June 18, 2013

Towerstream Network Certified For Next Generation Hotspots

By Oliver VanDervoort
Contributing Writer

Towerstream is already considered one of the top 4G and small cell rooftop tower companies in North America, and now the company has announced that its Manhattan Wi-Fi network is the first to be named a certified Next Generation Hotspot by the WBA ICP.

The ICP or Interoperability Compliance Program has a set of guidelines for Wi-Fi mobile operators so that they can standardize the way that mobile devices and computers connect to WiFi networks.

The protocols are there in order to cover security, data offload, device authentication, network implementation, and charging models. The point of the standardization guidelines is so that devices that are using Wi-Fi connections will be able to jump from one network to another with very little difficulty.

Jeff Thompson, CEO of Towerstream commented about his company's certification in a recent statement. "With the WBA's Next Generation Hotspot, Wi-Fi networks will become seamlessly integrated into the mobile lifestyle and greatly enhance the user experience. This tremendous step to integrate Wi-Fi into heterogeneous networks and mobile networks offers carriers a new opportunity and possible new revenue streams. We continue to applaud the WBA for their tremendous leadership in setting the path forward to a better connected world."

While Towerstream is one of the latest companies to get this kind of certification, it is likely that more companies will be getting these kind of qualifications in the very near future. Next generation hotspots haven't been getting much attention lately but it seems likely there will be a push moving forward. These kinds of standardization measures are being pushed by some rather large companies including firms like AT&T as well as other cellular and Internet companies.

With companies with deep pockets pushing for Wi-Fi standardization and next generation hotspot, Towerstream is likely one of the first of a flood of companies.
Juniper: Half of all mobile data traffic will be offloaded to Wi-Fi, small cell networks this year

June 14, 2013 | By Fred Donovan

Half of all mobile data traffic generated by smartphones, tablets and other 3G and 4G connected devices will be offloaded to Wi-Fi and small cell networks in 2013, according to the latest stats from Juniper Research.

Overall, mobile traffic generated by mobile phones and tablets will exceed 90,000 petabytes by 2017, the research found.

In order to monetize that data traffic, mobile operators are partnering with Wi-Fi networks and launching carrier grade Wi-Fi products. Also, 4G technologies are enabling operators to provide new services.

"While a 4G connection need not necessarily mean more data usage, consumers are in fact adapting to faster speeds and more data services, which could lead to more data usage. This increase in user demand for services in turn creates new opportunities within different economic sectors including commerce, energy, health and education, completing a cycle of demand," commented Nitin Bhas, Juniper analyst and author of the report.

In a white paper, Juniper said that "by offloading mobile data traffic onto available complementary networks, operators can optimize the available network resources and reduce the bottlenecking of services thereby allocating their network resources to other users."

The white paper added: "Operators need to view offloading solutions as a complementary solution along with their 3G/4G network to ease network congestion. They can deploy their own public Wi-Fi hotspots, such as AT&T (NYSE: T) in the U.S. has done, and then pre-install the connection manager software on customers’ smartphones so that when they detect networks in such hotspots, a seamless connection will be established to Wi-Fi for data."

North America and Western Europe are expected to have the highest offload factor throughout the forecast period, Juniper predicted.

For more:
- see Juniper's release
- read the Juniper white paper (reg. req.)

Read more: Juniper: Half of all mobile data traffic will be offloaded to Wi-Fi, small cell networks this year - FierceMobileIT http://www.fiercemobileit.com/story/juniper-half-all-mobile-data-traffic-will-be-offloaded-wi-fi-small-cell-net/2013-06-14#ixzz2WEXDgv2H
Mobile Operators to See 50% of their Data Traffic Transfer to Wi-Fi & Small Cell Networks this Year

Hampshire, UK – 12th June 2013: A new report from Juniper Research forecasts that almost 50% of data traffic generated by mobile phones, tablets and other 3G/4G connected devices, will be offloaded to Wi-Fi and Small Cell networks this year.

This is equivalent to 10 billion movie downloads or 9,000 petabytes (PB) per year being offloaded from mobile operator's networks.

