

Agata MAZURKIEWICZ 

Jagiellonian University in Kraków

aagata.mazurkiewicz@uj.edu.pl

POLISH TERRITORIAL DEFENCE FORCES AND INNOVATION DURING THE COVID-19 PANDEMIC

THE ASSESSMENT OF THE POTENTIAL OF A MIXED TYPE FORCE IN NON-MILITARY CRISIS RESPONSE

ABSTRACT Innovation can be understood in multiple ways. It can be seen as big breakthroughs and the introduction of entirely new inventions or as small, incremental changes introduced to existing products, processes, or solutions. Innovation can also be considered as a capability or a characteristic of individuals and organisations. It is viewed as one of the desired (if not crucial) aspects of functioning in a complex environment. This also refers to the armed forces and their activities during war and in response to crises. One of the biggest changes in the Polish Armed Forces in the second decade of the 21st century was the establishment of the Territorial Defence Forces (TDF), a mixed service comprising volunteer and full-time soldiers. This article aims to assess the innovative potential as well as the potential for innovation of such a mixed type of force in non-military crisis response by reviewing the key characteristics and actions carried out by the TDF.

Keywords: Territorial Defence Forces, Polish Armed Forces, innovation, crisis response

INTRODUCTION

Innovation is often considered as one of the key aspects distinguishing successful organisations and individuals, a welcome trait and a desirable result of efforts on multiple plains of human productivity, such as art, production, marketing, technology, science, and education. At the same time, as noted by Stephen J. Kline and Nathan Rosenberg, innovation *is complex, uncertain, somewhat disorderly, and subject to changes of many sorts*.¹ Multiple definitions and approaches have been applied to narrow down and grasp this fuzzy term. Innovation can therefore be viewed as a major and radically new technological breakthrough or a more incremental process of gradual *reinvention*.² It can be treated as an outcome of activity, as a process which results in desirable outcomes, or as a mindset or culture characteristic of an individual or an organisation.³ In each of these understandings, innovation is viewed in positive terms as something that allows one to adjust, survive, and thrive. Its importance is particularly clear in complex systems, characterised by unpredictability and dynamic changes, such as contemporary business or security environments. Indeed, modern security challenges, with their ambiguity and multidimensionality, require building resilience and responding to crises through innovative tools, processes, and attitudes.⁴ This should be reflected in changes introduced to (and by) the armed forces in their activities during war and in crisis response.

One of the biggest changes in the Polish Armed Forces in the second decade of the 21st century was the establishment of the Territorial Defence Forces (TDF), a mixed service comprising volunteer and full-time soldiers. In its official communication campaigns, the TDF emphasises the formation of strong roots with local communities (e.g. using the slogan *Always ready, always close*, or *Zawsze gotowi, zawsze blisko* in Polish), the readiness to build on local human resources, and the use of civilian expertise and skills of their part-time soldiers.⁵ The TDF, as the fifth branch of the Polish Armed Forces, is tasked with conducting defence activities in cooperation with other

¹ S.J. Kline, N. Rosenberg, "An Overview of Innovation", in N. Rosenberg, *Studies on Science and the Innovation Process*, Singapore 2010, p. 173.

² J. Fagerberg, "Innovation: A Guide to the Literature", in *The Oxford Handbook of Innovation*, J. Fagerberg, D. Mowery, R. Nelson (eds), Oxford 2006, p. 7.

³ K.B. Kahn, "Understanding Innovation", *Business Horizons*, vol. 61, no. 3 (2018); see also: W. Smith, J. Treem, B. Love, "Communicative Signaling of Occupational Fitness: How Innovative Ability Is Expressed and Assessed", *Communication Monographs*, vol. 86, no. 3 (2019).

⁴ See M. Stęпка, "Rezyliencja jako paradygmat bezpieczeństwa w czasach przewlekłych kryzysów", *Przegląd Politologiczny*, vol. 26, no. 2 (2021).

⁵ See Territorial Defence Forces Website [Wojska Obrony Terytorialnej], "Nasza tożsamość", at <https://terytorialsi.wp.mil.pl/nasza-tozsamosc>, 18 March 2022; P. Banasiak, "Motywuje nas chęć pomagania", Wojska Obrony Terytorialnej, 22 November 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/708782/motywuje-nas-chec-pomagania>, 18 March 2022; A. Szczepaniak, "Jestem pomocnym ramieniem i tarczą dla mojej społeczności", Wojska Obrony Terytorialnej, 23 February 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/648157/jestem-pomocnym-ramieniem-i-tarcza-dla-mojej-spolesnosci-2021-02-22>, 18 March 2022.

branches and allies as well as independently, assisting in crisis management, and conducting information activities.⁶ Since its inception in 2017, the TDF has already participated in three large-scale non-military crises: the COVID-19 pandemic, the crisis on the Polish-Belarusian border in 2021-2022, and the reception of refugees fleeing the war in Ukraine in 2022. The TDF soldiers have also been mobilised to assist in several smaller-scale non-military crises such as clean-ups after local floods and violent storms.⁷ These tasks and the particular composition of the TDF create a strong innovatory potential. That is why the aim of this article is to review the position of Territorial Defence Forces, as well as their activities, in order to find out what innovations (if any) the TDF brings to the Polish security system. This will allow us to assess the innovatory potential of such a mixed type of force in particular in non-military crisis response. The discussion is driven by qualitative content analysis. It feeds on official communication of the TDF posted on the website and in the social media, as well as media reports regarding the TDF and its activities between 2017 and 2022.

The article is divided into four parts. The first part offers a review of theoretical perspectives on innovation, its various understandings, and dimensions. The following two parts focus on the Territorial Defence Forces in the light of innovation: whether the TDF itself can be considered an innovative element in the Polish security system and what kinds of innovations has it so far brought to the table. Finally, the fourth part of the article offers a summary and conclusions on the potential of the mixed type of force in non-military crisis response.

1. INNOVATION

Much of the scholarly time and attention has been devoted to the conceptualisation of innovation. One of the more comprehensive perspectives was proposed by Kenneth B. Kahn, who presents innovation as three different things: an outcome, a process, and a mindset.⁸ For the sake of clarity, in this section of the article, I will briefly introduce all of these aspects of innovation. In the following sections, I will use primarily two of them: the outcome and the mindset.

