

### International Telecommunication Union

# Lifeworks – Turning vision into reality

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### End-user have high expectations for seamless communication

#### Convenience

Same look & feel on various devices leads to higher acceptance and usage

Enjoy new services

Demand for individual, lively & colorful communication services

Personalized services



#### **Availability**

Control and manage more effectively when and how to be contacted

### Don't care about the network

any access, any device, any location, any time

**Independency** 



### LifeWorks delivers sound solutions to industries in

transition



Information technology

Multimedia

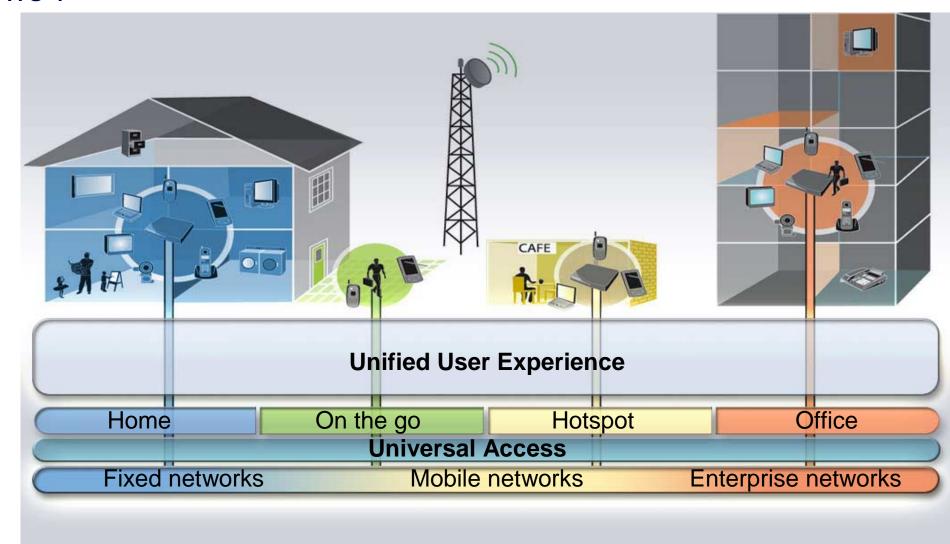
Entertainment

Services





### LifeWorks provides a unified user experience and universal access to services





#### LifeWorks



### A unified user experience

- Fast intuitive access to people and information
- Life-role settings for personal and professional activities
- Personal availability control



### Universal access to services

- Seamless connectivity at home, at work, and on the go
- Access to in-office business applications
- Universal presence information

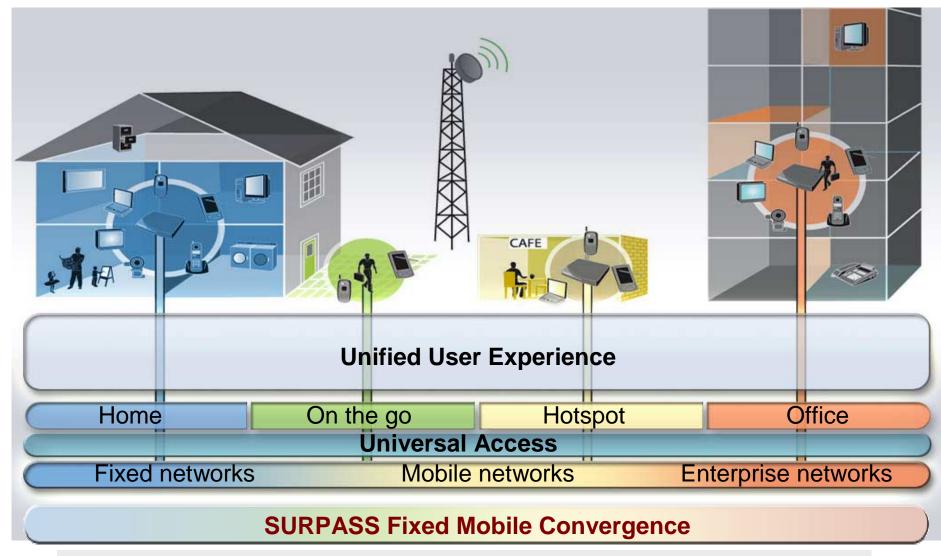


### LifeWorks benefits for network operators

- Enter new high-growth markets
  - Create new revenue streams
  - Exercise robust tariff models
  - Offer richer services
  - Secure more future business
- Implement powerful customer retention model
- o Lead as TIMES industry transforms

