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BASIC CONCEPTS OF SECURITY SCIENCES THEORY IN SECURITY STUDIES FROM THE CZECH PERSPECTIVE

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ABSTRACT

Security science in Czech Republic only postulate its scientific terminology. Difficulties in communication within and outside the newly created and evolving multidisciplinary scientific field is also reflected in the development and application of new concepts. Some concepts are already in place and are completely or at least partially understandable. They must be clearly defined and circumscribed. The problem does not lie in misunderstanding of terminology and specialized terminology specifying. The problem is, on the contrary in the vague and inconsistent use of terms most general, which are commonly used while part of a general, non-specialized language. Examples are the concepts of "security", "interest", "threat", "risk", "conflict" and others. Described unsatisfactory state of interdisciplinary shared a few overarching security terminology has led to the emergence of Czech security terminology.

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SECURITY SCIENCES PROPOSE THEIR OWN SCIENTIFIC TERMINOLOGY

Difficulties in communication inside and outside the newly created and developing multidisciplinary field of knowledge are reflected also in the cre-

ation and application of new terms. Some terms have been introduced and are fully or partly understandable. They must be clearly defined and specified. The problem of terminological misunderstandings does not lie in making the specialist terminology more precise. This problem lies in unclear and non-unified use of general terms, which are, at the same time, widely used in common language. Such terms as NATO "strategic documents" and "security methodology" are common and widely used, without their being standardised in their dictionaries – possibly only described in general dictionaries. This applies to key (conceptual) and basic terms – from which further, subordinate terms are derived, including the terms and definitions in the field of security studies (police science)[1].

These include such terms as "security", "interest", "risk", "threat", "conflict", "crisis", etc. The described insufficient common transdisciplinary and universal terminology for security studies has led to the emergence of Czech security terminology. The main purpose of this paper is to indicate that all terms in the field of security policy and security studies are 1) interconnected and 2) should be understood in an interdisciplinary and transdisciplinary way. The terminology of every scientific discipline should be characterised by the following:
- stability (which ensures the reliability of communication),
- systemicity (the terms from a given field should be connected),
- accuracy and transparency (including defined references to synonyms and terms in related fields) and
- capacity (a starting point to create new terms)[2].

Security vs security incidents and the ways of interpreting them

As presented above, security, similarly to the term of risk, is a very commonly used term. The transdisciplinary application of this term in various, often contradictory fields of science, such as political science, sociology, computer science, theology, medicine, ecology, ecology, law, military strategies and forensics, influences its inconsistent interpretation. According to some experts, "security" is such an idealised concept, that no argument can lead to reaching a consensus on its content.

[1] P. Zeman, Česká *bezpečnostní terminologie, její zdroje a její stav*, [in:] Česka *bezpečnostní terminologie*, ÚSS VA, Brno 2002, p. 7–9.

[2] J. Macháček, *Pojem stát je nezřetelný. Výrazy státnosti a stát ztrácejí kontury*, [in:] *Střední Evropa*, 2001, yearbook 17, No. 110, p. 61–66.

The society becoming more modern causes the security environment and the range of issues, which are part of the security debate, to constantly expand. The search for an answer to the question: What is security? is complicated by everyday, real security problems faced by social entities. As any term, also the **notion of security** must reflect the changing dynamics of social life and the security environment.

Security in the context of continuous social development is constantly increasing its space for implementation and communication. That way, the *debate on security* is gradually paving its way to new cultural, social and political areas, in which no systemic debate on security matters has been held in the past.

Security is a very complex, multidimensional social phenomenon, which is connected with various forms of human behaviour and human existence (spiritual, material, physiological, individual, and social). The notion of dimensionality in terminological terms expresses, in addition to the dimension, area and scope, also a specific feature which characterises the intensity, size and degree of something, especially in space or time. Security covers countless issues and problems affecting individuals as well as communities, along with the pursuit of their antagonistic social interests. The multidimensional nature of security indicates that this phenomenon is very broad in scope. Security is an important element of basic human needs, a social goal, an ideal and a value. At the same time, it has clear emotional, socio-psychological, socio-cultural and political effects. It is not only part of one's feelings (the feeling of safety), it expresses a specific state of a human being and society, as well as global problems of mankind.