According to Kahn, treating innovation as an outcome focuses on the result of activities and the introduction of new products, processes, marketing strategies, business

⁶ Territorial Defence Forces Website, "FAQ", at <https://terytorialsi.wp.mil.pl/faq>, 18 March 2022.

⁷ See M. Pietrzak, "Małopolscy Terytorialsi wspierają poszkodowanych po przejściu trąby powietrznej", *Wojska Obrony Terytorialnej*, 25 June 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/676955/malopolscy-terytorialsi-wspieraja-poszkodowanych-po-przejsciu-traby-powietrznej>, 18 March 2022; idem, "Podkarpaccy Terytorialsi usuwali skutki nawałnicy", *Wojska Obrony Terytorialnej*, 27 June 2020, at <https://media.terytorialsi.wp.mil.pl/informacje/532843/podkarpaccy-terytorialsi-usuwali-skutki-nawalnicy>, 18 March 2022; idem, "Ciąg dalszy działań pomocowych WOT na Lubelszczyźnie", *Wojska Obrony Terytorialnej*, 20 June 2019, at <https://media.terytorialsi.wp.mil.pl/informacje/446903/ciag-dalszy-dzialan-pomocowych-wot-na-lubelszczyznie>, 18 March 2022.

⁸ K.B. Kahn, "Understanding Innovation...".

models, supply chains or organizational structures.⁹ Innovation is therefore reflected in the result that was achieved by an individual or a group: the introduction of a new device, an improvement in existing ones, or finding a new use for them. It can also mean the introduction of new processes or a change in the existing processes and structures of the organisation. In other words, innovation is *doing something new* or *doing something in a new or different way*. Here, it is useful to add that the aspect of ‘novelty’ of the innovation outcome can also be defined in various ways. Chris Freeman and Luc Soete observed that innovation can either be something radically different from current technology or it can take the form of a slight modification.¹⁰ As such, we can distinguish *marginal* innovations developed incrementally, from *radical* innovations equal to breakthroughs, or even *technological revolutions* consisting of multiple innovations that together have a far-reaching impact.¹¹

Robert J. Sternberg, Jean E. Pretz, and James C. Kaufman took it even further and proposed eight types of innovation depending on the direction and extent of creative contributions.¹² Let us briefly look at these types. The first type is the closest to *marginal innovation* and is the result of *replication* – duplicating the product or process with just a minor change or adjustment, for example, launching a chocolate bar very similar to those already on the market. The second type is *redefinition*, which relies on looking at the existing products/processes from a new point of view, for example, the introduction of video games that could be played on (so far not interactive) TV sets. The third type of innovation is a result of *forward incrementation*: the invention of a new product/process takes place along the already established path and is readily accepted by consumers. To illustrate, Sternberg, Pretz, and Kaufman used the example of a lightbulb, which was developed in a series of smaller-scale inventions through a process of trial and error. *Advance forward incrementation* is the fourth type and indicates a more profound change. It is represented by products/processes which also move along the existing path but are ahead of their time. Contrary to the previous type, it moves the product/process to a place where consumers are not yet ready to go. Here, a useful example could be an art style that only found appreciation after decades or centuries, or the invention of a touch-screen which took place in the 1960s but waited for approximately 30 years to be put to a broader use.¹³ The fifth type of innovation is similarly profound and takes the form of *redirection* – the invention of something relatively different from the existing products/processes which also moves in a different direction from the existing technological path or way of doing things. To exemplify, Sternberg, Pretz, and Kaufman point towards the introduction of an assembly line which allowed for mass production in industries

⁹ Ibid., pp. 454-457.

¹⁰ C. Freeman, L. Soete, *The Economics of Industrial Innovation*, London 1997, pp. 21-22.

¹¹ J. Fagerberg, “Innovation. A Guide...”, p. 7.

¹² R.J. Sternberg, J.E. Pretz, J.C. Kaufman, “Types of Innovations”, in *The International Handbook on Innovation*, L. Shavinina (ed.), Oxford 2003.

¹³ M. Bellis, “The Inventor of Touch Screen Technology”, ThoughtCo.com, 12 July 2018, at <https://www.thoughtco.com/who-invented-touch-screen-technology-1992535>, 18 March 2022.

which have so far relied on more time- and labour-consuming manufacture, ultimately leading to automatization. The sixth type of innovation is *reconstruction/redirection* and relies on revisiting some past ideas and inventions and developing them in a new creative way. Arguably, fashion could provide us with multiple examples of this type of innovative reconstruction of some past clothing trends making a comeback with a more 'modern' twist. Next, the seventh type of innovation is *reinitiation*, which means finding a new starting point and developing the product/process in a new direction from that point. To illustrate, Sternberg, Pretz, and Kaufman recall the invention of the Cherokee written language, which used symbols from the English, Greek, and Arabic alphabets to represent the sounds of the Cherokee without regard for their sounds in the original languages. Finally, the eighth type of innovation according to Sternberg, Pretz, and Kaufman is *integration*, which constitutes *an attempt to move the field by putting together aspects of two or more past kinds of contributions that formerly were viewed as distinct or even opposed*.¹⁴ Here, they use the example of Newton's formulation of the universal law of gravity, which integrated the ideas of multiple thinkers and scholars and explained both the movement of bodies in space and the motion of objects on the Earth.

Innovation as an outcome can therefore take multiple forms. Innovative outputs can be products, structures, or processes that are just a small modification of existing technologies or a ground-breaking development. They can be built based on current ideas, introduce completely new notions, or reappropriate ideas from the past. Within this understanding, all contributions that are creative and useful can be discussed from the point of view of innovation.¹⁵

The second aspect of innovation, according to Kahn's model, is the process.¹⁶ Although it will not be used to a great extent in this analysis, it is useful to explain how it differs from innovation as an outcome. In Kahn's words, innovation as a process *attends to the way in which innovation is and should be organized so that these [innovative – A.M.] outcomes can come to fruition*.¹⁷ One of the models of the innovative process presents it as a cycle consisting of three phases (discovery, development, and delivery); other models propose five or even nine stages of the development of a new product.¹⁸ Another perspective that fits into the discussion on innovation as a process concerns itself with the various ways of achieving ambidexterity between exploitative and explorative aspects of functioning of an organisation.¹⁹ These can take the form of

¹⁴ R.J. Sternberg, J.E. Pretz, J.C. Kaufman, "Types of Innovations", p. 159.

