<b>RENATA ABDULINA</b>	Chairman of the Committee on Youth Policy and Cooperation with Public Organizations of Saint-Petersburg
<b>ARTEM KOROLEV</b>	Director of Education Projects Foundation "Reliable Replacement"
<b>ALEKSANDR KHROL</b>	Director of Nord Development AS

## "HOW TO MAKE THE RUSSIAN ARCTIC ATTRACTIVE FOR TOURISTS?"

December, 5

15.00-16.30

### ROUND TABLE

Hall H22-H23

Tourism in the Arctic can become a driver for creating new jobs, developing small and medium-sized businesses, remote Arctic territories, a source of significant revenues to the federal and regional budgets. To do this, it is necessary to solve a number of problems - to ensure a balance between the openness of the Arctic territory for foreign tourists and the interests of national security, transport accessibility, infrastructure development, and the creation and promotion of tourist and recreational clusters. Subjects of the Arctic zone of the Russian Federation together with the Federal Agency for Tourism will discuss the possibilities of state support and promotion of Arctic tourist projects, including through the Special Federal Program "Development of domestic and incoming tourism in the Russian Federation (2019-2025)".

### Issues for discussion:

- ✦ Support for Arctic projects within the framework of the Federal Target Program "Development of domestic and incoming tourism" for 2019-2025.
- ✦ Promotion of Arctic tourism projects in the domestic and foreign markets
- ✦ Ensuring the transport accessibility of Arctic tourist destinations
- ✦ Address support of extreme, ecological, ethnic and sports tourism

**Moderator:** OLEG SAFONOV, Head of the Federal Agency for Tourism

### Disputants:

<b>SERGEI KRIVONOSOV</b>	Deputy Chairman of the State Duma Committee of the RF on Physical Culture, Sport, Tourism and Youth Affairs Chairman of the Subcommittee on Tourism
<b>OLGA KUZNETSOVA</b>	Minister of the Development of Industry and Entrepreneurism of the Murmansk Region
<b>LEV LEVIT</b>	Advisor of Governor of the Arkhangelsk Region
<b>SERGEI KULAKOV*</b>	Chairman of the Culture and Tourism Committee of the Yamalo-Nenets Autonomous District
<b>ALEKSEI LESONEN*</b>	Minister of Culture of the Republic of Karelia

<b>ELENA MIRONENKO*</b>	Minister of Culture of the Krasnoyarsk Region
<b>SERGEI EMELIANOV</b>	Minister of Culture, Tourism and Archiving Affairs of the Republic of Komi
<b>ELVIRA TIMERGAZINA*</b>	Director of the Department of Youth Policy and Tourism of Yamalo-Nenets Autonomous Okrug

## "SUSTAINABLE DEVELOPMENT OF INDIGENOUS AND SMALL PEOPLES OF THE NORTH"

December, 5

15.00-16.30

### WORKING SESSION

Hall H25-H26

In conditions of active industrial activity, the native habitat of indigenous small peoples of the North is exposed to negative influences, which leads to a crisis in traditional industries and aggravation of social problems.

The vulnerability of the traditional way of life and the small number of each of the peoples of the North made it necessary to formulate a special state policy with regard to their sustainable development, which provides for systemic measures to preserve an original culture, language, crafts, trades and native habitat.

### Issues for discussion:

- ✦ Preservation of the traditional way of life of the indigenous peoples of the North
- ✦ The use of land and resources by the indigenous peoples of the Arctic zone
- ✦ Stimulation of traditional economic sectors and increase of their economic efficiency
- ✦ Creation of conditions for participation of indigenous peoples in solving issues, affecting their rights and interests
- ✦ The promotion of dialogue between indigenous peoples and industrial companies

**Moderator:** IGOR BARINOV, Head of the Federal Agency for Ethnic Affairs\*

### Disputants:

<b>IGOR BARINOV</b>	Head of the Federal Agency for Ethnic Affairs
<b>GRIGORII LEDKOV</b>	President of the Russian Association of Indigenous Peoples of the North, Siberia and Russian Far East
<b>ILDAR GILMUTDINOV</b>	Chairman of the State Duma Committee on Nationalities Affairs
<b>NIKOLAI KHARITONOV</b>	Chairman of the State Duma Committee of the RF on Regional Policy and Problems of the North and Russian Far East
<b>VALENTINA ZGANICH</b>	Member of the Federation Council Committee on Social Policy
<b>ANATOLII BRAVIN</b>	Acting Minister of National Policy of the Republic of Komi
<b>GALINA GABUSHEVA</b>	Executive Director, Union of the Northern Industrialists and Entrepreneurs of Norilsk
<b>NATALIA GALTSEVA</b>	Deputy Director of North-Eastern Complex Research Institute on Research Work of the Far East Department of Russian Academy of Science
<b>ANATOLII ZHOZHNIKOV</b>	Head of the "Adaptation of a human and society in the Arctic regions under conditions of climate changes of globalization" International Subdepartment of UNESCO of the FSAEI HE M.K. Ammosov North-Eastern Federal University

# "DEVELOPMENT OF TELECOMMUNICATION TECHNOLOGIES IN THE ARCTIC ZONE"

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December, 5

15.00-16.30

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Hall 8

## PANEL SESSION

Providing the Arctic zone of the Russian Federation with modern forms of communication is an indispensable condition for the social and economic development of the Far North.

