

Future of Civilizations.

A Global Forecast of Socio-Demographic, Power-Environmental , Innovative-Technological, Economic and Geopolitical Development of Civilizations for the Period up to 2050

Key Points of the UN Project Concept

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1. Need and Objective of Preparing a Global Forecast

1.1. The first half of the 21st century **is a transitional period of deep transformations**, confronting tendencies and new challenges to humanity to which the global civil society and its institutes (first of all the United Nations Organization) should give a conscious and worthy answer.

A transition to the post-industrial society that can be either technocratically information-based or humanistically noospheric is taking place.

The interaction of local civilizations of the fifth generation underway becomes the pivotal problem of our time - or aggravation of conflicts between civilizations, clashes, international terrorism or dialogue, cooperation and partnership of civilizations in the solution of urgent problems of a new century.

By the middle of the century many countries and civilizations, according to the UN's projections, will find themselves in a state of depopulation and a rapid aging of population while high rates of population growth will continue in other that will result in intensification of migration flows and aggravation of contradictions between civilizations.

The signs of global power-environmental crisis are aggravating in the world that might end with an environmental catastrophe unless transition from fossil fuel to renewable environmentally safe sources of power occurs.

A technological overturn developing in the vanguard countries that is connected with a transition to the sixth technological order will lead to the aggravation in a technological lagging of most countries and civilizations unless real measures for approximation in their technological level are taken in a global scale.

Globalization is evolving rapidly, polarization in income and level of life of the rich and poor countries and civilizations is aggravating that is fraught with a global social explosion. An organized humanity should make the fruit of globalization available to everybody; reduce a yawning chasm between the wealth and the poverty – a social basis of international terrorism.

The cold war and confrontation of two world systems, two super powers are already in the past. What model of future world order will be chosen – unipolar, bipolar or multipolar? Will it become a reality the partnership of civilizations?

In the near decade the human mind and will should give an answer to the challenges of the 21st century. If no worthy answer and the strategy are failed to be worked out, humanity will take the inertia-based path; a global catastrophe is impending. The matter is only in time and scale. However, another, innovative-breakthrough scenario is actually possible, if countries, civilizations, social and political forces realize a danger of new challenges and their responsibility before new generations for settlement of modern crisis and contradictions, will be able to work out and implement a long-term global strategy of an innovative breakthrough based on a long-term forecast worked out by scientists.

1.2. The aggravation of threats to the future of humanity is shown in a number of **long-term forecasts** – demographic forecast of the UN Economic and Social Council for the period up to 2050, UNEP environmental forecast to 2032, a number of forecasts published recently by scientific organizations, forecast of global technological revolution before 2020. RAND CORPORATION, energy forecast to 2030 of the International Energy Agency, forecast of development of world and local civilizations in the 21st century based on the methodology of integral macro forecasting of the Institute for Economic Strategies and the P. Sorokin-N. Kondratieff International Institute.

However, these forecasts are based on various methodologies and make only the starting basis for mapping out a long-term global strategy adequate to a totality of threats and contradictions of the first half of the 21st century.

1.3. In the 1970s under Resolution 3508 of the 30th session of the UN General Assembly a group of the UN experts headed by the Nobel Prize winner in economy W.W. Leontieff **the forecast of development of the world economy** for a period to 2000 was made in several scenarios. However, no long-term economic forecasting under the UN is performed that undermines the positions of this organization before the challenges of a new century.

1.4. It appears that it is necessary to **renew a long-term global forecasting within the UN** and prepare a global forecast of the future of civilizations, socio-demographic, power-environmental, innovative-technological, economic and geopolitical development for the period up to 2050. This proposal was set forward at the Round table meeting devoted to the centenary of the birth of Wassily Leontieff, in the RF permanent mission in the UN on 10.10.2006; it was supported by the participants of the meeting and in the greetings message of S.V. Lavrov, RF Minister of Foreign Affairs. Russia could come forward with the initiative to renew a long-term forecasting in the UN, and the Russian scientists can take the lead in the work based on the methodology of integral forecasting worked out by them and available scientific reserves in global forecasting involving scientists from other countries. A long-term global forecast should become a basis for mapping out a *long-term global strategy of an innovative breakthrough based on dialogue and partnership of civilizations* by the UN.

2. Major Contents of the Global Forecast

It is envisaged to consider the following range of issues in the global forecast.

