

LTE Services Suite: Evolved Packet Core

A Complete Hosted LTE Core Network

The Evolved Packet Core (EPC) replaces the traditional mobile switching center with IP-connected network elements, which in turn communicate with intelligent radio base stations (eNodeBs) through standard IP networking. Because of its flat, all-IP simplicity and industry-wide standardization, LTE allows the creation of cost-effective configurations that were previously impossible.

This innovative design enables the geographic separation of the EPC and Radio Access Network (RAN). ClearSky's LTE Services Suite takes advantage of this advancement by offering the complete EPC as a hosted service.

The ClearSky EPC is an industry-leading combination of high performance and low cost. Moreover, this

highly redundant and fail-safe architecture has been deployed and proven in LTE rollouts around the world. Carriers using this hosted service will realize significant up-front savings by eliminating the purchase of an expensive core network. Additionally, minimizing the need for high-cost specialized support personnel will reduce operating expenses.

Outsourcing the core network does not mean giving up control. Clients can use the LTE Element Management System to monitor and manage the RAN and the hosted EPC as if it were in the next room. Furthermore, customers can enjoy the peace of mind that comes from knowing that the entire system is being monitored 24/7 by LTE experts.

Product Features

- **Infinitely scalable:** Supports any size network, from a single eNodeB to an unlimited number of base stations.
- **Proven capabilities:** Based on hardware and software deployed around the globe.
- **Local monitoring:** The LTE Element Management System enables powerful monitoring and management of both the RAN and the hosted EPC.
- **Rapid integration:** Compatible with most existing billing and provisioning systems.
- **CALEA compliant:** Regulatory compliance through the Lawful Intercept Gateway built into the EPC.

Carrier Benefits

- **Lower total cost of ownership (TCO):** Vastly reduces the upfront investment and delivers ongoing savings by eliminating the cost of software/hardware maintenance contracts and dedicated personnel.
- **Assured upgrade path:** As new capabilities such as Voice over LTE become commercially available, the EPC can be upgraded to support available devices.
- **Faster time to market:** eNodeBs are configured to communicate with the existing hosted EPC, and the network can grow according to your schedule.
- **Unlimited scalability:** The capacity of the EPC grows with subscriber growth, eliminating expensive upgrades or replacements.

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Hosted LTE Core is Network Ready for Immediate Deployment

Frequently Asked Questions

What are all the components of the ClearSky LTE Services Suite and how do they work together?

The two primary components are the hosted Evolved Packet Core (EPC) and the Radio Access Network (RAN). In addition, the LTE Services Suite includes billing and provisioning system integration, an element management system for monitoring and control, and the network interconnection between the EPC and RAN.

How is the LTE radio network connected to the EPC? The eNodeBs use standard backhaul techniques to an aggregation point. From there, depending on the size of the radio network and latency requirements, various interconnection options are available between the aggregation point and the EPC including both public and private networks.

Can ClearSky help with roaming and devices?

ClearSky is actively promoting an open LTE ecosystem by working with industry trade associations, device manufacturers and larger carriers. The benefits of these relationships are available to every LTE Services Suite customer.

Is financing available for RAN purchases?

For larger network rollouts by financially qualified carriers, ClearSky can help arrange financing for capital purchases.

