# ASSESSMENT OF THE REGIONS (MUNICIPALITIES) SAFENESS

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#### Abstract

In the article the author suggests possibility consideration of safeness at the level of regions and municipalities. One of the possibility is creating a set of indicators, that will reflect possibilities of safety risks. Those are so-called monitoring indicators, e.g. failure of important elements of regions (municipalities). Their elimination may cause paralyses of life in the region. It is important to include these indicators into the strategic planning.

## Key words

Civil protection, indicator, security, crisis management, strategy.

## Introduction

In the Concept of population protection until 2020 with a view until 2030 (Government decree No. 805/2013) the population protection is defined as a wide "multidepartmental" discipline, which can not be explained and solved as just a task fulfilment, e.g. particularly warning, evacuation, concealment and emergency survival (linked to Geneva Convention from 12<sup>th</sup> August 1949), but as a set of activities and tasks of responsible authorities of public administration, legal entities and individuals and also citizens, which lead to provision of protection of life, health, asset and environment, in accordance with applicable laws and regulations [1]. In accordance with this thesis it is necessary to deal with individual details of population protection. They are both questions of prevention, because, as the slogan says "fortune favors the prepared" and response to issues arising from emergency situations (hereinafter referred to as MU) or crisis situations (hereinafter referred to as KS). An important part of this issue is the recovery of the environment after managing MU or KS. From a specific point of view, it can be stated that this area will be mainly dealt with crisis management, which gradually originated as a process, which deals with preparation of preventive measures to protect people, property and the environment. In the case of MU (KS) the crisis management solves the coordination of individuals (staff groups) using activities and methods for achieving the objectives and to manage a variety of specific tasks and functions. Its purpose is to protect the safety and security of the population [2]:

- functioning of the public administration,
- public health,
- availability of vital range of goods and services,
- public and private property,
- Integrated Rescue System,
- humanitarian assistance, including international participation of our employees.

Although the issue of crisis management is very extensive and affects all spheres of social life, its primary goal is public safety and protection, in our case of the region (the municipality). It will apply to existential threats and risks sizes to achieve them. Security in the region (municipality) will not be evaluated by the threat of harmonious development of the region (the municipality), but depending on the fulfillment of specific conditions for maintaining its essential features and functions, its life values and interests. It touches on fundamental theoretical, systemic and methodological bases of strategic management and

planning at regional and community level that have, given the largely intangible outputs and immediate contact with the population, certain specifics.

## 1 Strategic regional development

Region, in a systematic approach, can be characterized as a social system in an administrative organization that seeks to achieve its principal objective, the efficient and effective fulfillment of the mission, i.e. to serve the public through effective and efficient implementation of the regional development strategy [3]. Control of the region shows some aspects of complexity, which is subjected to various types of links (direct and intermediate), and dynamics that is caused by continuous changes in the conditions (internal and external) that require changes in the structure of the system and process management. Its behavior is influenced by the terms of both the internal and external environment and ways of interacting with it. It is expected that the region will meet the expectations of citizens, and therefore, the internal environment of the region has to be structured so that it can fulfill its objectives in the external environment, where conditions are changed. At the same time, it is necessary to understand that the region must be an open system with an appropriate interaction with the external environment, which is a necessary condition for its development. Considerable influence on the behavior of the region, has the existence of the human factor with its diverse and conflicting interests and subjective specialty. Similar characteristics apply to municipalities, especially the municipalities with extended powers. Here, as well, applies that the relationships, coordination and subordination are unthinkable without the application of the compatibility of system components and their elements, i.e. people. This assumes the compatibility of people with goals, objectives and their implementation and ways of thinking and acting. These and other characteristics of the regions (municipalities) must inevitably lead to a requirement to ensure their safety. Security is usually controlled by object of management, which is also of interest to the management of the region (municipality). Effective safety management requires its formation as are specific forms of management with support of analysis and finding answers to questions such as mission, tasks, functions, organizational structure and implementing of decisions. These include:

- protection of persons, i.e. human security, where will be implemented effective use of resources for achieving optimal security in integration with the fulfillment of the strategic objectives of regional development (municipalities);
- property protection in all types of property from the analyzed threats that may occur in the region (municipality);
- environmental protection, which currently has a number of aspects relating to environmental security, food security, etc.

