Construction Of Integrated Change Monitoring Business Framework

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SUMMARY

With the gradual deepening of ecological civilization,China has been establishing a categorized regulation mechanism in accordance with the requirements of having unified base map, unified standards, unified planning, and unified platforms, improving the integrated space-air-ground-network monitoring network and accelerating the establishment of a modern eco-environmental monitoring system by full utilization of various modern spacial information technologies . Based on the new positioning of surveying and mapping work, the author analyzed demands for change monitoring services across different departments and redundant construction in natural resources supervision and management, identified that traditional surveying and mapping production process no longer align with current technological advancements or diverse stakeholder requirements. It was imperative to restructure fundamental surveying and mapping production processes using modern informational technology □establish an integrated solution centered on "change monitoring" technology which achieves simultaneous updates to fundamental geographic information, land cover, and land use data while enables effective supervision and early warning for the illegal and irregular issues in natural resource development and ecological protection□and ultimately realize a "multi-purpose survey" framework. Trough establishing integrated change monitoring business framework,we produced standardized change monitoring outcomes, consolidated the common needs of multiple businesses maximally, integrated production capacity, intensified various production materials,reduced production costs, improved the universality and timeliness of products from the supply-side perspective,achieved cross-departmental and cross-level business integration,and enabled infrastructure and data resource sharing ultimately.The scheme was applied and verified in multiple projects such as full-element monitoring, special monitoring, ecological and environmental protection, and arable land protection. As a result, it has achieved the expected goals of cost reduction and efficiency improvement, significantly enhanced the service support capabilities of surveying and mapping work for all tasks related to ecological civilization

construction and economic and social development.