Practice and Reflection on China's Registered Surveyors System

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SUMMARY

The article Practice and Reflection on China's registered surveyors system elaborates on the legal basis for establishing the system of registered surveyors in China and the normative documents currently in force. It introduces the acquisition and termination of the registered surveyor qualification, registration, continuing education, and practice within China. The article also analyzes the current status of registered surveyors in China, identifying problems and challenges encountered during the implementation of the system. These issues cover the qualification acquisition and practice of registered surveyors, the management of their employing units, the value orientation of administrative authorities, and the role of registered surveyors. In response to these problems, the article proposes suggestions for reform and improvement.

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Since the early 1990s, China has gradually deepened market-oriented economic reforms. The surveying and mapping (S&M) administration system has also moved towards marketisation. Competitive bidding has become the dominant way of awarding S&M projects serving both government management and private-client transactions; private enterprises increasingly participate alongside traditional state-owned agencies. In parallel, the government reshaped market entry rules—setting qualification thresholds for S&M entities and exploring professional certification for individuals. After China's accession to the WTO in 2001, a package of laws was amended to honour WTO commitments. In 2002, The Surveying and Mapping Law of the People's Republic of China was revised, introducing an individual access regime, stipulating that "professional and technical personnel engaged in surveying and mapping activities shall possess the appropriate practice qualifications". To implement this provision, in January 2007 the State Council issued ten supporting documents including the Interim Provisions on the Registered Surveyors System, defining examination syllabi, registration, continuing education and practice rules. The institutional framework of Registered Surveyors System was basically established.

1.Entry and Post-licensure Oversight of China's Registered Surveyors

1.1Entry administration

Eligibility is obtained through a unified national examination, which is conducted under a unified national syllabus and unified questions, and is held once a year in principle.The examination comprises three modules:a) S&M Management, Laws and Regulations; b) Comprehensive S&M Capabilities;c) S&M Case Analysis. Only after being registered may a registered surveyor practise under the title "Registered Surveyors". A qualified registered surveyor must apply for registration through an entity that already holds a surveying and mapping qualification certificate. For a long time, the Chinese authorities have improved the approval mechanism by streamlining the online registration-management system and introducing innovative measures, establishing a four-tier model: application for Registered Surveyors→ review by a qualified entity → examination by the provincial authority → approval by the Ministry of Natural Resources. By vigorously promoting an "Internet Plus" service model, they have realized networked, paperless administration, optimized registration

services, and raised approval efficiency, with an average of about 7,000 registrations processed each year.

1.2 Ongoing and ex-post supervision.

Firstly, continuing professional development (CPD). CPD is a key step for enhancing the quality and capacity of Registered Surveyors. A decade ago, the Chinese government built an on-line CPD platform that supports on-line enrolment and authentication, course selection, real-time credit tracking, dynamic course updating and seamless data exchange. Leveraging the "Internet-plus" approach, the authority has made the system increasingly professional and public-interest-oriented; CPD for Registered Surveyors is now delivered mainly through free web-based training. By the end of 2025 the platform had enrolled more than 20,000 registered learners and provided a cumulative total of one million with free internet training. Secondly, the extinguishment of Registered Surveyors's registration . A registered surveyor's registration is cancelled or revoked under any of eleven statutory circumstances, such as loss of civil conduct capacity, criminal punishment, or acquisition of the certificate by improper means.

2. Rights and Obligations of China's Registered Surveyors

2.1 Registered surveyors shall have the following rights:

To use the title "Registered Surveyors";
To keep and use his/her own Certificate of Registration and practice seal issued by the People's Republic of China;
To engage in surveying and mapping practice within the prescribed scope;
To receive continuing professional development;
To advise against any violation of laws, regulations or technical standards and to report such violations to the higher surveying and mapping administrative authority;
To obtain remuneration commensurate with his/her professional responsibilities;
To appeal against any infringement of his/her professional rights.

2.2 Registered Surveyors shall perform the following obligations:

Comply with laws, administrative regulations and relevant management provisions, and uphold professional ethics;
Implement surveying and mapping technical standards and specifications;
Fulfill job responsibilities, ensure the quality of professional practice outcomes, and assume corresponding responsibilities;

Keep confidential any state secrets and the commercial and technical secrets of commissioning units that they become aware of;
Be employed by and practice at only one entity with surveying and mapping qualifications;
Not permit others to practice in their own name;
Update professional knowledge and improve professional technical competence;
Complete relevant work assigned by the registration management authority.

