



Mobile Converged Networks

2.2.1 Shaping the Future: Mobile Network Evolution to NGN - Additional Material

Regional Workshop for the Arab Region on Guidelines on the Smooth Transition of Existing Mobile Networks to IMT-2000 for Developing Countries

Damascus, Syria 13-15 June 2005

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>THIS IS **THE WAY**

Shaping the Future:
Mobile Network Evolution to NGN -
Additional Material

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>THIS IS **NORTEL**

Additional Material

> Animated charts

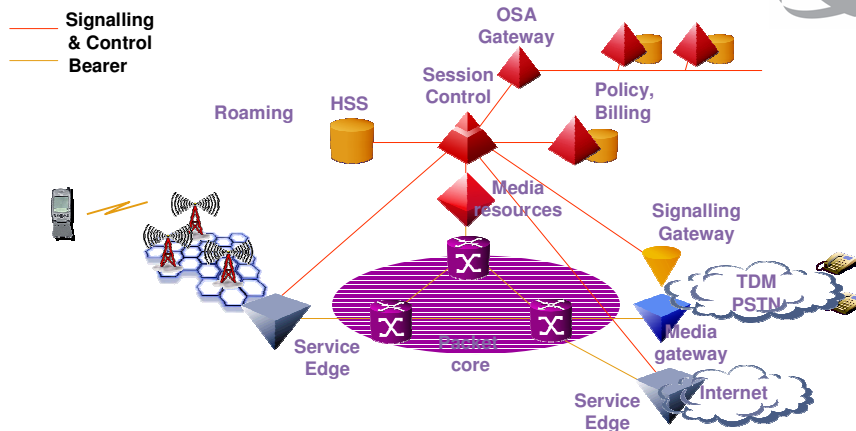
- provided as series of individual charts since pdf files do not handle PowerPoint animations well

> Acronyms

- Telecom presentations are acronym intensive!

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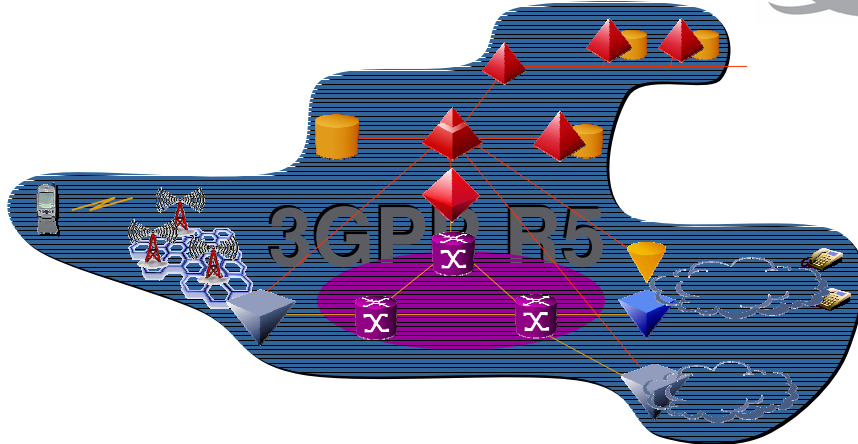
3GPP R5 network architecture (1/2)



- 3GPP R5 IM Subsystem provides a SIP and H248 framework for the applications and control environment of converged wireless networks
- Applications creation environment permits extending applications to users independently of their means and point of access

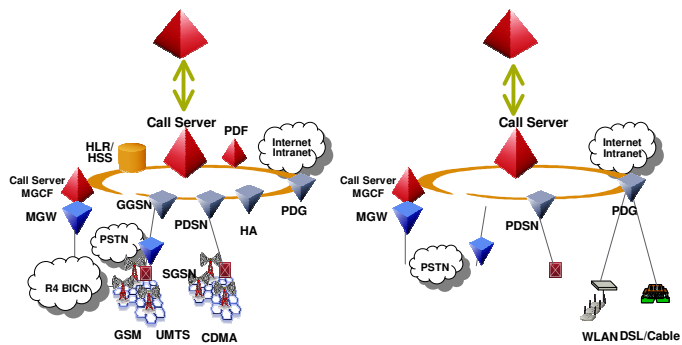
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3GPP R5 network architecture (2/2)



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Convergence - Non-animated - Step 1

