This glossary contains certain definitions of technical terms used in this interim report as they relate to the Group. Some of these definitions may not correspond to standard industry definitions or usage.

"3G" The third generation of wireless networks. These networks should be able to

support peak data rates of 144 Kbps at mobile user speeds, 384 Kbps at pedestrian user speeds and 2 Mbps in fixed locations (peak speeds), although some initial deployments were configured to support just 64 Kbps. ITU coordinates 3G standards through its IMT-2000 project and incorporates the

key standards bodies, 3GPP and 3GPP2.

"ADSL" Asymmetrical digital subscriber lines, a method of transmitting data over

traditional copper telephone lines. Data can be downloaded at speeds of up to

1.547 Mbps and uploaded at speeds of 128 Kbps.

"ASON" Automatic switching optical network, the functions of the control interface of

which allow it to develop an optical communication channel customised to users' needs according to their requests on an unmanned basis and support multichannel development, capacity expansion, configurability and network

intelligence development.

"CDMA" Code division multiple access, one of the standards for 2G mobile

communications. It is a spread-spectrum technology standard that assigns a pseudo-noise (PN) code to all speech and data bits, sends a scrambled transmission of the encoded speech over the air and reassembles the speech in its original format. By assigning a unique correlating code to each transmitter, several simultaneous conversations can share the same frequency allocations.

"CDMA2000" A technical specification for the provision of enhanced capacity for voice under

the CDMAOne standard with a maximum data rate of 2Mbps, comprising particular specifications such as 1xRTT (radio transmission technology), 1xEVDO

(data only version) and 1xEVDV (voice and data version).

"DWDM" Dense wavelength division multiplexing, a technology that enables a single

optical fiber to carry multiple data channels (or wavelengths). Current commercial

 $\ensuremath{\mathsf{DWDM}}$  systems can accommodate up to 100 channels.

"DSL" Digital subscriber lines, the collective name given to a number of techniques used

for transmitting digital data over the local loop or subscriber line. These are also

known as xDSL. Examples are ADSL, HDSL, VDSL, MDSL and RDSL.

"GSM" A global system for mobile communications, a digital cellular phone system

standard that originated in Europe. It is deployed in more than 170 countries and

uses a TDMA radio access scheme.

"IP" Internet protocol, as more specifically defined in RFC 791, the primary purpose of

which is to define packet architecture and address format.

"NGN" Next generation network, a data packet-based network capable of providing a

variety of services by using multiple broadband transmission technology to support unrestricted access to different service providers and of supporting

ordinary mobile communication that provides continuous services to users.

"PHS" A personal digital mobile telephone system developed in Japan operating on the

1900 MHz frequency.

"softswitch" Abbreviation for software switch, softswitch is an application protocol interface

which is used to link a traditional PSTN to IP networks and manage traffic

containing a mixture of voice, fax, data and video.

"TD-SCDMA" Time division synchronous code division multiple access, a 3G wireless

transmission technology developed in China to support voice, data and multi-

media communications.

"WCDMA" Wideband CDMA, a UMTS standard for 3G digital mobile networks adopting

wideband CDMA technologies to support voice, data and multimedia

communications with a theoretical maximum data rate of 2Mbps.