



Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission

COMMUNICATIONS AND MULTIMEDIA ACT 1998

COMMISSION DETERMINATION ON ACCESS LIST

DETERMINATION NO. 1 OF 2005

In exercise of the powers conferred by sections 55, 56 and 146 of the Communications and Multimedia Act 1998 [Act 588], the Commission hereby determines as follows:

Citation and commencement

1. (1) This Determination may be cited as the **Commission Determination on Access List, Determination No. 1 of 2005**.

(2) Subject to paragraph 5, this Determination shall come into force on 1 July 2005.

Interpretation

2. In this Determination, unless the context otherwise requires:

“Access Provider” means a network facilities provider who owns or provides Facilities and/or a network service provider who provides Services, listed in this Determination, and includes a holder of a registered licence under section 278 of the Act;

“Access Seeker” means a network facilities provider, a network service provider, an applications service provider, or a content applications service provider who makes a written request for access to Facilities or Services, listed in this Determination, and includes a holder of a registered licence under section 278 of the Act;

“Any-to-Any Connectivity” means a connection which is achieved when an end user is able to communicate with another end user, whether or not the end users are connected to the same network;

“ ‘A’ party” means, in the context of communications between end users, the end user from whom the communication originates;

“ ‘B’ party” means, in the context of communications between end users, the end user to whom the communication terminates;

“BGR” or “Border Gateway Router” means a router designed for the interconnection of two autonomous systems;

“Call Communications” means communications involving (in whole or in part) a number used in the operation of each Operator’s network including Message Communications;

“Centrex services” means a service offering the type of functionality associated with a PBX (Private Branch Exchange) from a central switch in the Public Switched Telephone Network, in which every extension is a direct line but intelligent functions are managed at the exchange;

“Communications Wire” means a copper or aluminium based wire forming part of a Public Switched Telephone Network;

“Customer” means, in relation to an Operator, a person having a contractual relationship with that Operator for the provision of communications by means of that Operator’s Facilities and/or Services;

“Customer Access Module” means a device that provides ring tone and ring current to customer equipment. Examples of Customer Access Modules include Remote Subscriber Stages, Remote Subscriber Units, Integrated Remote Integrated Multiplexers, Non-integrated Remote Integrated Multiplexers and the customer line module of a local switch;

“Facilities” means network facilities and/or other facilities which facilitate the provision of network services or applications services, including content applications services;

“Fixed Network” means network facilities and/or network services comprising the Public Switched Telephone Network and/or networks based on Internet Protocols for the provision of communications by guided electromagnetic energy or by point-to-point unguided electromagnetic energy;

“Interconnection Service” means Facilities or Services (including the physical connection between separate networks) to facilitate Any-to-Any Connectivity provided by an Access Provider to an Access Seeker which involves or facilitates the carriage of communications between an end user connected to the network of the Access Provider and a Point of Interconnection;

“Intermediate Point” means any technically feasible point between the network side of the Network Boundary and a Point of Interconnection;

“IP” or “Internet Protocols” means network-layer (Layer 3) protocol, as defined by the Internet Engineering Task Force, that contains addressing information and some control information that enables packets to be routed;

“Message Communications” means communications that provide only text with or without associated images, audio clips and video clips. Examples of Message Communications include Short Message Service and Multimedia Message Service;

“Mobile Network” means network facilities and/or network services comprising the public cellular mobile network and/or the public mobile radio network, for the provision of communications;

“Mobile Virtual Network Operator” means an Operator that is not a holder of a 3G spectrum assignment under section 159 of the Act but is capable of providing public cellular services to end users;

“Network Boundary” has the meaning given to that term in section 128 of the Act;

“Operator” means a network facilities provider, a network service provider, an applications service provider or a content application service provider (as the context requires) who is an Access Provider or an Access Seeker (as the context requires);
“POI” or “Point of Interconnection” means any technically feasible point which demarcates the network of an Access Provider and the network of an Access Seeker (collectively referred to as the ‘Interconnecting Networks’) and is the point at which communication is transferred between the Interconnecting Networks;

