

GEOSA's Geospatial Transformation: Driving Economic Development through Governance, Regulation, and Smart Oversight

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SUMMARY

The geospatial sector is undergoing a fundamental transformation from a traditionally data-centric function into a strategic enabler of national economic development. In this context, the General Authority for Survey and Geospatial Information is leading a comprehensive transformation in the Kingdom of Saudi Arabia—shifting from geospatial data production to an integrated role focused on governance, regulation, oversight, and economic enablement.

This paper presents GEOSA's evolving mandate in organizing the surveying, geospatial information, and imaging sector through the development of regulatory frameworks, policies, and standards that ensure quality, interoperability, and compliance. GEOSA plays a central role in supervising and monitoring sector activities, enhancing performance, and enabling a trusted national geospatial ecosystem.

Key initiatives include the establishment and modernization of national geodetic infrastructure and reference frames, as well as the expansion of high-precision services such as the national CORS network. In addition, advanced geospatial data acquisition technologies—such as mobile mapping systems—are being adopted to enhance data accuracy, coverage, and timeliness, supporting applications in smart cities, transportation, and infrastructure monitoring.

In parallel, GEOSA is introducing advanced regulatory and enablement mechanisms, including licensing and permitting systems, classification and qualification frameworks, and compliance monitoring to ensure adherence to standards and best practices. To support innovation and investment, GEOSA is enabling new platforms such as geospatial sandbox environments for testing emerging technologies (including mobile mapping, digital mapping, and smart navigation solutions), and facilitating investment opportunities through structured, data-driven

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processes.

These efforts are complemented by a strong focus on beneficiary engagement, streamlined access to geospatial services, and the development of national capabilities. Aligned with its vision of a smart, sustainable, and high-impact geospatial sector, GEOSA is strengthening international collaboration through platforms such as Fig and UN-GGIM.

The paper concludes by outlining GEOSA's strategic direction toward smart governance, regulatory excellence, and positioning geospatial as a critical pillar for economic diversification, sustainability, and evidence-based decision-making.

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