The 4G Game Changer

The new report, Mobile Data Offload & Onload: Wi-Fi, Small Cell & Carrier-Grade Strategies 2012-2017, found that while Operators were benefiting from much needed relief on their over-stretched networks, they were potentially losing monetisation opportunities on the lost data usage.

In response, Operators are actively partnering with existing Wi-Fi networks and launching their own carrier grade Wi-Fi solutions. In addition, 4G technologies such as LTE along with other wireless technologies are enabling Operators to provide new services and next generation connected devices such as smart glasses.

Report author Nitin Bhas added: "While a 4G connection need not necessarily mean more data usage, consumers are in fact adapting to faster speeds and more data services, which could lead to more data usage. This increase in user demand for services in turn creates new opportunities within different economic sectors including commerce, energy, health and education, completing a cycle of demand".

Seamless and Secure Wi-Fi Roaming

The report noted that as Operators implement NGH (Next Generation Hotspot) and Hotspot 2.0 specifications, they will be able to provide users with a seamless authentication and access experience similar to that of the cellular network.

Other Key Findings Include:

- Mobile data traffic generated by Smartphones, Featurephones and Tablets will exceed 90,000 PB by 2017.

- North America and Western Europe will have the highest offload factor throughout the forecast period.

The complementary 'Data Offload ~ Connecting Intelligently' whitepaper is available to download from the Juniper website together with further details of the full report.
Juniper Research provides research and analytical services to the global hi-tech communications sector, providing consultancy, analyst reports and industry commentary.

Read more: Mobile Operators to See 50% of their Data Traffic Transfer to Wi-Fi & Small Cell Networks this Year - FierceMobileIT http://www.fiercemobileit.com/press-releases/mobile-operators-see-50-their-data-traffic-transfer-wi-fi-small-cell-networ#ixzz2WEYhKHIU

**Towerstream Recognized as First Operator to Receive Wireless Broadband Alliance (WBA) ICP Certification**

*Company’s Manhattan Wi-Fi Network Becomes Premier Next Generation Hotspot*

MIDDLETOWN, R.I., June 13, 2013 (GLOBE NEWSWIRE) -- Towerstream Corporation (Nasdaq:TWER), a leading 4G and Small Cell Rooftop Tower company, today announced that its Manhattan Wi-Fi network is one of the first networks to be named as a certified Next Generation Hotspot (NGH) by the WBA's Interoperability Compliance Program (ICP).

"The WBA's ICP is a crucial step towards end users having seamless integration between 3G/LTE networks and reliable high capacity Wi-Fi networks. Towerstream engineering has been working closely with the WBA team and we couldn’t be more pleased with the results," said Arthur Giftakis, VP of Engineering and Operations at Towerstream.

The ICP outlines a set of Wi-Fi guidelines for mobile operators to standardize the way devices connect to and roam onto Wi-Fi networks. These guidelines include: security, data offload, device authentication, network implementation, charging models and billing mechanisms.

"With the WBA's Next Generation Hotspot, Wi-Fi networks will become seamlessly integrated into the mobile lifestyle and greatly enhance the user experience," said Jeff Thompson, CEO of Towerstream. "This tremendous step to integrate Wi-Fi into heterogeneous networks and mobile networks offers carriers a new opportunity and possible new revenue streams. We continue to applaud the WBA for their tremendous leadership in setting the path forward to a better connected world."

Shrikant Shenwai, CEO of the WBA, said: "It is great to see how the operator community has embraced the ICP, recognizing its value in improving the way in which it works together to deliver a more consistent roaming experience. Towerstream is one of the first to complete the initial network assessments and we are delighted that they have achieved compliancy. This neatly illustrates the growing momentum within the Wi-Fi roaming ecosystem, paving the way for the continued implementation of Next Generation Hotspot (NGH)."

**About Towerstream Corporation**
Towerstream (Nasdaq:TWER) is a leading 4G and Small Cell Rooftop Tower company. The company owns, operates, and leases Wi-Fi and Small Cell rooftop tower locations to cellular phone operators, tower, Internet and cable companies and hosts a variety of customers on its network. Towerstream was originally founded in 2000 to deliver fixed-wireless high-speed Internet access to businesses and to date offers broadband services in over 13 urban markets including New York City, Boston, Los Angeles, Chicago, Philadelphia, the San Francisco Bay area, Miami, Seattle, Dallas-Fort Worth, Houston, Nashville, Las Vegas-Reno, and the greater Providence area. For more information on Towerstream services, please visit www.towerstream.com and/or follow us @Towerstream.

