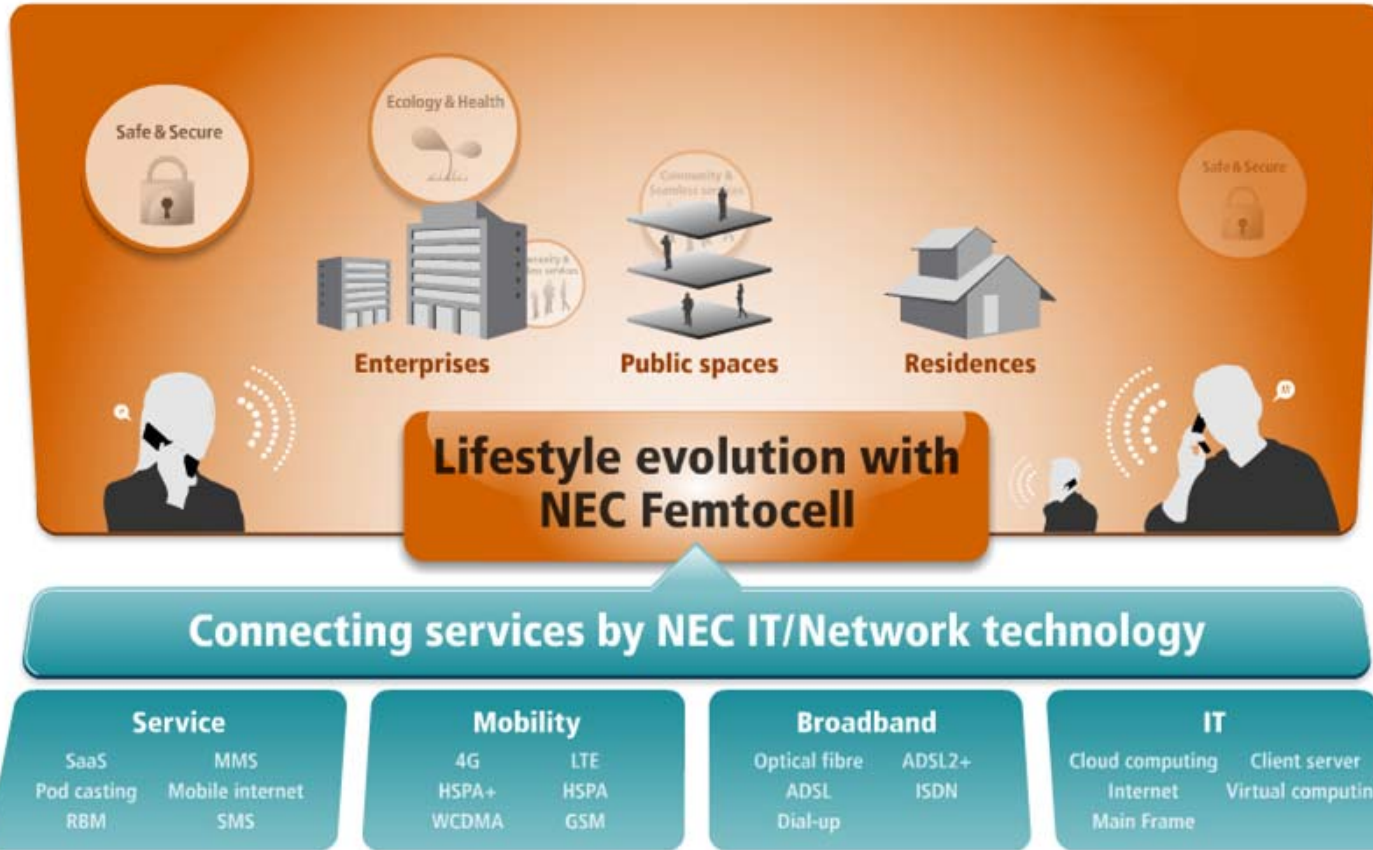




**Revolutionise your Mobile Lifestyle
with Femtocell Solutions & Services from NEC**

Revolutionise your Mobile Lifestyle with NEC Femtocell Solutions



NEC enables the seamless deployment of mobile cloud services

- Enhanced indoor coverage provided by Femtocells drive convergence of mobile access, service delivery and location aware services
- Using Femtocells to provide ubiquitous service delivery regardless of location is a key element of consumer application usage and key driver in enterprise revenue growth
- Femtocells bridge mobile and fixed networks, but it is only in combination with NEC's unique experience of IT/NW convergence that the true potential of this technology is realized. In this way, Femtocells will become a key component of next generation networks and an ubiquitous network society.

