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ETHIOPIAN
COMMUNICATIONS AUTHORITY

**TELECOMMUNICATIONS
INFRASTRUCTURE SHARING AND
COLLOCATION DIRECTIVE
No. 793/2021**

**JULY 2021
ADDIS ABABA**

TELECOMMUNICATIONS INFRASTRUCTURE SHARING AND COLLOCATION DIRECTIVE

WHEREAS it is essential to maximize the use of network infrastructure including, but not limited to, network capacity and capabilities, base station sites, backbone, towers and reduce duplication of investment for network facilities and cost for network deployment;

UNDERSTANDING the requirement to formulate a legal framework that governs Access Service Agreements between Telecommunications Operators and service providers;

RECOGNIZING the importance of protecting the environment by reducing the proliferation of towers and facility installations so that the aesthetic of the country's landscape is not adversely affected or impacted;

CONVINCED of the need to enhance competition amongst Telecommunications Operators in a cooperative environment;

NOW, THEREFORE, the Authority hereby issues this Telecommunication Infrastructure Sharing and Collocation Directive in accordance with Ethiopian Communication Service Proclamation No.1148/2019, Articles 6(2), 44(5), 44(10) and 54(2).

PART ONE GENERAL

1. Short Title

This Directive shall be referred to as the “Telecommunications Infrastructure Sharing and Collocation Directive No. 793/2021.”

2. Definitions

In this Directive, unless the context otherwise requires:

- 1) “**Access Agreement**” means an agreement made between a Telecommunications Operator or Infrastructure Provider for the provision of infrastructure sharing and/or collocation space.
- 2) “**Access Provider**” means a Telecommunications Operator or Telecommunications Service provider or Infrastructure Provider that provides infrastructure sharing and/or collocation space services to a Telecommunications Operator or Telecommunications Service provider.
- 3) “**Access Seeker**” means a Telecommunications Operator or Telecommunications Service provider seeking to acquire, or acquiring, Access Services from an Access Provider.
- 4) “**Access Services**” means services provided by one Telecommunications Operator or Telecommunications Service provider or Infrastructure Provider to another, for infrastructure sharing and/or collocation purposes.
- 5) “**Active Infrastructure**” means the elements or components on the active layer of a Telecommunications Network, including, but not limited to, antennas, switches, servers, databases, radio access nodes, transmission equipment, and national roaming.
- 6) “**Authority**” means the Ethiopian Communications Authority established under the Communications Service Proclamation No. 1148/2019.

- 7) “**Collocation**” means the placement of network equipment or systems that are used for service provision by a Telecommunications Operator together with network equipment or systems installed at premises of other Telecommunications Operator at a technically feasible location on the basis of agreement reached between them.
- 8) “**Infrastructure Provider**” means a passive infrastructure provider seeking to own, build, operate, manage or otherwise maintain telecommunications passive infrastructure with the objective of sharing infrastructure services with Telecommunication Operators and service providers.
- 9) “**Infrastructure Sharing**” means various kinds of arrangements to share an Access Provider’s active and passive infrastructure, including, but not limited to, the sharing of network elements, systems, equipment, facilities, premises or rights of way, with an Access Seeker, subject to an agreement between the parties.
- 10) “**Interconnection Services**” means services provided by one Telecommunications Operator to another, for the purpose of achieving interconnection of their Telecommunications Networks.
- 11) “**Passive Infrastructure**” means infrastructure that is not part of the active layer of a Telecommunications Network, including but not limited to, sites, buildings, shelters, towers, masts, poles, ducts, trenches, electric power supply, and air conditioning.
- 12) “**Reference Infrastructure Sharing Offer (RISO)**” means a standard form Access Agreement that describes the relevant services offered broken down into components, and the associated terms and conditions, including charges.
- 13) “**Retail Telecommunications Service**” means a Telecommunications Service that is provided directly to the public but not to another Telecommunications Operator.
- 14) “**Working Days**” means business working days only and shall not include Saturday, Sunday and any day that has been declared to be a public holiday by the Federal Democratic Republic of Ethiopia.

