
700MHz WiMAX for Personalized Wireless Broadband Broadcasting Platform

Chain Leader Communications
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Networking

- 2.5G/3G/HSDPA (Legacy Operators)
 - Voice Centric
 - Low Data Usage
- WiFi (Personal & WISP)
 - PC/PDA Connection with Limited Mobility
- DTV/DVB-H/DMB (Broadcasting)
 - One Way Broadcasting

Why WiMAX?

WiMAX's Outstanding Issues:

1. Deployment Cost
2. Interference



OECD Reports:

**The success of WiMAX based on the
Spectrum specification**

5.8GHz? 3.5GHz? 2.5GHz? 2.3GHz? Or 700 MHz?

700MHz Spacification:

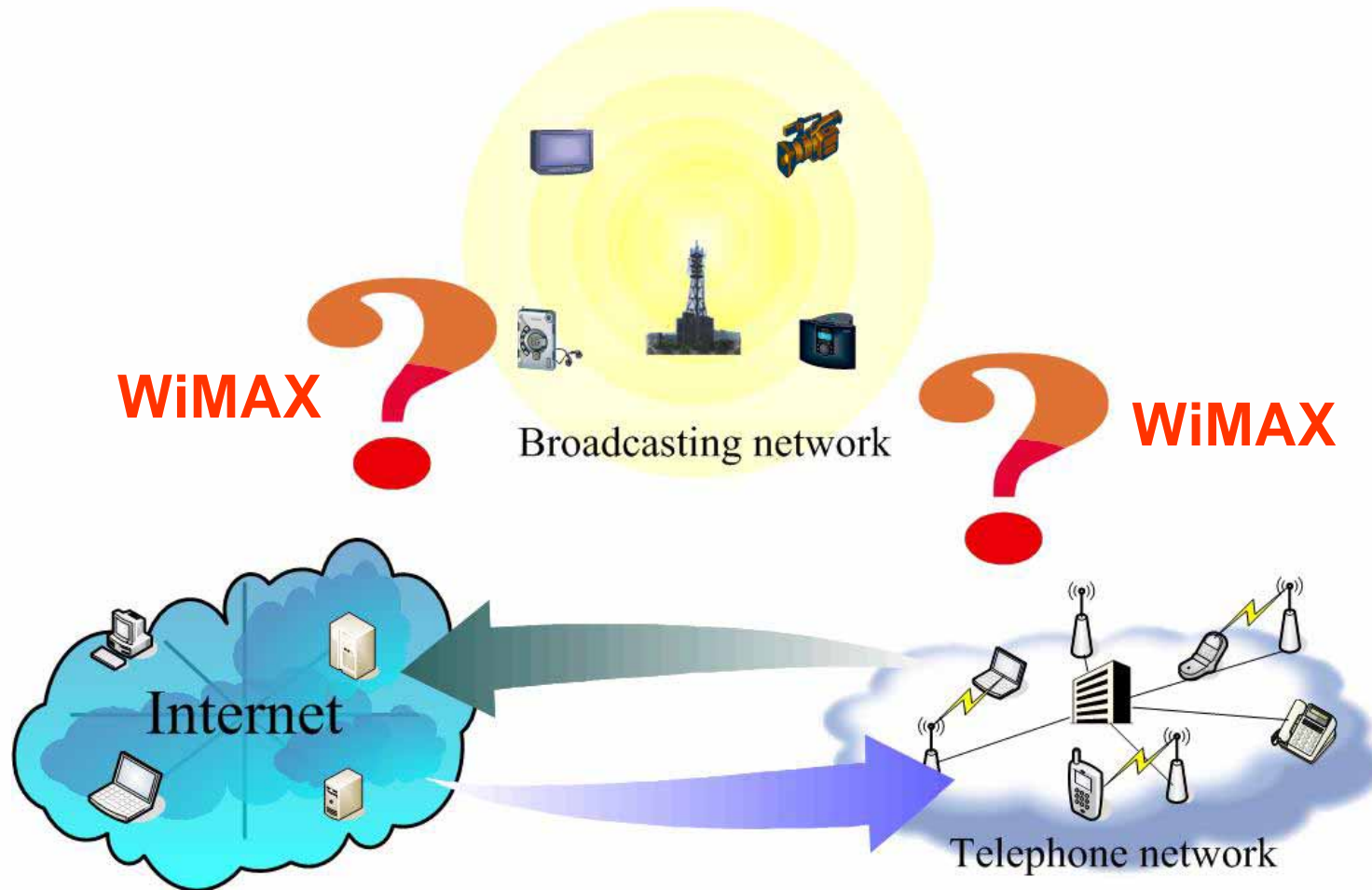
700MHz Benefit:

1. Longer range with same output power:
2. High Penetration
3. Low Interference
4. Better Mobility

700MHz Challenge:

1. Lower throughput rate comparing to higher spectrum.
2. Spectrum availability

WiMAX enables True Tripleplay



700MHz + WiMAX's Future

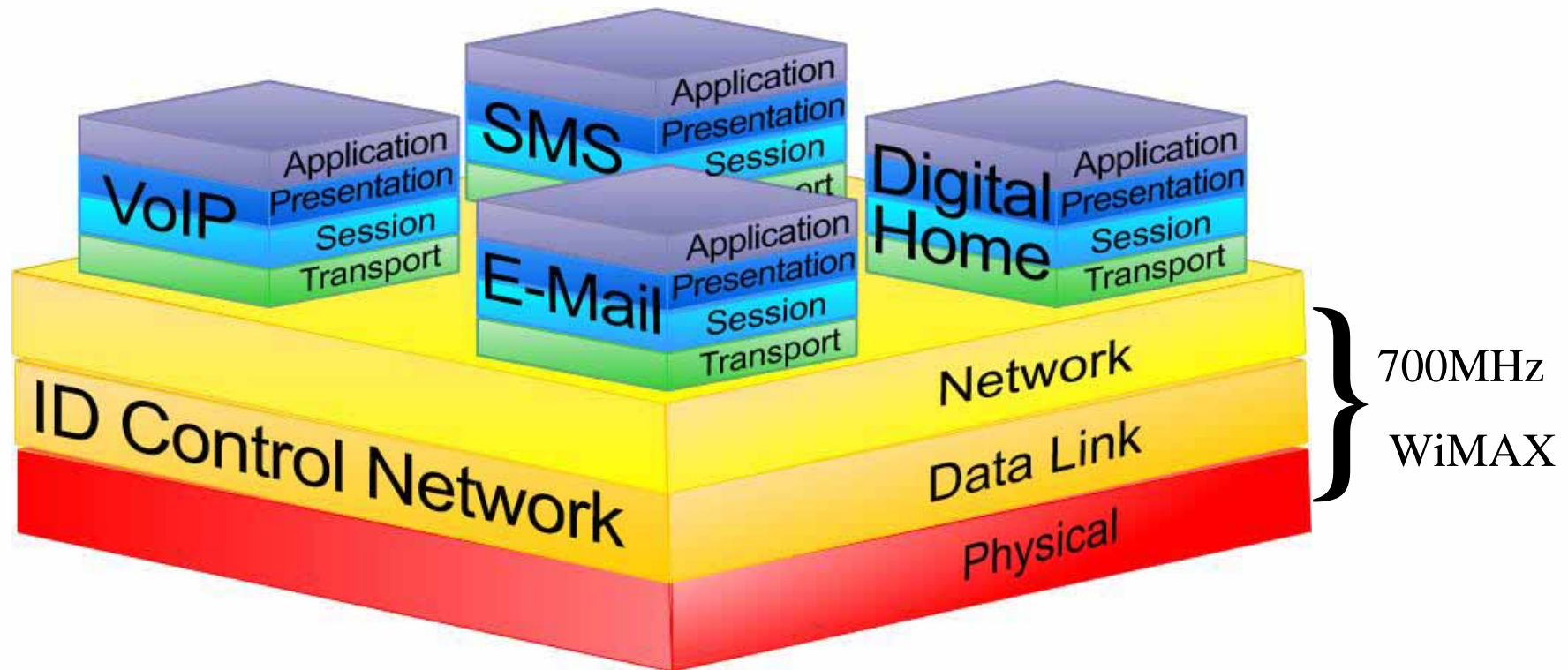
- Triple Play is always the term in Telecom world and lack of participation of broadcasting operators
- UHF Band is mainly the most familiar spectrum to the broadcaster, and broadcaster is most comfortable with the spectrum in such range
- Modern applications require mobility and user friendly plug & play configuration
- End user Identity management is the Killer Management for all the Triple Play operators to enable the transaction for all the delivery

700MHz WiMAX Killer Management

700MHz WiMAX “**ID Management Network**”

Through proper Identity Management, operators can deliver the proper content to the proper subscribers, and enable the B to B, B to C, or C to C transactions