Open up new opportunities & experiences to mobile users

Open opportunities



Address issues

Service provision
under secured network

Connected Home
(Make Mobile Integral to Home)



- Home networking
Service

Compelling Mobile Data
(Drive Mobile Data Service Uptake)



- Rich contents
- SNS with Multimedia
- Streaming TV

Abundant Mobile Voice
(Improve coverage and capacity indoors)



+ **Common service** (e.g.) bundled billing service

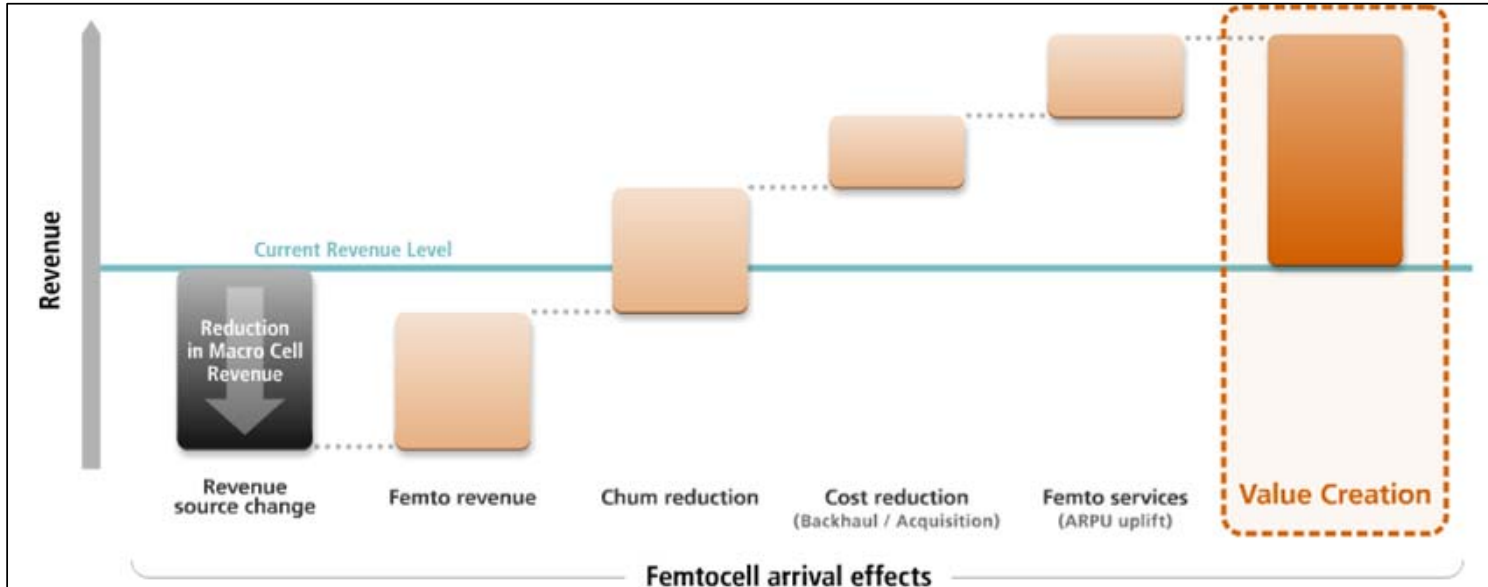
Femtocell Opportunities

Key benefits for end-users

- Dedicated 3G coverage and capacity - your own 3G mobile broadband network at home.
- Easy installation (Plug & Play), no truck roll
- All users enjoy the same benefits and services at home.
- Subscribers stay on 3G
- Integration to the digital and connected home