3. Objectives

The main objectives of this Directive are to:

- 1) Provide a framework to govern Access Agreements;
- 2) Provide clarity on the rules and procedures the Authority shall follow to regulate infrastructure sharing and collocation, in accordance with Article 44 of the Proclamation;
- 3) Minimize the cost of network deployment;
- 4) Protect the environment by reducing the proliferation of towers and facilities installation thereby not changing the aesthetics of the country’s landscape;
- 5) Enhance competition amongst Telecommunications Operators in a cooperative environment;
- 6) Maximize use of network infrastructure including, but not limited to, network capacity and capabilities, base station sites, backbone, towers and reduce duplication of investment for network facilities;
- 7) Ensure that the economic advantages derivable from the sharing of infrastructure are harnessed for the overall benefit of all stakeholders in the telecommunications sector;

- 8) Encourage Telecommunications Operators to pursue a cost-oriented policy with the added effect of a reduction in the tariffs chargeable to consumers; and,
- 9) Enable the Authority to coordinate and cooperate with other government institutions involved in infrastructure deployment and/or installation.

4. Scope of Application

This Directive shall apply to all Telecommunications Operators Telecommunications Service providers and Infrastructure Providers in the Federal Democratic Republic of Ethiopia.

PART TWO ROLE OF THE AUTHORITY

5. Role of the Authority

- 1) The Authority shall:
 - a) Endeavor to facilitate and encourage the provision of Access Services amongst Telecommunications Operators and other relevant parties in the telecommunications sector;
 - b) Regulate the provision of Access Services;
 - c) Provide a high degree of certainty on the rules governing the provision of Access Services between Telecommunications Operators and other relevant Parties in Telecommunications sector;
 - d) Intervene to determine the terms of the agreement in accordance with Articles 44 (4) and 44 (9) of the Proclamation when parties are unable to reach an agreement for Access Services; and,
 - e) At all times, reserve the right to examine incidence of infrastructure sharing and collocation to ensure consistency with the relevant license(s) and reduce the risk of a lessening of competition.
- 2) The Authority may:
 - a) Intervene at its own discretion, or if requested by a party to an Access Agreement, to determine whether the infrastructure sharing and collocation charges and compensation are cost-based;
 - b) Intervene at its own discretion, or at the request of a party to an agreement, to resolve an Access Agreement dispute in accordance with the mechanism provided in Article 22 of this Directive and the Authority's Dispute Resolution Directive;
 - c) Coordinate with other government bodies to facilitate the planning, construction, and sharing, of infrastructure for the provision of Telecommunications Services; and,
 - d) From time to time, determine the type of infrastructures that can be shared following a market-driven approach and consultation with all stakeholders impacted by any amendments.

**PART THREE
GENERAL PRINCIPLES**

6. General Infrastructure Sharing and Collocation Principles

All agreements for Access Services shall be consistent with the following principles:

- 1) Transparency:
 - a) The Authority's processes in reaching decisions related to infrastructure sharing and collocation service matters shall be open and transparent.
 - b) All Access Providers shall publish a Reference Infrastructure Sharing Offer ("RISO") approved by the Authority and make it available to an Access Seeker free of charge.
 - c) The Authority shall publish an approved RISO on its website.
- 2) Non-discrimination:

The non-discrimination principle requires that the terms and conditions for the provision of Access Services, shall be comparable to how an Access Provider supplies those same Access Services to itself, or to any other operator based on similar commercial parameters.
- 3) Cost Orientation:

Charges for Access Services shall be justifiable and reasonable and shall be cost-based.

**PART FOUR
COLLOCATION AND INFRASTRUCTURE SHARING PROCEDURES**

7. Rights and Obligations

- 1) All Access Seekers have the right to request Access Services from any Access Provider and the parties shall negotiate the terms of an agreement for such services in good faith.
- 2) An Access Provider that the Authority has determined to have a Significant Market Power (SMP) in a relevant market for Access Services and who receives a request for Collocation, from an Access Seeker, shall accommodate such request to the extent that it is technically feasible, and shall negotiate in good faith, reasonable terms and conditions for such services.
- 3) For all requests other than Collocation as described in Sub-Article (2) of this Article, An Access Provider has the right to decline to provide the requested Access Services on the following reasonable grounds of:
 - a) Insufficient capacity or space;
 - b) Illegality;
 - c) Safety, reliability, and incompatibility of facilities;
 - d) Integrity and security of the telecommunications network or services; or,
 - e) Not economically or technically feasible.

