

## CHAPTER 9 : TELECOMMUNICATIONS

### ARTICLE 9.1 : SCOPE AND COVERAGE

1. This Chapter applies to measures affecting trade in telecommunications services.
2. This Chapter does not apply to any measure adopted or maintained by a Party relating to cable or broadcast distribution of radio or television programming.<sup>9-1</sup>
3. Nothing in this Chapter shall be construed to:
  - (a) require a Party (or require a Party to compel any enterprise) to establish, construct, acquire, lease, operate, or provide telecommunications transport networks or telecommunications services where such networks or services are not offered to the public generally; or
  - (b) require a Party to compel any enterprise engaged in the cable or broadcast distribution of radio or television programming to make available its cable or broadcast facilities as a public telecommunications transport network, unless a Party specifically designates such facilities as such.

### ARTICLE 9.2 : ACCESS TO AND USE OF PUBLIC TELECOMMUNICATIONS TRANSPORT NETWORKS AND SERVICES<sup>9-2</sup>

1. Each Party shall ensure that enterprises of the other Party have access to and use of any public telecommunications transport network and service, including leased circuits, offered in its territory or across its borders on reasonable, non-discriminatory (including with respect to timeliness), and transparent terms and conditions, including as set out in paragraphs 2 through 4.
2. Each Party shall ensure that such enterprises are permitted to:
  - (a) purchase or lease, and attach terminal or other equipment that interfaces with the public telecommunications network;
  - (b) provide services to individual or multiple end-users over any leased or owned circuit(s);

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<sup>9-1</sup> For greater certainty, Singapore's obligations under this Chapter shall not apply to measures adopted or maintained relating to broadcasting services as defined in Singapore's Schedule to Annex 8B.

<sup>9-2</sup> This Article does not apply to access to unbundled network elements, including access to leased circuits as an unbundled network element, which is addressed in Article 9.4.3.

- (c) connect leased or owned circuits with public telecommunications transport networks and services in the territory, or across the borders, of that Party, or with circuits leased or owned by another enterprise;
- (d) perform switching, signaling, processing, and conversion functions; and
- (e) use operating protocols of their choice.

3. Each Party shall ensure that enterprises of the other Party may use public telecommunications transport networks and services for the movement of information in its territory or across its borders and for access to information contained in data bases or otherwise stored in machine-readable form in the territory of either Party.

4. Notwithstanding paragraph 3, a Party may take such measures as are necessary to

- (a) ensure the security and confidentiality of messages; or
- (b) protect the privacy of customer proprietary network information;

subject to the requirement that such measures are not applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade in services.

#### ARTICLE 9.3 : INTERCONNECTION WITH SUPPLIERS OF PUBLIC TELECOMMUNICATIONS SERVICES

1. Each Party shall ensure that suppliers of public telecommunications services in its territory provide, directly or indirectly, interconnection with the facilities and equipment of suppliers of public telecommunications services of the other Party.

2. In carrying out paragraph 1, each Party shall ensure that suppliers of public telecommunications services in its territory take reasonable steps to protect the confidentiality of proprietary information of, or relating to, suppliers and end-users of public telecommunications services and only use such information for the purpose of providing public telecommunications services.

*Treatment by Major Suppliers*

1. Each Party shall ensure that any major supplier in its territory accords suppliers of public telecommunications services of the other Party treatment no less favorable than such major supplier accords to itself, its subsidiaries, its affiliates, or any non-affiliated service supplier regarding:

- (a) the availability, provisioning, rates, or quality of like public telecommunications services; and
- (b) the availability of technical interfaces necessary for interconnection.

A Party shall assess such treatment on the basis of whether such suppliers of public telecommunications services, subsidiaries, affiliates, and non-affiliated service suppliers are in like circumstances.

*Competitive Safeguards*

- 2. (a) Each Party shall maintain appropriate measures for the purpose of preventing suppliers of public telecommunications services who, alone or together, are a major supplier in its territory from engaging in or continuing anti-competitive practices.
- (b) For purposes of subparagraph (a), anti-competitive practices include:
  - (i) engaging in anti-competitive cross-subsidization;
  - (ii) using information obtained from competitors with anti-competitive results; and
  - (iii) not making available, on a timely basis, to suppliers of public telecommunications services, technical information about essential facilities and commercially relevant information that is necessary for them to provide public telecommunications services.

