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Security management mechanisms in the face of contemporary threats: Introduction

The level of security of an organisation depends on a variety of factors, including the ability to identify risks and the implementation of security management, including governance mechanisms. The following criteria are considered in the typology of security threats:

- 1) objective – this includes political, military, and economic, as well as social and environmental security;
- 2) sources of threats – described as natural, technical, systemic, demographic, ideological, economic, educational, psychological, cultural, and other;
- 3) environmental – different environments are taken into account: natural, social, political, economic, scientific, and technological;
- 4) coverage – from global, through continental and regional, to local; and
- 5) scale of the threats – from the global level, through the international and state levels, to the administrative unit level.¹

A threat is a situation involving the possibility of sudden, unpleasant, and unexpected events causing negative consequences. Threats can be potential, real, subjective or objective, external or internal, military or non-military, as well as accidental (random) or intentional.² A threat is a situation where an unsafe condition is likely to

¹ Ł. Roman, "Istota współczesnych wyzwań i zagrożeń bezpieczeństwa", *Journal of Modern Science*, vol. 27, no. 4, 2015, pp. 209–226, <https://bibliotekanauki.pl/articles/451938> [accessed: 3 August 2022].

² P. Daniluk, H. Wyligała, *Analiza zagrożeń sektorowych dla bezpieczeństwa*, Warszawa: Difin, 2021, pp. 10–11.

occur for both the external and the internal environments. Threats are also analysed in the context of a crisis. The most important non-military threats are natural hazards. In the context of threats, much attention is paid to disasters due to both natural and civilisational causes.³

With regard to national security (within the national security governance system), the importance of monitoring the sources and scale of threats, as well as their types and directions, together with the prevention of the emergence of threats within and outside the national territory are emphasised. The importance of prevention of the effects of these threats, their elimination, and taking action with regard to the management of the defence of the state is pointed out.⁴

In the systemic approach, organisational security is the feature of an object that concerns its resistance to hazardous situations. The security of an organisation can also be considered as its ability to protect its values (sensitive assets) from threats, which can be related to systemic characteristics such as quality, reliability, stability, as well as sustainability and viability. The desired level of security for an organisation is provided by the organisation's security system. Disruptions affecting the security level of an organisation can be of various types – natural (e.g. floods), civilisational, technical failures – and can relate to equipment and systems, the specific regional characteristics, and the location, or to disruptive human actions. The factors affecting the level of security of an organisation also include the mechanisms for countering threats.⁵

The security of an economic organisation is mainly analysed from the point of view of prevention with regard to its potential for loss.⁶ The security of a business is considered as a dynamic state. It is present when the entity is ensured access to the most important values (goods), with no deterioration of this access in the future, which involves effectively pushing away or eliminating interferences.⁷ Security management, on the other hand, refers to the minimisation or elimination of threats

³ F. Mroczko, *Zarządzanie kryzysowe w sytuacji zagrożeń niemilitarnych. Zarys problemów regionu dolnośląskiego*, "Zarządzanie" Series, no. 32, Wałbrzych: Wałbrzyska Wyższa Szkoła Zarządzania i Przedsiębiorczości, 2012, pp. 63–70.

⁴ W. Kitler, "System bezpieczeństwa narodowego RP – aspekty prawno-organizacyjne", *Wiedza Obronna*, vol. 268, no. 3, 2019, pp. 5–33, <http://wiedzaobronna.edu.pl/index.php/wo/article/view/3/48> [accessed: 14 February 2022].

⁵ J. Stanik, R. Hoffmann, J. Napiórkowski, "Zarządzanie ryzykiem w systemie zarządzania bezpieczeństwem organizacji", *Ekonomiczne Problemy Usług*, no. 123, 2016, pp. 321–336.

⁶ J. Konieczny, "Bezpieczeństwo państwa a bezpieczeństwo biznesu. Studium metodologiczne", *Bezpieczeństwo. Teoria i Praktyka*, no. 4, 2015, p. 17.