8. Good Faith Negotiations

- 1) Agreements for Access Services shall be negotiated in good faith between the operators involved, and where disagreements arise, the parties shall use reasonable endeavors to resolve all disputes relating to Access Services.
- 2) Negotiations in good faith implies that neither negotiating party shall:
 - a) Intentionally mislead the other party;
 - b) Refuse to provide information relevant to an agreement, including information necessary to identify facility needed and cost data;
 - c) Force or coerce the other party into making an agreement that it would not otherwise have made; or,
 - d) Intentionally obstruct or delay negotiations;
- 3) The following actions shall be regarded as a breach of the principle of negotiating in good faith:
 - a) Failing to provide all relevant information to the other operator, relevant to the Services sought;
 - b) Demanding charges or fees that are not cost oriented;
 - c) Proposing unreasonable terms and conditions;
 - d) Demanding to sign non-disclosure agreements that are coercive or unnecessarily broad or restrictive;
 - e) Refusing to allow the insertion of clauses in an agreement that permits future amendments;
 - f) Attempting to tie terms and conditions contained in the agreement to the resolution of other unrelated issues;
 - g) Taking actions that are intended to delay negotiations, including, but not limited to, consistent refusal to designate a representative with the authority to make binding commitments; and,
 - h) Taking any other actions that may be deemed breaches of the principle of negotiating in good faith as determined by the Authority, from time to time.

9. Requesting Access Services

- 1) When a Telecommunications Operator makes a request for Access services to another operator, the Access Seeker shall make such request as follows:
 - a) In writing to the Access Provider;
 - b) Include sufficient information in relation to the kind of Access Service requested, including, but not limited to, the suggested date for commencement of negotiations, the date for which the Access Services are required, and technical specifications; and,
 - c) Inform the Authority in writing about the request within five (5) Working Days of its Application to the Access Provider.
- 2) Within ten (10) working days of receiving such request, the Access Provider shall inform the Access Seeker in writing, if it is able to:

- a) Commence negotiations related to the request for Access Services on the proposed date;
 - b) Supply the form of Access Services requested; and,
 - c) Provide the Access Services within the time frame requested by the Access Seeker.
- 3) Where the Access Provider has informed the Access Seeker that it is able to provide the requested Access Services, it shall:
 - a) Provide a copy of an approved RISO;
 - b) Allow the Access Seeker to conduct a site survey; and,
 - c) Initiate negotiations not later than ten (10) working days after receipt of the Access Services request.
 - 4) The Access Provider and Access Seeker shall negotiate in good faith and use their best efforts to complete negotiations and execute an Access Agreement not later than fifteen (15) working days after initiating negotiations, or within a reasonable timeframe agreed by both parties.
 - 5) The Access Provider and Access Seeker shall ensure that the conditioning of facilities and premises required to put into effect the Access Agreement are completed no later than thirty (30) working days after the execution of the Access Agreement, or within a reasonable timeframe agreed by both parties.
 - 6) A request for Access Services shall be refused only on grounds set out in Article 7(3) of this Directive and shall be justified in writing by the Access Provider, no later than ten (10) working days after receiving a request for Access Services.
 - 7) A copy of a refusal of a request for Access Services, shall be filed with the Authority by the Access Provider, not later than five (5) working days after the refusal has been submitted to the Access Seeker.
 - 8) Pursuant to Articles 44(4) and 44(9) of the Proclamation, where the Authority has determined that the Access Provider holds SMP in a relevant market for a requested Access Services, and the parties fail to reach an agreement within a reasonable timeframe, either party may appeal to the Authority, or the Authority may intervene on its own instance, to make a binding ruling pursuant to Articles 34 and 36-38 of the Proclamation, or in accordance with the Authority's Dispute Resolution Directive.

PART FIVE
ACCESS AGREEMENTS

10. Access Agreements

- 1) All Access Agreements shall be made in writing and shall:
 - a) Be in accordance with the principles set out in Article 6 of this Directive;
 - b) Comply with the terms and conditions of the licenses of both parties;
 - c) Conform to generally accepted industry standards and standards adopted by the Authority; and,

- d) Be consistent with the Proclamation, this Directive, or any applicable Directive adopted by the Authority.
- 2) An Access Agreement shall not directly or indirectly, prohibit, or frustrate the provision of a Telecommunications Service that the Access Provider and Access Seeker is lawfully able to provide.

11. Filing of Access Agreements

- 1) An Access Provider shall file an electronic copy of its Access Agreement with the Authority, not later than ten (10) working days from the date of the execution of such agreement.
- 2) The Authority at its own discretion, may request from either party, additional information which it deems necessary to evaluate the terms and conditions in a filed Access Agreement.