Demonstrable financial returns to Operators



Key benefits for Operators

- Create network capacity wherever needed.
- Enhance customer retention and reducing churn.
- Data off load at customer for high capacity applications
- New customer acquisition through observed coverage and performance



Opportunities

- Presence, Location and Context awareness
- Enables true delivery of Presence Based Services
- Meshed networks for enterprise and nomadic users



New from NEC for 2010

Products & Solutions

- New Commercial Deployments
- New Femtocell Access Points
- New Femto Integrated Access Devices
- Iuh-based solution
- Femtocell Service Platform
- Femto Home Gateway in the digital home

Advantages and Capability

- More Access Points for greater flexibility
- Iuh – NEC leading the way in opening up the network



NEC's Integrated Femtocell Solutions

Femtocell Service Platform

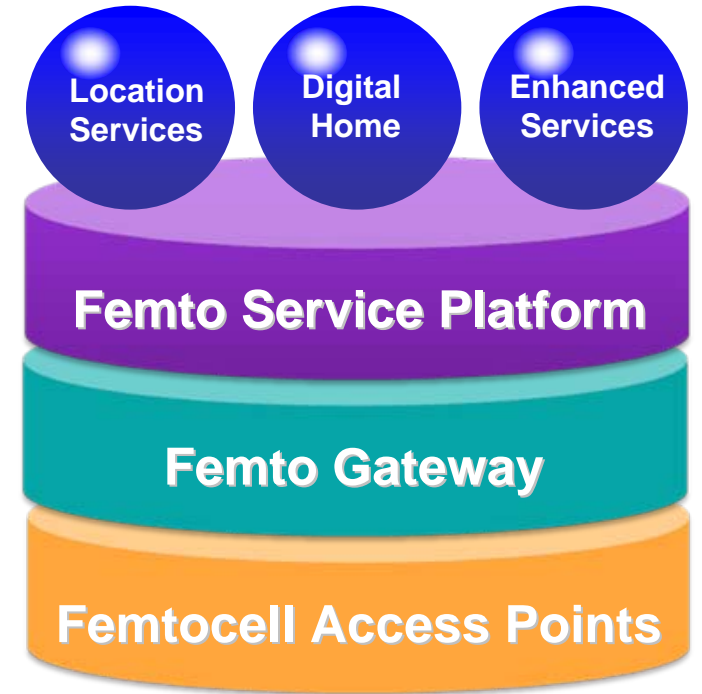
- Presence-based services, e.g. Alerts & Messaging
- Revenue generating service-enabler for Operators
- New Service-enabler for 3rd party Service Partners
- Key element for leveraging Femtocell adoption

Femto Gateway

- Mature, field-proven, flexible and saleable
- Advanced OSS and Service Assurance Solutions

Femtocell Access Points

- Home, SOHO, SME – flexible, mass-market solutions
- Enterprise – higher-capacity, wider coverage, advanced features
- Public indoor & outdoor Metrocells
 - Revolutionise the public 3G mobile network



Femtocell Markets, Products, Applications & Requirements



Home / Residential

- Improve voice and data quality
- Standalone Femto Box, plug-n-play with existing Broadband modem
- Small form factor
- Low power
- Integrated devices
- Future proofed for the digital home

Home + Office (SOHO)

- Home workers
- Small Office <20 staff
- Single or multiple access points
- Superior voice & data quality
- Advanced features
- High Throughput
- Integrated devices

Business (SME/SMB)

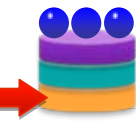
- Small-Medium Business 10s of staff
- Excellent voice quality
- Replaces PBX and Landline phones
- Single or Multiple access points
- HD-Voice Option
- 8 plus calls per AP

Corporate

- Larger Business with 100s of staff
- Multiple sites/buildings
- Superior voice & data quality
- Multiple APs often required
- High Security needs
- Integration with Corporate IT and Voice Network(s)
- HD-Voice option

Public / City

- Universities, City Centres, Shopping Centres, Airports
- Picocell / Microcell alternative
- Public Access
- High Capacity
- Wide Coverage
- Robust yet discreet



Home, SOHO & SME APs

Versatile femto access points to meet a range of home and business needs



NEW!