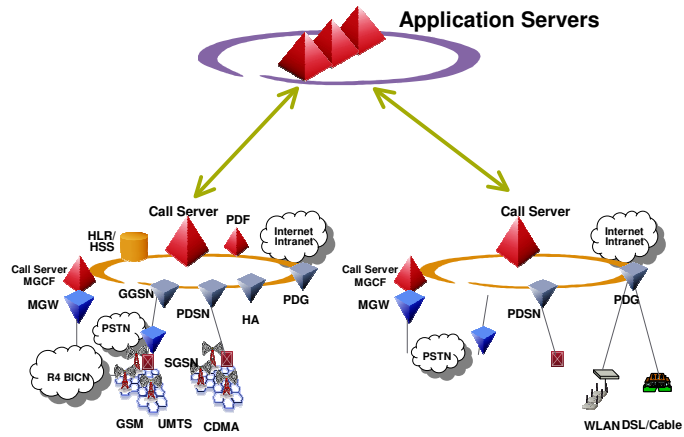


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Convergence - Non-animated - Step 2

Services

Architectural

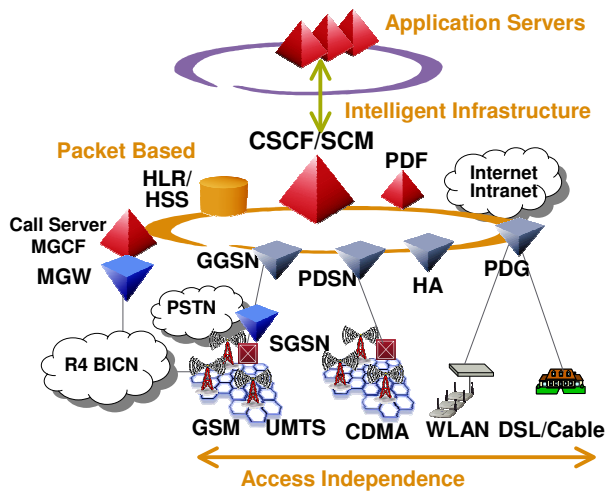


Convergence - Non-animated - Step 3

Infrastructure

Services

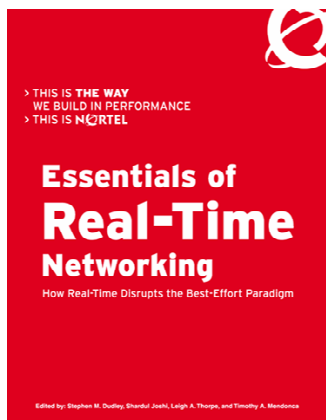
Architectural



Selected Acronyms

3G	Third Generation	MGCF	Media Gateway Control Function
3GPP(2)	Third Generation Partnership Project (2)	MGW	Media Gateway
BICN	Bearer Independent Core Network	NGN	Next Generation Network
CDMA	Code Division multiple Access	PC	Personal Computer
CSCF	Call State Control Function	PDA	Personal Digital Assistant
DECT	?? Digital Electronic Cordless Telephony	PDF	Packet Data Function
FA	Foreign Agent	PDG	Packet Data Gateway
GGSN	Gateway GPRS Support Node	PDSN	Packet Data Serving Node
GII	Global Information Infrastructure	POTS	Plain Old Telephone Service
GPRS	General Packet Radio Service	PSTN	Public Switched Telephone Network
GSM	Global System for Mobility	QoS	Quality of Service
HA	Home Agent	SCM	Session Control Manager
HLR	Home Location Register	SGSN	Serving GPRS Support Node
HSS	Home Subscriber Server	SIP	Session Initiation Protocol
IMS	IP Multimedia Subsystem	SLA	Service Level Agreement
IP	Internet Protocol	UMTS	Universal Mobile Terrestrial Access
ISDN	Integrated Services Digital Network	WLAN	Wireless Local Area Network
ISV	Independent Software Vendor	WWAN	Wireless Wide Area Network
LAN	Local Area Network		

Nortel Wrote the Book on Real-Time Networking (literally!)



- > For mission-critical applications, “best-effort” of data world is not acceptable
- > Not all networks can support real-time applications
- > Expert network planning and design is required
- > “The Book” – 800+ pages; technology/standards focused
- > Available on-line:
[http://www130.nortelnetworks.com/cgi-bin/eserv/cs/main.jsp?BV_SessionID=@@@&BV_EngineID=gaddhfhejghbhkcginchgcjg.0&cscat=DOCDETAIL&DocumentOID=292677&searched="real%20time%20networking](http://www130.nortelnetworks.com/cgi-bin/eserv/cs/main.jsp?BV_SessionID=@@@&BV_EngineID=gaddhfhejghbhkcginchgcjg.0&cscat=DOCDETAIL&DocumentOID=292677&searched=)

No one knows “real-time” networking better than Nortel