This all requires efficient use of resources for achieving optimal safety of the region (municipality) in integration with the implementation of their strategic development goals. This highlights the need to include in the Program of Regional Development (the Program) and the Strategic Development Plan of the Municipalities (the Plan) requirements for regional security policy based on the analysis of security risks and will formulate security goals. Establish rules and algorithms (system management functions), which will regulate the safety management. It also expects the procedures of activities aimed at planning, organizing, implementing and monitoring processes of security to be determined.

## **Program of regional development**

It follows that the solution of security in the region (municipality) must be supported in the Regional Development Strategy, which is based in the Program. This document can be used to support strategic planning at the municipal level, where the development strategy is solved in the Plan. It is perceived as an essential strategic and tactical document that sets out strategic objectives for the selected period and specifies strategic objectives and development priorities in the form of concrete measures and projects, determines the recipients and the method of financing and implementation. In general, the Program and Plan [4] are usually assembled as complex socio-economic documents of development of the region (municipality), which include directions and tasks of the development of a financial nature proportional to the expected available financial resources. Similarly, they include tasks and development of a non-financial nature, such as organizational tasks, political support, policies, tools and recommendations to higher authorities to support municipalities, etc. Usually, the issue of the population security is not established in their basis. The strategic plan formulates a vision of the region (municipality), i.e. strategic plan itself. There is formulated the state of the region (municipality), which gives us an information on how the region (municipality) is developed and formulates the expected future status of the region (municipality) and its aspirations. Objective of the management of the region (municipality) when building the Program (Plan) is to induce change, mobilize local coporations, individuals and communities to their active approach to the development of the territory, where they live.

**Basic principles** of strategic planning development are based in [5]:

- long-term nature (planning horizon of development from 10 to 15 years with the implementation of changes in the implementation of projects running 3-5 years),
- **complexity and selectivity** (strategic development planning is a complex process with the necessary systemic interconnectedness; given that the strategic plan can not address all aspects of development and security, it is needed the selection and prioritization of problems and possible directions of development),
- cohesion (necessary because decisions made in favor of certain activities have undoubtedly mediated impact on other activities),
- **consistency** (strategic plan is developed in connection with the development of the territory, which requires continuous evaluation of changes in input conditions, the results to date and modification of sub-steps),
- **openness** (respecting public opinion, and new stimuli and impulses in the preparation, negotiation, execution time),
- **reality** (setting realistic achievable goals and their financial, economic and social provision, etc.).

Representatives of the region (municipality) usually decide to develop a Program (Plan), when the regional (municipality) management accepts in its activities the principles of strategic management and such Program (Plan) considers as the cornerstone of its strategic decision making. From a managerial perspective, the need of strategic planning in safety is obvious, because the Program (Plan) should play the role of strategic management tool and should with its structure, content and method of implementation contribute to the success of region (municipality) control not only in development but also in population protection and their property. The success of the procedure [6] consists in the application of the principles of successful management, which can be applied to our solutions, such as:

- actively act,
- carry out their activity in the region (municipality), i.e. close to the population,
- to develop activities and initiatives through adequate autonomy,
- engage population in security solutions, and thus increase the effectiveness of the measures,
- create incentives that motivate people to self-protection and protecting solutions, leading to an increase in the system value,
- within implementation of security measures to use what they own (what they know and can do).

If we accept the view that management success lies among other things in the efficiency improvement of the adopted measures of strategic planning as well as improvement

of security of the region (municipality), the involvement of the population in solving this task will definitely help. At the same time safe region (municipality) creates the conditions for investment protection of legal and natural persons and also development of tourism in the region (municipality) and thus contributes to the development of the area. In these documents should also be addressed holders of tasks and identified ways of financing and implementation. Implementation of the Program (Plan) requires management to face to specific requirements. The management should have factual knowledge of the issue and orientation in tasks set to meet goals, accepting, evaluation and communication of information, application of principles valid for the decision-making process, cooperation with other team members, be able to manage own time and the resulting ability to set priorities, responsibility for the work environment, etc. It is expected that management will prepare strategic plans and after that it will realize tactical procedures. Strategies such as in [7] is the identification of the basic long-term goals of the entity, ways of their achievement and allocation of resources essential to realize these goals. The tactics of security can be viewed both in the wider sense, i.e. that it deals with tactical methods to implement the strategy, and in the narrower sense, i.e. it is a set of specific methods used to achieve the objectives of the strategy. Strategy sets the objective and basic directions of its possible achievement, e.g. development priorities, usually in alternatives, while tactics defines the ways and methods in which they are to be achieved. The strategy is grounded in the experience, invention, imagination and assumptions of management, in our case the region (municipality). The strategy discussed various options and accept compromises. Such principles and others are also applied for preparation of the Program (Plan).