700MHz WiMAX Service Platform

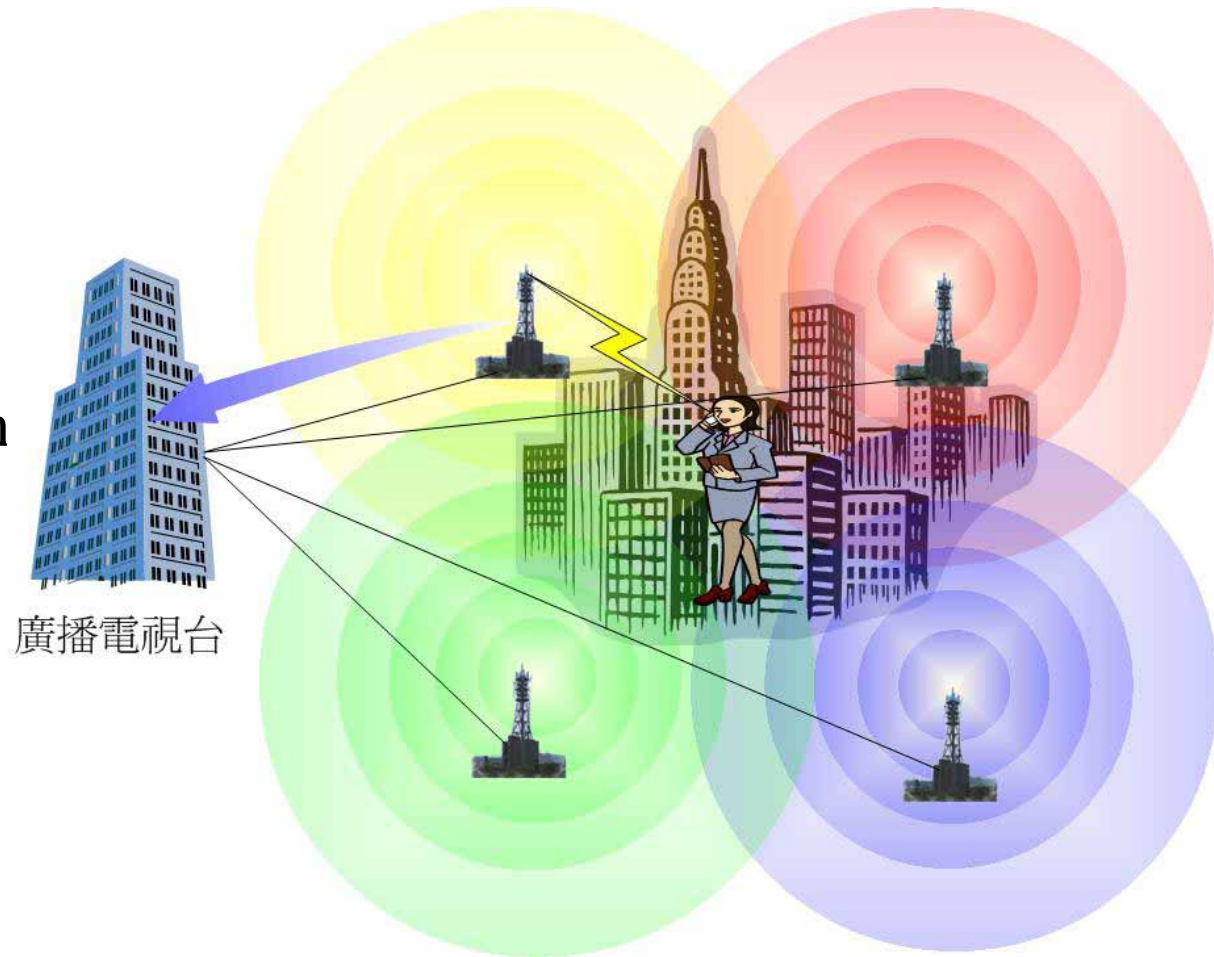


System Specification

- True IPv6 based network with the integration to the existing IPv4 network
- Full extension of IPv6 architecture for enabling individual address for each devices and user and allow “Trusted Transaction” for services between content provider to each individual
- Closed network with interconnection with Internet. Additional Personal Gateway Concept will be introduced for user to provide ID handshake
- Mainly target for up-loading file or return channel for broadcasting services。

