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Selected Issues in Regional Economic Development along

the Northern Sea Route

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Selected Issues in Regional Economic Development along

the Northern Sea Route

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FOREWORD - INSROP WORKING PAPER

INSROP is a five-year multidisciplinary and multilateral research programme, the main phase of which commenced in June 1993. The three principal cooperating partners are Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia; Ship and Ocean Foundation (SOF), Tokyo, Japan; and Fridtjof Nansen Institute (FNI), Lysaker, Norway. The INSROP Secretariat is shared between CNIIMF and FNI and is located at FNI.

INSROP is split into four main projects: 1) Natural Conditions and Ice Navigation; 2) Environmental Factors; 3) Trade and Commercial Shipping Aspects of the NSR; and 4) Political, Legal and Strategic Factors. The aim of INSROP is to build up a knowledge base adequate to provide a foundation for long-term planning and decision-making by state agencies as well as private companies etc., for purposes of promoting rational decisionmaking concerning the use of the Northern Sea Route for transit and regional development.

INSROP is a direct result of the normalization of the international situation and the Murmansk initiatives of the former Soviet Union in 1987, when the readiness of the USSR to open the NSR for international shipping was officially declared. The Murmansk Initiatives enabled the continuation, expansion and intensification of traditional collaboration between the states in the Arctic, including safety and efficiency of shipping. Russia, being the successor state to the USSR, supports the Murmansk Initiatives. The initiatives stimulated contact and cooperation between CNIIMF and FNI in 1988 and resulted in a pilot study of the NSR in 1991. In 1992 SOF entered INSROP as a third partner on an equal basis with CNIIMF and FNI.

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International Northern Sea Route Programme (INSROP)

SUBPROGRAMME III: TRADE AND COMMERCIAL SHIPPING ASPECTS

Project III.02.3

SELECTED STUDIES IN REGIONAL ECONOMIC DEVELOPMENT ALONG THE NORTHERN SEA ROUTE

Working paper

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1. INTRODUCTION

This report develops project III.01.1 "The Significance of the Northern Sea Route for the Arctic Areas of Russia" in two directions: 1) actualization of the state policy of stabilization and development of Arctic areas of Russia; 2) analysis and assessment of the social-economic situation and perspectives for the development of the areas along the NSR.

Project III.02.3. is being implemented by the Norwegian (ACTA Consult Ltd, FINNUT, NORUT) and Russian (SOPS & ES) groups with the following labour division: Norwegian part - western regions (Barents-Euroarctic region, North of West Siberia), Russian part - eastern regions (Taimyr Autonomous District and North of Krasnoyarsk krai, North of the Republic of Sakha (Yakutia), Chukchi Autonomous District). Analysis of the "Northern" state policy of the Russian Federation, contained in this report, relates to all Russian regions along the NSR.

Main sources of this report are: normative-legal acts, developed in 1993-1996, federal target programmes (and their projects), materials of the State Committee for statistics, reports of the Institute "Soyuzmorniiproekt" on the functioning of the Arctic sea transport system, analytical and forecast studies of SOPS & ES and other research institutes.

The author expresses his gratitude to researchers of SOPS & ES A.A.Vinokurov and I.L.Cherkasov for the presented materials, which were used in i.i. 2.2, 2.4, 3.2, 4, to A.P.Ushakov (Northern Sea Route Administration) - for their kind assistance in the preparation of this report and to the reviewer Prof. Victor Fischer (University of Alaska, USA) - for valuable comments, which were taken into consideration during finalization of the report.

2. EVOLUTION OF THE STATE POLICY OF THE RUSSIAN FEDERATION TOWARDS THE NORTHERN REGIONS.

2.1. Background

Market reform started in Russia in 1992 simultaneously in all regions without any adapting measures. Transition from planned to market economy was especially painful in the North. This could be explained by a number of reasons.

The former state-administrative economic system had the most accomplished forms here, and monopolized and highly specialized economy was not capable of self-regulation. Cessation of public material and technical supply resulted in the interruption of the regularity in products deliveries from other regions. The most part of industrial enterprises, ice-breaking fleet, ports got into a hard financial situation due to price liberalization and change in the credit system. The inflation shock at the beginning of 1992 practically annihilated money savings of the residents of the North, who had relatively higher incomes in the past, and thus significantly lessened their main stimuli to live in the North.

Transition to market conditions was complicated by the fact, that the economy of the Russian North was already weakened before the reform started, due primarily to a significant reduction of public investment in the sea fleet and port economy, technical reconstruction of main productions, the geological survey, as well as the depletion of a number of large deposits of mineral resources (oil, non-ferrous metals ores, apatites, etc.). Volumes of shipments along the NSR began to decline as from 1988.

The economic crisis in the Russian North affected all spheres. The volume of industrial output has fallen by half, volumes of production of almost every major product: oil, non-ferrous metals, gold, timber, chemical raw materials and fish, have significantly decreased. The volume of geological exploratory work in

the North has decreased more than 50% in comparison with its maximum level, making it extremely difficult to revive the mining industry. The volume of investments has decreased 6 times. The share of centralized investments decreased from 80% to 10%. Thus, the federal centre has virtually halted investment activity in the North.

Decline in production and investment activity in the North has given rise to an employment problem for the first time in this region. Number of persons not engaged in labour activity and registered unemployed constantly grows. This circumstance as well as decrease of actual incomes, loss of advantages, as related to incomes in comparison with the incomes of the residents of other regions, has caused the first wave of out-migration in the history of the Russian North.

The main benefit gained by the Russian North from the economic reform is decentralization and liberalization of external trade. At present northern producers receive the major part of currency revenues themselves. In recent years export of oil and gas from the deposits in the north of Western Siberia, of various kinds of raw materials - from the port of Murmansk, non-ferrous metals - from the port of Dudinka (produce of Norilsk mining-metallurgical works) has been growing. However, demand for these kinds of "northern" products on the domestic market has been decreasing much faster. The fall in world prices for exported non-ferrous metals, especially copper and nickel, is also a negative factor.

Experts clearly understood that the North, and especially the Arctic, are not able to adapt at once to market conditions and to overcome economic crisis, relying only on themselves (without state support). But the Government realized it too late, after reform had started and the former system of public regulation had collapsed.

Since 1992 special anti-crisis and stabilizing measures have been implemented in the Russian North. They include: state order for minimum necessary importation of food, fuel, consumer goods, etc. to the North; privileged

crediting of payments for seasonal cargoes; covering of a part of cargo shipment cost over the federal budget; public subsidies to a number of enterprises; provision of export quotas and reduction of customs duties; increase of prices for oil, gas, some kinds of non-ferrous metals and raw materials, regulated by the state; provision of additional privileges to the residents of the North, etc. However, these measures proved insufficient to stabilize the social-economic situation in the North, and besides, they were often revised. For instance, in 1994-1995 most credit and tax privileges were annulled, instead direct financial support to local budgets and enterprises, including those serving the NSR, was strengthened. Organizational forms of public regulation also changed. In particular, the State Committee on Social-Economic Development of the Regions of the North, established in 1990, in 1993 became a constituent part of the Ministry of Nationalities and Regional Policy, and in the beginning of 1996 it was again restored. Decisions on the development of state programmes of the development of the northern regions were revised not once, etc. On the whole, state policy towards the North at the first stage of the reform should be defined as necessary in principle, but insufficiently consistent and efficient.

The second stage of the economic reform, conditionally connected with the Programme of the Government of the Russian Federation "Reforms and Development of the Russian Economy in 1995-1997", goes with the certain evolution of the "northern" policy. In our opinion, it would be expedient to point out four priority directions in this process:

- formation of normative-legal base, accounting specific features of northern regions;
 - use of program planning and management;
 - economic protectionism;
 - social protectionism.

2.2. Normative-legal innovations

In 1995-1996 intensive activity on the legalization of special status of the regions of the North and special conditions for its residents continued. Bodies of legislative power took part in this work - Council of the Federation and the State Duma of the Federal Assembly of the Russian Federation, President of Russia, federal executive authorities, as well as bodies of legislative (representative) and executive power of the subjects of the Federation, located in the zone of the North.

Number of federal laws, President's decrees, Resolutions and Directives of the State Duma and the Government of the Russian Federation, adopted in relation to the North in the last two years, is about 150. The general idea is to create normative-legal system for the North at two levels: federal centre and subjects of the Federation. The Law "On the principles of state regulation of social-economic development of the North of the Russian Federation" is to be on the top of this pyramid.

The Law came into effect in June 1996. It establishes principles of state regulation in the field of economic, social, ecological, cultural and national development of the North and is aimed at the achievement of optimal combination of interests of the Federation and its subjects, territories of which belong to the North, creation of favourable conditions for economic activity, rational use of natural resources, environmental protection, provision of adequate life standard for the residents and sustainable development of the region.

The Law defines the main principle of state regulation in the North - state protectionism, aimed at creation of preferential conditions of development for the population and significant part of branches of economy in the North and at meeting state needs in products, produced in this region. Other principles of state

¹⁾ The adopted Law differs from the bill, discussed in the Working Paper on Project III.01.1.

regulation in the North are: a) selectivity of state support of production (assistance is given first of all to the enterprises and organizations, providing state needs and contributing to the fulfilment of social tasks); b) restriction of industrial development in the North for the purposes of careful use of its natural resources, conservation of the natural environment and protection of traditional principles of economic activity and way of living of the small ethnic minorities of the North; c) creation of conditions for the balanced development of production, social sphere and conservation of the natural environment; d) outstripping development of infrastructure objects, first of all of communications and transport, including the *Northern Sea Route*; e) use of shift method; f) conservation and development of aboriginal scanty peoples of the North; g) optimization of population number in the North.