Strategic decisions have to bring greater efficiency measures in public safety at limit costs. It is a systematic process that has been created using the application of general management functions. Its result is unambiguous determination of the strategic plan based on real conditions of the region (municipality).

Security in the region (municipalities) is practised by professional safety management of the region (municipality), which should not be changed with the election results. This stems from the fact that a professional manager is professionally prepared on a long-term performance of his duties. During the performance of systemized job position he gains experience, including the ability to plan security strategy in the Program (Plan), create additional safety documentation, make independent decisions in matters dealing with emergencies, etc.

Security dimensions in the Program (Plan), as the founding document of the strategic management of the region (municipality), is needed and has the sociopolitical, systemic and substantive aspects. All aspects act strictly synergistically. Their interconnected existence has an acceleration, i.e. the effects are multiplied, the absence of any of them act retarding, i.e. significantly reduces the effects. **Sociopolitical aspect** is understood to be a general agreement with the interested political forces and citizens about how should be the security measures implemented. **System aspect** as a tool for safety management in the region (municipality) must correspond to a set of documents at the state level. **Substantive aspect** focused with its content on key issues (threats, risks, priority).

Program of the Region Development and the Strategic Development Plan of the municipality may not be isolated documents, so they should solve, inter alia, the security in their content. The Program (Plan) generally consists [8] from:

- a) analytical part analysis of the objective area,
- b) synthetic parts synthesis of analytical results achieved and definition of strategic vision,
- c) planning parts formulation of subsequent successive steps that will lead to the fulfillment of the vision,
- d) executive parts formulation of specific projects.
- a) Analytical part provides situational analysis. There is defined the region (territory), surveyed the conditions for economic, social development and ensuring of security, i.e.

condition (decision problems) of region (territory), identification of causes of problem areas (threats), identification of major companies and facilities in the objective space, or activities of other entities affecting the region (municipality). Conclusions from the analysis of external relations are applied in relations to other spatial elements at the local, regional and national, even international level. In the analytical part, the content is focused on population, economic activities, infrastructure, the environment and the entities that affect the development of the region (municipality).

- b) In the **synthetic part** a SWOT analysis is applied. It allows qualified ordination of knowledge about the investigated area. It allows us to organize information about the region (municipality) in parts of S = strenghts, W = weeknesses, O = opportunities, T = threats. Strengths and weaknesses describe the current situation in the region (municipality), which is focused on assessment of internal factors that may affect the region, or that need to be improved. Opportunities and threats focus the view of management on future and serve as the basis for visions. So the SWOT analysis provides information on the current status and provides inputs for the proposal of the strategic development of the investigated area.
- c) **Planning part** contains development visions of the area, i.e. state of the region (municipality), which we should achieve in the future. Subsequently the decision problems (areas) are identified and need to be solved. This section also establishes long term specifically defined objectives and a set of consecutive goals to their fulfillment. Everything is relative to a particular region (municipality) and the executors. Those measures include concrete steps to ensure the fulfillment of sub-objectives (strategies). This section also shows financial requirements, including funding sources. It also features a set of indicators that can be used for an objective review of the strategic objectives.
- d) **Executive part** is made up by the action plan.

From the system point of view the Program (plan) should be one of the documents that contributes not only to the development of the region (municipality), but also to increase the public safety. This requirement stems from the need to ensure also multi-source financing of their security activities at the regional (municipality) level. It should have the ambition to bring the continuity into the development of the region (municipality).

