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FORECASTING GLOBAL HEALTH EMERGENCIES
THE CASE OF U.S. INTELLIGENCE COMMUNITY AND SARS-CoV 2

Abstract:
Forecasting future conditions and parameters of a strategic security environment is one of the most important tasks of a state's security institutions. The SARS-CoV-2 pandemic has shown the importance of generating preparedness for future global health emergencies. Appropriate forecasting is crucial from this perspective. Intelligence organisations perform a specific role in this realm due to their capabilities and position. U.S. Intelligence Community, arguably the most powerful in the world, has also devoted time to researching this issue. The objective of this paper is to examine the health security layer of its analytical products and analyse the reception of these forecasts by the U.S. government. The author employs desk research and document analysis to conduct the study.

Keywords:
forecasting; pandemic; health emergencies; resilience; security policy

Introduction

The world seems to be falling apart since the beginning of 2020. The SARS-CoV-2 pandemic and its cascading effects along with the unprovoked Russian attack against Ukraine and another period of extensive warfare definitively sealed the end of the so-called *strategic pause*. The awareness of the world's nonlinearity has increased significantly. The level of uncertainty and anxiety spiked with the new knowledge about the problems of the 'world operating system'.

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The sphere of the abovementioned uncertainty and anxiety can be reduced with appropriately prepared and effectively communicated forecasts. They ought to be communicated not only to executive branches of governments but also to societies. Intelligence services have a significant role in this realm. It stems from their competencies, capabilities, and specific position both in political and social structures. Intelligence organisation gathers information from a broad spectrum of sources and by various means – from OSINT (Open Sources Intelligence) through IMINT (Imagery Intelligence), SIGINT (Signal Intelligence) to ELINT (Electronic Intelligence) and HUMINT (Human Intelligence). It uses gathered information to define the sphere, within which a political leader makes a decision. Precisely, to help such a leader to make an informed and effective decision. Therefore, analytical bodies within intelligence services are critical instruments. With the nonlinear nature of the contemporary international situation, their work is crucial in understanding the structure of opportunities, challenges, risks, and threats and identifying trends.

It can be assumed, that the intelligence service has a limited role in health emergencies. According to such a simplified approach, such an organisation works on a tactical level, when a crisis of this type is imminent and a potentially dangerous pathogen is 'visible'. The task of spy agencies is to alarm national authorities about unfolding events. In fact, intelligence agencies of NATO countries are believed to have been issuing such warnings at the beginning of 2020. There should be no doubt, that U.S. intelligence agencies had information about the rapidly deteriorating situation in Chinese Wuhan province. According to available information, a little-known unit of the Defence Intelligence Agency, National Centre for Medical Intelligence informed about the crisis unfolding in the Middle Kingdom as early, as November 2019[2]. Other sources informed, that the U.S. shared intelligence about possible pandemics also with their NATO and Israeli allies[3]. Smaller organisations are also believed to have been warned by their authorities – Polish Foreign Intelligence Agency (*Agencja Wywiadu*) informed about the danger of public health emergency in January 2020[4]. As can be seen, those warnings were tactical. However, there is another role – the strategic warning of governments and societies, creating indispensable threat awareness and inducing decisive actions.

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[2] J. Margolin, J. G. Meek, *Intelligence report warned of coronavirus crisis as early as November: Sources*, <https://abcnews.go.com/Politics/intelligence-report-warned-coronavirus-crisis-early-november-sources/story?id=70031273> (30.12.2021).

[3] K. Gradon, W. R. Moy, *COVID-19 Response - Lessons from Secret Intelligence Failures*, "The International Journal of Intelligence, Security, and Public Affairs" 2021, vol. 23, no. 3, p. 165.

[4] *Wywiad ostrzegał przed pandemią?*, <https://infosecurity24.pl/sluzby-specjalne/agencja-wywiadu/wywiad-ostrzegal-przed-epidemia> (30.12.2021).

It is worth mentioning, that there is another instance of an even less known form of intelligence operations in the health security sphere – epidemic intelligence, in which officers investigate disease outbreaks, search four sources, spread patterns and any details that public health institutions cannot handle the situation. U.S. Centres for Disease Control and Prevention (CDC) runs Epidemic Intelligence Service (EIS). European Centre for Disease Prevention and Control operates its tools (i.e., The Early Warning and Response System of the European Union or EWRS; EU Rapid Alert System for Food and Feed or RASFF; Epidemic Intelligence Information System or EPIS)[5]. Clearly, World Health Organisation also has its own tools[6]. It is obvious, that states must have such an instrument at their disposal. Its parameters and efficiency vary and are contingent on states' resources.

