NORTEL NETWORKS

IP based unified networking

John Candish 7th February 2000

IP based unified networking

- Drivers for the IP based network.
- Call Control in the IP based network.
- Mobility in the IP based network.
- Unified IP based networking.
- Standardization of the IP based network.



Drivers for the IP based network

The key driver is a common application and service environment across access networks. Common IP based application environment.

Create an open platform for innovative, flexible & fast service creation. Enable existing services to be supported.

Provide a common core network and IP based mobility for all types of access.UTRAN, ERAN, Wireline.....

Provide a common IP based transport in the Core Network.

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Call Control

R00

Common services - such as Pre-paid.

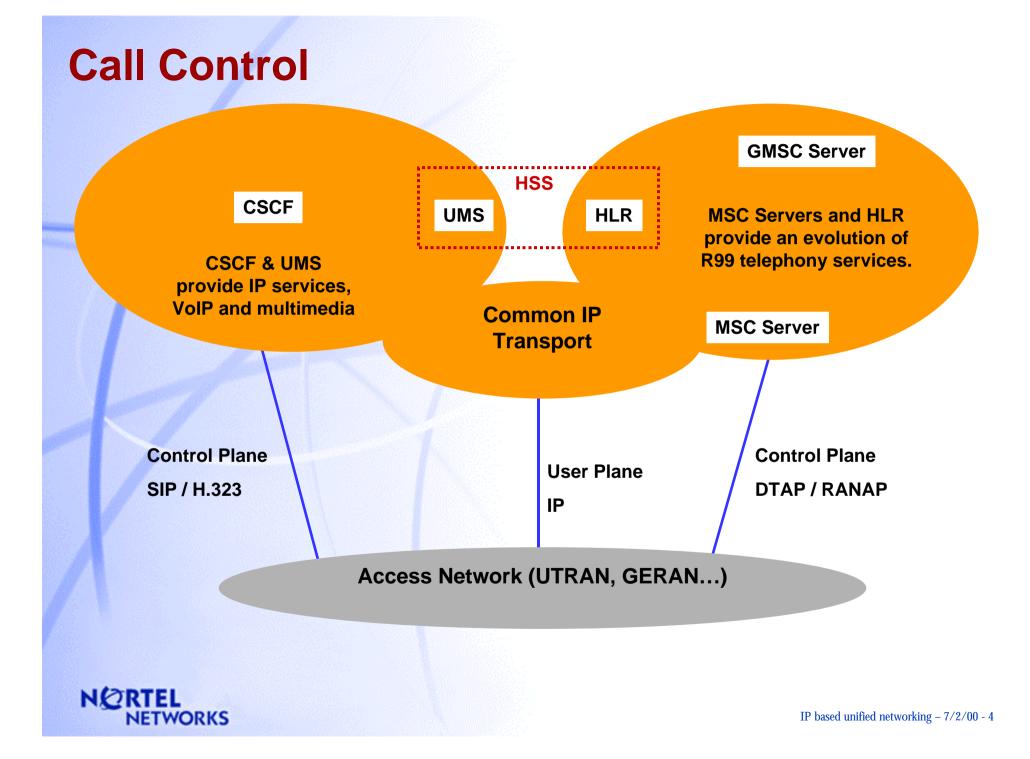
The All IP network will use IP based telephony protocols such as SIP and H.323 in place of DTAP CC. Enabling multimedia services including voice.