- 4 - 8 simultaneous calls
- HSDPA: up to 14.4 Mbps
- HSUPA: up to 5.76 Mbps
- Tx Power: 10 - 13 dBm

Integrated Access Devices

Complete communications solution for home or office



NEW!

- ADSL2+ & ADSL fall-back
- WiFi 802.11n
- Up to 2 VoIP ports,
- Up to 4 Ethernet ports
- Up to 2 USB 2.0 Host,
- Integrated Femtocell supports up to 8 calls, HSPA and 10-13dBm Tx Power

High-capacity, wide-range FAP

Robust yet discreet, wall-mounted product for enterprise and public spaces



NEW!

- **Up to 16 simultaneous calls**
- **HSDPA:**
up to 14.4 Mbps
- **HSUPA:**
up to 5.76 Mbps
- **Power: 20-24 dBm**
- **ADSL+ backhaul option**

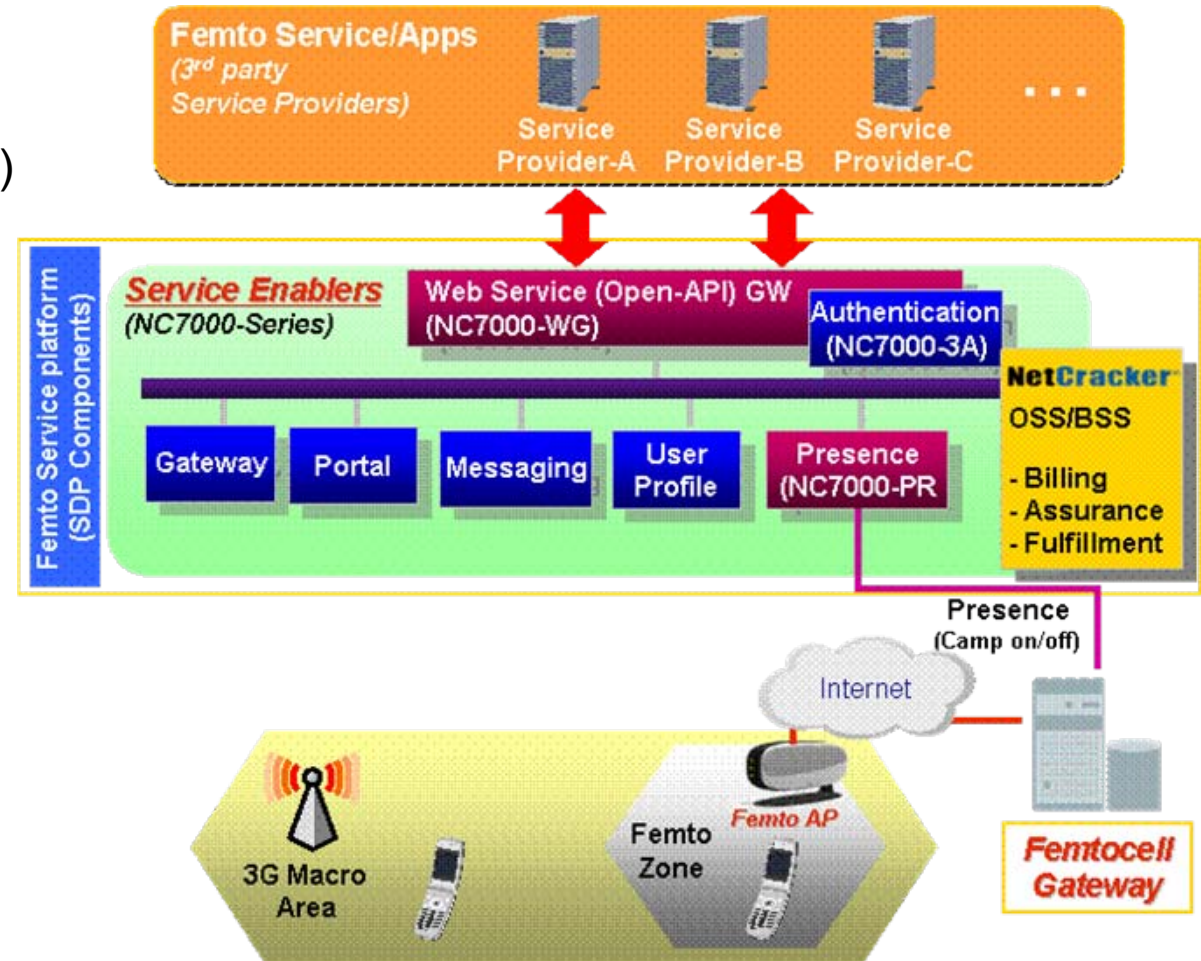
Introducing NEC's Femto Service Platform