¹⁵ Ibid.

¹⁶ K.B. Kahn, "Understanding Innovation...", pp. 457-458.

¹⁷ Ibid., p. 457.

¹⁸ See e.g.: N. Harmancioglu et al., "Your New Product Development (NPD) Is Only as Good as Your Process: An Exploratory Analysis of New NPD Process Design and Implementation", *R&D Management*, vol. 37, no. 5 (2007); R.G. Cooper, "Perspective: The Stage-Gates® Idea-to-Launch Process – Update, What's New, and NexGen Systems", *Journal of Product Innovation Management*, vol. 25, no. 3 (2008); K.B. Kahn, "Understanding Innovation...".

¹⁹ See e.g.: G. Panagopoulos, "Aspects of Organizational Ambidexterity", *Journal of Global Strategic Management*, vol. 1, no. 10 (2016); C.B. Gibson, J. Birkinshaw, "The Antecedents, Consequences,

separate departments responsible for ongoing functioning and for seeking new opportunities, outsourcing one of these functions to external entities, switching between the two types of activity, or allowing the employees to pursue them simultaneously. Innovation as a process is therefore more concerned with the way ideas are being developed and processed, rather than in what way these ideas themselves are innovative. As such, the analysis of innovation as a process in the TDF is beyond the scope of this paper.

The third aspect of innovation, as defined by Kahn, focuses on mindset and *addresses the internalization of innovation by individual members of the organization and advancement of a supportive culture throughout the organization*.²⁰ As such, innovation as a mindset focuses on the traits of an individual and an organisation that support innovation. In this regard, William R. Smith, Jeffrey W. Treem, and Brad Love have identified three dimensions that are representative of an innovative person: mindset, skillset, and emotion.²¹ In their words, *the innovation mindset comprises a natural inquisitiveness and curiosity, embracing of risk, and rejection of the status quo by striving to push the boundaries*.²² The skillset includes the technical skills, creativity, and communication skills necessary to articulate problems and solutions, and to inspire others. The emotional dimension of innovation includes passion and empathy for both the users of the product and for other members of the organisation. Although these three dimensions cannot be applied to the organisational level in a straightforward fashion, their encouragement can be part of an organisational culture. As a result, an organisation that supports innovation would embrace learning and risk-taking among its members.

Jeffrey Dyer, Hal Gregersen, and Clayton M. Christensen proposed a slightly different conceptualisation, which identified five typical skills for innovative individuals: associating, questioning, observing, experimenting, and networking.²³ Associating signifies the ability to link ideas from various fields or disciplines and constitutes the foundation for the other four skills. Questioning means challenging the status quo and pushing the existing boundaries, and should be driven by observation, which helps to gain insights and discover both problems and solutions. Experimenting has a more dynamic quality when compared to observing, as it implies actively constructing experiences and provoking responses to various stimuli. Finally, networking involves meeting people with various perspectives, experiences, and ideas that span multiple fields and disciplines. These skills can also be considered as elements of an organisational culture that supports innovation. In this regard, an innovative organisation would encourage associating, questioning, observing, experimenting, and facilitate networking.

and Mediating Role of Organizational Ambidexterity”, *Academy of Management Journal*, vol. 47, no. 2 (2004); P.M. Shields, J. Soeters, “Peaceweaving: Jane Addams, Positive Peace, and Public Administration”, *American Review of Public Administration*, vol. 47, no. 3 (2017).

²⁰ K.B. Kahn, “Understanding Innovation...”, p. 458.

²¹ W. Smith, J. Treem, B. Love, “Communicative Signaling...”.

²² *Ibid.*, p. 321.

²³ J. Dyer, H. Gregersen, C.M. Christensen, “The Innovator’s DNA”, *Harvard Business Review*, December 2009, at <https://hbr.org/2009/12/the-innovators-dna>, 18 March 2022.

When discussing organisational culture, it is vital to note that innovation is always dependent on context.²⁴ Military culture is heavily influenced by its very particular tasks of preparing for and participating in armed conflict.²⁵ In such a context, experimentation, risk-taking, and learning from trial and error are often not acceptable *as high risk situations are often unique and may threaten human lives*.²⁶ As a result, the armed forces are traditionally hierarchical and rely on strict discipline among their members.²⁷ In the post-Cold War security environment, this so-far rather conservative and cautious military culture of Western armed forces has indeed allowed growing flexibility reflected, for example, in the concept of the strategic corporal, which gives much more decisive power to lower-level commanders.²⁸ Still, the level of acceptance and encouragement of innovation in the military might be different from that of civilian organisations, and business ventures in particular. Keeping that in mind, let us now consider the Polish Territorial Defence Forces from the perspective of innovation.

2. THE TDF AS AN INNOVATION

In order to discuss the types of innovation brought into Polish armed forces by the TDF, let us first review the set-up and the context of the military system before its establishment. The process of professionalisation of Polish Armed Forces began in 2008 and included, among others, the end of conscription and the formation of a military comprising approximately 100,000 professional troops and approximately 20,000 reservists.²⁹ The National Reserve Forces (NRF) were established in 2010 with a task to support the Armed Forces in case of military and non-military crises in Poland and abroad. As such, in Poland, the NRF does not constitute a separate branch of the armed forces. NRF soldiers sign a voluntary contract under which they are required to participate in yearly rotational military exercise (up to 30 days per year) and perform a temporary military service (2-6 years, with possible extensions). During crises, they can actively serve for up to 24 months, with possible extensions.³⁰ They constitute a back-up

²⁴ R.J. Sternberg, J.E. Pretz, J.C. Kaufman, "Types of Innovations".

