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CRISIS DEVELOPMENT AND ITS MANAGEMENT*

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Abstract. The paper deals with the theoretical concept of crisis. The crisis is an integral and, in essence, regularly recurring part of any human activity. We are facing a crisis in areas such as the economy, politics, the military, civilization, as well as in our private, human lives. The paper analyzes in detail the dimensions and characteristics of the crisis, deals with the various stages of the crisis, their recognition and solution. The paper was created as one of the outputs of the foundation of the theory of security sciences, where the basic general concepts of security character were defined, which are valid in various fields of human activities, including various scientific fields. The concept of crisis is part of threat analysis and subsequent risk management in various fields, including economics, management of state and non-state institutions, business and overall sustainability. The concept of crisis is currently closely linked to global globalization, which brings significant benefits as well as global risks. These risks, which are not well addressed or subsequently managed, can erupt very quickly in a variety of crises of considerable global scope. The paper lists typical symptoms that are important for early detection and crisis management. The paper presents the definitions and relationships between the crisis and the stability of any systems (economic, social, political, etc.). It also provides a classification of crises, its contexts and related panic.

Keywords: economy; crisis; balance; crisis characteristics; panic

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Introduction

From its very onset, humanity has faced periods when people, states and civilisations prospered and flourished. Over time, these historical spells naturally turned into periods of stagnation, decline and limited development. The periods of "success and failure" and development and stagnation cyclically alternate. We live in a time of globalisation, which changes, accelerates and deepens everything that is fundamental (Marini, Chokani & Abhari, 2019). The present essentially differs from the past in the speed at which we can transmit and share information and individually perceive it (Pártlová et al., 2020). In essence, people in developed countries have online access to information from all over the country. Several million people own the property and land resources of the rest of the global population, so the basic distribution has already taken place and it is now only distinct elite groups battling each other, each group wanting to increase their share to the detriment of the other groups (Alkopher, Blanc, 2017). From the civilisational viewpoint, we are entering a stage where humanity is creating an unnecessary quantity of products that it is unable to use effectively, while at the same time excessively depleting its last resources without realising it (Savona & Ciarli, 2019).

Material and methods

Many concepts in threat analysis and risk management occur in different domains of human activities, disciplines and industries, including different scientific disciplines. For example, there are many definitions of the term "security". Otherwise, it is defined by economists, sociologists, politicians, police or criminologists, soldiers, security experts in industries, critical infrastructure, information technology (Matuszak, Jaskiewicz, Ludwinek et al. 2015; Ajdari, & Asgharpour, 2011). Security at the most general level is a special, diverse process, ensuring the continuity or state of a key, important process (business, life, health, sustainable development or at least a satisfactory state, etc.) (Alkopher, 2018).). At the Police Academy in Bratislava, Slovakia, a scientific research task arose, establishing a new field of Security Science, which would be a general, theoretical basis for solving security in any field of human activity. The basic task was (and is to establish) uniform basic security terminology, including generally applicable terms and definitions. One of the key concepts is the concept of crisis, which is addressed in this paper, based on the activities of the above research team during the years 2020-2021. When defining the basic concepts of security sciences, a comparison of basic definitions in domestic (Šimák, 2015), (Zeman et al., 2002), (Kopencova, Felcan & Rak, 2020) and foreign literature was made (Matuszak, Jaskiewicz, Wieckowski, 2017), (Moravcik & Jaskiewicz, 2018), (Breznau, 2021), (Blinc, Zidansek & Šlaus, 2007), (Buzan & Wæver, 2003), and many more).

Part of the theoretical task was the method of consistent and very extensive literary research. It was found that different entities (scientific institutions, companies, government organizations, etc.) perceive and interpret their content differently under the same content of basic security terms. In many cases, on the other hand, different institutions use different security terminology for the same content of a given term, which in many cases is even logically contradictory. The method of literary research was performed several times, gradually, repeatedly in several iterations. Domestic and foreign literary sources were used for various security areas, so that the basic terminological dictionary was as broad as possible and at the same time sufficiently general. Based on the obtained list of security terms, basic security terms were singled out using analytical and comparative methods. The specific content of these terms was then defined so that the definitions were in harmonious harmony with the various security areas. Security experts from various fields were involved in the process, and the Delphic oracle method was also used. Subsequently, a method of synthesis was applied, which helped to correctly understand the content of individual security terms. The result was definitions of basic terms and their contextual clarification. For the purposes of this paper, the date of the crisis was chosen and further theoretically processed.

Crisis

To identify the origin of the word crisis, we have to go all the way back to Ancient Greek and Latin. The Greek word *krino*, meaning select, assess, choose between two opposite variants, denotes the final, irrevocable either-or type of decision (success or failure). The word *krisis* expresses the decisive moment or time, the decision itself or the difficulty associated with making a decision, a sense of uncertainty, looking for help or averting a calamity (Šimák 2015). The Latin word *crisis* means a critical, culmination point in the progress of an event or process. In Czech, the word *krize* may often be interchangeable with such terms as **emergency** or **crisis situation**. In medicine, *crisis* is a term that refers to a period of hardship, a culminating medical condition; in theology it means the "last judgement".

