Accreditation and regulatory frameworks for a successful and sustainable geospatial profession in The Kingdom of Saudi Arabia. (14058)

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Key words: regulation, skills, competency, assessment

1. SUMMARY

An initiative led by the General Authority for Survey and Geospatial Information (GEOSA) in the Kingdom of Saudi Arabia, working with the Royal Institution of Chartered Surveyors (RICS), seeks to establish an accreditation framework for land surveyors.

The program is designed to set professional accreditation and registration requirements that meet international standards while reflecting national priorities.

Professionals working in the sector will be required to adhere to the highest standards of professionalism and technical competence, which will be assessed through a new robust assessment model, based upon best practice knowledge, skills, and competencies, and aligned to international assessment standards.

To achieve this, a range of assessment methodologies (e.g. competency-based evaluations, technical examinations, structured interviews) will be incorporated to ensure rigor, transparency, and fairness within the accreditation rules and requirements.

These requirements will be supported by a strong regulatory framework model ensuring ongoing professional practice standards, and a supportive, proactive approach to the regulation of professional practice.

International benchmarking is a key aspect of the approach, evaluating geospatial practice in a number of countries and existing regulatory systems. A comparative review of eight

jurisdictions (KSA, UK, USA, New Zealand, South Africa, Malaysia, UAE, Oman) across 13 thematic areas helped to identify common areas of practice, different approaches, and items of best practice.

This is an important initiative supporting Saudi Vision 2030 that will enhance workforce efficiency by clearly defining the skills and knowledge required for practice, support training and education programmes by providing a reference framework for learning, enable career planning and professional development, and introduce standardised assessment criteria.

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CREATING A REGULATORY FRAMEWORK

Professionalism is the competence and conduct expected of an individual engaged in a specified activity. Statutory regulators and traditional professional bodies commonly focus on the same core functions to maintain and provide assurance of the competence and conduct of their members:

• entry standards and processes;

• registration and the maintenance of a public facing register;

• ethical, conduct of business and technical standards and best practice guidance;

• continuing competence requirements; and,

• assurance, investigation, discipline and enforcement.

The way organisations implement these functions varies depending on their mission, values and the outcomes they are trying to achieve. Importantly, they vary depending on the nature of the professionals they are regulating, their work, the context within which it is being delivered and the nature of the clients receiving or purchasing services.

Geospatial surveying, and particularly land surveying, in Saudi Arabia is served by a number of complimentary requirements. The licensing landscape is simultaneously simple and complex; in that there is a clear and recognised need for individual competency requirements for practitioners who operate in a wide variety of roles serving public and private clients.

Robust entry requirements are therefore critical to maintaining standards and ensuring an individual is fit to practise, ensuring that assessment requirements support industry needs, and provide accessible routes into the profession.

The building blocks of a geospatial professional framework exist within the education and training systems in the Kingdom, through the provision of land survey degrees at Higher Education Institutions or training delivered the GEOSA Academy and entities aligned with the GEOSA geospatial skills guidelines. These elements are supported by a comprehensive, structured pathway for the professional accreditation and registration of land surveyors.

Designed to align with national geospatial strategies and international best practices, the framework ensures that individuals entering the profession meet rigorous standards of education, experience, and ethical conduct.

A tiered level registration system which includes structured assessment methods ensure competency at each stage of registration.

The entire framework is underpinned by robust policies and regulation covering standards and discipline, ensuring integrity, accountability, and alignment with national geospatial governance.

These processes are key as the decision to certify an individual is one of the most important decisions a certification body can make and represents the public reputation of the body. This is even more important when the certification body will align to recognised international standards, in this case ISO: 17024.

The responsibility to set a framework for classifying, assessing and registering individuals will be overseen by an appropriate group of internationally and locally recognised experts.

2. SKILLS AND EXPERIENCE

GEOSA geospatial skills guidelines support alignment between registration and technical practices and enhance workforce development and educational planning in the geospatial sector.