²⁵ A. Mazurkiewicz, *Civil-Military Cooperation in International Interventions: The Role of Soldiers*, London 2022.

²⁶ T. Bijlsma, I. Bogenrieder, P. van Baalen, "Learning Military Organizations and Organizational Change", in *Managing Military Organizations: Theory and Practice*, J. Soeters, P. van Fenema, R. Beeres (eds), London 2010, p. 228.

²⁷ See J. Soeters, P. van Fenema, R. Beeres, "Introducing Military Organizations", in *Managing Military Organizations...*, pp. 1-2.

²⁸ See C. Ruffa, C. Dandeker, P. Vennesson, "Soldiers Drawn into Politics? The Influence of Tactics in Civil-Military Relations", *Small Wars & Insurgencies*, vol. 24, no. 2 (2013).

²⁹ „Pobór, a profesjonalizacja armii”, Ministerstwo Spraw Wewnętrznych i Administracji, at <https://archiwum.mswia.gov.pl/pl/bezpieczenstwo/sprawy-obronne/6154,Pobor-a-profesjonalizacja-armii.html>, 29 November 2022.

³⁰ T. Compa, "Wojska Obrony Terytorialnej i Narodowe Siły Rezerwowe w Systemie Obrony Rzeczypospolitej Polskiej", *Facta Simonidis*, vol. 1, no. 13 (2020), pp. 83-86.

personnel and the number and type of active posts depend on the demand reported by commanders of units engaged in crises response tasks.³¹

Following the Russian annexation of Crimea in 2014, Poland decided to reform its national defence system and, as a part of this process, to establish the fifth branch of the armed forces – the Territorial Defence Forces. The idea behind the TDF was to establish a mixed type of force, comprising both professional soldiers and part-time volunteer soldiers. Part-time troops perform a new type of military service, Territorial Military Service, which involves participation in rotational exercises (one week-end per month for 11 months and a two-week summary training, 36 days per year in total) and on-site service depending on declared availability. The territorial military service lasts 1-6 years with possible extensions.³² As already mentioned, the basic tasks of the TDF include defence activities in cooperation with operational forces and allies; independent unconventional, anti-diversion and anti-landing activities; information activities, and crisis response.³³ The number of TDF troops was set at 53,000. The formation of the TDF was planned for 2016-2021 and was to take place in four stages, starting with three brigades formed in the eastern part of Poland. This initial plan was delayed due to the COVID-19 pandemic, which forced the TDF Command to temporarily suspend the recruitment process in 2020. In January 2022, the TDF comprised of more than 31,500 troops, including approximately 4,000 professional and approximately 27,500 part-time soldiers.³⁴

Using the innovation typology proposed by Sternberg, Pretz, and Kaufman, it could be argued that the establishment of the TDF represents an attempt at *forward incrementation* within the Polish national security system. *In forward incrementation, a new product is invented that moves an existing product line to the next step consumers are ready to take.*³⁵ Here, the establishment of the TDF is based on some of the assumptions of the National Reserve Forces, such as a special type of service, the rotational character of training, and the task of supporting the operational forces. However, the set-up of the TDF also includes a considerable amount of novelty. The position of a separate branch of the armed forces awards the TDF a different type of significance in the security system – equal to the Army, Navy, Air Forces, and Special Operations Forces. Furthermore, there is a clearly defined organisational structure and a number of permanent positions for the TDF soldiers. The NRF do not have the status of a separate military component and are viewed as a way of supplementing the full-time positions in various military units. In addition, the tasks assigned to the TDF indicate a much more independent position in the security system. The novelty of the TDF is also reflected in the

³¹ Ibid., p. 83.

³² Territorial Defence Forces Website, “FAQ: Służba – system szkolenia”, at <https://terytorialsi.wp.mil.pl/faq/sluzba-system-szkolenia>, 23 February 2022.

³³ Territorial Defence Forces Website, “FAQ: Struktura i zadania”, at <https://terytorialsi.wp.mil.pl/faq/struktura-i-zadania>, 23 February 2022.

³⁴ “Pięć lat wojsk obrony terytorialnej”, Polska Zbrojna, 11 February 2022 at <http://polska-zbrojna.pl/home/articleshow/36445?t=Piec-lat-wojsk-obrony-terytorialnej#>, 23 February 2022.

³⁵ R.J. Sternberg, J.E. Pretz, J.C. Kaufman, “Types of Innovations”, p. 161.

combination of full- and part-time troops. As of January 2022, the vast majority of the TDF were voluntary part-time soldiers, with professional full-time soldiers comprising less than 13% of the branch.³⁶ The increased significance (both in terms of the position in the system and the catalogue of tasks), as well as the mixed character of the TDF, represent a change in the field. A new concept is developed along the already set path, building on the experiences of having a professional army supported by a reserve force. Therefore, it could be argued that the introduction of the TDF in the Polish security system can itself be regarded as an innovation in the form of forward incrementation.

One of the aspects of the TDF – its mixed character – is also indicative of another type of innovation, that is, *integration*. According to Sternberg, Pretz, and Kaufman, integration *puts together two types of ideas that previously were seen as unrelated or even as opposed*.³⁷ In this case, the two areas that are being integrated are the military and the civilian sphere. Since the professionalisation of the military, the Polish Armed Forces have fit the Huntingtonian model of *separation* of the military and the broader society.³⁸ While the aim of this *separation* is to protect the political sphere from military influence and vice versa, it also has consequences in the relationship between the military and the broader (civilian) society. As Risa Brooks puts it, according to the Huntingtonian model, *to be a military professional was to exist apart from society, not just physically but also psychologically and ideologically*.³⁹ In the physical sense, this separation is reflected in distinctive spaces (e.g. military bases and compounds), services (e.g. military hospitals, separate judicial process), and even dress-code that clearly distinguishes soldiers from civilians. Psychological and ideological separation is the result of cultivating military values and norms in a way that would best fit the task of the armed forces, that is, in Samuel Huntington's terms, *the management of violence*. Scholars researching military culture and identity have long pointed to such characteristics as conservatism, masculinity, or the warrior ethos that are typical for Western soldiers⁴⁰ – values and norms that at times might be divergent from those of the wider society. As such, the TDF represents a merger of full-time professional soldiers with part-time, volunteer soldiers who often have a civilian job at the same time.⁴¹

³⁶ "Pięć lat wojsk obrony terytorialnej..."

