Mobile Core Evolution to IMS

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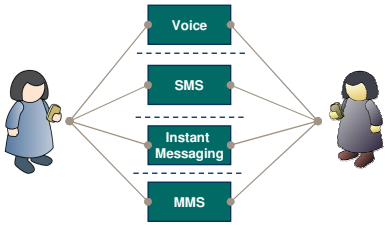
Why IMS?

- IP Multimedia Subsystem (IMS) is a standardised architecture (defined by 3GPP/3GPP2) for offering services on the packet domain.
- It is a generic architecture for offering multimedia services.
- IMS is independent of Access, supports: UMTS, GPRS, fixed line, WLAN etc.

Pre-IMS Communication



1) Decide on communication mode/media
2) Create content
3) Send/call the chosen person
4) Disconnect and reconnect if changing media

IMS Communication

1) See who is available beforehand (presence)
2) See which mode/media to use
3) Contact and create content
4) Change media in real time

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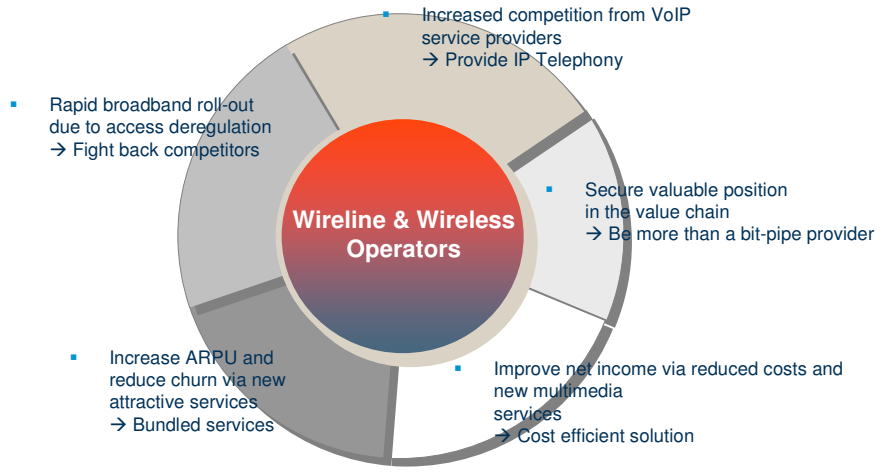
Why IMS- operator perspective?

How can IMS solve these issues?



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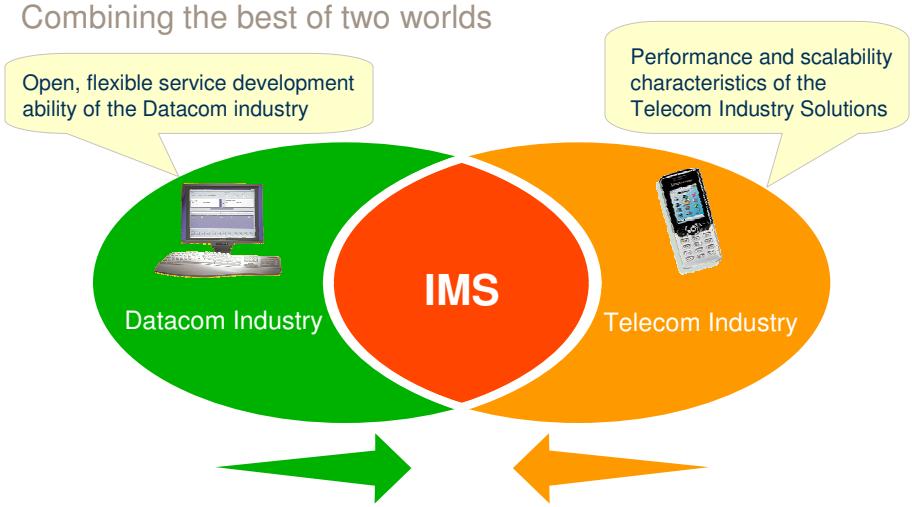
The core of IMS

