



Designing a System of Monitoring the Level of Security in Villages

Návrh systému sledovania úrovne bezpečnosti v obciach

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Abstract:

The article describes the system aspect as a security management tool, which must correspond to the set of documents at the state level. The factual aspect is content-oriented to key issues such as threats, risks and priorities. In general, the municipal security policy program should include the analytical part - the analysis of the solved territory, the synthetic part - the synthesis of the achieved analytical results and the definition of the strategic vision, the design part - the formulation of successive concrete steps leading to the fulfillment of the vision, the realization part - the formulation of specific projects.

Keywords: analysis, synthesis, strategic vision, security analysis, community

Abstrakt:

Článok popisuje systémový aspekt ako nástroj riadenia bezpečnosti, ktorý musí korešpondovať so sústavou dokumentov na úrovni štátu. Vecný aspekt je obsahovo orientovaný na kľúčové problémy ktorými sú ohrozenia, riziká a priority. Program bezpečnostná politika obce by mal spravidla obsahovať analytickú časť - analýza riešeného územia, syntetická časť - syntéza dosiahnutých analytických výsledkov a definovanie strategickkej vízie, návrhová časť - formulácia postupných konkrétnych krokov, ktoré povedú k naplnenie vízie, realizačná časť - formulácie konkrétnych projektov.

Kľúčové slová: analýza, syntéza, strategická vízia, bezpečnostná analýza, obec



Introduction

As a rule, community leaders decide to develop a plan when the municipality's management accepts the principles of strategic management in its work and considers such a plan to be the basis for its strategic decision-making. From the managerial point of view, the need for strategic planning in the area of security is seen in the fact that the plan should play the role of a strategic management tool and should contribute to the success of the region's management not only in development but also in the protection of the population and their assets by the structure, content and implementation. If we take the view that the success of the proceedings lies, among other things, in increasing the effectiveness of the strategic planning measures taken in parallel with increasing security region (municipality), and by involving the population in solving this task. Together safe region (municipality) creates conditions for the protection of investments of legal entities and entrepreneurs as well as for the development of tourism in the region (municipality) and in this way it helps to develop the territory. Effective security management requires it to form as a specific form of management, supporting analysis and searching for answers to questions of important roles, functions, organizational structure, and implementation of decisions. These include, in particular, the protection of people, the security of people where resource efficiency will be realized in order to achieve optimal security in integrating with the fulfillment of the strategic objectives of the development of the region or municipality. Protection of property in all types of property before the analysis threats that may arise in the region or municipality. Everything requires efficient use of resources to achieve optimal security of the region in integrating with the fulfillment of their strategic development goals. Such plans must be regional security policy requirements, which will be based on security risk analysis and formulate security targets. The main objective will be to set up procedures for activities aimed at planning, organizing, implementing and controlling security processes.

1. System and material aspects of security management

Region in this sense as a level of security analysis. Every subject, phenomenon or process is set in a certain space in the real world. Space as a category refers to a dimension that depicts the way of coexistence, the distribution of different beings, in which motion is possible, the different arrangement of objects, the location to determine the distance of objects, to define the concept of direction. Space can also be seen as a combination of physical and social dimensions. Then, in accordance with such an approach, the spatial form - region - is defined as the basic socio-geographical unit of analysis. Defining this geographical unit is a fundamental problem in the analysis and assessment of regional security. In security studies, a region is defined as a coherent geographical territory, made up of at least two states, a subregion designating one part of such a region, and the micro-region representing the level of units within the state boundaries. From the point of view of the research, we consider it necessary to identify and define a hierarchically lower level of analysis at the regional level, namely the local level, respectively. local environment. The local level of analysis - the local environment - is made up of a set of material, economic, social, political and spiritual factors that influence the existence of the conditions of being, the formation and operation of reference objects - individuals and social groups in a geographically relatively small environment. A street, a village, a small town, or even a city district can represent a local level of security analysis. It is an environment in

which most of the interactions of actors who live in it or carry out their activities take place. [3]