“POP” or “Point of Presence” means a point at which an Access Seeker has established itself for the purpose of obtaining access to Facilities and/or Services;

“PSTN” or “Public Switched Telephone Network” means a telephone network accessible by the public providing circuit switching and transmission facilities utilising analogue and/or digital technologies;

“Services” means network services and/or other services which facilitate the provision of network services or applications services, including content applications services;

“Transport Stream” means a packet based method of multiplexing one or more digital video and audio streams having one or more independent time bases into a single stream; and

“Unconditioned Communications Wire” means Communications Wire which is not conditioned for voice services only, for example by means of loading coils, taps, bridges or pair gain systems.

3. Any term used in this Determination shall, unless expressly defined or if the context otherwise requires, have the same meaning as in the Act or the regulations made under it.

4. Unless the context otherwise requires, words in the singular include the plural and vice versa.

Implementation of services under paragraphs 6(16), 6(17), 6(18) and 6(19)

5. (1) Paragraphs 6(16), 6(17), 6(18) and 6(19) will be carried out in phases to ensure effective and sustainable implementation. Paragraph 6(18) shall come into force on 1 July 2005, but paragraphs 6(16), 6(17) and 6(19) shall come into force on a later date to be decided by the Commission.

(2) In deciding the date of coming into force of paragraphs 6(16), 6(17) and 6(19), the Commission may take into account factors including but not limited to, market response to the implementation of paragraph 6(18) and requirements of Access Seekers and Access Providers.

(3) The Commission shall notify the date on which any or all of paragraphs 6(16), 6(17) and 6(19) shall come into force by way of notification in writing.

Access List

6. (1) Fixed Network Origination Service

(a) A Fixed Network Origination Service is an Interconnection Service provided by means of a Fixed Network for the carriage of Call Communications from customer equipment to a POI. The Fixed Network Origination Service comprises transmission and switching (whether packet or circuit) for Fixed Network-to-Fixed Network, Fixed Network-to-Mobile Network and Fixed Network-to-international outgoing calls insofar as they relate to freephone 1800 number services, toll free 1300 number services, and other similar services which require Any-to-Any Connectivity.

(b) The functionalities of the Fixed Network Origination Service include:

- (i) switching (whether packet or circuit); and
- (ii) the signalling required to support the Interconnection Service.

(c) Examples of technologies used in the Fixed Network Origination Service would be Integrated Services Digital Network (ISDN) and Voice over Internet Protocol (VoIP) networks.

(2) Equal Access (PSTN) Service

(a) The Equal Access (PSTN) Service is an Interconnection Service provided by means of a PSTN for the carriage of Call Communications from customer equipment to a POI which allows an end user to select and use the services of the Access Seeker. The Equal Access (PSTN) Service is only required to be provided on a call-by-call basis (for instance, through dialling of an equal access prefix code).

(b) The Equal Access (PSTN) Service comprises transmission and switching for PSTN-to-PSTN network calls (including Centrex services) and PSTN-to-international outgoing calls only.

(c) The functionalities of the Equal Access (PSTN) Service include:

- (i) circuit switching; and
- (ii) the signalling required to support the Interconnection Service.

(d) An example of a technology used in the Equal Access (PSTN) Service would be Integrated Services Digital Network (ISDN).

(3) Fixed Network Termination Service

(a) Fixed Network Termination Service is an Interconnection Service provided by means of a Fixed Network for the carriage of Call Communications from a POI to customer equipment. The Fixed Network Termination Service comprises transmission and switching (whether packet or circuit) for Fixed Network-to-Fixed Network, Mobile Network-to-Fixed Network and incoming international-to-Fixed Network calls and messages.

- (b) The functionalities of the Fixed Network Termination Service include:
 - (i) switching (whether packet or circuit); and
 - (ii) the signalling required to support the Interconnection Service.

(c) Examples of technologies used in the Fixed Network Termination Service would be Integrated Services Digital Network (ISDN) and Voice over Internet Protocol (VoIP) networks.