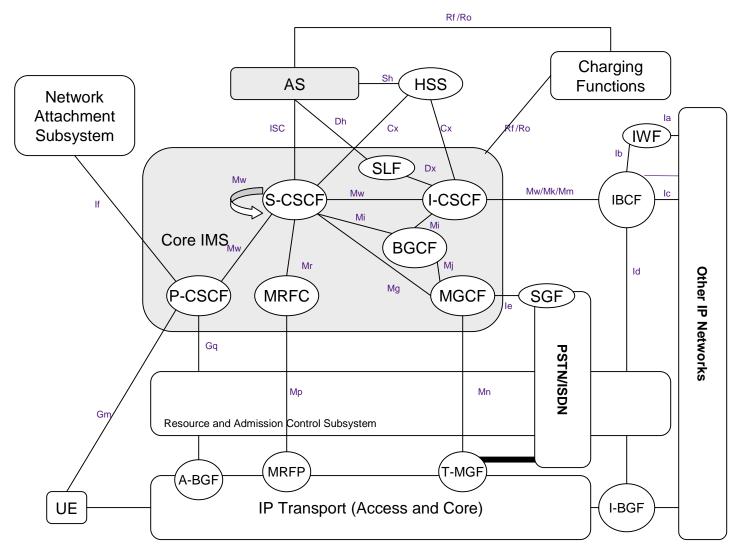


## SURPASS Fixed Mobile Convergenceturning Lifeworks vision into reality



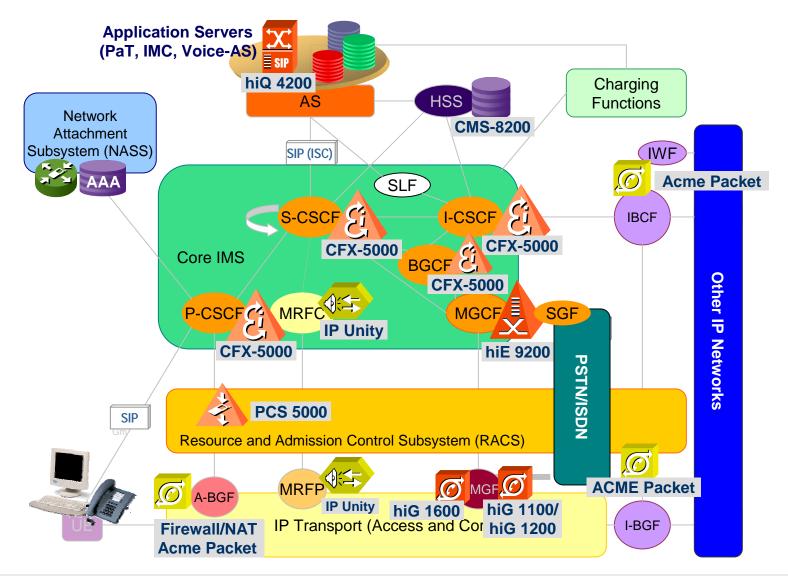


#### **NGN Architecture**





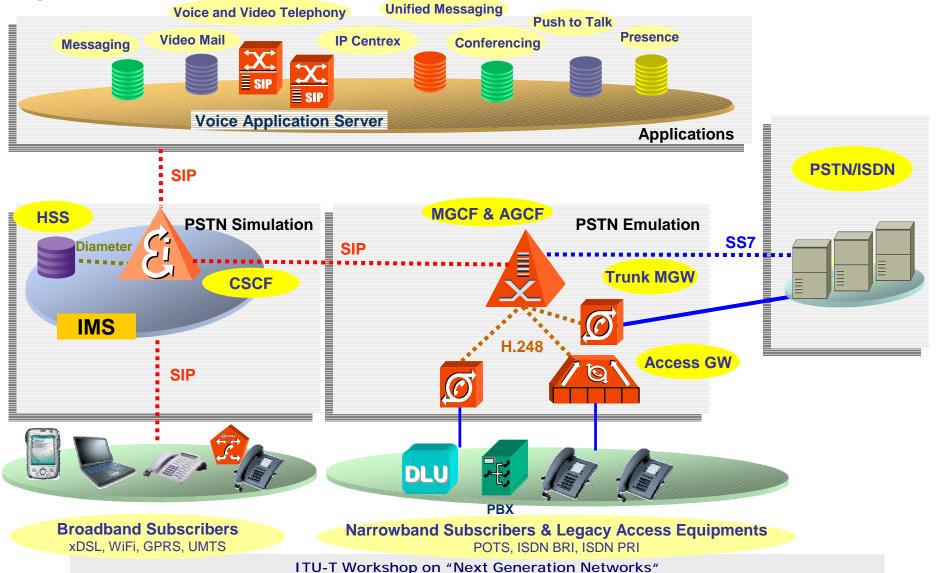
### Siemens FMC solution maps to NGN Architecture