Strategy decisions in relation to the security solution of the region (municipality) requires the acquisition of relevant information. Indicators of safety can show us the real state of the region (municipality) security.

# 2 Sub-set of indicators of threats to the safety of the region

The need to create a set of indicators<sup>1</sup> of safety hazard arises from both the level of crisis management and the perspective of creating a security strategy in the strategic development plan of the region (municipality). Indicators can be set differently for different systems, policy objectives, security, etc.

At the state level it will be indicators pointing to the political (domestic and foreign), economic and economic policy, defense and military policy, financial, social, internal policy and security, and public information policy etc.

On the lower level, i.e. regional and local it will concern the monitoring indicators such as failure of important elements of region security (municipality) and of course they will reflect the conclusions of the indicators of higher levels of management. Their exclusion can lead to consequences which paralyze life in a region. From this perspective, it will concern the critical elements of regional infrastructure, or the objects of critical infrastructure if they are deployed in the area of interest . Content of security threats indicators will form components that are equivalent, coherent and interrelated.

Indicators are used for qualified emergency management. They are distinguished from other information, because they are elements of specific management or supervisory processes. The principle is that the indicators suitable for a particular function are unsuitable for other functions. If we define the indicator, then it has a specific format that reflects the proposed target. Indicator as a component of the management process must have certain properties:

a) must have a broader meaning than the meaning of some value even measured accurately;

b) must identify a standard, i.e. that corresponds to the target or a reference value.

It follows that the indicators can be used to compare the level of security in the region (municipality), predict trends, to provide information for early warning, assess the conditions for achieving the objectives, etc. It is important to note, however, that a universal set of indicators for the safety or for another area may be difficult.

#### Indicators of the safety culture level

These indicators are based on whether the public policy documents on the prevention of major accidents are created and in what quality. Such documents include, for example crisic plans, emergency preparedness plans, emergency plans, emergency response plans, etc. Another indicator will be the fulfillment of laws and other binding regulations, such as the legal standards relating to the safety. If there are establishments of hazardous substances in the territory, the objectives and principles of prevention in these plants are worked out usually generally. Indicators must be directed to information on how to provide appropriate structure and management system for each of the following areas:

- a) organization and employees,
- b) identification and evaluation of major hazards and risks of their activation,
- c) operation management,
- d) management of changes,
- e) emergency planning,
- f) monitoring of program fulfillment,
- g) audit and control.

The objectives and principles of prevention of major accidents as well as limitation of their possible consequences are part of the program of work safety and environmental protection or as their supplement. The key point is provable familiarizing of employees with the principles of prevention, protection of health and safety at work, environmental protection. An integral part of the municipality's indicators is education of citizens in self-protection agaist emergency events. Municipal Authority informs citizens, natural and legal persons in the usual way with the nature of the potential threat, with prepared crisis measures and ways of their implementation. To ensure preventive measures, those documents need to be prepare. Their recency is a key indicator of the safety of the municipality.

#### Indicators of the management system level

This group of indicators includes the processing and documentation of the safety management system in the area of responsibility of the municipality. Management of the municipality must assess the threats and risks resulting from them for the territory of the municipality, such as floods, rainstorms, wind disasters (hurricanes, tornadoes), disruption of energy supplies (electricity, gas), waste economy and ecology (food, drinking water, environment, waste disposal), the threat arising from the operation of establishments operating with hazardous or ionizing substances in the territory of the municipality, etc. This area also covers the preparation and auditing of contingency plans, emergency plans and emergency response plans of the municipality to emergency situations etc.

## Indicators of organization and planning of necessary resources in crisis management

One group of indicators is providing of human resources. Here will be included workers, who are dealing with planning and everything that goes with it including provision of cooperation with the components of the IRS, legal and natural persons, training of employees of the municipal authorities and municipalities, updating of documentation and its verification, sufficiency and quality of materials and techniques of the municipality etc., eventually securing of necessary equipment and materials from companies or individuals doing business.

These indicators can also be assessed separately as indicators of human resource management. In any case, we must take into account the implementation of conditions and requirements in the selection of recruits at a certain position (systemized place), assessment of capabilities and competence of personnel, training and way of auditing the preparedness of employees, providing a special training for designated staff and verification of their readiness.