The question of intelligence organisations' – both classic and epidemic – responsibility to provide early warning of emerging major public health crises is clear. It was scientifically explored before the pandemic by scholars and practitioners[7]. After 2020, the pandemic's influence on national and international security and the role of intelligence has become an important

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[5] *Epidemic intelligence tools and information resources*, <https://www.ecdc.europa.eu/en/threats-and-outbreaks/epidemic-intelligence> (30.12.2021).

[6] *WHO Hub for Pandemic and Epidemic Intelligence*, <https://www.who.int/initiatives/who-hub-for-pandemic-and-epidemic-intelligence> (30.12.2021).

[7] See: L. Bengtsson, S. Borg, M. Rhinard, *European security and early warning systems: from risks to threats in the European Union's health security sector*, "European Security" 2018, vol. 27, no. 1, pp. 20-40; E. Christaki, *New technologies in predicting, preventing, and controlling emerging infectious diseases*, "Virulence" 2015, vol. 6, no. 6, pp. 558-565; P-M. David, N. Le Dévédec, *Preparedness for the next epidemic: health and political issues of an emerging paradigm*, "Critical Public Health" 2019, vol. 29, no. 3, pp. 363-369; V. Galaz, *Pandemic 2.0: Can Information Technology Help Save The Planet?* "Environment: Science and Policy for Sustainable Development" 2009, vol. 51, no. 6, pp. 20-28; A. M. Levitt, *Deadly Outbreaks: How Medical Detectives Save Lives Threatened by Killer Pandemics, Exotic Viruses, and Drug-Resistant Parasites*, New York 2013; M. McKenna, *Beating Back the Devil: On the Front Lines with the Disease Detectives of the Epidemic Intelligence Service*, New York 2004; *Public Health Intelligence and the Internet*, A. Shaban-Nejad, J. S. Brownstein, D. L. Buckeridge (Eds.), Cham 2017; D. Scales, A. Zelenev, J. S. Brownstein, *Quantifying the effect of media limitations on outbreak data in a global online web-crawling epidemic intelligence system, 2008–2011*, "Emerging Health Threats Journal" 2013, vol. 6, no. 1, article 21621; R. J. Totten, *Epidemics, national security, and US immigration policy*, "Defense & Security Analysis" 2015, vol. 31, no. 3, pp. 199-212; P. F. Walsh, *Managing Emerging Health Security Threats Since 9/11: The Role of Intelligence*, "International Journal of Intelligence and Counterintelligence" 2016, vol. 29, no. 2, pp. 341-367; J. M. Wilson, *The use of intelligence to determine attribution of the 2010 Haiti cholera disaster*, "Intelligence and National Security" 2018, vol. 33, no. 6, pp. 866-874.

element of studies in scientific and analytical circles[8]. What is more, these questions attract the attention of media outlets, which extensively report publicly known analyses of pandemic sources and their further impacts[9].

The following analysis is focused on strategic forecasts of global health emergencies, produced by the U.S. Intelligence Community. It is based on declassified documents. The core of the research source base is built around publicly known U.S. Intelligence Community's 'flagship' analytical products – Worldwide Threat Assessments (published since 2006) and Global Trends Reports (published since 1997). The source collection will be supplemented by scientific journal articles, monographs, think-tanks' analyses and press resources, which will help to broaden the context.

Methodological assumptions

The author utilizes a quantitative research strategy, based on scientific pragmatism. The latter emphasizes a liberal approach to the selection of methods, defined by their maximum usefulness in the exploration of a given issue and achieving assumed objectives[10].
Document analysis represents the main method, used in the study. Glenn A. Bowen considers, that "document analysis is a systematic procedure for reviewing or evaluating documents—both printed and electronic (…) material.

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[8]See: J. S. Bedi, D. Vijay, P. Dhaka, J. Paul Singh Gill, S. B. Barbuddhe, *Emergency preparedness for public health threats, surveillance, modelling & forecasting*, "Indian Journal of Medical Research" 2021, vol. 153, no. 3, pp. 287-298; G. Bowsher, R. Bernard, R. Sullivan, *A Health Intelligence Framework for Pandemic Response: Lessons from the UK Experience of COVID-19*, "Health Security" 2020, vol. 18, no. 6, pp. 435-443; G. Bowsher, R. Sullivan, *Why we need an intelligence-led approach to pandemics: supporting science and public health during COVID-19 and beyond*, "Journal of the Royal Society of Medicine" 2020, vol. 114, no. 1, pp. 12-14; E. Dahl, *Warnings Unheeded, Again: What the Intelligence Lessons of 9/11 Tell Us About the Coronavirus Today*, "Homeland Security Affairs" 2020, vol. 16, art: 7; M. E. De Vine, *Intelligence Community Support to Pandemic Preparedness and Response*, Washington, D.C. 2020; L. O. Gostin, *A Blueprint for the Future*, Cambridge, MA 2021; G. K. Gronvall, *The Contested Origin of SARS-CoV-2*, "Survival" 2021, vol. 63, no. 6, pp. 7-36; S. M. Malik, A. Barlow, B. Johnson, *Reconceptualizing health security in post-COVID-19 world*, "BMJ Global Health" 2021, vol. 6, art. e006520; M. Smith, P. Walsh, *Improving Health Security and Intelligence Capabilities to Mitigate Biological Threats*, "The International Journal of Intelligence, Security, and Public Affairs" 2021, vol. 23, no. 2, pp. 139-155; P. F. Walsh, *Improving 'Five Eyes' Health Security Intelligence capabilities: leadership and governance challenges*, "Intelligence and National Security" 2020, vol. 35, no. 4, pp. 586-602.