2.1. Methodology of a long-term global forecasting. Evaluation of the basic factors and limitations of global development for the period up to 2050 applying a geocivilizational matrix. Duration and depth, possible scenarios in settlement of global crisis situations in socio-demographic, power-environmental, technological, economic, geopolitical and socio-cultural development. Macro models and matrices of a long-term global forecasting.

2.2. Long-term forecast of civilizational development

The forecast of civilizational development for the prospects up to 2050 in several aspects:

- Establishment and spreading of the **post-industrial world civilization**, its essence and basic outlines;
- Development prospects of **local civilizations** of the fifth generation, prevention of their conflicts, development of dialogue and

partnership of civilizations in the solution of pressing global problems of the 21st century, formation of mechanisms for dialogue, cooperation and partnership of civilizations;

- Development scenarios of **global civilization**, its institutes and mechanisms for functioning, transformation of the UN at the new development stage of the global civilization.

2.3. *Global socio-demographic forecast* of dynamics of number, structure, age of population by civilizations and world adjusted for the UN's demographic projection up to 2050; the results of depopulation and overpopulation; endowment with labor resources of necessary qualification; cross-civilizational migration flows and related contradictions; dynamics of level and quality of life, outlooks for development of social complex, demographic block of geocivilizational macro model.

2.4. *Global power-environmental future* – prospects for the endowment of civilizations with power and other natural resources (mineral, land, forest, and water), prevention of a global power-environmental crisis, pollutant reduction, establishment of a noospheric civilization; power-environmental block of a geocivilizational macro model.

2.5. *Global innovative-technological forecast* – a scientific revolution of the beginning of the 21st c., change in generations of equipment and technological orders in civilizations, scenarios of assimilation and diffusion of the sixth technological order, wave of epochal and base innovations, dynamics of technological level and competitiveness of products of local civilizations, prospects and opportunities in bridging a technological gap between them, formation of a global technological space; technological block of a geocivilizational model.

2.6. *Forecast of geoeconomic dynamics* – economic growth and level of economic development of local and global civilizations, reproductive and institutional structure of economy based on a reproductive-cyclical macro model;

opportunities to ensure global sustainable development and prospects for surmounting polarization in income of social strata, countries and civilizations.

2.7. *Prospects of globalization* and development of international economic relations under conditions of globalization, tendency of dynamics of world prices and finance-credit relations, world rent and quasi-rent, development of TNC and international economic institutions; economic block of a geocivilizational model adjusted for a possible change in the model of globalization.

2.8. *Geopolitical future* – a forecast of a geopolitical situation, conflicts between civilizations and wars, evaluation of dynamics of civilizations based on a strategic matrix, future of military-political unions, formation of unipolar, bipolar or multipolar world order; transformation of the UN and other geopolitical institutes; geopolitical block of a geocivilizational macro model.

2.9. *Socio-cultural dynamics* in the 21st century, forecast for a change of a scientific paradigm of development, education, culture, ethics, religions, system of civilizational values; preservation of cultural and civilizational diversity, adaptation of new generations to life of society under changed conditions, upbringing to tolerance and forming the culture of peace, establishment of the integral socio-cultural order; formation of socio-cultural block of a geocivilizational model.

2.10. *Forecast of cycles and crises* in the development of world economy, global and local civilizations, change of super long-term (civilizational), long-term (Kondratieff) and medium-term cycles and their phases in the outlook for 2050; mutual influence of cycles and crises, their specifics and implications for local civilizations and global sustainable development; adjustment for the influence of cycles, crises and innovations in a geocivilizational macro model.

2.11. *Conclusion: recommendations for the UN long-term global strategy and mechanism for its implementation*

- Conditions for the implementation of an optimistic (innovative-breakthrough) scenario of socio-demographic, power-environmental,

innovative-technological, economic and geopolitical development of civilizations;

- recommendations for development of the UN long-term global strategy;
- proposals for mechanisms implementing a long-term global strategy, for transformation and increase in the UN role as the voicer of interests of global civil society.