Femto Service Platform Highlights

- Market proven, Carrier Grade Open Service Platform
- IT & NW Alignment (Femto, IMS/SDP, OSS)
- Quick media service deployment
- Residential & Enterprise Business Oriented

Expanding Service & Functional Ties

- Home control, M2M Service
- Rich Media Content Delivery
- Public Services (Airport, Lobby, etc.)
- Communities...



Advanced OSS and AP Management Solutions

Zero-touch Service Provisioning

- Seamless registration of Femtocell access points
- Service authorization using subscriber identifier such as IMSI
- Auto-provisioning of Femto service parameters such as the Radio Frequency Profile and entitlement of subscriber handsets

Service Configuration Management

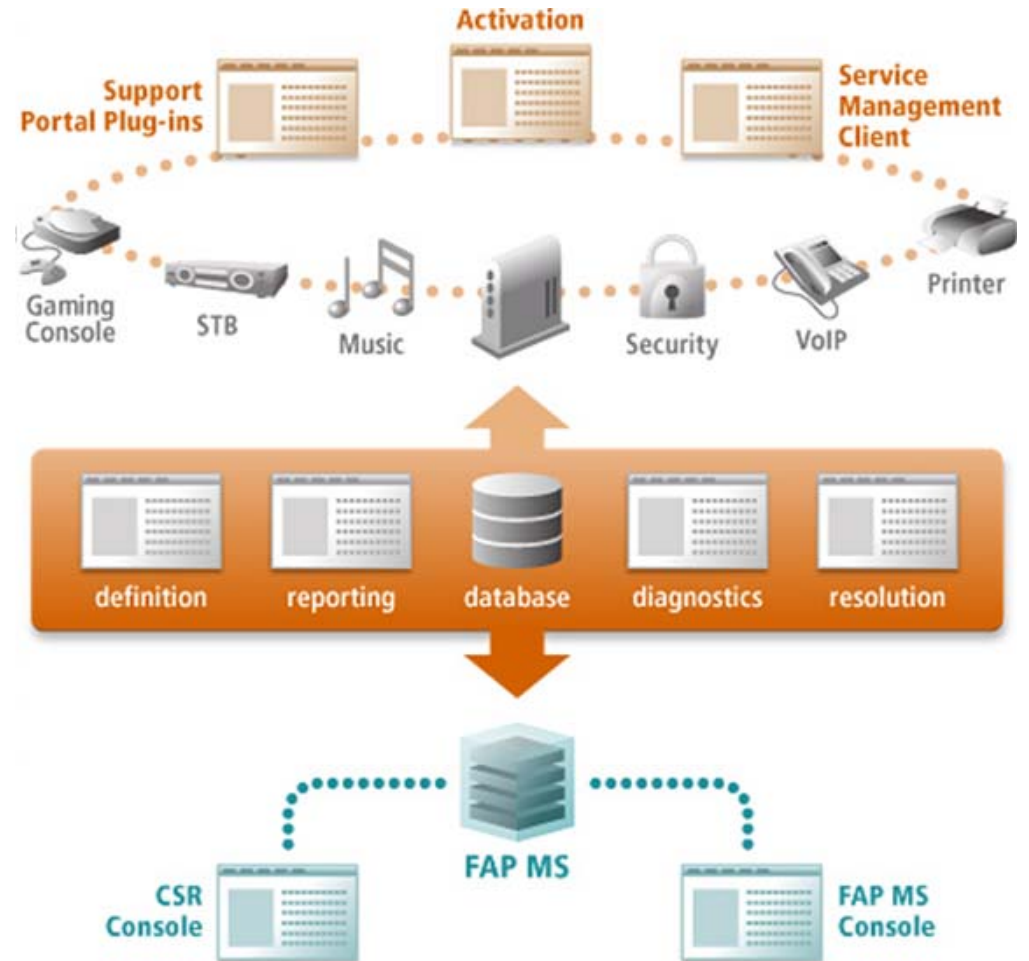
- Ad-Hoc configuration management such as subscriber handset entitlement
- Policy-based auto-configuration such as femtocell AP replacement