Another group will represent the IRS components, including voluntary fire brigade of municipalities and their ability to act. Not less important group of measures is provision of protection to the population of the municipality. The way it will be provided, will depend on the provision of financial resources that can be drawn from own municipal budget and from the budgets of superior degrees and administrators of regions (e.g. river basin) and from the resources of the European Union.

## Indicators limiting the risk of the threat activation

Indicators in this area will be characterized by the ability of ensuring the necessary tasks and determining liability of employees for their performance. It will reflect the readiness of the monitored region to address MU in terms of prevention, repression and renovation.

An important factor in the area of indicators will be identification of needs in preparedness of professionals and their security, including training. The experience gained in solving MU shows that timely and necessary information from employers to employees and local authorities to citizens about the risks of MU, methods for their reduction, ways of warning, protection and ways of solving MU, leads to better managing with consequences of MU, when problems arise. Similarly, the use of proven designs of employees and citizens to methods of security at the time of planning and public documentation negotiation. People are thus motivated to actively engage in safety control of the company according their employment status and preparation of preventive measures in the municipality to reduce the possible effects of MU at private and public property.

## Indicators of risk assessment

Group of indicators of risk assessment can be considered as the key indicators, because the size of the threats and risks arising from them will be the foundation of all measures in the given territory. Such indicators give us information about the characteristics of possible threats and the risk of possible activation of the threat, such as the nature, frequency and power of the threat, time dates, duration, affected area, prognosis of the development and the consequences.

Another part of the risk analysis we gives us information on the vulnerability, i.e. the area of vulnerability, the consequences of threats to human health and life, economic, financial implications etc.

Then we come to conclusions about manageability in the event of activation of the threat. So we have to prepare various measures to avert possible threats to the reduction of the possible consequences of the threat, if the threat will arise and to deal with MU. This is related to prognosis and warning, preparedness of intervention teams, including cooperation with public authorities, population, etc.

We can also deduce from the indicators of risk assessments the possible quantification, i.e. building up values of influence of possible threats, building up values of the potential

consequences, values of necessary expenses. These indicators provide the basis for the creation of alternative solutions to protect the population and their comparison with other comparable regions in the country and abroad. This gives us the possibility of cooperation and the provision of equipment and material, but also the individual components prepared to deal with possible MU, including cross-border cooperation.

## Indicators of local self sufficiency

One of the most important indicators are indicators of local self sufficiency. These are indicators that are also in the field of sustainable level of development of regions. These groups will include health - nutrition, mortality, sanitation, drinking water, availability of health services, housing, safety, atmosphere, air quality, soil and landscape, forestry, urbanization, freshwater ecosystems, water quality, consumption and production, use of energy, production and storage of waste. Another important part of this area of indicators is the traffic that will

significantly affect the environment and indirectly health and related attributes. In this group of indicators we will also assess and exploit institutional framework, which aims to strategically implementing the principles of sustainable development of the region. The provision of development in the region will contribute national and international cooperation, particularly in border regions or municipalities, respectively.

#### Methods designed for support of decision making process 3

To support the decision making process in the use of the information obtained from the individual indicators of the region (municipality), there are many methods. One of such method is using the Ishikawa diagram, in particular to identify the causes and consequences of MU (crisis situation), problems in provision of security protection of the population and the environment. etc.

#### Ishikawa diagram

This diagram is based on simple causality that each result (problem) has a cause or combination of causes. Its goal is to analyze and determine the most likely causes of the problem, in our case, the selection of possible indicators, see above. Given that the Ishikawa diagram is universal, we will use it not only in terms of searching the quality of preparedness, but also in detecting the causes of failure (problems) of safety systems at the investigated level of the region (municipality). It is suitable for use in groups (teams) process control to search for solutions, for example by brainstorming. I suppose this diagram, see Figure 1, will contribute to analytical work at systematic search of possible causes of problems in the security of the region (municipality). The causes are usually found in the basic branches. In the area of safety, they will generally be the following:

- citizens (causes caused by people emloyees, citizens), technical and material support (causes of techniques, tools, materials and their properties),
- documentation (causes of the rules, regulations, legislation or standards, plans, . methodologies, tools),
- protective measures (causes of the low level of protection against possible threats), preparation of professional staff and the general public (causes of inadequate preparation of both groups of people),
- organization of management (causes of improper management), environment (causes caused by the environment), etc.