[9] See reports by i.e.: "Axios", "ABC", "CNN", "Politico", "The Conversation" „The New York Times", "The Washington Post".

[10] D. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Method Approaches*, London 2013, pp. 10-12.

Like other analytical methods in qualitative research, document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (…). Documents contain text (words) and images that have been recorded without a researcher's intervention. (…) refer to documents as 'social facts', which are produced, shared, and used in socially organised ways"[11]. This method is considered adequate by the author.

To analyse the outlined problem, several research questions should be answered: *What are the structure and functions of the U.S. Intelligence Community? How U.S. Intelligence Community forecast global health emergencies? What was the U.S. Executive's reception of those analytical products?* Reflections on these questions are required to verify the author's hypothesis: *U.S. Intelligence Community provided analytical products containing warnings about the potential pandemic, but those warnings have not influenced the decision-makers.*

Explorations of the research problem described above should start with a brief presentation of the U.S. Intelligence Community.

Collect, analyse, and deliver – U.S. Intelligence Community's history, structure and mission

U.S. Intelligence Community was formally established by Executive Order 12333, issued by President Ronald Reagan in 1981 (amended in 2004 and 2008)[12]. It is responsible for collecting and providing the information needed by key members of the executive branch of the U.S. government (headed by the President and military leaders); analysing, producing and disseminating intelligence; gathering information about and conducting activities against international terrorism, the proliferation of Weapons of Mass Destruction; countering intelligence operations against the U.S.; conducting research and development activities, procurement of technical systems to perform operations; providing intelligence staff and operations security; integrating intelligence activities of all entities of the IC[13]. This structure is led by the Director of National Intelligence, who responds directly to the President of the United States

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[11] G. A. Bowen, *Document Analysis as a Qualitative Research Method*, "Qualitative Research Journal" 2009, vol. 9, no. 2, p. 27.
[12] *Executive Order 13470—Further Amendments to Executive Order 12333, United States Intelligence Activities*, "Federal Register" 2008, vol. 73, no. 150, p. 45325.
[13] *Ibidem*, p. 45331.

The lineage of the U.S. Intelligence Community could be traced to the late 19th Century. In 1882 the Office of Naval Intelligence (ONI) was established[14]. It was an expression of an increased sense of urgency that existed amongst servicemembers and statesmen, who had realised the need for the creation of modern naval power. ONI provided technological and shipbuilding intelligence, which helped to build the foundations of American naval preponderance. This agency can be described as the nucleus of the U.S. Intelligence Community which developed parallelly with the American rise to become a global power. In the early 20th Century, the Federal Bureau of Investigation which worked extensively in the public security sphere gradually developed counterintelligence capabilities to tackle threats from the dynamically changing strategic landscape – World War I, communism[15]. In 1915, U.S. Coast Guard established the position of Chief Intel Officer[16]. Subsequently, the Coast Guard expanded its intelligence operations to include HUMINT and cryptology. During the Second World War, the FBI provided counterintelligence cover, but also, as Intelligence Community's official website states it was "operating a full-blown foreign intelligence collection effort in the Western Hemisphere from 1940-1947"[17]. Intelligence gathering and covert operations capabilities of the United States were enhanced with the establishment of the Office of Strategic Services (OSS) in 1941. It was the OSS which was the first of a generation of full-fledged intelligence organisations, that constitute the fundaments of the modern U.S. Intelligence Community.

After the Second World War, the Bureau of Intelligence and Research (INR) was established within the Department of State with the task of providing support to the foreign service[18]. In 1947, the most recognisable body of the U.S. Intelligence Community – the Central Intelligence Agency – started to operate[19].

American intelligence organisations – after reaching their inflexion point during the Second World War and the onset of the Cold War – have gradually

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[14] See: J. M. Dorwart, *Dortwart's History of the Office of Naval Intelligence 1865-1945*, Annapolis, MD 2019.

[15] R. J. Batvinis, *The Origins of FBI Counterintelligence*, Kansas City, KS 2007, p. 65.

[16] *Coast Guard Investigative Service (CGIS). History*, <https://www.uscg.mil/Units/Coast-Guard-Investigative-Service/History/> (access: 30.12.2021).

[17] *History*, <https://www.intelligence.gov/mission#start> (30.12.2021).