Security issues have not yet been extensively studied, which has a clear impact on politics, the economy and other activities throughout society. The new quality, level and shape of the topic in question is obvious. This is connected with the dynamic development in the fields of European integration, European security design and further changes in the European Union. The gradually emerging security studies present a clear inter- and transdisciplinary system of science, which includes the field functioning on the interface of problems in the field of security, e.g. the present model of comprehensive security architecture, the existing security threats, the real risk of armed conflicts, the threat of infiltration by international crime, the sudden and constant growth in crime, the migration issues, the environmental crisis and the value crisis.

Security studies mostly deal with ensuring residents' and state's security against various types of threats. They specify the scope and manner of applying measures and activities which minimise threats. The basics of security studies are reflected in the security doctrine. It was determined that the process of ensuring security takes into account economy, politics, the culture of the individual and society, the level of knowledge and technology, the geopolitical and geostrategic situation, and public activities. Security studies should accept the existence of threats to security, and the elements and basic objectives of security.

The current debate on security has revealed new and unresolved issues which deserve attention and serious consideration. For example, solving the problems of terrorism or the living environment which threaten humanity as a whole, requires joint and concentrated efforts undertaken by all stakeholders. The same category of threats to security should include the matters of migrations, refugees and immigrants, and their social status.

The key question in this context is whether the expansion of various concepts of global security or comprehensive analysis of threats to security and individual security elements in the post-bipolar world can ensure the positive solution of the security issue. At the same time, ensuring the security of citizens and the Union, and therefore, minimising various types of threats, should be regarded as its basis.

"Security" is, at the same time, a basic terminological concept in the studies of freedom from threats, and a multifactorial and multilevel phenomenon. Various adjectives can supplement this terms, which can refer mainly to its nature (origin):

a) threats to security,
b) activities, tools or institutions which are intended to protect and provide security,
c) objects whose safety should be ensured[3].

Security should also be understood as a starting point, as a theoretical construct and a social system, which is of fundamental importance for the creation and development of security studies, the subject of which is the phenomenon at hand. The emergence of emergency or crisis situations is usually associated with a threat to the security of an individual or society.

The literature, which advocates the creation of security sciences, emphasises the importance of security in contemporary world, as well

[3] M. Mareš, *Ekonomická bezpečnost*, [in:] Česká *bezpečnostní terminologie. Výklad základních pojmů*, P. Zeman (ed.), VA, Brno 2002.

as the complexity of this phenomenon and its exploration. Holcr and Viceník indicate, for example, that security is a complex attribute whose content, structure and function go beyond not only the borders of a single discipline, but even all fields of science. On the other hand, Piwowarski states the need for interpreting security as an instrumental value[4]. This fact can not only be explicitly confirmed based on one's own theoretical analyses, but one can also scientifically develop its content and form. This requires defining a unified concept of security which is comprehensible and acceptable to all scientific disciplines.

Security and the extensive use of this term in various, often very different fields of science, results in its eclectic interpretation. Porada, Holomek et al.[5], touched upon this matter in a very pragmatic way, and Moller[6] did so in even more fundamental terms.

Each of the aforementioned dimensions encompasses a relatively wide range of security issues, actors, institutions, measures and relations. In addition to the above, the multidimensionality of security makes it possible to also analyse its further aspects, e.g. external, internal, objective, individual, police, civic, legal, social, cultural, technological, quantitative, qualitative, security systems, information technology security, transport security and critical infrastructure, etc. For this reason, e.g. military, economic, ecological, socio-cultural and human types of security, etc. were defined.

Especially when it comes to the security of a protected object (so far of the nation state), one should distinguish between internal security (in the case of occurrence, removal and elimination of threats from inside the object) and external security (in the case of occurrence, removal and elimination of threats from outside the object). All the aforementioned terms are usually interconnected, and their diversification is not completely clear. Therefore, security is a complex term.

Security (as opposed to danger) is currently an often used term, which communicates, depending on the selected point of view, different content

[4] J. Piwowarski, *Bezpieczeństwo jako stan oraz jako wartość*, [in:] *Bezpieczeństwo jako wartość*, Wyższa Szkoła Bezpieczeństwa Publicznego i Indywidualnego „Apeiron" w Krakowie, Kraków 2010, p. 56–59.

[5] V. Porada, J. Holomek et al., *Teorie a metodologie praktických věd a transfer vědeckých poznatků do policejní praxe*, PA ČR, Praha 2005.