⁷ M. Kwieciński, Zarządzanie bezpieczeństwem działalności przedsiębiorstwa – zarys problematyki, [in:] *Zarządzanie w sektorach prywatnym oraz publicznym*, ed. P. Lenik, "Prace naukowo-dydaktyczne Państwowej Wyższej Szkoły Zawodowej im. Stanisława Pigonia w Krośnie" no. 70, Krośno: Państwowa Wyższa Szkoła Zawodowa im. Stanisława Pigonia w Krośnie, 2016, p. 150.

through deliberate regulatory action by people. It can be considered from the standpoint of risk management, crisis management, disaster (accident) management, and value management.⁸ Security management refers to the protection against threats to different types of resources (assets): people, buildings, machines, and information resources, considering the risk and taking into account the vulnerabilities.

It is interesting to see organisations from the standpoint of security as agile, smart, or learning.⁹ Consideration is given to the possibility of using the intellectual capital of individual organisations, including those operating in a network that promotes security and social capital.¹⁰

Cluster-like links present a model of cooperation between companies, universities, and public administration (a *triple helix*), which takes the form of a quadruple helix when social media and civil society are included. The evolution is highlighted of cooperation within clusters related to synergistic impacts of the following nature: 1) modular, based on pooling the resources of partners who manage resources independently, 2) sequential, based on the division of tasks between partners who adapt the resources to the cooperation, and 3) reciprocal, based on the pooling of companies' resources and knowledge sharing, which leads to mergers or acquisitions. Competitive behaviour and its types are also considered. The role of open innovation is also highlighted.¹¹

This issue of *Security: Theory and Practice* addresses the issue of mechanisms for security management. The literature on this subject describes various mechanisms. The renewal mechanism is considered within the framework of the issue of company management in crises affecting specific industries. It can take the form of a spatial or temporal separation mechanism. The former mechanism, which relates to large organisations, involves renewal processes initially taking place in specific entities, as well as in departments or at functional levels of organisations. It is associated with the implementation of a learning loop and involves rearranging the structure and renewing key

⁸ L. Korzeniowski, *Podstawy nauk o bezpieczeństwie*, "Zarządzanie Bezpieczeństwem" Series, Warszawa: Difin, 2012, p. 58.

⁹ The concept of a Smart City (also in the context of a sustainable city) is presented in: A. Chodyński, "Wykorzystanie dorobku nauk o zarządzaniu na rzecz podnoszenia bezpieczeństwa miast. Koncepcja smart", *Bezpieczeństwo. Teoria i Praktyka*, no. 4, 2019, pp. 39–62, and the concept of learning organizations that use experience from emergency situations is presented in: idem, "Uczenie się i wpływ społeczny a bezpieczeństwo na poziomie lokalnym – zarządzanie w sytuacji awarii zagrażającej środowisku naturalnemu", *Bezpieczeństwo. Teoria i Praktyka*, no. 4, 2021, pp. 61–80.

¹⁰ Idem, Sieciowość w koncepcjach biznesu – aspekty społeczne i ekologiczne, [w:] *Zarządzanie odpowiedzialnym rozwojem przedsiębiorstwa*, Kraków: Oficyna Wydawnicza KAAFM, 2012, p. 83–110.

¹¹ M. Klimczuk-Kochańska, Relacje międzyorganizacyjne, [in:] *Zarządzanie, organizacje i organizowanie – przegląd perspektyw teoretycznych*, ed. K. Klincewicz, Warszawa: Wydawnictwo Naukowe Wydziału Zarządzania Uniwersytetu Warszawskiego, 2016, pp. 343–354.

competences with a limited risk. The temporal separation mechanism, which often applies to small and medium-sized companies, means that changes are implemented sequentially throughout the organisation. As a form of strategic entrepreneurship that is associated with innovation, it involves the introduction of new products and services, and the acquisition of new customers and new markets.¹² Strategic management considers the mechanisms of coordination and allocation of corporate resources related to the creation of transaction costs: price-based (market-based), hierarchical (characteristic of bureaucracy), and the later one, relational (social, based on trust).¹³