Combining the best of two worlds



Standardized, end-2-end services that are interoperability tested

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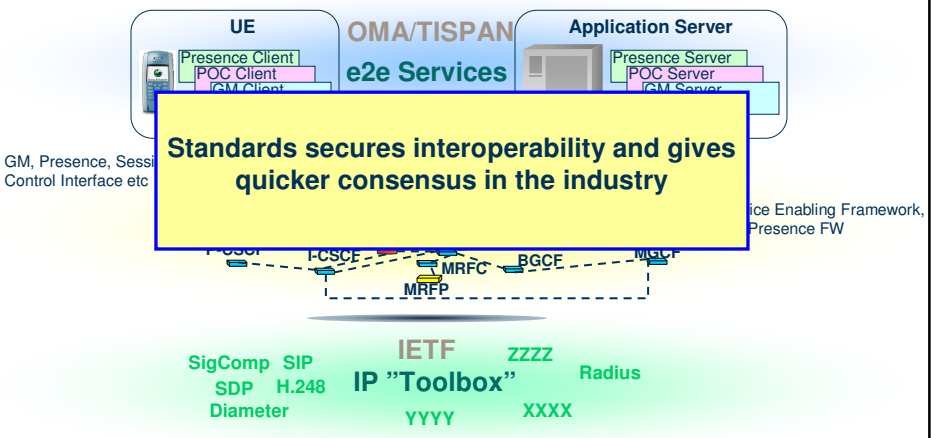
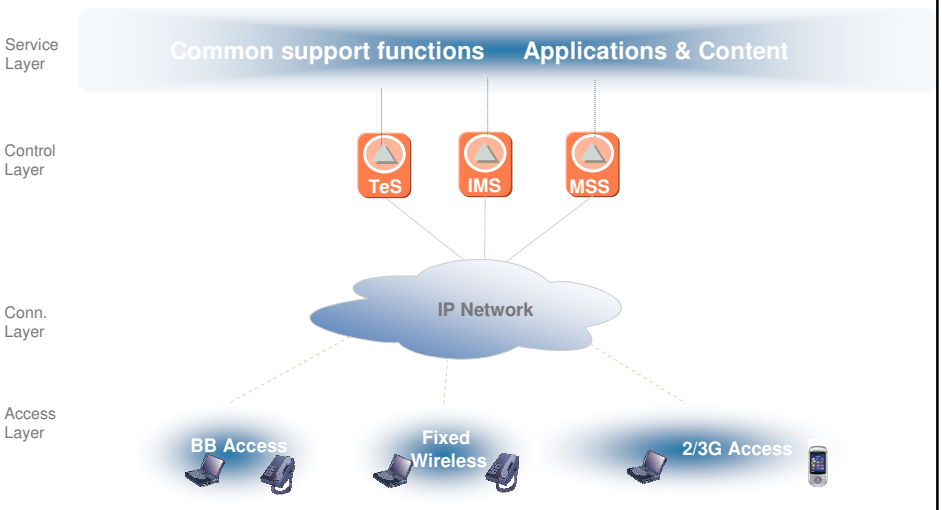
Standardization Bodies related to IMS