These branches are not mandatory followed, but can be flexibly adjusted according to the solved problem, see Figure No. 1, participants in the process should not be limited , but inspired. Ishikawa diagram can be used to search for the causes of problems, thus retroactively, as well as for the preparation of proposals of measures to protect the population and the environment, i.e. to prevent and, in the case of MU (KS) to reduce the consequences of possible events. Within the diagram creation, it is assumed that it will be teamwork, that a group of people operates with complementary skills and interest in the common goals. The process of creating the diagram is usually initiated by the exchange of ideas, such as brainstorming or analyzing process using a cycle "Plan- Do- Check -Act " (hereinafter referred to as PDCA), which in this case is seen as an integral part of any process where plannig, realizing and controlling goes on and then the comments that arose during the previous cycle are worked up. It may also be utilized another cycle Standardize -Do - Check-Act (hereinafter SDCA), when a standard is created at first and then all other activities are realized similarly to PDCA cycle. From the intention of the diagram utilization follows that it can be included among the selected method (Ishikawa diagram, Check lists, Pareto diagram ,Decision trees, etc.) that serve to improve the quality of process management.

Pareto analysis (states that 20% of causes can cause 80% of problems) can be used to determine which causes represents a priority, and therefore they will be addresses as the first. Using the Lorenz curve (we obtain the frequency of disagreements and percentage of the cumulative sum) the criteria for determining the main causes that most affect the consequences can be specified and afterwords it can be decided on corrective measures. The final phase will help us to develop or eliminate the causes. I depends on whether they affect us negatively or positively.

It is also possible to define sub-causes, i.e. to analyze the individual defined causes and search for their causes.

In determining the weights of individual causes we start from the relation (1).

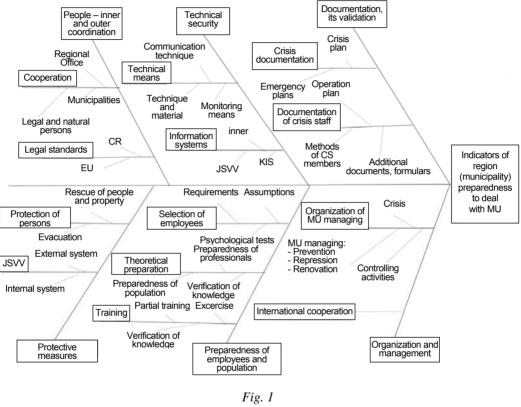
$$C_{K_{n}}^{V_{m}} = \frac{K_{n}^{V_{m}}}{\sum_{n=1}^{i} K_{n}^{V_{m}}}, \qquad (m = 1, 2, ..., j), \qquad (1)$$

whereas::

 $C_{K_n}^{V_m} \implies \text{ weight of n-th cause "K" m-th evaluator "V",}$   $K_n^{V_m} \implies \text{ number of points assigned n-th cause of the m-th evaluator,}$   $\sum_{n=1}^{i} K_n^{V_m} \implies \text{ the sum of the assigned points n to causes of m-th evaluator.}$  n=1

For graphic design of the diagram can be used mind maps. They represent a technique that uses a natural way of visual thinking to solve problems and organize information and ideas in graphic form. Mind maps can be conveniently used in the decision-making process as a proper way of organizing ideas. We increase the activity of mental activities, strengthen memory, concentration, creativity and innovative thinking in a natural way. We come to facilitate an understanding of the context of complex security problems. When evaluating the information we get to their quicker and more easier absorbation and processing. It is exponentiated using branching, images, colors and other graphic elements. Mind maps in our case, can be used to create different types of reports for the diagram, to analyze relationships, in effective planning of security projects, preparation of meetings, in setting priorities of activities in safety projects, in organization of computer files by categories, linking of various project documents with a map, in the planning process, etc. Mind map will be more illustrative than traditional documents.

