# Practice Development Trends of NGN for Developing Country: SoftX vs IMS

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- What are we looking for?
  - Telcos's expectation on NGN and IMS.
- Opinions on the Deployment
  - Possible relationship between SX and IMS
  - Some Examples for the real deployment

# What Telcos are doing without IMS?

- Circuit-based
  - Perfect Voice Communication
  - Basic Data Communication, partly convergence
  - Basic Multimedia Communication, partly convergence
- IP-based
  - Perfect Inheriting of Voice Communication
  - Broadband Data Communication, but most independent deployment
  - Multimedia Communication, more convergence than Circuit Age

# What is the expectation for NGN and IMS by Telcos?

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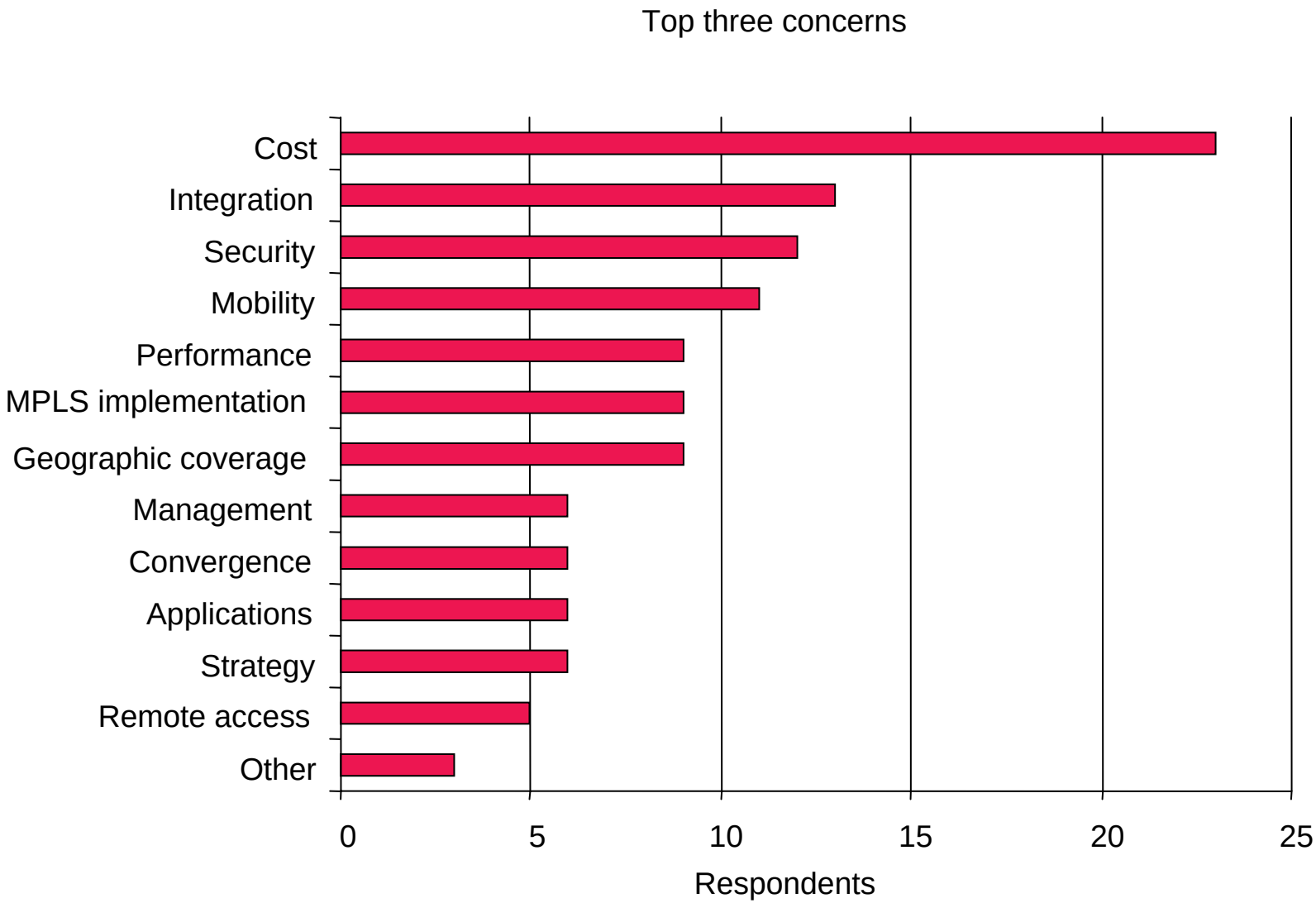

