



**Afghanistan Telecommunication Regulatory Authority (ATRA)**

**INFRASTRUCTURE SHARING AND COLLOCATION  
REGULATORY PROCEDURES**

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## **PART I - PROVISION**

### **1. Citation**

These Procedures may be cited as the Infrastructure Sharing and Collocation Regulatory Procedures, 2020.

### **2. Background**

2.1 ATRA has responsibility under the Telecom Law to:

- (a) Promote fair competition in the communications industry, and encourage and promote Infrastructure Sharing among its licensees.
- (b) Accelerate installation and development of telecommunications networks and services throughout Afghanistan, at reasonable prices;
- (c) Require a person having Significant Market Power to sell/offer telecommunications services on a non-discriminatory basis to other licensed Service Providers;
- (d) Develop Procedures for Infrastructure Sharing and Collocation ("IS/C").

2.2 These Procedures ensue from a premise that all Access Providers and Access Seekers have the freedom to negotiate IS/C agreements in accordance with mutually agreed terms.

2.3 These Procedures are designed and developed to encourage IS/C among telecommunications operators within a predetermined framework to remove uncertainty and create an environment for better cooperation.

2.4 Additionally, these Procedures explain ATRA's role in achieving the most efficient use of facilities amenable to sharing.

### **3. Status of the Procedures**

These Procedures are to be read subject to the Telecom Law and other relevant laws, and in conjunction with the License Conditions and the Procedures for Installation of Towers and Antennas for Mobile Telecommunications.

### **4. Interpretation**

In these Procedures, unless the context requires otherwise:

<b>“Access Provider”</b>	means any telecommunications Network Operator or Service Provider, who owns or is in control of a facility or infrastructure to which another Network Operator or Service Provider wishes to get into an agreement for the purposes of Collocation or Infrastructure Sharing;
<b>“Access Seeker”</b>	means any telecommunications Network Operator or Service Provider who wishes to get into an agreement with another telecommunications Network Operator or Service Provider, who owns or is in control of telecommunication’s infrastructure and facilities, for the purpose of Collocation or Infrastructure Sharing;
<b>“Active Infrastructure Sharing”</b>	is the sharing of electronic infrastructure and facilities; this may include sharing of transmission equipment, microwave radio equipment, spectrum, antennae, feeder cables, Base transceiver Station (BTS)/ Node B/ e-Node, Radio Access Network (RAN), billing platforms, switching centers, routers, Base Station Equipment, Base Station Controller (BSC) /Radio Network Controller (RNC), optical Fiber/ wired access and backbone transmission network, database, etc.;
<b>“ATRA”</b>	means the Afghanistan Telecommunication Regulatory Authority established under Article 4 of the Telecommunications Services Regulation Law, 2005;
<b>“Collocation”</b>	means the placement of transmission equipment owned by the interconnection demanding operator in the premises of the interconnection providing operator for interconnection to that operator’s network;
<b>“Distributed Antenna System” or “DAS”</b>	means a multi-band antenna system which distributes the RF signals, combined through a multi-band combiner from different BTS of authorized operators, within a geographic area or structure;
<b>“Facility, Facilities”</b>	mean the same thing as, and are interchangeably used with the term “infrastructure”;
<b>“In-Building Solution” or “IBS”</b>	means a telecommunications solution commonly built in conjunction with a DAS, which is used to extend and distribute the telecommunications signal of a given Mobile Network Operator within a building;
<b>“Infrastructure Sharing”</b>	means the joint use of network facilities by two or more operators subject to agreement specifying relevant technical and commercial conditions; the term “Infrastructure Sharing” is more general than the term “Collocation” and unless explicitly stated otherwise, Infrastructure Sharing refers for the purposes of these Procedures to the sharing of facilities that are not feasible for Collocation;
<b>“Lessening of Competition”</b>	has the meaning in the Telecom Law;
<b>“Network Operator”</b>	means a Service Provider who owns and manages a Telecommunications Network;
<b>“Passive Infrastructure Sharing”</b>	is the sharing of non-electronic infrastructure and facility; this may include dark fiber, ducts (for the installation of optical fiber), sharing of physical sites, rights-of-way, buildings, shelters, towers/masts, electric power supply and battery backup, grounding/earthing, air conditioning, security arrangement, poles, trenches, Sub-Loop (Wire or Cable) and Local Loop (Wire or Cable);

<b>“Physical Collocation”</b>	means Collocation where equipment is placed in a separate room within the premises of the interconnection-providing operator and remains under the control of the interconnection-demanding operator;
<b>“Radio Access Network (RAN) Sharing”</b>	means a form of active sharing where two or more operators agree to use the same access network equipment, including base station active equipment and possibly the antenna. Each operator uses its own core network. This type of active sharing itself can typically be split into two types, depending on whether operators share the same spectrum or not: - <b>Multi-Operator Radio Access Network (MORAN)</b> sharing is a form of RAN sharing where only equipment is shared (i.e. not spectrum). - <b>Multi Operator Core Network (MOCN)</b> sharing is a form of RAN sharing where all elements of the radio access network, including spectrum, are shared.
<b>“Remote Collocation”</b>	means Collocation where the equipment of the interconnection-demanding operator is installed in a location near the premises of the interconnection-providing operator and a transmission medium is used to realize the physical interconnection;
<b>“Service Provider”</b>	has the meaning in the Telecom Law;
<b>“Telecom Law”</b>	means the Telecommunications Services Regulation Law, 2005, as amended thereof;
<b>“Telecommunications”</b>	have the meaning in the Telecom Law;
<b>“Telecommunications Network”</b>	has the meaning in the Telecom Law;
<b>“Virtual Collocation”</b>	means Collocation where equipment is placed in the equipment line-up of the interconnection-providing operator and is maintained by this same operator.