It follows from this that the solution of the municipal security must be supported in the regional development strategy, which is embedded in the program of municipal planning strategy, commonly called security policy. In this document the chosen period will be specified and the strategic objectives and development priorities will be specified, the beneficiaries will be identified and the way of financing and implementation will be determined. From a general point of view, the Security Policy Program includes routing and development tasks of a financial nature that correspond to the anticipated available financial resources. Similarly, they include non-financial development tasks such as organizational tasks, political support, tools and recommendations for municipalities to support the municipality. The strategic goal is a formulated vision of the village, which analysis the state of the municipality, which gives us information about how the village developed and formulated the expected future situation of the municipality. The effort of municipal management will create a program that will mobilize local legal, natural persons and the population to their active approach to the development of the territory in which they live. [1]

From a managerial point of view, the document "security policy" should become a strategic management tool and should contribute to the development of the municipality, as well as to the protection of the population and their property. The effectiveness of this process consists in applying the principles of successful governance that can be applied in security policy, for example in active communication, to carry out security activities directly in front of the inhabitants of the village, even close to the inhabitants, to develop activity and initiative - to involve the broad population of the municipality, which may lead to an increase in the effectiveness of the measures taken. [2]

The system aspect as a safety management tool in the municipality has to correspond with the system of documents at the state level. The factual aspect is content-oriented to key issues such as threats, risks and priorities. The region's development program developed at the public territorial unit and the Strategic Development Plan of the municipality must not be an isolated document, therefore it should also be solved in the content part. Program security policy should generally include: 1. analytical part - analysis of solved territory, 2. synthetic part - synthesis of achieved analytical results and definition of strategic vision, 3. design part - formulation of successive concrete steps that will lead to fulfilment of the vision, 4. realization part - formulation of specific projects. [4]

1.1 Safety analysis - analytical part

The analytical part contains situational analysis. It defines the territory of the municipality, the conditions for economic, social development and security. This analyses the current state of the village, identifies the causes of problem areas, identifies the main companies and facilities in the area under consideration, or activities of other entities influencing the municipality. The conclusions from the analysis of external relations are applied in relations to other territorial elements at local, regional, national or transnational level. In the analytical part, the content page is centered on the population, economic activity, infrastructure, the environment and

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other entities that affect the development of the municipality. Security analysis at the municipal level will include: 1. analysis of unlawful acts (offenses, crimes, offenses), 2. development trends of crime (crime analysis) and offenses, -3. social analysis - selected indicators related to the development of risk phenomena such as unemployment, social benefits, 4. institutional analysis containing entities that act preventively and influence the level of public order and security. [2]

The security analysis will contain at least the following data on transgressions, crimes and offenses, together on the territory of the municipality. 1st offenses at least for the past 2 years, year-on-year comparison and index per 10,000 inhabitants, together with year-on-year change of index, criminal activity will be listed in the structure.

Tab. 1 Table crime – misdemeanor and crime

Year	Total	Property	Violent	Moral

The index is counted: (number of offenses / population of the municipality) x 10,000

Tab. 2 Table offenders

Year	Age 0-14	Age 15-17	18 and more age	Recidivists

Tab. 3 Table victim

Year	Age 0-18	Woman	People older than 65 years

For the purposes of analysis, it is also necessary to collect and analysis data on the following types of offenses: 1. against public policy, 2. against civil cooperation, 3. against property, 4. offenses in the area of protection against alcoholism and other addictions, 5. offenses against generally binding I declare in the field of security and public order. The data on all the offenses mentioned will supply the municipality with entities whose competence is to solve and elucidate such offenses and that is the City

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Police and the Police of the SR. The data will be arranged in the table according to the types of offenses, for the territory of the municipality.