# What Telcos wish IMS could do?

- Layered architecture
  - Separates transport, control and applications
  - **“We can buy best of breed at every layer!”**
- Access-agnostic
  - Simpler convergence of fixed and mobile networks
  - **“Services no longer tied to access network technology!”**
- Real-time IP applications
  - With QoS, security, charging
  - **“A means to fight IP applications leakage to the Internet!”**
- New kinds of applications
  - Blended together
  - **“Higher ARPU, lower churn!”**
- More applications, much more quickly, at much lower cost
  - But controlled, supplied and billed by service provider
  - **“No need to rely on a few killer apps!”**

# What's IMS services?

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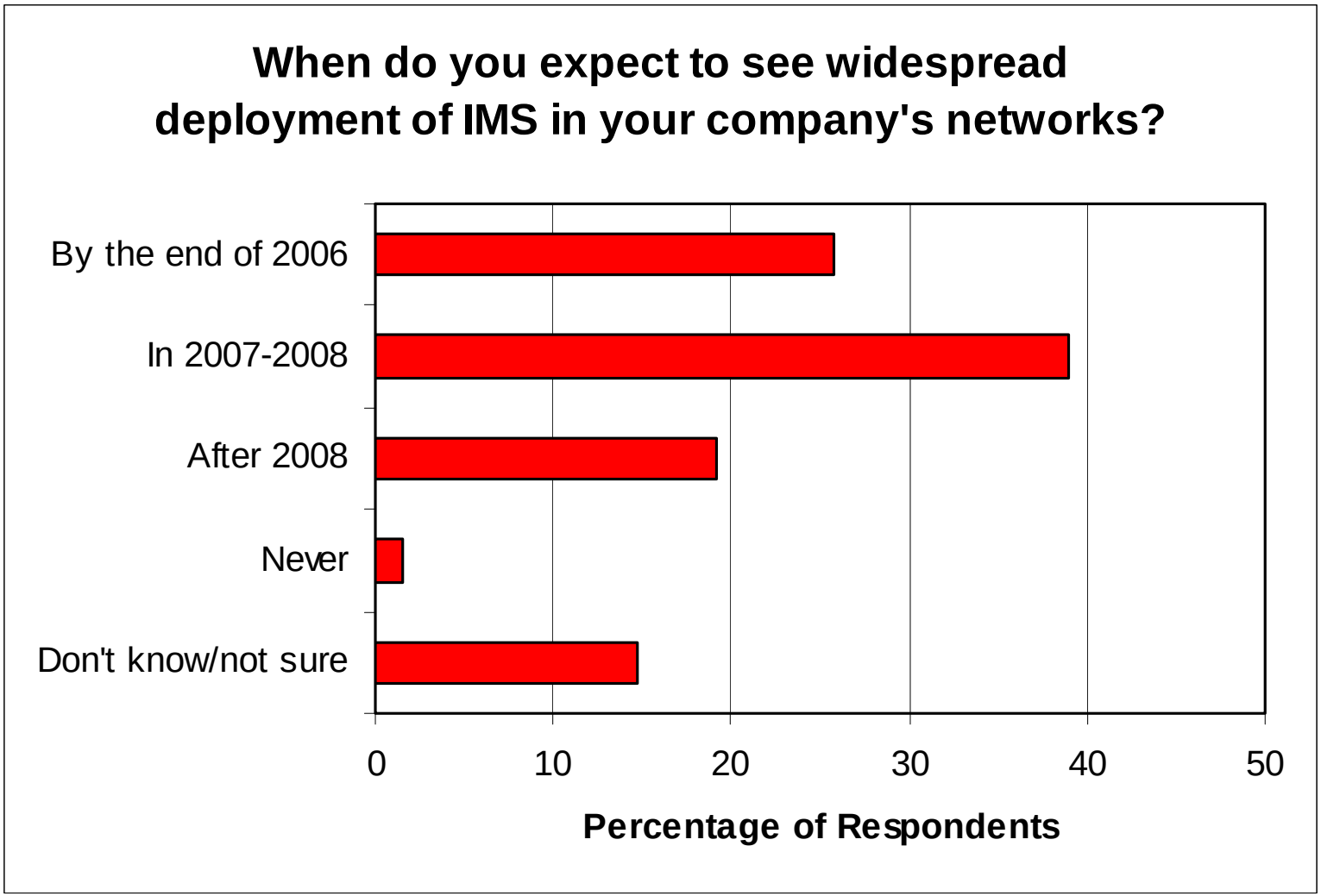
- Messaging services (IM, SMS, MMS etc.)
- Push to talk over NGN (PoN)
- Point-to-point interactive multimedia services (e.g. interactive real-time voice, real-time text, real-time video, total conversation, voice telephony with text, etc.)
- Collaborative interactive communication services (multimedia conferencing with file sharing and application sharing, e-learning, gaming)
- Push-based services (e.g., IP multimedia services, MMS, and new services including public safety, government, corporate IT etc.)
- Content delivery services (Radio and Video streaming, Music/Video on demand, TV channel distribution, financial info distribution, professional and medical image distribution, electronic publishing)
- Broadcast/Multicast services
- Hosted and transit services for enterprises (IP Centrex, etc.)
- Information services (e.g. cinema ticket info, traffic status, advanced push)
- Location based services (tour guide, assistance for emergency call etc.)
- Presence and general notification services
- Real-time conversational voice services
- 3GPP Release 6 and 3GPP2 Release A OSA-based services