The Towerstream Corporation logo is available at http://www.globenewswire.com/newsroom

About Hetnets Tower Corporation

In early 2013, we formed a wholly owned subsidiary, Hetnets Tower Corporation ("Hetnets"). Since 2010, the Company has been exploring opportunities to leverage our fixed wireless network in urban markets to provide other wireless technology solutions and services. Over the past few years, a significant increase in mobile data generated by smartphones, tablets, and other devices has placed tremendous demand on the networks of the carriers. The Company believes that the wireless communications industry is experiencing a fundamental shift from its current, macro-cellular architecture to hyper-densified Small Cell architecture where existing cell sites will be supplemented by many smaller base stations operating near street level. The Company also believes that Wi-Fi will be an integral component of Small Cell architecture.

We have effectively transferred certain assets to Hetnets which is the operating entity for our shared wireless infrastructure segment. Hetnets plans to generate the majority of its revenue from (i) rental of space on street level rooftops for the installation of customer owned Small Cells which includes Wi-Fi antennae, DAS, and Metro and Pico cells, (ii) rental of a channel on Hetnets' Wi-Fi network for the offloading of mobile data, (iii) rental of cabinets, switch ports, interconnection services, including backhaul or transport, and (iv) rental of power and power backup.

About the Wireless Broadband Alliance

Founded in 2003, the aim of the Wireless Broadband Alliance (WBA) is to secure an outstanding user experience through the global deployment of next generation Wi-Fi. In order to make this a reality, the WBA is currently championing various initiatives in the Wi-Fi ecosystem including Next Generation Hotspot (NGH) trials, Wi-Fi Roaming and its Interoperability
Compliance Program (ICP). Today, membership includes major fixed operators such as BT, Comcast and Time Warner Cable; seven of the top 10 mobile operator groups (by revenue) and leading technology companies such as Cisco, Google and Intel. WBA member operators collectively serve more than 1 billion subscribers and operate more than 5 million hotspots globally. The WBA Board includes AT&T, Boingo Wireless, BT, China Mobile, Cisco Systems, Intel Corporation, iPass, KT Corporation, NTT DOCOMO and Orange. www.wballiance.com

Participants of the ICP Trial


AT&T Mobility Services, Boingo Wireless, BT, China Mobile, NTT DOCOMO, KT, Orange France, PCCW Mobile HK Ltd, Shaw Communications, SMART Communications, TMN (Portugal Telecom), Towerstream and True International Communication Company Limited.

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Apple's iOS 7 proves it's a Wi-Fi world

June 12, 2013 | By Tammy Parker

One need only look at features included in the souped-up iOS 7 announced at Apple's (NASDAQ:AAPL) Worldwide Developers Conference to see that Wi-Fi has truly become the cellular industry's BFF.

The newest version of Apple's iPhone mobile operating system will be included in the next iPhone--rumored to be called the iPhone 5S or iPhone 6--which will be released in the fall.

One of the major Wi-Fi-related additions to the latest iOS is support for the Hotspot 2.0 standard, which should make it easier for iOS devices to connect to certified and secure Wi-Fi hotspots. Inclusion of this technology in the high-profile iPhone will go a long way toward unifying mobile industry backing for this approach to seamless cellular-to-Wi-Fi offloading.

Another significant feature some expect to see in the upcoming iPhone is support for the next-generation Wi-Fi standard, 802.11ac, which should help drive 802.11ac adoption in Wi-Fi network routers. Apple said Monday that it is including support for 802.11ac in its new AirPort Extreme base station, Time Capsule and MacBook Air laptops, and Gartner analyst Carolina Milanesi told Computerworld the next-generation iPhone will likely support 802.11ac as well.
ZyXEL Communications applauded Apple's addition of 802.11ac to some of its products, saying urban dwellers trying to use congested 2.4 GHz spectrum will welcome 802.11ac, which uses 5 GHz spectrum. "Additionally, 11ac support is ideal for graphics and video professionals who can take advantage of the increased bandwidth to improve productivity by reducing downtime while transferring multimedia files," the company added.