(4) Mobile Network Origination Service

(a) A Mobile Network Origination Service is an Interconnection Service for the carriage of Call Communications from a 'A' party to a POI. The Mobile Network Origination Service supports Mobile Network-to-Mobile Network, Mobile Network-to-Fixed Network and Mobile Network-to-international outgoing calls in so far as they relate to freephone 1800 number services, toll free 1300 number services, and other similar services which require Any-to-Any Connectivity.

- (b) The functionalities of the Mobile Network Origination Service include:
 - (i) switching (whether packet or circuit); and
 - (ii) the signalling required to support the Interconnection Service.

(c) Examples of technologies used in the Mobile Network Origination Service would be:

- (i) Global System for Mobile Communications (GSM); and
- (ii) International Mobile Telecommunications 2000 (IMT-2000).

(5) Mobile Network Termination Service

(a) A Mobile Network Termination Service is an Interconnection Service for the carriage of Call Communications from a POI to a 'B' party. The Mobile Network Termination Service supports Mobile Network-to-Mobile Network, Fixed Network-to-Mobile Network, incoming international-to-Mobile Network calls and messages.

- (b) The functionalities of the Mobile Network Termination Service include:
 - (i) switching (whether packet or circuit); and
 - (ii) the signalling required to support the Interconnection Service.

(c) Examples of technologies used in the Mobile Network Termination Service would be:

- (i) Global System for Mobile Communications (GSM); and
- (ii) International Mobile Telecommunications 2000 (IMT-2000).

(6) Interconnect Link Service

An Interconnect Link Service is a Facility and/or Service which enables the physical connection between the network of an Access Provider and the network of an Access Seeker for the purpose of providing an Interconnection Service.

(7) Private Circuit Completion Service

(a) A Private Circuit Completion Service is an Interconnection Service for the carriage of communications by way of a private circuit between a POI and an end user, available only at one end of a private circuit.

(b) The functionalities of the Private Circuit Completion Service include:

- (i) switching (whether packet or circuit); and
- (ii) the signalling required to support the Interconnection Service.

(c) An example of a technology used in the Private Circuit Completion Service would be Integrated Services Digital Network (ISDN) and IP based networks.

(d) An end user includes a wholesale or retail customer and includes an Operator and the final recipient of the service.

(8) Domestic Network Transmission Service

(a) A Domestic Network Transmission Service is a Facility and/or Service for the carriage of communications between transmission points (not being Customer transmission points) via network interfaces at such transmission rates as may be agreed between the Access Provider and the Access Seeker on a permanent basis.

(b) The Domestic Network Transmission Service transmission points are:

- (i) any technically feasible network transmission points;
- (ii) submarine cable and satellite links between a transmission point in Sabah and Sarawak, and a transmission point in Peninsular Malaysia.

(c) The functionalities of the Domestic Network Transmission Service include:

- (i) switching (whether packet or circuit);
- (ii) signalling required to support the technology or to provide a service;
- (iii) termination at either end by a port, router, network termination unit, switch or earth station;
- (iv) a digital protocol.

(d) Network interfaces referred to in paragraph (a) above include elements such as copper wire, microwave, laser, fibre optic, satellite or other wireless technologies.

(e) An Access Seeker for the Domestic Network Transmission Service includes (but is not limited to) a network facilities provider or network services provider which is only authorised to provide limited (e.g. in the last mile) network facilities or network services, but wishes to acquire the Domestic Network Transmission Service in order to connect its limited network facilities or network services.

(9) Internet Access Call Origination Service

(a) An Internet Access Call Origination Service is an Interconnection Service provided by means of a PSTN for the carriage of Call Communications over the voice bandwidth from customer equipment to a POP being:

- (i) a POI;
- (ii) at an agreed point of input to the Access Seeker's modem bank or router; or
- (iii) at an agreed point of output from the Access Provider's modem bank or router.

(b) The functionalities of the Internet Access Call Origination Service are:

- (i) circuit switching;
- (ii) the signalling required to support the network service; and
- (iii) dial-up to short codes and special services numbers.