Tab. 4 Table of comparison of individual offenses

	The population		Offenses			Index on 10 000 inhabitants			Change 1x-1y v %
	To 31.12. 201y	Change over the year 201x	Year 201x	To 31.12. 201y	Change 1x-1y	Year 201y	Year 201y	Change 1x-1y	
Against public order									
Against civic coexistence									
Against property									
In the area of protection against alcoholism									
Grievances against municipalities									

Year x in the table shows, for example, year 2016 and year 2017.

The socio-demographic part of the analysis will include: 1. the number of unemployed for the year x, y, the year-on-year comparison and the index per 10,000 inhabitants, 2. the number of social benefits payable depending on the amount of income in the municipality (social benefits) year-on-year comparison and index per 10,000 inhabitants; 3. existence of socially excluded localities in the municipality; - the name of the locality, its brief description and the number of inhabitants, including their national composition, 4 other risky social factors.

1.2 Security analysis - Synthetic part

In the synthesis of knowledge and design solutions for security analysis, a brief interpretation of the statistical outputs, which will include the designation of the most problematic sites and the main security issues arising from the data on transgressions and crimes, offenses, perpetrators and victims and their territorial distribution. The general outcomes indicated in the tables are possible and desirable to further specify

and provide arguments for the chosen form of the municipality for a particular year. - identifying the problems and / or risks that need to be addressed, - how to address and identify the actors involved in the implementation of the plan (solutions). [5]

In the synthesis section, the SWOT analysis is appropriate. This allows for a qualified knowledge-based learning. It will allow us to organize information about the village into parts of S = Strengths, W = Weaknesses, O = Opportunities, T = Threats. The strengths and weaknesses describe the current state of the municipality. This section focuses on assessing the intrinsic factors that may influence or need to be improved by the region. Opportunities and threats focus management's perspective on the future and are the basis for vision. Thus, the SWOT analysis provides information on the current state and provides background for the design of the strategic development measures of the solved territory. [3]

The design part will contain the development vision of the territory and the state of the village, which we should achieve in the future. Following these are identified the decision issues (areas) that need to be resolved. This section also sets out long-term specific objectives and a set of successive short-term goals to meet them. Everything is tied to a particular municipality and executor. These measures include concrete steps to ensure that the targets are met. This section also sets out financial requirements, including funding sources. It also includes a set of indicators that serve to objectively control the fulfillment of strategic goals.

The implementation part consists of an action plan. From a system point of view, it should be one of the documents that contributes to increasing the safety of the population. This requirement stems from the need to ensure, at municipal level, also the multi-source financing of their security activities. A strategy for addressing community safety requires relevant information. We can show security indicators on how the region is secure. [2]

At municipal level, these will be indicators that monitor the failure of important elements to ensure community safety. Their decommissioning can lead to consequences that paralyze life in a particular village. From this point of view, it will be critical elements of the regional infrastructure or critical infrastructure objects if they are deployed in the space of interest. The content of the security threat indicators will consist of components that are equivalent, cohesive and interconnected. Such indicators in municipalities include: indicator of the level of safety culture, indicator of the level of municipal management, indicators of limitation of risks in the municipality, indicators of risk assessment and others.

The main indicators are: descriptive, allowing the description of the reality of the reality under investigation relevant indicators; inter-connectivity that allows for a systemic approach to explore reality by linking and linking sub (subsystem) indicators; analytical, providing a comprehensive view of the state and trends of development researched reality through the identification of decision-makers, predictive, allowing you to predict future trends by developing trends possible states of the studied reality, phenomenon or process.

Indicators should meet the following requirements:

- the indicator in quantitative form expresses the state of security situation when a threat or its preconditions for security breach arises reference objects

- indicators have high sensitivity and variability (variability), which allows their use for monitoring, evaluating and predicting processes in a security environment

- indicators are also characterized by a high degree of sensitivity to mutual interactions and ties, thus allowing an indication of the emergence of threat accumulation, or the creation of conditions for their creation.

