Geodesy Matters – Reinstating the Foundations of Spatial Education and Knowledge in Europe (and in the World)

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SUMMARY

Geodesy, land - and engineering surveying form the invisible yet indispensable infrastructure of modern society. From securing property rights and enabling sustainable urban development to supporting climate resilience and digital transformation, the contributions of geodetic professionals are foundational. Yet, paradoxically, the academic and institutional support for this profession is in decline. Across Europe, universities are reducing and in some cases closing their geodesy and survey programmes. This decline is threatening the continuity of expertise in a field that is more critical now than ever before.

This presentation explores the topic "Geodesy Matters", adopted by the Council of European Geodetic Surveyors (CLGE) as the central theme for 2025. It draws on the Dublin Declaration, adopted at the X CLGE Conference of the European Surveyor, which articulates a collective commitment to reinvigorate the profession through education, advocacy, and collaboration. The declaration highlights the urgent need to protect and modernise geodetic education. It is warning that without a new generation of well-trained professionals, Europe risks undermining its capacity to manage land, infrastructure, and environmental challenges effectively.

The presentation examines the evolving role of the geodetic surveyor in the context of increasing technical complexity and legal scrutiny. It emphasises the growing demand for accuracy and precision in construction, spatial data management, and regulatory compliance — demands that require not only technical proficiency but also ethical responsibility and interdisciplinary collaboration. The profession’s DNA lies in its ability to ground and bridge the virtual and physical worlds, translating digital models into real-world applications with accuracy, precision and

accountability.

Despite these critical functions, the erosion of academic programmes in geodesy, land - and engineering surveying signals a dangerous disconnect between societal needs and educational priorities. This presentatoin argues that reversing this trend is not merely a professional concern but a strategic imperative for Europe's resilience and innovation.

We therefore issue a clear and urgent call to the academic and political communities: Reinstate and strengthen geodesy, land - and engineering surveying education across Europe. Invest in the next generation of spatial professionals, not merely those focusing on the visualisation and interpretations of the data via GIS. We need to recognise geodesy is the cornerstone that the more modern spatial sciences need to underpin and secure Europe's digital and sustainable future.