TELECOMMUNICATIONS · EMERGING TECHNOLOGY · MARKET-ENTRY VALIDATION

A national carrier wanted first-mover advantage in wireless broadband — before betting on a nationwide rollout, it proved the technology in the field: 33 sites surveyed, 13 regions commissioned, and an acceptance regime that turned a trial into an investment decision.

A national telecommunications carrier's WiMAX 802.16(d) broadband field trial across 13 regions — site qualification, build, live core-network integration, and a defined field-test-acceptance process, delivering decision-grade evidence for a market-entry commitment.

CLIENT **A national telecommunications carrier (anonymized)**	ROLE **Project Manager — wireless broadband field trial**	ENGAGEMENT IN NUMBERS **13 regions · 33 sites surveyed → 13 commissioned · 120 subscriber units · 12 engineers trained**
DURATION **10 months · team of six**	PLATFORM / INTEGRATION **WiMAX 802.16(d) BWA · integrated with the live carrier core — NGN/soft switch, PSTN, internet, enterprise VPN**	PROGRAM SCALE **Nationwide trial across 13 regions, underpinning a national market-entry decision for underserved areas**

01 The mandate

The carrier wanted early entry into broadband wireless access to reach underserved areas ahead of the market. But the technology was young, and a nationwide rollout was a multi-million-dollar capital commitment that could not rest on a vendor datasheet. Before the business could commit, it needed the technology proven on its own network, in its own regions, against its own acceptance standards.

The field trial existed to produce that proof: qualify candidate sites region by region, build and commission base stations and subscriber units, integrate them with the live national core network, and define the acceptance regime that would make the results decision-grade — evidence the carrier could take to an investment decision, not a collection of anecdotes.

02 The delivery context

An investment decision disguised as a network build

The trial's real product was not coverage — it was confidence. Every survey, test, and acceptance record existed to answer one executive question: should the carrier commit multi-million-dollar national rollout capital

to this technology? That meant the rigor of the evidence — site readiness reports, bench tests, a defined field-test-acceptance procedure — mattered as much as the radios.

Thirteen regions, one live core network

Each region brought its own power, logistics, and readiness realities, and every commissioned site had to integrate with the carrier's live core — next-generation switching, PSTN, internet, and enterprise VPN services — without disrupting the network the country was already running on. Distributed field deployment with centralized operational and integration risk.

03 How the engagement was run

Qualified the ground before committing to it

Led the survey of 33 candidate sites — AC/DC power, network availability, and local resources for the rollout — and produced site-readiness reports that qualified 13 sites for commissioning. Capital and schedule went only to ground that had been proven, not assumed.

Engineered the acceptance regime before the field test

Ran a bench test first, then personally defined the field-test-acceptance process and procedures — so when results came in from 13 regions, they were measured against one documented standard and could carry an investment decision rather than an opinion.

Fast-tracked the build, then handed over the capability

Created the project plan with deliberate schedule compression, commissioned 13 base stations and 120 subscriber units with per-site power, racks, and switching, integrated the trial with the carrier's core services, and trained 12 of the carrier's own engineers on the network-management system — handing over a capability, not just sites.

04 Outcome

All 13 regions were commissioned and integrated with the live core network in ten months by a team of six — 33 sites surveyed and qualified down to 13, 13 base stations and 120 subscriber units live, and a documented field-test-acceptance regime applied across every region. The carrier received what the trial was commissioned to produce: decision-grade field evidence for its market-entry decision, a defined acceptance standard for any subsequent rollout, and 12 of its own engineers trained to run the network. Commercial figures are held confidential; the rollout decision itself belonged to the carrier and is not claimed here.

FIELD TRIAL, QUANTIFIED	SCALE
Candidate sites surveyed and reported	**33 — qualified down to 13**
Regions commissioned	**13 base stations, nationwide**
Subscriber units deployed	**120**
Core integration	**NGN/soft switch · PSTN · internet · enterprise VPN**
Delivered	**10 months · team of six · 12 carrier engineers trained**

OUTCOME POSTURE

33 sites surveyed. 13 regions commissioned. One decision-grade field trial — ten months, a team of six.

Emerging-technology validation done properly: qualify the ground, engineer the acceptance standard, integrate with the live network, and hand the carrier evidence it could invest against.

05 What this demonstrates

Turned an emerging technology into a decision-grade trial.

Delivered field evidence rigorous enough to carry a national market-entry decision — site readiness, bench testing, and a documented acceptance regime.

OFFERED TODAY AS: TECHNOLOGY VALIDATION & DELIVERY

Qualified capital site by site.

Surveyed 33 candidate sites and committed build effort only to the 13 that passed readiness — power, network, and local-resource criteria on the record.

OFFERED TODAY AS: PROGRAM MANAGEMENT

Engineered the acceptance standard.

Personally defined the field-test-acceptance process after bench testing, so 13 regions reported against one documented standard.

OFFERED TODAY AS: QUALITY & ACCEPTANCE GOVERNANCE

Integrated with a live national core.

Connected trial sites to the carrier's running core — switching, PSTN, internet, enterprise VPN — without disrupting national service.

OFFERED TODAY AS: CARRIER-GRADE DELIVERY

Handed over capability, not just infrastructure.

Trained 12 carrier engineers on the network-management system so the trial could be operated and extended by the client's own team.

OFFERED TODAY AS: CHANGE & TRAINING

SOURCE ARTIFACTS AND DISCLOSURE

Anonymized for client confidentiality: the carrier, country, vendor products, and commercial figures are withheld. Figures represent counts recorded in engagement documentation held by the practice — site readiness reports, bench test results, the field-test-acceptance procedure, commissioning records, training materials, and the final trial assessment. The carrier's subsequent rollout decision is not claimed.

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