3. Stages and Activity Arrangement under the UN Project

3.1. The international project will be implemented at several *stages*:

- *preparatory stage* – (October-April 2007): concept formulation of the project, formation of the international creative team, approval with the Russian government authorities and the UN, identification of the financing sources;
- *working out the methodology of global macro forecasting, evaluation of factors and limitations and development scenarios of world economy and civilizations* for the period up to 2050 applying a reproductive-cyclical macro model, geocivilizational and strategic matrices, discussions at the expert meeting in Munich (April 2007);
- *preparing forecasts* under points 2.2-2.9 for the period up to 2050, working out and evaluation of the outputs of the projections of world, local and global civilizations, interaction of civilizations; discussions at the expert meeting and at the international conference in Peking (November 2007);
- *forecast of cycles and crises, making consolidated estimates of future civilizations and world economy*, for an outlook up to 2050, developing recommendations for a long-term global strategy, discussions of the outputs at the expert meeting and at the round table in Moscow (May 2008).

- *preparation and publication of the consolidated report* ‘Future of Civilizations’, presentation and discussion at the International symposium and Internet-conference in the UNO (New York, October 2008), placement on the internet;
- submission of the consolidated report and recommendations for a long-term global strategy to the Ministry of Foreign Affairs of Russia and the UNO (November 2008)

3.2. Arrangements under the Project

An international creative team, including the following persons (preliminary) will be formed for such project activities:

- *project coordinator* – Alexander Granberg, R.A.S. Academician, Boris Kuzyk, R.A.S. corresponding member, Yuri Yakovets, R.A.P.S Professor;
- *major responsible parties* – Professor A.I. Ageyev, R.A.O. Academician I.V. Bestujev-Lada,, Professor **W. Bledsoe** (USA), Professor T.G. Bogatyrev, R.A.S. Academician O.T. Bogomolov, Professor **J. Glenn** (USA), R.A.S. corresponding member R.S. Grinberg, Professor **I. Wallerstein** (USA), Professor Danilov-Danilian, R.A.S. Academician A. A. Dynkin, R.A.S. foreign member **V.L. Quint** (USA), Professor V.G. Kinelev, Professor E.A. Kozlovsky, Professor G. Mensch (Germany), Professor **George Ray** (India), Professor **Matius Ten Raa** (Netherlands), R.A.A.S. Academician E.N. Krylatih, Professor V.I. Kushlin, N.A.N.U Academician S.I. Pirozhkov (Ukraine), R.A.S. Academician A.A. Petrov, R.A.S. corresponding member N.M. Rimashevskaya, R.A.S. Academician M.L. Titarenko, Professor **Chang Shahua** (China), Professor Ya. G. Shemyakin, R.A.S. Academician N.P. Shemelev, Professor **Shuntaro Shishido** (Japan), Professor **M. Elman** (Netherlands), etc.

3.3. Project financing will be performed on a shared basis from the UN, World Bank, UNFPA, RF Ministry of Education and Science, RF Ministry of Finance, other organizations and sponsors.

4. Project Outputs

4.1. The international team of scientists based on the methodology of integral forecasting will prepare a *long-term forecast* for development of civilizations that will provide a science-based projection of possible scenarios of future development to the UN, its organizations and members.

4.2. Based on the forecast there will be drawn up recommendations for *mapping out a global strategy* for a long-term outlook that will allow overcoming crises and conflicts, promote the UN role in their settlement, and establish a mechanism for cooperation and partnership of civilizations.

4.3. The implementation of the global strategy will permit to ensure conditions for *global sustainable development*, speeding up economic growth rates, bridging a gap between the rich and the poor, vanguard and lagging countries and civilizations, diminish the danger of geopolitical conflicts and clashes between civilizations.

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**METHODS FOR WORKING OUT A SECTION OF THE
GLOBAL FORECAST ‘FUTURE OF CIVILIZATIONS’
‘TENDENCIES, CRITICAL SITUATIONS AND CIVILIZATION
EVOLVEMENT SCENARIOS TO 2050’**

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1. Elaboration Methodology for the Section of the Forecast

1.1. The global forecast section ‘Future of Civilizations’ with its concept supported by the RF Ministry of Foreign Affairs envisages the identification and assessment of tendencies and critical situations in dynamics of local civilizations of the fifth generation from 1950 and underpinning the scenarios for their evolvement and interaction to 2050 applying a geocivilizational matrix. Such elaboration of the section will result in a scientific report for the employment in making other sections of a global forecast and recommendations for the grounding of the UN strategy for dialogue and partnership among civilizations.

1.2. The report (section of the global forecast) is based on the methodology of *integral forecasting* that synthesizes and expounds in system a theory of foresight and Nikolai Kondratieff’s theory of cycles, crises and innovations as well as a civilizational approach and a theory of socio-cultural dynamics of Pitirim Sorokin and Wassily Leontieff’s balance method of analysis and forecasting.