Crisis denotes a situation characterised by a serious, but not necessarily transparent disruption of a certain system (consisting of objects and ongoing processes) or any of its parts, with an utmost urgent need to come up with a decision that is adequate in terms of time and system, followed by a solution that leads to elimination of the disruption that compromises the treasured and protected values, interests or goods (Zeman et al. 2002, adapted), (Jakulíková, Vranková et al, 2020). Crisis is synonymous with such terms as disaster, deterioration, complication, turnaround, turning point, trouble, distress, calamity, hardship, emergency, adversity, conflict, tension or panic. In life we may distinguish between health, personal (individual), middle-age, financial, economic, system, international, political, refugee/migrant, security and other crises.

Dimension of crisis

There are usually the following dimensions to every crisis (Zeman et al. 2002, adapted):

- Crises are turning points that disrupt a sequence of events.
- Crises are situations that call for a response on the part of those affected by it.
- Crises compromise the goals of those affected by them.
- The consequences of a crisis shape the future of those involved.
- Crisis means a convergence of events that results in their rearrangement.
- A crisis produces uncertainty in evaluating the situation and formulating alternative solutions.
- A crisis reduces the ability to have control over events and their consequences.
- A crisis is a situation where those trying to contain the crisis have extremely inadequate information.
- A crisis puts extra time pressure on those involved.
- A crisis is characterised by changes in relations between those involved.
- A crisis escalates tensions.
- A crisis provides an opportunity for those who are prepared.
- A crisis clarifies human relationships.

Crises are usually conceived of as certain stages of conflicts characterised by precisely defined traits (Klíková, Kotlan & Machová, 2017). There is probably no general definition of crisis as much of the term's content depends on the needs, interests and professional focus of the creator of the definition who may come from a variety of backgrounds (König & Winkler, 2021). Before defining the very term itself, some assumptions and generalisations need to be made that are common to all crises (Šimák 2015, adapted, expanded):

- a crisis arises at a certain stage in the development of objective phenomena, events and processes as a result of changes in their external and internal conditions and parameters;
- a crisis involves a disturbance of the functional balance (stability) of an object, system or process and a threat to its development as a result of changes in the external or internal environment that substantially change or may change such objects, system or process;
- the negative consequences conditioned by the course of a crisis can seriously compromise the functioning or even the existence of an object, system or process;

- there are causal determinacy and temporal sequence elements to each crisis;
- in objective processes, a crisis arises and progresses independently of the will of man; knowledge of the causes, tendencies and regularities behind these phenomena makes it possible for social subjects to influence, to a large extent, the origin of the crisis, its course and consequences; on the other hand, without people, there would be no crises;
- a crisis may also arise as a result of subjectively determined and partly deliberately induced processes, the consequences of which do not necessarily correspond to what has been expected;
- the evaluation and perception of the crisis is subjectively determined by its consequences for the evaluating subject. These consequences can not only be intrinsically contradictory in terms of the diversity of their effects on the subject, but also in terms of the different effects on other evaluating subjects; i.e., crises have a subjective-objective dimension in the value sphere (the crisis of one subject can at once be a benefit, and a precondition for the development of another entity);
- a crisis can be artificially induced as a vehicle for addressing the subject's internal problems, or as part of a tactic or a strategy in a competitive environment;
- crisis is an objective part of the development of society, of nature and of technical or technological processes, but also the subjective experiencing of a threat (risk) (Kotlan 2020a, 2020b). See Figure 1 below.