802.11ac support could come in handy for gaming as well when using another new iOS 7 feature, AirDrop, which employs peer-to-peer Wi-Fi or Bluetooth as a conduit for discovering other nearby Apple devices and remotely sharing files--including photos, videos and contacts. AirDrop first appeared in the Mac OS X 10.7 Lion, according to Apple Insider.

Though Apple included AirDrop in iOS 7, it did not include near-field communications (NFC). "During the Monday keynote, Craig Federighi, Apple's senior vice president of software engineering, took a dig at Samsung's NFC capabilities, saying there will be 'no need to wander around the room bumping your phone with others','" PC Mag wrote.

Further, Apple is adding a new FaceTime Audio feature to iOS 7, which enables native VoIP. This can be used over a cellular data plan if a carrier allows it, but, more importantly, it can be used over Wi-Fi. "The FaceTime button is right there, a click away from each contact on your phone. FaceTime Audio doesn't require downloading a separate app, nor does it require finding other people you want to call from those apps. You just have to go to your contacts, and your iPhone will determine whether your contact also has FaceTime Audio," said The Atlantic Wire.

Also among the numerous new iOS features is automatic updating, which drew an approving tweet from Sen. John McCain (R-Ariz.), who complained last month during a Senate hearing on Apple's tax practices that he was frustrated at having to manually update his iPhone's apps. The automatic updating feature will leverage strong cellular or Wi-Fi connections for quick downloads of app updates.

And iOS 7 finally enables users to toggle Wi-Fi on and off without having to dive into the device's settings panel.

But not all of the iPhone Wi-Fi news this week related to iOS 7. AT&T Mobility (NYSE:T) said it is bringing its Enhanced Push-to-Talk service to business customers through a new app available for Apple's iPhone 5 and iPhone 4S, boasting that this will be the first time a U.S. carrier is offering PTT capabilities on the iPhone. In addition to the app, AT&T said its Enhanced PTT service can now be used over Wi-Fi, including more than 32,000 AT&T Wi-Fi hotspots.

Taking a look at the growing use of Wi-Fi in smartphones of any ilk and the list of new iOS 7 features with Wi-Fi forces one to recognize just how crucial the 802.11 family of standards and its offshoots have become to the mobile industry. It's probably an understatement to say that the modern cell phone is increasingly the Wi-Fi phone.--Tammy
Comcast to Pepper Neighborhoods With WiFi Hotspots

By Rachelle Dragani
E-Commerce Times

If you're a Comcast Xfinity subscriber, you may soon have the opportunity to broadcast a WiFi signal from your home that any other Xfinity user in range would be able to access. The signal wouldn't interfere with your secure, closed home network -- it would just be one more patch in a patchwork quilt of WiFi coverage that Comcast wants to establish.

Comcast is rolling out a neighborhood WiFi initiative designed to allow its Xfinity Internet subscribers to log in to nearby wireless hotspots outside of their home.

Subscribers to the service will essentially be the hosts for two separate WiFi networks. One will be their private and secure home connection. The other signal, which Comcast would provide for free, would serve as a neighborhood signal that could be shared by other users, such as guests of the home or other Xfinity users who happen to be looking for a WiFi connection nearby. Those users would use their own login information to access the service.

Keeping the networks separate would not only protect the security of the more private line, but also ensure that subscribers' personal connections wouldn't be slowed down due to network congestion.

Comcast has been testing the initiative in several areas on the East Coast, including the Washington, D.C., metro area. About 100,000 customers are already using the service.

Only available to Xfinity subscribers, the service is part of the Comcast's overall strategy to deliver more wireless access both inside and outside of users' homes.

Making It Work

If successful, Comcast's plan could be a popular way to increase customer access to WiFi and keep those customers at Comcast, said Ritch Blasi, senior vice president of mobile and wireless at Comunicano.

"This is a good way to foster loyalty with their current customers by extending broadband service outside the home or business," he told the E-Commerce Times.