1.3. This report employs a *geocivilizational matrix* to identify tendencies and to evaluate scenarios of dynamics and interaction between civilizations. How to make and apply such matrix is addressed in the treatises of B.N. Kuzyk and Yu.V. Yakovets ‘Civilization; Theory, History, Dialogue and the Future’ (M.: INES, 2006, Volume II, Chapter 18) and ‘Future of the World and Russia. A Manifesto of Integral Macro Forecasting’ (M.: INES, 2006, Ch. 3). Both treatises in Russian and English are placed on the Internet at www.kuzyk.ru. These methods have introduced some adjustments to the matrix.

The matrix is based on three measurements: for 12 local civilizations of the fifth generation (spatial), 8 major factors of their dynamics (factor measurement) and for a period 1950-2050 decade-based (time measurement).

1.4. *Three groups of civilizations of the fifth generation* are taken as an object of measurement described by several general features:

- Civilizations of Europe and North of Eurasia (western European, eastern European, and Eurasian);

- Civilizations of America and Oceania (northern American, Latin American, Oceanic; they are youngest, and their evolvement and self-identification is still going);
- Civilizations of Asia and Africa (Japanese, Chinese, Indian, Buddhist, Moslem, and African – to the south of the Sahara); Indian and Chinese are most ancient of them and densely populated.

1.5. Evaluation of dynamics of each local civilization in retrospect from 1950 and to 2050 is made on *three groups of factors*:

- **Primary** – number, structure and dynamics of population and natural-demographical environment (endowment with natural resources, level of environmental pollution);
- *Technical-economic* (technological level – relation of technological orders; structure and economic dynamics rates, and impact of globalization);
- Geopolitical-sociocultural (state-political stability, wars and revolutions, development of spiritual sphere –science, culture, education, ethics, and religions).

1.6. **Time period** of the evaluation and forecast – 100 years (1950 – 2050).

This is a period of:

- The completion phase of the second and establishment of the third historical super cycle in dynamics of the global civilization that determines a radical realignment of a global civilizational space;
- A transition from the industrial world civilization (life cycle – from the last half of the 18th to the end of the 20th cc.) to post-industrial (life cycle – from the beginning of the 21st to the end of the 22nd cc.);
- A replacement of the fourth generation of local civilizations with the fifth that determines a change in the leaders, intensification of differentiation among civilizations and aggravation of struggle between them;

- a transition from a sensual socio-cultural system that has prevailed in the West for more than four hundred years to the integral system, with modifications in the West and the East (that Pitirim Sorokin foresaw);
- a transition, in the first decades of the 21st century, from the fifth Kondratieff cycle to the technological cycles adequate to it, to the prevalence of the sixth Kondratieff cycle in the vanguard countries and order in the 20-40s years.

All these transitional crisis processes overlap each other and resonate that determine an abundance of critical situations and their aggravation in the first half of the 21st century. In the long-term forecast, it is necessary an accurate diagnostics of a cluster of civilizational crisis situations and defining the optimal paths and mechanisms for their overcoming.

1.7. Major components of the genotype of civilizations are taken in the *factor analysis* and a forecast of dynamics of civilizations:

- **demographic factor** – number, dynamics, structure of population, intensification of international migration and effect thereof; a new challenge – polarization of demographic dynamics of civilizations, maintaining (also with a slowing down) high rates of population growth in some civilizations (African, Moslem, Indian, and Latin American) with aggravating depopulation and aging of the population in other (Japanese, Western European, Slavic, Eurasian, from the 30s of the 21st century – Chinese);
- **natural-ecological factor** – gaining the unevenness of life and economic growth support with natural resources and aggravation of environmental pollution in the densely populated areas, expansion of a global energy-ecological crisis;
- **technological factor** – aggravation of a technological gap between a group of vanguard civilizations where the fifth technological order prevails and assimilating the sixth (northern American, western European, Japanese, a major party of Oceanic) with the catching up

Chinese, Indian and Latin American and technologically lagging African and a larger part of the Moslem civilization; technological degradation of the Eurasian civilization in the 90s that has resulted in a fall in the competitive capacity of its products);

