

5 - 7 December 2025

Dublin, Ireland

# Active Resource Management for Hydrogen, Smart Airports and Mobility

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## Abstract

The new geopolitical evolution places Europe in the face of multiple challenges. The “erupting systemic conflict between authoritarian and liberal states,” as Chancellor Friedrich Merz stated, compels a deeper reconsideration of an earlier warning by German Economics Minister Katherina Reiche: “The neoliberal world order as we knew it is slowly but surely becoming a thing of the past. The economy is no longer driven by economic logic, but by the geopolitical interests of a new world order.” Historically, such shifts have emerged in the aftermath of war. In this context, the EU-funded ASKLEPIOS project, supported by the NextGenerationEU framework, has developed assistive robotic technologies designed to improve the motor functions of patients with neurological disorders and support teleoperated medical intervention. This work now calls for extension into conflict-affected regions, particularly Ukraine. The paper explores the alignment between these technologies and the aerospace transport sector, which is undergoing profound transformation due to geopolitical turbulence, climate pressure, and supply chain fragility. With over one billion people suffering from neurological conditions, representing 6.3% of the global disease burden - European strategies such as the Green Deal, the ESA 2040 Strategy, the forthcoming EU Space Act, and significantly increased defense funding highlight the urgency for integrated frameworks. We introduce the concept of active resource management for MCV (Medical and Casualty Evacuation), a cooperation and verification mechanism that unites robotics, climate neutrality, and industrial autonomy into a comprehensive response strategy. This framework supports resilience, security, and sustainable mobility within an evolving geopolitical and technological landscape.

**Keywords:** Assistive Tele-Robotics; Green Deal; MCV; Rehabilitation Strategy; Sustainable Mobility.