

CASE STUDY

BSNL REPLACES INCUMBENT LAWFUL INTERCEPTION SYSTEM WITH PERTSOL'S INTERCEPTOR



INTRODUCTION

Bharat Sanchar Nigam Limited (BSNL) overhauled its aging, high-cost interception system with PertSol's iNterceptor –rolling out 26 deployments pan-India in record time. The result? A fully compliant, future-ready LI platform with zero migration downtime and a significantly reduced total cost of ownership.

CHALLENGES

What wasn't working? What critical problems existed

- ✓ The existing foreign vendor's Lawful Interception (LI) System supported only 2G/3G and lacked capability for new services such as 4G, NGN/IMS, and CMS integration.
- ✓ System upgrades and enhancements required high investment, continuous maintenance, and complex management.
- ✓ Excessive AMC charges and prolonged support turnaround times due to dependence on offshore R&D teams.
- ✓ Frequent paid change requests for minor enhancements increased operational costs.
- ✓ Large hardware footprint caused higher power consumption, increasing the Total Cost of Ownership (TCO).
- ✓ Inability to meet evolving regulatory and compliance standards, creating a compliance risk for the operator.

SOLUTION

What was implemented, and why?

Solution Implemented PertSol's Lawful Interception System – iNterceptor

- ✔ PertSol deployed 26 LI systems across the BSNL's Pan-India 2G/3G/4G/NGN/IMS network.
- ✔ Systems were deployed, tested, validated, and commissioned in six months, with some sites operational in two weeks.
- ✔ Supported seamless migration of all active targets and sensitive interception data from the incumbent LI system without downtime.
- ✔ Fully compatible with network elements from Nokia, Ericsson, Huawei, ZTE, UTStarcom, and Alcatel.
- ✔ Provided a unified, modular, secure, and standards-compliant LI platform capable of supporting legacy and upcoming networks.
- ✔ Enabled centralized management of target provisioning, monitoring, and warrant handling.

RESULTS

What measurable improvements did the customer experience?

- ✔ Ensured 100% regulatory compliance with DoT, TEC, 3GPP, ETSI, CALEA, ANSI standards.
- ✔ Zero downtime migration, ensuring uninterrupted interception operations.
- ✔ 5000 concurrent target provisioning and 480 concurrent interceptions per system across 26 locations.
- ✔ Faster investigation support through reliable IRI/CRI & CC delivery to CMS and LEAs.
- ✔ Reduced operational complexity by replacing multiple legacy systems with a unified platform.
- ✔ Lower Total Cost of Ownership (TCO) due to reduced hardware footprint and minimized AMC/CR overheads.

KEY HIGHLIGHTS

Problem	Solution	Impact
Legacy LI system not supporting 4G/IMS/CMS	Deployed PertSol's unified iNterceptor across 26 sites	Full LI compliance with DoT/TEC/ETSI/3GPP
High AMC cost, delayed support, large hardware footprint	Modular, scalable LI platform with centralized management	Lower TCO and reduced operational overhead
Slow upgrades, frequent paid Crs, limited vendor flexibility	Seamless migration with no downtime	Faster investigations and nationwide operational efficiency

“As communication networks evolve, lawful interception must evolve with them. A modern interception framework helps service providers maintain compliance, support authorized investigations, and prepare for the future without disrupting operations.”