**IMS will start from non real-time, non voice service first: data-based service**

# What is the plan for Telcos?




Source: Heavy Reading

# Conclusions

- We are looking for……
  - Money and Flexibility !!!
    - Revenue from new APP
    - Open Arc to reduce COPEX
    - Be Converging and easy to deploy new APP to reduce OPEX
    - ……
- But we must think about ……
  - What's the real situation of the APPs to market?
  - Evolution not Revolution to future

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# Evolution Road from current Network

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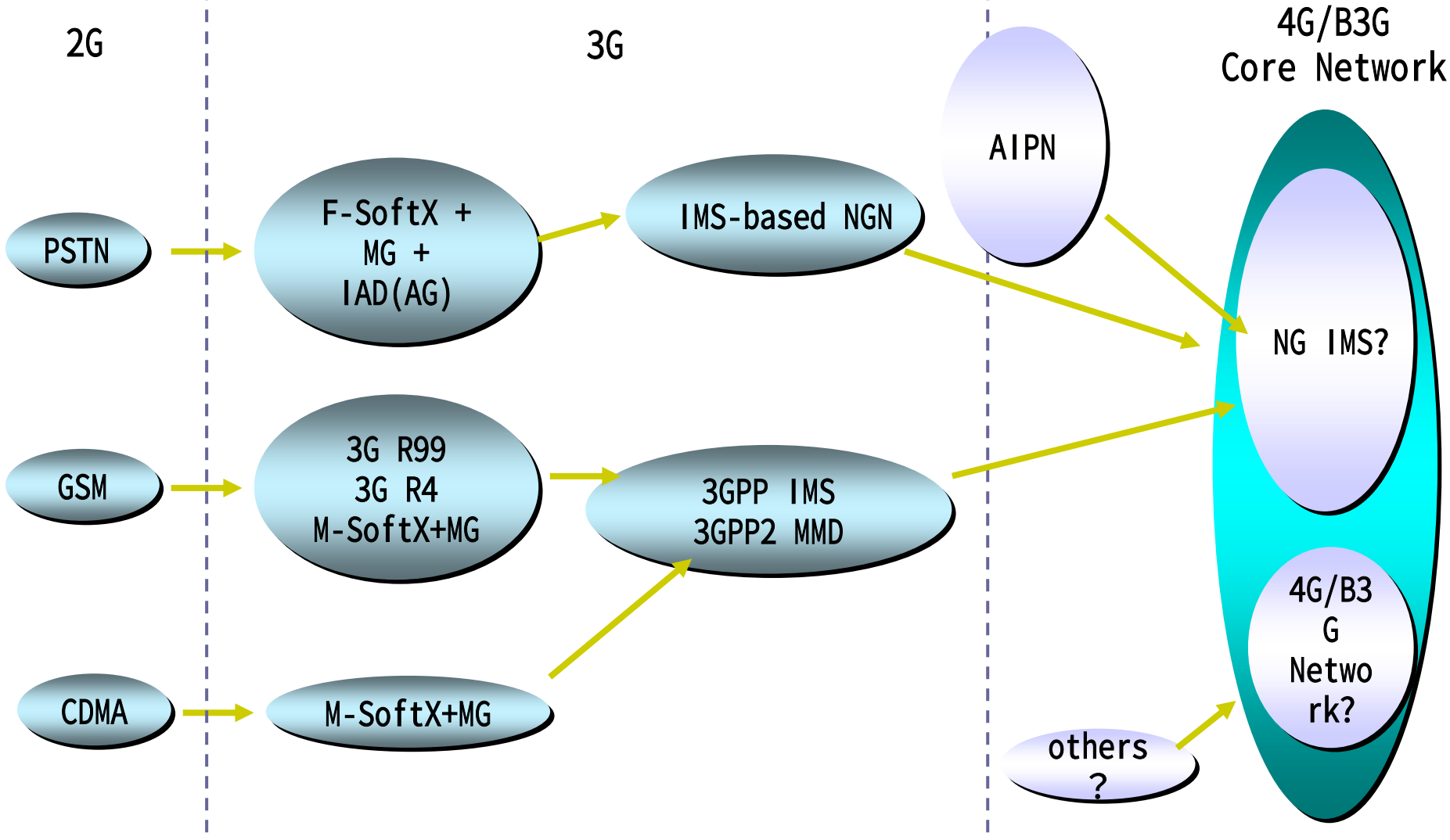