These knowledge, skills and behaviours will be applied to form the basis for the accreditation framework and the matrix to assess and measure practitioner's competency. The framework highlights the distinctions in roles, required skills, and qualifications.

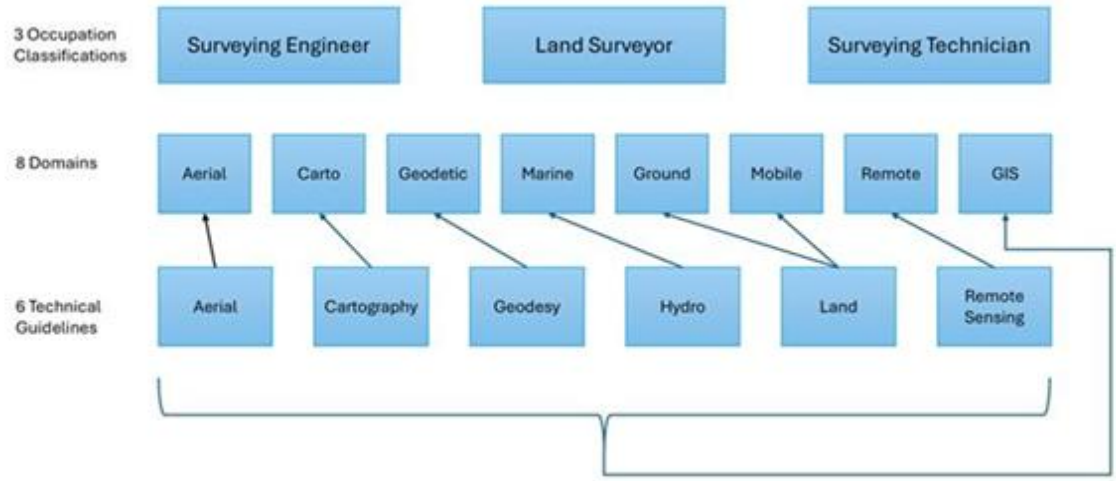
By understanding the tools, techniques, and knowledge required for each survey type and how they relate to specific roles, stakeholders can better design training programs, support career development, and ensure consistency across the geospatial profession. Such alignment is

essential for fostering mobility, competence recognition, and innovation in surveying and geospatial sciences.

Levels of technical competence are underpinned by a clear and consistent assessment structure, which defines the specific knowledge, technical and professional skills required at each level of certification. For land survey, GEOSA's suite of six technical standards documents provide an outline framework for initial assessment to practitioner certification levels, including the skills requirements.

The Professional Domains Skills and Competencies Guide, sets out the requirements for individual registration. The model is designed to be iterative and adaptive, so that the impact of geospatial technologies and future developments, including AI and indoor drones, which promise to further transform the profession, can be considered within future versions.

This figure shows the connectivities between the domains of practice, and technical guidance documents in the new registration framework, under an overarching Geomatics field.



With these developments, GEOSA has begun the next steps towards individual certification and the launch of a register of geospatial practitioners in Saudi Arabia.

3. CONCLUSION

Responsibility for a register of practitioners is a key regulatory tool. It provides a controllable and auditable decision point for when individuals are able to practice and maintain their

registrations. It is used by the employers, public and consumers to identify whether or not someone has met the standards of entry and ongoing registration requirements.

BIOGRAPHICAL NOTES

Eng. Abdulmajid Al-Anazi is the Executive Director of Practitioners Qualification and Classification at the General Authority for Survey and Geospatial Information (GEOSA) in the Kingdom of Saudi Arabia.

Nawaf Alyousef is an Advisor at GEOSA, leading the development of practitioner registration processes.

Ian Jeal is the Executive Director, Education and Qualification Standards at The Royal Institution of Chartered Surveyors (RICS). He is responsible for the assessment of surveyors for entry to the RICS Register of Members, and for the accreditation of academic education programmes.

James is the head of Land & Resources (L&NR) at The Royal Institution of Chartered Surveyors (RICS) with direct responsibility for the geospatial sector and the management of best practice standards and output across all L&NR sectors.

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