The Law contains the list of means (methods) of state protectionism:

- guarantees and compensations to the population, indemnifying for additional costs of living and carrying out of activity in severe natural-climatic conditions;
- compensations to physical and juridical persons, participating in meeting state needs, providing their profitability, first of all to enterprises, producing and processing natural resources, agricultural and building enterprises;
- financial assistance in supplying goods to the regions with limited terms of deliveries;
- support to and social-economic development of aboriginal scanty peoples of the North;
- careful use of natural resources, considering increased vulnerability of the northern nature and securing rational use of natural resources;
- establishment of state non-budget funds on the basis of a part of payments for the right to use nonrenewable natural resources in order to create

conditions for life activity of the future generations, when reserves of these resources will be depleted;

- participation in the realization of federal and regional economic, social and environmental programmes of the development of the North;
 - privileged crediting of the development of prospective productions;
- assignment of subsidies, loans and credits on preferential terms for housing construction or purchase for those, moving from the regions of the North to other regions.

Most part of the articles of the Law reveal main directions of state regulation in the North:

Article 5. State regulation of economic development (specific features of structural and investment policy are determined here).

Article 6. State support of entrepreneurship.

Article 7. State support of goods deliveries.

Article 8. State guarantees and compensations (for those, working and living in the North).

Article 9. Health, maternity and child protection.

Article 10. State regulation of population number in the North.

Article 11. State regulation of the development of economy and culture of small aboriginal ethnic minorities of the North.

Article 12. State regulation in the field of environmental protection and use of natural resources.

Statements of corresponding articles are usually of framework character: they identify tasks, but do not contain quantitative data. It is important, however, that they determine an extended list of exceptions (departures) to the general Russian policy (with market dominant) and general Russian legislation (for example, tax, credit and other privileges, subsidies and compensations). Article 7, especially important for the NSR functioning, is more specific.

In compliance with the Law, federal authorities must assist in supplying goods to the regions of the North with limited terms of deliveries in order to provide sustainable functioning of the economy and life sustenance at the stage of transition to market economy.

Amount of state financial support of goods deliveries is considered in the process of making federal budget and is pointed out in a separate item. Food and fuel-power resources are given priority in rendering assistance in supplying goods to the North. Federal executive authorities determine: the list of the regions of the North with limited terms of deliveries. The procedure for the organization of products deliveries; terms of assignment of financial resources and mechanism for the realization of deliveries pattern. These bodies also carry out control of goods deliveries to the North, timely assignment of financial means, as well as of their proper use and return.

Article 2, i. 2 is of large significance for the international activity in the zone of the Northern Sea Route: "In case other rules, than those stated in the present Federal Law, are established by the International Agreement of the Russian Federation, then rules of the international agreement are applied".

In elaboration of the Law "On the principles ..." a number of special laws is prepared or adopted. The first of them (reference to it is made in the Law "On the principles ...") is - the Law "On state guarantees and compensations for those, who live and work in the regions of the Extreme North and localities with the same status". The objectives of this Law are to secure the living standard of local population, compensating for discomfortable regional conditions, to prevent spontaneous out-migration, to create conditions for moving of certain groups of residents (for example, pensioners) to the southern regions and their further social-economic adaptation, to create stimuli and guarantees for those, working in the North in shifts. The Law effects in the following spheres - employment, labour

payment, vacations, housing relations, compensations for transport costs, social insurance, pensions.

The Law on the continental shelf, adopted by the State Duma in October 1995, has large significance for Russian Arctic regions. This Law determines the status of the continental shelf of the RF, sovereign rights and jurisdiction of the Russian Federation on its continental shelf and their realization in compliance with the Constitution, universally recognized principles and norms of the international law and international agreements. The Law contains provisions on the boundaries of the continental shelf, study, exploration and development of its mineral and living resources. In particular, it is established, that representatives of small aboriginal minorities and ethnic communities; permanent residents of the territories, adjacent to the sea coast, have preferential rights to use living resources.

It is envisaged, that in the nearest future there will be adopted laws, regulating "northern" aspects of the use of mineral resources, environmental protection, sea transport, etc.

Decree of the President of the Russian Federation "On the state policy of the Russian Federation in the matters of the North" (21.11.95) is an important political and normative document. This Decree envisages re-establishment of the State Committee of the Russian Federation for the Development of the North (Goskomsever of Russia) within the system of federal bodies of executive power "in order to provide implementation of the state policy in social-economic development of the northern territories of the Russian Federation, to strengthen state regulation and interbranch coordination in this field, to create necessary conditions for the increase of the efficiency of the use of natural resources, improvement of living conditions for the population, comprehensive development of economy and culture of scanty peoples of the North". Re-establishment of Goskomsever is evidence of the acknowledgement of the necessity to coordinate

the efforts of ministries and departments, regional authorities in the implementation of efficient northern policy. In our opinion, the actual influence of Goskomsever will be determined, first of all, by its control functions in the field of distribution and use of financial resources.

State policy (and its consequences) in the Russian North is tightly linked to the *genesis of federative relations*.

The process of powers division between the Federation and individual subjects of the Federation, as well as the process of the formation of actual economic federalism are actively developing after the declaration of national sovereignty of the Russian Federation in June 1990, and since 1992 - within the independent Russia. Specific to the zone of the North in this context is, that it comprises different types of Federation subjects. Among the regions located along the NSR these are: republics (Komi, Yakutia-Sakha, krais (Krasnoyarsk), oblasts (Murmansk, Arkhangelsk, Tyumen), autonomous districts (Nenets, Yamal-Nenets, Khanty-Mansi, Taimyr, Evenk, Chuckchi).

The 1993 Constitution of the Russian Federation establishes equality of all subjects of the Federation and divides all state powers into three groups: exclusively Federation powers, exclusive powers of the subjects of the Federation; joint powers. The main tendency in the development of federative relations after the adoption of the 1993 Constitution is the delegation of a part of joint powers to the subjects of the Federation under special bilateral agreement.

But an exclusively Russian constitutional paradox remains: all subjects of the Federation are equal according to their status, but some subjects constitute a part of other subjects. Thus, Nenets Autonomous District is a part of Arkhangelsk oblast, Yamal-Nenets and Khanty-Mansi Autonomous Districts form constituent parts of Tyumen oblast, Taimyr and Evenk Autonomous Districts - of Krasnoyarsk krai. Only Chuckchi Autonomous District is completely independent (some years ago it was separated from Magadan oblast). In the economy under transition these

specifics of the Russian state system are the cause of contradictions between autonomous districts and krais and oblasts, comprising these districts. Most frequent are conflicts arising when property and taxes are to be divided. For example, in 1995-1996 there was a controversy between Taimyr District and Krasnoyarsk krai concerning tax collection from Norilsk mining-metallurgical works. For the present this collision is settled in the following way: the town of Norilsk (with the mining-metallurgical complex) has been withdrawn from the jurisdiction of Taimyr District and is now under the direct jurisdiction of Krasnoyarsk krai.

The process of property and management transformation in the Arctic transport system is also problematical. Thus, after corporatization of sea shipping companies and transfer of ports under the jurisdiction of the subjects of the Federation and municipalities attempts are made to divide the NSR into sections, managed by the Federation subjects (this is the idea of the Republic of Yakutia-Sakha). Another example - use of territorial waters. Disregarding the statement of the Constitution of Russia, where territorial waters are considered as the sphere of exclusive federal power (in legal aspect), the authorities of Nenets, Yamal-Nenets, Chuckchi autonomous districts establish their own normative acts on the use of territorial waters. Thus, the system of federal and regional economic legislation and management along the NSR is not yet sufficiently stable.

2.3. Program planning and management

After the liquidation of the system of centralized planning federal target programmes are one of the main methods of state influence on the economy of Russia. In recent years approximately 2/3 of total investments were assigned from the federal budget for their implementation. For a number of objective reasons the North is regarded as a priority zone in program planning.

In 1991-1995 main hopes were pinned on the preparation of a complex programme of social-economic development of the whole zone of the Russian North. In 1992 "Concept and main directions of the programme on the development of the regions of the North for 15-20 years" was developed, in 1993 - "Theses of Russian programme of social-economic development of the North". At the end of 1994 the Ministry of Nationalities and Regional Policy submitted to the Government a detailed project under the title "State programme of economic and social development of the North of Russia". Analysis of this project is given in the work report (1).

Revised draft Programme was considered at the meeting of the Government on 10 August 1995 and approved on the whole. But later the Programme was not adopted. A briefer document, prepared by the Ministry of Economy and Ministry of Nationalities and Regional Policy, received official support. In November 1995 the Government of the Russian Federation adopted the Directive, declaring as follows: "... while preparing forecasts, concepts and programmes of social-economic development of the Russian Federation ministries and departments, executive authorities of the subjects of the Russian Federation are recommended to take into account proposals, developed by the Ministry of Economy and Ministry of Nationalities, on the main directions of federal policy towards social-economic development of the North of Russia, as well as main provisions of the draft Programme of social and economic development of the North, considered at the meeting of the Government on 10 August 1995". Besides, Ministry of Economy and Ministry of Nationalities were instructed to report on the account of specified proposals on the federal policy towards the North of Russia in the forecasts, concepts and programmes of social-economic development, submitted to the Government.