# Co-existing of Softswitch and IMS

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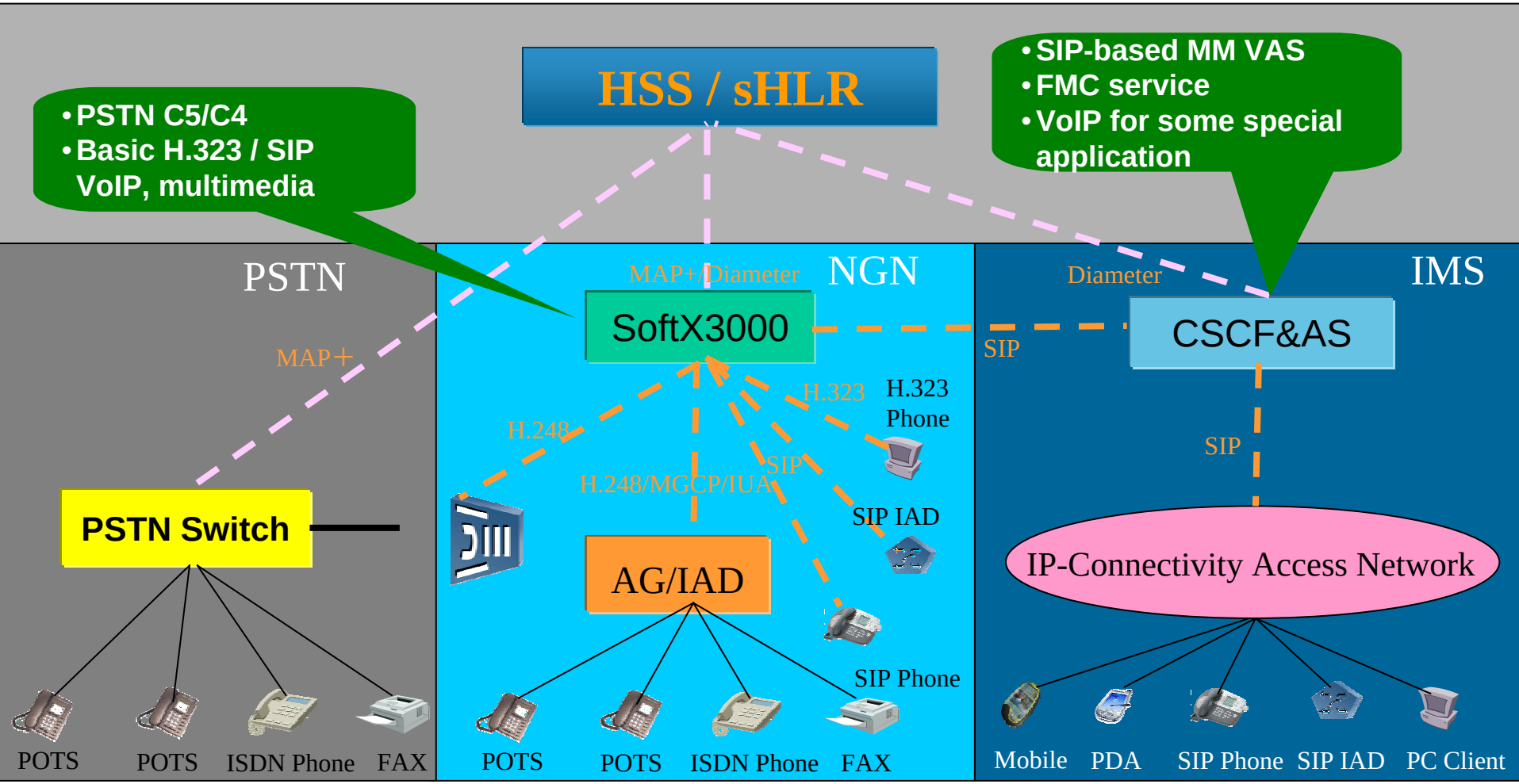