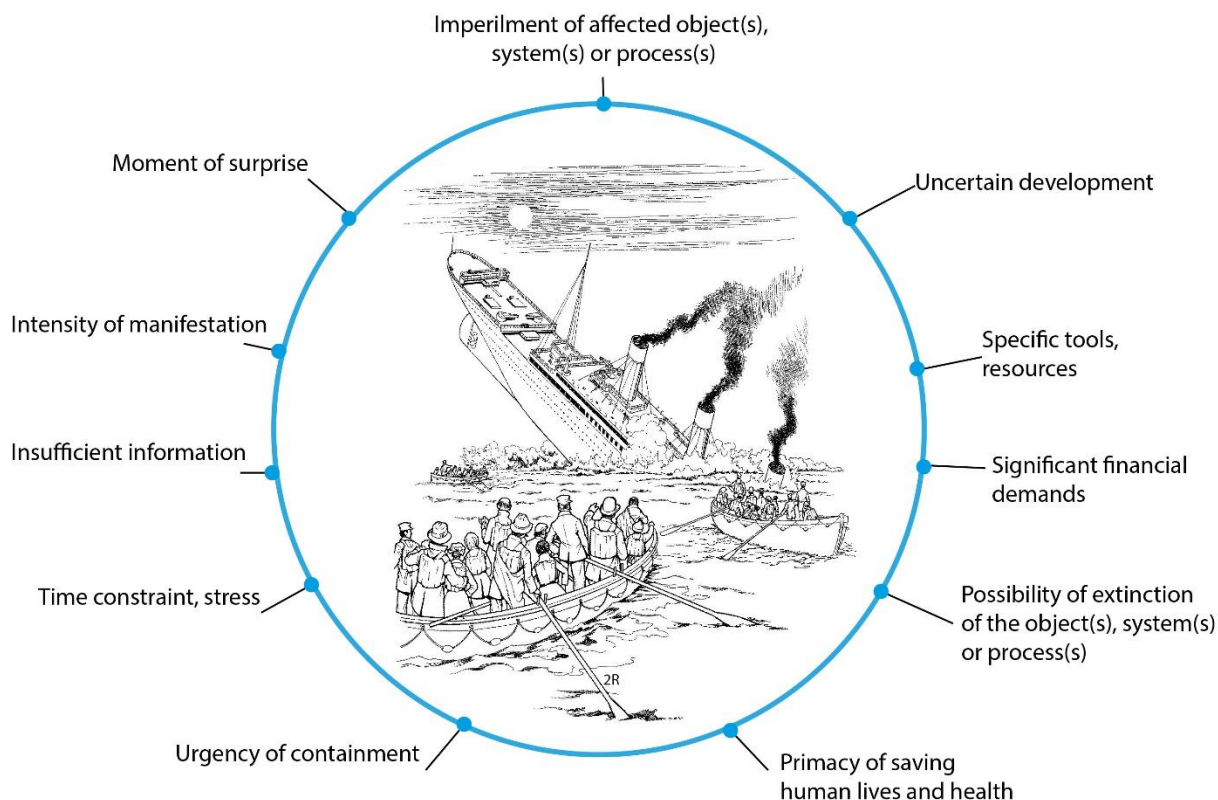


Figure 1. Typical characteristics of a crisis.

Source: Roman Rak

Crisis denotes such disturbance of the functional balance (stability) of an object, system or process due to changes in their internal or external environments that significantly changes or may change the object, system or process, with the resulting negative consequences being capable of seriously compromising their functioning or existence (Šimák 2015, p. 50, adapted).

It is typical for a crisis and its elimination (Buzan & Waever, 2009), (Chehabeddine & Tvaronavičienė, 2020):

- **Affected object(s), system, processes imperilled** – if the crisis is not contained, there is a risk of the objects, systems or processes ceasing to exist. The objects, systems and processes are imperilled, and the attention in addressing the crisis is devoted to them in the first place.
- **Moment of surprise** – as a general rule, a crisis arrives unexpectedly, surprisingly, at a time when it is least convenient, and when we are not sufficiently prepared to face it.
- **Intensity of manifestation** – a crisis generally culminates at a very high intensity unless we have responded to the early warning symptoms characterising and advertising the potential onset of the crisis and its further development.
- **Lack of information** – at the time of a crisis, the information required to contain the crisis safely and quickly and to raise awareness and subsequently coordinate the containment processes is usually not available.
- **Time pressure, stress** – there is usually very little time to address a crisis; the crisis is only addressed by small work teams and in some cases even individuals. They are exposed to tremendous physical and mental stress.
- **Urgency of the solution** – in order for an intense crisis to be successfully contained, it must be resolved as soon as possible, in a qualified manner and with resolve.
- **Uncertain development** – containing a crisis is an extremely difficult task, both mentally and logically, as the outcome of the containment measures cannot be known beforehand and at times the result may be very hard to predict.
- **Specific tools, resources** – specific tools and resources (technology, material and other resources, crisis scenarios, management procedures, etc.) are usually required to prevent any further deterioration of a crisis and to eliminate its consequences.
- **Substantial financial demands** are typical of certain types of crises. At times, the required funds are exponentially higher than those we chose not to invest in elimination and prevention of crises, or insurance, etc.
- **Risk of an object, system, process ceasing to exist** causes stress and concerns in a situation of a severe time constraint, increases the level of experienced pressure and calls for the deployment of all available resources in order to successfully contain the crisis. In many a crisis, however, the outcome is never clear, yet all available resources must be used.
- **Primacy of saving human lives and health** – during rescue and liquidation work, human health and lives and their protection have the highest priority. In certain specific large-scale crises (wars, the Cold War, armed conflicts, specific intelligence operations), however, even this principle can be neglected and it may be acceptable to sacrifice a certain number of people to save much larger groups of population. Yet, the process is hardly ever supported by law.

Example:

The example of bringing down an airliner with a missile fired from a military jet fighter will help us clarify other parts of the context and technical terminology. Security incidents, various events, processes, as well as crises, always take place at a certain point in time. Crises come and go. Therefore, one axis of the chart is time. The second relevant parameter in monitoring the development of security incidents (including crises) is the value of the monitored critical parameter(s) of an object, system or process. There can also be multiple monitored critical parameters at the same time.

In the given case, some examples of the other parameters include the distance of the missile from the airliner, the ability of the airliner to avoid the fired missile (or otherwise avert the collision), the integrity and airworthiness of the airliner, the number of live, injured or dead persons on board, etc. Each of the parameters takes a certain value that must not (or should not) be exceeded in order to avoid damage (acceptable risk).

The monitored parameters may vary up to the critical limit (value), the threshold of a crisis, where there is a serious disruption of the functioning, existence of the object, system or process itself. This point is referred to as the **onset of crisis** (t_{ZK}). If the **critical values of the monitored parameters** continue to develop unfavourably, there can be **crisis culmination** (point K in Figure 2). Eventually, the crisis subsides with the passage of time, ending at time t_{KK} (**end of crisis**). The events unfolding during the $\langle t_{ZK}, t_{KK} \rangle$ window are referred to as a **crisis** (during which critical, negative events and processes occur, with large-scale, often unforeseen, impacts). See Figure 2.