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<sup>9-3</sup> For the purpose of the United States' obligations, Article 9.4 does not apply to rural telephone companies, as defined in section 3(37) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, unless a state regulatory authority orders otherwise. Moreover, a state regulatory authority may exempt a rural local exchange carrier, as defined in section 251(f)(2) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, from the obligations contained in Article 9.4.

<sup>9-4</sup> Article 9.4 does not apply to suppliers of commercial mobile services.

*Unbundling of Network Elements*

3. (a) Recognizing that both Parties currently provide for access to unbundled network elements, each Party shall provide its telecommunications regulatory body the authority to require that major suppliers in its territory provide suppliers of public telecommunications services of the other Party access to network elements on an unbundled basis at terms, conditions, and cost-oriented rates, that are reasonable, non-discriminatory (including with respect to timeliness), and transparent for the supply of public telecommunications services.
- (b) Which network elements will be required to be made available in the territory of a Party, and which suppliers may obtain such elements, shall be determined in accordance with national law and regulation.
- (c) In determining the network elements to be made available, a Party's telecommunications regulatory body shall consider, at a minimum, in accordance with national law and regulation:
- (i) whether access to such network elements as are proprietary in nature are necessary; and whether the failure to provide access to such network elements would impair the ability of suppliers of public telecommunications services of the other Party to provide the services it seeks to offer; or
  - (ii) whether the network elements can be replicated or obtained from other sources at reasonable rates, such that the unavailability of these network elements from the major supplier will not impair the ability of other suppliers of public telecommunications services to provide a competing service; or
  - (iii) whether the network elements are technically or operationally required for the provision of a competing service; or
  - (iv) other factors as established in national law;
- as that body construes these factors.

*Co-Location*

4. (a) Each Party shall ensure that major suppliers in its territory provide to suppliers of public telecommunications services of the other Party physical co-location, at premises owned or controlled by the major supplier, of equipment necessary for interconnection or access to unbundled network elements on terms and conditions, and at cost-oriented rates, that are reasonable, non-discriminatory (including with respect to timeliness), and transparent.

- (b) Where physical co-location is not practical for technical reasons or because of space limitations, each Party shall ensure that major suppliers in its territory provide or facilitate virtual co-location on terms and conditions, and at cost-oriented rates, that are reasonable, non-discriminatory (including with respect to timeliness), and transparent.
- (c) Each Party may determine, in accordance with national law and regulation, which premises in its territory shall be subject to subparagraphs (a) and (b)

### *Resale*

- 5. Each Party shall ensure that major suppliers in its territory:
  - (a) offer for resale, at reasonable<sup>9-5</sup> rates, to suppliers of public telecommunications services of the other Party, public telecommunications services that such major supplier provides at retail to end-users; and
  - (b) do not impose unreasonable or discriminatory conditions or limitations on the resale of such public telecommunications services.<sup>9-6</sup>

### *Poles, Ducts, and Conduits*

- 6. (a) Each Party shall ensure that major suppliers in its territory provide access to poles, ducts, and conduits, owned or controlled by such major suppliers to suppliers of public telecommunications services of the other Party, under terms, conditions, and cost-oriented<sup>9-7</sup> rates, that are reasonable, non-discriminatory (including with respect to timeliness), and transparent.
- (b) Nothing shall prevent a Party from determining, under its domestic law and regulation, which particular structures owned or controlled by the major suppliers in its territory, are required to be made available in accordance with paragraph (a) provided that this is based on a determination that such structures cannot feasibly

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<sup>9-5</sup> In the United States, a wholesale rate set pursuant to domestic law and regulation shall be considered to be reasonable for purposes of subparagraph (a). In Singapore, wholesale rates are not required by the telecommunications regulatory body and therefore are not factored into a determination of what is considered to be reasonable for the purposes of subparagraph (a).