When considering an organisation as a system, the notion of an adjustment mechanism, which is a dynamic element of the management system, is discussed. It is responsible for the ability to shape new equilibrium conditions. Particularly important is its role in the mutual adjustment of three groups of stabilising components: values and goals, regulation and structures, and management methods and practices.¹⁴ The concept of a mechanism is referred to various areas and activities within an organisation: corporate renewal,¹⁵ knowledge management (refers to solutions, tools, and methods),¹⁶ and mechanisms for managing inter-organisational networks.¹⁷

The mechanism of organisational learning and the use of effective learning instruments and techniques were analysed using the example of activities carried out in government administration. The mechanisms of organisational learning were considered in the context of the processes of knowledge creation and the factors that support them. Practices that enhance organisational learning were identified.¹⁸ Technological entrepreneurship is cited as a mechanism for organisational development.¹⁹ The key mechanisms are also discussed at the level of management paradigms.²⁰ The term

¹² B. Hajdasz, *Wybory strategiczne podczas odnowy przedsiębiorstwa indukowanej kryzysem branży*, doctoral thesis, Uniwersytet Ekonomiczny w Poznaniu, Wydział Zarządzania, 2017, p. 74.

¹³ W. Czakon, "Obrazy sieci w zarządzaniu strategicznym", *Zeszyty Naukowe Wydziału Zamiejscowego w Chorzowie Wyższej Szkoły Bankowej w Poznaniu*, no. 19, *Strategie przedsiębiorstw w sieci*, 2017, pp. 71–81.

¹⁴ J. Skalik, A. Barabasz, G. Belz, "Systemowe uwarunkowania rozwoju metod zarządzania. Przykład modelu Triady", *Acta Universitatis Lodzienensis. Folia Oeconomica*, vol. 234, 2010, pp. 71–83.

¹⁵ J. Karpacz, Swoboda działania jako determinanta odnowy strategicznej przedsiębiorstwa, [in:] *Strategie rozwoju organizacji*, eds. A. Stabryła, T. Małkus, Kraków: Fundacja UE w Krakowie, 2012, pp. 45–55.

¹⁶ B. Mierzejewska, "Mechanizmy wspierające zarządzanie wiedzą w organizacji", *E-mentor*, no. 3(10), 2005, pp. 55–59.

¹⁷ P. Kordel, *Zarządzanie sieciami międzyorganizacyjnymi*, Gliwice: Wydawnictwo Politechniki Śląskiej, 2010, p. 67.

¹⁸ *Jak wzmacniać organizacyjne uczenie się w administracji rządowej*, eds. B. Ledzion, K. Olejniczak, J. Rok, Warszawa: Wydawnictwo Naukowe SCHOLAR, 2014, pp. 12–14.

¹⁹ P. Kordel, *Przedsiębiorczość technologiczna*, Gliwice: Wydawnictwo Politechniki Śląskiej, 2018, pp. 13–14.

²⁰ A. Jaki, "Mechanizmy rozwoju paradygmatów zarządzania", *Przegląd Organizacji*, no. 2, 2014, pp. 8–13.

mechanism is often defined as coordination concerning direct managerial supervision, as well as the alignment of contractors. Using the role of the organisational structure for the integration activities of the different parts of an organisation, a system standardisation – coordination system is considered.²¹ A mechanism is also seen as a key metaphor for organisational reality (e.g. as a network or a metaphor of a technological nature).²² Resilience mechanisms related to the sustainability of an organisation are also considered.²³ The literature on this subject emphasises that resilience draws attention to a culture of preparedness. It uses mechanisms of a central or local (bottom-up) nature that result not only in the absorption of shocks, but also in opportunities concerning the adaptation of vulnerable (weakest) elements of different types of systems: social, economic, and political. The importance of the ability to restore resources in systems, as well as to restore functionality, is emphasized. Attention is drawn to the role of the autonomous capacities of individual links in the system – both resilient (robust) and adaptive.²⁴

A critical infrastructure protection mechanism based on an ongoing exchange of information is described.²⁵

According to the author of this text, the mechanisms presented can play a significant role as a response to existing or possible threats. The concept of a mechanism is described in detail in this issue of *Security: Theory and Practice* in the publication relating to the issue of *ambidexterity* (an article by Andrzej Chodyński).