Why has the work on the Programme of the North, ongoing for many years, not been accomplished? In our opinion, two circumstances were of decisive

significance: 1) the extremely large area under the Programme (up to 60% of the whole territory of Russia), where over 100 regional and sectoral programmes are already being implemented; 2) the passive attitude of the leaders of the Federation subjects in supporting the Programme in general (many of them tried to promote their own regional programmes); it should be mentioned, that until recently subjects of the Federation, related to the zone of the North, were not linked together in the institutional aspect, while individual subjects are members of interregional associations, formed according to a different economic-geographical principle ("North-West", "Siberia", "Far East"). In 1996 the Association for the North was established, but it has not yet shown its worth in concrete matters.

At present, program approach is realized in a form different from the general Programme of the North: development of federal programmes a) for individual subjects of the Federation, b) federal target programmes, objects and measures of which cover northern regions, c) federal coordinating (management) programmes for macroregions (Far East, Siberia), comprising northern territories.

In 1995 the Federal Programme of social-economic development of the Republic of Sakha (Yakutia) was approved (See analysis of this programme in item 4.). A similar decision will probably be adopted for the Republic of Komi. Financial and other assistance, for special purposes, is also given to the northern territories, for which special Resolutions and Directives of the Government of the Russian Federation were adopted in 1994-1995 - these are Taimyr and Chuckchi autonomous districts.

Of numerous federal target programmes, implemented at least partially in the northern regions, the "Programme of the Revival of the Merchant Fleet of Russia" should be pointed out (See (1)), as well as special resolutions of the Government on the development of the sea shelf, development of the joint-stock company "Norilsk nickel". In June 1994 Resolution of the Government "On measures for the improvement of the Northern Sea Route Management" was

adopted. It envisages determination of main directions of the NSR development as a constituent part of the programme of social-economic transformation of the Extreme North.

Development of Presidential programmes on the Asian part of Russia creates a new situation in the state regulation in the North.

In April 1996 the Federal Programme of the development of the Far East and Trans-Baikal region till 2005 was approved. It was given the highest state status - Presidential programme. It covers the following regions along the NSR: Republic of Sakha (Yakutia) and Chuckchi Autonomous District. The Programme integrates 68 federal target programmes, implemented at least partially on the territory of the macroregion. Programme Administration is being established - joint management body, consisting of the representatives of federal centre and subjects of the Federation.

In May 1996 President B.Yeltsin signed the Decree on the development of the federal programme of the development of Siberia, which will probably also be given the status of Presidential programme. This programme will also cover regions along the NSR: Yamal-Nenets, Khanty-Mansi, Taimyr autonomous districts, the north of Krasnoyarsk krai.

A large number of important programmes, which are implemented to insufficient extent, shake faith in this instrument of state regulation of the economy²). The main reason for the failure to implement "Northern" programmes is the current investment crisis in Russia, especially the actual reduction of the investment part of the federal budget. But rejection of the programmes will put the North into an even more difficult situation, for, firstly, it will restrain opportunities to receive financial resources for special protectionist measures (see i. 2.4 and 2.5), and, secondly, it will strengthen the competitiveness of their regions.

²) Reviewer Prof. V.Fischer takes notice of this situation.

2.4. Economic protectionism

Economic protectionism in the Russian North is the most important principle of the state policy. Main methods and forms of economic protectionism are established in the Law "On the principles ..." (See item 2.2.).

It is necessary to have in mind, that the territory of the Russian North is extremely diverse, as far as the financial-economic situation is concerned. For example, the budgets of Yamal-Nenets and Khanty-Mansi autonomous districts receive very large revenues from production and sale of gas and oil. Revenues of the budget of Evenk district, on the contrary, are almost completely determined by transfers from the federal budget. The financial situation of Taimyr (excluding the town of Norilsk) and Chuckchi districts is difficult. The financial situation of enterprises and organizations of different branches differs greatly. That's why financial assistance to the northern territories, enterprises and organizations should be of strictly *selective* character. Subventions, subsidies, preferential credits to economic agents have two main objectives: supply of products, required for the state needs (by means of maintaining viability of production infrastructure and service industries as well) and prevention of unemployment growth, which almost inevitably causes out-migration from towns and workmen's settlements.

Supply of necessary goods, first of all food and fuel, became the most acute problem of the "survival" of the North since the start of market reform. This problem could not be solved on the basis of market self-regulation for a number of reasons: recipients of goods in the North do not have financial means to pay for seasonal deliveries, and it is disadvantageous for producers in the southern regions to deliver goods to the North because of delays in payments and high risk, limited terms of goods deliveries to the North create large difficulties to transport companies (in addition to the problems of suppliers).

The problem of supplying goods to the North is closely connected with the functioning of the water transport system, including the NSR and rivers, flowing into the Arctic Ocean. In 1995 4.3 million tonnes of cargoes were delivered to the North by sea, 20.4 million tonnes - by inland water transport. Shipments of cargoes by the ships of the marine fleet to the ports and areas along the NSR made up in 1995 (in thousand tonnes):

ports of the White Sea - 7.9

ports of the Barents Sea - 50.7

port of Dudinka - 375.6

areas of western Arctic - 10.9

areas of central Arctic - 36.2

areas of eastern Arctic - 299.4

ports of the eastern Chuckotka - 376.4

Economic mechanism of state support of goods supply to the North was changed many times in 1992-1996 and rather significantly.

In 1992-1993 assignment of preferential credits from the federal budget was the main form of state support. Experience has shown, that return of these credits didn't exceed 30%, it reflected objectively the limited financial potentialities of enterprises and budgets of the northern regions.

In 1994, for purposes of solving the problem under consideration, federal and regional funds of financial support were established, their means being formed from the federal and regional budgets. It was planned to assign 7.4 trillion roubles from the federal fund for 1994. Northern enterprises were assigned the right to receive loans from these funds with privileged interest rate (1/3 of the discount rate of the Central Bank).

Besides financial support of goods deliveries to the northern regions, the Government started to use non-market methods: A commission was established, entitled to carry out strict administrative control of the use of state credits, having

the special purpose of the fulfilment of contracts on goods supply, delivery time-schedule, etc. Terms of assignment of "northern" credits were revised in favour of the recipients of these credits: prolongation of given earlier credits and exemption from payment of interest on these credits, transfer of non-returned means to the regional funds for financial support of goods supply, referring of a part of non-returned credits to the internal state debt. Besides, enterprises, supplying and transporting products to the North, started to receive significant tax privileges (in 1995 amounting to 1080 billion roubles in federal taxes alone).

In April 1995 a special Law was adopted on re-registration of debt in the amount of 5 trillion roubles and transfer of this sum to the regional funds for financial support.

In the federal budget for 1995 financial support for goods deliveries to the North was determined in the amount of 4380 billion roubles. In spite of significant difficulties in finding funds in the course of this year, this sum was actually assigned (4378 billion roubles). Amount of regional funds for financial support made up 3277 billion roubles as of the beginning of 1996.

It should be noted, that the sea and inland water fleet, serving the Arctic, systematically suffers large financial losses due to late goods deliveries to the base ports, enforced idleness of ships, delayed consumers' payment for transport services. Outstanding debt to sea and inland water shipping companies and ports amounted to 758 billion roubles as of 1 January 1996.

In 1996 the pattern and key parameters of financial support of goods supply to the North were again significantly changed. According to experts' estimates required volume of financial assistance for 1996 would amount to 20.9 trillion roubles. However, it is determined in the adopted federal budget for 1996, that assistance from the federal fund of support in 1996 will be assigned only to the regions of the Extreme North and localities with the same status with limited terms of navigation, and only to compensate partially for the cost of goods

deliveries. The amount of this assistance is determined in the sum of 3 trillion roubles. The Law on the Federal budget for 1996 envisages also transfer of budgetary loans, given for these purposes earlier, and interests, to be paid, to the bodies of the Federation subjects. Besides these means, budgetary loans will be given to defray cash "gap", being the result of differences between the terms of loans return and the terms of goods purchase and deliveries. The Ministry of Agriculture and Foodstuff will take certain financial obligations, connected with the purchase and supply of food to the North.

According to experts' estimate, in 1996 it will be necessary to supply to the regions with limited terms of navigation: 3.6 million tonnes of oil products. 7.0 million tonnes of coal, 1.2 million tonnes of foodstuffs. However, means from federal and regional funds, required for the provision of these deliveries, were assigned with large delays; for this reason signing of contracts on goods deliveries was delayed and cargoes are accumulating in the base ports awaiting the start of navigation.

In March 1996 the Executive Commission of the Government of the Russian Federation adopted a number of resolutions on the provision of goods deliveries to the regions with limited terms of navigation, including: advancing of payment of transport costs, assignment of not less than 70% of the total sum of annual financing from the federal budget before 15 July, giving of budgetary loans to the subjects of the Federation to provide deliveries in the first half-year. Goskomsever of Russia made a proposal, as a legislative initiative, to increase the fund of state support of goods supply to the North in 1996 by 6.7 trillion roubles at the expense of the incomes of the Central Bank of Russia, received from privatization of federal property.

