# Fixed Mobile Convergence Enterprise Solutions

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**Cisco Global Mobile Team**

# Why FMC is causing a "Perfect Storm"

## HANDSETS

**Multimode devices becoming reality**

**Open OS changes the ownership model**

## SIP & IMS

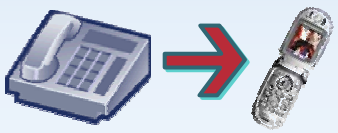
**Move to Create Platform for IP-Based Services**

**Session and service setup and control over IP**

**Service Convergence**

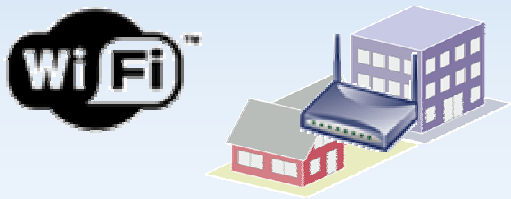
## VoIP

**Minutes continue to move away from fixed networks and on to broadband and mobile networks and eventually "peer-to-peer"**



## WLAN/UMA

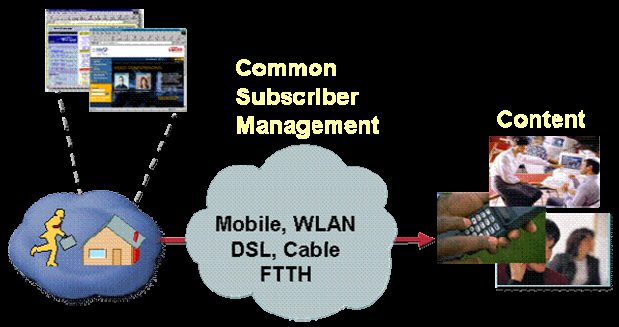
**Momentum Continues in Enterprise, Homes and Hotspots**



# Cisco Strategy
## A closer look at fixed-mobile service convergence

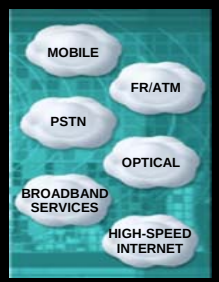
**APPLICATION CONVERGENCE**

Integration of New Innovative IP D/V/V Services over Broadband for **Increased Revenue**