12. Amendment of Access Agreements

- 1) The parties to a filed Access Agreement may amend or modify such agreement by mutual accord. The modified agreement shall be filed with the Authority not later than five (5) working days from the date of the execution of such modification.
- 2) If parties to an Access Agreement filed with the Authority in accordance with Sub-Article (1) of this Article fail to agree on the terms and conditions for amending such agreement, the Authority may intervene at the request of either party, or at its own discretion, to set such terms in accordance with the Authority's Dispute Resolution Directive.

13. Termination of an Access Agreements

- 1) The termination of an Access Agreement shall be strictly in accordance with the terms in such agreement.
- 2) If a party to an Access Agreement, filed with the Authority, intends to terminate such agreement, it shall give not less than a sixty (60) working days written notice to the other party, specifying the grounds for termination.
- 3) Where there is an alleged breach, the operator providing the notice shall give the other party not less than thirty (30) working days to remedy the alleged breach, and if the party in breach fails to remedy such breach within that period, the operator may then terminate the agreement providing a termination notice period of an additional thirty (30) working days, or seek the Authority's intervention in accordance with the Authority's Dispute Resolution Directive.
- 4) An Access Seeker which is a party to an Access Agreement that has been sent a notice of intention to terminate, may seek the Authority's intervention and in such instance, the Authority may intervene in accordance with the Authority's Dispute Resolution Directive.
- 5) If an Access Provider terminates an Access Agreement, it shall notify the Authority in writing not later than five (5) working days after the termination of such agreement, and provide a copy of the notice of termination.

14. Reference Infrastructure Sharing Offer (RISO)

- 1) A RISO shall adhere to, and incorporate the general principles for Access Agreements, in accordance to Article 6 of this Directive, and the provisions set forth in this Directive.
- 2) All Telecommunications Operators which the Authority has determined to have SMP in one or more markets for Access Services shall file a RISO with the Authority for approval. A RISO shall be filed not later than thirty (30) working days after being directed to do so by the Authority.
- 3) The Authority shall have not more than twenty (20) working days to review a proposed RISO and decide whether it shall approve it for publication, or intervene to change the terms and conditions of a proposed RISO. If the Authority does not reject the request for approval, or intervene to change the proposed RISO within the twenty (20) working days period, a proposed RISO shall be deemed approved.
- 4) An approved RISO remains in effect until a modified RISO is approved, unless otherwise determined by the Authority. An approved RISO shall be published on the Authority's website.
- 5) An Access Provider with an approved RISO shall file an amended RISO with the Authority for approval.
- 6) The Authority shall, within ten (10) working days, review a modified RISO and decide whether it shall approve it for publication. If the Authority does not reject the request for approval, or does not intervene to order changes to a filed modified RISO within the ten (10) working day period, a modified RISO shall be deemed approved.
- 7) The Authority may intervene to order modifications to the terms and conditions of a filed or approved RISO, at its own discretion, or following a request from a Telecommunications Operator, if:
 - a) A RISO or any provision thereof, is inconsistent with provisions in the Proclamation, this Directive, or any applicable Directive adopted by the Authority, or,
 - b) The Authority considers that it is in the public interest for it to intervene.
- 8) If the Authority decides to intervene to order changes to a filed, or approved RISO, it shall determine the appropriate modifications in a transparent manner, in accordance with Articles 36 and 37 of the Proclamation, and adhere to the following procedure:
 - a) Issue a Public Notice, informing interested parties that it is initiating a regulatory proceeding to order amendments to a RISO. The Notice shall be accompanied by a clear statement indicating which provision in the RISO, and why, is either:
 - i). Inconsistent with provisions in the Proclamation;
 - ii). Inconsistent with provisions in this Directive;
 - iii). Inconsistent with provisions in any applicable Directive adopted by the Authority; or,
 - iv). Not in the public interest.