(10) 3G-2G Domestic Inter-Operator Roaming Service

(a) The 3G-2G Inter-Operator Roaming Service is a Service that enables a Customer of a 3G Operator or a 3G Mobile Virtual Network Operator to initiate, receive or otherwise utilise applications on the 2G Mobile Network of the 2G Operator, where:

- (i) the Access Provider is the relevant 2G Operator; and
- (ii) the Access Seeker is the relevant 3G Operator or a 3G Mobile Virtual Network Operator.

(b) The functionalities of the 3G-2G Inter-Operator Roaming Service include the ability of the 3G Customer to initiate and receive voice calls, but are otherwise limited to the applications that the Access Provider provides to its own Customers on its 2G Mobile Network which supports Any-to-Any Connectivity.

(11) Inter-Operator Mobile Number Portability Support Services

(a) The Inter-Operator Mobile Number Portability Support Services comprise the Facilities and/or Services which support mobile number portability for public cellular services, where:

- (i) the Access Provider is the provider of the Inter-Operator Mobile Number Portability Support Services, and is the losing provider of the end user service; and
- (ii) the Access Seeker is the acquirer of the Inter-Operator Mobile Number Portability Support Services, and is the gaining provider of the end user service.

(b) The Facilities and/or Services that support Mobile Number Portability referred to above include:

- (i) the Inter-Operator processes to support the implementation of a port;
- (ii) technological solutions to support the ongoing porting obligation; and
- (iii) routing and signalling with respect to ported calls.

(12) Infrastructure Sharing

(a) Infrastructure Sharing is a Facility and/or Service which comprises the provision of physical access, which refers to the provision of space at specified network facilities to enable an Access Seeker to install and maintain its own equipment.

(b) Specified network facilities include towers and associated tower sites.

(c) Physical access includes power, environmental services (such as heat, light, ventilation and air-conditioning), security, site maintenance and access for the personnel of the Access Seeker.

(13) Domestic Connectivity to International Services

Domestic Connectivity to International Services is a Facility and/or Service which comprises, each individually:

- (i) a backhaul transmission service between a network transmission point and a submarine cable landing centre or an earth station;
- (ii) connection services between equipment co-located at the submarine cable landing centre and the submarine cable system.

(14) Network Co-Location Service

(a) The Network Co-Location Service is a Facility and/or Service which comprises:

- (i) physical co-location, which refers to the provision of space at an Access Provider's premises to enable the Access Seeker to install and maintain its own equipment necessary for the provision of the Access Seeker's services through the Facilities and/or Services of any Operator. Physical co-location includes

physical space, power, environmental services (such as heat, light, ventilation and air-conditioning), security, site maintenance and access for the personnel of the Access Seeker;

- (ii) virtual co-location, which refers to the provision of facilities or services at an Access Provider's premises to enable the acquisition by the Access Seeker of Facilities and Services on the Access List, where equipment is owned and maintained by the Access Provider; or
- (iii) in-span interconnection, which is the provision of a POI at an agreed point on a physical cable linking an Access Provider's network facilities to an Access Seeker's network facilities.

(b) Network premises at which co-location is to be provided includes switching sites, submarine cable landing centres, earth stations, exchange buildings, other Customer Access Modules (including roadside cabinets) and such other network facilities locations associated with the provision of a Facility or Service on the Access List, and includes co-location provided at any location where main distribution frame is housed.

(15) Network Signalling Service

The Network Signalling Service is a Facility and/or Service for the interconnection of the Signalling System Number Seven (SS7) network of an Access Provider to the SS7 network of an Access Seeker at the signal transfer points. The information exchanged on signal transfer points of the interconnected SS7 networks include but is not limited to:

- (i) Integrated Services Digital Network User Part (ISUP) information;
- (ii) Transaction Capability Application Part (TCAP) information; and
- (iii) TCAP/SCCP (Signalling Connection Control Part) services information.

(16) Full Access Service

(a) The Full Access Service is a Facility and/or Service for the use of Unconditioned Communications Wire between the Network Boundary at an end user's premises and a point on a network that is a potential POI located at or associated with a Customer Access Module and located on the end user side of the Customer Access Module.