Interactive Broadcasting Network

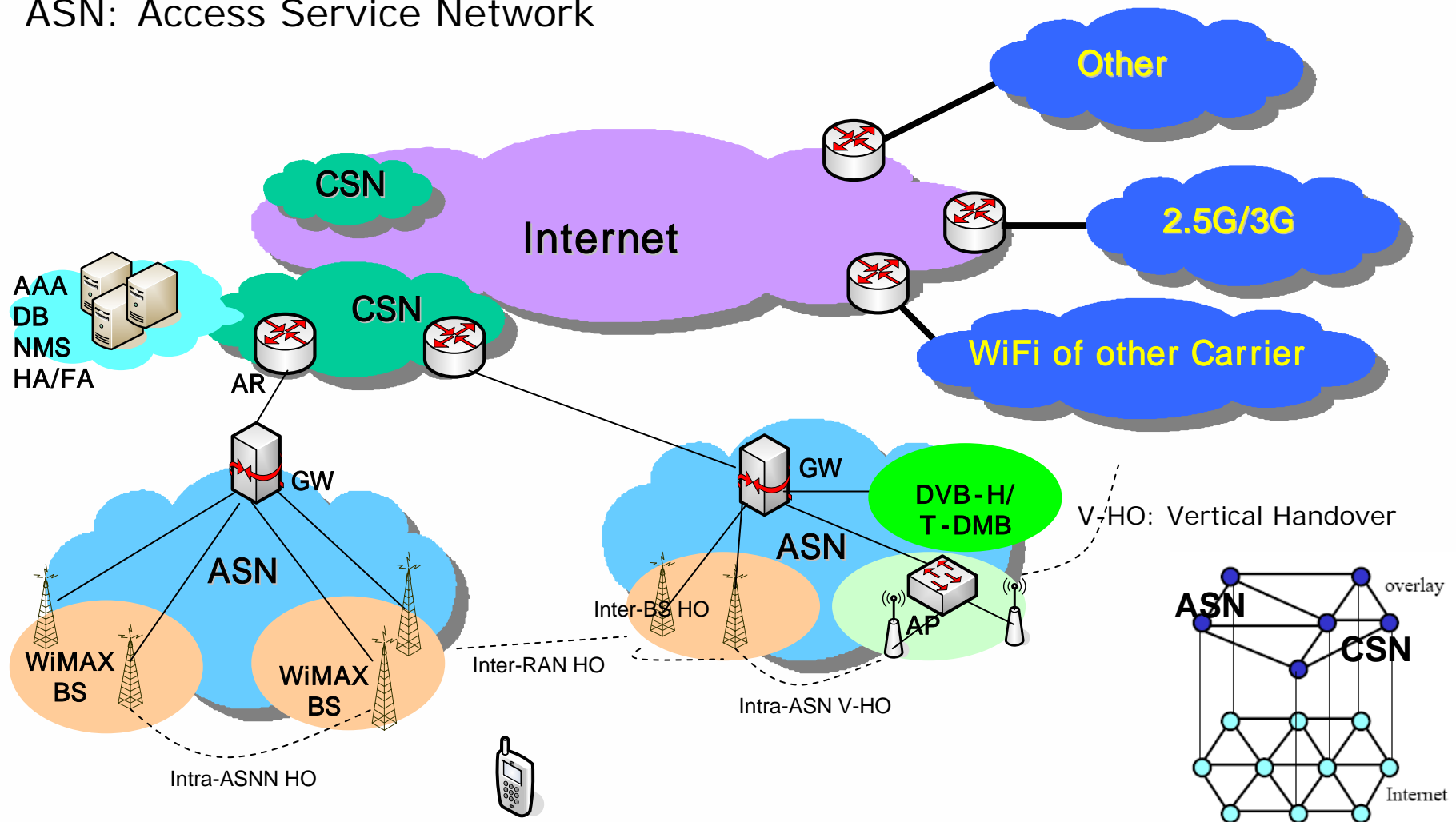
Providing upstream
return path to enable
IP-TV and
broadcasting channel
descramble interaction