**SERVICE CONVERGENCE**

Service Continuity across Access for **Customer Loyalty And Stickiness**



**NETWORK CONVERGENCE**

Eliminate Layers in the Network for **Increased OPEX/CAPEX Efficiencies**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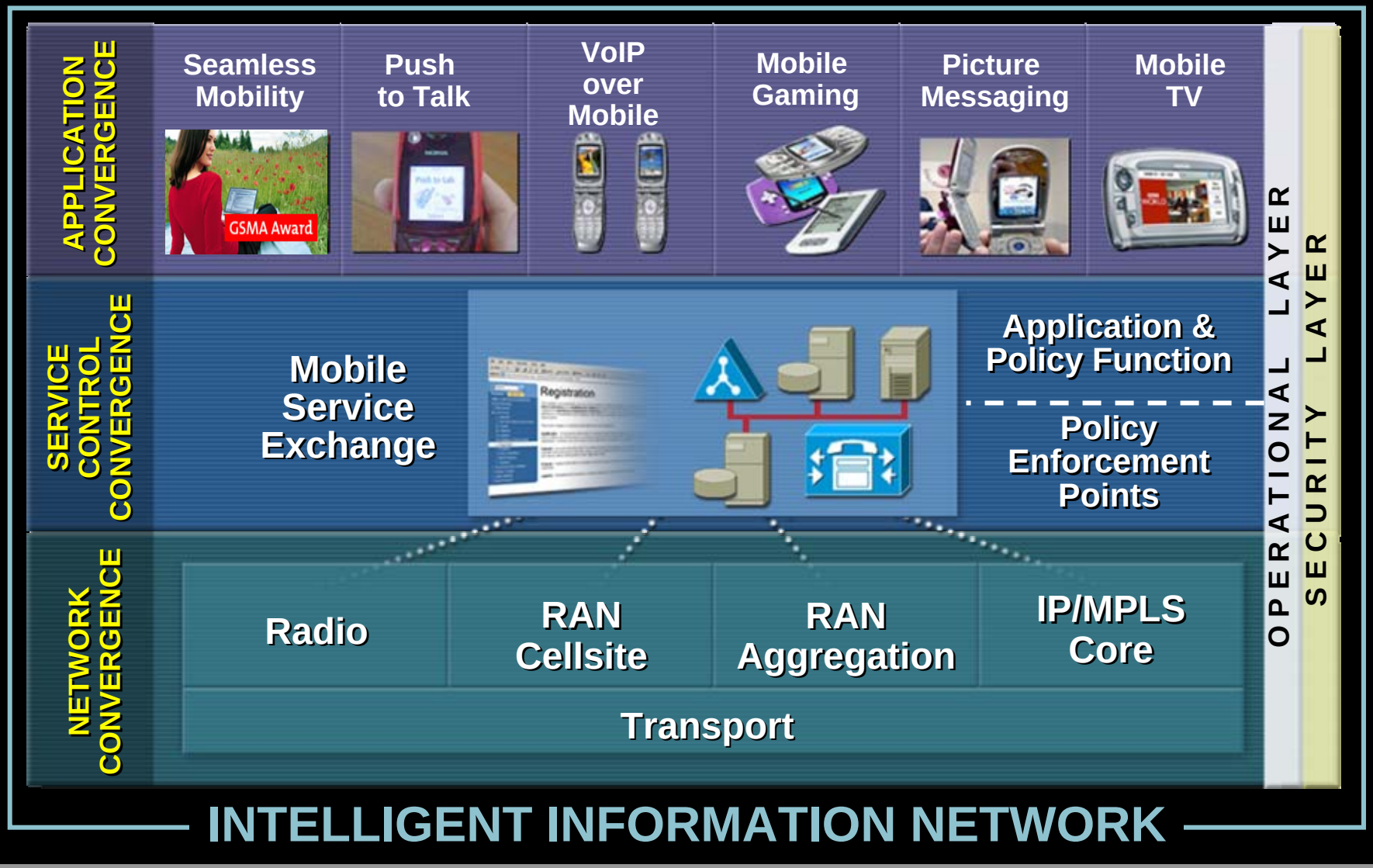
# Mobility IP NGN Architecture