- ***economic factor*** – a differentiation of the level (per capita) and GDP dynamics rates, shifts in reproduction and institutional structural economy, deepening of economic stratification and a gap between rich and poor countries, civilizations and social strata, inflation rates, instability of the financial system and a foreign debt growth, and also an impact of globalization on economic dynamics and changes in a geoeconomic space;
- ***geopolitical factor*** describing a socio-political stability, conflicts and revolutions in each civilization, and in relations between them, fluctuations of freedom and totalitarianism, evolvement of democratic institutions, conflicts and clashes between civilizations and countries, a level of militarization of economy and society;
- ***socio-cultural factor*** – the level and tendencies in the development of science, culture, education, ethics and religion, and a stable system of civilizational values;

1.8. In determining the outlooks for development of civilizations for a period to 2050 (beginning from 2010) a forecast evaluation of each factor ***by two scenarios*** is given:

- ***inertia-based*** provided that the tendencies prevailing now mainly persist;
- ***innovative-breakthrough*** - should a strategic course based on the base innovations are implemented both in dynamics of each civilization and in the interaction among them. The executive summary and the questionnaire form include the evaluation of the degree, conditions and effect if each scenario is implemented.

1.9. Each factor by each civilization and in each period of time gets a quantitative evaluation in points; then such data are added and a ***summary***

evaluation of the state of a given civilization for a given period of time is derived. Also, a summary estimation is determined by three groups of factors: primary, technological-economic and geopolitical-sociocultural.

The total upper evaluation by all factors added makes 1,000 points and is distributed among individual factors as follows:

- the first group – 300 points (demography – 200, natural-ecological factor – 100);
- the second group – 400 points (technological and economic by 200 points); and
- the third group – 300 points (geopolitical 100, socio-cultural 200).

1.10. The summary evaluations for each civilizations are added by three groups of civilizations (Europe and North Africa, America and Oceania, Asia and Africa), and then an **integral evaluation** is derived in general for the global civilization and by each factor. In the estimation of the integral evaluation multiplying factors 1.2 are applied for northern American, Western European and Chinese civilizations and reduction factors 0.8 for African, Moslem and Eurasian civilizations.

1.11. The evaluations for each civilization are provided by experts who complete the questionnaire form and attach an executive summary thereto incorporating the analysis of the outcomes, explanation of changes in individual factors, critical situations and ways for their solution, evaluate a level of a probable implementation of this or that variant of the forecast, consider a possible involvement in conflicts or dialogue and partnership among civilizations.

1.12. The union group will make summary calculations by group of factors and groups of civilizations, and if necessary, eliminate contradictions, give an integral evaluation for a global civilization and employ the outcomes in the report including recommendations.

1.13. The draft final report and appendices with the estimations by civilizations are to be placed on the Internet, discussed at the 22nd Cross-Disciplinary Discussion and video/Internet-conferences. Subject to the discussion

outcomes and comments and proposals the final report will be updated, published, placed on the Internet and be forwarded to the originators of other sections of such global forecast, submitted to the Ministry of Foreign Affairs, UN and UNESCO.

QUESTIONNAIRE FORM

**For Evaluating Tendencies, Critical Situations and Scenarios for the
Evolution of Civilization for 1950-2050**

Civilization Name

Factors Periods	1	2	1+2	3	4	3+4	5	6	5+6	Integral evaluation + - 6
	200	100	300	500	200	400	150	200	300	1000
1960										
1970										
1980										
1990										
2000										
2010 A										
B										
2020 A										
B										
2030 A										
B										
2040 A										
B										
2050 A										
B										

- Factors:**
- 1 – demographic;
 - 2 – natural-ecological;
 - 3 – technological;
 - 4 – economic;
 - 5 – geopolitical;
 - 6 – socio-cultural

Scenarios: A – inertia-based

B – innovative-breakthrough

Civilizations of the 5th generation

Europe and the North of Eurasia –	Western European
	Eastern Slavic
	Eurasian
America and Oceania –	North American
	Latin American
	Oceanic
Asia and Africa –	Japanese,
	Chinese,
	Buddhist,
	Moslem,
	African (south to the Sahara)

An executive summary should be attached to this form.

The form and executive summary on 5-7 pages should be mailed before 5.05.2007 to the following E-mail: misk@inesnet.ru tel/fax +7 495 234 46 97

Expert details: last name, first name, patronymic

Academic degree, rank

Employment place and position

Address, telephone, fax, E-mail

Signature

Date