³⁷ R. Sternberg, J. Kaufman, J. Pretz, "The Propulsion Model of Creative Contributions Applied to the Arts and Letters", *Journal of Creative Behavior*, vol. 35, no. 2 (2001), p. 95.

³⁸ See S. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, Cambridge, MA 1957.

³⁹ R. Brooks, "Paradoxes of Professionalism: Rethinking Civil-Military Relations in the United States", *International Security*, vol. 44, no. 4 (2020), p. 11.

⁴⁰ See V.C. Franke, *Preparing for Peace: Military Identity, Value Orientations, and Professional Military Education*, Westport, CT 1999, pp. 54-55; J. Soeters, D. Winslow, A. Weibull, "Military Culture", in *Handbook of the Sociology of the Military*, G. Caforio (ed.), New York 2006, p. 253; W. Broesder, A. Vogelaar, M.C. Euwema, "The Peacekeeping Warrior. A Theoretical Model", in *Blurring Military and Police Roles*, M. Easton et al. (eds), The Hague 2010; A. Mazurkiewicz, "The Dynamics of the Contemporary Military Role: In Search of Flexibility", *Annales Universitatis Mariae Curie-Skłodowska. Sectio K. Politologia*, vol. 25, no. 2 (2018), pp. 7-24.

⁴¹ See: #NasiTerytorialsi (Eng. 'our territorials') on Facebook.

The TDF also strongly emphasises the relative diversity of its troops in public communication, particularly through social media. The official Facebook page of the TDF features a series of posts presenting individual troops and their civilian occupation (e.g. a professional sportswoman, a high school student, an actor, a paramedic, etc.).⁴² Furthermore, contrary to social media pages and profiles of other branches of the Polish Armed Forces,⁴³ the TDF often uses images and stories of its female soldiers. This also reflects the relatively high number of female troops in the TDF (16% as of March 2021⁴⁴), compared to other branches (8% in Polish Armed Forces in general, including the TDF, as of December 2021⁴⁵).

This mixed character of the Territorial Defence Forces can also be interpreted as an indicator of innovation based on Dyer, Gregersen, and Christensen's conceptualisation.⁴⁶ To a certain extent, it can be viewed as an embracement of risk, in particular in the light of heavy criticism of the viability and utility of the TDF prior to and just after its establishment.⁴⁷ But the mixed character of the TDF also creates favourable conditions for associating (linking ideas and knowledge from various fields and disciplines) and networking, as it facilitates building ties between people from different environments, who otherwise might not have come into contact. In the light of this innovative set-up of the TDF, what kinds of innovations were introduced by the TDF and TDF soldiers during their involvement in recent non-military crises?

3. INNOVATIONS BY THE TDF

Compared to other cases of the TDF's engagement, the response to the COVID-19 pandemic seems to have generated the most numerous innovations and creative ideas, solutions, and approaches.⁴⁸ Three examples can be used to demonstrate the different

⁴² Territorial Defence Forces, official Facebook profile, at <https://www.facebook.com/Terytorialsi>, 15 March 2022.

⁴³ Compare: Polish Air Force, official Facebook profile, at <https://www.facebook.com/SilyPowietrzne/>, 15 March 2022; Polish Navy, official Facebook profile, at <https://www.facebook.com/MarynarkaWojennaRP>, 15 March 2022.

⁴⁴ I. Jędruszczuk, "Kobiety w WOT", *Wojska Obrony Terytorialnej*, 7 March 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/651073/kobiety-w-wot>, 15 March 2022.

⁴⁵ M. Czerwińska, "Służba wojskowa kobiet w siłach zbrojnych RP wczoraj i dziś", *Serwis Rzeczypospolitej Polskiej*, 23 February 2022, at <https://www.gov.pl/web/obrona-narodowa/sluzba-wojskowa-kobiet-w-silach-zbrojnych-rp-wczoraj-i-dzis>, 15 March 2022.

⁴⁶ J. Dyer, H. Gregersen, C.M. Christensen, "The Innovator's...".

⁴⁷ See e.g. E. Żemła, "Generałowie krytycznie o Wojskach Obrony Terytorialnej", *Onet.pl*, 22 May 2017, at <https://wiadomosci.onet.pl/tylko-w-onecie/generalowowie-krytycznie-o-wojskach-obrony-terytorialnej/52knmdf>, 11 March 2022.

⁴⁸ See also: M. Stepka, A. Mazurkiewicz, "The Curious Case of the COVID-19 Crisis and the Militarisation of Resilience", *LSE IDEAS CSEEP at Jagiellonian University*, 7 December 2021, at https://cseep.uj.edu.pl/blog/-/journal_content/56_INSTANCE_syU1o8MIR1gt/147284642/149324533?fbclid=IwAR2mA-84chk0iK9HQjitL8r2NsWlseuMJofS7rw4_H-aJBPw5xXRieZdF0,

types of innovation in accordance with Sternberg, Pretz, and Kaufman's typology. As mentioned earlier, it is important to remember that the assessment of the level of creative input and innovation is very context-dependent. While in some environments these examples might not be viewed as innovatory, they do possess an aspect of novelty when considered from the standpoint of military engagement.

As the first example we can consider the adaptation of the thermal targeting device *Rubin* to quickly scan large groups of people in order to detect cases of increased body temperature that could be an indication of a potential SARS-CoV-2 infection. The device was used for this purpose in June 2020 during matriculation examination in some schools in central Poland and the TDF Command declared that it could also be used to speed up the process of temperature screening in large communication nodes (e.g., airports or train stations).⁴⁹ It could be argued that this is an example of innovation in the form of *redefinition*. It relies on using the existing, easily accessible resources and repurposing them – amending some of their elements to perform a new function and, in this case, fit into new circumstances. Here, we can see technology that was invented and constructed as a part of a weapon and then redefined as a tool useful in a non-military crisis situation.