# Mobility IP NGN Architecture

APPLICATION CONVERGENCE

Seamless Mobility

CMX: SSG, HA AP's

Mobile IP Client

swisscom mobile

OPTION WIRELESS TECHNOLOGY

OPERATIONAL LAYER

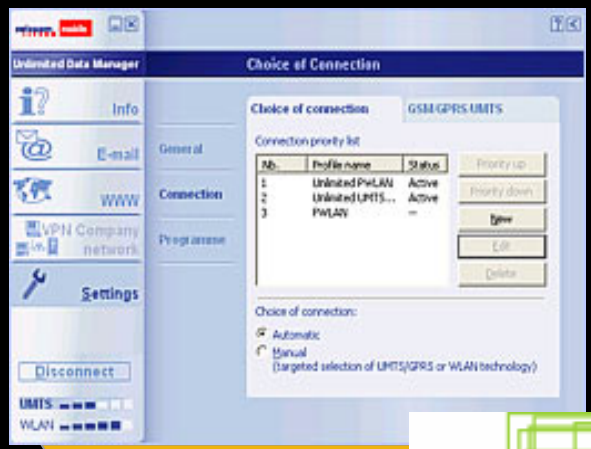
SECURITY LAYER

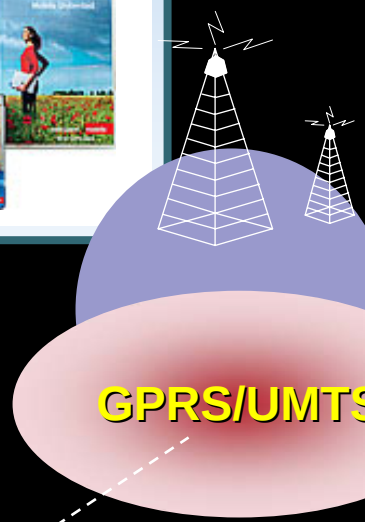
SOLUTIONS

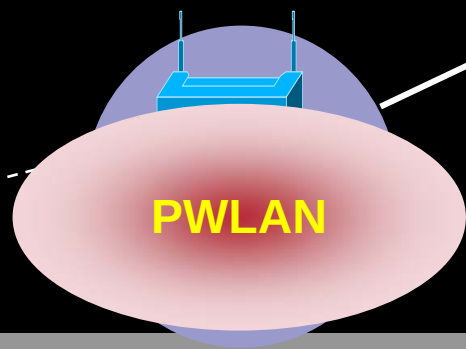
PARTNERS

INTELLIGENT INFORMATION NETWORK

# CMX: Seamless Mobility & Multiradio PC Data Card







# Mobility IP NGN Architecture

APPLICATION CONVERGENCE

Push to Talk

IPICS – IP Interoperability & Cooperation solutions