- b) The Public Notice shall include the proposed modification and provide a justification for such modification.
 - c) The Authority shall give interested parties not less than fifteen (15) working days to respond and comment on the proposed changes.
 - d) After receiving comments from interested parties, the Authority shall have not more than fifteen (15) working days to respond to the comments received, and either:
 - i). Provide a response addressing each comment and issue a final determination; or,
 - ii). Provide a response addressing each comment, modify the proposed changes if needed, and allow interested parties to submit comments again using the same time frame as in the first round, before issuing a final determination.
 - e) The Authority may, at its own discretion, allow more than two rounds of revisions and comments from interested parties before issuing a final determination.
 - f) During the regulatory proceeding, the Authority shall publish its responses to comments received and its final decision on its website.
 - g) To the extent that information provided by interested parties to the Authority during the course of this proceeding is confidential, the Authority shall use its reasonable efforts to protect the confidentiality of such information.
- 9) A RISO shall include detailed terms and conditions of the Access Services provided, the technical standards, as well as standards for safety and security to be implemented by the provider of Access Services.
- 10) A RISO shall include provisions on how to modify the terms and conditions of service.
- 11) A RISO shall include at least the following sections:
- a) Framework agreement;
 - b) Description of Access Services offered and related terms and conditions;
 - c) Detailed terms and conditions for access to facilities or physical infrastructure belonging or controlled by the Access Provider, including the standards for safety and security implemented by the Access Provider;
 - d) Operational procedures including service provisioning, planning, and maintenance procedures;
 - e) Commercial aspects including charges, payments, billing procedures, and terms and conditions, including, but not limited to, any recharge for ground lease costs and/or strengthening work;
 - f) Service level agreement;
 - g) Provisions for sharing information on size or capacity of facilities, including the amount of space available for collocation or infrastructure sharing, as well as technical specifications for ancillary services or facilities; and,

- h) Provisions for amendment procedures including how Access Seekers will be informed about proposed changes to the terms and condition of the Access Services, and timeframe for such changes.

PART SIX
CHARGES FOR COLLOCATION AND INFRASTRUCTURE SHARING

15. Charges for Access Services

- 1) Access Providers shall not offer more favorable rates or terms to affiliate companies than offered to other Access Seekers.
- 2) Access Providers shall offer Access Services at reasonable rates that are not less favorable than those provided by other Access Providers to itself.
- 3) Charges for Access Services shall:
 - a) Be in accordance with the principles set out in Article 6 of this Directive;
 - b) Be sufficiently unbundled to ensure that an Access Seeker is not required to pay for access to infrastructure not strictly required for the services requested; and,
 - c) Be negotiated and agreed between the parties pursuant to Sub-Articles 44(3) and 44(8) of the Proclamation.
- 4) Charges for Access Services shall itemize and separately account for:
 - a) Fixed, one-off charges for the establishment and implementation of Access Services arrangements;
 - b) Periodic rental charges for on-going use of network infrastructure or facilities; and,
 - c) Variable charges for supplementary services.
- 5) Without prejudice to Sub-Article 3(c) of this Article, the Authority shall have the power to determine the charges for Access Services pursuant to Article 44 of the Proclamation.

16. Accounting Separation

- 1) Where the Authority has determined that an Access Provider has SMP in a relevant market for Access Services, and the Access Provider also provides Retail Telecommunications Services, the Access Provider shall keep separate accounts, as if the Access Services were in fact carried out by a legally independent company, so as to identify all elements of cost and revenue attributable to such services.
- 2) The Authority may, at its own discretion, adopt directives prescribing how the account separation referred to in Sub-Article (1) of this Article shall be implemented.

PART SEVEN
ALLOCATION, RESERVATION OF CAPACITY, AVAILABILITY OF ACCESS

17. Allocation and Reservation of Capacity

- 1) Requests for Access Services shall be considered and granted by an Access Provider on a first-come, first-served basis.

- 2) Notwithstanding, Sub-Article (1) of this Article, the first-come, first-served basis shall not prevent subsequent simultaneous requests from being considered equally in a non-discriminatory manner and all served in a consistent manner.
- 3) A Telecommunications Operator shall take into consideration the demand for infrastructure sharing and collocation when expanding its facilities and when installing or deploying new infrastructure amenable to sharing and co-location.
- 4) Where there is no available capacity at the existing facilities to meet the needs of additional requests, a Telecommunication Operator shall consider re-development as a means of increasing capacity at existing facilities.
- 5) A Telecommunication Operator that installs or plans to install infrastructure amenable to sharing may require potential Access Seekers to express their requirements in writing and, subject to mutual agreement, share the development costs of the new infrastructure that are amenable to sharing.
- 6) The right of a Telecommunication Operator to reserve capacity for which it has made long term investments shall, at all times, be recognized but balanced against the need of not hampering the network roll-out or expansion plans of new market entrants.
- 7) Where a Telecommunication Operator exercises the option to reserve some Access Services rights in circumstances of limited capacity:
 - a) The reserve period shall not exceed two (2) years, after which period the right shall cease to be reserved and be available to Access Seekers;
 - b) Not more than twenty-five percent (25%) of capacity shall be reserved in each available infrastructure.
- 8) Information and documentary evidence of the reservation shall be maintained by a Telecommunications Operator and made available to other operators on demand.