700MHz WiMAX Architecture

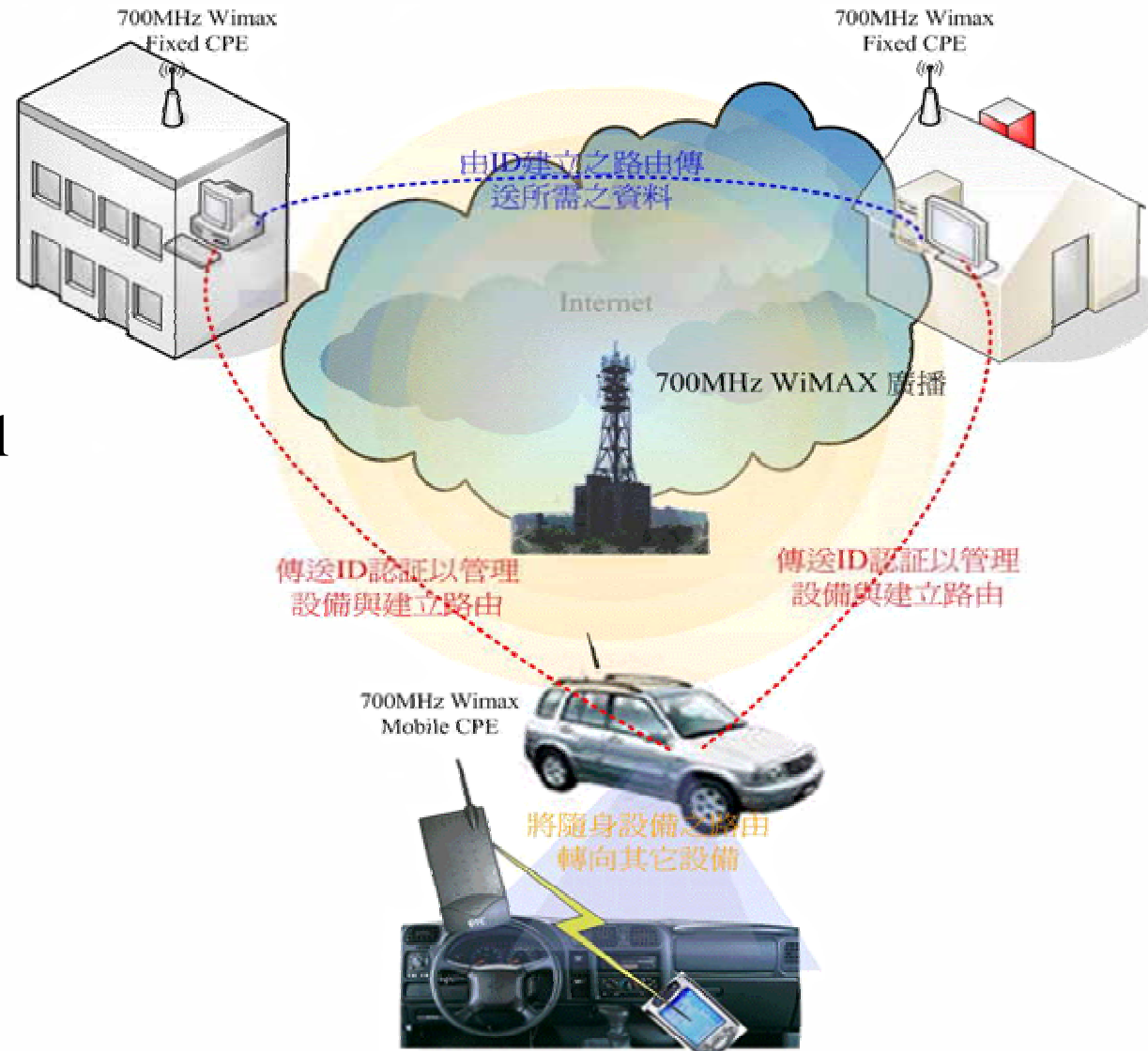
CSN: Connectivity Service Network

ASN: Access Service Network



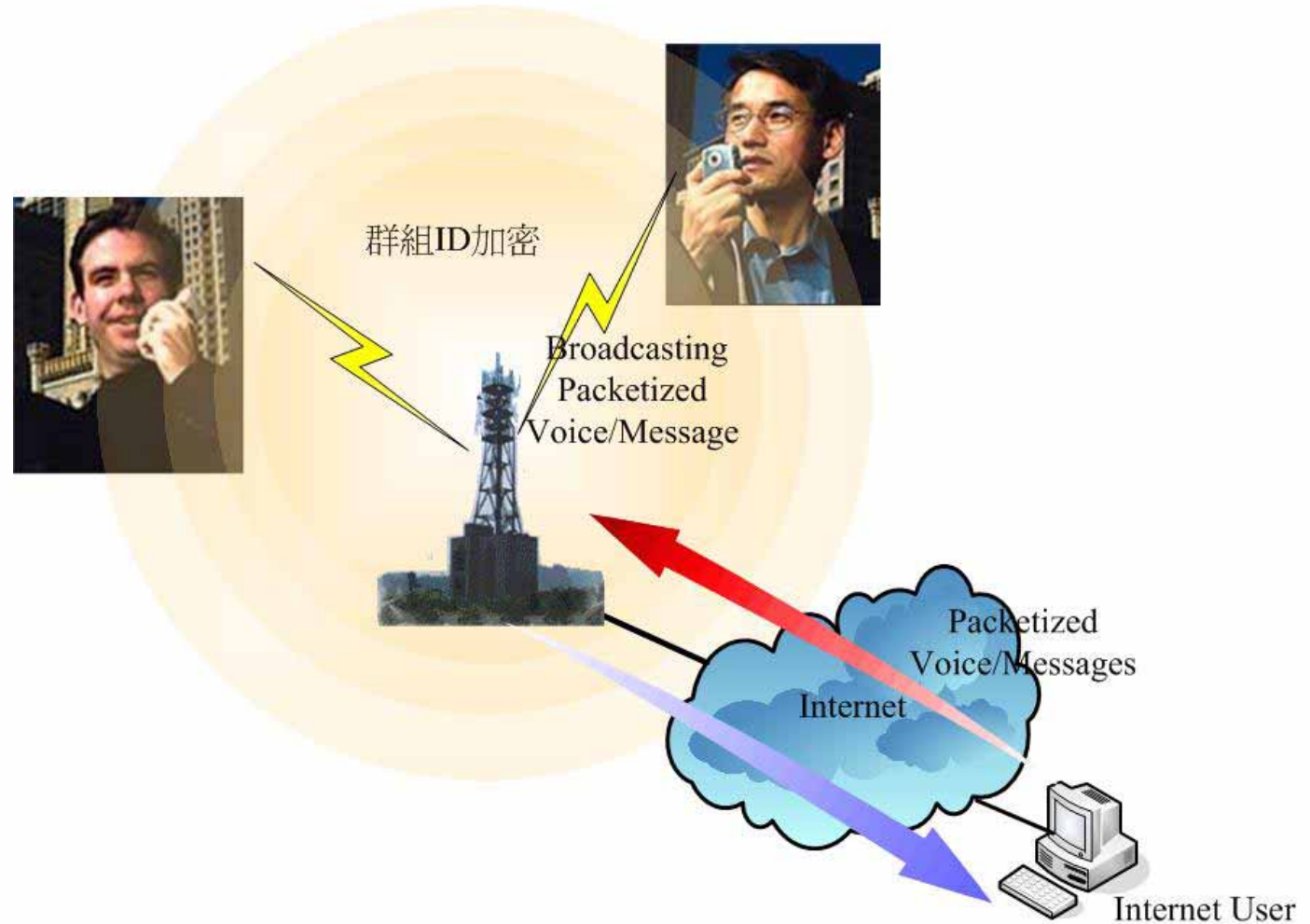
Personal Network

Remote management with embedded proactive Personal ID hand shake process



Customized Communication

Leveraging the Personal ID and trigger the secure transaction on the existing Voice communication



Interactive Broadcasting Services

- Broadcasting Portal
- Broadcasting Browser