## 5. **Objectives of the Procedures**

The Primary object of these Procedures is to establish a framework within which Network Operators can negotiate IS/C agreements, and for that purpose, specifically to:

- (a) ensure that the incidence of unnecessary duplication of infrastructure is minimized or completely avoided;
- (b) protect the environment by reducing the proliferation of infrastructure and facilities installations;
- (c) promote fair competition through equal access being granted to the installations and facilities of Network Operators on mutually agreed terms;
- (d) ensure that the economic advantages derivable from the sharing of facilities are harnessed for the overall benefit of all telecommunications stakeholders;
- (e) minimize capital expenditure on supporting infrastructures and

to free more funds for investment in core network equipment;  
and

- (f) encourage Network Operators to pursue a cost-oriented policy with the added effect of a reduction in the tariffs chargeable to consumers.

## **PART II - TELECOMMUNICATIONS INFRASTRUCTURE SHARING**

### **6. Passive Infrastructure Sharing**

6.1 ATRA shall encourage and promote the sharing of the following passive infrastructures:

- (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.

6.2 Antenna mast and tower structure sharing shall be regulated via the specific Procedures for Installing Mobile Telephones Towers and Antennas.

6.3 Where the sharing of an infrastructure such as rights-of-way and electric power is dependent upon securing the necessary approval of a granting authority, such approval should be obtained before the sharing agreement can be finalized.

- 6.4 ATRA may from time to time, either on its own initiative or upon the request of any interested Licensee, add to the list of passive infrastructures above that can be shared.

## **7. Active Infrastructure Sharing**

- 7.1 ATRA shall not encourage, but will allow sharing of the following active infrastructures under the conditions set in the respective license and Articles 7.2 through 7.8:

- (a) Radio Access Network (RAN) as MORAN.
- (b) In-Building Solutions (IBS).
- (c) Optical/Wired Transmission Links.
- (d) Multiplexer (MUX), Synchronous Digital Hierarchy (SDH) and Dense Wavelength Division Multiplexer (DWDM).

- 7.2 For RAN sharing:

- (a) Network Operators may enter into bilateral or multilateral agreements in order to share RAN among themselves.
- (b) Only Network Operators having radio spectrum permits shall be eligible to implement this mode of sharing and the sharing shall be limited between the same category of licenses.
- (c) For the purpose of this mode of Active Infrastructure Sharing, Network Operators may only share BTS/ Node B/ e-Node, antennae, feeder cable, RAN, microwave radio equipment and BSC/RNC only among themselves.

- 7.3 For IBS sharing:

- (a) Network Operators may, individually or jointly, adopt IBS. In order to adopt IBS, Network Operators shall be allowed to implement Distributed Antenna System (DAS).
- (b) Only Network Operators having radio spectrum permits and/or relevant licenses shall be eligible to implement this mode of sharing.
- (c) In case IBS is implemented including DAS, provisions shall be kept for integrating any other Network Operators into the system.
- (d) Coupling of Network Operators for implementation of IBS including DAS should be done on a fair, transparent and non-discriminatory basis to other concerned Network Operators. Engagement into exclusive contracts prohibiting access to other

Network Operators of similar categories shall be treated as an infringement of these Procedures.

- (e) Network Operators shall enter into bilateral/multilateral agreements for implementation of IBS including DAS. Tariffs, terms and conditions shall be mutually agreed based on the existing legal and regulatory framework in this regard.
- (f) For implementation of DAS, Network Operators may only share antennae, feeder cable, splitters and combiners among themselves.

7.4 For Optical/Wired Transmission Link sharing:

- (a) Network Operators, with the exception of Nationwide Fiber Optic Transmission Network (NFOTN) operators, are not permitted to build optical/wired backbone transmission networks, if such networks or NFOTN operators are already available there.
- (b) Network Operators may develop, maintain and operate Optical/Wired backbone transmission networks with the prior approval of ATRA if NFOTN operators fail to provide them with transmission network facilities fulfilling their requirements.
- (c) Network Operators may sell or lease the excess capacity/ core/ fiber of their transmission networks to NFOTN operators. In such case, the NFOTN operators will be entitled to buy or take lease on the excess capacity/ core/ fiber from Network Operators and shall submit the copy of such agreement to ATRA accordingly.

