
GLOSSARY OF TECHNICAL TERMS

This glossary contains explanations of certain terms and definitions used in this prospectus in connection with the Company and its business. The terms and their meanings may not correspond to standard industry meaning or usage of these terms.

“2G”	second generation wireless service. This generation of services started in 1990 and is based on circuit-switched technology where each call requires its own cell channel, which makes transmission of data relatively slow as compared with 2.5G and 3G. Such services include CDMA, TDMA and GSM
“2.5G”	second-and-a-half generation wireless service. Such service is based on packet-switched service that increases transmission speeds as compared with 2G
“3G”	third generation wireless service, a system of services proposed to be adopted in the near future for mobile communications, which will allow wireless transmission speeds up to 2 Mbps. Key features of such systems are a high degree of worldwide commonality of design, compatibility of services, use of small pocket terminals with worldwide roaming capability, Internet and other multimedia applications, and a wide range of services and terminals
“active product”	electronic component that requires external power to manipulate or react to an electronic input for a desired output
“anechoic chamber”	a room which is built or installed with materials which absorb most, if not all, microwaves. The room may serve as a laboratory for testing antenna as background electromagnetic waves or noises are eliminated and also protect workers who work in the control room from the health hazard as the control room is physically separated from the chamber
“antenna”	a device for receiving and transmitting electromagnetic signals. An optimal antenna for a given transmission or reception of a frequency has a length equal to the wavelength (or a usable fraction) of that frequency. A function of antenna is to transform electromagnetic wave into alternating current (and hence energy for triggering signals for electronic equipment), or in the opposite way
“base station”	transmitter and receiver which serve as a transmission device between all mobile users in a cell and connect mobile calls to the mobile phone switching office and/or the land-line phone network
“base station antenna(s)”	antenna(s) for mobile communication base station
“bit”	binary digit, a unit of data that is represented as a one or a zero

GLOSSARY OF TECHNICAL TERMS

“CDMA”	Code Division Multiple Access technology, a type of mobile communication system in modulation. The technology converts voice signal into a digital signal, adds an address (the identity code of the destination which the sender wishes to send to) to each digital voice packet, scrambles the packet and sends it by way of radio frequency
“CDMA2000”	a broadband CDMA technology for application in 3G
“cell”	a geographical area in cellular communications
“cell site”	the transmission and receiving centre for a cell, which generally consists of (i) an antenna, (ii) a closure that contains the antenna (and other environmental control units (such as heater or air-conditioner units)), and (iii) a small building in which the said closure is located
“cellular”	a wireless local telephone service that operates by dividing a geographical area into sections or cells. Each cell has its own transmitter/receiver that tracks and operates with mobile phones within its area. The dimensions of a cell can range from several hundred metres to several kilometres
“combiner/divider”	an RF device which enables GSM 900MHz and CDMA 800MHz system information to be combined and worked through one indoor distribution antenna system
“coupler”	an RF device which divides a signal unevenly into signals of different powers. The smaller output end is called coupled output
“decibel” or “dB”	a measurement of increase or decrease of a signal that comes from the ratio of transmitted power to received power. Negative decibel represents a loss of power and positive decibel represents an increase in power
“digital”	a signal that has only two possible levels per cycle
“dipole unit(s)”	the smallest physical radiation unit in an antenna. Its length is a quarter of a wavelength and into which the electrical signal is fed symmetrically
“duplexer”	an RF device which makes transmitted and received signals simultaneously go through one antenna
“encapsulation cases”	a shell made of insulation material which lets RF wave go through so that the RF units are able to be protected from weather influences
“feeder”	a transmission line which connects the antenna with other electronic device, such that the line transmits RF energy from a transmitter to an antenna, and/or from an antenna to a receiver. If operating properly, the transmission line itself does not radiate or intercept energy