<sup>9-6</sup> In the United States, a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers may be prohibited from offering such service to a different category of subscribers. In Singapore, where national law and regulation provides for this, resellers that obtain public telecommunications services available at retail only to a category of subscribers at particular rates may be prohibited from offering such service to a different category of subscribers at that particular rate.

<sup>9-7</sup> In the United States, this obligation may not apply to those states that regulate such rates as a matter of state law.

be economically or technically substituted in order to provide a competing service.

### *Number Portability*

7. Each Party shall ensure that major suppliers in its territory provide number portability to the extent technically feasible, on a timely basis and on reasonable terms and conditions.

### *Interconnection*

8. (a) General Terms and Conditions

Each Party shall ensure that any major supplier in its territory provides interconnection for the facilities and equipment of suppliers of public telecommunications services of the other Party:

- (i) at any technically feasible point in the major supplier's network;
- (ii) under non-discriminatory terms, conditions (including technical standards and specifications), and rates;
- (iii) of a quality no less favorable than that provided by such major supplier for its own like services or for like services of non-affiliated suppliers of public telecommunications services or for its subsidiaries or other affiliates;
- (iv) in a timely fashion, on terms, conditions, (including technical standards and specifications), and cost-oriented rates, that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the supplier need not pay for network components or facilities that it does not require for the service to be provided; and
- (v) upon request, at points in addition to the network termination points offered to the majority of suppliers of public telecommunications services, subject to charges that reflect the cost of construction of necessary additional facilities.<sup>9-8</sup>

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<sup>9-8</sup> These costs may include the cost of physical or virtual co-location referenced in Article 9.4.4.

(b) Options for Interconnecting with Major Suppliers

Each Party shall ensure that suppliers of public telecommunications services of the other Party may interconnect their facilities and equipment with those of major suppliers in its territory pursuant to at least one of the following options:

- (i) a reference interconnection offer or another standard interconnection offer containing the rates, terms, and conditions that the major supplier offers generally to suppliers of public telecommunications services; or
- (ii) the terms and conditions of an existing interconnection agreement or through negotiation of a new interconnection agreement.

(c) Public Availability of Interconnection Offers

Each Party shall require each major supplier in its territory to make publicly available either a reference interconnection offer or another standard interconnection offer containing the rates, terms, and conditions that the major supplier offers generally to suppliers of public telecommunications services.

(d) Public Availability of the Procedures for Interconnection Negotiations

Each Party shall make publicly available the applicable procedures for interconnection negotiations with major suppliers in its territory.

(e) Public Availability of Interconnection Agreements Concluded with Major Suppliers

- (i) Each Party shall require major suppliers in its territory to file all interconnection agreements to which they are party with its telecommunications regulatory body.
- (ii) Each Party shall make available for inspection to suppliers of public telecommunications services which are seeking interconnection, interconnection agreements in force between a major supplier in its territory and any other supplier of public telecommunications services in such territory, including interconnection agreements concluded between a major supplier and its affiliates and subsidiaries.

(f) Resolution of Interconnection Disputes

Each Party shall ensure that suppliers of public telecommunications services of the other Party, that have requested interconnection with a major supplier in the Party's territory have recourse to a telecommunications regulatory body to resolve disputes regarding the terms, conditions, and rates for interconnection within a reasonable and publicly available period of time.

*Provisioning and Pricing of Leased Circuits Services*<sup>9-9</sup>

9. (a) Each Party shall ensure that major suppliers of leased circuits services in its territory provide enterprises of the other Party leased circuits services that are public telecommunications services, on terms and conditions under pricing structures, and at rates that are reasonable, non-discriminatory (including with respect to timeliness), and transparent.
- (b) Each Party may determine whether rates for leased circuits services in its territory are reasonable by taking into account the rates of like leased circuits services in comparable markets in other countries.

## ARTICLE 9.5 : SUBMARINE CABLE LANDING STATIONS

1. Where under national law and regulation, a Party has authorized a supplier of public telecommunications services in its territory to operate a submarine cable system (including the landing facilities and services) as a public telecommunications service, that Party shall ensure that such supplier provides that public telecommunications service<sup>9-10</sup> to suppliers of public telecommunications services of the other Party on reasonable terms, conditions, and rates that are no less favorable than such supplier offers to any other supplier of public telecommunications services in like circumstances.