[18] T. King, *Intelligence Informs Foreign Policy Making at the U.S. State Department* [in:] *Strategic Analysis in Support of International Policy Making: Case Studies in Achieving Analytical Relevance*, ed. T. Juneau, New York 2017, pp. 95-100.

[19] In 1947, the United States Air Force created a security and intelligence unit – 25th Air Force. It was merged with the 24th Air Force and now operates as the 16th Air Force. See: R. S. Cohen, *16th Air Force Launches Information Ops for the Digital Age*, <https://www.airforcemag.com/article/16th-air-force-launches-information-ops-for-the-digital-age/> (access: 30.12.2021).

developed different capabilities, capitalising on technological innovations. In 1952 the National Security Agency was established to perform cryptographic works, SIGINT and ELINT operations[20]. National Reconnaissance Office – established in 1961 – was in turn institutional response to satellites and other strategic intelligence capabilities growth.

In 1961, the Department of Defence created its own intelligence activity – the Defence Intelligence Agency (DIA), which was tasked with gathering and disseminating military intelligence to the Department's executive and Joint Chiefs of Staff[21]. In subsequent years, several departments and services established their own intelligence tools. Department of Energy created the Office of Intelligence and Counterintelligence in 1977[22] to operate within nuclear threats environment (terrorism, counterproliferation). Armed forces' branches have also created their own, autonomous intelligence units – U.S. Army (Intelligence and Security Command) in 1977 and Marine Corps in 1978[23].

After the end of the Cold War, Intelligence Community expanded further – in 1996 the National Geospatial-Intelligence Agency (NGA) was created as an effort to consolidate geospatial and imagery analysis within one body[24]. In 2003, the Department of Treasury established its own intelligence unit – the Treasury Office of Intelligence and Analysis (OIA). It covers information protection programs and personnel with access to sensitive data.

The most significant development in U.S. intelligence institutional structure after September 11 terrorist attacks was the establishment of the Director of National Intelligence (DNI) in 2005, with oversight and facilitation across the organisation's spectrum as its main mission. DNI established the Inspector General position for the IC and four intelligence centres (National Counterterrorism Centre, the National Counterintelligence and Security Centre, and the National Counterproliferation Centre; and the Cybersecurity Threat Intelligence Integration Centre). DNI is also responsible for Presidential Daily Brief[25].

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[20] B. D. Berkowitz, A. E. Goodman, *Strategic Intelligence for American National Security*, New Jersey 2020, p. 50.

[21] *Defense Intelligence Agency* [in:] *Encyclopedia of Military Science*, ed. G. K. Piehler, London 2014, pp. 464-465.

[22] J. Rovner, *Intelligence and National Security Decision Making* [in:] *The Oxford Handbook of U.S. National Security*, eds. D. S. Reveron, N. K. Gvosdev, J. A. Clodu, Oxford 2018, p. 134.

[23] A. R. Wells, *Between Five Eyes: 50 Years of Intelligence Sharing*, Philadelphia, PA 2020, p. 83.

[24] R. M. Clark, *Geospatial Intelligence: Origins and Evolution*, Washington, D.C., pp. 242-243.

[25] R. A. Best, *Intelligence Reform After Five Years: The Role of the Director of National Intelligence (DNI)*, Washington, D.C. 2010, pp. 2-5.

Changes in the U.S. Intelligence Community architecture were introduced in 2006 and 2007. First, Drug Enforcement Administration initiated Intelligence Program to help investigate the drug trade and provide intelligence at the tactical (support of operations) and strategic (shape decisions and policies) levels[26]. In the following year, the Department of Homeland Security (DHS) established the Office of Intelligence and Analysis. Apart from providing intelligence support to DHS operations, it coordinates the work fusion centres (instruments of sharing information between IC organisations).

The latest addition to U.S. Intelligence Community is Space Delta 7, a unit of the U.S. Space Force, which provides "critical, time-sensitive and actionable intelligence for space domain operations to allow for the detection, characterization and targeting of adversary space capabilities"[27].

This brief presentation shows the potential of the U.S. Intelligence Community. All the abovementioned agencies and military units work to collect information and create analytical products for government officials and, when declassified, to the public opinion.

The pandemic threat in Global Trends reports

Global Trends report is a quadrennially published strategic forecast of the U.S. Intelligence Community. These forecasts contain an analysis of trends, which have the potential to shape the world situation in the 15-20 years. The report assesses critical drivers of coming transformations, identifies weak signals and wild cards and explores the long-term influence of changing. It also outlines scenarios for alternative futures.

The series started in 1997 with the publication of the *National Intelligence Council Global Trends 2010 report*[28]. Global health issues were not the most important concern of the intelligence analysts at that time. The essential issue explored was the transformation of the global order after the fall of communism and its impacts on U.S. global posture and situation in crucial regions.