Thus, provision of goods deliveries is the most important direction of state economic protectionism in the North, judging by the amount of financing and strict administrative control. It should be mentioned, that *all regions along the*

eastern section of the NSR, as well as a part of regions along its western section (Nenets and Yamal-Nenets districts, partially Murmansk oblast, Republic of Karelia, Arkhangelsk oblast, Yamal-Nenets and Khanty-Mansi districts) are the regions with limited terms of navigation, and all forms of economic protectionism apply to them³).

2.5. Social protectionism

Main tasks, methods and forms of state social protectionism are determined in the "Law on the principles of state regulation of socio-economic development of the North of the Russian Federation", articles 8-11 (See item 2.2.). They are described in more detail in the Law "On the state guarantees and compensations for those who work in the regions of the Extreme North and localities given the same status". Tasks of social protectionism, recorded in these laws, remain the subject of further legislative work.

Search for the sources of financing of social measures is the main problem, which became more acute under the economic crisis. The acuteness of the problem is confirmed by the démarche of the Ministry of Finance, which submitted to the Government a proposal for the abolition of a number of "northern" privileges, as excessive for the budget and falling out of the world practice. The Ministry of Finance made a conclusion: only introduction of a special northern tax, extended to the whole territory of the Russian Federation, could become the radical solution of the problem. In our opinion, such straightforward proposal will not find understanding either among the residents of "not-northern" regions, or among legislators, the majority of which represent interests of not-northern regions. The Law "On the transfer of the income of the Central Bank of the Russian Federation"

³⁾ The list of regions of the Extreme North and localities with the same status with the limited terms of navigation is approved by the Government of the Russian Federation on 23 April 1996 (Resolution N 502).

(adopted and approved on 5 June 1996) is an example of the most efficient approach. This Law determines that a part of the income of the Central Bank will be spent to cover travel costs of residents of the North, working in the budgetary sphere, going to the places of spending their vacations and back.

Some new approaches to the solution of the tasks set forth, are given in the developed federal programmes. Thus, it is envisaged in the Presidential Programme of the development of the Far East and Trans-Baikal region (covering northern territories, close to the NSR, such as Republic of Sakha, Magadan oblast, Chuckchi Autonomous District), that costs of the introduction of increased wages coefficients will be reimbursed to public enterprises from the federal budget, for non-public enterprises - by means of tax privileges. This programme envisages also compensation to the population of differences in local (very high) and average Russian tariffs for electric power.

The most urgent social problem in the Russian North is prevention of mass out-migration, caused by the economic situation. For this purpose measures are taken to give financial assistance to the enterprises, providing critical employment, to provide timely payment of wages, supply of a wide variety of consumer goods to the North, etc.

The resettlement of a part of northern residents to more successful regions is inevitable, and economically reasonable (reduction of inefficient productions, migration of aged population, extension of shift method of work, etc.), but it is necessary to provide at least partial reimbursement of resettlement costs, to arrange provision of pensions to those who move to other regions, to provide them with dwellings in new places of residence. In 1995 the Federal Programme "Housing construction on the territory of the Russian Federation for the citizens, moving from the regions of the Extreme North" was adopted. Means from the federal budget are assigned for this programme, shared financing is envisaged from the budgets of the Federation subjects, local budgets and funds of

enterprises. Finally, in June 1996 the Council of the Federation approved the Law on the resettlement of residents from the regions of the Extreme North and localities given the same status. According to forecast estimates migration of the population from the North will slow down and almost stop after 2000.

Adoption of laws on social support for the residents of the North is an important legal achievement. However, it doesn't guarantee realization of the laws in strict compliance with their economic context. Creation of an adequate financial-economic base is the primary condition of their realization, and this will be possible only at the stage of stable growth of Russian economy. Only then will the state be able to assign sufficient means to maintain harmonious development of the economy and population of the northern regions. In the nearest 1-2 years state funds will be used mainly to prevent irreversible social and economic consequences.

3. GENERAL PROBLEMS OF THE ECONOMIC DEVELOPMENT OF THE REGIONS ALONG THE EASTERN SECTION OF THE NSR

3.1. Problem regionalization

"Regions located along the NSR" is a rather conventional notion. In the context of the present study, this notion relates not only to the coast and isles of the Arctic Ocean, but to the zone of transport-economic influence of the NSR as well. In the Asian part of Russia this zone extends from the Arctic coast to the inland areas of the continent, for many hundreds of kilometres as a rule, depending on the configuration of the river system and other transport networks, and finally on the existing and potential goods flows, transported along the NSR or delivered to the NSR.

This used notion requires identification according to the adopted economic-geographical zoning and existing state-administrative division of Russia. Otherwise, isolation from the information system, analytical developments carried out earlier, actual management structure, is inevitable.

As far as the applied economic-geographical zoning is concerned, there are no problems. Regions, located along the *eastern* part of the NSR (to the east from Dixon), undoubtedly belong to the northern parts of East-Siberian and Far Eastern economic regions. It could be added that they are located also within the areas of interregional associations of economic interaction "Siberian agreement" and "Far East and Trans-Baikal region" and areas, included in the new federal programmes "Siberia" and "Far East and Trans-Baikal region".

It is more difficult to determine correspondence to the existing state-administrative units - subjects of the Russian Federation. Proceeding from the analysis of transport-economic linkages, the following regions, to our opinion, should be related to the zone of influence of the NSR: Krasnoyarsk krai with its autonomous districts (not whole territory), Republic of Sakha (Yakutia) (not whole territory), Chuckchi Autonomous District (whole territory). Thus, only northern territories, in which we are interested in the context of the present study, should be singled out from Krasnoyarsk krai and Republic of Sakha; it is not expedient to divide the units of the lower level - administrative districts.

Regionalization, proposed in this project, comprises 5 subjects of the Federation: Krasnoyarsk krai, including Taimyr (Dolgan-Nenets) and Evenk autonomous districts, Republic of Sakha (Yakutia), Chuckchi Autonomous District. Analysis of main indices of economic and social development is given for these Federation subjects in item 3.2.

It is proposed to include in the zone of direct influence of the NSR:

- 1. The northern part of Krasnoyarsk krai: Taimyr Autonomous District, Norilsk and settlements under its jurisdiction, Igarka and settlements under its jurisdiction, Turukhansk administrative district.
- 2. The northern part of Republic of Sakha (Yakutia): basins of the rivers Anabar, Olenek, Yana, Indigirka, Kolyma, lower and middle reaches of the Lena river.
 - 3. Chuckchi Autonomous District: the whole territory.

When analyzing certain aspects of the interaction of the NSR and economy of the regions it is expedient to include the following areas: for Krasnoyarsk krai - Evenk Autonomous District (especially the basin of the Nizhnaya Tunguska river) and areas along the lower reaches of the Angara river (linkages with Norilsk and Igarka, shipment of cargoes for the NSR), for Republic of Sakha - areas along the middle and upper reaches of the Lena river, participating in supplying goods to the Arctic and Sub-arctic regions.

Changes in transport networks could extend the zone of the NSR interaction with the regions of Siberia and the Far East. From this point of view two transport projects are of the most significance.

The first project: trans-shipment from the railroad (Trans-Siberian, North-Siberian railways) to the Yenisei river (river-sea port Lesosibirsk) - transportation by ships of "river-sea" type along the Yenisei - exit to the NSR.

The second project: Pacific ports (Sovetskaya Gavan, Vanino) - Baikal-Amur railroad, Amur-Yakutian railroad to the Aldan river (town of Tommot) or the Lena river (Yakutsk) - the Lena river - NSR. This mixed route could speed up deliveries of cargoes almost twice in comparison with the sea route across the Bering Strait (Summer 1995 INSROP expedition confirmed it).

All regions, located along the eastern section of the NSR, have many common problems: severe climate, remoteness from economic and cultural centres

of the country, insufficient development of transport network, raw material specialization of the economy, lagging social infrastructure, environmental vulnerability, and complicated social situation, conditioned by these factors. These common problems, as well as specific problems, are analyzed by the subjects of the Federation (item 3.2.) and three regions of direct influence of the NSR (See item 4).

3.2. Main indices of economic and social development of the Federation subjects, located along the eastern part of the NSR

Regions along the eastern section of the NSR under study comprise five subjects of the Russian Federation, which, due to their status, are the objects of regular statistical monitoring, carried out by the State Committee for Statistics. Statistical data on Krasnoyarsk krai include data on Taimyr and Evenk districts. But systematization of data on autonomous districts does not cover all the indices we are interested in (probably, this fault will be soon eliminated). Statistics on the Chuckehi District, which became fully independent of Magadan oblast, are complete. Let us remind, that Norilsk industrial region and port of Dudinka are not included in statistical data on Taimyr District, instead they are accounted directly in statistics on Krasnoyarsk krai.

Data on the territory and population are given in Table 1.

Aggravation of *demographic process* in the Russian North (beginning of the decline in the natural growth of the population) coincided with the economic crisis, the specific consequence of which in the North was out-migration (See Table 2). As a result, population was decreasing in recent years in all five subjects of the Federation under consideration, and out-migration from Chuckotka assumes disastrous character (highest intensity of out-migration in all Russia). In 1995 alone, 13,600 persons moved from Chuckotka.

Industrial output declined continually in all five Federation subjects up to 1995, though the rate of decrease was lower than the Russian average (See Table 3). In 1995 industrial output started to grow (in contrast to Russia as a whole); in the first half of 1996 it continued in Krasnoyarsk krai and Taimyr District.