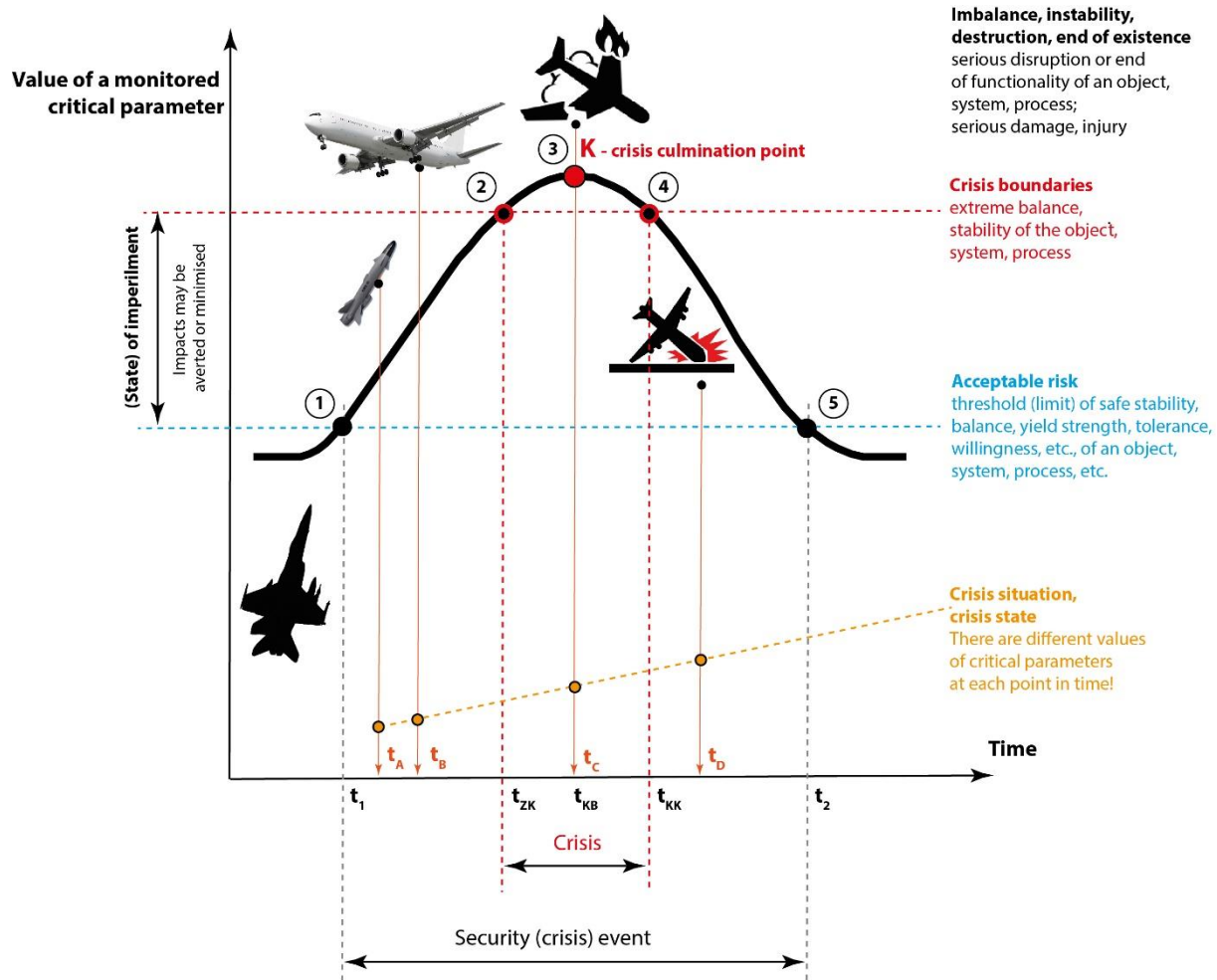


Figure 2. A figure designed to explain the terms security (crisis) incident, crisis, crisis boundaries, acceptable risk, crisis situation, crisis state, crisis culmination, culmination point of a crisis.

Source: Roman Rak

The events unfolding during the $\langle t_1, t_2 \rangle$ window are referred to as a security incident or **crisis incident**. Although the acceptable risk, i.e., the threshold, yield strength, tolerance, etc., of an object, system or process is exceeded, in reality, the objects, systems and processes are capable of withstanding the effects of the disturbing factors to a certain (considerable) extent. This condition is referred to as vulnerability. An actual crisis only occurs after the critical parameter values exceed the crisis threshold (yield strength, tolerance, etc.), when objects, systems or processes are no longer capable of maintaining their balance, integrity, equilibrium, functionality or even their existence (Böhm, Kubjatko et al, 2020).

Crisis situations or crisis states are time frames capturing the course of security, crisis incidents, events, processes, always related to a specific point in time and a specific place (if the event can be narrowed down to any geographical area). Each crisis / security incident evolves over time, and it always shows different values of the monitored critical parameters. The terms “crisis situation” or “crisis state” always characterise the actual state of events, objects, systems or processes at a specific point in time and at a specific place.

The Table 1 below shows how the security situation changes over time t , how the crisis evolves:

Table 1. Example of a crisis situation developing over time

Time	Security state, security situation, crisis state, crisis situation
t_1	A missile is fired from a fighter jet. The missile may hit an airliner.
t_A	The rocket approaches the airliner, it is spotted by the pilots and reported to the air traffic controller. The first symptoms of a crisis appear.
t_B	The pilots try to avoid the missile by initiating an evasive manoeuvre against the sun. The manoeuvre has failed – the missile continues to track its target and approaches. The security situation continues to deteriorate.
t_{ZK}	The missile is now so close that it cannot be safely avoided and the collision is inevitable. A crisis has occurred; the airliner is doomed.
$t_{KK} = t_C$	Civil airliner hit by an air-to-air missile. This is followed by the destruction of the airliner and the death of several passengers as a result of an explosion in the enclosed space with subsequent formation of a vacuum. From the viewpoint of the monitored critical parameter of the missile's distance from the airliner, a crisis occurs.
t_D	However, it depends on the choice of the monitored parameters and their values over time. If one of the parameters is the number of people killed, then the crisis only occurs at time t_D when the plane hits the ground in a densely populated area. Dozens, hundreds of other people in a shopping centre are killed. From this point of view, other people are killed or injured. Therefore, the crisis only culminates at that time.

