

Hexagon's Survey Networks Need Fleet-Self-Calibration

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What Hexagon HxGN SmartNet Provides

Hexagon's HxGN SmartNet operates a global RTK correction network with reference stations across most developed regions plus emerging deployments in additional geographies. SmartNet competes with Trimble VRS Now and similar commercial RTK services. The architecture and competitive position closely parallel Trimble's: centralized reference-network maintenance, internet-distributed corrections, subscriber devices that consume the corrections.

Hexagon's broader precision-positioning portfolio (Leica geosystems, Novatel GNSS, autonomous-mining systems, construction equipment integration) depends on the SmartNet correction substrate. The maintenance investment in the reference network is substantial and the competitive position depends on coverage breadth.

Why Hexagon Faces the Same Geographic Limits as Trimble

The reference-network economics produce structural limits regardless of operator. Hexagon faces the same geographic underserved areas that Trimble does: mining operations in remote regions, agricultural operations in vast geographies,

expeditionary deployments without pre-positioned infrastructure, autonomous-vehicle operations in non-urban areas.

Hexagon's customer base in mining (Leica MachineControl for mining, autonomous mining systems) and construction (HxGN MachineControl for construction equipment) operates substantially in these underserved geographies. The customers absorb the limitation through alternative arrangements (private RTK networks, lower-precision operation) that current architecture forces them into.

How Fleet Self-Calibration Extends Hexagon's Coverage

The architectural primitive integrates with Hexagon's existing precision-positioning equipment additively. Where SmartNet coverage exists, the existing corrections continue to operate. Where coverage is sparse or absent, the marker consensus calibration provides the alternative precision substrate.

Hexagon's equipment business benefits from extending precision-positioning coverage geographically without proportionally extending reference-network investment. The customer base in underserved geographies gains structural precision-positioning capability through the architectural primitive without requiring Hexagon to expand SmartNet into uneconomic regions.

What This Enables for Hexagon's Customer Industries

Mining operations using Hexagon's autonomous-mining systems gain precision in geographies where SmartNet coverage is impractical. Construction operations using Hexagon MachineControl gain expeditionary-deployment capability. Agricultural deployments using Hexagon precision agriculture gain coverage in remote-rural regions.

Hexagon's competitive position benefits from being the precision-positioning vendor that integrates with the architectural primitive. The patent positions the primitive at the layer where Hexagon's equipment customers operate in geographies that current centralized-reference architecture cannot economically reach.