It's especially important for Comcast to foster that loyalty. Demand for wireless access is increasing, and several cable, satellite, wireless and Internet service providers are scrambling to fill that need, said Rob Enderle, principal analyst at Enderle Group.
"If it works, it should be very popular," he told the E-Commerce Times. "If they can get the infrastructure in place, they can challenge with VoIP technology and underprice the telephone companies with a technology that can approach the mobility of 4G but at a far lower price."

That's only if the company can execute a seamless implementation, though, which could be difficult, Enderle observed.

"Maintaining quality and bandwidth will be an increasing problem -- and unlike the cellphone companies, the WiFi hubs are mostly not under Comcast control," he pointed out. "This could give customers very uneven quality, but they should have a cost and price advantage that is significantly offsetting this."

Expanding WiFi's Reach

Like many cable operators, Comcast has already rolled out public WiFi services in spots such as cafes, shopping areas or train platforms, and that trend is only going to continue, said Blasi.

"Coverage is king in wireless," he noted.

Comcast seems to understand that, said Enderle.

It knows that offering as much coverage as possible is key in this industry, and the companies that can offer that bandwidth, as well as being willing to be flexible with their wireless plans, are going to be the ones that end up as key players, he explained.

"It certainly shows that cable companies have a way to fight back -- and should if they don't want to become obsolete," suggested Enderle.

"This battle is far from over, though, and either the cable or telephone companies are likely to be a casualty ... in a few years and, I expect, both know this. Comcast is playing the long game, but if they don't, they are likely out of business in five to 10 years."

AT&T’s Project VIP Ahead of Schedule and Still Ramping

May 10, 2013 | by J. Sharpe Smith | AGL-1. Carrier. LTE | No Comments


AT&T’s Project Velocity IP (VIP) is running ahead of schedule with nearly 200 million LTE POPs covered to date, and the carrier expects to complete almost 90 percent of 300 million POPs by
the end of this year, John Stephens, senior executive VP and CFO, told AT&T’s first quarter earnings call.

“It’s still early, but we already have made tremendous progress with our LTE deployment,” he said. “The LTE network also is operating at high [network performance] levels.”

Capital expenditures for the first quarter were $4.3 billion with more than half going to wireless. **Total capex is expected to be $21 billion as Project VIP ramps up.** However, AT&T is lowering its long-term capex to the $20 billion range for both 2014 and 2015, according to Stephens, down from the $22 billion level that was announced as part of project VIP last November.

“This reduction brings no slowdown in our project VIP deployment. As we refine our VIP planning, we are seeing greater integration efficiencies in our spending curves,” he said. “Our LTE build is accelerating into this year’s spending. That along with additional savings in non-Project VIP spending gives us confidence to revise our expectations without changing our overall build target.”

**The driver of Project VIP, mobile data, continues to increase service revenue, which now represents a $20 billion annualized stream growing at 21 percent.** Smartphone subscribers, which now make up 70 percent of AT&T’s postpaid base, increased by more than 1.2 million in the quarter and by more than 7.1 million in the last 12 months.

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**16 Cellular Bands. 3 Wi-Fi bands. One Handset.**

http://mobile-experts.blogspot.com/2013/05/16-cellular-bands-3-wi-fi-bands-one.html

Joe Madden, Mobile Experts

May 2013

The drive to create a single-SKU smartphone is getting a little crazy. Okay, drop the words “a little”. Today’s flagship smartphones cover 2G in four bands, 3G in six bands, and LTE in six bands. To make things worse, TD-LTE, Carrier Aggregation, and supplemental downlink (SDL) bands will increase the total count to between 12 and 16 bands by 2016. MIMO in
most of these bands doubles the number of antennas and receivers, creating a giant headache for the RF guys.

At the same time, the Wi-Fi ecosystem is making a transition from 802.11n to 802.11ac, making dual-band operation a standard feature on most handsets. In a few years, we also expect introduction of 802.11ad to become prevalent, with 60 GHz short-range operation for huge bandwidth. The consumer applications for Gigabit communications are already on their way, so in our headline we listed 3 Wi-Fi bands—a likely possibility for smartphones in the 2016 timeframe. The number could conceivably increase to 4 Wi-Fi bands, with 802.11ah standardizing bursty communications below 1 GHz for M2M applications. Nobody can predict whether this mode will be desirable on handsets, four or five years from now.