GLOSSARY OF TECHNICAL TERMS

“gain”	in respect of a given antenna, the ratio of the power required at the input of a reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same electromagnetic strength at the same distance. Gain is usually measured in decibel
“GDP”	gross domestic product
“GPRS”	General Packet Radio Services, an evolved version of 2G GSM technology which transmits and receives packets of data through different parts of the network, instead of using a continuous open radio channel. The system takes advantage of space capacity of the network and data transmission speed is up to 115.2 Kbps, as compared with GSM’s speed of 9.6 Kbps or 14.4 Kbps
“GSM”	Global System for Mobile communication, a widely used digital wireless telephone technology. The technology digitizes and compresses data, then sends it down a channel with two other streams of user data, each in its own time slot
“GSM/CDMA antenna(s)”	GSM/CDMA base station antennas
“hertz” or “Hz”	a measure of the number of cycles per second in a waveform
“Internet”	a global network of interconnected, separately administered public and private computer networks
“IP”	Internet Protocol, which was originally developed by the U.S. Department of Defence to enable communications of dissimilar computing platforms around the country
“Kbps”	kilobits per second
“KHz”	kilohertz, a thousand hertz
“LAN”	local area network, a communication network that serves users within a confined geographical area
“Mbps”	megabits per second
“metal backplane”	an aluminium plate which forms part of a panel, which is used for directing the antenna’s wave direction and beam width
“MHz”	megahertz, a million hertz
“mounting kits”	a mechanical set which fixes the antenna to the installation pole or tower
“packet”	a unit of data in a transmission that contains payload (transmitted information) and overhead (addressing and error-correcting information)

GLOSSARY OF TECHNICAL TERMS

“PAS”	acronym for “personal access system”, which was designed jointly by UTStarcom Inc. and a Japanese manufacturer, and which is commonly known as “小靈通 (Xiaolingtong)” in the PRC. It is a wireless city-phone, and its key features include that the system connects to a public switched telephone network through radio signals and it also provides city-wide cordless operation
“PAS Antenna(s)”	WLL/PHS base station antenna(s), commonly referred to as antenna(s) for “小靈通” (Xiaolingtong) in the PRC
“passive product”	electronic component that does not require any external power to manipulate or react to an electronic input for a desired output
“PCS”	an acronym for “personal communications service”, a wireless phone service similar to cellular telephone service, but emphasising personal service and extended mobility. Cellular was designed principally for car phone use with transmitters emphasising coverage of highways and roads. PCS is designed for greater user mobility and generally requires more cell transmitters for coverage, but has the advantage of fewer blind spots
“PHS”	an acronym for “personal handyphone system”, which was developed by the Nippon Telegraph and Telephone Corporation. Personal handyphone is a portable wireless phone which is light in weight and functions as a cordless phone at home and as a mobile phone elsewhere
“protocol”	the organised processes and rules that communications equipment use to transfer data
“repeater”	a device that is used to take a signal that has travelled a long distance and make such signal new again (for instance, by way of reproducing and re-transmitting such signal)
“RF”	radio frequency, which ranges from 500KHz to 300 gigahertz
“RF active device”	device which uses radio frequency signals to broadcast data information within a local network, and which does not amplify (extend signal transmission range) signal on such local network
“splitter”	an RF device which divides a signal evenly into two or more signals of the same power
“subscriber(s)”	telecommunications customer(s)
“TDMA”	Time Division Multiple Access, a digital cellular telephone communication technology that divides each cellular channel into three time-slots in order to increase the amount of data that can be carried

GLOSSARY OF TECHNICAL TERMS

“TD-SCDMA”	Time Division Synchronous Code Division Multiple Access one of the three recognised standards for 3G technology in the world
“Technical Specifications of Base Station”	移動通信系統基站天線技術條件 (The Specification for Mobile Communication System Base Station Antenna) promulgated by the MII on 24 May 2000
“telecom”	telecommunications, communication across a distance through electrical or radio signals
“WAP”	an acronym for “wireless application protocol”, a specification for a set of communication protocols to standardise the way that wireless devices, such as mobile phones and radio transceivers, can be used for Internet access, including browsing the web, sending and receiving e-mail
“WCDMA”	Wideband Code Division Multiple Access, an ITU standard derived from CDMA and a 3G mobile wireless technology
“wireline services” or “fixed-line services”	services which are, in contrast to wireless services, provided through lines (whether made of copper wires, optical fibres or otherwise) to connect locations for which services are located
“WLL”	an acronym for “wireless local loop”, a system that connects subscribers to the public switched telephone network using radio signals as a substitute for copper wires for all or part of the connection between the subscriber and the switch. An advantage of such system is to allow connection of an existing network to a large number of subscribers without implementing the works for laying copper wire network, hence reducing both material and labour costs
“°”	degrees