The next report, issued in 2000[29], explored key drivers and trends in seven areas: demographics; natural resources and environment; science and technology; the global economy and globalization; national and international governance; future conflict; the role of the United States. Public health issues

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[26] *Intelligence*, <https://www.dea.gov/law-enforcement/intelligence> (30.12.2021).

[27] *Space Delta 7 Fact Sheet*, <https://www.peterson.spaceforce.mil/Portals/15/Fact%20Sheets/Space%20Delta%207%20Fact%20Sheet.pdf?ver=D8Qlv67p62PfYOPAydn-Xw%3d%3d> (30.12.2021).

[28] *Global Trends 2010*, <https://permanent.fdlp.gov/LPS106554/LPS106554/www.dni.gov/nic/special_globaltrends2010.html> (30.12.2021).

[29] *Global Trends 2015: A Dialogue About the Future with Nongovernment Experts*, Washington, D.C. 2000.

are brought up with analyses of regions or states. However, there is one reference to a global health issue: "another global epidemic on the scale of HIV/AIDS, or rapidly changing weather patterns attributable to global warming, with grave damage and enormous costs for several developed countries – sparking an enduring global consensus on the need for concerted action on health issues and the environment"[30].

Worldwide health emergencies have a broader presence in analyses contained in the report published in 2004. The problem of global change dynamics and the emergence of Asia as the gravity centre of world affairs constitutes the background of the whole report. Experts focus on possible globalisation disruptions. The pandemic is listed as one of the factors that could derail it. The report reads as follows: "some experts believe it is only a matter of time before a new pandemic appears, such as the 1918-1919 influenza virus that killed an estimated 20 million worldwide. Such a pandemic in megacities of the developing world with poor healthcare systems (…) would be devastating and could spread rapidly throughout the world. Globalization would be endangered if the death toll rose into the millions in several major countries and the spread of the disease put a halt to global travel and trade during an extended period, prompting governments to expend enormous resources on overwhelmed health sectors"[31]. It can be assumed, that SARS-CoV-1 outbreak (2002-2004) and Avian Influenza A (H5N1) influenced forecasting process. However, analysts underline the efficiency of "international surveillance and control mechanism"[32]. The positive experience of the limited spread of SARS the so-called bird flu can be seen in these forecasts. Nevertheless, the potential of the pandemic is not underestimated.

In November 2008, *Global Trends 2025: A Transformed World* report has pandemic as an alarming scenario in the chapter exploring the growing potential for conflict. The scenario presupposes the emergence of a new, highly transmissible respiratory disease by 2025. Analysts evoked epidemiology experts pointing at "highly pathogenic avian influenza (HPAI) strains, such as H5N1, to be likely candidates for such a transformation, but other pathogens – such as the SARS coronavirus or other influenza strains"[33].

The scenario assumes rapid spread of it due to the mild symptoms and asymptomatic cases and the ineffectiveness of control mechanisms. Highly populated and dense areas, where humans and animals live in close vicinity were indicated as potential sources of the pandemic (with China and Southeast Asia in general as examples). According to the report, "unregulated animal

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[30] *Ibidem*, p. 82.
[31] *Mapping the Global Future*, Washington, D.C. 2004, p. 30.
[32] *Ibidem*.
[33] *Global Trends 2025: A Transformed World*, Washington, D.C. 2008, p. 75.

husbandry practices could allow a zoonotic disease such as H5N1 to circulate in livestock populations – increasing the opportunity for mutation into a strain with pandemic potential"[34]. Analysts assume that the disease spreads despite imposed restrictions after a slow reaction of the public health system response in the originating country. As the novel disease sweeps the world, the situation of states deteriorates, healthcare systems are overwhelmed, economic catastrophe unfolds, and the death toll reaches "hundreds of millions". Additionally, the report alarms, that internal and international tensions and conflicts will be more likely[35]. The structure of this alarming scenario speaks for itself.

Global Trends 2030. Alternative Worlds report, issued in late 2012, lists the pandemic as a 'black swan', a surprise event with major, potentially catastrophic consequences. The report reads: "an easily transmissible novel respiratory pathogen that kills or incapacitates more than one per cent of its victims is among the most disruptive events possible. Such an outbreak could result in millions of people suffering and dying in every corner of the world in less than six months"[36]. It should be noted that report was published after the pandemic of the deadly swine flu virus (A/H1N1). According to CDC estimations, it killed from 151,700 to 575,400 people worldwide[37]. The report discusses the phenomenon of the pandemic itself, recounts past pandemic cases and deliberates on the potential of pathogen breaking species barriers. Analysts stress, that "an easily transmissible novel respiratory pathogen that kills or incapacitates more than one per cent of its victims is among the most disruptive events possible. They add that such a disease, "unlike other disruptive global events, such outbreak would result in a global pandemic that directly causes suffering and death in every corner of the world, probably in less than six months"[38].