### Fixed Mobile Convergence – a detailed look



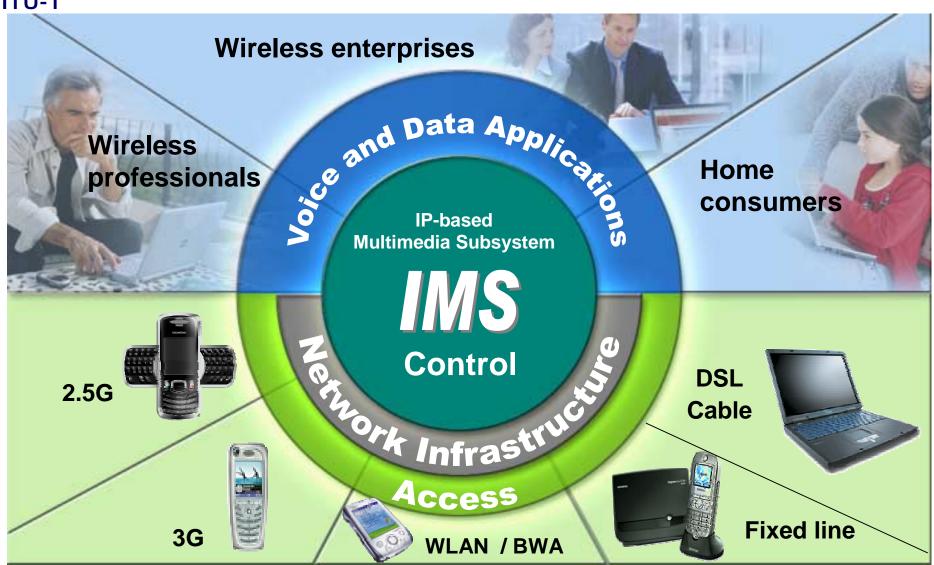


Hanoi, Vietnam, 15-16 May 2006



### IMS – the common control as the key to converge access technologies, content & applications

ITU-T





### IMS is a key element in NGN network evolution

- o IMS (IP Multimedia Subsystem) is the common control infrastructure for real-time and non-real-time end-to-end multimedia services and any mixture of those
- IMS is designed and standardized by 3GPP to integrate smoothly with existing mobile and fixed networks
- New and existing services (e.g. Presence, Location) and applications can be connected and controlled by IMS through the standardized ISC interface
- o By using SIP (Session Initiation Protocol) IMS based services can be accessed **from any IP/SIP capable device** (UMTS, GPRS, WLAN, wireline users, etc.)



### IMS allows efficient application integration

No IMS: - repeated vertical integration o With IMS: - one-time integration - no synergies!