18. Obligation to Safeguard Availability of Access to New Infrastructure

- 1) When planning and constructing new network infrastructure or facilities, all Access Providers shall take into account, to a reasonable extent, the demand for collocation and infrastructure sharing that exists, or that may exist, following the expansion, or construction, of new network infrastructure or facilities. This new infrastructure shall be planned and constructed to facilitate collocation and infrastructure sharing with Access Seekers, in accordance with this Directive.
- 2) An Access Provider that plans to install or construct new passive network infrastructure or facilities, shall share its development plans with other Telecommunications Operators as can reasonably be expected to require access to such passive network infrastructure and facilities in the future.
- 3) No Telecommunications Operator shall install cables, equipment, or other facilities that do not correspond to the current or foreseeable needs for servicing its customers, and which, as a result of undue space utilization, prevent or limit collocation and the sharing of infrastructure with current, or potential Access Seekers.
- 4) Where an Access Provider, plans to alter, expand, or move network infrastructure components, or facilities, that are subject to an Access Agreement, the Access Provider shall give no less than ninety (90) working days written notice to the parties

of such agreement, specifying the proposed changes along with a plan to mitigate disruptions to the Access Services provided to the Access Seekers.

PART EIGHT FORBEARANCE

19. Request for Forbearance

- 1) Notwithstanding any provision in this Directive, an Access Provider may request the Authority forbearance from a specific obligation in this Directive if:
 - a) The Authority has not determined that the Access Provider has SMP in a relevant market for Access Services;
 - b) The Access Provider considers that, although the Authority had determined it has SMP in a relevant market for Access Services, changes in competition in the relevant market had eliminated any market power it may have previously had;
 - c) The Access Provider considers that, although the Authority had determined it has SMP in a relevant market for Access Services, the specific conditions of competition in a certain geographic area, warrants forbearance from those obligations in that geographic area; or,
 - d) The conditions in a particular network infrastructure component or facility, makes compliance with a specific obligation in this Directive, impractical or unfeasible.
- 2) An Access Provider requesting the Authority for forbearance from any obligations shall do so in writing and specifying which provision of this Directive it is requesting forbearance and the reasons for such forbearance.
- 3) The Authority, after receiving a written request for forbearance, shall respond in not less than thirty (30) working days, indicating whether:
 - a) The request is denied, providing a reasonable explanation for such denial;
 - b) It requires more information to evaluate the request; or,
 - c) It has decided to intervene to make a binding ruling in accordance with the procedure established in Articles 34 and 36 through 38 of the Proclamation.
- 4) Notwithstanding Sub-Article (1) of this Article, the Authority shall allow applications for forbearance after five (5) years from the date of issuance of new Telecommunications Operator licenses.
- 5) Where the Authority grants an Access Provider forbearance from a specific obligation in this Directive, such forbearance shall be granted for not longer than one (1) year.

PART NINE COLLOCATION

20. Collocation as an Element of Interconnection

- 1) To the extent that Collocation services are required for interconnection, the terms and conditions for Collocation services shall be included in interconnection agreements, the terms and conditions of which shall be in accordance with this Directive.

- 2) A Telecommunications Operator that the Authority has determined to have SMP in one or more markets for the provision of collocation services shall include in its RISO an offer for the facilities available for collocation, including a price list for the different components of collocation.
- 3) An operator that seeks interconnecting with another operator has the right to request the type of collocation suitable for its operation. Annex A describes various modes of collocation.
- 4) Unless specifically excluded, the terms and conditions of collocation are in general to be governed by the same rules as infrastructure sharing as described in Annex B.

**PART TEN
PUBLICATION**

21. Publication of Infrastructure Information by the Authority

- 1) The Authority shall, from time to time, publish or ensure that there is published, adequate and up-to-date information, on network infrastructure and facilities that belong to, or are controlled by, Access Providers with SMP in relevant markets for Access Services.
- 2) Where the Authority has determined that an Access Provider holds SMP in relevant markets for Access Services, the Access provider shall provide the Authority information about its facilities and infrastructure that are either:
 - a) Currently being shared with Access Seekers; or,
 - b) Potentially available for sharing.
- 3) Such information in Sub-Article (2) of this Article may include, but not be limited to, current space or capacity shared with Access Seekers, and reserved space or capacity potentially available for sharing.
- 4) Following a written request by the Authority, an Access Provider shall provide the information referred to in Sub-Article (2) of this Article within thirty (30) working days of such request.
- 5) The Authority may, at its own instance, publish on its website, the information received from Access Providers about facilities and infrastructure currently shared or potentially available for sharing.
- 6) Notwithstanding any provision in Sub-Articles (1) through (5) of this Article, all Telecommunications Operators shall within thirty (30) Working Days submit to the Authority, upon request, a detailed inventory of all towers and masts, and information on collocation spaces, duct routes, dark fiber routes, unbundled local loops, interconnection point facilities, manhole locations, available capacities, and meet me points owned or controlled by such operator. Such inventory shall include at a minimum, the following information about each tower or mast:
 - a) Location of tower providing GPS coordinates;
 - b) Type of tower structure, including information related to lattice, monopole, guyed, etc.;
 - c) Material of tower;
 - d) Height above ground;