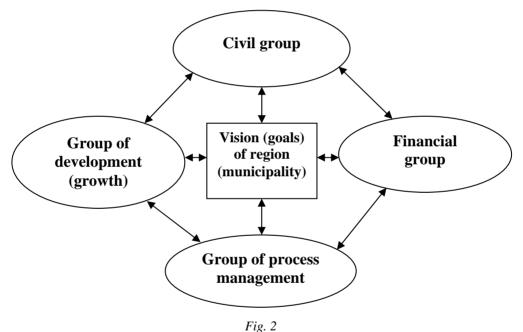
One of the known methods that generates the link between strategy (strategic objectives formulated in the form of strategic plans, sub-strategies, etc.) and operative activity is the Balanced Scorecard method (BSC hereinafter).





#### **Balanced Scorecard**

The method BSC creates a link between the strategy (strategic objectives formulated in the form of strategic plans, sub-strategies, etc.) and operational activities, expressed graphically in Figure No. 3. BSC is a strategic management system, which helps to convert strategy into concrete plans and scales. It helps to strike a balance between individual plans. It creates a strategic feedback with the information on the success of implemented strategy. It is a system of linked objectives, indicators, targets and initiatives that describe together strategy and the way how this strategy should be achieved. It is also a management system that uses the BSC method as the main instrument for sharing strategies in management, creation of strategic alliances within the organizational structure, creation of plans and provision of feedback and resources for the planned security measures. The BSC method can be used modified also in crisis management. It helps to real linking of strategies with operational activities so that the strategy will implemented in all areas and it will be possible to measure the achievement of strategic objectives. It will help to link the strategic goals of the company with the tasks of managers. The method is not only focused on financial indicator, but it also allows to monitor other indicators, such as processes, professional staff, etc. It is focused on the prediction and implementation of individual measures. The method is beneficial because it helps to improve the management in transmission of strategic plans into operational activities, i.e. to implement strategic objectives into the tactical management. It contributes to the development of strategic plans to become a continuous process and also to consolidate various processes, services, competencies and units. It follows that this method will be used to support the processes of strategic and tactical management. As it was already mentioned , the core of the BSC method is a set of balanced indicators. Before applying BSC method in public administration, it is necessary to clarify the vision and strategic priorities. The method's purpose is to ensure their fulfillment. Vision and individual strategies of the region (municipality) is usually solved in four groups, which must be balanced.

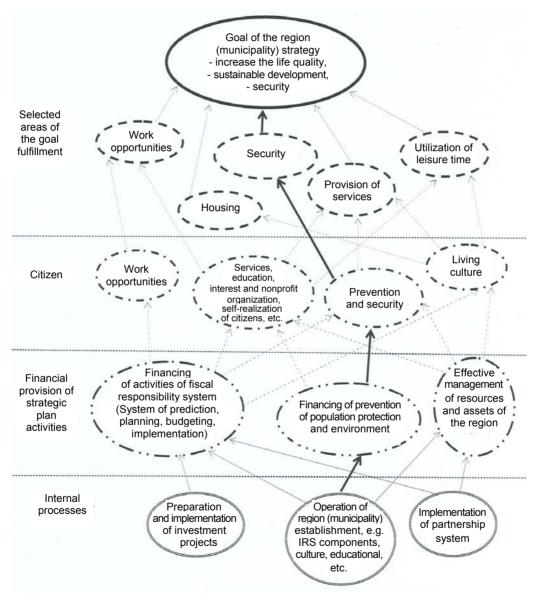


Scheme of BSC method for the region (municipality), own source

Groups of visions and individual region (municipality) strategies, see Figure No. 2:

- **Civil Group**: First we need to clarify whether we know the needs and expectations of citizens (legal and natural persons) in the security field. It is important to determine what needs to be done.
- **Financial Group**: Another group of topics related to financial affairs. What resources (financial, human, economic, technical) are needed to fulfill the vision and strategy.
- **Group of process management**: It is also necessary to identify system processes that provide enough resources.
- **Group of development (growth)**: It is important not to forget the development, so to figure out, whatever has to be managed.

This method can be used for indicators that are included in the group e.g. as indicators of the level of culture safety, indicators of organization and planning of resources needed in crisis management, local sustainability indicators, etc. Its advantage is the involvement of stakeholders in the implementation of the strategy and serves also as an important mean for the communication of problems with citizens.



