EDITORIAL FOREWORD

From jubilee reflection to logistics capability, resilience and implementation

It is with great pleasure that we present Issue 1/2026, Volume 64 of *Systemy Logistyczne Wojsk / Military Logistics Systems*. This issue continues the jubilee year of the journal, which marks fifty years of its contribution to the development of military and civil logistics research. The previous issue opened this anniversary reflection by recalling the journal's history, identity and institutional development. The present issue takes the next step: it turns from remembrance towards the future, asking how logistics research can support operational capability, resilience, technological implementation and responsible management in a rapidly changing security environment.

The fiftieth anniversary of *Military Logistics Systems* is not only an occasion to look back. It is also a moment to reaffirm the role of the journal as a platform connecting military logistics, civil logistics, crisis management, transport, supply chains, infrastructure, digital technologies and security studies. Since its establishment, the journal has accompanied the evolution of logistics from a primarily material and organisational function into a complex, data-driven and interdisciplinary system supporting military readiness, state resilience and economic continuity. The articles included in this issue reflect precisely this transformation.

The jubilee context of this volume is broader than the journal itself. It coincides with the 75th anniversary of the Military University of Technology, an institution whose mission combines military service, engineering education, scientific research and technological development. It also follows the main jubilee events organised during the 17th Scientific Conference on Applied Logistics, devoted to dual-use technologies in civil and military logistics. This conference provided an important forum for discussing the role of logistics at the intersection of theory and practice, military and civilian applications, academic research and institutional needs. In this sense, the jubilee of the journal was celebrated not only as a ceremonial event, but also as a working debate on the future of logistics systems.

The programme of the conference also created space for reflection on the functioning of territorial logistical support within the Polish Armed Forces. This perspective is particularly important today, when logistics must be understood not only as the movement of people, equipment and supplies, but also as a system of readiness, continuity and adaptation. Territorial, operational and strategic dimensions of logistics increasingly overlap with technological, legal, informational and infrastructural conditions. The present issue reflects these interdependencies by bringing together papers that address both classical military logistics problems and emerging challenges related to innovation, cybersecurity, artificial intelligence, unmanned systems, transport digitalisation and sustainability.

The opening article returns to one of the core areas of military logistics: fuel supply. It proposes a model for assessing the mobility of a fuel supply system in an operational-tactical troop grouping. The article addresses the need for probabilistic and analytical tools that support command decision-making under uncertainty. In doing so, it shows that logistics mobility cannot be reduced to physical displacement alone; it also depends on the ability to estimate time, risk and the probability of timely task execution.

The second article focuses on food supply for small groups of soldiers using unmanned aerial vehicles. It combines a practical military logistics problem with an emerging technological solution. The study demonstrates the exploratory potential of UAV-supported delivery in situations where conventional supply routes may be risky, delayed or unavailable. Together with the first article, it anchors the issue in the fundamental sustainment functions of armed forces: fuel, food, mobility and continuity of support.

The third article shifts attention from operational supply to the institutional conditions of defence capability development. It analyses intellectual property rights management in defence research and development projects and its implications for the use of publicly funded results. The article shows that technical documentation, access rights and the ability to modify and further develop technologies are not merely legal issues. They are also logistics issues, because they determine whether military equipment can be maintained, modernised and supported throughout its life cycle. This contribution therefore forms a bridge between classical military logistics and the wider system of defence innovation.

The next two articles examine advanced technologies used to protect critical infrastructure and organisational security. One of them analyses the integration of artificial intelligence into air defence systems protecting critical infrastructure. It explores how AI-enabled sensing, classification, trajectory prediction and decision support may improve the performance of air-defence processes under simulation-based conditions. The following paper investigates unmanned aerial vehicles as tools for controlling selected aspects of an organisation's security. It shows how UAV-supported inspections may improve situational awareness, documentation quality and the safety of personnel, especially in technical safety and physical security tasks. Both articles demonstrate that logistics infrastructure increasingly depends on technologies capable of monitoring, protecting and supporting decision-making in complex environments.

The issue then moves from technological protection to the informational and crisis dimensions of logistics. The article on the role of logistics in the state security system under disinformation threats highlights the indirect mechanisms through which information disorder may affect crisis logistics. It emphasises that logistics effectiveness depends not only on infrastructure and resources, but also on trust,

perception, decision-making and social behaviour. This perspective is continued in the study on crisis communication during the September 2024 floods in Poland. The article provides an empirical case showing the importance of communication continuity, warning systems, coordination and information resilience in crisis management. These two papers remind us that logistics systems operate in informational environments that can either support or destabilise response operations.

Cybersecurity is another dimension of resilience addressed in this volume. The article on cybersecurity risk assessment of suppliers in the supply chain proposes a decision-support model based on the Analytic Hierarchy Process and a scoring approach. It shows that supplier risk must be assessed not only in terms of operational dependency, but also through exposure to threats, technical vulnerability and potential impact on continuity. This contribution is especially relevant in an era when logistics networks depend on digital platforms, data exchange and interorganisational connectivity.

The following group of articles broadens the perspective towards transport systems and digital logistics. The paper on the management of logistics processes in road freight transport under conditions of sectoral digitalisation examines how GIS, IoT and hybrid management models may support the optimisation of logistics flows. The bibliometric analysis of project logistics in maritime transport maps the scientific development of a field that is crucial for oversized cargo, specialised operations, heavy-lift capabilities and maritime supply chains. The article on public transport in modern cities then shifts the focus towards urban mobility, showing how integrated public transport models, route coordination and infrastructure planning affect the efficiency and sustainability of contemporary cities.

The final article addresses waste management logistics and improvement proposals in an industrial enterprise. It applies FMEA to identify critical risks in waste handling, documentation, storage and digital traceability. By closing the issue with waste logistics, the volume underlines that logistics research today must also engage with sustainability, circular economy, compliance and environmental responsibility. Military, crisis, transport and enterprise logistics differ in context, but they share a common need for process visibility, risk assessment, integration of data and practical improvement.

Taken together, the twelve articles in this issue form a coherent picture of contemporary logistics research. They move from sustainment of troops to defence innovation, from AI and UAV technologies to crisis communication and cybersecurity, from freight and maritime transport to urban mobility and waste management. This order reflects the broad identity of *Military Logistics Systems*: a journal rooted in military logistics, but open to the civil, economic, technological and environmental dimensions of logistics systems.

The jubilee year is also a moment to reflect on the future standards of scientific publishing. Academic journals operate today in an evolving environment of evaluation, international indexing, open science, research ethics and methodological transparency. For *Military Logistics Systems*, the most credible response to these changes is to continue strengthening the quality of published research: clearly formulated research gaps, transparent methodologies, reproducible analyses where possible, responsible use of data, international dialogue and practical relevance for military and civil logistics communities.

The present issue therefore treats the jubilee not as a closing point, but as a commitment. Fifty years of the journal's development provide a strong foundation, but the challenges ahead require continuous adaptation. Logistics systems must become more resilient, more digital, more interoperable and more capable of supporting decision-making under uncertainty. They must also remain connected to practice: to armed forces, public administration, industry, transport operators, crisis-management institutions and academic research.

We would like to thank all Authors, Reviewers, Members of the Scientific Board, Editorial Board and the wider community of the Military University of Technology for their contribution to this jubilee volume. Their work confirms that logistics remains one of the key systems linking resources, technologies, decisions and security. We hope that the articles included in this issue will inspire further research, discussion and practical implementation in both military and civil logistics.

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