[6] B. Moller, *Global, National, Societal and Human Security a General Discusion with a Case Study from the Middle East*. Paper for the 4th PanEuropean Conference at the University of Kent at Canterbury, United Kingdom, 2001.

in respect of the studied dimensions. Nowadays, the emergence of various opinions on the effective scope of security in terms of state's policy appears certain in state bodies and academic circles. Due to the extensive thematic range of individual dimensions, they will be analysed. The planned studies focus on those aspects of the security concept, which considerably limit the current and prospective possibilities of developing security studies.

Mareš recommends limiting the current definition in respect to a specific object: **security as a state, in which threats to the object (so far usually the nation state and international organisations) and its interests are eliminated at a lowest possible level, and the object is efficiently equipped and eager to cooperate during the elimination of the existing and potential threats**[7]**.**

Security incidents (events)

In philosophical, natural, technical and social fields, the concept of an incident (event) occurs in various meanings. In its most general meaning, an event is understood as a phenomenon, process or circumstance[8]. In the case of technical and natural sciences, we are dealing with a somewhat limited definition of the event, which is determined as a specific set of circumstances, as a phenomenon located in a given point in space and time. It is a basic scientific unit in the science theory. An event is defined in most general terms in the case of philosophy – as a phenomenon, which takes place and is triggered by a previous phenomenon. In computer studies, an event is understood is an information security incident, which takes place and causes malfunction or defect in a computerised IT system. The processes and phenomena which takes place chronologically under specific conditions, are referred to as events. *An event (incident*[9]*)* is, therefore, a change introduced to a given object in time[10].

Events consist of individual states, with the states being constant in a given time, and events being dynamic, and therefore bringing about changes

[7] M. Mareš, *Ekonomická bezpečnost*, [in:] Česká bezpečnostní terminologie. Výklad základních pojmů, P. Zeman (ed.), VA, Brno 2002.

[8] J. Požár, *Bezpečnostní situace a identifikace*, [in:] *Základy teorie policejně-bezpečnostní činnosti II*, A. Filák a kol (ed.), Police-History, Praha 2006, p. 147.

[9] Incidents can sometimes by used in its narrower meaning, as a synonym for an event. In this text, however, we understand the incident as a general concept, covering different types of events, but in most cases they are identical (equal) and can be changed ad hoc.

[10] A. Filák et al. (ed.), *Základy teorie policejně-bezpečnostní činnosti II*, Police-History, Praha 2006.

in individual states. States are individual static conditions of the object, and a sequence of states in time creates an event. Processes and transformations resulting from shifts are part of the event. Shifts can have various size, strength and direction, and thus differ in the subsequent processes. Such shifts are brought about by so-called transition operators or, in other words, transformation operators.

To closer investigate this issue, as noted by Požár, invoking Ponce[11], it is necessary to characterise an event as a time sequence of individual operations at a given moment. To this end, a formal aspect of the so-called state (phase) space was selected, which shall be understood as an ordered pair:

$S = (S, \varphi)$,

where S is a finite set of states, and φ is a finite set of operators.

The φ operator in this context is a partial representation of the set of states S in respect of one another. In the partial representation of φ of set S, in contrast to general representation (which can also be referred to as total), not all elements of the S set have to be specified. If for a given $s \in S$ the value of $\varphi(s)$ is specified, such representation applies to s. In a given case of security measures, one can imagine a set of states at a given moment as data and information on the characteristics and attributes, e.g. data from a crime scene, data from an accident site, information from a financial audit of an institution, etc. Obviously, such states can change over time and acquire new characteristics. Ponce states: "The main time units are a fact and an event. A fact is understood as a state of affairs (statement), which takes place in a certain time. This applies to the static aspect of the world. Temporal facts are defined in respect to a given moment (e.g. current balance on the last day of the month) or a period of time. An event is a state of affairs which takes place over time. This applies to the dynamic aspect of the world. Temporal events can be defined in relation to a time interval".

A security incident or event can be described as a sequence of individual states, in a way corresponding to its course.

The description of individual states of events is expressed as a set of information on the event. This can be explained using an information vector $\vec{I} = (i_1, i_2, \ldots, i_n)$, where $i_1, i_2, \ldots, i_n$ are individual pieces of information on the event at a given moment of time. In practice, however, this is

[11] D. Ponce, *Některé otázky reprezentace* času, http://hilbert.chtf.stuba.sk/KUZV/download/kuzv-ponce.pdf.

not so simple, as usually the matter is a complete set of data and information on the state of the event, which might not be – and often is not – recognisable. These are imprecise and unclear data and information which are difficult to detect. From the theoretical point of view this means poorly designed problems, as in such cases we are dealing with stochastic or probabilistic relationships. Contemporary theories are devising so-called chaos theories.