Mobile Experts has recently completed two market studies to understand the industry reaction to these difficult problems. We've interviewed more than 50 different companies to fully understand what's going on in the handset RF ecosystem. Will all of these bands work together? What sacrifices will be made to performance? Does a CMOS module like the Qualcomm RF360 make a difference? Will Wi-Fi and cellular radio components merge together?

In our study on RF Front Ends for Handsets, we concluded that the industry can, and will, support the increasing complexity. RF vendors have found incredible ways to cram the additional complexity into a smaller size than today’s modules, allowing space in the handset for a huge battery. New modules are coming in the market that will help to consolidate functionality, making entry-level smartphones easy to implement and making “Worldphones” feasible with skillful engineering and some extra components.

Chart 1: Number of Active Cellular Bands Worldwide
In our study on Carrier Wi-Fi, we found that the low cost of Wi-Fi is making a big impact on the market. Today, about 34% of total global mobile data passes through a Wi-Fi access point. By 2017, we expect that 48% of traffic will flow through Wi-Fi, with Carrier Wi-Fi contributing at least 15% of the total. One key conclusion that came out of our interviews with global operators: Carrier Wi-Fi will be the primary way for billions of people to access the Internet, due to poor residential broadband access in most of the world.

The rise of Carrier Wi-Fi also leads us to the conclusion that dual-band Wi-Fi will be built into most mobile handsets in the future. The entry-level smartphone will include dual-band Wi-Fi, even if it only includes 3G instead of LTE. There is also a possibility that we will move away from one MIMO “spatial stream” for Wi-Fi to incorporate 2x2 downlink MIMO for handsets, as we have for many tablets.

We will add a third Wi-Fi band for high-end smartphones in 2015 to 2016, when 802.11ad (WiGig) is adopted for very high speed data transfer at 60 GHz. Streaming HD content from
a handset to a PC or television screen, or downloading a movie from a kiosk will happen somewhere north of 1 Gbps at very short range...making this a high end feature that will penetrate 10-20% of the market by 2018.

*Chart 2: Migration of mobile data to Wi-Fi and Small Cells*

Source: Mobile Experts

Overall, we see strong, growing market demand for high-speed data communications in 51 frequency bands today, and we expect that as many as 19 data bands will be crammed into a single handset. Add Bluetooth, NFC, GPS, and FM Radio to the list, and we will have 24 radio bands in the “iPhone 8” or the “Galaxy S7”—handsets that are currently implemented as messy lines on white-boards in Cupertino and Seoul today.

The staggering complexity of the “Worldphone” RF design is separating Apple and Samsung from LG, RIM, Nokia, and others. While Apple and Samsung will drive to include as many bands as possible, competing to offer the best “Superphones” on the market, they certainly
get more attention in the press. Their strategy has worked out well so far, with the flagship phones driving their overall market share upward.

However, Apple and Samsung are sacrificing RF performance in their drive for single-SKU capability, and other companies are able to offer products which work better in a local market. For example, RIM has avoided some of the compromises made in radio performance by other companies and currently offers much better radio performance than an iPhone 5 or a Samsung Galaxy S4. In the real world, that means that a Blackberry may get 5 Mbps when your iPhone is running at 2 Mbps or even less. For the sake of Nokia, RIM, Motorola, and end users everywhere, we hope that mobile operators recognize the difference between multi-band capability and actual performance.

Posted 3 weeks ago by Joe Madden

Passpoint Promise Land

May 04, 2013

Samsung launched the new Galaxy S 4 with great fanfare, but the greatest thing about that device is buried rather deep in the user's guide. It is the world's first smartphone to ship with Passpoint enabled!
Passpoint is the Wi-Fi Alliance's designation for devices and network equipment that support the Hotspot 2.0 standard. **There is almost no amount of hype that goes far enough when talking about the impact that Hotspot 2.0 will have on the wireless world.** Seriously.