The report explores the pandemic in the scenario called *Stalled Engines*, where analysts assume the stagnation of globalization and overall instability in the world with violence in the Middle East, decomposition of the EU and self-isolation of the U.S. The pandemic, originating in South Asia sweeps the world. South Asia, parts of India and the Middle East are hit particularly strong, but developed countries also suffer the loss of life[39]. *Stalled Engines* is the worst-case scenario, where a pandemic is a part of a 'wave' of crises and hit destabilised world with global actors repositioning to adapt.

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[34] *Ibidem*.

[35] *Ibidem*.

[36] *Global Trends 2030: Alternative Worlds*, Washington, D.C. 2012, p. xi.

[37] *2009 H1N1 Pandemic (H1N1pdm09 virus)*, <https://www.cdc.gov/flu/pandemic-resources/2009-h1n1-pandemic.html>, (30.12.2021).

[38] *Global Trends 2030…*, *op. cit.*, p. 13.

[39] *Ibidem*, pp. 110-115.

In the last pre-COVID pandemic report – *Paradox of Progress* published in January 2017 – the global health emergency is embedded with a scenario called *Islands*. General parameters of this scenario are defined by the rise of inequality, rapid technological progress (especially Artificial Intelligence); shift in global trade patterns; slower economic growth; China and India struggling with the 'middle-income trap'; the United States and Europe turning inwards and accelerating climate change[40]. According to this scenario, the pandemic hits in 2023 and reduces global travel, disrupting supply chains and contributing to economic problems[41]. The report reiterates the assumption, that Asia (China, Indonesia, and Vietnam) is a potential hotspot for the emergence of a pathogen with pandemic potential[42].

Strategic forecasts of the U.S. Intelligence Community clearly indicate that the pandemic constitutes a grave threat to global stability and has the potential to ignite complex crises, which can morph into armed conflagrations. Another publicly known analytical product of U.S. intelligence is the Worldwide Threat Assessment (originally Annual Threat Assessment) released annually by the Director of National Intelligence.

Pandemic in Worldwide Threat Assessments

The report is traditionally issued at annually public hearings of high-rank intelligence officials in the U.S. Senate and House of Representatives. It introduces the assessment of threats to U.S. national security for that year and covers a wide range of issues from economic problems through geopolitical questions, cyber threats, and terrorism to Weapons of Mass Destruction and the environment.

The first report released in 2006 informs, that U.S. Intelligence Community "has expanded the definition of bio-threats to the US beyond weapons to naturally occurring pandemics"[43]. As the report reads, the most dangerous pathogen is identified in the "new and deadly avian influenza strain", which breaks the species barrier[44]. The next report does not mention any kind of health emergency, constituting a threat to U.S. security[45]. The 2008 assessment reiterates concern for the possible emergence of deadly avian flu and adds

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[40] *Global Trends. Paradox of Progress*, Washington, D.C 2017, pp. 50-51.

[41] *Ibidem*.

[42] *Ibidem*, p. 92.

[43] *Annual Threat Assessment of the Director of National Intelligence for the Senate Select Committee on Intelligence*, < https://www.dni.gov/files/documents/Newsroom/Testimonies/20060202_testimony.pdf >, p. 24 (30.12.2021).

[44] *Ibidem*.

[45] See: *Annual Threat Assessment of the Director of National Intelligence*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20070111_testimony.pdf> (30.12.2021).

another dimension to the problem: "emerging pandemic also has the potential to be used as a weapon by a terrorist group or a technically experienced lone actor"[46]. The 2009 edition of the report devotes a whole section to health issues with a series of warnings about emerging new deadly pathogens. It also discusses other possible public health problems with the potential to turn into a large-scale crisis, i.e. chronic diseases, tropical diseases and child mortality[47].

The 2010 report is released in time of the swine flu pandemic. It contains a section titled *Strategic Health Challenges and Threats*, which offers a detailed analysis of the pandemic threat, populations' health worldwide and the lack of sufficient monitoring and surveillance systems. The report warns that the "international focus for avian influenza in Eurasia deflected international attention and resources away from the possibility of the emergence of a different virus, from another region, and from a different animal host"[48]. A similar section is included in the 2011 report. The swine flu pandemic remains a main point of reference. The report underlines inadequate levels of pandemic preparedness in the world, also in developed countries[49]. The 2012 report, in turn, remains silent about global health emergencies[50].

The next, 2013 edition of the assessment is prepared for the year, when the Middle East Respiratory Syndrome coronavirus (MERS-CoV), another zoonotic disease[51]. The report devotes a section to a brief discussion about the new, potentially dangerous pathogen, which can be a major disruption to global stability[52]. The 2014 report contains a section titled *Health Security Threats*.

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[46] *Annual Threat Assessment of the Intelligence Community for the Senate Armed Services Committee*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20080227_testimony.pdf>, p. 43 (30.12.2021).

