

Title: Release 2000 Options

Source: BT

Discussion within the 3GPP has indicated that solutions and services based upon the Internet Protocol (IP) and its associated protocols represent the basis for the future development and evolution of 3GPP specifications. On going discussions relate to the relationship between, and co-existence of the different technologies available to operators for the Release 2000 timeframe.

Release 2000 will represent an evolution of Release 99. From the PS perspective, R00 will include the support of real time interactive multi-media services (including speech) via Quality of Service mechanisms over the evolved GPRS elements. These features compare with features such as telephony that are available via circuit switched technologies. From the CS perspective Release 2000 will also embrace technical evolutions such as MSC servers and the application of Bearer Independent Call Control (BICC) concepts.

Due to the many starting points, technologies and evolution paths that different operators around the world will find themselves in it is clear that different network solutions are likely within the R00 timeframe. (For example some operators may wish to offer speech services via MSC based networks, others may wish to use VoIP via evolved GPRS mechanisms.)

Release 2000 specifications need to take into account the differing options, technologies and requirements that operators will need and should cater for the differing evolution paths and technologies that may be applied. These 'Architecture Options' will need to be included within the Release 2000 specifications to enable to operators to deploy network infrastructure according to their current position and the expected evolution of their services and infrastructure.

Proposal

In order to support the different starting points and requirements from operators it is proposed that the Release 2000 specifications should be developed to cater for different 'Architecture Options'. This will enable the deployment of different and mixed architecture configurations which still comply with standards but give flexibility to suit the differing requirements. Guidance on the specific architecture options that are required for Release 2000 should be stated in a 3GPP permanent document in terms of combinations of:

- **CS CN domain:** *comprises all core network elements for provision of CS services;*
- **PS CN domain:** *comprises all core network elements for provision of PS connectivity services;*
- **IM CN subsystem:** *(IP Multimedia CN subsystem) comprises all CN elements for provision of IM services.*

It is further proposed that the set of options includes one that enables the deployment of the **PS CN domain** and **IM CN subsystem** only - *without* the **CS CN domain**.

Note: the above definitions have been developed within S2 at their meeting #12 in Tokyo and are the subject of a liaison to TSG SA. It is assumed that the CS CN domain includes the MSC Server.

End