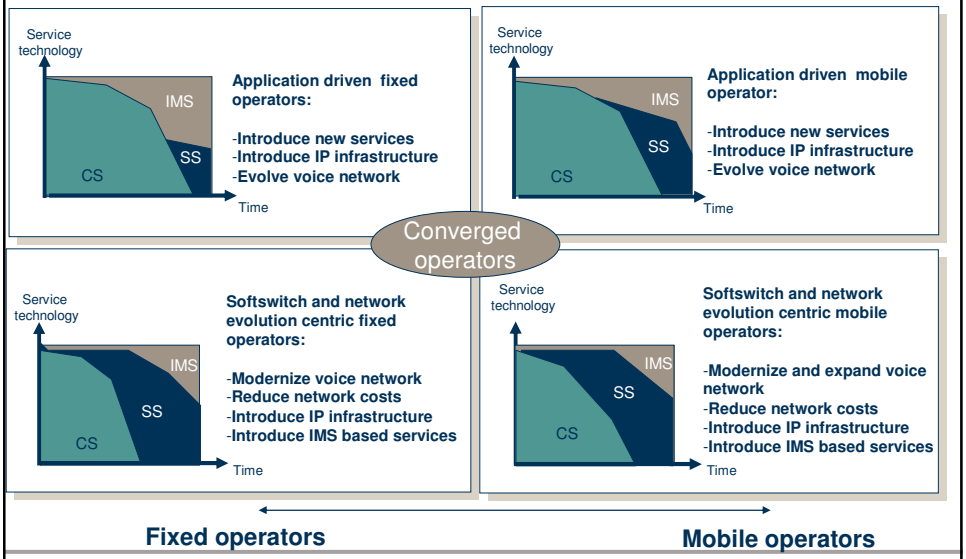
All-IP network- target network

Multimedia services via IMS and SIP



Efficient evolution to all-IP

Different paths depening on operator situation - 4 key trends



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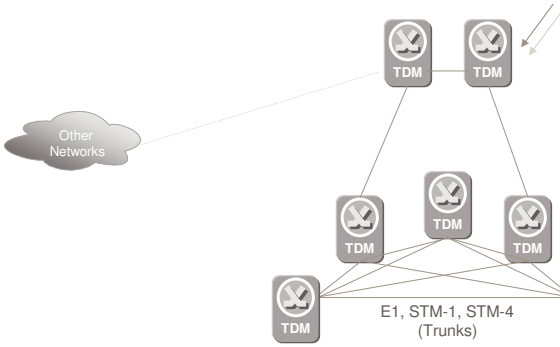
Network centric mobile operator

Starting point



- Need for modernization
  - → Need for less nodes
  - → Need for a less trunks
- Create an IP core network for payload and signaling
  - → Reduce costs
- Need for high bandwidth access support

Wireless access

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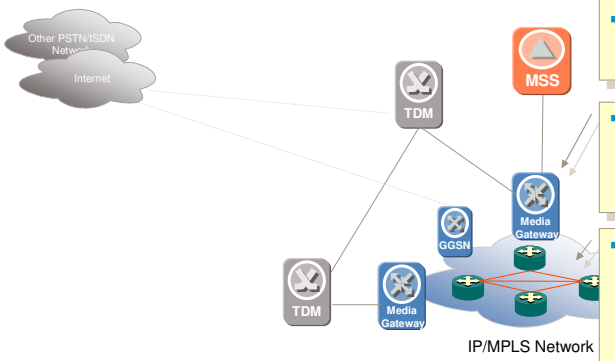
Introduction of softswitch

Reduced costs, IP core network



- Mobile Softswitch
- Controls MGW via H.248
- 100 % PSTN Emulation
- Handles all the call control
- Supports multiple interconnect protocols: xxxx

- MGW performs local switching
  → transmission savings

- IP Core network
  → Major savings due to IP transport and signaling
  → Service assurance and network redundancy via Diffserv and MPLS
  → Savings due to compression

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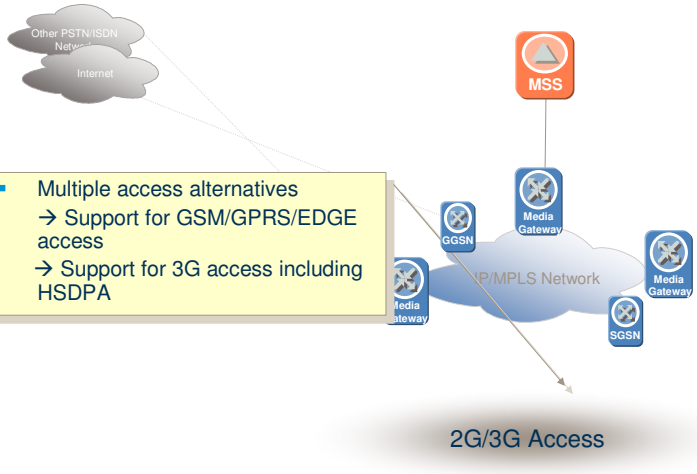
Modernization of access network

Support for mobile broadband



- Multiple access alternatives
  → Support for GSM/GPRS/EDGE access
  → Support for 3G access including HSDPA