Source: the authors

Course and stages of a crisis

As shown above, security situations as such and crises constantly evolve.

Each crisis shows a specific pattern of progress, which is determined by the type of the crisis, its intensity and space, its external and internal processes and circumstances, etc., in which the crisis takes place. In general, a crisis has 4 developmental stages (Šimák 2015, Kotlan, 2019):

- Symptoms stage[†]
- Acute stage
- Chronic stage
- Crisis containment stage

The **crisis symptoms stage** is not static; symptoms of instability show up at a varying intensity, inconsistent with the usual state of the object(s), systems and processes, which also has implications for the perception, identification, analysis and assessment of such objects, systems and processes. The stage can be divided into 4 phases, which depend on the intensity of the symptoms:

- **Unnoticeable symptoms of a crisis** – they traditionally pass unnoticed by the disinterested public and are only spotted by a narrow community of experts. During this period, it is difficult to come up with an adequate response and prevent aggravation of the crisis as the factors contributing to the crisis cannot be clearly identified;
- **Mild symptoms of a crisis** – partial and ambiguous information on the impending crisis, which can only be identified by experts in the given field. This is a very good time to apply adequate responses and nip the crisis in the bud;

[†] Sometimes referred to as the **latent stage**.

- **Strong symptoms of a crisis** – clearer and more comprehensive information on the impending crisis, which can be correctly evaluated by most managers. Once they are identified, an adequate and immediate response must be taken resolutely;
- **Very strong symptoms of a crisis** – complete and unequivocal information describing the impending crisis, which even a layman can identify. In this case, it is already difficult to come up with an adequate response, and the chances of successfully averting the acute stage of the crisis are minimal. However, it can be assumed that if an adequate response is produced, the impact of the crisis, i.e., the extent of damage and loss, will be minimised. See Figure 3.

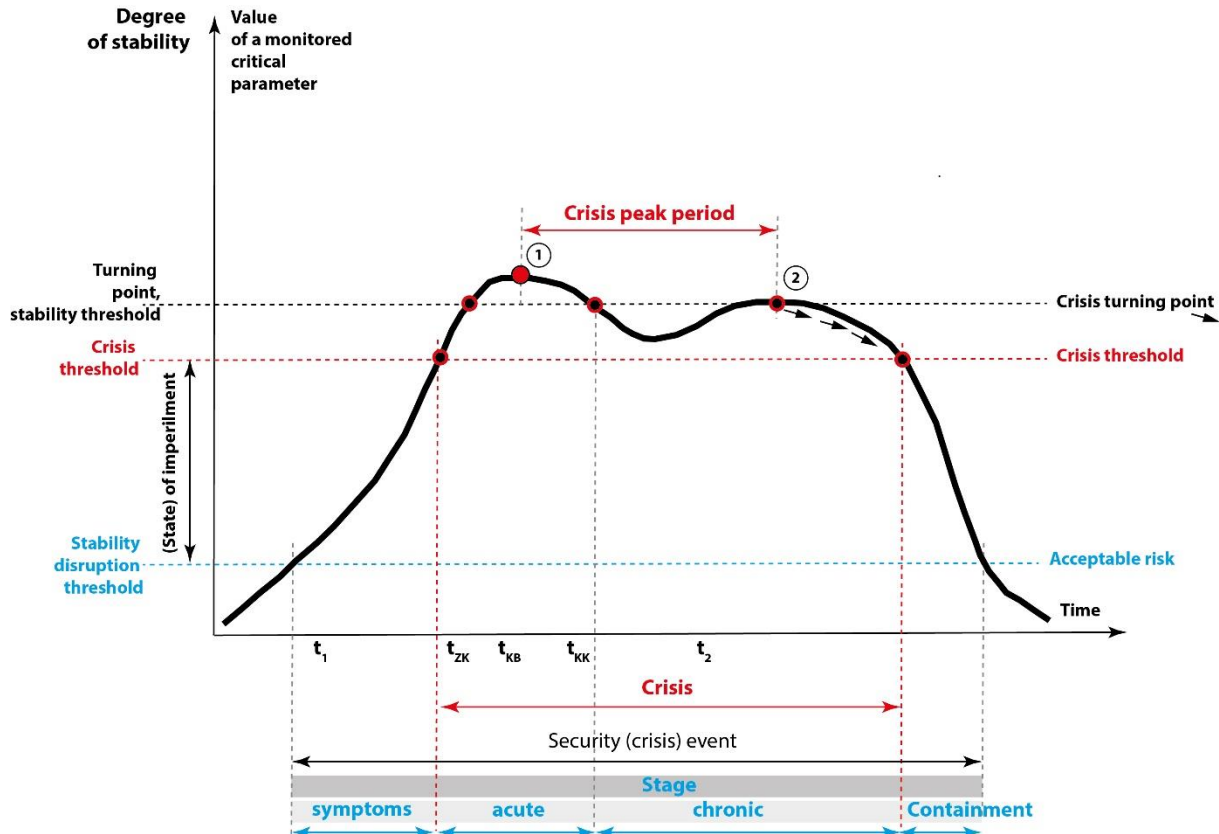


Figure 3. Stages of a crisis.