2. Where submarine cable landing facilities and services cannot be economically or technically substituted, and a major supplier of public international telecommunication services that controls such cable landing facilities and services has the ability to materially affect the price and supply for those facilities and services for the provision of public telecommunications services in a Party's territory, the Party shall ensure that such major supplier:

- (a) permits suppliers of public telecommunications services of the other Party to:
  - (i) use the major supplier's cross-connect links in the submarine cable landing station to connect their equipment to backhaul links and submarine cable capacity of any supplier of telecommunications; and
  - (ii) co-locate their transmission and routing equipment used for accessing submarine cable capacity and backhaul links at the submarine cable landing station at terms, conditions, and cost-oriented rates, that are reasonable and non-discriminatory; and

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<sup>9-9</sup> The obligation under this article is not an obligation to provide leased circuits as an unbundled network element, which is addressed in Article 9.4.3.

<sup>9-10</sup> This shall include any submarine cable landing facilities included as part of that authorization.



- (b) provides suppliers of telecommunications of the other Party submarine cable capacity, backhaul links, and cross-connect links in the submarine cable landing station at terms, conditions, and rates that are reasonable and non-discriminatory.

#### ARTICLE 9.6 : INDEPENDENT REGULATION AND PRIVATIZATION

1. Each Party shall ensure that its telecommunications regulatory body is separate from, and not accountable to, any supplier of public telecommunications services. To this end, each Party shall ensure that its telecommunications regulatory body does not hold any financial interest or maintain an operating role in such a supplier.
2. Each Party shall ensure that the decisions of, and procedures used by its telecommunications regulatory body are impartial with respect to all interested persons. To this end, each Party shall ensure that any financial interest that it holds in a supplier of public telecommunications services does not influence the decisions of and procedures of its telecommunications regulatory body.
3. Where a Party has an ownership interest in a supplier of public telecommunications services, it shall notify the other Party of any intention to eliminate such interest as soon as feasible.

#### ARTICLE 9.7 : UNIVERSAL SERVICE

Each Party shall administer any universal service obligation that it maintains in a transparent, non-discriminatory, and competitively neutral manner and shall ensure that its universal service obligation is not more burdensome than necessary for the kind of universal service that it has defined.

#### ARTICLE 9.8 : LICENSING PROCESS

1. When a Party requires a supplier of public telecommunications services to have a license, the Party shall make publicly available:
  - (a) all the licensing criteria and procedures it applies;
  - (b) the period of time normally required to reach a decision concerning an application for a license; and
  - (c) the terms and conditions of all licenses it has issued.
2. Each Party shall ensure that an applicant receives, upon request, the reasons for the denial of a license.

ARTICLE 9.9 : ALLOCATION AND USE OF SCARCE RESOURCES<sup>9-11</sup>

1. Each Party shall administer its procedures for the allocation and use of scarce resources, including frequencies, numbers, and rights of way, in an objective, timely, transparent, and non-discriminatory fashion.
2. Each Party shall make publicly available the current state of allocated frequency bands but shall not be required to provide detailed identification of frequencies assigned or allocated by each government for specific government uses.

## ARTICLE 9.10 : ENFORCEMENT

Each Party shall ensure that its telecommunications regulatory body maintains appropriate procedures and authority to enforce domestic measures relating to the obligations under Articles 9.2 through 9.5. Such procedures and authority shall include the ability to impose effective sanctions, which may include financial penalties, injunctive relief (on an interim or final basis), or modification, suspension, and revocation of licenses.

## ARTICLE 9.11 : RESOLUTION OF DOMESTIC TELECOMMUNICATIONS DISPUTES

Further to Articles 19.5 (Administrative Proceedings) and 19.6 (Review and Appeal), each Party shall ensure the following:

*Recourse to Telecommunications Regulatory Bodies*

1. Each Party shall ensure that enterprises of the other Party have recourse (within a reasonable period of time) to a telecommunications regulatory body or other relevant body to resolve disputes arising under domestic measures addressing a matter set out in Articles 9.2 through 9.5.