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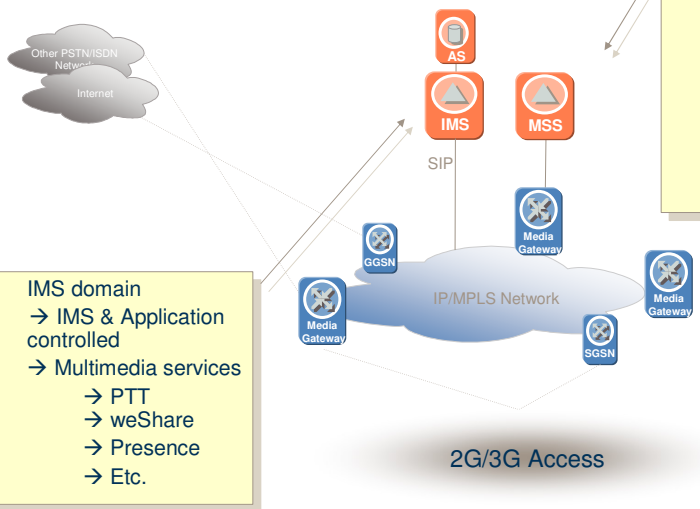
Introduction of IMS

Stepwise introduction of IMS based services



- PSTN emulation domain
  - → MSS controlled
  - → Telephony over IP
  - → Common IP backbone with Diffserv and MPLS
  - → SIGTRAN signaling

- IMS domain
  - → IMS & Application controlled
  - → Multimedia services
    - → PTT
    - → weShare
    - → Presence
    - → Etc.

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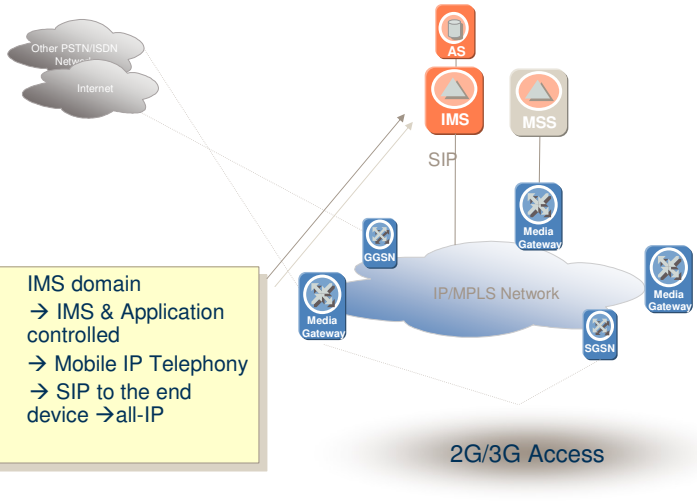
IMS as key service enabler

Mobile IP Telephony a reality- all services via IP (SIP)



- IMS domain
  - → IMS & Application controlled
  - → Mobile IP Telephony
  - → SIP to the end device →all-IP

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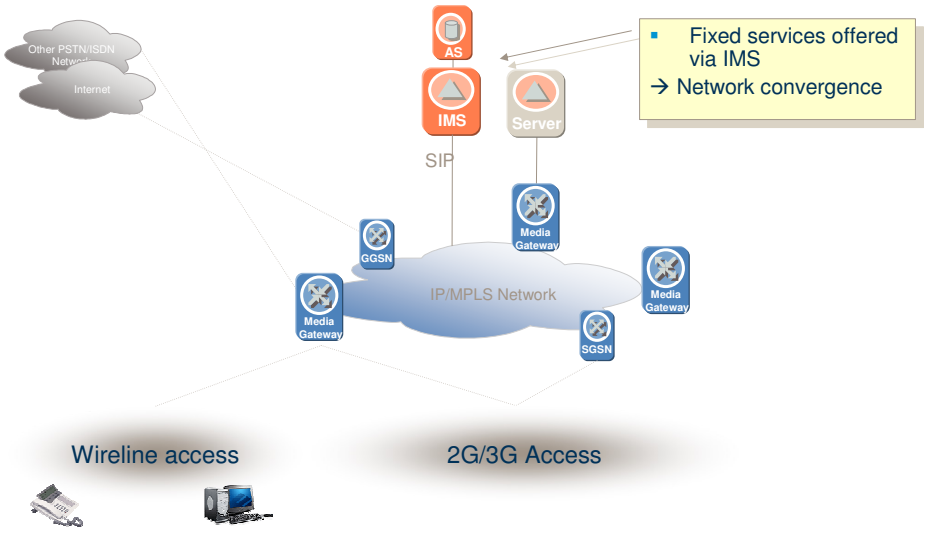
Add fixed access