Security indicators are actually precursors that allow you to identify the state of safety in the environment, in the conditions and in the sectors, of interest. [4]

Conclusion

The current analyzes and the development of security in the world itself show the rapid onset of non-military threats that affect not only individual states but also regions. Such threats include, for example, terrorism, crime, extremism of various kinds, uncontrolled migration, lack of strategic raw materials, natural disasters, environmental degradation, and the like. These non-military threats, along with other factors, can have an impact on global security in the world, in the Slovak Republic, but also on the security of regions and municipalities, which can include businesses, organizations and institutions. Ensuring the safety of communities is of great social importance.

Effective security management requires formation as a specific form of management with support for analysis and search for answers to questions of important tasks, functions, organizational structure, and decision implementation. Security policy for population protection. The community security solution must be supported in the regional development strategy, which is embedded in the Municipal Planning Programming Strategy, commonly called security policy. In the document, the security policy is the chosen period, and the strategic objectives and development priorities are specified, the bearers will be identified and the way of financing and implementation will be determined. From a general point of view, it includes a program of security policy and roles of financial development that correspond to the assumed available financial resources. The effort of municipal management is to create a program that will mobilize local legal, physical and people to their active approach to the development of the territory in which they live. 2. Synthetic part - Synthesis of achieved analytical results and definition of strategic vision, 3. Design part - formulation of successive concrete steps that will lead to the fulfillment of the vision, 4. Realization part - formulation of specific projects. In the synthesis section, it is advisable to use SWOT analysis. The design part will include the developmental visions of the territory and the state of the municipality that we should achieve in the future. The implementation part consists of an action plan.

References

- [1] HORÁK, R., L. DANIELOVÁ, J. KYSELÁK a L. NOVÁK. *Průvodce krizovým plánováním pro veřejnou správu*. Praha: Linde Praha, a.s., 2011. ISBN 978-80-7201-827-7.
- [2] BOROŠ, M., LOŠONCZI, P., VELAS, A.: *Testovanie detekčnej schopnosti vybraných komponentov poplachových systémov*. 1. vyd. Žilina (Slovensko): Žilinská univerzita, 2018. 133 s. ISBN 978-80-554-1453-9.

- [3] KURILLOVÁ, Z., LOVEČEK, T., LUGANO, G., VELAS, A.: Deep learning shift in elearning. In: *INTED 2018, 05.03.2018-07.03.2018, Španielsko/INTED 2018: Proceedings from 12th International Technology, Education and Development Conference*, Valencia, 5th - 7th of March 2018. Valencia (Španielsko): IATED Academy, 2018. ISBN 978-84-697-9480-7. ISSN 2340-1079, s. 2551-2555.
- [4] KUBÁS, J., ŠOLTÉS, V.: Security in local government of the Slovak Republic. In: *SGEM 2017: international multidisciplinary scientific conferences on social sciences & arts: conference proceedings: urban planning, architecture & design Book 5*. Vol. II: Urban studies, planning & development architecture and design. ISSN 2367-5659. Sofia: STEF92 Technology, 2017. ISBN 978-619-7408-25-6. S. 235-241.
- [5] HOLLÁ, K., SVENTEKOVÁ, E., SVETLÍK, J., VELAS, A.: Increasing the attractiveness of study programs in the field of security and safety. In: *EDULEARN18, 02.07.2018-04.07.2018, Španielsko/EDULEARN18: conference proceedings: 10th International Conference on Education and New Learning Technologies*. [Valencia] (Španielsko): IATED Academy, 2018. ISBN 978-84-09-02709-5. ISSN 2340-1117, s. 4135-4140
- [6] MOLDAN, B. *Indikátory a udržiteľný rozvoj*. Praha: Univerzita Karlova, 2013. Available from: <http://panda.hyperlink.cz/cestapdf/pdf06c3/moldan.pdf>
- [7] BARTOŠOVÁ, H., BARTOŠ, J. *Bezpečnostní dimenze regionálního rozvoje*. Praha: Vysoká škola regionálního rozvoje, 2012. Available from: www.regionálnírozvoj.eu/sites/regionalnírozvoj.eu/files/c01_bartosova_bartos_bezpecnostni_dimenze_f.pdf

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