Krasnoyarsk krai, Sakha and Chuckotka play a significant role in the Russian economy, as far as production of non-ferrous metals, diamonds and gold (these productions are included in "non-ferrous metallurgy") is concerned. It is reflected in the sectoral structure of industrial production in these regions (See Table 4). Krasnoyarsk krai produces significant volumes of electric power, coal, timber; Republic of Sakha - coal. Industrial production in Taimyr and Evenk districts is insignificant and has low marketability.

Table 1
Territory and population of the subjects of the Federation

Subject	Territory (Th. km ²)	Population as of Jan. 1, 1995 (Th. pers.)
Krasnoyarsk krai	2339.7	3117
incl.:		
Taimyr District	862.1	47
Evenk District	767.6	21
Republic of Sakha	3103.2	1036
(Yakutia)		`
Chuckchi District	737.7	100
Total	6180.6	4253

Table 2
Rates of birth, mortality, natural and migration growth by the subjects of the
Russian Federation in 1995 (per 1000 pers.)

Subject	Born	Died	Natural growth (decrease)	Migration growth (outflow)	Total growth (decrease)
Krasnoyarsk krai	9.9	14.0	- 4.1	0.8	- 3.3
Taimyr District	11.7	10.6	1.1	-	-
Evenk District	14.6	10.4	4.2	-	-
Republic of Sakha	15.3	9.9	5.4	-17.3	-11.9
Chuckchi District	9.9	8.5	1.4	-146.2	-144.8

Table 3

Indexes of physical volume of industrial output (1990=100)

	1991	1992	1993	1994
Russian Federation	92	75	65	51
Krasnoyarsk krai	97	83	71	59
Taimyr District	124	97	77	69
Evenk District	93	84	91	75
Republic of Sakha	98	78	75	75
Chuckchi District	92	82	72	60

Table 4

Sectoral structure of industrial production in 1994 (in % of total volume)

Subjects branches	Russian	Krasnoyarsk	Taimyr	Evenk	Republic	Chuckchi
	Federation	krai	A.D.	A.D.	of Sakha	A.D.
Power	13.4	9.5	22.0	15.7	12.0	31.8
Fuel	15.1	6.7	19.6	10.5	15.6	13.3
Iron and steel	8.3	0.8	-	_	-	_
Non-ferrous metallurgy	6.6	46.9	-	-	58.4	47.6
Chemical and petrochemica	7.4	7.1	-	-	-	0.1
Mechanical engineering and metal-working	19.6	8.5	2.8	0.6	1.4	0.4
Timber, wood- working and pulp and paper	4.6	6.3	0.3	37.2	1.4	0.6
Industry of building materials	5.2	3.4	11.8	20.0	5.6	1.3
Light industry	3.1	1.2	4.0	-	0.3	0.2
Food industry	17.7	7.8	30.5	8.1	4.5	4.2

As mentioned above, due to liberalization of external trade, the northern regions got direct exit to world markets, using competitive advantages in production of non-ferrous metals, gold, diamonds, and partially - timber. In 1995 direct export from Krasnoyarsk krai made up 2372.3 billion roubles, Republic of Sakha - 211.0 billion roubles. During this year Krasnoyarsk krai received USD 1219.6 million, Republic of Sakha - USD 788.5 million.

Relations on the domestic Russian market are less favourable. Demand for the majority of goods produced in the region is falling. Share of unprofitable enterprises in the first quarter of 1996 was: in Krasnoyarsk krai - 37%, Republic of Sakha - 55%, Chuckchi District - 79%. Creditors' and debtors' debt is growing. By

the end of the first quarter of 1996 it reached respectively: in Krasnoyarsk krai - 1733 and 11807 billion roubles, Republic of Sakha - 7593 and 5067 billion roubles, Chuckchi District - 798 and 661 billion roubles.

Investment activity in the subjects of the Federation under consideration decreased in the years of crisis approximately 4-6 times. In 1995 the volume of capital forming investments was 9908.7 billion roubles. At the same time structure of the sources of financing changed radically, not by means of substitution of centralized investments with new sources, but mainly due to multiple reduction of investments from the federal budget (See Table 5). It is significant, that in the largest regions - Krasnoyarsk krai and Republic of Sakha - which earlier received enormous investments from the state, their share is now lower than the average for Russia. Share of own budget is significantly higher in Sakha and Chuckchi District.

Table 5

Capital forming investments by sources of financing in 1995 (%)

	Federal	Budgets of the	Budgetary fund of	Own means of
]	budget	Federation	state support to	enterprises and
		subjects	priority branches	organizations
Russian Federation	11.0	10.5	1.9	62.5
Krasnoyarsk krai	4.7	9.7	0.9	79.5
incl.:		;		
Taimyr A.D.	15.9	7.9	5.0	71.2
Evenk A.D	35.3	29.7	23.4	10.6
Republic of Sakha	6.9	27.6	-	45.2
Chuckchi A.D.	55.7	22.9	2.8	17.0

Table 6 Number of registered unemployed, March 1996 (Th. pers.)

Subject	Number of persons not engaged in labour activity, searching for work	Number of unemployed	Number of unemployed, receiving unemployment benefit
Krasnoyarsk krai	65.4	58.0	52.5
incl.:			
Taimyr A.D.	1.3	1.3	1.1
Evenk A.D	0,4	0,4	0,4
Republic of Sakha	12.6	6,8	6,3
Chuckchi A.D.	2.7	2.5	2.1

Labour market in the Federation subjects under consideration suffers from heavy heritage of the past: towns and workers' settlements in places of former "gulags", narrow, often mono-branch structure of production, artificial employment in inefficient servicing productions. Number of unemployed is growing (See Table 6), but the level of actual unemployment is much higher.

At present the number of vacant jobs is everywhere, except for the Republic of Sakha, significantly smaller, than the number of unemployed. As of the end of March 1996 demand for workers, declared by enterprises and organizations, was: in Krasnoyarsk krai - 3802 pers., Taimyr District - 95, Evenk District - 37, Republic of Sakha - 14495, Chuckotka - 188 pers.

Indices of the living standard in the analyzed regions reflect typical situation in the Russian North: higher wages and per capita incomes, but higher cost of living, as well as a comparatively low level of social infrastructure, not compensated by money incomes. It should be mentioned, that by average wages Chuckotka ranks third in Russia (after Yamal-Nenets and Khanty-Mansi districts);

average per capita income in Sakha and Chuckotka is two times higher than the average for Russia (See Table 7).

Table 7

Average wages, average per capita money income and living wage

(March 1996, Th. roubles)

	Average wages and social payments	Average per capita money income	Living wage	Ratio to living wage, %	
				of average wages	of average per capita money income
Russian Federation	775.5	734.0	365.5	212	201
Krasnoyarsk krai	1263.5	922.4	347.0	364	266
incl.:					
Taimyr A.D.	2003.6				
Evenk A.D.	1343.5		•••		
Republic of Sakha	1960.9	1443.1	882.9	222	163
Chuckchi A.D.	24883.4	1414.8			

Consumer prices in the northern regions are naturally higher than average Russian values, and often cancel out the advantage of higher money incomes. In March 1996 the cost of 19 main kinds of food based on the average Russian level: in Krasnoyarsk krai - 133%, Taimyr A.D. - 181%, Evenk A.D. - 217%, Republic of Sakha - 215%, Chuckchi A.D. - 323%. Cost of this basket in Chuckchi A.D. was the highest among all subjects of the Federation.

Nevertheless, the purchasing power of the population money incomes, in food equivalents, in the Federation subjects under consideration is higher than the average for Russia. Thus, in 1994 it was possible to buy for the average monthly income: in Russia - 59 kg, in Krasnoyarsk krai - 66 kg, in Sakha- 69kg of meat; correspondingly 322, 393, 736 of milk (litres); 180, 190, 244 kg of sugar, etc.

In order to obtain acomparative characteristic of the living standard in the regions under consideration, we could take the ratios of average wages, average per capita money income and living wage, where regional characteristic features of the living standard and regional prices are taken into account. These indices for Krasnoyarsk krai are amongst the best in the country. Unfortunately, no data on money incomes of the population in the autonomous districts is yet available in the state statistics.

Under radically changed economic conditions, when most money savings were lost in 1992, the population of the northern regions have kept in the main or restored the former pattern of use of their incomes. Data of Table 8 confirms this fact (data on Magadan oblast conditional speaks for data on Chuckchi A.D. in 1990 statistics).

Table 8 Structure of the use of money incomes, %

	Expenditures on goods purchase and payment for	Obligatory payments and various fees savings	Increase in deposits, state loans, certificates	Excess of incomes expenses
	services	1000		
		1990		
Russian Federation	75.3	12.2	7.5	5.0
Krasnoyarsk krai	73.3	15.1	5.8	5.8
Republic of Sakha	55.4	23.9	9.1	11.6
Magadan oblast	55.8	31.0	3.7	9.5
1994				
Russian Federation	64.5	6.8	24.2	4.5
Krasnoyarsk krai	58.4	10.6	9.8	21.2
Republic of Sakha	52.7	9.4	7.9	30.0
Magadan oblast	50.0	7.4	16.0	26.6
Chuckchi A.D.	39.0	10.9	8.8	41.3

Share of expenditures on the purchase of goods and services, various deposits and payments have declined significantly; instead, deposits at banks, expenditures on the purchase of securities and especially in the item "excess of incomes over expenditures", which includes cash, saved at home (mainly in hard currency) and money migration to other regions, have increased. The population of Chuckchi District has a minimum share of consumer expenses and a maximum share of money savings. This leads one to believe that a significant part of the population of Chuckotka patterns its behaviour not on an increase of the living standard in the place of their residence, but on moving from the region.