3.Design of Practice System for Registered Surveyors in China

According to relevant Chinese government documents, a registered surveyor shall, at an entity with surveying and mapping qualifications, conduct surveying and mapping practice activities corresponding to that entity's qualification level and business scope.

Technical design documents and surveying and mapping product quality documents formed during surveying and mapping activities must be signed by a registered surveyor and affixed with a practice seal before they can become effective.

Modifications to surveying and mapping documents signed and sealed by a registered surveyor shall be made by that registered surveyor himself/herself; if the registered surveyor is unable to make modifications due to special circumstances, another registered surveyor shall make the modifications, sign and seal them, and simultaneously assume responsibility for the modified portions. When a registered surveyor engages in professional practice activities, the entity where he/she is employed shall accept commissions and collect fees uniformly. Economic losses caused by quality problems in surveying and mapping products shall be compensated by the entity that accepted the commission. The entity that accepted the commission shall seek recourse from the registered surveyor who undertook the surveying and mapping business in accordance with the law.

3.1 Scope of Practice for Registered Surveyors:

Technical design of surveying and mapping projects;
Technical consultation and technical assessment of surveying and mapping projects;
Technical management, guidance and supervision of surveying and mapping projects;
Quality inspection, review and authentication of surveying and mapping products;
Other surveying and mapping business specified by relevant departments of the State Council.

3.2 Professional Competencies Registered Surveyors Should Possess

Being familiar with and master national surveying and mapping and related laws, regulations and rules;

Understanding the development status of international and domestic surveying and mapping technologies, having relatively rich professional knowledge and technical work experience, and being able to handle relatively complex technical problems;

Being Skillful in applying surveying and mapping related standards, specifications and technical means to complete technical design, consultation, assessment of surveying and mapping projects, and quality inspection management of surveying and mapping products;

Having the ability to organize and implement surveying and mapping projects.

4. Current Status of China's Registered Surveyor Workforce

Since 2011, relevant Chinese government departments have organized and implemented 15 national Registered Surveyor qualification examinations. By the end of 2025, approximately 30,000 individuals in China have obtained the Registered Surveyor qualification through these examinations, representing about 5% of practitioners in the field. From a regional economic development perspective, their distribution across the three major economic zones is as follows: eastern region (12 provinces/municipalities) 52.9%, central region (9 provinces) 26.8%, and western region (10 provinces/municipalities) 20.3%.

The vast majority of Registered Surveyors hold professional and technical positions, with the engineering series being the primary title sequence. Specifically, one-third hold senior professional and technical titles, while approximately 40% hold intermediate titles. Nearly one-third of Registered Surveyors also hold management positions in their workplaces, with over 10% serving as senior management personnel.

Over the years, several issues have emerged during the implementation of China's Registered Surveyors system:Firstly, institutional development has lagged behind. The current system framework was established a decade ago. Some provisions no longer align with current policy requirements and practical realities. The system urgently requires comprehensive revision and improvement, the legal hierarchy needs elevation, and systematic establishment, amendment, and abolition of regulations are necessary.

Secondly, the total number is relatively insufficient with uneven regional distribution. Class-A qualification units employ significantly more Registered Surveyors than Class-B units. Eastern and southern regions have substantially more Registered Surveyors than western and northeastern regions. Public institutions and large enterprises also have higher numbers compared to small and micro enterprises.

Thirdly, the alignment between examination and practical application needs improvement. The qualification examination covers extensive content across multiple specialties with a broad knowledge scope, making it highly challenging and creating a disconnect between tested knowledge and practical needs. Some examination passers lack adequate practical experience, rendering them unqualified for key positions such as project technical leaders or quality control managers.

Fourthly, practice requirements are unclear and operational mechanisms are not well-established. Current regional pilot programs primarily focus on encouragement. While the Surveying and Mapping Law specifies legal liabilities for employing units, existing regulations lack clear provisions on accountability and responsibility determination for individual Registered Surveyors. The relationship between responsibilities, rights, and benefits remains ambiguous, an integrity system has yet to be established, and problem accountability is difficult to define.