# Evolution: IP Multimedia Capability Enhancement as Softswitch provides PSTN/AN services

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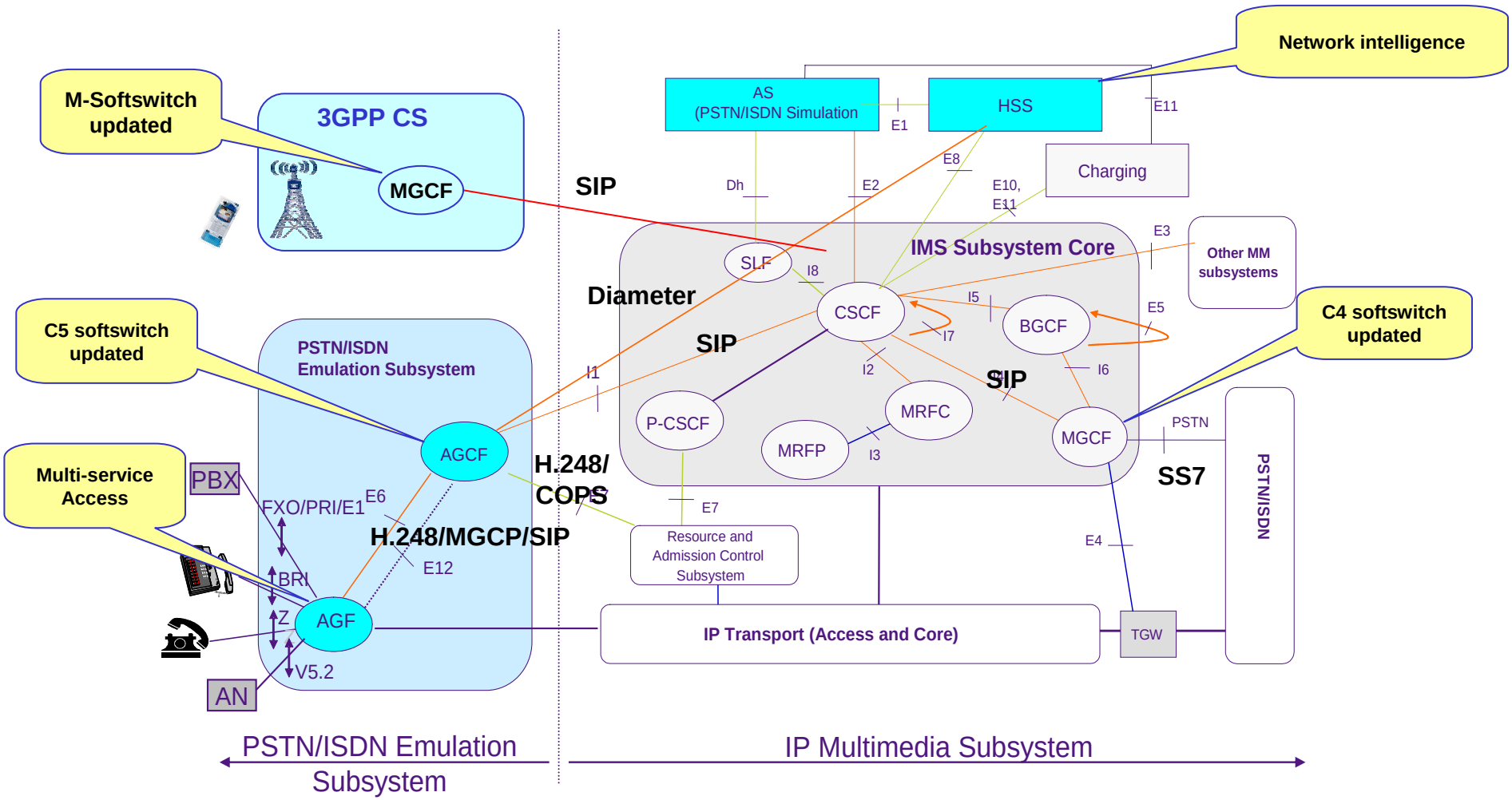