- e) Maximum load;
 - f) Site specification, including information on the area in square feet, and other characteristics;
 - g) Power access, including information related to grids, generators, etc.;
 - h) Current usage such as tower load, number of antennas, square feet occupied by equipment, etc.; and,
 - i) Current spare capacity.
- 7) Prior to commencement of construction of any new tower or mast, a Telecommunications Operator shall furnish the Authority the information set out in Sub-Article (6) of this Article in connection to the proposed new tower or towers, and shall, within thirty (30) working days from the completion of construction, notify the Authority confirming that the information remains accurate.
 - 8) The Authority shall establish and maintain a database with the information received from Telecommunications Operators in accordance with Sub-Articles (6) and (7) of this Article, and shall provide relevant information to any Telecommunications Operator, within fifteen (15) working days following a written request.

**PART ELEVEN
DISPUTE RESOLUTION**

22. Infrastructure Sharing and Collocation Dispute Resolution

- 1) Any dispute between Access Providers and Access Seekers relating to the reasonableness of a request for Access Services, or unreasonableness of charges for Access Services, or where parties fail to reach an agreement or otherwise fail to implement an Access agreement, may be referred to the Authority by either party for resolution.
- 2) A party requesting the Authority to resolve a dispute shall submit a written request to the Authority not later than thirty (30) working days after the parties fail to reach an agreement.
- 3) Following the written request to intervene, the Authority shall respond to the requesting party not later than ten (10) working days after receiving such request, whether it:
 - a) Requires additional information from the parties involved before deciding whether to intervene or not;
 - b) Has decided not to intervene and provide a written response with a justification for not intervening; or,
 - c) Has decided to intervene in accordance with the procedures established in the Authority's Dispute Resolution Directive.

**PART TWELVE
COMPLIANCE AND ENFORCEMENT**

23. Compliance

The Authority shall monitor an Access Provider's and Access Seeker's compliance with the provisions of the Proclamation and this Directive.

24. Enforcement

- 1) Where the Authority, consistent with the provisions of this Directive, the Proclamation, and other instruments that the Authority may issue, determines that an Access Provider or Access Seeker has violated the provisions of this Directive, it shall impose remedies pursuant to Article 52 of the Proclamation that shall include fines or restitution.
- 2) Without prejudice to Sub-Article (1) of this Article, the Authority's remedies and sanctions shall be guided by the Council of Ministers Regulation issued pursuant to Article 52(6) of the Proclamation that determines the types of infractions that would result in license revocation, suspension and other administrative measures and stipulate the penalties and the amount of fines to be paid.

PART THIRTEEN MISCELLANEOUS

25. Amendment

The Authority upon consultation with respective stakeholders, may, at any time it deems it necessary, and consistent with the Proclamation, amend this Directive.

26. Effective Date

This Directive comes into force as of the 9th day of July 2021.

DONE IN ADDIS ABABA, ON THE 9TH DAY OF JULY 2021

**ENGINEER BALCHA REBA
DIRECTOR GENERAL
ETHIOPIAN COMMUNICATIONS AUTHORITY**

ANNEX A

ILLUSTRATION OF CATEGORIES OF ACCESS SERVICES

The following categories of services are offered as an illustration of the kinds of common Access Services this Directive apply to, unless otherwise determined by the Authority. Some of these services may include sharing the right of way of the Access Provider.