PTT Server (CSPS) / CDMA

MOTOROLA

sonim

SOLUTIONS

PARTNERS

INTELLIGENT INFORMATION NETWORK

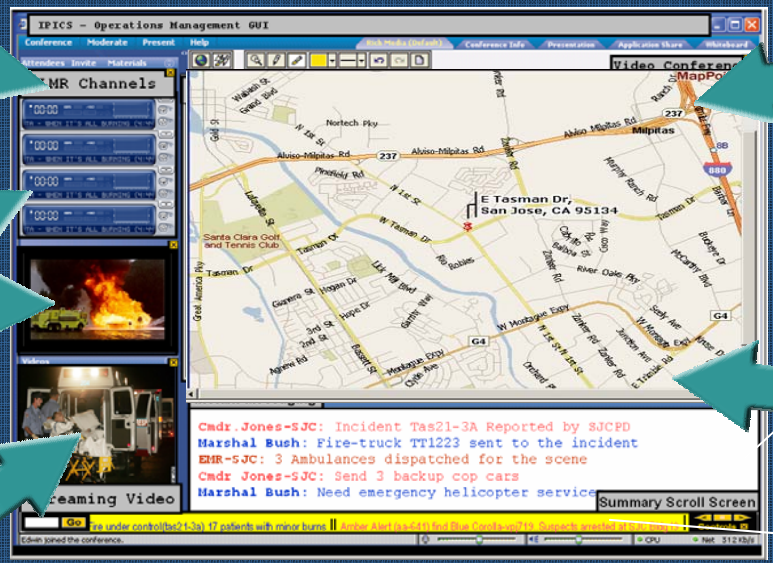
OPERATIONAL LAYER

SECURITY LAYER

# IPICS Vision and High-Level Architecture

Voice Interoperability

Video Interoperability



Data Interoperability

Instant Messaging

Incident Alert

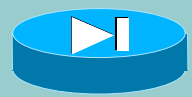
## IPICS Server

API

IVR

LMR GW

MAR



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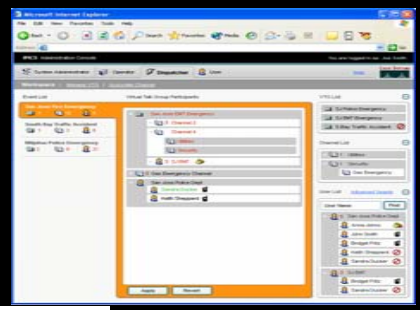
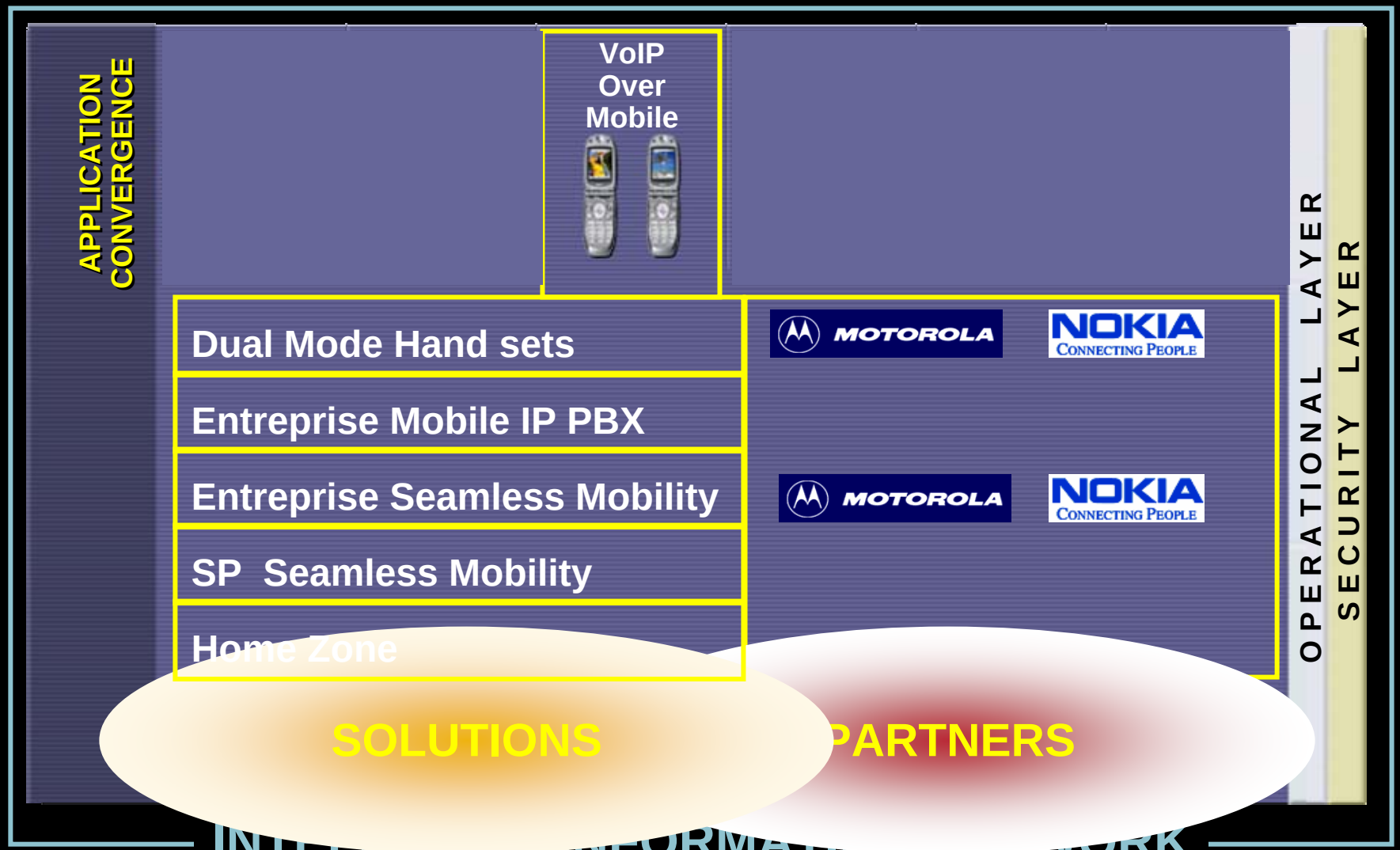
OTHER NW INFRASTRUCTURE

