

Following are brief descriptions of recent industry analyst research pieces that may interest those in the Mobility Community.

- **Current Analysis, Vodafone Launches Femtocell Service.** CA is "positive" on the "near-term launch of Vodafone Access Gateway, as both a European milestone in consumer FMC and an exemplary case of needs-based marketing. For the industry-at-large, this launch represents a fascinating precedent for femtocell FMC, but Vodafone UK has wisely chosen to underplay the technology and treat this launch as a service quality improvement issue. Reading between the lines, the Vodafone Access Gateway will be brought to market as a value-added device which does one thing, but does it well – essentially fixing a common customer complaint of poor indoor cellular coverage."
- **In-Stat, Mobile data growth increases backhaul capacity needs.** In-Stat says the need for more backhaul capacity will grow three-fold between 2009 and 2013.
- **Infonetics, Global WiMAX Service Strategy 2009–2011: Service Provider Survey.** According to the WiMAX Forum, there are over 470 WiMAX networks being deployed or already live around the world. This survey is intended to capture a strategic overview from a range of these operators, to better understand how/why these networks are being deployed, the rationale behind the services offered, the business model, the target markets, and the subscriber and revenue numbers operators are projecting between now and 2011.
- **Yankee Group, Mobile Backhaul: Will the levees hold?** Mobile network operators (MNOs) should transition to fiber in the backhaul where there is a clear ROI, and microwave where capex and speed to deploy are concerns and where microwave can support the speeds and distances needed. Copper-based technologies such as T1 and DSL should be used to leverage existing infrastructure until the growth in traffic and performance demand of 4G/LTE make the use of copper unviable.
- **Infonetics, Update of mobile infrastructure report.** "The mobile infrastructure market was marked in the first quarter of 2009 by steep declines across the board except for W-CDMA and packet core equipment, strong 3G rollouts in China, and a major vendor shakeout. Between China Mobile, China Unicom, and China Telecom, a total of 59,000 3G base transceiver stations (BTS) were deployed in China alone in 1Q09, helping Huawei and ZTE gain significant share at the expense of most of the other major players in the RAN equipment market. Huawei is now the size of Alcatel-Lucent in this segment, and ZTE doubled its RAN revenue market share over just the last 4 quarters, solidifying its spot on the top 5 vendor leaderboard." -- **Stéphane Téral**, principal analyst for Mobile and FMC Infrastructure.
- **IDC Link, Mid-year look at WiMAX.** The developments at Comcast [the announcement of its High-Speed 2Go service] represent another important milestone for WiMAX infrastructure. First, it showcases the potential relevance of WiMAX (and for that matter 3G) technology to Comcast's existing infrastructure and business model. It speaks to how these wireless technologies can potentially work in complement with the wired infrastructure, especially in the context of the North American market. Second, it shows the continued momentum and growth of WiMAX in general.
- **Infonetics Continuous Research Service, Importance to WiMAX of VOIP services.**
- **Ovum, Capex, Equipment Market Update.** Global wireline equipment sales fell 13% in 1Q09 versus the year-ago quarter. Lower growth was seen across all segments, including next-generation segments such as core and edge routing and WDM optical

networking. Analysis of operator capex reveals strong growth in India, China, and South America, weak growth in Europe, and significant declines in North America and advanced Asia-Pacific. Emerging markets will be key to vendor growth in 2009.

- **Current Analysis, Cisco GGSN 2.0 Assessment.** Cisco's eGGSN Release 2.0 is threatening to the competition. While GGSN session capacity is solid and IP service capabilities are understandably strong, competitors have begun to grow their scalability and session density in expectation of EPC launches and Cisco's lack of a SGSN could represent a gap seized on by service providers.
- **Infonetics Continuous Research Service, Perspective on 2008 restructuring of China telecommunications.** The great China telecommunications restructuring announced in May 2008 is in place now at mid 2009, but the basics have not changed. The restructuring goal was to create more competition, with three vertically integrated, wireline/wireless providers competing for mobile, business, and consumer. The strong—China Mobile and China Telecom—are getting stronger, and the second place player—China Unicom—is finding it hard to compete both in mobile and wireline. China Mobile, as the #1 mobile operator in the world ranked by subscribers, is larger than its two competitors combined in terms of revenue and capex. China Mobile will no doubt stay in the #1 position going forward, with strong, assertive leadership and management. It is no surprise that China Mobile is the only one of the three that has an active, well funded program to shift their infrastructure from TDM to packet, preparing itself to be even more operationally competitive, with a more efficient network to carry the IP/Ethernet packets of growing wireless data traffic. China Telecom will remain the #1 wireline provider and is using its CDMA assets to rollout EV-DO mobile broadband. China Unicom, comprising the previously #2 mobile and #2 wireline providers, looks like it will be the clear #3 operator in China for some time.
- **Current Analysis, Assessment of Clearwire.** Current Analysis is "slightly positive" on Clearwire, though it acknowledges that the company has major challenges.
- **Freeform Dynamics, Factors affecting use of mobile services.** With high speed networks, sophisticated devices and a myriad of services and content available, mobile users would seem to have everything they need, but how much are they taking advantage of all this, and what can be done to ensure maximum value for the user and a good return for the mobile operator?
- **Yankee Group, Sprint/Ericsson outsourcing agreement.** "The North American telecom market has finally cracked, as Yankee Group predicted it would. Sprint's U.S.\$5 billion deal to hand off routine network functions to Ericsson is a game changer that challenges ingrained perceptions of what is core and non-core to telecom operators' business activity. Until now, North American telecom operators have been unwilling to externalize network functions on such a large scale."
- **Ovum, The various Asia/Pacific telecom markets -- including Japan, India and China.** "This research aims to provide a high-level view of operator and market performance and regional development across fixed voice, broadband and mobile products."
- **Ovum, Global Mobile Outlook.** Key messages include:
 - Mobile continues to prove resilient to macroeconomic factors
 - Competition is increasing around the world, but the impact on operators is limited
 - Voice remains the 'killer' mobile application, but prices are eroding rapidly

- Access is the main avenue for data revenues, but growth in data risks network strain
- LTE to dominate the route to 4G
- Femtocells winning the convergence race
- Mobile operators are threatened more by their traditional competitors than 'left field' players
- Extravagant M&A is calmed by macroeconomic conditions, so operators can focus on driving synergies

- **Current Analysis, Perspective on Sprint/Ericsson Outsourcing agreement.** CA is "positive" on this announcement, though it notes significant challenges in making this successful.
- **IDCLink, Sprint/Ericsson Outsourcing Agreement.** While key MS contracts in Asia and Europe by operators such as Bharti and 3-Italy have served as market catalyst for widespread adoption of MS in those regions, North American operators have been more cautious about outsourcing the day-to-day network operations, that is, until this week. IDC believes that as the North American telecom market continue to mature, increased price erosion will force operators to continually cut cost and focus internal resources on customer facing initiatives. This environment is highly conducive to adoption of MS as a competitive strategy. Sprint's success with *Network Advantage*, however, will only be part of the company's transformation journey. What is significantly different now is that Sprint will continue on this journey with the support of Ericsson's resources and global services team.