![Passpoint notification on a Samsung phone](image)

Hotspot 2.0 has been a work in process by the Wi-Fi community for better than half a decade. The goal being to make the process of Wi-Fi roaming as easy to use and secure as with cellular. It's not an easy proposition, but that standard was finally completed in June of last year, and network equipment with the Passpoint certification began to ship in the fall. Then came the wait for smartphones vendors to start shipping Passpoint certified devices. Now that wait is finally over!

With Samsung starting to ship Passpoint on the Galaxy S 4, we can expect the other major smartphone vendors to follow suit in short order. Users will now be able to enjoy all the benefits of Hotspot 2.0 technology, and it's a long list.
What makes Passpoint such a big deal is that it heralds in a new era where users no longer have to think about SSIDs or authentication or fumble around with passwords. Instead they just get connected. Just as in the cellular world, all the complexity of roaming and getting connected will be hidden from the user. That's a network and device problem, and not a user problem.

All users care about is an always best-connected wireless experience. And Wi-Fi roaming can go far beyond the cellular experience. You don't need to leave the country or even leave town to enjoy the wonders of roaming.

A user can roam at a local coffee shop, at a football stadium across town, or an airport on the other side of the world. Roaming partners can include mobile operators, cable operators, wireline operators, large and small enterprises, large and small public venues, consumer brands, and the list goes on. Roaming is simply the magic behind the curtain that makes everything happen.

Think about a huge web of millions of Wi-Fi access points owned by tens of thousands of different entities, all of which can be accessed by the user courtesy of a web of behind the scenes roaming agreements.

And not only does it make the user's life a lot easier, it solves the network densification problem for mobile operators. With the arrival of Hotspot 2.0, Wi-Fi will begin to so weave itself into the fabric of the mobile experience that it will start to disappear from view. Hotspot 2.0's magic doesn't end with seamless roaming, the technology also provides an encrypted airlink.

Now when a user sits down in a coffee shop or airport they don't need to worry about the security of their over-the-air communications. This is a problem that plagues a lot of public hotspots.
Congratulations to Samsung for being the first vendor to ship Passpoint capable devices, and now the entire wireless user community worldwide can begin to enjoy an entirely new and even more compelling user experience.

U.S. mobile data traffic grew 69 percent last year
Voice minutes were flat and fewer SMS messages were carried on networks in 2012, CTIA said

MAY 03, 2013

U.S. mobile networks carried 69 percent more data traffic in 2012 than in the prior year, but roughly the same number of voice minutes and fewer SMS messages, according to the industry group CTIA.

The findings came from a semi-annual survey by the organization, which represents the nation's mobile operators. The results released Thursday covered the full year 2012.

Data traffic bounded past 1 trillion megabytes in 2012, rising from 866.8 billion megabytes in 2011 to 1.468 trillion megabytes last year, CTIA said. Other results show factors that probably helped to drive that growth. For one thing, the number of active smartphones (and "wireless-enabled PDAs") grew 36.4 percent, while even more data-hungry wireless-enabled devices, such as tablets and laptops, grew by 10.2 percent.

The total number of subscriber connections crept up by 3.3 percent to 326.4 million, more than the number of people in the country: Wireless penetration in the U.S. was 102 percent at the end of last year, according to CTIA.

However, the use of SMS declined, with 2.19 trillion text messages sent and received in 2012, down 4.9 percent from 2.3 trillion a year earlier. That may not mean consumers are sending fewer short text messages to each other but that more are using so-called "over the top" messaging services such as Skype and WhatsApp, which don't count toward SMS traffic totals. Meanwhile, SMS's multimedia cousin, MMS, grew by 41 percent to 74.5 billion messages sent and received. That's good news for carriers, though MMS use is still on a far smaller scale.
Subscribers spent more time talking on the phone in 2012 than in 2011, but only by a bit. Minutes grew by 0.2 percent to 2.2999 trillion.

The group and its carrier members have used growth in mobile data for years to support calls for more radio spectrum being opened up for mobile services. But in its press release announcing the latest survey results, the group put the spotlight on how much carriers are investing in their networks: $30.1 billion in 2012, up 19 percent from the prior year.

That's the most the carriers have spent in any year since the survey began in 1985, and it comes out to US$94 per subscriber, the group said. That sum also dwarfs the level of mobile network investment around the world, which averages $16 per subscriber, according to CTIA.

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