A fully converged network

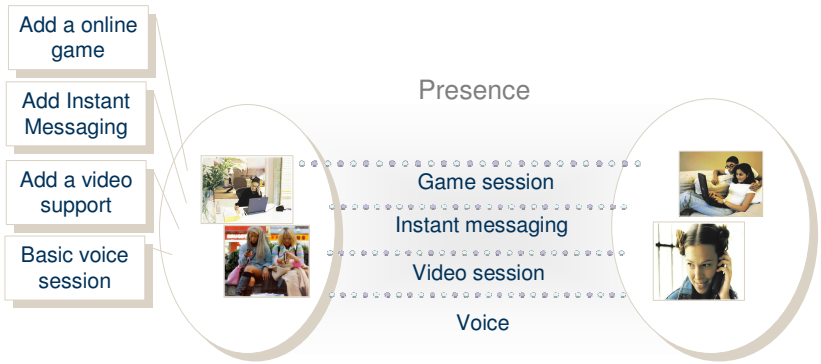


- Fixed services offered via IMS

→ Network convergence

Provide a multimedia experience

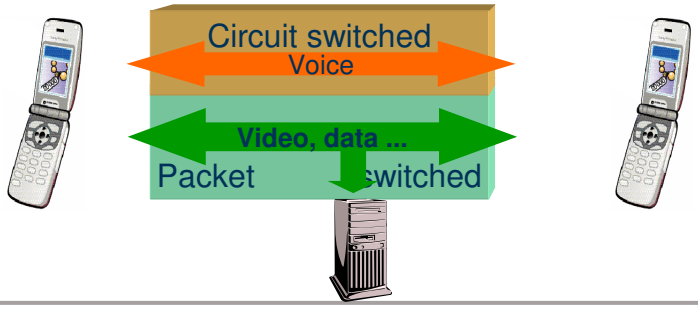
Enabling richer communication for end users



Richer communication enabled by IMS

Combinational Services

- A combinational service is created by combining a CS speech call and one or more PS media streams
- The services that are mixed have the same A-and B-party and, when combined, appear as a single task to the end-user



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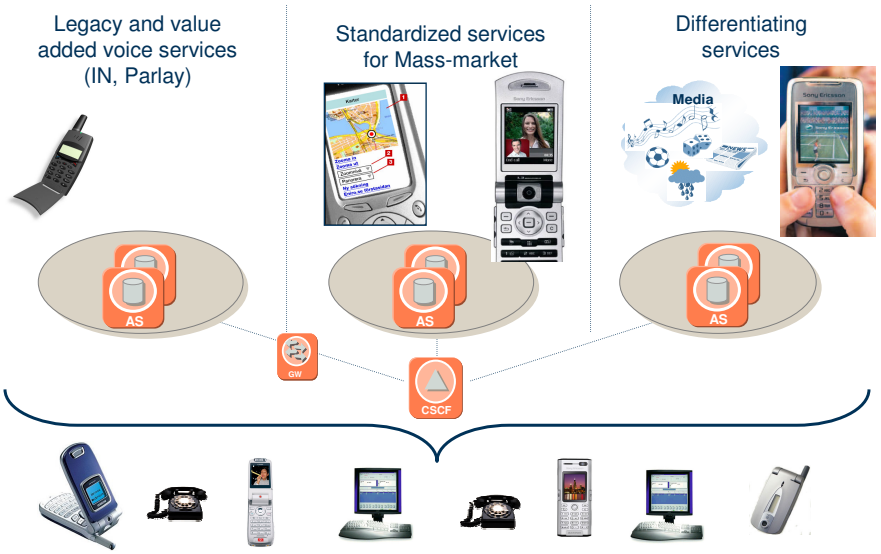
Broad application spectra

Defining services

Legacy and value added voice services (IN, Parlay)

Standardized services for Mass-market

Differentiating services



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What is being said about IMS

Comments from previous IMS conferences

"We will achieve more in 5 years than we have done the last 20!"

"Pre-standard services threats long term business potential"

European operator

"Availability of IMS-enabled devices – key for success"

European vendor

"Our goal - excellence in user experience"

European operator

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TAKING YOU FORWARD