COLLOCATION

- 1) **Collocation:** A service where the provider makes available space in its network infrastructure, facilities, or premises, to an Access Seeker. An Access Seeker usually has 24-hour, seven (7) days per week access to the collocation space or room to install, operate, and maintain its own telecommunications transmission equipment. Collocation services may be offered in various modes:
 - a) **Dedicated Collocation:** Where an Access Provider provides a custom-built dedicated, separated, and secured, space for the installation of an Access Seeker's telecommunications equipment.
 - b) **Adjacent Collocation:** Where an Access Provider provides space to an Access Seeker in an enclosed space, but separated structure, within or near, the site boundary of its existing facility.
 - c) **Distant Collocation:** Where an Access Provider provides space to an Access Seeker in an enclosed space, but at a distant location, from the boundaries of its existing facility.
 - d) **Co-mingling:** Where an Access Provider provides Access Seekers with floor space or space within a rack, to place their equipment next to each-other.
 - e) **Virtual Collocation:** Where an Access Provider gives an Access Seeker the ability to connect to an Access Provider's services without physical access to a collocation space. An Access Seeker provides its own transmission equipment or leases it from an Access Provider. The Access Provider handles the installation, operation and maintenance, of the equipment. An Access Seeker does not have physical access to the virtual collocation space or the equipment, but can electronically monitor and control such equipment communications.

PASSIVE INFRASTRUCTURE

- 2) **Passive Infrastructure Services:** Includes various types of services that provide access to infrastructure that is not part of the active layer of a Telecommunications Network. The following examples are provided as an illustration.
 - a) **Access to Ducts:** Refers to access to conduits or pipes, that enclose underground telecommunications cables. These ducts protect the cables, and enable installing or pulling additional cables without further digging. Access to ducts may include access to associated infrastructure, such as, manholes, handholes, or buildings. It may also include access to power and air conditioning services.

- b) **Access to Towers and Masts:** A service where an Access Seeker is allowed to use a tower or mast that belongs, or is controlled by, an Access Provider, for the purpose of installing an Access Seeker's transmission equipment and cables. Such service may also include access to associated infrastructure such as buildings, sites, power, or air conditioning.
- c) **Dark Fiber:** An Access Provider leases a single fiber or a number of fiber pairs, to an Access Seeker. However, the Access Provider does not have its transmission equipment connected to the leased fiber. Such service may also include access to associated infrastructure such as manholes and handholes, buildings, sites, power, or air conditioning.
- d) **Access to Interconnection Points:** This refers to access to facilities, sites, or buildings, where two or more Telecommunications Operators interconnect. Such service may also include access to associated services such as collocation, access to cross connectors, power, and air conditioning

ACTIVE INFRASTRUCTURE

- 3) **Active Infrastructure Services:** Includes various types of services that require access to the elements or components on the active layer of a Telecommunications Network. The following examples are provided as an illustration.
 - a) **Wholesale Leased Capacity Service:** Consist of a point-to-point transmission service with a pre-established transmission capacity with managed network transmission service. Such service may include Long Distance Leased Circuit and IP Transit Services
 - b) **Sharing Radio Access Network (RAN):** Sharing may take various forms; for example, a single RAN may serve two or more core networks belonging to different operators. Other forms may involve sharing all elements of the RAN.
 - c) **Wholesale national roaming service:** Is a service where the Access Seeker's mobile subscribers may be hosted using the network of a second mobile operator (i.e., the "Access Provider"), allowing a subscriber of the Access Seeker to have mobile service in areas outside the Access Seeker's network coverage area.
 - d) **Backhaul Transmission Sharing:** A service where the infrastructure sharing provider and the infrastructure sharing seeker share a common link to connect with their radio and core network nodes.

ANNEX B

TYPES OF INFRASTRUCTURE AMENABLE FOR SHARING

1) Passive Infrastructure

- a) Rights-of-way
- b) Antenna mast and tower structures
- c) Dark fiber
- d) Poles
- e) Ducts
- f) Trenches
- g) Space in buildings
- h) Shelters
- i) Air conditioning
- j) Sub-Loop (Wire or Cable)
- k) Local Loop (Wire or Cable)
- l) Electric power (public or private source)
- m) Grounding/Earthing
- n) In-House wiring

2) Active Infrastructure

- a) Radio Access Network (RAN) (MORAN or MOCN)
 - i). BTS/Node
 - ii). B/e-Node
 - iii). Antennae
 - iv). Feeder cable
 - v). RAN
 - vi). Microwave radio equipment
 - vii). BSC/RNC
- b) In-Building Solutions (IBS)
 - i). Distributed Antenna System (DAS)
 - ii). Antennae
 - iii). Feeder cable
 - iv). Splitters
 - v). Combiners
- c) Optical/Wired Transmission Links.
- d) Multiplexer (MUX)

- e) Synchronous Digital Hierarchy (SDH)
- f) Dense Wavelength Division Multiplexer (DWDM)
- g) National Roaming