# IPICS Components - Release One Oct 24

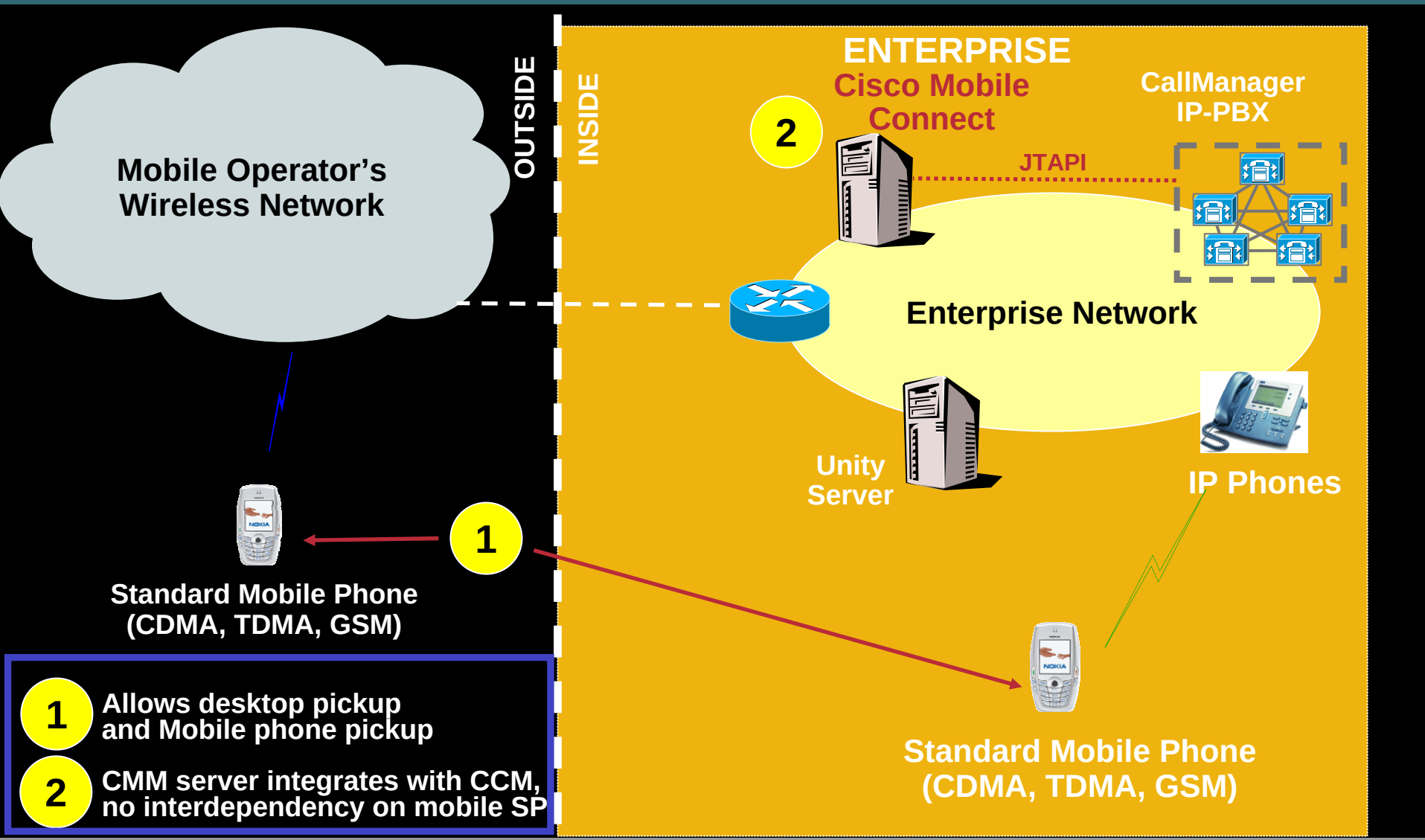
- IPICS Server (Appliance) MCS Platforms
- Media Services
  - RMS Router Media Services (Router DSP Release 1.0)
- Incident Management Console
- PMC (Push to Talk Management Center)
- IP Phone with Radio PTT capability
- Customization of PMC and Incident Management Console



# Mobility IP NGN Architecture



# IPC Mobility Solution: (Phase 1)
# Mobile Connect (for mobile phones)



# Cisco Mobile Connect  Highlights

- Simultaneous ring (single #)
- Multiple remote destinations (up to 4 – mobile, home, etc.)
- Single enterprise voice mail
- Desktop call pickup
- Mobile phone call pickup
- Enterprise “dial tone”
- Remote on/off
- Inclusive/exclusive filters
- Caller ID (given service provider support)
- System admin controllable user profile access
- Web-based admin for system admin and end-user
- No changes required with mobile phone or mobile cellular service provider
- CCM 4.x and 5.x compatible

# Cisco / Nokia Dual Mode Solution

- **Cisco Call Manager**
- **CM Express**
- **CCM user license**
- **Cisco Mobility Manager**
- **Cisco WLAN**
- Cisco ISR
- VPN3000 / Firewall