The second example of an innovative approach of TDF soldiers during the COVID-19 pandemic is a web application developed in cooperation with military cadets. Its aim was to facilitate contact between the TDF and local government structures, health providers, and NGOs and to speed up the process of providing assistance to overburdened civilian structures.⁵⁰ While not exactly ground-breaking, as such technologies are already used by multiple actors, this could be viewed as an example of innovation in the form of *replication*. Using Sternberg, Pretz, and Kaufman's description, the implementation of this particular technology by the TDF *represents an effort to show that a given field is where it should be*,⁵¹ that is, a confirmation of its utility and a declaration of the readiness to apply it. In this case, the *marginal* innovative character of the web application means the development of a new process which addresses the needs emerging during a crisis situation.

18 March 2022; T. Białas, "Fear as a Determining Factor in the Development of Special Forces and the Territorial Defence Forces in Poland in the 21st Century", *Bezpieczeństwo. Teoria i Praktyka*, vol. 44, no. 3 (2021), pp. 186-188. For an example of innovation not related to the COVID-19 pandemic, see the European Territorial Defence Regional Co-operation Initiative, M. Klisz, "Regionalna obrona terytorialna – możliwości i szanse współpracy", *Krakowskie Studia Międzynarodowe*, vol. 15, no. 4 (2018), pp. 87-107.

⁴⁹ M. Rosłaniec, "Terytorialsi wykorzystali innowacją technologię podczas matur", *Wojska Obrony Terytorialnej*, 8 June 2020, at <https://media.terytorialsi.wp.mil.pl/informacje/523369/terytorialsi-wykorzystali-innowacja-technologie-podczas-matur>, 15 March 2022; M. Miernicka, "Rubiny w walce z epidemią", *Polska Zbrojna*, 21 May 2020, at <http://polska-zbrojna.pl/home/articles/how/31234?t=Rubiny-w-walce-z-epidemia#>, 15 March 2022.

⁵⁰ M. Pietrzak, "Aplikacja, która ułatwi pomoc!", *Wojsko Polskie*, 9 April 2020, at <https://www.wojsko-polskie.pl/dwot/articles/aktualnosci-w/2020-04-09c-aplikacja-ktora-uatwi-pomoc/>, 15 March 2022.

⁵¹ R.J. Sternberg, J.E. Pretz, J.C. Kaufman, "Types of Innovations", p. 159.

Finally, the third example comprises a short video, a story, and a colouring book designed by the TDF soldiers to explain the pandemic and the COVID-19 testing procedure in a child-friendly manner.⁵² Within the context of the armed forces, this is a relatively fresh idea, as the message sent by the military is directed primarily to small children and their parents. In this sense, it could be treated as an innovation in the form of *redirection* – an attempt to reach an audience that is new and different from the traditional target of military information operations. Sending the message directly to small children, using simple language and an entertaining and interactive form, represents an effort by TDF soldiers to cover the needs of more vulnerable sections of the society, which could otherwise be overlooked by more general directions of crisis response.

CONCLUSION

Given the discussion above, the TDF and its activities can be framed in terms of innovation as an outcome and as a mindset/organisational culture. When considered from the perspective of an outcome, the Territorial Defence Forces themselves represent an innovative attempt at creating a military component that mixes together full-time soldiers and the so-called ‘weekend’ troops, who also have a civilian occupation. This breaks with the more traditional perception of the military service as an exclusively full-time job. Similarly, the various activities undertaken by TDF soldiers during the pandemic provide examples of innovative outcomes: new products and processes that have been developed as a result of crisis response. The level of novelty introduced through these activities varies, but in each instance they do display the aspects of creativity and usefulness which are characteristic of innovation. Indeed, given the positive evaluation of the TDF’s engagement, in particular during the COVID-19 pandemic,⁵³ the future role of the TDF in non-military crisis response is likely to increase. In March 2022, Poland introduced a new law which gives the commander of the TDF the responsibility for planning, coordination, and implementation of crisis response.⁵⁴ This provides more legitimacy for the TDF to develop and implement innovative approaches to crisis response.

However, the implementation of these innovative outcomes is also largely dependent on the maintenance of innovative organisational culture. In the case of the TDF, this type of organisational culture is facilitated by its mixed character. It creates conditions allowing for the identification of issues that might have been overlooked and the development of new ideas and solutions which span across fields and disciplines. While

⁵² “ZUZIA I WYMAZUŚ – w WOT rusza kampania edukacyjna dla dzieci [mat. do pobrania]”, Wojsko-Polskie, 27 May 2020, at <https://www.wojsko-polskie.pl/3bot/articles/aktualnosci-w/2020-05-27m-zuzia-i-wymazus-w-wot-rusza-kampania-edukacyjna-dla-dzieci-mat-do-pobrania/>, 15 March 2022.

⁵³ M. Stępka, A. Mazurkiewicz, “The Curious Case of the COVID-19 Crisis...”.

⁵⁴ *Ustawa z dnia 11 marca 2022 r. o obronie Ojczyzny*, Dz.U. 2022, poz. 655, art. 22 ust. 2 pkt. 6.

it deserves additional research, it could be argued that the larger than usual percentage of female soldiers has allowed the TDF to recognise the particular needs of some vulnerable groups and develop ways to address them. The wide range of civilian expertise available to the TDF has created an opportunity to generate ideas and quickly implement solutions facilitating crisis response.

Given these arguments, it could be concluded that a mixed type of force, which brings together full-time and part-time soldiers, has a considerable innovative potential. Its composition encourages and facilitates networking between people with different fields of expertise, experiences, and knowledge, and consequently provides space for associating between questions, problems, ideas, and solutions. This sort of approach is particularly valuable in complex emergencies and non-military crises, when the range of issues and the diversity of affected social groups require a broad perspective, empathy, out-of-the-box thinking, and a broad pool of skills that can be easily tapped into depending on needs. However, in order for this potential to be successfully channelled into innovative results, it needs to be reinforced by an organisational culture and structure that support empathy, free expression of ideas, and learning processes.

