

Navigating Geopolitical Turbulence: Essential Competence of the Defense Industry Manager

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Abstract: This study explores the essential change management competencies required of defence industry leaders and managers in the context of the amplification and complexity of today's geopolitical turmoil. Examining the direct and indirect impact of major crises, such as the war in Ukraine, the Hamas-Israel conflict, the US administration's tariff policies, and China's technological and military rise, the article emphasizes the need for personnel in this strategic sector to develop superior capabilities in anticipation, strategic adaptation, risk management, and international collaboration. By integrating recent literature from the fields of strategic management, geopolitics, security studies, and defence economics, the paper argues that mastering change is no longer an optional skill, but a fundamental competency for maintaining operational superiority, ensuring national security, and navigating effectively in an era of global uncertainty.

Keywords: change management, defence industry, international defence cooperation, operational resilience, strategic leadership

1 INTRODUCTION

The defence industry operates in a global environment characterized by intense geopolitical dynamics and the emergence of complex and interconnected security challenges. The beginning of the 21st Century and especially the last period of time has been marked by major political-military events; such as the Russian Federation's aggression in Ukraine (Kofman et al., 2023), the escalation of the persistent conflict between Hamas and Israel (Cordesman, 2024), trade policies impacting critical materials supply chains and the military and technological rise of China (Campbell, 2021). All of these have reshaped the global strategic landscape, in which the leadership of the United States - and implicitly its allies - is being strongly contested. For defense industry personnel, ranging from high-ranking officials to enterprise managers specialized in munitions and weapons manufacturing, the ability to understand, anticipate, and respond effectively to these turbulences is not just a matter of operational efficiency, but a strategic imperative for maintaining or more accurately, regaining competitive advantage and ensuring national security (Breakingdefence, 2022).

2. DIRECT AND INDIRECT IMPACT OF GEOPOLITICAL CRISES ON THE DEFENCE INDUSTRY

The current geopolitical crises have significant effects on the defence industry:

- The war in Ukraine: The most visible and far-reaching effect has been the increase in defense spending. Even N.A.T.O. member states agreed to allocate 2% of GDP, Romania theoretically allocates 2.24% of GDP to defense in 2025, with the possibility of expanding to 2.5% for armament. "It is a budget that takes into account the security situation in Romania's vicinity and is aligned with our country's membership in NATO and our EU missions" and "All procurement programs initiated by the Romanian Ministry of National Defense, as well as those that are in preparation, are aligned with the

provisions of Emergency Ordinance No. 124/2023 on the execution of technological and industrial cooperation in the fields of defense and security, which creates the premises for the involvement of economic operators from the national defense industry in the main armament programs carried out by the Ministry of National Defense" said Angel Tilvăr - Minister of National Defense, in regards to the support of the National Budget Law for 2025. However, the reality shows that Romania fails to meet its NATO commitment of 2%, not realizing the budgeted expenditure in the area of "armaments and equipment". Below is the evolution of defense spending as a percentage of GDP.

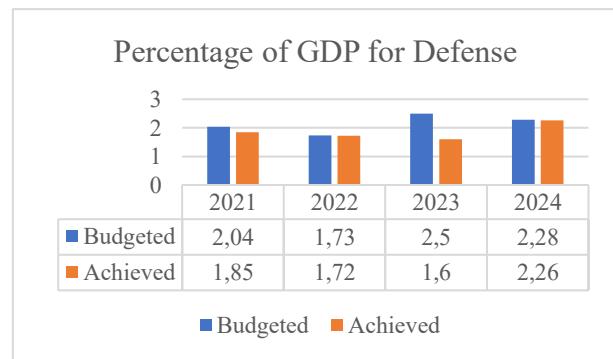


Fig. 1 Percentage of GDP for Defense in Romania

The conflict in Ukraine has also demonstrated the importance of technological and operational adaptability on the battlefield, highlighted vulnerabilities in ammunition and equipment supply chains, and stimulated a reassessment of military doctrines and defense requirements in many countries (Matthew Slusher, 2025). It has also accelerated international defense cooperation and the transfer of military technology (Andersson, 2023).

- The Hamas-Israel conflict: Emphasizes the importance of surveillance technologies, anti-missile defense systems and urban warfare. It also highlights the complexity of non-state actor involvement in conflict and the need for tailored response strategies (Selján, 2024).

• The Economic Tariffs Imposed by the U.S. Administration: have created uncertainty in global supply chains for critical materials used in the production of military equipment and required the identification of alternative sources and geographic diversification of suppliers. In the spring of 2025, the entire world found itself with its main market closing. Contrary to the globalization trend, the U.S. president is announcing tariffs that differ from state to state. Production costs and delivery times have exploded. This uncertainty has added to the already existing problems faced by the Romanian defense industry (lack of a gunpowder factory, outdated production lines, aging personnel, etc).

• The rise of China: It poses a long-term strategic challenge, spurring significant investment in military research and development and generating an arms race in certain regions. China is undoubtedly poised to overtake the United States as the world's leading global military power. China's military investments and subsidies are impressive, generating constantly adapting to cutting-edge technologies, new military capabilities and new offensive tactics (Digi24, 2025).

3. ESSENTIAL CHANGE MANAGEMENT SKILLS FOR DEFENSE INDUSTRY PERSONNEL

In this dynamic and complex context, leaders and managers in the defense industry need to develop and cultivate a specific set of change management competencies. The main competencies envisaged are:

• Geopolitical and Security Strategic Thinking: - Geopolitical and Security Strategic Thinking: A deep understanding of global power dynamics, strategic alliances, emerging threats, and the geopolitical implications of technology and procurement decisions is fundamental (Walt, 2018).