It is regarded that an event takes its course in a given time interval $<t_0, t_1>$, where t_0 is starting time of the event, and t1 is a next point in time, and it is true that $t_1 > t_0$. Based on additional, complementary information from various sources, over time one can obtain the correct information on the state of events S_{t1}. A transition from state S_{t0} to state S_{t1} takes place through the transition operator ϕ_1. This transition can be symbolically expressed using the interrelation $\varphi_1 = S_{t0} \rightarrow S_{t1}$. An event can also be understood as a longer time interval, which is why the event is within the $<t_0, t_k>$ time interval, where time tk is specified as end time and it is true that $t_0 < t_1 < t_k$. Therefore the event will be characterised by a finite sequence of operators $(\varphi_1, \varphi_2, \varphi_3, \ldots \varphi_k)$ in such a way that operator φ_1 applies to state S_{t0}, operator φ_2 applies to state $S_{t2} = \varphi_1(S_{t1})$ etc. Then the end operator φ_k applies to $S_{t0} = \varphi_{k-1}(S_{tk-1})$. Thus we can obtain the correct information on the sought states and operators, which constitute or constituted the security incident (event).

The characteristics, type and elements of a security incident

A security incident is a process which is being prepared, occurs, has its course and disappears, and which causes a security situation. Security authorities then resolve the situation in such a way, so as to explain the relevant incident[12]. A security incident is a process which usually took place in the past, but might be a process under preparation, or a proceeding process, or a latent process.

Security incidents can be classified based on various criteria. The most important criteria include the legal assessment of the event, the cause of the event, the effect (loss) caused by the event. In this regard, individual classifications of security events in line with the legal assessment, type of violation and caused effects, are specified. Every security inci-

[12] J. Požár, *Bezpečnostní situace a identifikace*, [in:] *Základy teorie policejně-bezpečnostní* činnosti *II*, A. Filák a kol (ed.), Police-History, Praha 2006, p. 149.

dent is characterised by its own elements, which determine and specify it. The specification and possible precise determination of the safety incident type influences the creation and securing of a specific type of measures by security authorities established to perform such tasks.

The significance of knowledge concerning security incidents

The cognitive significance of security events (incidents) is analysed in detail by Požár[13]. This primarily means that depending on the type and dynamics of events, they cause the occurrence of specific measures undertaken by security authorities. Depending on their type and dynamics, security events are especially significant for the creation of so-called early and urgent (organisational, security, reconnaissance, etc.) measures. The application of early exceptional measures depends on the time of emergence, or possibly on the time of identifying the security incident, as well as on the moment of emergence, the type and nature of the incident and the way and circumstances of such emergence. Early exceptional measures are important in the case of security incidents which occurred immediately before their reporting or identification. Especially in such cases they are of urgent and often unique nature. The effectiveness of the following security measures depends on the timeliness, speed and quality of the early emergency measures. The importance of the timely and appropriate implementation of urgent measures:

– prevents the occurrence of new and the escalation of already existing adverse events;
– on the other hand, it aims at creating favourable conditions for the purposeful, planned and successful implementation of intelligence measures, criminal law measures, as well as preventive, legal and administrative measure[14].

The security situation

Požár and Porada spent many years (1988–2007) on the theoretical analysis and practical application of security situation measures, in the conditions of the emergence and development of police sciences and the theory

[13] J. Požár, *Bezpečnostní situace a identifikace*, [in:] *Základy teorie policejně-bezpečnostní* činnosti *II*, A. Filák et al. (ed.), Police-History, Praha 2006, p. 156–157.

[14] A. Filák et al. (ed.), *Základy teorie policejně-bezpečnostní* činnosti *II* ,Police-History, Praha 2006, p. 156.

of police activities in the field of security[15]. Human cognitive activity is usually a specific process in which one goes from a solved problem and understanding its properties, to another problem. This means certain solutions and effects of individual actions. This cognitive activity of a cognitive subject is connected with forecasting and planning, which are to precede a given activity in terms of intentional measures. Any process of activity, operation or action is, therefore, understood as a sequence of individual taken and effected decisions. Therefore, every decision determines the result of the solved task, which makes it possible to present and create a logical model for solving individual tasks. These tasks are interconnected by direct reciprocal relationships and feedback. The tasks, individual activities, operations and measures create a system[16]. Solving individual tasks is usually accomplished in interactive cycles, which, in individual cases, can lead to a change in task conditions or to a new task[17].