# Huawei's Smooth Evolution Solution

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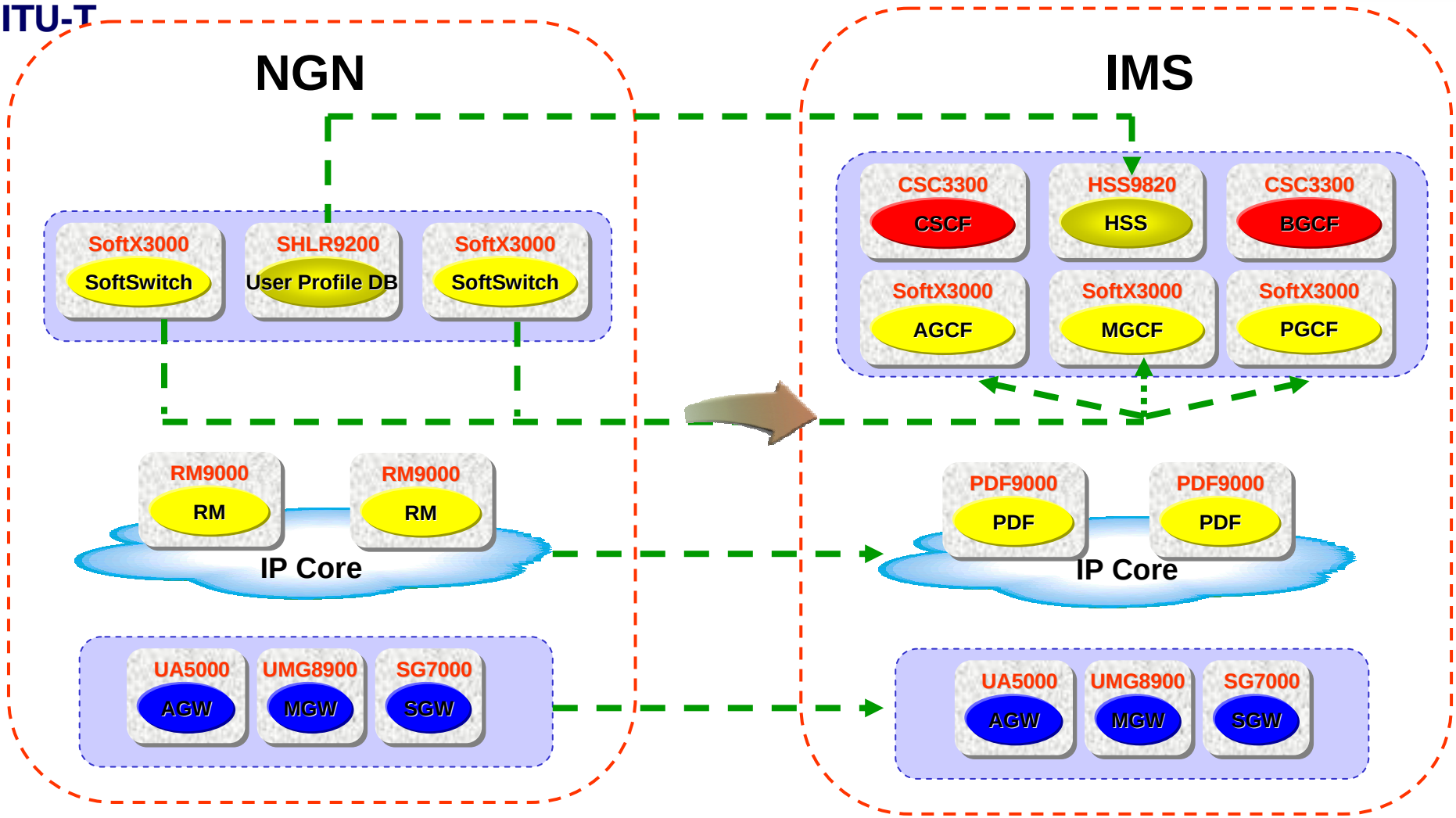



■ Same Network Architecture ■ Minimum System Change ■ Shared HW&SW Platform

# SoftSwitch vs IMS in General

- IMS is a clear trend, especially for the non real-time services;
- There is no confliction between the softswitch and IMS.
- Softswitch is the best way if the requirements focus on the voice communication.