On the whole, the social-economic situation in the five Federation subjects under consideration can be assessed in different ways. Production decline has almost stopped and upsurge has started in individual branches and regions. Growth of export plays a significant role in this tendency. Dynamics of main indices of the living standard is rather optimistic in comparison with other regions. The most significant social-economic danger is caused by spontaneous emigration of the population, especially from Chuckchi District. It can be explained not only by objective factors (loss of jobs, high cost of living), but by the formed emigration stereotype, which is reflected, in particular, in the structure of the use of money incomes.

4. Problems of economic development of individual regions, located along the NSR

4.1. North of Krasnoyarsk krai

This region, lying within the zone of direct economic interaction with the NSR, comprises four sub-regions: Taimyr A.D., Norilsk, Igarka, Turukhansk administrative district. The territorial structure and organization of the region have

two specific features: 1) 76% of the total population of the region is concentrated in the town of Norilsk alone (as administrative unit); 2) the towns of Norilsk and Igarka have under their jurisdiction rather large settlements and adjacent territories. Besides, it should be taken into account, that the port of Dudinka is an administrative part of the town of Norilsk (See Table 9).

The region under consideration provides a significant part of the NSR freight turnover. Below data is given on the volumes of shipments in 1994 in Th. tonnes; in brackets - maximum volume, reached in the past years.

Table 9 Population of the region (as of 01.01.1995)

	Th. pers.	% to the total
Town of Norilsk and settlements under	253.9	76.3
its jurisdiction		
incl.:		
town of Norilsk	158.6	47.7
town of Kaierkan	26.3	8.0
town of Talnakh	67.7	20.3
workers' settlement Snezhnogorsk	1.3	0.4
Taimyr A.D.	47.0	14.1
Town of Igarka and settlements under	15.7	4.7
its jurisdiction		
incl.:		
town of Igarka	12.8	3.8
workers' settlement Svetlogorsk	2.5	0.8
Turukhansk district	16.1	4.8
TOTAL	332.7	100.0

Freight shipments along the NSR from the west made up: to Dudinka - 354.5 (813.3), to Dixon - only 0.8 (18.6), to the Khatanga Bay - 53.1 (90.2). Cargoes to Dudinka are delivered mainly to meet the needs of Norilsk and Norilsk mining-metallurgical works. In 1994 delivery of oil products along the NSR to this region stopped, the main reason being noncompetitiveness of sea shipments

because of high tariffs. Oil products came to be supplied to the North along the Yenisei river. But for the first time food (9.1 Th. t) from Western Europe was shipped to Dudinka along the NSR. In our opinion, this flow should become regular. Cargoes from the east are not delivered to this region along the NSR.

Tandem "Norilsk mining-metallurgical works - port of Dudinka" accounts for the main part of cargoes, shipped along the NSR. While shipments from this region within coastal trade (i.e. intended for the domestic Russian market) fell almost threefold, export has shown a rising tendency, especially export of non-ferrous metals (See Table 10).

Table 10
Shipments of production from of Norilsk mining-metallurgical works from the port of Dudinka in 1994, Th. t

(in brackets - maximum volume of shipments)

	Total	Including		
		coastal trade	export	
Shipments from the port- total	905.1	679.7 (1728.4)	225.4 ()	
incl.:		·		
Ore	462.0	462.0 (1082.7)	-	
Fine matte	89.3	86.7 (196.5)	2.6 (29.3)	
Non-ferrous metals	319.1	96.3 (334.3)	$222.8 = \max$	
Sulphur	-	- (106.7)	- (119.2)	

Since 1994 oil products, coming from the Yenisei, have been shipped from Dudinka: 16.0 - to the west, 9.6 - to the east. Condensate was shipped from the lower reaches of the Yenisei for the first time (13.5).

Export of timber from Igarka still has significant importance, though it has decreased 2.5 times, for the functioning of the NSR and economic support of timber and wood-working industries of Krasnoyarsk krai - 297.6 (755.0).

A brief discussion of the economic problems of the sub-regions is given below.

• Norilsk

The mining-metallurgical works - the leading enterprise of the Russian joint-stock company "Norilsk nickel", forms the base of the economy of "greater" Norilsk. 70% of Russian copper, 90% of nickel, 90% of cobalt, 100% of metals of the platinum group is produced here. The share of this enterprise in the world production is - over 20% of nickel, over 40% of platinum metals. While in 1991-1993 production declined by 1/3, 1994 production increased due to the growth of metals export to Western Europe.

The process of privatization of the joint-stock company "Norilsk nickel" attracts attention in business circles and amongst politicians, especially the attention of the left-wing opposition. In February 1996 the State Duma adopted the Resolution, where omissions and violations in the process of "hasty" privatization of "Norilsk nickel" are pointed out. The essence of the adopted resolution is the necessity of strengthening state control over this company's activities, by keeping the major shareholding as well. The development of the situation at "Norilsk nickel" is of principal significance for further institutional transformations in Russia.

Restoration of the former level of metals production and its increase is possible only if significant investments are made in new technologies and extension of the raw materials base. Change of the form of ownership has not solved this main task. In order to increase the work-load of the NSR it is important to renew export of sulphur, which earlier exceeded 200 Th. t per year.

• Taimyr Autonomous District

This district does not comprise industrial centres. Industrial output in 1995 was 9.3 billion roubles (approximately USD 2 million), corresponding to approximately USD 45 per capita annually. The most significant production is coal production (55 Th. t in 1995). The aboriginal population (Dolgan and Nenets peoples) are engaged in fishing and reindeer-breeding (domestic reindeer herd is 56 Th.).

At present Taimyr District does not produce cargoes for the NSR. In the future (beyond 2000) such an opportunity will depend on the development of the Taimyr coal basin (dependant upon a large demand for coal in Western Europe), Maimecha-Kotui province of complex ores (phosphate raw, titanium, iron ore, niobium, rare-earth metals) and new deposits of ores, containing non-ferrous metals.

• Igarka

Igarka is a unique town. Territory under the jurisdiction of its administration is 17.9 Th. km², comprising the workers' settlement Svetlogorsk. Sawing trans-shipment complex, uniting in one technological cycle saw-mill and sea port for export timber shipments, is the enterprise, forming the town. Maximum volume of timber export from Igarka was achieved in 1976 - 1265 Th. m³. During the period of relative stability this complex carried out the following trans-shipment work:

trans-shipment of sawn wood, delivered from the south along the Yenisei, on board sea ships for export - 800-1000 Th. m³;

loading of own sawn wood on sea ships for export - over 300 Th. m³; shipments of own sawn wood for domestic market - 20-25 Th. m³;

handling of round wood, delivered in rafts for sawing at the saw-mill - up to 800 Th. m^3 .

In 1975-1994 Kureiskaya hydro-electric power station of 600 MW capacity was constructed. In 1995 this station generated 1778 million KW.h (while designed production capacity is 2600). A large construction base was created in the workers' settlement Svetlogorsk. It was planned to use it for the construction of new hydro-electric power stations and other objects, which never materialized. The population in Svetlogorsk reduced 3.6 times in comparison with the period of mass construction of hydro-electric power objects.

In 1989 volumes of shipment and transit trans-shipment of timber began to decrease sharply: 1990 - 711.3, 1994 - 297.6 Th. m³. Local output of sawn wood significantly decreased: 1990 - 371.4, 1994 - 102.6 Th. m³. Three circumstances played a decisive role: 1) due to outstripping growth of prices for fuel and power, as well as of taxes and payments on credits (in comparison with prices for timber) sawing of wood in Igarka became unprofitable; 2) demand for sawn wood in West Europe has declined; 3) usual suppliers of wood and sawn wood (from the areas in the lower reaches of the Angara river) prefer shipments by railroads and further - through sea ports of the European part of Russia (Arkhangelsk, St.Petersburg, Novorossiisk); the competitiveness of the NSR has decreased due to the growth of tariffs, established by Murmansk shipping company. Total freight turnover of the sea port of Igarka decreased in 1991-1994 2.5 times, that of the river port - 2.1 times.

In compliance with the resolution of the Government *Federal* Programme of social-economic development of Igarka for the period till 2005 was developed. It was developed by SOPS & ES.

Along with stabilization and development of sawing and trans-shipment complex the Programme envisages certain diversification of the economy of this town-region.

Forecasted increase in demand for sawn timber of high quality in European countries creates a necessary prerequisite for the development of the sea port. Efficiency of its operation will increase due to sawing production, where the redundant labour force of the port could be employed during the period between navigations. It is planned to increase production of export sawn timber from 125.9 Th. m³ in 1995 to 400 by 2000.

Calculations show, that export of sawn timber through the port of Igarka is preferable in comparison with transportation by the railroad and sea ports of the European part of Russia (See Table 11). But it is supposed, that timber transportation costs in the main navigation period do not include ice-breaking duty (31 doll./tonne). Inclusion of this ice-breaking duty makes sawn timber shipments along the NSR non-competitive.

