MODEL OF RESOURCE MANAGEMENT IN PROJECTS OF THE CONDITIONS IMPROVEMENT OF IMPLEMENTATION OF SYSTEM 112

Abstract. In this scientific article is shown and systematized the basic resources that characterize the organizational and technical components of emergency call System 112 for the conditions of successful implementation in dimension of Ukraine taking into account the regional character through the use of project-oriented management of projects and programs and the characteristics of complexity. Proposed the model of resource management in the project of System 112 and is identified the key factors that influence into the project.

Keywords: project, System 112, proactive management, resource management, project resources.

MODEL ZARZĄDZANIA ZASOBAMI W PROJEKTACH POPRAWY REALIZACJI SYSTEMU 112

Streszczenie. W artykule przedstawiono i usystematyzowano podstawowe zasoby, które charakteryzują organizacyjno-techniczne elementy systemu awaryjnego wezwania za jednym numerem alarmowym 112, oraz warunki udanej realizacji w ramach Ukrainy poprzez wykorzystanie zarządzania projektowo-orientowanego projektów i programów. Zaproponowano model zarządzania zasobami w projektach wprowadzenia Systemu 112 oraz określono kluczowe czynniki wpływające na sam projekt.

Słowa kluczowe: projekt, System 112, proaktywne zarządzanie, zarządzanie zasobami, zasoby projektu.
System of emergency call number - is a universal and unified organizational and technical structure that is designed for day and night information receiving on emergencies (ES) and timely response to them had come to USA in 1968. In 1991, the EU pledged to develop a European counterpart of the project and implement it by 1998.

The system of a single emergency number (System 112) has been successfully operating in Europe and similar projects are developed and implemented in the Commonwealth of Independent States (CIS) countries including Ukraine. Analysis of the test launching of the System 112 in Ukraine during Euro 2012 revealed a number of incompatibilities and necessity to systematize all project components of the System 112 and to determine the influence of various factors on them. A key element in the successful implementation of regional development of projects in Ukraine's 112 Systems is the use of proactive management, in the context of mission realization on the reaction of a turbulent external environment, that take's into account the competitive of environment and urgent emerging issue.

Effective project management [2] of System 112 implementation requires a clear structuring as a project and as system management, by dividing the project into subsystems, and the system of control itself to the relevant components. Thus the success of the efficiency of project and programs management of regional development of implementation of System 112 requires strict sustainable management of complex processes under the conditions of uncertainty under influence of external and internal environment.

An important factor in the effective use of proactive management [1] is the development of tools and mechanisms that significantly improve project management of regional development implementation of System 112. The success of proactive management of projects and programs of regional development can be achieved by modeling of project environment, taking into account the impact of external and internal factors throughout the life cycle of the organization process and implementation of System 112 to ensure the sustainability of growth in the region during the implementation of innovative strategies [3].

On the basis of above mentioned is proposed model diagram, which takes into account proactive management and mental space, as well as term-historical component of Ukraine's regions (see image 1).
As shown in Image 1, the main factors ensuring success of the implementation of System 112 in the regional dimension is the study of the main factors as: geolocation (G), the socio-political state of society at the national and regional levels (SPS), and competence of all participants in the project (C), based on the theory of complexity (TC) for reaching a state of balance and harmonization at all levels of causality. Formalizing the above factors we obtain the following dependence:

\[ \text{RAM} = \langle G, SPS, C, TC \rangle; \] (1)

where \( \text{RAM} \) - resource allocation management in the project of System 112.

As it is shown in Image 1, a significant impact for the success implementation of System 112 has external turbulent environment and coordination during interacting with Government Information and Analytical System for Emergency Situations (GIAS ES) [5]. GIAS ES as the central executive agency shall ensure round the clock functioning of its maintenance, monitoring and formation of accounting documentation and international integration (for software and hardware) of formal and informal organizations.
\[ P = < PE, GIAS ES >; \] (2)

where \( P \) – project of implementation of System 112, \( PE \) – project environment.

Theories of complexity of project implementation of System 112 consists in the calculation of project implementation at the regional level based on the parameters of difficulty. Taking into account the different levels of the state of readiness of regions to the project and their features require the use of project-oriented approach in management of project and portfolio of project. Exploring the security status of regions for 2011-2012 year by ranking we defined the priority areas of the project of System 112 in the case of Ukraine. This are the regions of the biggest danger for safe life of citizens, particularly the south-eastern regions of Ukraine and Crimea.

Proceeding from theory of complexity success implementation of project of System 112 depends on the process of time management in all phases and cycles of the project, which can be represented in the following formalization:

\[ T_{\text{project}} = (T_{\text{in}} + T_{\text{pl}} + T_{\text{im}} + T_{\text{st}})^*PE; \] (3)

where \( T_{\text{project}} \) – time management of project. Elements of the expression is the amount of time the elements of project initiation \( T_{\text{in}} \), Planning \( T_{\text{pl}} \), Implementation \( T_{\text{im}} \) and start \( T_{\text{st}} \) and its multiplying on a factor of influence of project environment \( PE \).

Geolocation of callers is carried by automated system for cooperation and coordination with national mobile operators and landline communications.

To socio-political situation we assign the impact of factors such as unstable and crisis economic situation, not coordinated work of national and regional legislative, executive and judicial authority, intense social status and level of education among the citizens of the state and military instability, the state of education, science and innovation technologies.

Participants of the project of System 112 are authorities, departmental service: State Service for Emergencies of Ukraine (SSEU), the Ministry of Internal Affairs (MIA), Ambulance and Emergency Medicine (AEM), Gas-Emergency Service (GES), firms and companies that are providing communications, municipal services, public formal and informal organizations, self-governments, and others [4].

The core of the model (Image 1) are the resources of the project of implementation of System 112. Resources of the project are any sources and prerequisites of getting some tangible or intangible benefits which together can create the conditions for successful implementation of project. Resources are divided into material, financial, human and information (see Image 2).
Analyzing the model diagram Image 1 and Image 2 it can be stated that the efficiency of project of implementation of System 112 in the regional dimension requires rigorous and systematic action-oriented project management and balanced, harmonized control of the distribution of resources and minimize the impact of turbulence medium term, taking into account historical component, characteristics of of complexity and regional peculiarities Ukraine.

References