Source: Roman Rak

Acute crisis stage – denotes a period of crisis where the discrepancy between the actual state and the usual functional state of an object, system or process, or its development, is so significant that a change in quality occurs, with the risk of the object, system or process being disrupted or ceasing to exist. Their basic functions have been disrupted, which is obvious to all those involved, and therefore emergency measures must be immediately taken. At this stage, it is necessary to take adequate measures to eliminate the damage and injuries that are already occurring, and respect the fact that:

- the very essence of the functioning and existence of the object, system and process is compromised;
- decisions are made under pressure and without sufficient information;
- if the response to the acute stage of a crisis is successful, the chronic stage of the crisis may be avoided, i.e., the acute stage passes to the crisis containment stage.

The chronic stage of a crisis is the period where the susceptibility to a change in quality of the objects, systems and processes created at the acute stage of the crisis persists. Disruption of the basic functions of the objects, systems or processes persists, causing more destruction, with no signs of a turning point in the development of the crisis towards the extinction of the objects, systems or processes or containment of the crisis (Kubjatko, Görtz et al, 2018). During this stage, the crisis may be mitigated or it may even subside as a result of the action taken by those involved, or it can escalate in several waves, and its course and consequences may be diversified. During this period, it is generally impossible to clearly identify the sources and causes of the crisis, which adds extra pressure and at once delays the containment of the crisis. See Figure 4.

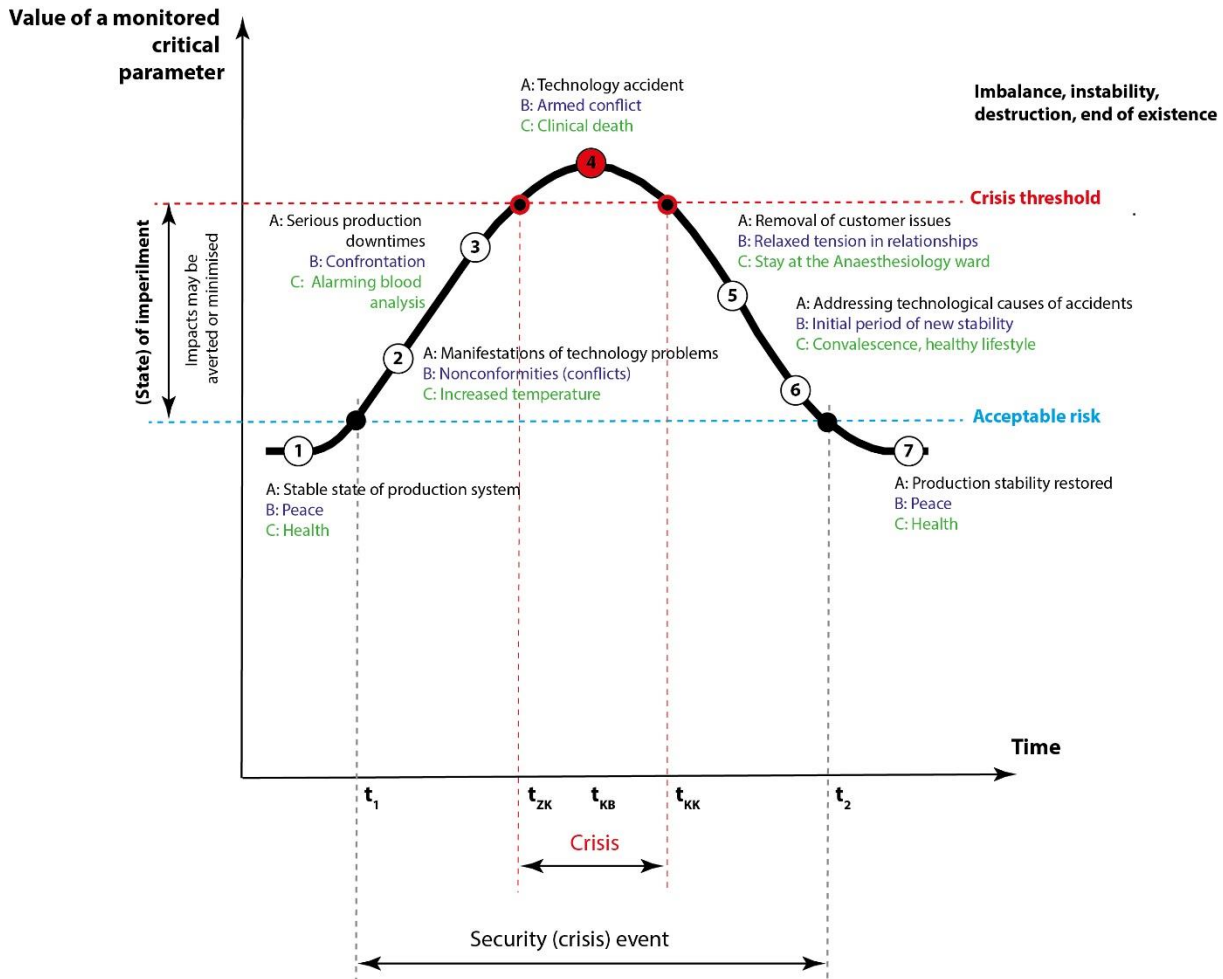


Figure 4. Sample courses of crisis in various environments / for various objects A – production plant (emergency), B – state (armed conflict), C – patient (serious disease).