5. Considerations for Advancing the Implementation of China's Registered Surveyors System

First, improve and perfect the institutional system. To address the problems of lagging institutional development and unclear practice requirements for the Registered Surveyors system, we can deliberate on and timely revise relevant policy provisions regarding qualification examinations, registration, and continuing education. Properly handle the relationship between the Registered Surveyors system and the current management system. On the basis of promoting Registered Surveyors' practice, research and issue practice norms and standards in combination with practical realities, improve and implement the responsibilities, rights, and benefits of Registered Surveyors, pay greater attention to institutional linkage with project management, product management, quality management, and integrity management, and promote the gradual integration and improvement of the institutional framework system.

Second, optimize the Registered Surveyor examination and continuing education and training. To address the current problem of insufficient numbers of Registered Surveyors, which to some extent affects the implementation of the Registered Surveyor system in project production management, we should continuously improve the scientific nature of examination questions, gradually solve the problem of misalignment between examination and practical application, continuously enhance question quality, emphasize comprehensive analysis and practical abilities, and solve practical problems, so that those who pass the examination can effectively play their roles in project operation management within their areas of expertise. At the same time, firmly grasp the professionalism and public welfare nature of continuing education and training, closely follow the development trends of the surveying and mapping

industry and the promotion and application of new technologies, dynamically update learning resources, adopt diversified continuing education and training models, and through approaches such as improving training faculty quality, enriching training content, improving training methods, and linking training with actual work, enable them to better play their roles in project production management.

Third, improve the efficiency of registration approval services. Streamline approval processes, optimize service methods, and reduce processing time limits. We can pilot a notification and commitment system for certification matters, simplify the certification materials required from applicants, and strengthen verification during and after the process. Explore the implementation of electronic registration certificates and seals for Registered Surveyors. Accelerate the upgrading of information technology infrastructure for Registered Surveyors, and enhance the administrative management and social service efficiency of the registration management system and continuing education system.

Fourth, establish a practice supervision system. To address the problem of an imperfect practice mechanism for Registered Surveyors, we can formulate measures for the supervision and management of Registered Surveyor integrity files, explore the establishment of a supervision mechanism centered on practice quality management and a Registered Surveyor integrity system with files and credit evaluation as its main content, improve the accountability system for Registered Surveyor practice, and gradually form a credit management-based supervision system for Registered Surveyors with appropriate alignment of responsibilities, rights, and benefits.

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BIOGRAPHICAL NOTES

WU, Weidong, Deputy Director General of the Human Resources Development Center at China's Ministry of Natural Resources and holds the title of Researcher. With extensive experience in legal frameworks for surveying and mapping, market regulation research, human resource development, professional qualification systems, and talent evaluation, he

possesses profound expertise in natural resource policies and regulations. His professional expertise includes rigorous theoretical knowledge and extensive practical experience. Wu has led multiple landmark projects: the "Geographic Information Security Policy and Legal Strategy Research," specialized studies on the "Surveying and Mapping Law of the People's Republic of China," drafting the "Surveying and Mapping Qualification Grading Standards (2009 Edition)," developing national vocational skill standards for "Real Estate Surveyors" and "Unmanned Aerial Vehicle Survey Operators," and revising the "Occupational Classification Dictionary of the People's Republic of China" for natural resource-related fields in 2015 and 2021. He has also contributed to the "Surveying and Mapping Development Strategy Research," participated in drafting the "Surveying and Mapping Law of the People's Republic of China (Revised Draft)," and engaged in the formulation and review of the "Basic Surveying and Mapping Regulations (Draft for Review)" and "Map Management Regulations of the People's Republic of China (Draft for Review)."

ZHAO, Zheng, Director of the International Cooperation Division at the Human Resources Development Center of China's Ministry of Natural Resources and serving as an Associate Researcher, has dedicated his career since 2000 to theoretical research on international cooperation in land and natural resources. He has managed key international cooperation projects and talent evaluation initiatives. His research portfolio includes leading and participating in major projects such as "New Mechanisms for Overseas Geological Surveys and Exploration Development," "International Cooperation Capacity Building on Natural Resources of China".
Zhao has published articles in professional journals like Land and Resources Intelligence and China Mining Journal. Several of his research findings have received official endorsements from the Ministry of Natural Resources leadership, with some already translated into policy measures.

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