The initial terms, which should be defined for further purposes are the "task", "problem" and "situation".

The concept of task means a logical verdict presented as

"given → V; required → W;" → (1)

formally worded as <V; W>, where V is the specified conditions for the task and W is the explicitly stated objective of the task.

In the first approximation the set of given objectives V includes a subset of V^S possible states of a given object and a subset of V^R transformation (transition) operators, which transform the object from a given state into another. From a theoretical perspective, one can understand V^R as a representation of V^S for set V^S (the same sets). In this case, V^S set can be understood as a set, all information on the object in time t. Objective W is then specified by the desirable states of objects in end time t_k, where t_k is the time of completing the task. Objective W does not have to have only its end state, but is expressed as a sequence of states in a time interval $< t_0, t_k >$, t_0 to is the time of starting the task. In this case we are dealing with trajectories (paths) in the space of solving individual states

[15] R. Rak, V. Porada, *Informační proces jako prostředek poznání bezpečnostní situace a nástroj určování následných bezpečnostních* činností, [in:] *Bezpečnostní teorie a praxe*, PA ČR, Praha 2002.

[16] V. V. Sadovskij, *Základy všeobecnej teórie systémov*, Pravda, Bratislava 1977, p. 77.

[17] V. Porada, J. Požár, *Pojem, podstata a význam bezpečnostní situace*, [in:] *Bezpečnostní teorie a praxe*, PA ČR, Praha 2001, p. 79–89.

$V^s = (V^s_1, V^s_2, \ldots V^s_n,)$. Solving a task is therefore a process of selecting a sequence of operators, which gradually make the object reach the desired state, which is, at the same time, target state $V^s_{(tk)}$.

The subsequent states of the object are expressed as a set of information, which creates an integrated system. This can be expressed as the following description of initial state $V^s(t_o) = f(i_1, i_2, \ldots, i_n)$ where $i_1, i_2, \ldots, i_n$, are the individual pieces of information on the object, and are expressed as a function. In practice, however, this is not only a special case of function, but is usually about the probability or statistical data.

Based on additional, complementary information from various sources, in time $t_1 (t_o, < t_1,)$, we can obtain information on the next state $V^s(t_1)$. A transition from state $V^s(t_o)$ to state $V^s(t_1)$ takes place through transition operator $V^R(t_1)$. This transition can be presented symbolically as the dependence:

$V^R(t_1) = V^S(to) \rightarrow V^S(t_1)$

That way we obtain, within time interval $< t_o, t_k >$, where to $< t_i < t_k$, further information and, thereby gradually states $V^S(t_1)$ change. This results in a sequence of states

$V^S(t_o), V^S(t_1) \rightarrow, V^S(t_i), \rightarrow V^S(t_k)$

with transitions from $V^s(t_i) \rightarrow V^s(t_k)$ being applicable.

This sequence of states is described using information on the object, environment of the system, and is convergent and approaches the given objective W.

One should note, however, that this algorithm is presented in its general form. Some difficulties might appear in semantics, in providing an informative process, i.e. in the course of obtaining, storing, selecting, and using the appropriate information on the object.

The generalised concept of task was investigated by many authors at the methodological level. These are Pribam, Galanter, Miller (1960–1964), Newel, Somon, Amosov, Kozelskij (1960–1977) et al. The problem, in a canonical form, is understood as a logical verdict in the following form:

"Required W"; (2)

formal expression: < ----,w >,

where conditions V are not explicitly specified.

In this case the problem is expressed as an incomplete task to obtain information on the conditions V of the given task. The stage of determining

conditions requires some measures and operations, which will ultimately lead to formulating a task (1), which can be formally expressed as:

"given < -; w > required < V; W >".

The concept of situation can, according to Hlavsa, be understood in two ways. First, statically as interrelations, circumstances, conditions, etc.; and, second, dynamically, as actions and interactions, as the behaviour of individuals, beings created by man, sections, scenes, actions, etc. In this case, situation is not understood as static. Situations, actions, events are processes, live stories, in which people contact one another and clash, which causes new possibilities and creates conditions and obstacles to overcoming such situations and coping with them.

In most general terms, situations should be understood as a set of circumstances and conditions relating to someone or something in a given time, a state or relation[18]. Social sciences use the concept of situation sensu stricto. A situation does not express here only a state, circumstances, etc., but specific relationships, interrelations in the sequence of events, sequences of individual, subsequent events or phenomena. In this case, we mean the dynamic component of actions of all cognitive objects, when a situation includes stimuli for an entity to act, and constitutes the result of its activity. This also means that it is possible to impact on a situation by given actions, also retroactively. On the other hand, a situation depends on the given level of resolution, objectives and other important circumstances.