[47] *Annual Threat Assessment of the Intelligence Community for the Senate Armed Services Committee*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20090310_testimony.pdf>, p. 44 (30.12.2021).

[48] *Annual Threat Assessment of the US Intelligence Community for the Senate Select Committee on Intelligence*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20100202_estimony.pdf>, pp. 41-43 (30.12.2021).

[49] *Statement for the Record on the Worldwide Threat Assessment for the Senate Committee on Armed Services*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20110 310_testimony_clapper.pdf>, pp. 31-33 (30.12.2021).

[50] *Unclassified Statement for the Record on the Worldwide Threat Assessment of the US Intelligence Community for the Senate Committee on Armed Services*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20120216_SASC%20Final %20Unclassified%20-%202012%20ATA%20SFR.pdf> (30.12.2021).

[51] *Middle East respiratory syndrome coronavirus (MERS-CoV)*, <https://www.who.int/ health-topics/middle-east-respiratory-syndrome-coronavirus-mers#tab=tab_1> (30.12.2021

[52] *Statement for the Record Worldwide Threat Assessment of the US Intelligence Community. Senate Select Committee on Intelligence* <https://www.dni.gov/files/NCTC/ documents/news_documents/2013_03_12_SSCI_Worldwide_Threat_Assessment.pdf> (30.12.2021).

This section lists five sources of the potential global health emergency: "the emergence and spread of new or re-emerging microbes; the globalization of travel and the food supply; the rise of drug-resistant pathogens; the acceleration of biological science capabilities and the risk that these capabilities might cause the inadvertent or intentional release of pathogens; and adversaries' acquisition, development, and use of weaponized agents. Infectious diseases, whether naturally caused, intentionally produced, or accidentally released, are still among the foremost health security threats"[53]. The report estimates, that the global outbreak could last for approximately two years[54].

The 2015 edition also discusses the question of pandemic threat. It can be assumed, that the report was influenced by the Ebola virus outbreak in West Africa. The assessment warns, that "the world's population remains vulnerable to infectious diseases because anticipating which pathogen might spread from animals to humans or if a human virus will take a more virulent form is nearly impossible". There is also a reference to population density and interconnectedness as potential drivers of the pandemic[55]. The 2016 assessment contains a reference to the Zika virus, which was the most important health emergency worldwide at that time[56]. The report mentions other important driving forces behind the potential pandemic: "human encroachment into animal habitats, including clearing land for farm use and urbanization"[57]. The 2017 edition of the assessment reiterates conclusions about the pandemic dangers from the prior reports, adding World Bank estimations of the cost of such an event (which is the equivalent of 4.8 per cent of global GDP, or more than $3 trillion)[58]. In 2018, the report underlined the raising frequency of disease outbreaks since 1980, pointing at population growth and urbanization, travel and trade patterns, and climate. MERS-CoV and various strains of influenza are listed as pathogens with particularly high potential for turning into

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[53] *Statement for the Record. Worldwide Threat Assessment of the US Intelligence Community. Senate Select Committee on Intelligence*, <https://www.dni.gov/files/documents/Intelligence%20Reports/2014%20WWTA%20%20SFR_SSCI_29_Jan.pdf>, pp. 11-12 (30.12.2021).

[54] *Ibidem*, p. 12.

[55] *Statement for the Record. Worldwide Threat Assessment of the US Intelligence Community. Senate Armed Services Committee*, <https://www.dni.gov/files/documents/Unclassified_2015_ATA_SFR_-_SASC_FINAL.pdf>, pp. 10-11 (30.12.2021).

[56] *Zika virus*, <https://www.who.int/news-room/fact-sheets/detail/zika-virus> (30.12.2021).

[57] *Statement for the Record. Worldwide Threat Assessment of the US Intelligence Community*, <https://www.dni.gov/files/documents/SASC_Unclassified_2016_ATA_SFR_FINAL.pdf>, p. 14 (30.12.2021).

[58] *Statement for the Record. Worldwide Threat Assessment of the US Intelligence Community. Senate Armed Services Committee*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/SASC%202017%20ATA%20SFR%20-%20FINAL.PDF>, p. 14 (30.12.2021).

a major, global threat[59]. The last report before the SARS-CoV-2 pandemic does not introduce new questions regarding health emergencies. It reiterates points from previous assessments and adds an analysis of the connection between conflicts and violence and the spread of infectious disease and the underlining vulnerability of the U.S. and the world[60].

The 2020 edition of the assessment was not published – it was blocked by the Trump Administration at the begging of the pandemic.

Ignored warnings

Intelligence supplies the government with information that helps to make decisions. Unfortunately, this simple rule is very often unable to overcome political obstacles. When a major emergency turns into a political crisis, intelligence organisations are to blame for the lack of timely and accurate information and – in consequence – lack of preparedness.

