

CASE STUDY

INDIA'S TIER-1 TELECOM SERVICE PROVIDER REPLACES INCUMBENT LAWFUL INTERCEPTION SYSTEM WITH PERTSOL'S INTERCEPTOR

Organization: Tier-1 Telecom Service Provider (TSP)

Industry: Telecom Industry

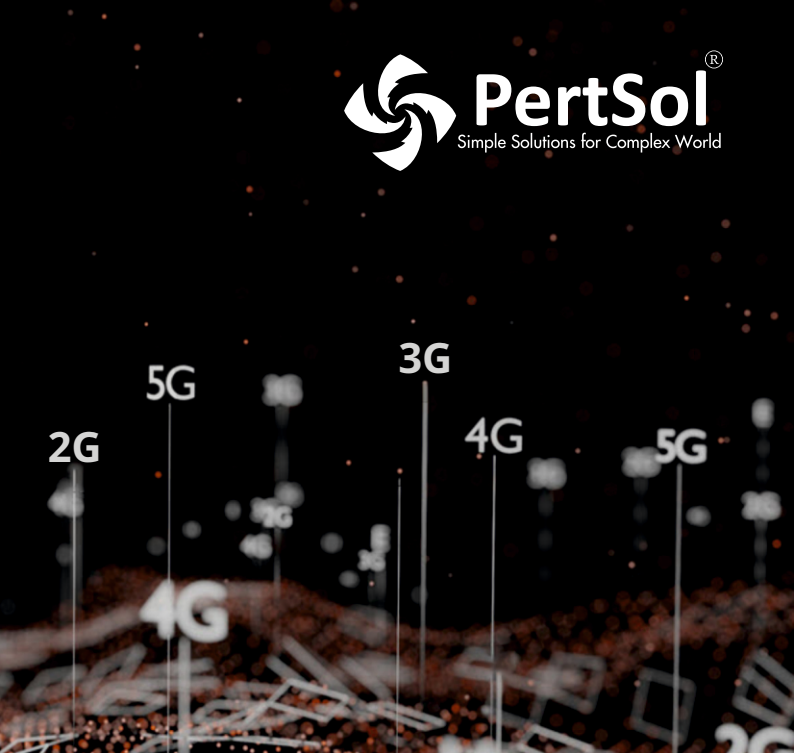
Country: India

Operation: Country Wide

The Tier-1 TSP faces a significant challenge in upgrading incumbent Lawful interception (LI) capabilities for new services, network enhancements, and evolving regulatory requirements. To stay fully compliant with India's regulatory requirements, it must undertake substantial system enhancements or consider a complete swap of its incumbent LI platform. This transition is crucial for maintaining compliance and ensuring the capability to handle new technological demands effectively.

PertSol iNterceptor

PertSol's unified Lawful Interception Solution (Management & Mediator Platform) to intercept and monitor the communication data of 2G/3G/4G/IMS/IGW and delivery of IRI/CRI & CC (intercepted traffic) to Government Centralized Monitoring Center (CMS) and Law Enforcement agencies (LEAs) in ETSI and convertible format over HI2 and HI3. Whereas Target Interception integration with CMS and LEAs over ETSI defined HI1 and EHI1 interface.



About Tier-1 TSP

Tier-1 TSP is one of the largest and leading public sector organization offering a wide range of telecom services in India. It started operating on September 15, 2000, and installed quality telecom in India. It offers a wide range of wireless and wireline services such as 2G/3G/4G/IMS/PSTN/LL/Broadbands.

The Challenges

Tier-1 TSP has implemented a Lawful Interception System of a foreign vendor for intercepting communication for 2G & 3G services. However, to overcome the challenges faced by TSP while expanding to cater to newer requirements for 4G, NGN/IMS Interception, and integration with a Centralized Monitoring System (CMS), they published requirements for the solution that can easily integrate, intercept & manage voice, data, video, and other multimedia services for legacy network elements (Alcatel Lucent, Ericsson, Huawei, ZTE) of 2G/3G and as well as new networks elements (Nokia, ZTE, UTStarcom) 3G, 4G, and NGN/IMS. With a unified Lawful Interception solution as a continuous focus, the TSP team explored various LI vendors to upgrade the company's Lawful Interception System to comply with the latest regulations and standards. However, purchasing, managing, and maintaining a dedicated Lawful Interception System (LIS) required significant, ongoing investment, time, and resources and introduced various complexities.

The existing vendor was imposing excessive charges for the Annual Maintenance Contract (AMC) yet support under the AMC

was problematic due to prolonged turnaround times for issue resolution. This delay was primarily because the vendor had to rely on its Research and Development team based offshore location, which contributed to delayed support. Additionally, the vendor frequently demanded paid change requests for even minor enhancements. Their solutions also had a substantial hardware footprint, which led to increased power consumption. Because of all these factors, there was a surge in the total cost of ownership (TCO) for the customers.

The Objective

The strategic goal of this Tier-1 TSP is to upgrade its Lawful Interception System to meet its Lawful Interception regulatory compliance as per their Unified Access Service License (UASL) to help federal and state intelligence and law enforcement agencies to prevent, investigate crime & terrorism activities that pose a threat to National Security. With an expanding portfolio of customers, TSP's key priority is to implement an LI platform that can intercept all existing and upcoming networks and comply with international & local standards.