## Enterprise Infrastructure

**Operator infrastructure**

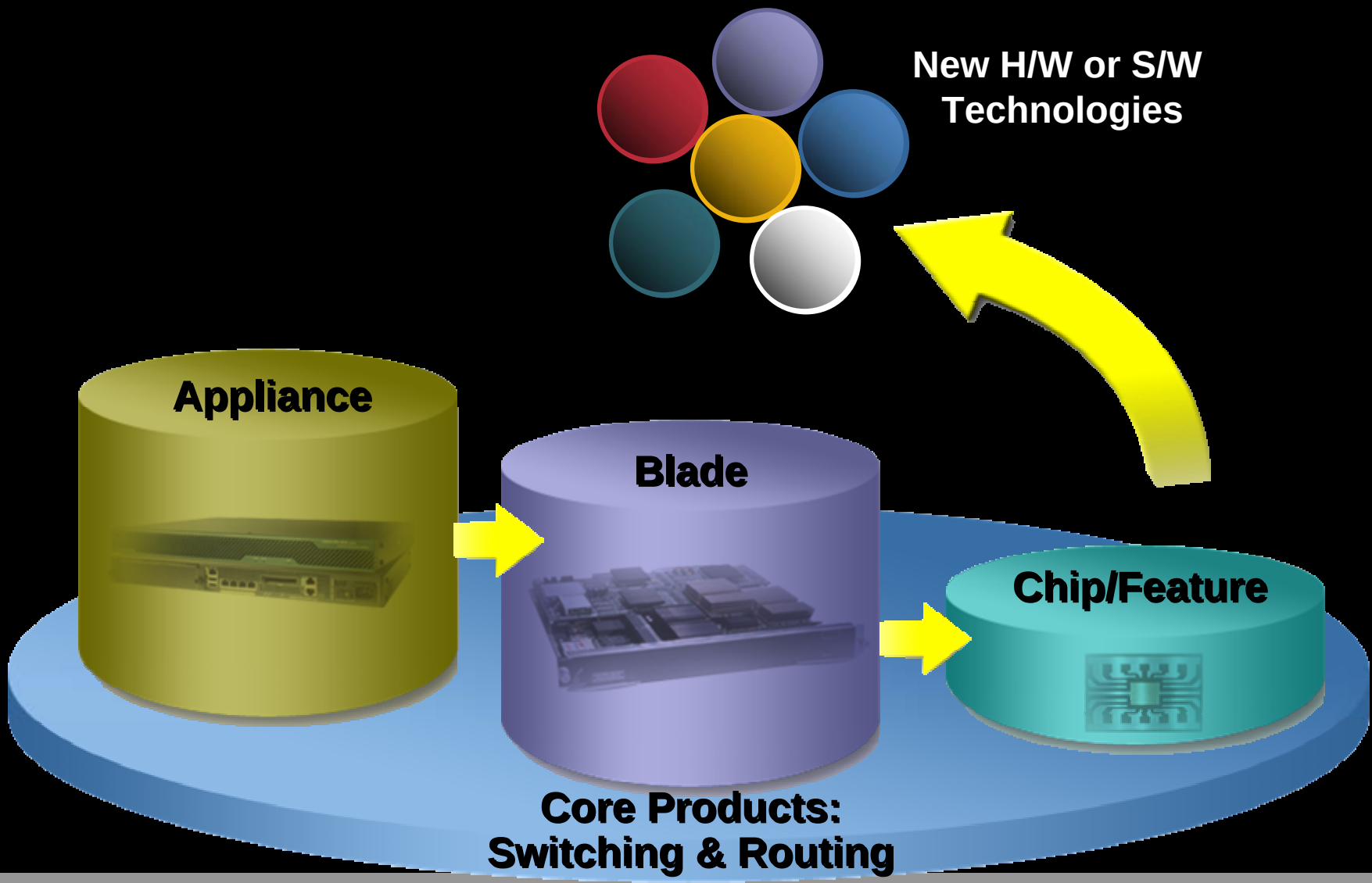
fixed network

mobile network

- **Nokia S60 Device**
- **CCX Compatible**
- **Nokia SCCP Client**
- Nokia Mobile VPN
- Nokia Mobile Email
- Nokia Business Center (Push Email+PIM)
- Nokia Device Manager
- Pointsec File Crypto
- Symantec Mobile Security

**Nokia SCCP Mobile Client**

# Expanding the Coverage - CCX



# Cisco Compatible eXtensions
# Clients and Wireless Access points Compatibility

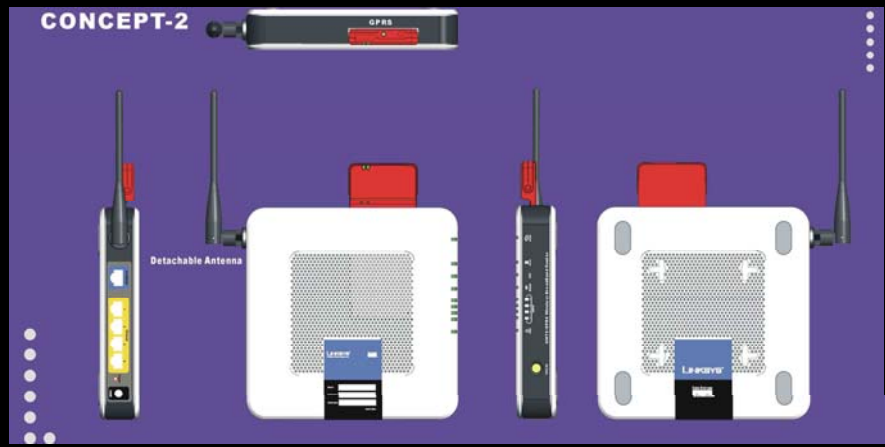
## http://www.cisco.com/go/ciscocompatible/wireless

