

## Avren Femtocell Conference: Femto Forum Formation

**Analysts:** P. Jarich  
**Report Date:** Jul 05, 2007  
**Markets:** Wireless Infrastructure

### Summary

#### Event Summary

July 2, 2007 – The Femto Forum – an independent, not-for-profit organization – was launched by a number of telecom vendors focused on the femtocell opportunity: Airvana, ip.access, NETGEAR, picoChip, RadioFrame, Tata and Ubiquisys. Headed by Simon Saunders, the Forum will work to promote femtocell uptake via market education, ecosystem development and standards development. New members – operators and vendors – will be publicly announced in the near-term.

#### Analytical Summary

- **Current Perspective:** Positive on the formation of the Femto Forum. At a very basic level, the Femto Forum points to a growing interest in realizing the potential of femtocells through common marketing messages, standards development, regulatory support, etc. And, while it would benefit from a public endorsement by large operators and vendors, the Femto Forum is being supported by a set of vendors constituting what are considered the most ardent (interested) femtocell players. Of course, the credibility needed to move the market will likely require visible, active support from major operators and system vendors – not just femtocell specialists.
- **Vendor Importance:** High to the Femto Forum because it plans to address – head-on – some of the key obstacles which could hold up the success of the market. As with most new technologies, the success of the femtocell market will require concerted marketing efforts (convincing users and operators of the value), concerted regulatory efforts (convincing governments of the femtocell value proposition), and concerted standardization efforts (to bring scale and cost-efficiencies to the market). These are the stated tasks of the Femto Forum. They are also, however, the function of groups such as the 3GPP, somewhat mooted the necessity of the Forum.
- **Market Impact:** Moderate on the femtocell market. The Femto Forum has its head in the right place, focusing on activities which should help to drive the market. It also boasts members who know the femtocell space well and are invested in the market's success. The Forum's ability to affect change, however, has yet to be proven and will remain a major question until market-shaping vendor and operator members are named.

### Perspective

#### Current Perspective: **Positive**

We are taking a positive stance on the formation of the Femto Forum. To be sure, the success of the femtocell market will depend on solid credible products. It will also require support in terms of marketing the femtocell value proposition (to operators, regulators and end-users) and building the market scale necessary to deliver

cost-effective solutions. The Femto Forum (backed by a strong set of femtocell specialists) is in a position to address these demands. So too, however, is the 3GPP – a group which has had the public support of brand-name operators and vendors for some time, lending it a strong track-record of credibility and clout.

The basic femtocell premise is relatively simple. For FMC services, a home base station can provide coverage and capacity benefits (an improvement over home-zone or repeater solutions) while not requiring users to buy a new mobile device (an improvement over dual-mode WiFi solutions). Yet, as simple as the premise might be, it won't be successful unless these competitive advantages are conveyed to market stakeholders: operators, end-users and regulators. And, ideally, solutions should standardize on a discrete set of options in order to build scale and keep costs down.

This is where the Femto Forum comes in. Pulling together a set of femtocell specialists, the group plans to promote the femtocell market through education, marketing and standards issues including radio planning, radio control, interoperability, device management, device provisioning, etc.

Nobody would argue with the basic tasks or value of the Femto Forum. Clearly, the start-ups currently driving femtocells into the market see the Forum's efforts as critical to the survival of the industry. This does not mean, however, that the Forum will succeed in its efforts. Bringing a diverse set of vendors (each with slightly different agendas) together with a common market message will be difficult. Effectively selling this message in a market crowded with competing FMC solutions will be more difficult. Competing with the efforts of established standards bodies such as the 3GPP (a group which can publicly proclaim larger, more credible, members) will be even more difficult yet.

## Positives and Concerns

### Competitive Positives

- The advent of the Femto Forum points directly to the momentum behind, and interest in, femtocells. While operators and vendors, alike, might debate the merits of femtocells, the fact that a number of competing vendors have banded together to drive femtocell messaging, standards and regulation speaks to the fact that the market is real – real enough that vendors (and, ostensibly operators) see a need to coordinate their market promotion efforts.
- The Femto Forum promises to address the marketing and regulatory issues necessary to drive femtocell success. The specific value of femtocells to operators as well as users is still unclear. Is it based on low-cost calling, improved coverage, improved data performance? Likewise, the impact of regulation on femtocells is unknown. Will operators allow the reuse of 3G spectrum in the home? Will safety concerns surrounding RF radiation arise? To transform the femtocell opportunity into a successful market, each set of issues will need to be tackled – something that the Forum has on its agenda.
- The Femto Forum promises to address the standardization issues necessary to drive femtocell success. Whereas operators have understood the value of placing a base station in the home for years, the price of doing so has been prohibitive. The interest in femtocells stems from a belief that unit prices can be driven below \$200. Obtaining these prices will be difficult, however, if scale is hindered by vendors pursuing a myriad of diverse femtocell models and architectures. Combined with operator demands for best-of-breed, and

multi-vendor networks (including access devices and integration solutions), the importance of standardization cannot be denied.

- While launched without a public endorsement from major mobile vendors or operators, the Femto Forum brings together a veritable who's who of femtocell specialists: Airvana, ip.access, NETGEAR, picoChip, RadioFrame, Tata and Ubiquisys. With a strong focus on the market, these vendors are highly motivated to see the Forum succeed in its efforts. Perhaps more importantly, these vendors are particularly close to the market, suggesting a critical understanding of operator demands from femtocells.

## Competitive Concerns

- No major operator or vendor members were announced at the formation of the Femto Forum. Yes, femtocell specialists know the market and are deeply invested in its success. Major players, however, provide a deeper endorsement of the market and have the clout to scale, regulation, market perceptions, etc.
- The 3GPP, 3GPP2 and WiMAX Forum may be a more appropriate venue through which to build standards for the femtocell ecosystem. Doubtless, attempts to build standards (or, at least, standard practices) around femtocell products are admirable – it will be hard to build a scalable, cost-effective femtocell solution without these efforts. Typically, wireless standards have come from bodies such as the 3GPP (and its counterparts in other technologies). In their favor, these groups maintain a broader set of members, immediate credibility and are already working on femtocell issues (femtocells, for example, are already a part of LTE specifications).
- There is little that the Femto Forum can actually do to ensure scale efficiencies within the femtocell market. The Forum can specify recommended femtocell architectures and even recommended network integration models. It cannot, however, compel operators to converge on one model or architecture – particularly since every operator will have their own requirements and may see specific network implementations as a competitive advantage.
- Ultimately, it's unclear how much power the Femto Forum can wield in terms of operator or consumer perceptions. From a marketing perspective, the Forum can release white papers, position papers and market primers. None of this, however, ensures that the Forum will be successful with its marketing push. Coming from different perspectives, the members must still agree on a common vision and learn how to work cohesively. Then, they will need to develop a story that is compelling when compared with competing solutions and technologies.