# Glossary

**This glossary contains certain definitions and other terms as they relate to the Company and the Group and as they are used in the Annual Report. These definitions may, or may not, correspond to standard industry definitions.**

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| **Analog** | A type of mobile communications technology which transmits analog signals between base stations and mobile subscribers. |
| **Average number of subscribers** | For 1997 and 1998, the average number of subscribers is the arithmetic average of the number of subscribers at the beginning and the end of the corresponding calendar year. For 1999 and 2000, it is the weighted average of the number of subscribers in each calendar month in that year. In this annual report, the average number of subscribers is used to calculate indicators such as Minutes of Usage Per User Per Month (MOU) and Average Revenue Per User Per Month (ARPU). |
| **Base station; Base transceiver station** | Base (transceiver) station refers to transmitters, receivers, and antennas serving each wireless network cell and their transmission power will determine the radius of each cell. |
| **BOSS** | Business Operation Support System, which includes billing and collecting systems, customer care centers, and sales and marketing systems. |
| **Cellular mobile communications system** | In a cellular mobile communications system, the coverage of an operator is divided into various cells. Each cell corresponds to the area covered by a set of transmitters and receivers and is allocated a fixed set of frequencies. |
| **Channel** | For mobile communications, a channel is a pair of frequencies for signal transmission. There are two types of channels for GSM: voice channels for the transmission of voice and data; and control channels for the transmission of network management information and channel control information, and application data information such as short message services. |
| **CMNet** | CMNet is the IP backbone network, constructed by the Group, which covers the service areas of the Group's 13 mobile communications operators. CMNet can also provide computer subscribers as well as mobile subscribers with various IP-based services like Internet and VoIP. |
| **Digital mobile communications** | A type of mobile communications technology which transmits digital signals between base stations and mobile subscribers. Digital signals are produced by modulating the analog signals. |

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**GPRS**

General Packet Switched Radio Service refers to the application of packet-switched technology in wireless telecommunications which will only consume network resources during data transmission without the need to have a dedicated channel for continuous data transmission flow. GPRS technology allows mobile subscribers to transmit and receive data at a speed exceeding 115 kbit/s.

**GSM**

Global System for Mobile Communications, a pan-European mobile telephone system based on digital transmission and cellular network architecture with roaming. GSM is the standard accepted in most of Europe, the Middle East, Africa, Australia and Asia (with the exception of, among others, Japan and South Korea).

**Interconnect**

To establish effective communication links between telecommunications networks so as to permit the subscribers of a telecommunications service operator to communicate with the subscribers of another telecommunications service operator or to utilize the telecommunications services provided by another telecommunications service operator.

**IP**

Internet Protocol, the standard communication protocol used in the exchange of information between terminals or network equipment over the Internet.

**Mobile switching centre**

Mobile switching centre processes communications between mobile subscribers and other subscribers (such as mobile subscribers, ISDN subscribers and fixed line subscribers, etc.). Mobile switching centre includes the necessary database for the storage of subscriber information and equipment to perform subscriber mobility functions.

**Network infrastructure**

Fixed infrastructure equipment consisting of base stations, base station controllers, antennas, switches, information management systems and other equipment that provide communications services to subscribers.

**Network utilisation rate**

The ratio of the aggregate subscriber base to the capacity of the mobile telecommunications network. At present, the capacity of the mobile telecommunications network is calculated on the basis that each wireless voice channel can support 30 subscribers.

**Penetration rate**

The total number of subscribers (including the estimated subscribers using the services of other operators) divided by the total population in the designated area.

**Roaming**

A service which allows a subscriber to use his or her handset while outside of his or her home location. Roaming requires an agreement between operators in order to permit subscribers to access the other operator's system.

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| **SIM card** | Subscriber Identity Module card which is the necessary identification for subscribers to connect to the network and which contains a GSM encryption algorithm to ensure secure communications. The SIM card contains the personal identification number of the subscriber as well as basic subscriber data and network information. |
| **WAP** | Wireless Application Protocol is a software protocol stack that defines a standardized means of transmitting Internet-based content and data to mobile handsets and other wireless handheld devices. |
| **VoIP** | Voice over IP telephony refers to the encoding of voice signals using IP Protocol and transmitting them over an IP network. In this case, the voice signals are divided into several packets and each packet is sent separately instead of setting up and maintaining a voice channel between the calling and called parties for the duration of a call. |
| **2.5 Generation mobile communications technologies (2.5G)** | 2.5 Generation mobile communications technologies are interim mobile phone technologies that are designed to facilitate an eventual migration from current Second Generation mobile telecommunications technologies (including GSM and CDMA, etc.) to Third Generation mobile telecommunications technologies (including GPRS and EDGE, etc.), which enhance the wireless data communication capabilities of the current Second Generation mobile telecommunications system. |
| **Third Generation mobile telecommunications technologies (3G)** | Third Generation mobile telecommunications technologies are focused on providing wireless broadband multi-media communications services including high-speed data services, imaging services and global roaming. |