- CCX is a Cisco a program to develop interoperability with semiconductor and client vendors with Cisco Access Points WLAN.
- CCX provides additional functionalities ( Security, QOS, Performance and battery Management and end to end performance ) improvement while working with Cisco APs and Cisco Wireless Infrastructure

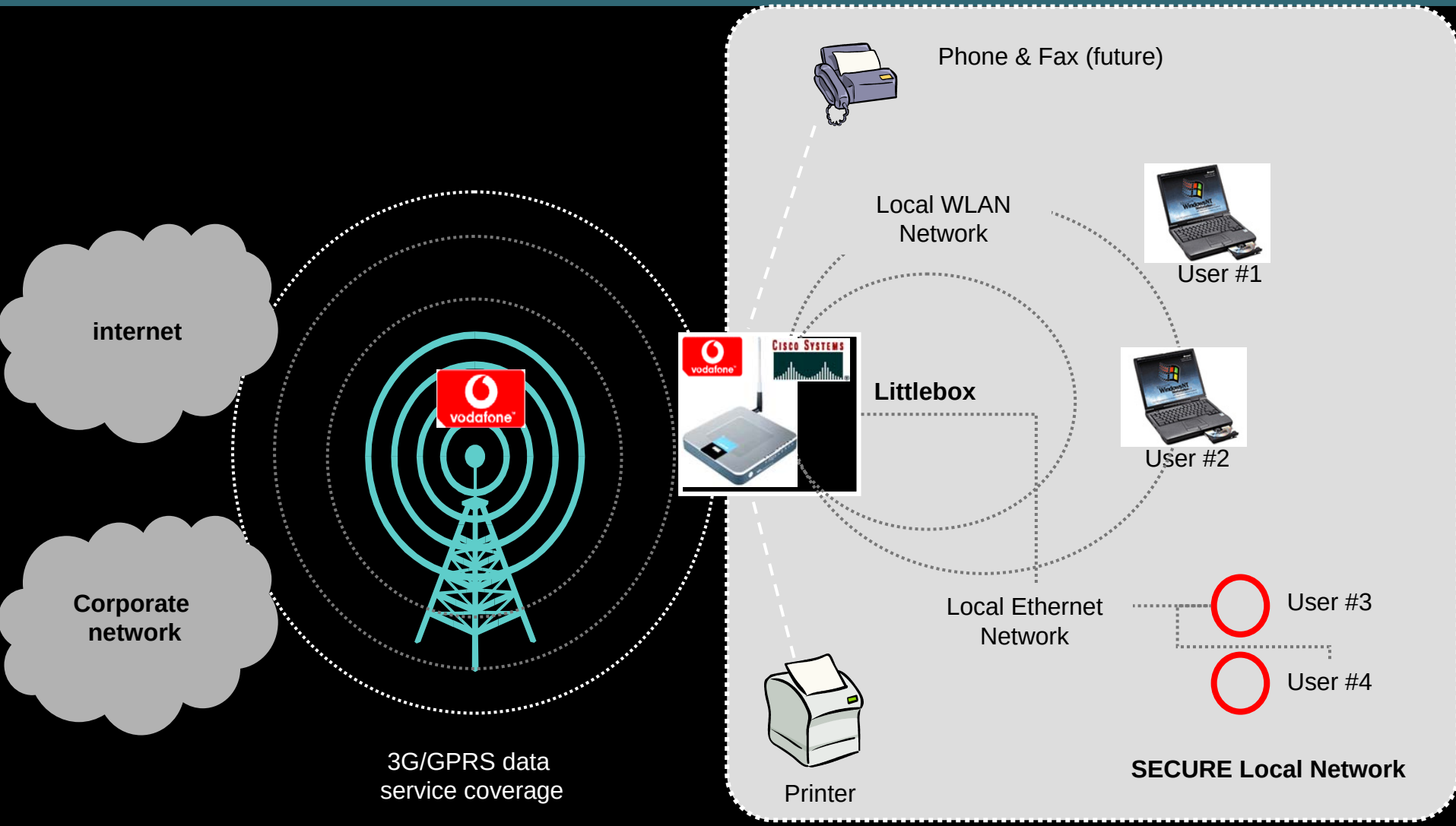
# Littlebox: Linksys-Based WLAN/3G Router

