Аннотации статей на английском языке

A METHODOLOGY AND TECHNOLOGY FOR RISK ASSESSMENT BASED ON OPEN DATA

M. I. Faleev, Center for Strategic Research in Civil Defence of the Emercom of Russia, Moscow

I. Yu. Oltyan, E. V. Arefieva, FC VNII GOChS, Moscow

M. V. Bolgov, Water Problems Institute Russian Academy of Sciences, Moscow

Annotation. The article describes a methodology and technology for assessing the risk of emergency situations for the constituent entities of the Russian Federation based on the use of open data. This implies constructing an overall risk index for a set of indicators reflecting natural and man-made hazards, vulnerability (of population, assets and territories), resilience (capabilities to prevent, respond to and recover from emergencies), and systems of engineering protection of territories from natural dangerous processes.

Keywords: risk, emergency situation, overall risk index, open data-based risk assessment, vulnerability, resilience.

"MY CITY IS GETTING READY": THE PARTICIPATION AND INFLUENCE OF RESIDENTS ON THE EXISTING FORMS OF MANAGEMENT REDUCING DISASTER RISK IN THE DEVELOPMENT OF RUSSIAN CITIES

S.V. Belkin, V.V. Voronin, A.S. Gudozhnikova, O.N. Popova, The Association of Small and Medium Towns of Russia, Moscow

Annotation. The article refers to current problems in the participation and influence of residents on the existing forms of management reducing disaster risk in development of Russian cities: the involvement of people in shaping the image of the future; the involvement of citizens to disaster risk reduction; elimination of local vulnerabilities and implementing new opportunities of social inclusion; introduction of best practices from other cities of the world; identifying and strengthening social connectedness and culture of mutual assistance through municipal initiatives and initiative "My city is getting ready".

Keywords: urban development, smart city, disaster risk, community engagement, inclusiveness, analytical support of citizens, social capital, the head of the city government, a system of self-assessment of sustainability of municipalities.

JAPAN'S EXPERIENCE IN OVERCOMING THE CONSEQUENCES OF NATURAL DISASTERS

Yu. I. Sokolov, Russian Scientific Society for Risk Analysis

Annotation. The article analyzes the experience of Japan in overcoming the consequences of natural disasters, mainly caused by the earthquake and tsunami in March 2011.

Keywords: earthquake, tsunami, nuclear power plant, damage, population protection system, law on protection from natural disasters, early warning system, rehabilitation works, rehabilitation financing.

RISK ANALYSIS OF OIL SPILLS IN TRANSPORT OPERATIONS IN THE COASTAL WATERS OF SEAS AND OCEANS

B. V. Arkhipov, D. A. Shapochkin, Federal Research Center of Informatics and Management Russian Academy of Sciences, Moscow

Annotation. The article provides general information and requirements for the order of risk analysis for different types of activity in the offshore and/or coastal areas of the ocean. A statistical model is developed and estimations of probability are given of spill scale depending on the volume of utilization of petroleum products.

Keywords: requency of discharges, bulk of discharges, statistics.

RISK OF ENVIRONMENTAL POLLUTION BY METHANOL IN THE GAS INDUSTRY

R. V. Galiulin, R. A. Galiulina, Institute of Basic Biological Problems RAS, Moscow region, Pushchino

Annotation. Examples and risks of environmental pollution by the methanol used in the gas industry as hydrate formation inhibitor and also the toxic impact of present substance on a human are reviewed. Hygienic standards of methanol for control of environmental pollution are presented. Various methods of utilization and cleaning of sewage and soils contained methanol (burning, burial, physicochemical, catalytic and microbiological degradation) as a solution of the problem of environmental pollution risk by this substance are characterized.

Keywords: gas industry, methanol, hydrate formation inhibitor, environmental pollution, toxic impact on human, hygienic standards, methods of utilization and cleaning.

STATISTICAL METHOD FOR PREDICTION OF SNOW AVALANCHES ACTIVITY IN THE SOUTH-WEST OF THE MAGADAN REGION

M. V. Ushakov, North-East Interdisciplinary Scientific Research Institute n.a. N. A. Shilo, Far East Branch, Russian Academy of Sciences, Magadan, Russia

Annotation. One of the characteristic features of the Magadan Region is the annual snow avalanches. To assess the risks associated with avalanche activity, its long-term forecasts are needed. Based on the results of spectral analysis for the south-west of the Magadan Region, a satisfactory method for the ultra-long-term forecast seasonal activity of snow avalanches was obtained. According to the prognostic equation, it is possible to draw up a "schedule" of avalanche activity for many years to come. The accuracy of the verification forecasts was 68.2%. At the same time, one must bear in mind that the prognostic equation has been obtained from a short series of observations, therefore, its refinement is required as the actual material is accumulated.

Keywords: snow avalanches, spectral analysis, harmonics, predictability of forecasts.

NEW APPROACHES TO THE ASSESSMENT OF OCCUPATIONAL RISKS

I. V. Alibekova, E. V. Kulakova, FSBEI HE "Orel State Agrarian University named after N. V. Parahina"

Annotation. This article refers to accidents at work, occupational diseases, morbidity with temporary disability, reduced working capacity due to work in unfavorable working conditions, as well as the economic damage associated with all of them.

To assess the effectiveness of labor protection in the organization proposed a mechanism for conducting labor protection with evaluation criteria.

It is shown, that in addition to training on labor protection and other arrangements necessary to amend the methodology for the existing conditions of monitoring tools and labor safety, to make them less expensive and desirable, rapid methods, that are proposed in this article.

Keywords: accident, working conditions, security, professional risk, activities for the protection of labor, mechanism maintenance of labor protection, monitoring.

REGIONAL-LEVEL DEPOSIT VOLATILITY OF A BANKING SYSTEM

O. V. Lunyakov, N. A. Lunyakova, Financial University under the Government of the Russian Federation, Moscow

Annotation. The financial crisis of 2007 determined the importance of effective liquidity risk management system. A large number of scientific researches in this direction are connected with the identification and analysis of risk factors that explain fluctuations in deposits volume at the micro-level, i.e. at the bank level. The deposit (withdrawal) risks are usually considered as the most important components of liquidity risk. The objective assessment of the stochastic component of deposit volatility is important for the economy, since it has a direct impact on long-term interest rates, cost of borrowed capital, terms of lending and investment. At the same time, the earlier studies did not consider systematically regional differences in explaining the variations in deposit fluctuations. The purpose of this article is to improve the scientific and methodological approaches to assess regional financial risks. We offer to use a semi-dispersion as a measure of deposit (withdrawal) risk and EM-algorithm for clustering country regions by the level of deposit volatility. The research results confirmed the regional differences in the deposit volatility, which, in many cases, are related to uneven provision Russian regions with banking services. The approach can be used for monitoring of financial and economic development of the regions of the Russian Federation.

Keywords: banks, liquidity, deposit volatility, deposit (withdrawal) risk, EM-algorithm, cluster analysis, regional economy.

RISK ASSESSMENT OF MULTILEVEL ORGANIZATION

S. A. Cherkashin, Bank of Russia, Moscow

V. S. Cherkashina, "Grupo NEAT SL" (company producing equipments for medical and social institutions), Madrid.

Annotation. The article describes the solution of the problems of the risk management system organization for a company with a wide branch network and having a multi-level organizational management structure. As well as the creation of a mathematical risk assessment model that can automatically adjust the scale of measure the risk on the basic of the estimates data.

Keywords: risk management, risk assessment, organization of risk management systems.