Source: Roman Rak

The crisis containment stage is characterised by the restoration of equilibrium of the objects, systems or processes to their original or a new quality level. The containment may take the shape of the original objects, systems or processes ceasing to exist and new objects, systems or processes emerging, or the original objects, systems or processes being restored in a new form affected by the crisis and the altered conditions. During this period, the entities involved, respecting the course of the crisis, define a recovery strategy and implement a number of organisational, HR - and technology-related and other specific measures, culminating in the restoration of stability and new quality of the objects, systems or processes.

The individual crisis stages take alternate turns, and whether they occur, and in what sequence, depends on the timely identification of the crisis symptoms and the effectiveness of the measures put in place (see Figure 1, Figure 5). If the early symptoms of a crisis are identified in good time and adequate effective countermeasures are taken, the crisis may be averted. Similarly, the chronic stage may be avoided. See Figure 5.

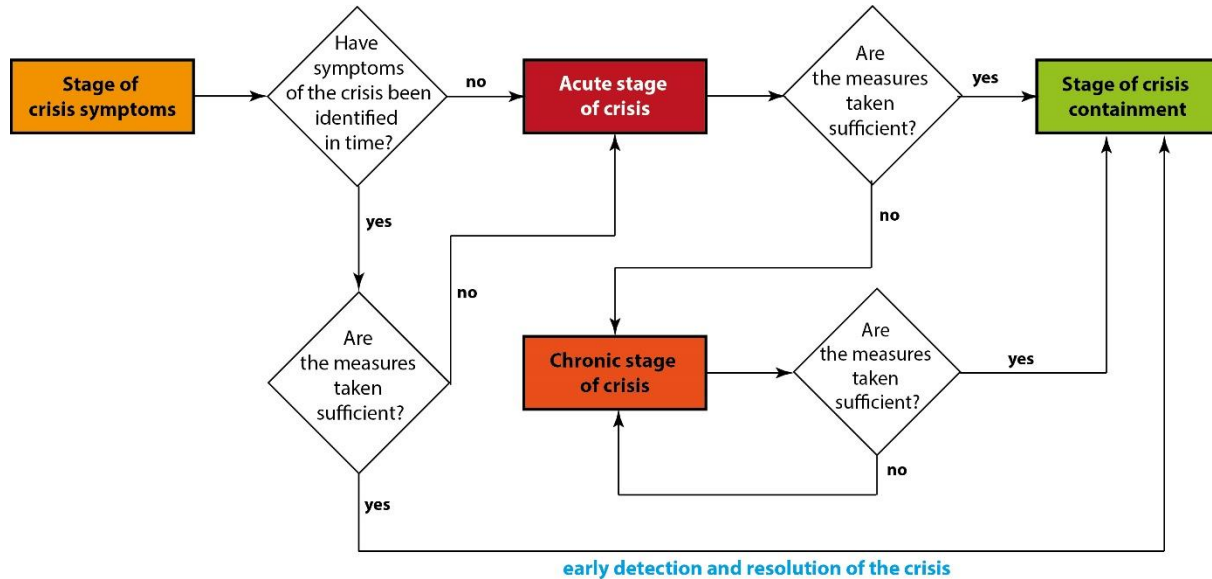


Figure 5. Dependencies of individual crisis stages on the timely identification of the symptoms and adequacy of the measures taken to avert it.

Source: Roman Rak

Classification of crises

In terms of security, there are a number of criteria by which crises may be artificially classified, such as:

- **Area of occurrence** – local, regional, national, international, global crises;
- **Level of imperilment**
 - **Lower level** – minor imperilment, sufficient time to adopt measures;
 - **Higher level** – immediate and extensive manifestations;
 - **Catastrophic level** – extinction of an object, process, system;
- **Rate of formation** – slow, fast;
- **Number of affected persons** – large-scale crises (10^4 and more), medium-scale crises (10^2 to 10^3) and small-scale crises (1 - 10^2) affecting individuals;
- **Affected object** – the economic sphere, public sector, environment, social policy, foreign policy, domestic policy, social, military, technology, evidentiary, moral value-related, ethical, religious, personal, health, financial and other crises;
- **Effect of the factor** – creeping (continuous), leap crises;
- **Surprising effect** – surprising, expected.

Context of the crisis

There are several terms related to crises that are relevant to public administration:

- **Crisis attribution** – attributing the causes and factors behind a crisis to an individual, which often does not correspond to reality.
- **Crisis intervention** – specialised instantaneous assistance provided to people who land in a crisis. The aim is to restore the individual's mental balance, which has been disturbed by a critical life event. Crisis intervention is a comprehensive, practical tool, which may include psychological help (the point of focus

is on the problem that triggered the crisis, with the individual concerned being confronted with the crisis and the crisis is addressed), medical help (psychiatric intervention, medication, hospitalisation), social assistance (social intervention) and legal aid (Vel'as, Lenko, Lenkova & Felcan, 2019).