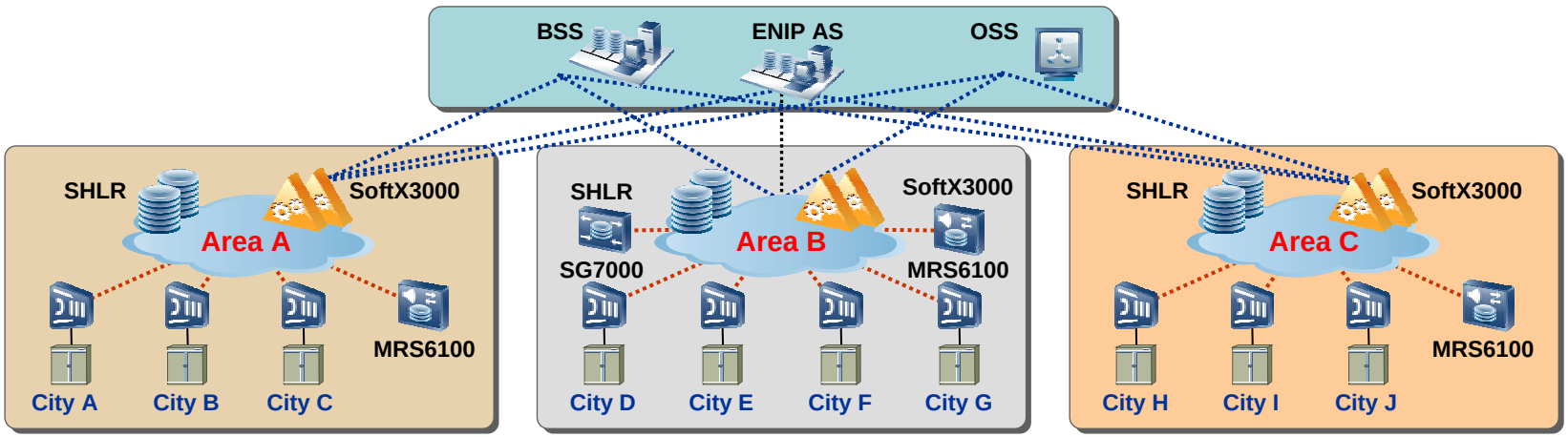
# U-SYS NGN in ShanXi, CHINA

## Challenges

- Hard to provide enhanced services in old PSTN switch
- Hard to provide unified user experiences for users in whole province

## Benefits

- IMS based smart network solution, easy to migrate to IMS network.
- ENIP AS provides unified service experiences for whole province users, and provides more enhanced services, such as MRBT, Video conference, IP Centrex, UC, WEB 800, etc.
- Reducing CAPEX and OPEX



# First National Wide NGN Network Consolidation in LATA --U-SYS in CANTV, Venezuela

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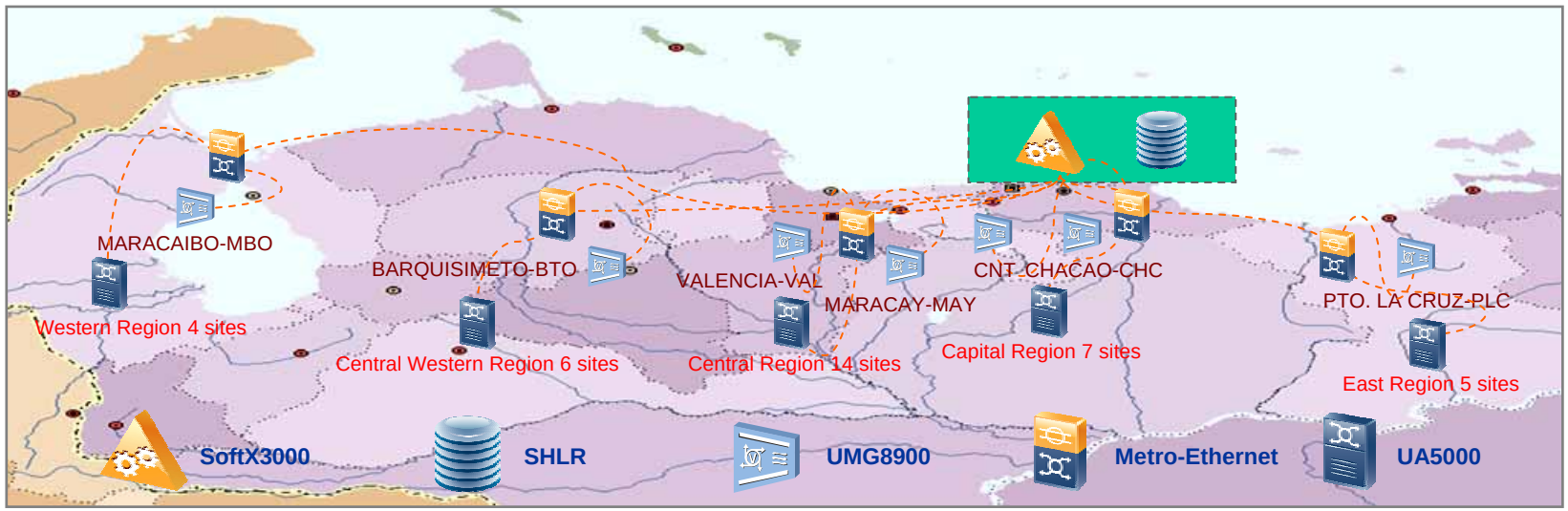
## Challenges

