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EMERGING SPACE ECONOMY IN SERBIA: POLICY GAPS, INSTITUTIONAL DESIGN, AND STRATEGIC PATHWAYS FOR INTEGRATION INTO THE GLOBAL SPACE SECTOR

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ABSTRACT

The global space economy has entered a phase of accelerated growth, driven by the emergence of the New Space paradigm, increased private sector participation, and the expansion of downstream applications across multiple industries. While leading spacefaring nations continue to strengthen their strategic positions, an increasing number of small and emerging economies are seeking pathways to integrate into the global space ecosystem. In this context, Serbia represents a case of a country with a solid scientific foundation but without a fully developed institutional and industrial framework for space activities.

This paper examines the current state of the space economy in Serbia through a multidisciplinary lens encompassing policy, law, economics, and institutional development. Drawing on internationally recognized definitions of the space economy (OECD, BEA) and recent global market trends, the study analyzes Serbia's existing capacities, including its scientific institutions, participation in international research initiatives, and emerging technological competencies. Particular attention is given to institutional gaps, including the absence of a national space strategy, limited regulatory framework, and lack of a dedicated coordinating body for space activities.

The research identifies key structural challenges that hinder the development of a national space ecosystem, such as fragmentation of stakeholders, insufficient funding mechanisms, limited industry participation, and the ongoing issue of brain drain. At the same time, the paper highlights

strategic opportunities for Serbia, particularly in downstream segments such as Earth observation applications, data analytics, small satellite development, and space situational awareness.

Building on this analysis, the paper proposes a set of policy-oriented recommendations aimed at enabling Serbia's gradual integration into the global space economy. These include institutional reforms, such as the establishment of a national space office or agency, re-engagement with international governance frameworks (including COPUOS), strengthening public-private partnerships, and fostering innovation ecosystems through science and technology parks. The study also outlines a phased development model for Serbia's space sector, emphasizing the alignment of scientific potential with economic and industrial policy.

The paper contributes to the broader discourse on the role of emerging space nations by offering a structured framework for understanding how smaller economies can strategically position themselves within the rapidly evolving global space sector. It further underscores the importance of coherent policy design and international cooperation as key drivers of sustainable growth in the space economy.