The situation, in a canonical form, is understood as a logical verdict in the following form:

"given V"

formal expression: <V; ->, where V are specific conditions, and W – objectives. Objective W is not specified explicitly.

In common understanding we can characterise a situation as circumstances, a set of conditions, which are given. In a descriptive concept, a situation can be understood as a set of interconnected factors, events and conditions, which reflect the individual stages of the task. In this case, we investigate the situation as an incomplete task <V; W>, which can be formally expressed as:

"given <V; ->, required <V; W>.

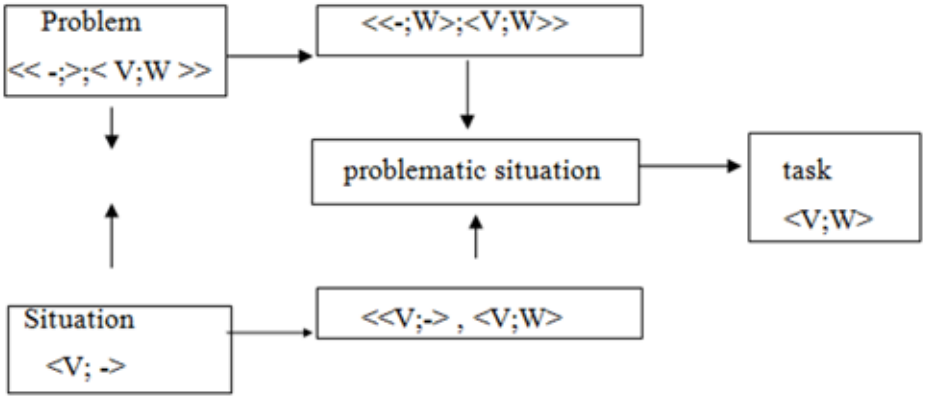
[18] J. Kraus a kol., *Nový akademický slovník cizích slov*. Academia, Praha 2006, p. 731.

This problem and situation are narrowly connected to a task **in two ways**:

1. In the case of relatively conditioned understanding, we assume the existence of indirectly expressed conditions, **hypothetical situations**, in which there is a problem, or as an orientation of objectives which constitute a specific set of individual, subsequent situations.
2. Situations and problems can be understood as the initial stage of specifying the task, in which conditions and objectives are interconnected. The task formulation is preceded by a **problematic situation**, in which "vague" directions appear, which are mainly characterised by imprecise determinations of stochastic objectives and indistinctly specified conditions.

Indeed, the problematic situation reflects the hypothesis, in which the formulation of the situation and problem is reciprocally specified. The correctness and quality of task solution depend on the gradual formulation and specification of states, conditions and objectives, with this probability determined by so-called task function characteristics. The entire **process** can be schematically **presented in the following manner**:

Figure 1 The dependence of a problem on a situation



In fact, every person acts in a complicated complex of problems, in various conditions and for various purposes. In their reactions, they select the suitable combination of conditions to achieve the set objectives in an effective way. This is a conditional orientation towards information, reflecting a real object or process. In this case, the **security situation** is the object and the investigated process.

The content and scope of the concept of security situation

In the literature on the subject we can find various designations of a given identical concept, for which in the present theory we use the term "police security situation". In particular, this is about the terms "criminal situation"[19], "operational situation"[20], "operational security situation"[21] and e.g. "police situation" and "security situation". In situations concerning the individual cases of investigation, criminology uses the term "investigative situation"[22].

Previously, we generally defined the concept[23] of task, situation and problematic situation. This definition clearly indicates that a security situation is specified by exact conditions, circumstances and states, in which activities in the field of security are conducted. One should note, however, that not all conditions have the same impact. Their impact can be either direct or indirect, either positive or negative. As regards time, conditions, circumstances and other factors can be divided into short-term, long-term, variable, static and slow-changing. This reflects the dynamics as well as temporal and spatial limitations. This, in turn, means that changes in the security situation will also be inevitable at different stages of security activities. Moreover, it should be noted that there are interrelations and bonds between conditions, circumstances and states; therefore these states are variable. From the point of view of the systemic approach, it follows that the security situation is a system, as its elements are specific conditions, circumstances and individual actions, among which there are variable relationships. The exact parameters of the state, which characterise this system in a given time and space, are called system states[24]. In our case, the parameters of the security situation state will be determined, for example, by the state, structure and dynamics of crime in a given territory,

[19] F.R. Schurich, *K teorii kriminalistické situace*, [in:] *Aktuální otázky současného vývoje kriminalistických metod*, UK, Praha 1982, p. 23–38.

