Development and investigation the theoretical base of scenario analysis methodology

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It is proposed theoretical ground and development of methodology of scenario analysis as tools of technological foresight which helps to make decisions in the field of scientific and technological politics at national and regional level as well as at the level of separate manufacture branches, large organizations and companies. For solving this problem, it is necessary to develop the scientifically grounded approaches, ways and methods of qualitative analysis in the tasks of technological foresight, to create methods and principles of modeling of future event scenarios and practical procedures of expert estimation, to develop the system methodology of application of qualitative analysis methods in the development of future scenarios of behavior of complex systems of different nature (social, economical, technical, ecological, etc) which function under the influence of substantially nonlinear events at all stages of life cycle, taking into account mutual influences and connections between them, substantial uncertainty multifactor stages and risk levels.

As the result of Project execution, there will be developed new theoretical and methodological grounds of methodology of system analysis in problems of technological foresight taking into account the new principles of expert estimation and estimation of probability of qualitative analysis methods, which will give the possibility of guaranteed receiving of authentic scenarios of the future in scientific technological and innovation activities; with the introduction of new principles, there will be created new information expert systems as tools for decision-making support while executing the complex of works on technological foresight.

There will be prepared the analytical report for Government of Ukraine, main organs of branches of industry and large enterprises, for which there was carried out complex of works on technological foresight with the purpose of getting recommendations and strategy of innovate 'breakthrough' development of these branches of industry and enterprises.