The Solution

After a thorough evaluation of their requirements, the team at Tier-1 TSP chose PertSol's Lawful Interception System (PertSol-iNterceptor), which enabled them to meet their needs for lawful interception and monitoring. The system is compatible with all incumbent and upcoming network elements supplied by Nokia, Ericsson, Huawei, ZTE, and UTStarcom. The PertSol Lawful Interception System (LIS) is a state-of-the-art monitoring solution designed to play a central role in any Lawful Interception & Monitoring.

PertSol implemented 26 Lawful Interception systems covering TSP's Pan-India network of 2G/3G/4G/NGN/IMS services. All 26 systems were deployed, tested, validated, and commissioned parallelly in 6 months, with a few sites going up and running in 2 weeks' time. Each of these 26 systems supports 5000 concurrent target provisioning, 480 concurrent target interception, and 12 LEAs.

Considering it replaced existing Lawful Interception systems, PertSol seamlessly migrated all active targets & other sensitive intercepted data from the current system to PertSol-iNterceptor without any downtime. This was crucial for TSP, which required uninterrupted interception services and could not afford to shut down active targets, even for a few minutes. PertSol LIS helps telecom operators and Internet service providers fulfill their legal obligation to intercept calls and data while maintaining maximum privacy protection.

It can offer a user-friendly and field-proven solution that can help operators manage and oversee their active warrants from a central location, regardless of the type and number of networks in which the interception measures are deployed.

It enables the target-based monitoring of public communications services, including telephone calls, mobile data, and Internet-based services such as e-mail, voice-over-IP, instant messaging, and others. The system acts as a bridge or mediator between the service provider's network and law enforcement's monitoring centers. It is designed for changes and adapts to network modification very well. It protects investments through its modular setup, accommodating network expansion as well as network changes. It also integrates with existing Lawful Interception solutions, incorporating them in a centrally managed solution.

Solution Key Benefits

Compliant: LIS is designed to help operators adhere to national and international lawful interception standards set by ETSI, 3GPP, ANSI/ATIS, and Cable Labs. PertSol leverages its expertise in these standards to ensure partners and customers can implement and operate a reliable, hassle-free LI solution.

Cost Efficient: PertSol LIS is a cost-efficient LI compliance solution with a low hardware footprint that integrates with existing network platforms & leverages internal interception functions. Once installed, it requires minimal maintenance, with central administration features that minimize costs while efficiently handling law enforcement requests.

Support All Services & Networks: The solution supports all public telecommunications services and networks from leading vendors. It can simultaneously serve multiple networks with complete user and data separation, accommodating various business models and deployment options.

Customized as per the Needs: PertSol offers LIS as a game-changing solution that is complete with hardware, software, & services for seamless network integration. Customers can select from predefined bundles catering to 100 to several hundred thousand LI targets simultaneously. Its modular architecture allows easy customization to match network services and traffic demands.

Secure and Reliable: We focused on IT security, deeply understanding the security and privacy needs of lawful interception. LIS features robust end-to-end security to protect user data against unauthorized access, loss, and manipulation. It undergoes regular audits by top telecom operators and independent third-party firms.

The Result

One of the primary factors that led the Tier-1 TSP team to select PertSol's Lawful Interception System (LIS) was its dependable and efficient interception and monitoring capabilities. This system significantly reduces the time required for service providers or network operators to gather and deliver intercepted communications from private individuals or organizations to law enforcement officials.

In just six months, PertSol has successfully deployed and activated its unified Lawful Interception system across TSP's diverse network. This integration encompasses multiple Network Equipment Providers (NEPs), including Nokia, Alcatel, Ericsson, Huawei, ZTE, and UTStarcom, utilizing the X-Interface to capture and deliver intercepted IRI/CRI & CC data to CMS and Law Enforcement Agencies (LEAs) via ETSI HI and other readable/decoded interfaces. The implementation of PertSol's Lawful Interception and Monitoring System helps them to be compliant with the latest standards like 3GPP, ETSI, CALEA, ANSI, TEC, and Department of Telecommunication (DOT) regulations.

About PertSol

PertSol is a leading pioneer in providing next-generation Telecom, Intelligence, and Security Solutions specifically tailored for Intelligence, Regulatory, and Law Enforcement Agencies, Communication Service Providers, and Emergency & Public Warning Service Providers. With over 10+ Years of proven expertise, we have established ourselves as a trusted partner in safeguarding national regulations, security, and public safety by upholding the law with our security products.

Our AI-powered solutions are at the core of our strategy, featuring advanced technologies in Target Lawful Interception, Centralized Monitoring & Analytics, AI-ML Based Location Intelligence, & IP Metadata Interception. These robust platforms empower intelligence, regulatory, and law enforcement agencies to conduct in-depth investigations, gather critical intelligence, and make informed decisions with speed and accuracy. Our solutions deliver actionable insights that significantly enhance operational efficiency and mission success.

TAILORED SOLUTIONS FOR DIVERSE INDUSTRIES



Intelligence & Law
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Communication
Service Providers



Emergency
Services

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