



3GPP2 and Femto Forum Announce Publication of a Best Practice Guide for cdma2000 Femtocell Deployments

Deployment guide aims to help the hundreds of cdma2000 operators understand how they can successfully deploy femtocell services

Arlington, VA –November 14, 2011 - 3GPP2, the organization responsible for the development of specifications which are the basis for the cdma $2000^{@1}$ family of standards, and the Femto Forum, the independent industry and operator association that supports femtocell deployment worldwide, today announce the publication of an operator guide for cdma2000 femtocell and small cell deployments. It provides an overview of cdma2000 standardized architecture and interfaces, as well as deployment best practices. These include rollout models, frequency planning, provisioning options, radio parameters, interference mitigation techniques, security and handoff.

The guide provides a detailed insight into the full capabilities of cdma2000 femtocells thereby going beyond the features encompassed in the current standard. It also provides essential advice for operators on key issues such as effectively managing handoff, how to phase the roll out of small cells with expanding feature sets, as well as advice on using a shared carrier and how best to mitigate interference. These are applicable not just for residential implementations but also for the wider range of applications including enterprise, rural femto, and metrocells.

"This publication, formally known as 'S.R0139 Femtocell Systems Overview for cdma2000 Wireless Communication Systems' makes it easier to navigate through the detailed technical specifications pertaining to femtocells" said Ms Cheryl Blum, Chair of 3GPP2 Steering Committee. Mr. Nick Yamasaki, Chair of 3GPP2 TSG-S (Technical Specification Group for Systems and Services) added: "The intended audience ranges from network operator executive level personnel responsible for outlining objectives in early stages of deployment planning (e.g., required feature set of both the FAPs and femto-aware mobile devices, spectrum decisions), to product development managers responsible for detailed design decisions (e.g., FAP method of synchronization)."

"There are numerous live cdma2000 femtocell offerings around the world – including the world's first ever femtocell deployment in 2007. Last month at 4G World, Sprint confirmed that they had installed over half a million femtocells. However, given there are a total of 327 operators offering cdma2000 services globally, there remains a major untapped market who could benefit from the dramatic coverage and capacity advantages delivered by femtocells," said Andy Germano, the Femto Forum's Vice-Chairman. "This is the most complete operator guide available and contains detailed information on all aspects of femtocell deployment."

3GPP2 announced the formal publication of comprehensive specifications for femtocell devices that incorporate cdma2000 1x and HRPD (EVDO) radio access

¹ cdma2000[®] is a trademark for the technical nomenclature for certain specifications and standards of the Organizational Partners (OPs) of 3GPP2. Geographically (and as of the date of publication), cdma2000 is a registered trademark of the Telecommunications Industry Association (TIA-USA) in the United States.





technologies in March 2010. The specifications describe all aspects of a SIP/IMS-based femtocell architecture for highly-scalable deployment of femtocells. They allow the integration of existing mobile devices, enhanced femtocell-aware mobile devices, femtocell devices (FAPs), security gateways and femtocell convergence servers from multiple vendors.

About The Femto Forum

Femtocells are low-power wireless access points that operate in licensed spectrum to connect standard mobile devices to a mobile operator's network using residential DSL or cable broadband connections. The Femto Forum (www.femtoforum.org) has been set up to promote the wide-scale adoption of femtocells. It has 137 members including 63 operators representing more than 1.71 billion mobile subscribers – 33% of the global total. Comprised of mobile operators, telecoms hardware and software vendors, content providers and innovative start-ups, its mission is to advance the development and adoption of small cells via femtocells and broader applications of femto technology for the provision of high-quality 2G/3G/4G coverage and services within the residential, enterprise and public access markets. For more information about The Femto Forum, please contact Oliver Chapman at +44 (0) 7713 404 571, e-mail Oliver@femtoforum.org or visit the Femto Forum web site at http://femtoforum.org.

About 3GPP2

The Third Generation Partnership Project 2 is a collaborative Third Generation (3G) telecommunications specification-setting project comprising North American and Asian equipment manufacturers and carriers. The five Organizational Partners of the Third Generation Partnership Project 2, which are nationally recognized Standards Development Organizations are: Association of Radio Industries and Businesses (ARIB) – Japan, China Communications Standards Association (CCSA) – China, Telecommunications Industry Association (TIA) – USA, Telecommunications Association (TTA) – Korea, and Telecommunication Technology Committee (TTC) – Japan. For more information about 3GPP2, contact Victoria Mitchell of the 3GPP2 Secretariat at +1-703-907-7779, e-mail secretariat@3gpp2.org or visit the 3GPP2 web site at www.3gpp2.org. -