[20] J. Heřmánek, B. Stříž, *Základy operativně pátrací* činnosti *VB*. PF UK, Praha 1971, p. 92–142.

[21] B. E. Bogdanov, J. Nesnídal a kol., *Ochrana majetku* v *socialistickém vlastnictví*, VŠ SNB, Praha 1982, p. 112–130; A. Pešek a kol., *Operaticně-pátrací* činnost *kriminální služby VB*, VŠ SNB, Praha 1982, p. 40–59.

[22] V. J. Koldin a kol., *Kriminalistika socialističeskich stran*, Juridičeskaja literatura, Moskva 1986, p. 159–169.

[23] V. Porada, J. Požár, *Pojem, podstata a význam bezpečnostní situace*, [in:] *Bezpečnostní teorie a praxe*, PA ČR, Praha 2001.

[24] J. Habr, J. Vepřek, *Systémová analýza a syntéza*, SNTL, Praha 1986, p. 15.

the identified offences, misconducts and security breaches, the security forces and measures.

The concept of security situation is defined as a dynamic and complex set of states, conditions and circumstances which are characterised by elements and attributes of police security activities, crime and other offences in the assigned area and at a given moment, as well as the interrelations between them[25].

A security situation is a complex, multifactorial object of cognition, whose studying and analysis require a systems approach. To study and evaluate a security situation, it should be treated as a category which exists objectively, irrespective of security activities, and which is cognisable.

In our opinion, in every security situation it is necessary to differentiate between its objective content specified and expressed by real phenomena and processes taking place during security activities, and the subjective meaning, expressed by subjective needs, interests, experiences, knowledge and other attributes of the actor in the field of security, individually or as a whole. It is known that the same objective phenomenon can trigger different reactions in different people; one the other hand, it also results in different decisions or their changes. The objective content and subjective meaning can often markedly differ from each other, with the subject having their own idea of the situation and its solutions. The subjective understanding of the security situation is closely connected with the motivation area, as well as one's knowledge and experience, which, in turn, determine the objectives of behaviour and actions.

The evolution of a security situation can be constant, continuous or discontinuous, sudden. For this reason it very helpful to recognise and predict its possible changes. It is therefore necessary to create and apply an adequate information system in the cognitive process of a security situation; in our case, this is about creating an information system and a **model of a security situation**. This system and model must meet the following requirements:

– the affordability and accessibility of getting to know the modes of action, phenomena and processes;
– the possibility of recording the results of such modes of action, phenomena and processes;

[25] V. Porada, J. Požár, *Pojem, podstata a význam bezpečnostní situace*, [in:] *Bezpečnostní teorie a praxe*, PA ČR, Praha 2001, p. 84.

– the knowledge of possible states and decision variants;
– the probability of possible decision variants;
– the effective and available way of reacting to conditions, which makes it possible to achieve the objective in line with the selected variant;
– the knowledge of the significance and usefulness of the possible result[26].

Obviously, any security situation will require an adequate response from the subject. Selecting the reaction and effecting the decision requires the application of appropriate cognitive methods. Every security situation is specific and unique, which is why the process of its cognition must be systematic and must constitute an algorithm. The vast majority of recorded security situations occur in a particular sequence and are influenced by various social factors with exiting specific interrelations. Therefore, we study the security situation in connection to the surrounding environment.

The basic elements of a security situation

The main classification criterion shall be the criterion of stability or changeability of individual systems of elements, and therefore of conditions and circumstances, which characterise the security situation. Based on this we obtain relatively stable, quasi-stable and finally changeable elements. This division was made by Porada and Požár in 2001. In retrospect, on the basis of an analysis of the approach to the police security situation, in line with the selected criteria the core of the security situation is reflected by the following elements:
– geographical, climatic, social, economic and other characteristics of the territory in which the police security services operate;
– the state, structure and dynamics of crime and the state of public order;
– the state of own efforts and measures involved in combating crime to protect public order, and the effectiveness of their use[27].