• Technological Anticipation and Operational Adaptation: The ability to anticipate disruptive technological developments (artificial intelligence, cyber warfare, autonomous drones) and rapidly adapt military doctrines, organizational structures, and acquisition processes is crucial to maintaining superiority (Laurence&Cordey, 2020)

• Strategic and Operational Risk Management: Identifying, assessing, and mitigating risks associated with geopolitical instability, supply chain vulnerabilities, and cyber threats are critical to ensuring operational continuity and information security (Kaplan & Mikes, 2012).

• Adaptive and Resilient Leadership in Volatile Environments: Leaders in the defense industry must inspire confidence and lead teams through periods of uncertainty and rapid change, fostering a culture of adaptability and continuous learning (Snook et al., 2009; Uhl-Bien et al., 2007).

• Effective International Collaboration and Partnerships: Building and maintaining strong relationships with international allies, industrial partners and research institutions is vital for information exchange, joint technology development and interoperability (Keohane & Nye, 2012).

• Management of Secure and Diversified Supply Chains: Ensuring access to critical materials and essential components by diversifying supply chains, identifying local and regional alternatives, and implementing robust cybersecurity measures is crucial (Sodhi & Tang, 2021).

• Strategic Communication and Public Relations: Effectively communicating the mission, challenges, and needs of the defense industry to policy makers, the general public, and allies is critical to garnering support and maintaining trust.

• Development and Procurement of Complex Endeavors: the ability to effectively manage the development and procurement of complex military equipment within established timelines and budgets; while adapting to changing technology and evolving operational requirements, is vital (Morris, 2017).

• Organizational Learning and Continuous Innovation: Fostering a culture of learning from experiences (including current conflicts), experimentation, and rapid adoption of technological innovations is essential for maintaining strategic advantage (Lundvall, 2010).

• Ethics and Responsibility in a Geopolitical Context: Ethical and responsible decision making in the context of geopolitical tensions and the implications of the use of military technology is a fundamental competency for defense industry personnel (Allen, 2015)

4. PRACTICAL EXAMPLES FROM THE DEFENSE INDUSTRY

Growing regional demand for munitions and military equipment has raised the need to revive domestic production capacities. There are plans and initiatives to change the image of defense industry enterprises, in the sense of modernization of state-owned factories subordinated to the National Company Romarm S.A., the main producer and direct exporter of military products in Romania. We cannot fail to notice the following steps in the right direction:

✓ The European Commission has approved €47 million for the construction of a new military gunpowder factory in Romania (Governance Course, 2024).

✓ Signing of Letters of Request (L.O.R) addressed to the U.S.A. for the co-production of both NATO standard 155 millimeters artillery projectiles as well as NATO 120 millimeters tank ammunition in the framework of state-owned defense industry enterprises.

✓ The start of the military drone production process in state-owned defense industry enterprises (Carfil S.A., 2025).

Through the PNRR (National Recovery and Resilience Plan), Romania has undertaken the reform of Corporate Governance, with the aim of achieving a minimum of 50% of the “Board of Directors” selection processes. In the Defense Industry, the percentage of companies having full members with a 4-year term of office exceeds 75%. This stability contributes directly to their performance and creates real scope for change.

Romania has sought to attract foreign investment and to develop technological partnerships with major global arms manufacturers for technology transfer and local production of components or systems. The National Strategy for the Defense Industry 2024-2030 emphasizes the importance of strengthening these partnerships (SGG, 2024). In this regard, we recall:

- ✓ Partnership between Carfill S.A – subsidiaries of C.N. Romarm S.A., and Periscope Aviation;
- ✓ Partnership between UPS Dragomiresti S.A. – subsidiaries of Romarm S.A. and General Dynamics;

Despite its potential, the Romanian defense industry faces significant challenges. A large proportion of the components used in local production are imported, up to 70% in some cases (Antena 3 CNN, 2025). Moreover, state-owned companies in the sector have historically faced mismanagement, lack of re-engineering and bureaucratic problems, which have delayed essential investments (Bursa.ro, 2022; Europa Liberă, 2025). This limits Romania's ability to take full advantage of increased demand and ensure real strategic autonomy.

5. IMPLICATIONS FOR THE TRAINING AND DEVELOPMENT OF DEFENSE INDUSTRY PERSONNEL

There is a recognition of the need to invest more in military R&D and to ensure a skilled workforce, which are crucial for the long-term sustainability of the industry (SGG, 2024). The implications for the training and development of leaders and senior management in the defense industry are significant. Military educational institutions and professional development programs must integrate elements of geopolitical strategic thinking, geopolitical risk management, technology foresight, adaptive leadership, and resilient supply chain management into the curriculum. Simulation exercises and case studies based on actual geopolitical scenarios can contribute to the development of these essential skills.

6. CONCLUSIONS

In conclusion, today's geopolitical environment, marked by regional conflicts, great-power tensions and rapid technological developments, is placing unprecedented demands on leaders and senior management in the defense industry. Mastering change management, in its most comprehensive sense, including understanding geopolitical dynamics, strategic

adaptation, risk management, international collaboration and continuous innovation, is no longer a secondary skill, but a core competency for maintaining operational superiority, ensuring national security and navigating effectively in an era of global uncertainty. Investing in the development of these competencies is a strategic priority for any defense industry organization aspiring to successfully meet the complex challenges of the future.

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