BIBLIOGRAPHY

- Banasiak P., "Motywujenaschęćpomagania", Wojska Obrony Terytorialnej, 22 November 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/708782/motywuje-nas-chec-pomagania>.
- Bellis M., "The Inventor of Touch Screen Technology", ThoughtCo.com, 12 July 2018, at <https://www.thoughtco.com/who-invented-touch-screen-technology-1992535>.
- Białas T., "Fear as a Determining Factor in the Development of Special Forces and the Territorial Defence Forces in Poland in the 21st Century", *Bezpieczeństwo. Teoria i Praktyka*, vol. 44, no. 3 (2021), pp. 179-191, <http://dx.doi.org/10.48269/2451-0718-btip-2021-3-013>.
- Bijlsma T., Bogenrieder I., Baalen P. van, "Learning Military Organizations and Organizational Change", in *Managing Military Organizations: Theory and Practice*, J. Soeters, P.C. van Fenne, R. Beeres (eds), London 2010.
- Broesder W., Vogelaar A., Euwema M.C., "The Peacekeeping Warrior. A Theoretical Model", in *Blurring Military and Police Roles*, M. Easton et al. (eds), The Hague 2010.
- Brooks R., "Paradoxes of Professionalism: Rethinking Civil-Military Relations in the United States", *International Security*, vol. 44, no. 4 (2020), pp. 7-44, https://doi.org/10.1162/isec_a_00374.
- Compa T., „Wojska Obrony Terytorialnej i Narodowe Siły Rezerwowe w Systemie Obrony Rzeczypospolitej Polskiej”, *Facta Simonidis*, vol. 1, no. 13 (2020), pp. 79-98.
- Cooper R.G., "Perspective: The Stage-Gates® Idea-to-Launch Process – Update, What's New, and NexGen Systems", *Journal of Product Innovation Management*, vol. 25, no. 3 (2008), pp. 213-232, <https://doi.org/10.1111/j.1540-5885.2008.00296.x>
- Czerwińska M., "Służba wojskowa kobiet w siłach zbrojnych RP wczoraj i dziś", Serwis Rzeczypospolitej Polskiej, 23 February 2022, at <https://www.gov.pl/web/obrona-narodowa/sluzba-wojskowa-kobiet-w-silach-zbrojnych-rp-wczoraj-i-dzis>.

- Dyer J.H., Gregersen H., Christensen C.M., "The Innovator's DNA", *Harvard Business Review*, December 2009, at <https://hbr.org/2009/12/the-innovators-dna>.
- Fagerberg J., "Innovation: A Guide to the Literature", in *The Oxford Handbook of Innovation*, J. Fagerberg, D.C. Mowery, R.R. Nelson (eds), Oxford 2006, <https://doi.org/10.1093/oxfordhb/9780199286805.003.0001>.
- Franke V.C., *Preparing for Peace: Military Identity, Value Orientations, and Professional Military Education*, Westport, CT 1999.
- Freeman Ch., Soete L., *The Economics of Industrial Innovation*, London 1997.
- Gibson C.B., Birkinshaw J., "The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity", *Academy of Management Journal*, vol. 47, no. 2 (2004), pp. 209-226, <http://dx.doi.org/10.2307/20159573>.
- Harmancioglu N. et al., "Your New Product Development (NPD) Is Only as Good as Your Process: An Exploratory Analysis of New NPD Process Design and Implementation", *R&D Management*, vol. 37, no. 5 (2007), pp. 399-424, <https://doi.org/10.1111/j.1467-9310.2007.00486.x>.
- Huntington S., *The Soldier and the State: The Theory and Politics of Civil-Military Relations*, Cambridge, MA 1957.
- Jędruszcuk I., "Kobiety w WOT", *Wojska Obrony Terytorialnej*, 7 March 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/651073/kobiety-w-wot>.
- Kahn K.B., "Understanding Innovation", *Business Horizons*, vol. 61, no. 3 (2018), pp. 453-460, <https://doi.org/10.1016/j.bushor.2018.01.011>.
- Klisz M., "Regionalna obrona terytorialna – możliwości i szanse współpracy", *Krakowskie Studia Międzynarodowe*, vol. 15, no. 4 (2018), pp. 87-107.
- Mazurkiewicz A., *Civil-Military Cooperation in International Interventions: The Role of Soldiers*, London 2022, <https://doi.org/10.4324/9781003159001>.
- Mazurkiewicz A., "The Dynamics of the Contemporary Military Role: In Search of Flexibility", *Annales Universitatis Mariae Curie-Skłodowska. Sectio K Politologia*, vol. 25, no. 2 (2018), pp. 7-24, <http://dx.doi.org/10.17951/k.2018.25.2.7-24>.
- Miernicka M., "Rubiny w walce z epidemią", *Polska Zbrojna*, 21 May 2020, at <http://polskazbrojna.pl/home/articleshow/31234?t=Rubiny-w-walce-z-epidemia#>.
- Panagopoulos G., "Aspects of Organizational Ambidexterity", *Journal of Global Strategic Management*, vol. 1, no. 10 (2016), <https://doi.org/10.20460/JGSM.20161022382>.
- Pietrzak M., "Aplikacja, która ułatwi pomoc!", *Wojsko Polskie*, 9 April 2020, at <https://www.wojsko-polskie.pl/dwot/articles/aktualnosci-w/2020-04-09c-aplikacja-ktora-umatwi-pomoc//>.
- Pietrzak M., "Ciąg dalszy działań pomocowych WOT na Lubelszczyźnie", *Wojska Obrony Terytorialnej*, 20 June 2019, at <https://media.terytorialsi.wp.mil.pl/informacje/446903/ciag-dalszy-dzialan-pomocowych-wot-na-lubelszczyznie>.
- Pietrzak M., "Małopolscy Terytorialsi wspierają poszkodowanych po przejściu trąby powietrznej", *Wojska Obrony Terytorialnej*, 25 June 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/676955/malopolscy-terytorialsi-wspieraja-poszkodowanych-po-przejsciutruby-powietrznej>.
- Pietrzak M., "Podkarpaccy Terytorialsi usuwali skutki nawałnicy", *Wojska Obrony Terytorialnej*, 27 June 2020, at <https://media.terytorialsi.wp.mil.pl/informacje/532843/podkarpaccy-terytorialsi-usuwali-sutki-nawalnicy>.