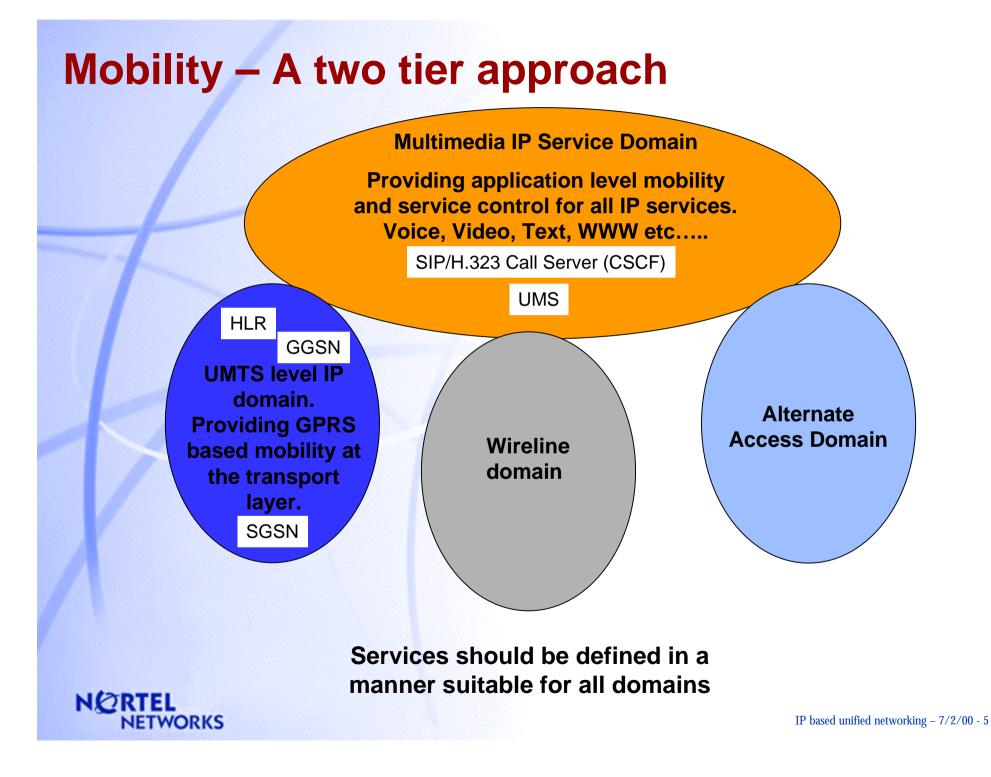
Services based on evolved DTAP CC will also be provided. Supporting R99 GSM/UMTS devices.

Operators will be able to choose from IP and DTAP based services, or a combination of both.

IP based multi media services including voice should not be restrained by existing services, but based on the long term requirements of this market segment.







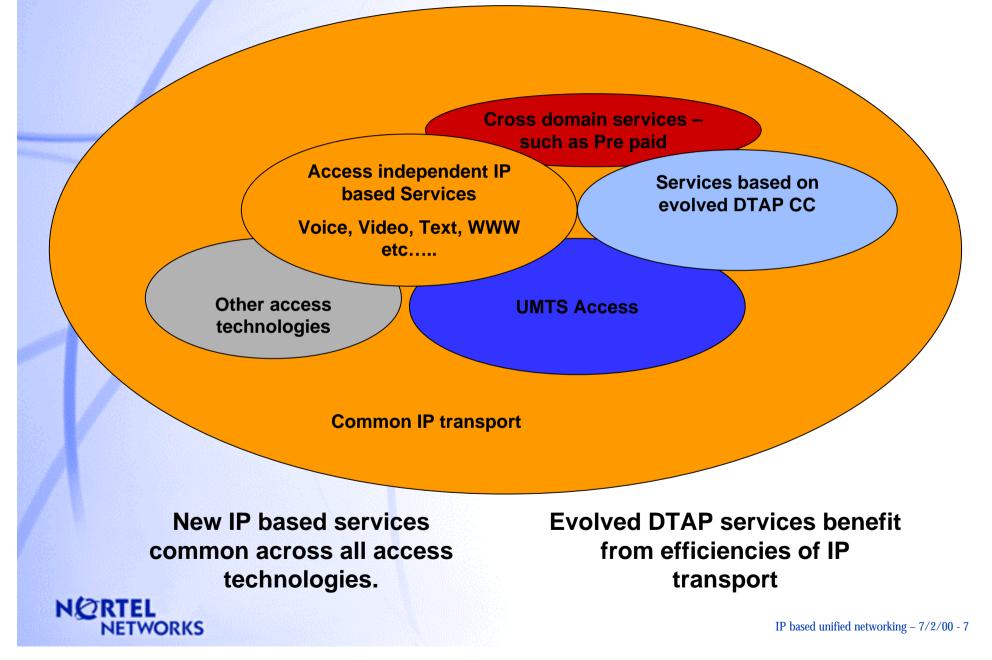
Two tier mobility is the key to providing unified services across all access domains

Advantages of two tier mobility

- Promotes access independent core network.
- Provides baseline for mobility support across heterogeneous access networks.
- Provides for separation of service and application control from mobility.



Unified IP based networking



GSM standardisation

- Creation of a unique standard for mobile-only application.
- Services defined in detail, consistency with the ISDN approach and concept.
- Desire for service consistency when roaming and limited technical possibilities to achieve this.
- Lack of strong competition during the early GSMstandardisation phase.

IP based standardisation

- Services must be independent of access technology.
- Standardisation of tool kits should be favoured in place of specific services.
- Availability of existing IP telephony toolkits should be reviewed.
- Strong cooperation with other standards groups is essential.
 3GPP must be careful not to standardise areas that are better covered in other groups.