Intelligent, Proactive Service Monitoring & Service Assurance

- Detection of service effecting events to trigger service alarm and escalation
- Detect location change outside of service area and trigger APMS action to temporarily disable service

Diagnostics & Assisted Customer Care

- Real-time service diagnostics and remediation for Customer Service
- Integration and aggregation of diagnostic data with Mobile Device Manager
- Example Diagnostics
 - Quality of service diagnostics such as RF signal power, SNR, backhaul link speed, etc.
 - Review changes in RF configuration



Leading Technical Development & Innovation

Technology Leadership

- Awarded femtoforum award for progress in commercial deployments
- Leading luh interoperability and femtoforum plugfest activities
- Standards & Patents
- Driving technical requirements
- Femtocell test labs in 3 continents
- Track record in large field deployed 3G, LTE and WiMAX networks
- GAN, luh and SIP/IMS femto solutions

Enhancing the customer experience

- Femto Handover
 - Macro to Femto
 - Femto to Macro
 - Femto to Femto
 - Audio handover indicator
 - Always aware, always on net
- Camp-on Service Trigger
- Presence events & Presence server
- Delivery of cloud services
 - Service continuity at work and home
- Femto aware applications in the pipeline
 - Exclusive functionality and content

On the NEC stand @ MWC

What you can experience

Femto Camp-On Service Trigger

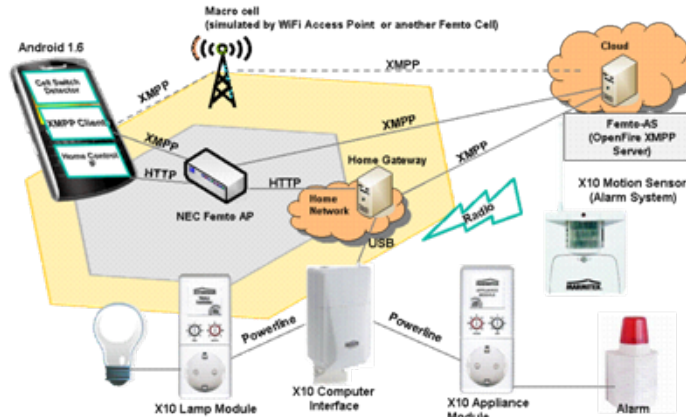
- Enables the Operator to build new presence based applications
- Demonstration of Home Control and Home Security Solutions

Location aware search and community platform

Home automation and control platform

- Context aware application for the connected home

Demonstration of 3GPP-compliant luh (from Tuesday)



Why you should talk to NEC today

NEC continues to pioneer the femtocell market

- New Access points for operator and end user choice
- Mature, Comprehensive, Market-Leading Platform and OSS
- Wide range of AP's for different Market Segments and supplier diversity
- Service enabler for Different Applications, network and AP driven
- Comprehensive support for a range of network Technologies: GAN, Iuh, IMS, SIP
- NEC quality, reliability & delivery, backed by a century of delivering to Customer needs

Please remember to also experience

- the NEC femto-enabled connected home demonstration on the stand opposite
- the NEC LTE showcase
- the NEC presentations at the MWC Conference
 - (## date, time, location)
- the NEC presentation at the femtozone
 - Tuesday 16 Feb, 17:00, Femtozone, Hall 2



Empowered by Innovation

NEC