Table 11
Costs of sawn timber transportation from Lesosibirsk to foreign customers

		Costs, doll./m ³			
Transport route	Destination	Total	incl. by kinds of transport		
			railroad	river	sea
Yenisei and NSR	London	50-52	_	12.5	37.5 -39.5
	Egypt	58	-	12.5	45.5
Railroad and sea via St.Petersburg	London	71.5-82	38-44	-	33.5 -38
Railroad and sea via Novorossiisk	Egypt	69.5-75	42-47	-	27.5 -28

Other directions of the economic development of Igarka, increasing the work-load of the NSR, are connected with the development of local deposits of copper ores and graphite, as well as of oil-gas fields of the Turukhansk region.

Explored deposits of copper sandstone, containing also silver, make it possible to consider them as reserve raw materials base for Norilsk works (total forecasted reserves are 14.2 million tonnes of copper).

Kureiskoye deposit of graphite can give, according to the prepared project, 96 Th. t of raw; development of this deposit is restrained by the narrowness of the market (main consumer - Krasnoyarsk graphite plant - has reserves of raw for 4 years). Export of concentrated graphite raw along the NSR through the port of Igarka is possible.

Development of oil-gas fields in Turukhansk district (see below) will make it possible to construct in Igarka mini-plants, producing necessary oil products, and, probably, to transport oil from the port of Igarka.

• Turukhansk district

The economic potential of this district is extremely insignificant at present. Even existing small-scale industry, serving local needs, decreased its output 3 times as compared to 1990. Per capita consumer goods production makes up 7 doll./year.

The economic future of the district depends first of all on the development of oil-gas fields on the left bank of the Yenisei, and of mineral resources in the basin of the Nizhnaya Tunguska.

At present three oil and gas fields are discovered in Turukhansk district (Lodochnoye, Tagulskoye, Vankorskoye), their total reserves in categories C1+C2 are: oil - 235.4 million t, natural gas - 142.1 billion m³, condensate - 3.6 million t. According to preliminary estimates the annual volume of oil production could be 3 million t.

There are deposits of graphite, ores of non-ferrous metals, oil, diamonds in the basin of the Nizhnaya Tunguska (territory of Evenk District). Due to its geographical position, Turukhansk could become the base for the development of the new region and trans-shipment port of the NSR.

4.2. North of the Republic of Sakha (Yakutia)

Conditionally we relate the administrative districts of the Republic, served by the NSR, to the "regions along the NSR"; they roughly coincide with the navigable parts of the basins of the rivers Anabar, Olenek, Yana, Indigirka, Kolyma, as well as with the lower reaches of the Lena river: the whole freight flow of the Republic to the NSR is transported from this area. In accordance with this criterion all Arctic regions lie within the zone under consideration, but many (more southerly) territories, belonging, according to the Russian legislation, to the "regions of the Extreme North and localities with the same status", are not included in it.

- Deposits of tungsten and tin (in the east), diamonds (the Anabar river basin) of strategical importance, numerous deposits of bituminous coal (the river Lena, Zyryanovsky basins, etc.) are found in the zone under consideration. They are developed partially. Deputatsky ore mining and processing enterprise, which produced up to 5 Th. t of tin, is of major economic importance.

The major part of the present economic potential is located in the central (Yakutian industrial unit), western (diamonds, natural gas production, hydroelectric power station), southern and south-eastern (South-Yakutian coal basin, gold mining area) parts of the republic. However, the economic and especially the social problems of the Arctic zone are to a great extent similar to the problems encountered by the whole republic. It is also necessary to take into account the "constructive sovereignty" of the Republic of Sakha (Yakutia), the manifestation of which is integrated social-economic policy, aimed at the equalisation of conditions for the residents of the various regions of the republic. It means, that

the general situation in the republic influences the situation in every region of the republic. That's why the dynamics of general socio-economic indices of the republic (See item 3.2) have a direct influence on its Arctic zone.

Table 12

Shipments along the NSR through the ports of the Republic of Sakha (Yakutia), 1994

(in brackets - maximum volume of shipments in the previous years)

Shipments from the west, coastal trade

to the area Tiksi-Yana - 49.4 (384.0)

to the Indigirka river - 0 (30.9)

to the Kolyma river - 74.8 (95.0)

Shipments from the east, coastal trade

to the Kolyma river - 6.8 (331.0)

to the Indigirka river - 1.7 (8.5)

to the area Tiksi-Yana - 0 (107.0)

Intra-Arctic coastal trade

Tiksi - Khatanga - 4.5

Tiksi - Anabar - 3.2

Tiksi - Yana, Indigirka, Kolyma - 0

Export (to the APR countries)

Timber from Tiksi - 42.4 (195.6)

Coal - 0 (108.7)

Cargoes are shipped to the republic along the NSR both from the west (oil products and various cargoes to the area of Tiksi, the Yana, Indigirka, Kolyma rivers), and the east (to the Kolyma, Indigirka rivers). Total volume of intra-Arctic coastal trade is carried out from the port of Tiksi: to the west (the Anabar, Khatanga) and east (the Yana, Indigirka, Kolyma rivers); but in 1994 no shipments took place eastwards. Goods are exported (to the APR countries) from Tiksi only. These are timber, and formerly - coal (See Table 12).

Sea transport accounts for 15%, inland water transport - for 55% and railroad (only the south) - 27% of the total volume of shipments to the republic.

The river Lena is the main transport line. Cargoes are shipped along this river from the port of Osetrovo (trans-shipment from the railroad) to the area of Tiksi and further - to the ports and port points of the Arctic seas either on river vessels or after trans-shipment to sea vessels in Tiksi. Thus, the inland water fleet is a real rival of sea shipping companies.

The economy of the Arctic regions of the republic has hard times now. The majority of ore mining and processing enterprises (including tin producing enterprise Deputatsky), as well as coal mines became unprofitable. A part of them is closed, others reduced production. Traditional branches of aboriginal peoples (especially reindeer-breeding) are in depressive state. As it can be seen from Table 12, volumes of sea shipments decreased several times. Positive changes in the republican economy (see item 3.2) have yet slight impact on its Arctic regions.

The main source for making an assessment of the medium-term perspective of the region under consideration is the Federal Programme of socio-economic development of the Republic of Sakha (Yakutia) for the period till 2005, adopted in 1995.

Forecasts indicate that the population of the republic will decrease from 1073 (1994) to 965 Th., mainly due to the population emigration from the northern regions and regions with declining mining industry. Main regions of

growth will be western, southern and central regions, where, along with stabilization of existing enterprises, new productions and jobs will be created: diamond processing and jewellery, semi-precious stones processing, woodworking, porcelain-faience and ceramic production, processing of mineral water, etc. Coal production is to make up in 2000 18 million t, natural gas - 4 billion m³, oil - 1.7 million t, production of oil products - about 2 million t.

For the time being there are no prerequisites for the extension of raw production and processing in the Arctic area of Sakha (Yakutia) with several exceptions. Development of the Zyryanovsky coal basin (with shipments of coal to Chuckotka and Magadan oblast) and preparation of local diamonds for commercial production are more probable. The idea of "resource reconstruction" is rather popular, its essence being that the way of involving mineral-raw (i.e. nonrenewable) resources in the North is exhausted, and use of renewable natural resources, including agriculture, fishery in inland water reservoirs, fur and leather productions, medical-biological industry, use of recreation potential, should become priority directions. Not only traditional ecological, but economic arguments as well, are given: stable demand on the domestic and world markets, favourable opportunities for small business, including the use of high technologies, harmonious interaction with traditional forms of economic activity of aboriginal peoples.

The main change in the transport network of Sakha (Yakutia) expected in the future is the completion of Amur-Yakutian railroad (AYaM): Berkakit-Tommot-Yakutsk. The temporary operation of the road to Yakutsk is planned to start in 2001, and if it does, by 2005 the structure of shipments to the republic will change radically: railroad transport will account for 7.7 million t (55.85%), inland water transport - 5.2 (37.7%), other kinds of transport, including sea transport - only 0.9 million t (6.5%). Thus, railroad transport will dominate in provision of

life activity of the republic. Freight turnover of sea ports is forecasted for 2005 in the following volumes: Tiksi - 650 Th. t, Zeleny Mys - 29.0 Th. t.

Probably, a combined railroad-river route to the North will replace a part of the traditional way of shipments to the eastern section of the Arctic. In particular, oil products (approximately 100 Th. t) will not be shipped to the river Kolyma basin from the ports of the Far East, but along the river Lena route.

At the same time it will be necessary to analyze potentialities for the formation of the flow of new cargoes, including international transit cargoes, along the route BAM, AYaM (to Yakutsk) - Lena - NSR in the western direction. This analysis should include assessments of the organization of prolonged and all-year navigation to the west of Tiksi.

4.3. Chuckchi Autonomous District

The whole territory of Chuckchi District could be related to the zone of direct influence of the NSR, though the influence of the NSR on the coast of Chuckchi Sea (main ports - Pevek, Cape of Schmidt) is stronger than it is on the coast of the Bering Sea (ports - Providence, Ekvekinot, Anadyr). Coincidence of the boundaries of the problem region and the subject of the Federation facilitates the provision of information about the analysis being carried out.

Main traditional economic and social indices of the Autonomous District are given in tables 1-4. The situation in the economy of the district is difficult, and is the main reason for out-migration. Supplementary indices are given in Table 13. Unfortunately, data on the products of Chuckotka's specialization - gold, silver, tungsten, tin, mercury - is not given in the open statistics. All other industrial productions work to supply mining enterprises and to serve the population.

Per capita production of industrial goods in current prices makes up 6.3 million roubles (approximately 140 doll.) annually or 528 Th. roubles monthly,

Table 13

that is 4 times lower than average wages. This explains the significant need for subsidisation in this region; financial assistance is rendered in the form of direct subsidies to the enterprises (total losses - 354 billion roubles) and transfers to local budget.

