



# Enliten Update

April 30, 2009 Vol. 2

## Mobile Video PT2 – LTE vs. WiMax & NAB 2009

Sharing of Thoughts, Perspectives, Experiences with/from End-users

### MobileTV PT2 LTE vs. WiMax

*Feedback to the previous "Update" was overwhelming. The "Mobile Video" topic proved timely and of great interest. As a result, this issue features a continuation on MobileTV, specifically: Long Term Extension (LTE), the next generation wireless service to be provided by AT&T and Verizon and Sprint's WiMax service.*

As mentioned in the previous "Update" our wireless carriers are working diligently to introduce their 4G service offerings, which among other things, will feature enhanced video capabilities. 4G is the term for fourth-generation wireless (also known as Beyond 3G, the current dominant wireless standard).

#### Sprint's WiMAX

Sprint has partnered with Clearwire to provide its open-standard WiMax service. WiMax is based on the 802.16 wireless standard of the IEEE and will average download speeds of 4 Mbps and uploads at 2 Mbps. Theoretically, WiMax can provide download speeds up to 40 Mbps for fixed service and 15 Mbps for mobile service. Although Sprint's Clearwire service is the first (4G) to be implemented, it will only be available in 10 cities by the end of the year and 15 by the end of 2010.

Sprint's service is supported by a number of companies, including: Comcast, Time-Warner, Bright House Networks, Google, and Intel. This gives cable companies competitive offers against AT&T and Verizon video-based IPTV (U-Verse and FiOS) and wireless services.

#### AT&T and Verizon LTE

AT&T and Verizon have selected Long Term Extension (LTE) as their 4G mobile standard. LTE is based on proprietary technologies and will provide download speeds up to 100 Mbps and uploads at 50 Mbps. LTE service will not be available until 2010, with widespread availability not expected until 2012.

LTE is supported by many manufacturers, such as Motorola, Nokia, and Ericsson, who make devices for the GSM standard. GSM is the dominant cellular standard (serving an estimated 80% of the world) and is similar to LTE.

Although WiMax is the first 4G technology to reach the market, LTE is considered by many to be better, projecting all services on single

### NOTICE

The ideas, thoughts, and perspectives included in the **Update** are from **Enliten** clients, other end-user submittals, and **Enliten** experiences with industry vendors.

We received a tremendous amount of comments about, and insights regarding, the **Update** on Mobile Video – Smartphones.

**Many of them were with permission to share.**

Many contributors requested case studies and benchmark examples from other end-users. When we receive enough information to justify the effort, **Enliten** will aggregate the submittals into a **topical paper**.

#### "Twitter"

led the list of topics of interest and will be covered in the next issue of **Update**. Digital Asset Management and Webcasting will be the next topics.

**Your suggestions and contributions are encouraged!**

**Especially, if you use Twitter to drive video**

devices. In addition, LTE is expected to reach into rural areas, which currently are unserved by terrestrial wired or wireless voice and data services, via the spectrum AT&T and Verizon purchased as a result of the television station digital transition (scheduled for June 12, 2009).

It is unlikely that WiMax service will reach many of these unserved areas, which would require the expensive and extensive build out of telephone towers and cable plants. Satellite service is the complement to WiMax in these areas.

### Other Options

AT&T also plans to roll out the “plus” version of its 3G network, High Speed Packet Access (HSPA+), with speeds up to 20 Mbps. Other companies, including Clearwire and cable operators, will offer various 4G services for both fixed to home and business as well as mobile.

### Benefit for the Enterprise?

The U.S. has a wide selection of wireless voice and data services, although, some may dispute the coverage and quality. Today’s wireless provides Internet and limited video capabilities and functionality. The next generation wireless services will provide enhanced video applications. This will give communication, media, and IT managers more tools to reach and inform their employees and clients anywhere, anytime...via, terrestrial wired and wireless as well as satellite connectivity.

The next generation services will provide challenges, such as workflow, governance, security, creation and management of content. They will be the same (or similar) challenges we face today due to the convergence of TV and the PC and the state of digital, data, and IP.

### Benefit to Consumers?

Feature rich handheld devices! Improved coverage and service quality! Competitive pricing! Ultimately, there will be a battle between wireless and wired services, especially in the consumer space. Much like today’s voice and data (IM and e-mail) services to cellphones and mobile devices, where consumers drop hardwired voice services into the home, many will exclusively subscribe to wireless broadband service (dropping wired broadband).

*For an expanded version of **Mobile Video (Pts 1 & 2)**, with details on how smartphones and DTV services came to be, who the winners are, and list of content references, send an e-mail request to [rp1@enliten.net](mailto:rp1@enliten.net).*

**ASK for it!**

## NAB 2009

Good news, Bad new regarding this year’s NAB:

**I’ll touch on the Bad News first, to end on a positive note:**

1. Attendance was down;
2. Number of exhibitors was down;
3. No major new, revolutionary technologies to get excited about.

**applications.**

**Ask how Enliten**  
helps organizations!

**Find out how we can help you!**

Need information or updates on specific applications or solutions?

Have us develop a white paper (briefing).

Enjoy timely turnarounds, affordable prices, relevant information, and strategic guidance.

**Enliten** is a proud sponsor of the Communications Media Management Association (**CMMA**) and Federal Government Distance Learning Association (**FGDLA**).

For information on how and why to join CMMA:  
[www.cmma.net](http://www.cmma.net)

For information on FGDLA:  
[www.fgdla.us](http://www.fgdla.us)

**Enliten’s Page of Enlitenment (PoE)** will continue to be published on an infrequent, but hopefully, regular basis.

The PoE will feature detailed articles and white papers, all of which can be found on the home page of **Enliten’s** website or in the Resource Center Section.

**Good News:**

1. Bad News list is short;
2. Travel and lodging costs were low, if not reasonable;
3. Plenty of seating was available throughout the halls;
4. Exhibitors found floor traffic to be serious, with viable buyers;
5. Products, solutions, and service offerings are improving, maturing....and they are aplenty:
  - a. High Definition (HD) solutions are full steam ahead;
  - b. Digital Asset Management (DAM), Content Management (CM), Asset Management (AM), and server solutions for file based management of digital assets are widely available;
  - c. Authorizing and permissioning capabilities are improved, as are
  - d. Tracking and measurement;
  - e. Overlap expands! Virtually any vendor in any space provides varying solutions:
    - i. Delivery solutions support digital signage applications and vice versa;
    - ii. Encoding and transcoding solutions also address workflow;
    - iii. Manufacturers are providing services;
6. NAB finally appears to recognize us...featuring a few titles in the Bookstore targeted for the enterprise market.

Visit the [Enliten Web Site](http://www.enliten.net)  
[www.enliten.net](http://www.enliten.net)

Gain access to industry articles and case studies at the [Enliten Resource Center](#).

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