*Reconsideration*

2. Each Party shall ensure that any enterprise aggrieved or whose interests are adversely affected by a determination or decision of the telecommunications regulatory body may petition that body for reconsideration of that determination or decision. Neither Party may permit such a petition to constitute grounds for non-compliance with such determination or decision of the

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<sup>9-11</sup> The Parties understand that decisions on allocating and assigning spectrum, and frequency management are not measures that are *per se* inconsistent with Article 8.5 (Market Access) and Article 15.8 (Performance Requirements). Accordingly, each Party retains the right to exercise its spectrum and frequency management policies, which may affect the number of suppliers of public telecommunications services, provided that this is done in a manner that is consistent with the provisions of this Agreement. The Parties also retain the right to allocate frequency bands taking into account existing and future needs.

telecommunications regulatory body unless an appropriate authority stays such determination or decision.

### *Judicial Review*

3. Each Party shall ensure that any enterprise aggrieved by a determination or decision of the telecommunications regulatory body may obtain judicial review of such determination or decision by an impartial and independent judicial authority.

### ARTICLE 9.12 : TRANSPARENCY

Further to Chapter 19 (Transparency), each Party shall ensure that:

1. rulemakings, including the basis for such rulemakings, of its telecommunications regulatory body and end-user tariffs filed with its telecommunications regulatory body are promptly published or otherwise made available to all interested persons;
2. interested persons are provided with adequate advance public notice of and the opportunity to comment on any rulemaking proposed by the telecommunications regulatory body;
3. its measures relating to public telecommunications services are made publicly available, including:
  - (a) tariffs and other terms and conditions of service;
  - (b) specifications of technical interfaces;
  - (c) conditions applying to attachment of terminal or other equipment to the public telecommunications transport network; and
  - (d) notification, permit, registration, or licensing requirements, if any; and
4. information on bodies responsible for preparing, amending, and adopting standards-related measures is made publicly available.

### ARTICLE 9.13 : FLEXIBILITY IN THE CHOICE OF TECHNOLOGIES

A Party shall endeavor not to prevent suppliers of public telecommunications services from having the flexibility to choose the technologies that they use to supply their services, including commercial mobile services, subject to the ability of each Party to take measures to ensure that end-users of different networks are able to communicate with each other.

### ARTICLE 9.14 : FORBEARANCE AND MINIMAL REGULATORY ENVIRONMENT

The Parties recognize the importance of relying on market forces to achieve wide choice and efficient supply of telecommunications services. To this end, each Party may forbear from applying regulation to a telecommunications service that such Party classifies, under its laws and

regulations, as a public telecommunications service upon a determination by its telecommunications regulatory body that:

- (a) enforcement of such regulation is not necessary to prevent unreasonable or discriminatory practices;
- (b) enforcement of such regulation is not necessary for the protection of consumers; and
- (c) forbearance is consistent with the public interest, including promoting and enhancing competition among suppliers of public telecommunications services.

#### ARTICLE 9.15 : RELATIONSHIP TO OTHER CHAPTERS

In the event of any inconsistency between this Chapter and another Chapter, this Chapter shall prevail to the extent of such inconsistency.

#### ARTICLE 9.16 : DEFINITIONS

For purposes of this Chapter:

1. **backhaul links** means end-to-end transmission links from a submarine cable landing station to another primary point of access to the Party's public telecommunications transport network;
2. **physical co-location** means physical access to and control over space in order to install, maintain, or repair equipment used to provide public telecommunications services;
3. **cost-oriented** means based on cost, and may include a reasonable profit, and may involve different cost methodologies for different facilities or services;
4. **commercial mobile services** means public telecommunications services supplied through mobile wireless means;
5. **cross-connect links** means the links in a submarine cable landing station used to connect submarine cable capacity to the transmission, switching and routing equipment of different suppliers of public telecommunications services co-located in that submarine cable landing station;
6. **customer proprietary network information** means information made available to the supplier of public telecommunications services by the end-user solely by virtue of the end-user-telecommunications service supplier relationship. This includes information regarding the end-user's calling patterns (including the quantity, technical configuration, type, destination, location, and amount of use of the service) and other information that appears on or may pertain to an end-user's telephone bill;
7. **end-user** means a final consumer of or subscriber to a public telecommunications service, including a service supplier but excluding a supplier of public telecommunications services;

