

Alcatel-Lucent End-to-End 4G LTE Solution

Deliver the magic of 4G LTE with the
leading end-to-end solution

Alcatel·Lucent 



The Alcatel-Lucent End-to-End 4G LTE Solution is the industry's most comprehensive answer to unleashing mobile broadband innovation. Our advanced solution unlocks new revenue streams and innovative business models, reduces costs and increases efficiency. The solution provides an integrated, pre-tested, end-to-end 4G LTE™ network that enables service providers to:

- Deliver a unique user experience cost-effectively with a scalable, smart and efficient network that harnesses the best of wireless and IP technologies
- Unlock new revenue streams and innovative business models with a rich and open ecosystem of devices, applications and content
- Accelerate mobile network evolution to an all IP network and prepare for the future with field-proven business and network transformation services

Step Into A New Era

LTE technology provides unprecedented bandwidth and capacity plus low latency. As the next step in the evolution of all wireless radio access technologies, LTE fosters new opportunities to offer enriched mobile broadband services, expand your business and achieve a sustainable competitive position.

LTE all IP network infrastructure provides enhanced service agility to allow for new business models. You can increase user-paid revenues with new multimedia IP services such as video telephony/conferencing, mobile gaming and machine-to-machine services. You can also acquire additional non-user paid revenues through targeted advertising, content brokering and e-commerce transactions.

The Alcatel-Lucent End-to-End 4G LTE Solution leverages Alcatel-Lucent's leading position in both next generation IP networking and wireless/LTE technologies. Our proven



solution has been selected and launched commercially by the world's largest service providers with a scale, scope and size that is unmatched in the industry.

Offers unique user experience cost effectively

The Alcatel-Lucent End-to-End 4G LTE Solution provides a comprehensive all-IP service-aware network. It lets you offer unique end-user experiences while generating new revenues.

The solution includes software-defined LTE radio access and breakthrough lightRadio™ architecture, offering a simpler, lighter, greener wireless network paradigm. It integrates an any-G (2G/3G/4G) all-IP reliable high-performance Wireless Packet Core and our industry-leading converged mobile backhaul and transport solution. It also comprises a Service Delivery Environment (SDE) which includes a comprehensive IP Multimedia Subsystem (IMS) and enables a broad range of applications and a new mobile conversation experience.



Unlocks new revenue streams and innovative business models

The Alcatel-Lucent End-to-End 4G LTE Solution unlocks new revenue streams by leveraging a rich and open ecosystem. Through the ng Connect Program — a global initiative led by Alcatel-Lucent — device, application and content providers work together to drive the development of new services that improve the connected user experience. Over 65 member companies jointly develop Service Concepts integrated with the Alcatel-Lucent End-to-End 4G LTE network and innovative revenue models.

Alcatel-Lucent is also leading the way in Application Enablement with open application programming interface (API) solutions that expose communication APIs in a controlled and secure manner. Developers can combine the communication and management capabilities of a service provider's network with web applications to support innovative business models.

Speeds mobile network evolution to all-IP

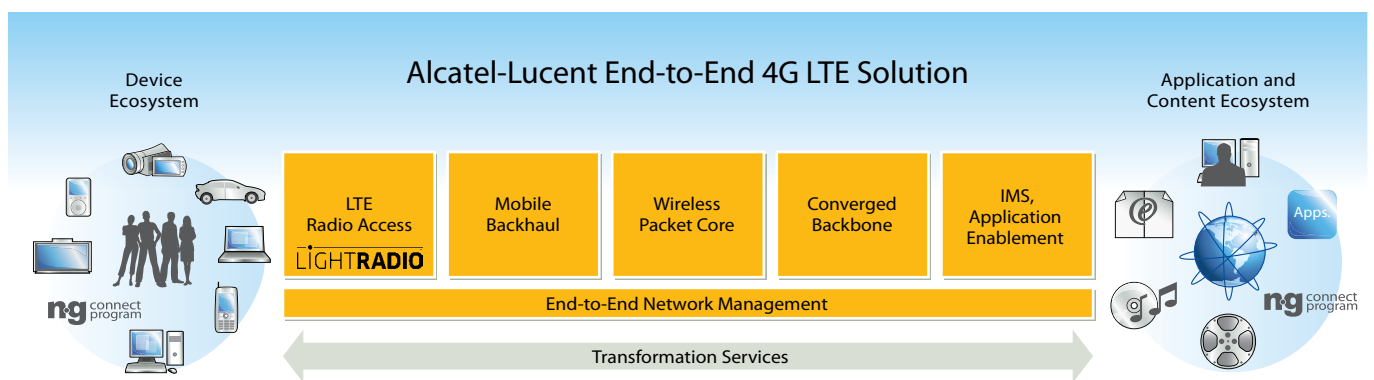
The breadth and depth of our services portfolio and transformation expertise helps transform mobile networks to 4G while optimizing the business and operations model. With our consulting, project management, multi-vendor integration, operations, and managed network services, you can:

- Accelerate mobile network evolution to all-IP while minimizing costs and mitigating risks with field-proven business and network transformation services
- Maximize operational efficiencies, to speed time-to-market of new LTE services

Our solution offers smooth evolution and seamless service continuity to LTE from any wireless network technology, including:

- Global System for Mobile Communications (GSM)
- Wideband Code Division Multiple Access/High-Speed Packet Access (WCDMA/HSPA)
- CDMA, Evolution-Data Optimized (EV-DO)
- Time Division – Synchronous CDMA (TD-SCDMA)
- Worldwide Interoperability for Microwave Access (WiMAX)

Figure 1. Delivering the most comprehensive 4G LTE Solution



Benefits of the Alcatel-Lucent End-to-End 4G LTE Solution



A SOLUTION UNMATCHED IN THE INDUSTRY

- Provides a pre-integrated solution to speed and simplify deployment
- Leverages innovative lightRadio architecture to enable a more efficient, cost-effective mobile network for greater capacity and coverage
- Delivers enhanced service control using network intelligence for customized value-added services and applications
- Supports any-G mobile backhaul with integrated, flexible access alternatives (fiber, microwave and copper) to minimize costs
- Offers end-to-end Quality of Service (QoS) management to enable service assurance and an enriched broadband experience
- Fosters improved network, device and service intelligence to transform the customer experience
- Enables self-optimized network (SON) radio access to simplify deployment and operations
- Supports IMS for Voice over LTE (VoLTE)-compliant communications, including video and Rich Communication Suite (RCS) services
- Interworks with partner ecosystem (devices, applications and content) to speed time-to-market
- Brings industry-leading IP transformation expertise to enable a seamless evolution to an all-IP architecture

MARKET-LEADING END-TO-END 4G LTE SOLUTION

- **Innovative** – Powered by Bell Labs. We set the communications industry benchmark
- **Leader** – Selected by the world's largest service providers for CDMA and GSM/HSPA network evolution: Verizon Wireless and AT&T
- **Proven** – Delivered the world's largest and most advanced commercial LTE network
- **Versatile** – Leading advanced global field trials in segments covering Frequency Division Duplex (FDD) and Time Division Duplex Long Term Evolution (TD-LTE) spectrum in all the major frequency bands
- **Advanced** – Supporting cutting-edge field trials worldwide, including for China Mobile, the world's largest TD-LTE pilot network
- **Recognized** – Boasting LTE market leadership acknowledged by leading industry analysts, including Dell'Oro and Infonetics (Quarterly reports, 2011)



For more information, please visit:

LTE Solutions website: www.alcatel-lucent.com/lte

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