Application 1 ... n















**Specific Sign-on** Authentication

**Specific Billing** 

**Specific Session Control** 

**Specific Database** per Application

**Specific Network** Integration

Specific O&M

**Specific Sign-on** Authentication

**Specific Billing** 

**Specific Session Control** 

**Specific Database** per Application

**Specific Network** Integration

Specific O&M

#### **IMS**

Single Sign-on **Authentication** 

**One Billing** 

One Multimedia **Session Control** 

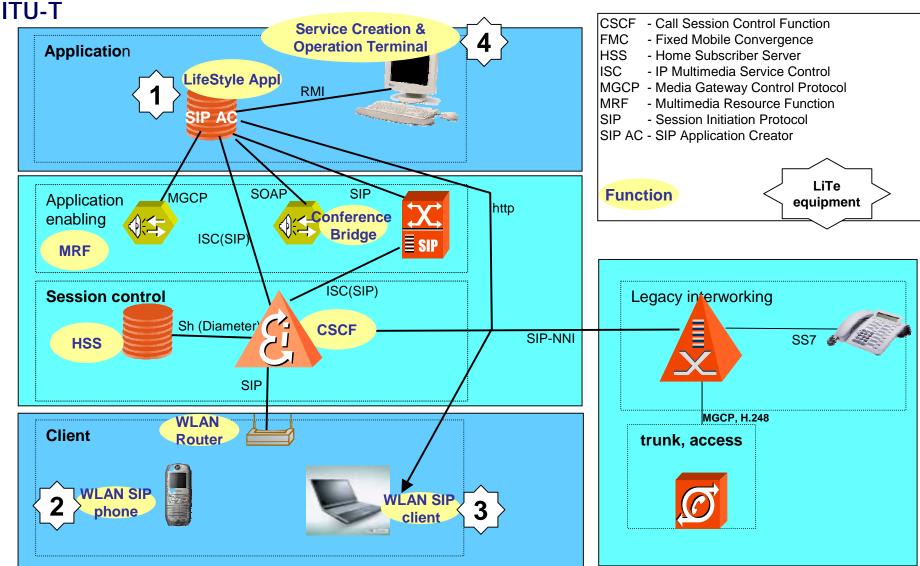
Global **User Database** 

Common network Integration

Common O&M



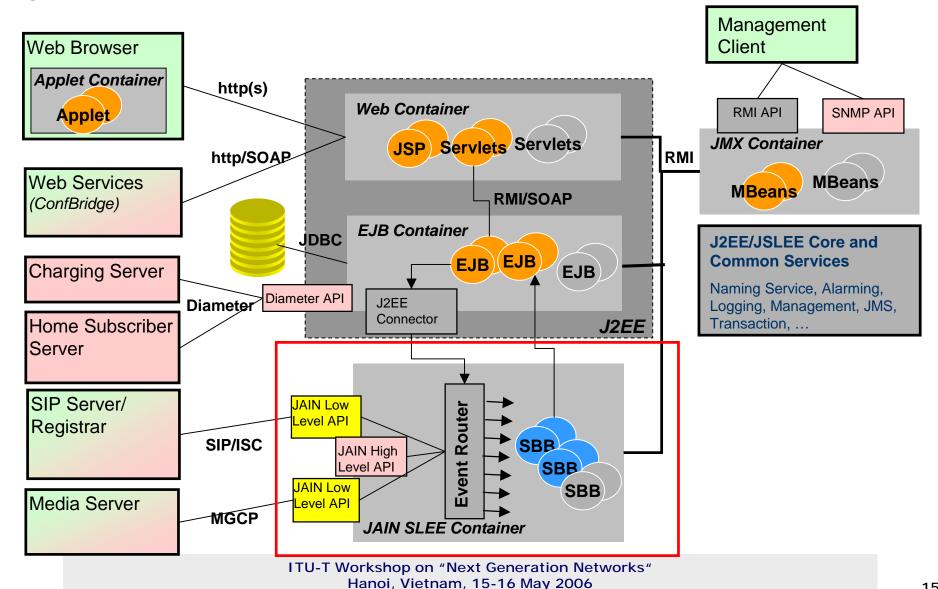
### Lifestyle Telephony Application Server with IMS





### Lifestyle Telephony with IMS – a detailed look

#### ITU-T





### Key FMC Network Component – Call Session Control Function

### o Functionality:

- IMS Registration and IMS User Authentication
  - Access control to IMS and support of different user authentication schemes
- IMS Session Control and Service Control
  - Service invocation and control of application servers
- IMS Addressing Support
  - SIP-URI, ENUM
- SIP Signaling Compression
  - Allows efficient transport over RAN
- IMS Routing Support
  - Dynamic routing of SIP messages
- Charging and Lawful Interception Support
  - Generation of charging and LI information in CSCF



### Key FMC Network Component – Home Subscription Server

- o The HSS is the central database for network services and the user profile data, such as:
  - User identity information (eg: MSISDN, IMSI, HTTP Digest Password etc)
  - Registration and Mobility Management information (eg: S-CSCF SIP address, hostnames etc)
  - Subscribed services and profiles:
    Application Server Trigger (Filter Criteria)
  - Charging Information, e.g. Charging ID



### Key FMC Network Component - Media Gateway Control Function & Access Gateway Control Function

- o Interconnection to CSCF via SIP
- Trunk Media Gateway Control and Access Gateway Control using H.248
- Integrated Signaling Gateway providing SS7 connection to PSTN network
- Full range of Class 4 and 5 services
- Most comprehensive set of network features
  - Routing
  - Number Portability .. and more ...
- Support of various signaling variants
  - Multiple ISUP variants (different from countries)
  - SIP, SIP-I, H.248, MGCP, INAP CS1/CS2/CS3, H.323 etc



### **Key FMC Network Component – Voice Application Server**

- VAS is an Application Server providing hosted services, i.e. it is a software based switching platform designed to run on commercially available hardware, utilizing standard communication protocols
- Providing feature rich voice and video application server to the IMS subscribers
- o Provides IP Centrex functionality
- Web based call management
- Attendant function and Presence management
- State of art commercial platform delivering residential, business, regulatory and next generation multimedia features for SIP users



### FMC as the major step to LifeWorks delivers Unified user experience