The existing economic mechanism is insufficient to normalize the socioeconomic situation in Chuckotka. It often obliges the Government of the Russian
Federation to adopt special resolutions. Thus, in 1994-1995 resolutions were
adopted on additional assignment of means to Chuckchi A.D. for purposes of
purchasing vegetables and potatoes, on measures for the social protection of the
residents of the settlements Mandrikov and Polyarny, as a result of the liquidation
of the mine and transition of the ore mining and processing complex to new gold
mining technology, etc.

Some indices of economic and social development of Chuckchi Autonomous

District

Indices	1994	1995
Population, Th. pers	113.0	100.0
Industrial output, billion roubles (in current prices)	946	634
Industrial production:		
Electric power, million kW.h	255	181
Coal, Th. t	982	874
Meat, Th. t	0.37	0.75
Diary products, Th. t	2.1	1.1
Volume of contract work, carried out by building companies, billion roubles	60.1	92.3
Losses in all spheres of economic activity (January-	_	-354
November), billion roubles Reindeer stock, Th.	330.8	280.8

Due to the reduction of production activity and out-migration the volume of freight shipments to Chuckotka decreased several times. In 1994 this tendency strengthened due to the hard ice conditions, which made it impossible to deliver in September-October all cargoes awaiting dispatch in the ports of departure. There was a positive event in the 1994 navigation period - for the first time a consignement of oil products and food was delivered from abroad. 40.5 Th. t of oil products was delivered to Shmidt Cape and Pevek from Seattle (steamer "Presnya"), 4.4 Th. t of food to Pevek from the USA and 1.8 Th. t - from the West Europe⁴) (See Table 14).

Table 14

Shipments along the NSR through the ports of Chuckchi Autonomous District, 1994, Th. t

(in brackets - maximum volume of shipments in the previous years)

Shipments from the west, coastal trade

to Pevek - 0.9 (49.7) to Shmidt Cape - 0 (3.4)

Shipments from the east, coastal trade

to Pevek - 169.7 (474.4) to Shmidt Cape - 32.9 (272.3)

to Pevek - 32.3
(incl. from the east -30.5)
to Shmidt Cape - 14.4

⁴⁾ This scenario of the Russian Arctic supply was substantiated in our developments within the INSROP, including the report on the theme III.01.1.

In the short and medium-term perspectives there will be no radical changes in the structure of the economy of the region. Within the Presidential Programme for the development of the Far East and Trans-Baikal region till 2005 it is envisaged to implement investment projects on the transition of mining enterprises to new technologies and complex use of raw materials, construction of the Bering sea port, work on the creation of a telecommunications network, as well as measures aimed at the development of economy and culture of small ethnic peoples of Chuckotka. It is also possible, that work will start on the development of oil-gas fields in the Anadyr river basin and on the shelf of the Chuckohi Sea. Probably, in the nearest years the attitude towards the project on the construction of trans-continental polyline with the tunnel across the Bering Strait will be formulated in principle.

5. Conclusion

(Tasks for the future)

The analysis carried out shows strong dependence of the NSR functioning on the political and economic situation in Russia, especially in its Arctic and Subarctic regions, and on the efficiency of the state policy of economic and social protectionism (including legislative activity, relationships between federal and regional administrations).

In the period of transition from planned to market economy, from stateunitary system to the system of actual federalism, social-economic mechanisms are in the process of continuous adaptation in the Russian North. Political and economic stabilization and start of economic upsurge inevitably generate new problems of regional development along the NSR, making more vital the need for long-term forecasting and elaboration of strategic decisions on the development of the NSR. Therefore, INSROP-II is necessary. Moreover, results of INSROP-I cannot be used efficiently and systematically without INSROP-II.

In our opinion, priority problems of economic studies within the programme INSROP-II (continuation of sub-programme "Trade and Commercial Shipping Aspects") are as follows:

- 1. Further analysis and forecasting of state policy for the development of regions along the NSR and Arctic transport system, as well as of the efficiency of this policy implementation.
- 2. Analysis and forecasting of interrelations between the Federal Centre and subjects of the Federation, concerning development of Arctic regions and the NSR, especially in the field of the use of natural resources, use of territorial waters and ports, and management of the sections of the NSR.
- 3. Monitoring of main cargo producing centres along the NSR (in particular, Yamal Peninsula, the Ob Bay (in connection with gas production development), Norilsk-Dudinka, Igarka).
 - 4. Competitiveness of the NSR on the market for transport services.
- 5. Perspectives for the formation and development of combined (railroad, river, sea) transport systems of Eurasia, comprising the NSR.

References

- 1. Granberg A. The Significance of the NSR for Regional Development in Arctic Areas of Russia. INSROP Working Paper. No 19-1995, III.01.1.
 - 2. Granberg A. The Arctic and Russia. INSROP Symposium Tokyo 1995.
- 3. Høifødt S., Nygaard V. and Aanesen M. The Northern Sea Route and Possible Regional Consequences. INSROP Working Paper No. 16-1995, III.02.1.
- 4. Summary materials on the activity of marine fleet in the Arctic in 1994. Report of "Soyuzmorniiproekt", 1995.
- 5. Programme of the development of the regions along the lower Angara (Nizhnee Priangarye). Draft. SOPS & ES, 1995.
- 6. Presidential long-term Programme of the development of the Far East and Trans-Baikal region for the period till 2005.
- 7. Federal Programme of social-economic development of the Republic of Sakha (Yakutia).

Review of Professor Alexander Granberg's INSROP III.02.3 paper "Selected Studies in Regional Economic Development Along the Northern Sea Route"

Review by. Prof. Victor Fischer, University of Alaska

Prof. Granberg does an excellent job of synthesizing Russian Federation policies for the northern regions and providing much detailed information about the economic and social conditions in the regions under study. This is not surprising, since he is the foremost Russian expert on the northern regions.

There is no need to summarize the paper, since I view my review function principally to point up matters that may need clarification or revision. Herewith, then, a number of comments:

- 1. Reference is made to a large number of policies, plans, and programs adopted for the North. In a couple of instances, something is said about implementation; e.g., 1995 provision of federal funding for delivery of goods and, in the case of social protection, the need for an adequate financial-economic base for realization of laws. This latter point is important and deserves attention in other discussions of policies and programs. Russia, as so many other countries, has a history of adopting endless measures that are never carried out, and it would be valuable to have a greater indication of the extent to which policies have been and are being implemented, particularly in terms of financial support. Also, can one really expect that the reestablished Goskomsever will be an effective coordinating mechanism?
- 2. The issue of jurisdiction of the Federation and subjects of the Federation over territorial waters, use of ports, and the like (see bottom p. 10) is important for the future and might be specifically included in item 2. of Conclusions (p. 38).
- 3. The author states (top p. 17): The most urgent problem in the Russian North is prevention of mass out-migration. What is that a problem? Is it a matter of policy? Or is it because of impact of migrants on other regions? If jobs do not exist any more and living conditions are not

satisfactory, should out migration be stymied?

- 4. The descriptions of the various districts and communities are fascinating in their depth and detail. I am sure they will provide a good point of departure for further analysis and planning.
- 5. Conclusions. Under priority focus, not priority problems (mid p.38), item 1. should be something like: Continuing examination and analysis of federal and regional policies and programs for the development of regions along the NSR and Arctic transport system and of the effectiveness of their implementation.
- 6. These comments are addressed to INSROP, rather than the author. The paper has obviously been translated from Russian and needs a thorough editing to make it more readable in English. I assume also that INSROP edits papers in terms of grammar, punctuation, capitalization, etc. Terms such as little in number peoples of the North don't come across well in translation from the Russian. If you do not have an easier term to use, you might check with Scott Polar Research Institute. Is regioning (p. 18) an accepted term? For the sake of uninitiated readers, it should be made clear that subjects of the Federation are the major governmental subdivisions of the Russian Federation; some of the types are listed top p. 10. Principal not principle, mid p. 29.

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The three main cooperating institutions of INSROP



Ship & Ocean Foundation (SOF), Tokyo, Japan.

SOF was established in 1975 as a non-profit organization to advance modernization and rationalization of Japan's shipbuilding and related industries, and to give assistance to non-profit organizations associated with these industries. SOF is provided with operation funds by the Sasakawa Foundation, the world's largest foundation operated with revenue from motorboat racing. An integral part of SOF, the Tsukuba Institute, carries out experimental research into ocean environment protection and ocean development.



Central Marine Research & Design Institute (CNIIMF), St. Petersburg, Russia.

CNIIMF was founded in 1929. The institute's research focus is applied and technological with four main goals: the improvment of merchant fleet efficiency; shipping safety; technical development of the merchant fleet; and design support for future fleet development. CNIIMF was a Russian state institution up to 1993, when it was converted into a stockholding company.



The Fridtjof Nansen Institute (FNI), Lysaker, Norway.

FNI was founded in 1958 and is based at Polhøgda, the home of Fridtjof Nansen, famous Norwegian polar explorer, scientist, humanist and statesman. The institute spesializes in applied social science research, with special focus on international resource and environmental management. In addition to INSROP, the research is organized in six integrated programmes. Typical of FNI research is a multidisciplinary approach, entailing extensive cooperation with other research institutions both at home and abroad. The INSROP Secretariat is located at FNI.