(b) The Full Access Service includes the use of optical fibre cable and associated transmission services between an Intermediate Point and the POI, associated tie cable services, shared splitting services, interfaces to operational support systems and network information.

(17) Line Sharing Service

(a) The Line Sharing Service is a Facility and/or Service for the use of the non-voiceband frequency spectrum of Unconditioned Communications Wire (over which wire an underlying voiceband PSTN service is operating) between the Network Boundary at an end user's premises and a point on a network that is a potential POI located at, or associated with, a Customer Access Module and located on the end user side of the Customer Access Module.

(b) The Line Sharing Service includes the use of optical fibre cable and associated transmission services between an Intermediate Point and the POI, associated tie cable services, shared splitting services, interfaces to operational support systems and network information.

(18) Bitstream Services

(a) Bitstream with Network Service

The Bitstream with Network Service is a Facility and/or Service for the provision of Layer 2 connectivity for the carriage of certain communications (being data in digital form and conforming to Internet Protocols) between customer equipment at an end user's premises and a POI at the Access Seeker's premises, where:

- (i) the Customer's equipment is directly connected to an Access Provider's network; and
- (ii) the Access Seeker, but not the Access Provider, assigns the Customer with an IP address.

Bitstream with Network Service includes shared splitting services, interfaces to operational support systems and network information.

(b) Bitstream without Network Service

The Bitstream without Network Service is a Facility and/or Service for the provision of Layer 2 connectivity for the carriage of certain communications (being data in digital form and conforming to Internet Protocols) between customer equipment at an end user's premises and a POI at the Access Provider's premises, where:

- (i) the Customer's equipment is directly connected to an Access Provider's network; and
- (ii) the Access Seeker, but not the Access Provider, assigns the Customer with an IP address.

Bitstream without Network Service includes shared splitting services, interfaces to operational support systems and network information.

(19) Sub-loop Service

(a) The Sub-loop Service is a Facility and/or Service for the use of Unconditioned Communications Wire between the Network Boundary at an

end user's premises and a point on a network that is a potential POI located at or associated with a Customer Access Module and located on the end user side of the Customer Access Module. For Sub-loop Service, the Customer Access Module is housed in a roadside cabinet.

(b) The Sub-loop Service includes the use of optical fibre cable and associated transmission services between an Intermediate Point and the POI, associated tie cable services, shared splitting services, interfaces to operational support systems and network information.

(20) Digital Subscriber Line Resale Service

(a) The Digital Subscriber Line Resale Service is a Service for the provision of connectivity for the carriage of certain communications (being data in digital form and conforming to Internet Protocols) to customer equipment insofar as it relates to IP addresses directly and indirectly connected to the Access Provider's network. The Digital Subscriber Line Resale Service uses Digital Subscriber Line technology for carriage over the Communications Wire between the Network Boundary at an end user's premises and the Customer Access Module of the Access Provider's network.

(b) The Digital Subscriber Line Resale Service is limited to the wholesale provision of the digital subscriber line service ordinarily provided by the Access Provider to end users.

(21) Internet Interconnection Service

The Internet Interconnection Service is a Facility and/or Service for the carriage of data in digital form between one or more POI at a BGR of an Access Provider's network and the IP addresses directly connected to the Access Provider's network.

(22) Broadcasting Transmission Service

(a) The Broadcasting Transmission Service is a Facility and/or Service for the carriage of communications which comprise a content applications service between transmission points via network interfaces at such transmission rates as may be agreed between the Access Provider and the Access Seeker on a permanent basis.

(b) Transmission points are any technically feasible network transmission points.

(23) Digital Terrestrial Broadcasting Multiplexing Service

The Digital Terrestrial Broadcasting Multiplexing Service is a Facility and/or Service for the combining of multiple content applications service Transport Streams into a single Transport Stream with or without the addition of conditional access information.

Transitional and Savings

7. The Commission Determination on Access List, Determination No. 1 of 2001, shall remain in force for the purpose of and application to access agreements registered with the Commission prior to 1 July 2005.

Made: 12 June 2005

DATO' V DANAPALAN

Chairman

Malaysian Communications and Multimedia Commission