President Donald Trump simply choose to avoid another wave of critique and decided to block the publication of the Worldwide Threat Assessment report. According to *Time*, two senior government officials confirmed, that the 2020 edition of the report contained another warning about the potential global health emergency and underlined U.S. and world's vulnerability[61]. It was rather a symbolic move than a real action against the U.S. Intelligence Community, which often disagreed with President's view. If this question is tied to a massive critique of the Trump Administration's conduct during the pandemic, the approval ratings and PR questions can be seen as the most important factors behind this decision.

This case shows the larger problem of the appropriate use of intelligence information by top government officials. As it can be seen, in the period immediately preceding the pandemic, the Trump administration did nothing to raise the level of preparedness of the health security system. Contrary, the Administration cut funds in critical areas. In 2018 the Global Health Security and

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[59] *Statement for the Record. Worldwide Threat Assessment of the US Intelligence Community*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/2018-ATA---Unclassified-SSCI.pdf>, p. 17 (30.12.2021).

[60] *Statement for the Record. Worldwide Threat Assessment of the US Intelligence Community*, <https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf>, (30.12.2021)

[61] J. Walcott, *The Trump Administration Is Stalling an Intel Report That Warns the U.S. Isn't Ready for a Global Pandemic*, <https://time.com/5799765/intelligence-report-pandemic-dangers/> (30.12.2021). See also: *Statement before the U.S. Senate Committee on Armed Services Subcommittee on Emerging Threats and Capabilities. Biological Threats to U.S. National Security*, <https://www.armed-services.senate.gov/imo/media/doc/Gerberding_11-20-19.pdf>, p. 4 (30.12.2021); *Partly false claim: Trump fired entire pandemic response team in 2018*, <https://www.reuters.com/article/uk-factcheck-trump-fired-pandemic-team-idUSKBN21C32M> (30.12.2021).

Biodefense unit within the National Security Council was largely disbanded with some of its members reassigned to other positions (also within the health security realm), which disrupted U.S. preparedness and capabilities[62]. The Administration has also tried to cut funding for the Centres for Disease Control and Prevention (the claim that it succeeded was verified as false)[63]. This was the question of the political line of the Administration, but the problem is more complex.

The allocation of constrained resources is a difficult political decision. A warning about a pandemic is just one of many warnings passed by the U.S. Intelligence Community (and every other intelligence organisation). Prioritization of these warnings is a political question which is addressed differently by different political forces. How severe the pandemic threat was and what was the level of the Administration's awareness (Trump's and his predecessors') remain unknown because naturally, the most important and valuable intelligence is classified.

It is also required to consider the societal level of this question. This article discusses publicly accessible U.S. intelligence forecasts which should act as knowledge sources and awareness-building tools. Both in the U.S. and the world, because of the significance to the U.S. itself and the efficiency of American intelligence services (which was shown before the Russian invasion of Ukraine). It became clear, that those warnings were not appropriately understood and processed by authorities and societies.

Conclusion

The hypothesis put by the author was positively verified. The U.S. Intelligence Community repeatedly issued warnings about the growing threat of deadly pathogens generating global crises. That warning was ignored by successive Administrations in the U.S. The reasons for this ignorance varied from the mundane question of budget priorities to a lack of will to listen to the spies 'warning about the end of the world' every day. The authorities must have chosen between different threats to address. However, it is clear, that the level of preparedness for a pandemic should and could have been higher. Those warnings were also ignored by society in general, so there was no pressure on the government to act by tying this question to the political process.

The main objective of security forecasting is not the highest accuracy (although, some of the discussed scenarios were accurate), but to cause changes

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[62] L. H. Sun, *Top White House official in charge of pandemic response exits abruptly*, <https://www.washingtonpost.com/news/to-your-health/wp/2018/05/10/top-white-house-official-in-charge-of-pandemic-response-exits-abruptly/> (30.12.2021).
[63] L. H. Sun, *CDS to cut by 80 percent efforts to prevent global disease outbreak*, <https://www.washingtonpost.com/news/to-your-health/wp/2018/02/01/cdc-to-cut-by-80-percent-efforts-to-prevent-global-disease-outbreak/> (30.12.2021).

in approach, awareness, contingency planning, resources preparations and mindset – here and now.

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3. *Annual Threat Assessment of the Director of National Intelligence*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20070111_testimony.pdf>
4. *Annual Threat Assessment of the Intelligence Community for the Senate Armed Services Committee*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20080227_testimony.pdf>
5. *Annual Threat Assessment of the Intelligence Community for the Senate Armed Services Committee*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20090310_testimony.pdf>
6. *Annual Threat Assessment of the US Intelligence Community for the Senate Select Committee on Intelligence*, <https://www.dni.gov/files/documents/Newsroom/Testimonies/20100202_testimony.pdf>
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