The issue addresses a number of questions related to the opinions presented. At the national level, reference was made to enhancing security with distributed energy resources based on renewable energy sources, particularly in situations of war threats (an article by Krzysztof Waśniewski). In showing the prospects for creating hydrogen valleys, reference was made to the concept of clusters (an article by Anna Bałamut). Different viewpoints related to security management at organizations were presented. Hazards related to occupational safety are pointed at by Janusz Ziarko. New innovative solutions concern the use of blockchain technology (an article by Katarzyna Sienkiewicz-Małýjurek). The issues of management mechanisms appear in articles on information management (articles by Marta du Vall and Marta Majorek) and in articles on railway safety. The topic of safety culture in relation to the concept

²¹ Nowe kierunki w organizacji i zarządzaniu. *Organizacje, konteksty, procesy zarządzania*, eds. B. Glinka, M. Kostera, Warszawa: Oficyna a Wolters Kluwer business, 2012, p. 269.

²² G. Gliszczynski, L. Panasiewicz, "Konsepcja modelu metasystemu jako kierunek rozwoju teorii systemów zarządzania", *Przegląd Organizacji*, no. 1, 2018, pp. 21–29.

²³ S.T.A. Pickett, B. McGrath, M.L. Cadenasso, A.J. Felson, "Ecological resilience and resilient cities", *Building Research & Information*, vol. 42, issue 2, 2014, pp. 143–157.

²⁴ M. Stępką, "Rezyliencja jako paradymat bezpieczeństwa w czasach przewlekłych kryzysów", *Przegląd Politologiczny*, no. 2, 2021, pp. 105–117.

²⁵ Narodowy Program Ochrony Infrastruktury Krytycznej – tekst jednolity, 2020, p. 38, https://www.konin.pl/files/dokumenty_na_strone_2021/Narodowy-Program-Ochrony-Infrastruktury-Krytycznej-2020-tekst-jednolity.pdf [accessed: 11 August 2022].

of intellectual capital is addressed (an article by Agnieszka Giszterowicz), as well as the role of the manager in shaping the safety culture of an organisation (an article by Michał Adam Leśniewski).

The articles respond to the recommended topics specified in the call for papers sent to the authors, which states:

A manifestation of the resilience of organisations (including towns/cities, and various types of business entities) is to maintain the continuity of their operations. To achieve this, it is necessary to implement a system of appropriate coordination of activities, also in emergency situations. Coordination of activities is associated with the implementation of security management mechanisms.²⁶

Adequate management mechanisms should ensure business continuity also in unexpected situations, i.e. those that take place on an ad hoc basis, and within an operational perspective. At the same time, the role of mechanisms in the strategic perspective should be emphasised, as a major part of appropriate resilience strategies. People will play an important role in the implementation of these mechanisms: on the one hand, employees, and on the other hand, managers of commercial and non-commercial organisations, using various instruments to maintain the continuity of the organisation's operations in emergency situations.

With reference to the issue of rail safety in the European Union, including the role of cluster-like links, the views of representatives of the European Railway Clusters Initiative (ERCI) were presented, as well as a report from a workshop on the subject held in Italy. Attention was also given to the need to build security in organisations, with emphasis on the role of audits (a report from the 21st International Congress on Internal Control, Internal Audit, Anti-Corruption, and Anti-Fraud). Current security issues at the state and business levels are presented in a report from Mirosław Kwieciński's original seminar. Highlights from the Krynica Forum 2022 were presented by Krzysztof Waśniewski and Anna Bałamut.

²⁶ The European Commission adopted a set of legislative conclusions aimed at limiting the emission of greenhouse gases by 2030, thus adjusting the climate, energy, transport and tax policy, European Commission, Brussels, 14 July 2021, COM(2020) 562 final: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and The Committee of the Regions „Fit for 55”: delivering the EU’s 2030 Climate Target on the way to climate neutrality.