

Carrier-Integrated: The Key to Reliable Broadband PTT



- End-to-end performance optimization and service assurance
- Single point of contact responsible for support and billing

Broadband push-to-talk (PTT) has crossed the marketing threshold from visionaries to pragmatists, with business and public safety decision makers recognizing the value of broadband PTT as a way to augment land mobile radio (LMR) communications. As the results of a recent survey show, broadband PTT is so attractive because of its ability to connect More People (executives, administrators, off duty personnel), in More Places (3G/4G/LTE/Wi-Fi), with More Devices (smartphones, tablets, ruggedized feature phones) than ever possible with LMR.

What's missing from this discussion so far is the concept of end-to-end reliability, or, in other words, the availability, redundancy, 24/7 monitoring/support, as well as ongoing device and application testing/certification needed to ensure the broadband push-to-talk service provides reliable instantaneous communications. While over-the-top (OTT) and carrier-integrated broadband PTT solutions deliver similar capabilities when it comes to More People, More Places and More Devices, there are significant differences in their abilities to meet the criteria for end-to-end reliability.

Over-the-top broadband PTT solutions, whether on-premise or hosted, rely on carrier cellular networks without carrier integration or support. Running as OTT applications, neither on-premise or hosted broadband PTT solutions can ensure solution performance beyond their software platform; for the customer this means there is no single entity responsible for end-to-end solution performance, optimization, service assurance, and support.

With a carrier-integrated broadband PTT solution, the system, its components, and the application running on the smartphone, low-cost feature phone, or other device are all tightly integrated with the carrier's network and daily operations.



Platform



Network



Devices

As the leading provider of carrier-integrated solutions, Kodiak Broadband PTT delivers:

- Push-to-talk communications continuously optimized to provide highest level of performance
- Single point of contact for all support and a single bill to pay
- PTT applications, devices, and 3rd-party apps thoroughly tested and certified by both OEMs and carriers
- Support for existing and developing LMR and PTT standards
- Telco-grade service-level agreement, key performance indicators, 24/7 monitoring, and integrated access to PTT administration through carrier's business portal

As the table below shows, a carrier-integrated broadband PTT solution is uniquely positioned to meet or exceed requirements in key areas, including Network, Platform, Devices, Security, Operations/Support, and Budget.

| | Carrier-integrated | OTT On-premise | OTT Hosted |
|--|---------------------------|----------------|------------|
| Network | | | |
| 3G/4G/LTE/ Wi-Fi | ✓ | ✓ | ✓ |
| Optimized network performance | ✓ | | |
| Network drive tested by carrier or 3rd party | ✓ | | |
| Platform | | | |
| Geo-redundant with high availability components | ✓ | Optional | Optional |
| Scalability to millions of subscribers | ✓ | | Limited |
| Superior vocoding/voice quality | ✓ | | ✓ |
| Disaster continuity via real-time cutover to geographically distributed nodes | ✓ | | |
| Devices | | | |
| Ruggedized smartphones with dedicated or programmable PTT button | ✓ | ✓ | ✓ |
| Low-cost, purpose-built, ruggedized feature phones with dedicated PTT button | ✓ | | |
| Carrier and OEM certified, with ongoing testing of new releases/versions | ✓ | | |
| Car kits, mobile subscriber devices, and wide array of accessories | Wide selection | Limited | Limited |
| Security | | | |
| AES 256 encryption | ✓ | ✓ | ✓ |
| FIPS 140-2 validated cryptography | ✓ | Optional | Optional |
| 24/7 Security Operation Center monitoring and continuous security improvement | ✓ | | Optional |
| Standards Support | | | |
| Implementation of OMA PoC v2 standard | ✓ | | |
| Leadership in OMA Push-to-Communicate for Public Safety (PCPS) standard | ✓ | ✓ | |
| Ability to implement carrier supported service enablers (i.e. QoS, Priority, ProSE) available in existing and emerging standards | ✓ | | |
| Operations/Support | | | |
| End-to-end 24/7 solution monitoring | ✓ | | |
| Single point of contact for all support | ✓ | | |
| No internal personnel/resources required | ✓ | | ✓ |
| Budget | | | |
| Single bill | ✓ | | |
| Subsidized low, mid and high tier device cost | ✓ | | |
| Availability of a low-cost PTT-only plan with no data plan required | ✓ | | |

To learn more about the advantages of the Kodiak Broadband PTT solution and carrier-integration, visit www.kodiakptt.com.