8. **enterprise** means an entity constituted or organized under applicable law, whether or not for profit, and whether privately or government owned or controlled. Forms that an enterprise may take include a corporation, trust, partnership, sole proprietorship, branch, joint venture, association, or similar organization;
9. **essential facilities** means facilities of a public telecommunications transport network or service that:
- (a) are exclusively or predominantly provided by a single or limited number of suppliers; and
  - (b) cannot feasibly be economically or technically substituted in order to provide a service;
10. **interconnection** means linking with suppliers providing public telecommunications transport networks or services in order to allow the users of one supplier to communicate with users of another supplier and to access services provided by another supplier;
11. **leased circuits** means telecommunications facilities between two or more designated points which are set aside for the dedicated use of or availability to a particular customer or other users of the customer's choosing;
12. **major supplier** means a supplier of public telecommunications services that has the ability to materially affect the terms of participation (having regard to price and supply) in the relevant market for public telecommunications services as a result of:
- (a) control over essential facilities; or
  - (b) use of its position in the market;
13. **network element** means a facility or equipment used in the provision of a public telecommunications service, including features, functions, and capabilities that are provided by means of such facility or equipment;
14. **non-discriminatory** means treatment no less favorable than that accorded to any other user of like public telecommunications transport networks or services in like circumstances;
15. **number portability** means the ability of end-users of public telecommunications services to retain, at the same location, existing telephone numbers without impairment of quality, reliability, or convenience when switching between like suppliers of public telecommunications services;
16. **person** means either a natural person or an enterprise;
17. **public telecommunications transport network** means telecommunications infrastructure which a Party requires to provide public telecommunications services between defined network termination points;

18. **public telecommunications service** means any telecommunications service (which a Party may define to include certain facilities used to deliver these telecommunications services) that a Party requires, explicitly or in effect, to be offered to the public generally. Such services may include inter alia, telephone and data transmission typically involving customer-supplied information between two or more points without any end-to-end change in the form or content of the customer's information;<sup>9-12</sup>
19. **reference interconnection offer** means an interconnection offer extended by a major supplier and filed with or approved by a telecommunications regulatory body that is sufficiently detailed to enable a supplier of public telecommunications services that is willing to accept its rates, terms, and conditions to obtain interconnection without having to engage in negotiations with the major supplier concerned;
20. **service supplier** means any person that supplies a service;
21. **submarine cable landing station** means the premises and buildings where international submarine cables arrive and terminate and are connected to backhaul links;
22. **supplier of public telecommunications services** means any provider of public telecommunications services, including those who provide such services to other suppliers of public telecommunications services;<sup>9-13</sup>
23. **telecommunications** means the transmission and reception of signals by any electromagnetic means;<sup>9-14</sup>
24. **telecommunications regulatory body** means a national body responsible for the regulation of telecommunications; and

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<sup>9-12</sup> Because the United States does not classify services described in 47 U.S.C. § 153(20) as public telecommunications services, these services are not considered public telecommunications services for the purposes of this Agreement. This does not prejudice either Party's positions in the WTO on the scope and definition of these services.

<sup>9-13</sup> (a) For purposes of Singapore's obligations in Articles 9.3, 9.4.1, 9.4.5, 9.4.8, and 9.13, the phrase **supplier of public telecommunications services** means a facilities-based licensee or services-based licensee that uses switching or routing equipment, in accordance with the Singapore Code of Practice for Competition in the Provision of Telecommunications Services, 2000.

(b) For purposes of Singapore's obligations in Articles 9.4.3, 9.4.4, 9.4.6 and 9.5, the phrase **supplier of public telecommunications services** means a facilities-based licensee in accordance with the Singapore Code of Practice for Competition in the Provision of Telecommunications Services, 2000.

<sup>9-14</sup> Including by photonic means.

25. **user** means an end-user or a supplier of public telecommunications services.