- Broadcasting Shopping
- Broadcasting SMS/MMS
- Broadcasting E-Mail
- Broadcasting Tribes
- Group Positioning Services
- Group information Services
- Group Network Management
- Personal Network Management

Broadcasting Portal

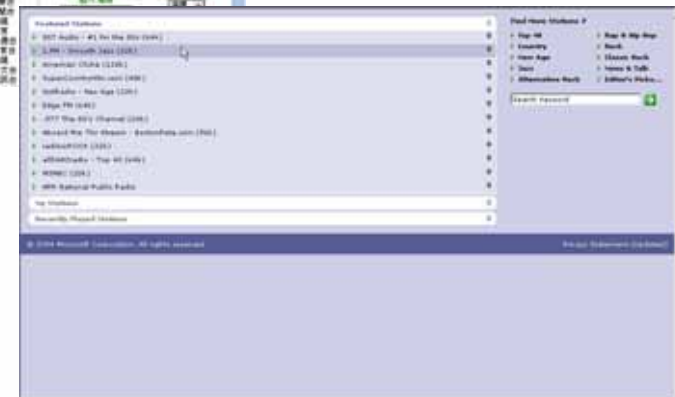
Google Video

+

TV Portal

+

Radio Portal



Web 2.0 Applications

HAM Radio Digitized

Wireless Video Streaming Sharing

Wireless Video Blog



Sensor Network and Digital Home Integrations



Q&A