The successful development of communication services will help to create favorable conditions for the work of the transport, industrial and defense complex. The development of telecommunication technologies in the Arctic has a number of features related to both natural conditions and a significant size of the territory with a minimum population density.

At the moment, the Ministry of Communications of Russia, together with Rossvyaz and FSUE "Space Communication" are developing the concept of a federal program for improving the communication system in the Arctic, which envisages the development of an orbital grouping on a high ellipse.

It is planned to create a united protected information telecommunication system of transport industry in the Arctic zone, which will cover the entire territory of the macroregion, including water areas, inland waterways, polar airways and land main lines.

Within the framework of the working session, it is planned to discuss actual tendencies in the development of telecommunication technologies in the Arctic, taking into account the coordination of the interests of the state and business.

### Issues for discussion:

- ▶ State policy in the development of telecommunications in Arctic
- ▶ The needs of Arctic regions and companies in modern types of communication
- ▶ Innovative technologies for providing communication in the Arctic
- ▶ Basic telecommunication projects in the Arctic zone. Opportunities for medicine and education
- ▶ Development of satellite and radio communication in the Arctic

**Moderator:** LEONID KONIK, Chief Editor of Publications of Group of Companies ComNews

### Disputants:

<b>DMITRII ALKHAZOV*</b>	Deputy Minister of Telecom and Mass Communications of the Russian Federation
<b>IGOR SHILKIN</b>	Deputy Head of All-Russian Service for Disaster Medicine Staff – Head of the Crisis Management Centre of the All-Russian Service for Disaster Medicine Staff
<b>VIKTOR DONIANTS</b>	General Director of the “Zond-Holding” Satellite-link Communication Company
<b>ALEKSANDR KUZOVNIKOV</b>	Head of Communication and Retransmission of Information System Control of the JSC Academician M.F. Reshetnev «Information Satellite Systems»
<b>A. GOROVOI</b>	Deputy Director of the Civil Products Development Department of the JSC “Almaz – Antey” Air and Space Defence Corporation”
<b>MIKHAIL GLINKA</b>	Head of the Introduction of Innovative Projects Department of the «Russian Satellite Communications Company»

<b>IURII PETROV</b>	Director of the Data Bases Department of NAO “Siberian SAC”
<b>TATIANA MOKHOVA</b>	General Director of the LLC “Edinstvo”
<b>S. REKUNOV</b>	Scientific and Research Institute of Advanced Studies and Scientific Technologies in the Field of Life Safety of St. Petersburg University of State Fire Service of Emercom of Russia

## "FORMING AN EFFECTIVE SYSTEM OF HANDLING AND PROCESSING WASTE IN THE ARCTIC: SPECIFICITY AND SOLUTIONS"

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December, 5

15.00-16.30

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Hall 9

### WORKING SESSION

Russia has launched a full-scale reform of the solid municipal waste management system (SMW). In the process of its implementation the regions of the Arctic zone have faced a number of problems that can eventually lead to a situation when the export and utilization of waste under the old principles will become illegal, while the formation of a new system is impossible due to its economic unfoundedness in the Far North. Experts and many representatives of federal and regional authorities declare the need to develop a special approach to the treatment of SMW in the Arctic, taking into account the distances, low population density, climatic and natural conditions.

### Issues for discussion:

- ✦ State support for the development of the sphere of SMW treatment in the Russian Arctic
- ✦ Formation of regional schemes for the management of SMW in the Arctic regions: positive experience, problematic issues, prospects for implementation
- ✦ SMW in the Arctic: subsidizing the transport of waste or changing requirements for accommodation facilities?
- ✦ Technologies for utilization and processing of waste for the Arctic zone

### Disputants:

<b>ARTEM SIDOROV*</b>	Head of the Federal Service for Supervision of Natural Resources
<b>ANDREI CHIBIS*</b>	Deputy Minister of Construction, Housing and Utilities of the Russian Federation
<b>ROMAN KUPRIN*</b>	Deputy Director of Metallurgy and Materials Departments of the Ministry of Industry and Trade of the Russian Federation
<b>ROMAN POLSHVEDKIN</b>	First Deputy Minister of Industry, Natural Resources, Energy and Transport of Komi Republic
<b>ALEKSEI MAKRUSHIN</b>	General Director of the Association of HUI “Development”
<b>RUSLAN GUBAIDULLIN</b>	Acting Director of Association “Clean Country”
<b>ILDAR NEVEROV</b>	Chairman of the Committee on Environmental Management and Ecology of “Business Russia”
<b>KONSTANTIN LADYGIN</b>	General Director of the Safe Technologies, Inc.
<b>KIRILL FRIDMAN</b>	Deputy Director of the FBIS “North-West Public Health Research Center”

*\* subject to change without notice*