## Initial Feature Set

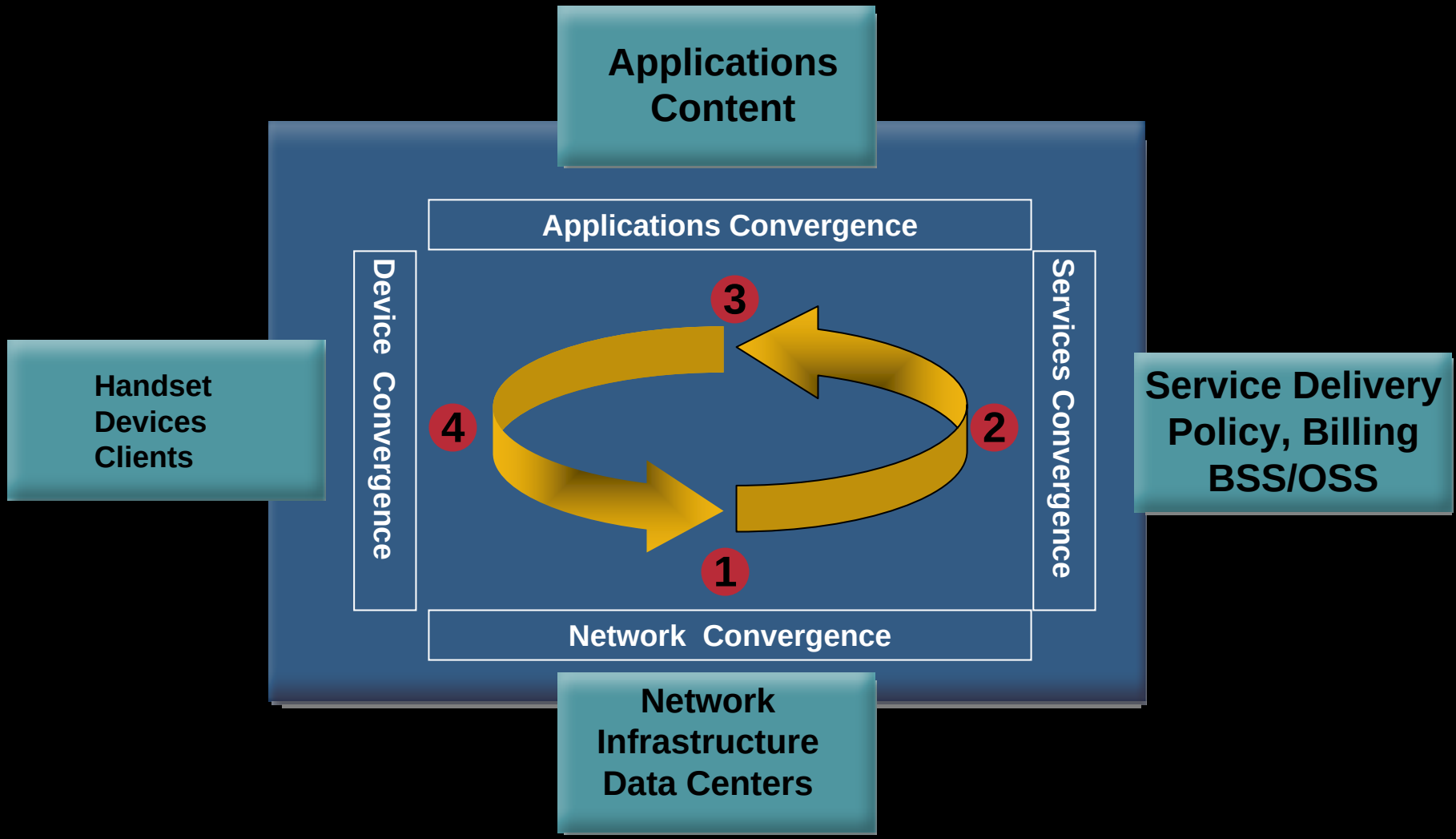
- 54 MB/s WLAN hotspot
- PCIMCA card slot to take Vodafone 3G data card
- 4-port Ethernet hub to support local networking and peripheral devices eg printer,
- Internal software customised to support Vodafone card and services



# Connect Box


Phone & Fax (future)
Local WLAN Network
User #1
User #2
Littlebox
internet
Corporate network
Local Ethernet Network
User #3
User #4
3G/GPRS data service coverage
Printer
SECURE Local Network

# Mobility Ecosystem is evolving in 4 dimensions



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