*Fig. 3* Selected parts of realization of the region (municipality) security strategy, own source

## Conclusion

In the sphere of security other elements of management at the regional level (municipality) come to the fore. It concerns the application of the principle of partnership in the management of the region (municipality). In the future, it should be expected that this issue will be greatly developed. The ways towards the realization of that aspect should be found in the effective participation in the management of non-profit organizations and in direct participation of citizens. Partnership is one of the alternatives of political and economic model and social decision-making based on the assumption that the decision-making process is effective and efficient, if it takes place within active participation of those, who are most affected by the consequences of decisions. This can be ensured by using a so-called methods civic **participation** [9]. Within its application citizens participate in the decision-making process, which is different from the forms of representative democracy. The method puts emphasis on cooperation with citizens and confrontation of decisions with their ideas. How the citizens are involved in the decision-making process, it is dependent on the selected form of management of the region (municipality). Citizens should be involved in so-called community planning. The general public (work groups) is used in this activity to prepare the analysis and suggestion part. Planning is a process, where a discussion, solution argue and public information to obtain feedback information of "concerned" citizens takes place. Important principles talks about that:

- citizens are adequately informed about the whole process of decision making,
- citizens' views are known before the management make a decision,
- citizens have influence and control over decisions,
- representatives of the people are involved in decision-making and agree with the decision.

People in this method are drawn into the decision-making process in different ways. These may be for example simple information to the public, or so-called breakfast with reporters on various topics, questionnaires, surveys, interviews, public hearings, public negotiations (usually after a certain part of the ongoing decision-making process), round table (interactive form of public participation), workshop (focused on the processing of comments and suggestions), action planning (creating space for questions and clarification), conferences (presentation of opinions of experts and professionals), a cup of coffee (suitable for small municipalities), dialogue with a selected group of management and public, a process of nominal groups (the method consists of a simple hierarchical order of ideas generated by the participants), Samoan circles, working groups, etc. The choice of the form of public participation depends on the topic, management experience and size of the region (municipality), etc.

From the previous lines it is clear that the evaluation of safety in the community will play a large role in the development of society even in future. Creating a set of indicators will have an impact on security, development of regions and municipalities, including the attitudes of investors, tourists, etc.

#### NOTES:

<sup>1</sup> Indicator (from lat. *indicare*, to show) means generally [9]:

<sup>•</sup> guide, not of direction,

<sup>•</sup> visible phenomenon that indicates hardly noticeable social change, or allows prediction of other phenomena,

<sup>•</sup> device that allows you to watch or to read the instantaneous state of a system, etc.

# Literature

- [1] Collective of authors GD NO. 805/2013. *Concept of population protection until 2020 with a view until 2030.* Prague: MI GD FRS CR, 2013.
- [2] HORAK, R., L. DANIELOVA, J. KYSELAK and L. NOVAK. *Guide of crisis planning for public administration*. Prague: Linde Praha, a.s., 2011. ISBN 978-80-7201-827-7.
- [3] BARTOSOVA, H. and J. BARTOS. *Security dimension of the regional development*. Prague: College of Regional Development, 2012. Available at: www.regionalnirozvoj.eu/ sites/regionalnirozvoj.eu/files/c01\_bartosova\_bartos\_bezpecnostni\_dimenze\_f.pdf
- [4] ROUSOVA, E. Utilization of work efficiency model in management and development of efficiency of workers in production area. Zlin: UTB in Zlin, 2008.
- [5] KRIST, J. et al. *National strategic plan Leader 2014*. Prague: National network MAS, 2011.
- [6] CHANDLER, A. Strategy and structure: chapters in the history of the industrial enterprise. Cambridge: M.I.T. Press, 1962. ISBN 02-6203-004-7.
- [7] http://www.rozvoj-pk.cz/soubory/topmanazeri/Den02\_studijni\_material\_SP.pdf, 2014
- [8] Collective of authors. Preparation, creation and implementation of strategic plans of municipalities and microregions. Ostrava: EF VSB TU, 2006.
- [9] MOLDAN, B. *Indicators and sustainable development*. Prague: Charles University, 2013. Available at: http://panda.hyperlink.cz/cestapdf/pdf06c3/moldan.pdf

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