- **Crisis communication** – transfer of information between public authorities, regional self-governing bodies and components of the integrated rescue system using means of voice and data transmission of information via public electronic communications networks and selected parts of non-public electronic communications networks.
- **Crisis measures** – measures designed to contain crisis situations, as well as actions to mitigate or eliminate the consequences of crisis situations. Some rights and freedoms may have to be restricted and specific obligations imposed in order to implement the measures.
- **Crisis preparedness** – designing measures to contain crisis situations and to participate in containing them.
- **Crisis planning** – a comprehensive set of procedures, methods and measures used by competent authorities and designated entities in order to prevent, prepare for and respond to crisis situations.
- **Crisis management** – a set of activities performed by crisis management authorities focused on the analysis and evaluation of security risks and the planning, organising, implementing and monitoring of the activities performed in connection with the preparation for and containment of crises, or protection of critical infrastructure. Crisis management can be considered in the narrower or broader sense of the term. In its broader sense, the term includes restoration and prevention actions; in its narrower sense, it includes preparation measures (especially crisis planning), containment of crises and liquidation work.
- **Crisis negotiation** – a method of resolving incidents and crises where the police communicate with offenders and other persons involved as an important part of managing certain types of crisis situations. It is used in those cases where the use of force would mean an excessive risk of injury for the innocent participants of the event. Crisis negotiation applies social, forensic and clinical psychology, as well as information and communication technologies and special police procedures. The aim is not only to persuade individuals to cease their hazardous behaviour, but often to calm the situation and provide time and social space for resolving the crisis by means other than force.

Panic

The frequent response to crisis situations is panic.

Panic means collective fright, chaos that primarily evolves during mass events (sporting events, traffic accidents, natural disasters, calamities, epidemics, financial or social crises, etc.), **when people begin to worry about their lives, health or property for any reason whatsoever**, usually in confined spaces or in spaces from which it is even mentally impossible to escape – at such moments, an individual finds no rational way out (Nalepova, 2020). **It is an irrational behaviour that arises as a result of dangerous situations or emergencies. Panic may lead to the formation of a so-called panic crowd, which drags the individual with it. Panic is a socio-psychological phenomenon giving rise to a panic attack. It manifests itself by strong anxiety or horror, which can also arise for no apparent reason.** In such case, a person feels a strong danger and various catastrophic ideas may come to their mind (Šimák 2015, p. 72, adapted).

Psychologists characterise panic as spontaneous, uncontrolled behaviour in people whose mental balance has been disturbed. Some of the typical symptoms of panic given in literature include:

- rapid multiplication of irrational (incomprehensible) components in behavioural strategy;
- amplification of the emotional component of the decision-making process;
- lack of coordination of interactive, communication and information links;
- reduced cognitive control of behaviour;
- tendency to extreme reactions.

Panic is caused by shortage of information, inside a certain social structure, which, in connection with extreme tension or expectations, can sometimes take the form of a crowd psychosis. Therefore, in crisis situations, timely and correct communication is vital, providing the necessary, adequate information (Odlerova, 2014).

Discussion

Recognizing crises, especially their serious signals, symptoms, before crossing the limit state is a very difficult matter in modern practice (Ajdari & Asgharpour, 2011). Crises in a globalized world are very specific today, especially their rapid development, the interconnectedness of many fields or spheres of influence or dependence, which they simultaneously or gradually affect.

Crisis management should be dealt with primarily by experts, professional crisis managers, professional teams with high erudition, outlook and especially experience. However, this is not always the case in today's practice. Often, only politicians or managers who are unable or unwilling to assess the extent of the crisis and the necessary countermeasures in a broader context or for a longer period than their election period decide.

Many crises can even be caused quite artificially and can pursue the narrow, private goals of economic, political elites. Current anthropogenic crises are usually characterized by not a single culmination point, but take place in gradual, relatively fast waves.

Due to these circumstances, it is sometimes difficult to recognize the symptoms of crises and to look for adequate anti-crisis measures.

Conclusion

The submitted paper deals with the phenomenon of crisis, which can (and indeed does) occur in various spheres of everyday reality – in economics, social or political development, in the development of civilisation, etc. The concept of crisis is also perceived as an opportunity, because a crisis is always followed by the restoration of equilibrium, with the subsequent upturn. However, the model is based on the assumption that there are sufficient various resources for further development so that the dreamt-of principle of sustainable development survives. But the equilibrium can also be restored at much lower values than we have grown accustomed to. From the viewpoint of the economy in particular, we have become accustomed to alternating periods of stagnation and prosperity in the shape of a standard sinusoid, with the stagnation, or the culmination of the crisis, presenting a single wave reaching its minimum. This is how we have learned to perceive crises, and then act; expect a calming decline and stabilisation once the peak critical values have been reached. Yet, the COVID-19 pandemic shows that there are increasingly more waves coming after the first one, reaching far more critical parameters (Kurilovska & Hajdukova, 2021). Globalisation, which is based on synergies and a strongly interconnected economy, can lead to the development of the most diverse subsequent crises in various areas. Due to the interconnectedness of their many aspects, these crisis will spread gradually, in different waves, where their periodicity (frequency) and amplitudes may not be as regular as we have been used to.

Crises are very creeping; slowly or quickly. In order to be able to respond adequately to crises, we need to identify control and border (critical) points in good time. These points will then help us to detect impending dangers in time and take appropriate action. The contribution of the article is a description of the existence and illustrative graphical representation of these points, which are crucial for early recognition. When searching for and evaluating threats, it is necessary to analyze their time course and impacts depending on time. The contribution, in contrast to static observation or examination of crises (reaching a critical, further irreversible point), provides an insight into the dynamic side of the crisis. In practice, the symptoms of an impending crisis are either overestimated or not observed at all. The paper newly introduces various parameters, characteristics of crises, which can be used to further classify crises. The paper also presents the characteristics by which it is possible to recognize acute or chronic (protracted) crises. These characteristics are shown in a simple flowchart.

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