Information as a means of cognising security situations and a tool intended to determine subsequent security activities

The security situation can generally be understood as a system of interlinked elements, which influence one another to a various extent, and their characteristics which affect the state, development and effects of social

[26] R. Ackoff, F. Emerie, *O celonapravlennych sistemech*, Sovětskoe radio, Moskva 1974, p. 87.
[27] J. Požár, *Bezpečnostní situace a identifikace*, [in:] *Základy teorie policejně-bezpečnostní* činnosti *II*, A. Filák et al. (ed.), Police-History, Praha 2006, p. 122–125.

phenomena which adversely affect the health, life and all other possible values of a given society (the essence of social order, freedom, religion, property, etc.)[28].

Negative phenomena are usually described and penalised by national legislation. **The security situation** is always **specific and unique**, important at a given moment. The security situation is connected with the environment in which it occurs, takes its course and develops.

The environment can be geographic, social, political, etc. in nature, and can be a combination of these. The **causes and conditions** completely determine the state of security, and **circumstances** are of rather random nature, which can, but does not have to, directly impact on the course of the security situation. The causes and conditions, for example, the state of a criminal before committing a crime, are analysed, planned and purposefully prepared; the circumstances are the reality in which the security situation is taking place without predicting it. Circumstances can completely stochastically change the course of the safety situation without taking them into account. Unpredictable circumstances can also have a positive and negative impact on security components, as well as on perpetrators, organisers of anti-social actions, etc.

One important attribute is therefore the **current state** of the security situation, which has evolved over time in a specific way. From analytical and practical points of view, it is essential for security services to **forecast** and anticipate future (short-term and long-term) shifts on the basis of which preventive and repressive security measures can be effectively identified. Perpetrators and security services undertake certain **actions** or encourage others to conduct them, which is reflected in the security situation. The actions of security services and entities which violate the law or plan to do so, are antagonistic in nature. Security services conduct their actions based on knowledge of a specific security situation.

The **security situation** presents a certain **security risk**, it has its manifestations and consequences which are a source of **information**. Knowledge of the manifestations, consequences and information relating to the security situation is, as a rule, partial. We do not need to be aware of any safety risks, nor do we need to be aware of any manifestations or consequences,

[28] R. Rak, V. Porada, *Informační proces jako prostředek poznání bezpečnostní situace a nástroj určování následných bezpečnostních* činností, [in:] *Bezpečnostní teorie a praxe*, PA ČR, Praha 2002, p. 53–56.

at first glance. Neither does the information need – and usually never is – to be complete or up to date[29].

The initial lack or incompleteness of information are typical of the activity of security services under a security situation. The basic means of action in the field of security are: **collection, evaluation, storage and sharing of the required information**. They are used not only to find and punish perpetrators, but also to as a tool to determine the actions of security services so as to positively impact on the security situation.

Individuals perceive the security situation subjectively. Only the evaluation of many independent and reliable sources of information will make it possible to objectively determine the real security situation. After an objective assessment of the security situation, apart from the identification and evaluation of information, **misinformation**, which is quite common in the case of security activities, is created and disseminated on purpose. Misinformation is employed on purpose both by criminal organisation and police services, as well as intelligence services. Distinguishing between information and misinformation is a complex process. Entities producing misinformation take into account the fact that their opponent will evaluate it and find the true nature of things. For this reason good misinformation is equipped with refined legends, designed and implemented in such a way, that every in-depth verification yields a negative result, i.e. to make it impossible to reveal misinformation. Well-prepared misinformation is usually disseminated through several channels so as to make the opponent convinced, when evaluating it, that it comes from several independent, objective (verified) sources. The security situation can be expressed in a number of ways – by describing it (verbally, visually, graphically, etc.), and comparing with practical and empirical experiences, and models.

The security situation is studied and analysed by special units, as well as command and coordination centres. Appropriate methodologies in respect of security situations should be chosen based on the results of analyses, assessment of all risks and available measures and sources. The security apparatus plans and forecasts the future course of events and conducts management and control activities aimed at exerting positive impact

[29] R. Rak, V. Porada, *Informační proces jako prostředek poznání bezpečnostní situace a nástroj určování následných bezpečnostních* činností, [in:] *Bezpečnostní teorie a praxe*, PA ČR, Praha 2002, p. 205–208.

on the security situation. The appropriate strategic and tactical procedures are selected. Summing up, one can state that, at this moment, the security apparatus is prepared to manage complex, negative security situations. This results in engaging appropriate measures and sources, which translate into effective preventive and repressive measures of the security apparatus[30].

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