- As the largest operator in Venezuela, CANTV strives to provide more service experiences to all its' end customers in the country but run the network at an overall low cost.
- Existing analog switches and old digital switches: high OPEX and hard service deployment.

## Benefits

- National Wide Network Coverage: 180K lines and 30K DTs
- Whole network intelligence and overall low O&M cost
- Multiple Services: Voice, B/W list, video call/conference, CRBT, etc.

cantv



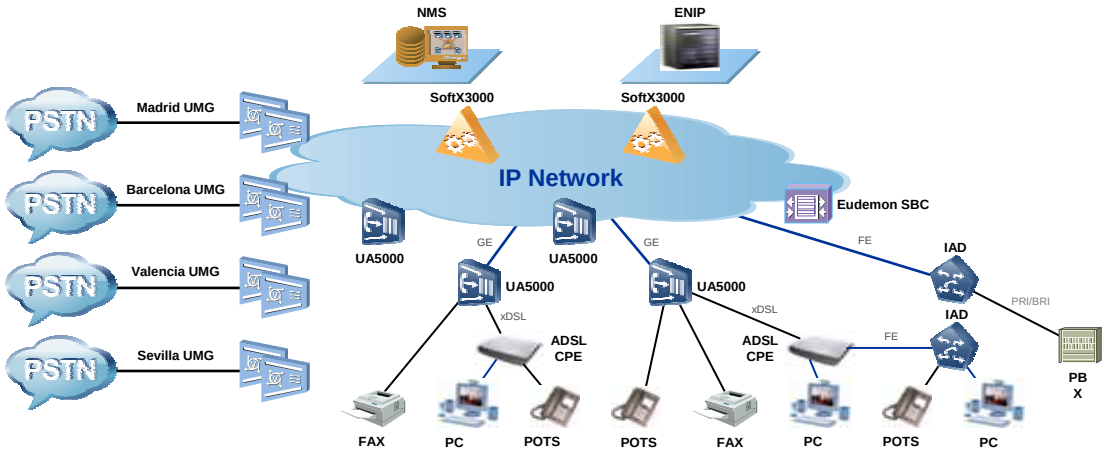
# U-SYS in Jazztel ,Spain

## Challenges

- The existing voice network: small capacity, unclear network structure and high maintenance cost.
- Services like NP are very difficult or even impossible to be realized on old network.
- Complete the new network construction within six months.

## Benefits

- Large capacity network bearing 390K lines and 75K trunks.
- Customerilized service including Number Portability, Indirect Access , which can fully take advantage of the ULL policy.
- Advanced network architecture. Centralized network management system and automatic service provisioning system.




# Worldwide NGN Application

Etisalat, UAE

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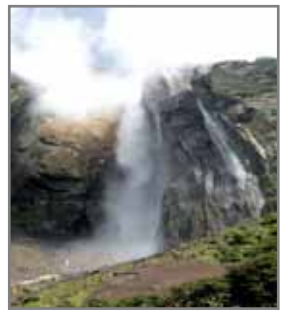

Cantv, Venezuela

BTC, Bulgaria

PCCW, Hong Kong

TOT, Thailand

JAZZTEL, Spain

- In June 2005，Huawei Technologies received the Frost & Sullivan Asia Pacific Technology Award for:

**"NGN Infrastructure Vendor of the Year 2005"**

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# *Thank You*

April 4, 2006