
GLOSSARY OF TECHNICAL TERMS

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

“5G”	the fifth-generation wireless network technology
“10G”	10 Gigabit (i.e. one billion bits), in data communications, it is commonly used for measuring the amount of data that is transferred in one second between two telecommunication points. A network with a data transfer speed of 10G offers significantly faster data transmission compared to previous generations, enabling high-speed connectivity for various applications such as data centres, enterprise networks, and telecommunications systems
“10G-PON”	10 Gigabit Passive Optical Network, a high-speed fibre optic technology that enables the transmission of data, voice, and video at a rate of 10G per second. It provides a cost-effective solution for delivering high-bandwidth services over a passive optical network infrastructure
“AI”	artificial intelligence
“access network”	in the context of a telecommunications network, an access network mainly serves to receive and transmit signals between end-user devices (such as mobile phones, telegraphs, data terminals and computers) and the telecommunications network via the transmission network
“base station”	a fixed transceiver station serving as a central connection point of access network which connects wireless devices to a telecommunications network
“big data”	a combination of structured, semi-structured and unstructured data collected by organisations that is too large and complex to process using traditional methods. The big data can be analysed by machine learning, modelling and other advanced analytics applications to extract meaningful insight to enhance business efficiency
“CAGR”	compound annual growth rate, calculated by subtracting one from the result of dividing the ending value by its beginning value raised to the power of one divided by the period length

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- “cloud computing” the on-demand availability of computing resources over the internet for applications, servers (physical servers and virtual servers), data storage, development tools and networking capabilities, hosted at a remote data centre and managed by a cloud services provider. Enterprises only pay for the cloud computing services they use without building their own computing resources
- “conduit” in the context of a telecommunications network, a conduit is a means of transmitting data from one device or network to another. It can be in the form of a physical or virtual connection
- “core network” in the context of a telecommunications network, a core network is the backbone network which interconnects networks by providing paths for the exchange of information between various sub-networks. Typically, a core network comprises and is supported by a collection of high-capacity communications facilities, hardware and devices and software which are maintained by telecommunications network operators. It allows telecommunications services to be provided to end-users and transfers network traffic at high speed
- “digitalisation solution services”. digitalisation solution services, in the context of the smart city solution services industry, refer to the turnkey solution from planning, developing, installing, and optimising the hardware and software that integrates physical infrastructure, information infrastructure, social infrastructure, and commercial infrastructure, encompassing an area’s population, transportation assets, energy resources, commercial activity, and communications. This involves the application of traditional technologies including digitalisation, ICT to design system that connects different infrastructures for collection of data and operation of infrastructure, as well as the use of advanced technologies such as IoT, cloud computing, and AI for real-time data collection, real-time incident response, rapid analytics and automated decision making

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“discriminative AI”	a type of AI model which mainly focuses on data classification and statistical analysis based on given parameters or examples. As opposed to the advanced forms of AI which involve content reconstruction or generation by themselves, discriminative AI is a more basic form of AI which simply analyses the patterns or features in the input data to assign labels to new data. Discriminative AI models are widely adopted in digitalisation solutions and used in tasks such as image recognition, language processing, fraud detection, and recommendation systems
“GB”	the GB standards (中華人民共和國國家標準) which are the PRC national standards issued by the Standardisation Administration of China (中國國家標準化管理委員會). GB stands for Guobiao (國標), which means “national standard”. Mandatory standards are prefixed “GB”. Recommended standards are prefixed “GB/T” (T stands for tuijian (推薦), which means “recommended”). The GB standards set forth specific requirements for various types of products and services
“GDP”	gross domestic product
“ICT”	information communications technology
“Industrial Internet of Things” or “IIoT”	a subset of IoT that applies specifically to industrial settings focusing on machine-to-machine communication, big data and machine learning, which enables industries and enterprises to improve efficiency and reliability in their operations
“Internet of Things” or “IoT” . . .	Internet of Things, which describes the network of devices that are embedded with sensors, software and other technologies for the purpose of connecting and exchanging data with other devices and systems over the Internet or other communications networks
“ISO”	International Organisation for Standardisation, an international standard development organisation which develops and publishes standardisation in technical and non-technical fields
“last mile”	the final portion of the telecommunications networks that delivers telecommunications signals to the end-users’ premises

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“module(s)”	in the context of computer software, a module is a set of computer coding composed to deliver specific functionality which forms a component of a software programme. Through the process of software development, software developers can customise a software comprising multiple separate and interchangeable modules or components to cater to specific needs of end-users
“node(s)”	in the context of a telecommunications network, a node is a connection point within a communications network and an endpoint for data transmission or redistribution. Nodes are programmed or engineered to recognise, process and forward data transmissions to other network nodes
“Optical Line Terminal” or “OLT”	a key component in a fibre optic network. It acts as a central hub that manages the communication between the telecommunications service provider’s network and the customer’s premises. It is responsible for distributing and managing data to multiple devices connected to the network
“telecommunications”	the transmission of information by various types of technologies over wire, radio, optical, or other electromagnetic systems
“telecommunications network” . .	a communication system that constitutes the interconnection of multiple telecommunications systems for end-users to communicate with each other. It consists of a group of nodes interconnected by telecommunications links that are used to exchange information between the nodes, and usually has a three-layer structure comprising the core network, transmission network and access network
“tower”	a high-erected steel structure or a pole for hosting antennas or other equipment
“transmission network”	in the context of a telecommunications network, a transmission network transmits electrical or optical signals, consisting of various nodes and links that transmit, transfer, and receive information, and provides protected signal transmission connection channels to other networks utilising transmission equipment (such as base stations) as well as electrical or optical cables or optical fibers, wireless or other electromagnetic systems as the conduit

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- "virtual reality" or "VR" the use of computer modelling and simulation that enables a person to interact with an artificial three-dimensional visual or other sensory environment. VR applications immerse the user in a computer-generated environment that simulates reality through the use of interactive devices (such as goggles, headsets, gloves, or body suits) which send and receive information
- "sq.m." square meter