- "Pięć lat wojsk obrony terytorialnej", Polska Zbrojna, 11 February 2022, at <http://polskazbrojna.pl/home/articleshow/36445?t=Piec-lat-wojsk-obrony-terytorialnej#>.
- Polish Air Force, official Facebook profile, 2022, at <https://www.facebook.com/SilyPowietrzne/>.
- Polish Navy, official Facebook profile, 2022, at <https://www.facebook.com/MarynarkaWojennaRP>.
- "Pobór, a profesjonalizacja armii", Ministerstwo Spraw Wewnętrznych i Administracji, at <https://archiwum.mswia.gov.pl/pl/bezpieczenstwo/sprawy-obronne/6154,Pobor-a-profesjonalizacja-armii.html>.
- Rosenberg N., *Studies on Science and the Innovation Process*, Singapore 2010.
- Rosłaniec M., "Terytorialsi wykorzystali innowacją technologię podczas matur", Wojska Obrony Terytorialnej, 8 June 2020, at <https://media.terytorialsi.wp.mil.pl/informacje/523369/terytorialsi-wykorzystali-innowacja-technologie-podczas-matur>.
- Ruffa Ch., Dandeker Ch., Vennesson P., "Soldiers Drawn into Politics? The Influence of Tactics in Civil-Military Relations", *Small Wars & Insurgencies*, vol. 24, no. 2 (2013), pp. 322-334, <https://doi.org/10.1080/09592318.2013.778035>.
- Shields P.M., Soeters J., "Peaceweaving: Jane Addams, Positive Peace, and Public Administration", *American Review of Public Administration*, vol. 47, no. 3 (2017), pp. 323-339, <https://doi.org/10.1177/0275074015589629>.
- Smith W.R., Treem J.W., Love B., "Communicative Signaling of Occupational Fitness: How Innovative Ability Is Expressed and Assessed", *Communication Monographs*, vol. 86, no. 3 (2019), pp. 313-335, <https://doi.org/10.1080/03637751.2018.1557719>.
- Soeters J., Fenema P.C. van, Beeres R., "Introducing Military Organizations", in *Managing Military Organizations. Theory and Practice*, J. Soeters, P.C. van Fenema, R. Beeres (eds), London 2010, <https://doi.org/10.4324/9780203857106>.
- Soeters J., Winslow D., Weibull A., "Military Culture", in *Handbook of the Sociology of the Military*, G. Caforio (ed.), New York 2006, https://doi.org/10.1007/0-387-34576-0_14.
- Sternberg R.J., Kaufman J.C., Pretz J.E., "The Propulsion Model of Creative Contributions Applied to the Arts and Letters", *Journal of Creative Behavior*, vol. 35, no. 2 (2001), pp. 75-101, <https://doi.org/10.1002/j.2162-6057.2001.tb01223.x>.
- Sternberg R.J., Pretz J.E., Kaufman J.C., "Types of Innovation", in *The International Handbook on Innovation*, L.V. Shavinina (ed.), Oxford 2003, <https://doi.org/10.1016/B978-008044198-6/50011-5>.
- Stęпка M., "Rezyliencja jako paradygmat bezpieczeństwa w czasach przewlekłych kryzysów", *Przegląd Politologiczny*, vol. 26, no. 2 (2021), pp. 105-117, <https://doi.org/10.14746/pp.2021.26.2.7>.
- Stęпка M., Mazurkiewicz A., "The Curious Case of the COVID-19 Crisis and the Militarisation of Resilience", LSE IDEAS CSEEP at Jagiellonian University, 7 December 2021, at https://cseep.uj.edu.pl/blog/-/journal_content/56_INSTANCE_syU1o8MlR1gt/147284642/149324533?fbclid=IwAR2mA-84chk0iK9HQjitL8r2NsWlseuMJofS7rw4_HaJBPrw5xXRieZdF0.
- Szczepaniak A., "Jestem pomocnym ramieniem i tarczą dla mojej społeczności", Wojska Obrony Terytorialnej, 23 February 2021, at <https://media.terytorialsi.wp.mil.pl/informacje/648157/jestem-pomocnym-ramieniem-i-tarcza-dla-mojej-spolecznosci-2021-02-22>.

Territorial Defence Forces, official Facebook profile, 2022, at <https://www.facebook.com/Terytorialsi>.

Territorial Defence Forces Website, "FAQ", 2022, at <https://terytorialsi.wp.mil.pl/faq>.

Territorial Defence Forces Website, „Nasza tożsamość”, 2022, at <https://terytorialsi.wp.mil.pl/nasza-tozsamosc>.

Ustawa z dnia 11 marca 2022 r. o obronie Ojczyzny, Dz.U. 2022, poz. 655.

“ZUZIA I WYMAZUŚ – w WOT rusza kampania edukacyjna dla dzieci [mat. do pobrania]”, Wojsko Polskie, 27 May 2020, at <https://www.wojsko-polskie.pl/3bot/articles/aktualnosc-w/2020-05-27m-zuzia-i-wymazus-w-wot-rusza-kampania-edukacyjna-dla-dzieci-mat-do-pobrania/>.

Żemła E., “Generałowie krytycznie o Wojskach Obrony Terytorialnej”, Onet.pl, 22 May 2017, at <https://wiadomosci.onet.pl/tylko-w-onecie/generalow-krytycznie-o-wojskach-obrony-terytorialnej/52knmdf>.

Agata MAZURKIEWICZ – holds a PhD in Political Science (Jagiellonian University) and is an Assistant Professor at the Institute of Political Science and International Relations of the Jagiellonian University in Kraków. Her research interests include civil-military cooperation, peacekeeping missions, and NATO affairs. She was a principal investigator and researcher in several national and international research projects devoted to NATO, peacekeeping, as well as reconciliation in Poland. She teaches courses on international military relations, armed forces, and NATO. Her latest publications include a research monograph entitled *Civil-Military Cooperation in International Interventions. The Role of Soldiers* at Routledge, CASS Series.