7.5 For MUX/SDH/DWDM sharing:

- (a) International long-distance operators, mainly NFOTN operators, may share MUX/SDH/DWDM among themselves.
- (b) International Gateway (IGW) operators and Interconnection Exchange (ICX) operators may share MUX/SDH/DWDM among themselves only at the designated common Point of Interconnection (PoI).
- (c) International Internet Gateway (IIG) operators and National Interconnection Exchange (NIX) operators may share MUX/SDH/DWDM among themselves only at the designated common Point of Interconnection (PoI).

7.6 Specifically, and for the avoidance of doubt, neither spectrum sharing nor national roaming shall form part of the items which may be negotiated and agreed upon by telecommunications operators under Active Infrastructure Sharing Agreements.



- 7.7 Active Infrastructure Sharing is expected not to increase interdependence in such a degree that may reduce competitive edge of the Network Operators.
- 7.8 Active Infrastructure Sharing shall primarily be given priority in the rural, remote and underserved areas of the country, particularly for promotion of universal access.
- 7.9 ATRA may from time to time add to the list of active infrastructures that can be shared.

**8. Procedure for Negotiating IS/C**

- 8.1 Any Network Operator who owns or has control of a facility amenable to sharing may enter into negotiations with another Network Operator who submits a request to share in the use of that facility.
- 8.2 All negotiations for Infrastructure Sharing must be done with the utmost good faith. The owner of a facility must not:
  - (a) obstruct or delay negotiations or resolution of disputes;
  - (b) refuse to provide information relevant to an agreement including information necessary to identify the facility needed and cost data;
  - (c) refuse to designate a representative to make binding commitments.
- 8.3 A request for Infrastructure Sharing should be in writing. A party to whom such a request is made should within thirty (30) days either agree to the request and grant access for sharing; or where access is denied, provide reasons in writing for the denial.
- 8.4 Except in emergency situations, the replacement of a shared facility, or its modification, may only be undertaken upon due service of a sixty (60) -day notice on the other party.
- 8.5 A party on whom notice is served may file a petition against the removal or modification of a facility within fifteen (15) days of receiving such notice, and the notifying party may file a reply thereto within seven (7) days.

**9. Terms and Conditions for Infrastructure Sharing**

- 9.1 A Network Operator shall provide capacity on its infrastructure to other Network Operators on a “first-come, first served” basis, determined in accordance with the order in which it receives requests for Infrastructure Sharing.
- 9.2 Infrastructure Sharing services shall be provided by the Access Provider to the Access Seeker at reasonable rates, on terms and conditions which are no less

favorable than those provided by the Access Provider to itself, any non-affiliated licensee or any subsidiary or affiliate of the Access Provider and shall be of no less favorable quality than that provided by the Access Provider to itself, any non-affiliated licensee or any subsidiary or affiliate of the Access Provider.

- 9.3 Infrastructure Sharing services shall be provided in a manner that:
- (a) maximizes the use of telecommunications networks and infrastructure;
  - (b) minimizes the potential for negative environmental impacts; and
  - (c) enables the development of competition in the provision of telecommunications networks and services in a timely and economic manner.
- 9.4 Infrastructure Sharing services shall be provided by the Access Provider to the Access Seeker at technically feasible points and routes on terms and conditions that are just, reasonable and non-discriminatory and in accordance with an Infrastructure Sharing agreement between the two parties. The Access Provider shall prepare a list of feasible points and routes suitable for Infrastructure Sharing.
- 9.5 A Network Operator shall reserve the right to refuse an application for Infrastructure Sharing on grounds of demonstratable:
- (a) Insufficient capacity, and/or
  - (b) Safety, reliability, incompatibility of facilities.
- 9.6 The decision to refuse an application for Infrastructure Sharing shall be communicated in writing to the requesting Network Operator specifying the reasons for such refusal.
- 9.7 Every Infrastructure Sharing agreement, including any prior existing agreement, shall be in writing and shall specify the contractual terms and conditions agreed on by the parties. All such agreements shall be registered with ATRA.
- 9.8 Any disputes relating to Infrastructure Sharing, including costs and tariffs, shall follow a dispute escalation procedure and may ultimately be referred to ATRA.
- 9.9 The terms on which Infrastructure Sharing is offered should be in compliance with the principles of neutrality, transparency, non-discrimination and fair competition.
- 9.10 Competition shall not be compromised during Infrastructure Sharing through collusive behavior among Network Operators.

- 9.11 ATRA shall at all times reserve the right to examine incidence of Infrastructure Sharing Agreements to ensure consistency with the relevant License(s) and reduce the risk of a lessening of competition.
- 9.12 Where ATRA:
- (a) determines that an Infrastructure Sharing Agreement is inconsistent with the relevant License(s) and/or
  - (b) identifies a risk of lessening of competition as a consequence of such Infrastructure Sharing,

It may require such an agreement to be discontinued.

- 9.13 Network Operators shall have to fulfill all of their individual obligations included, but not limited to rollout obligations as contained in their individual licenses, irrespective of Infrastructure Sharing Agreements with other operators.

## **10. Price-Setting for Infrastructure Sharing**

- 10.1 Prices for Infrastructure Sharing should be non-discriminatory, reasonable, and based on the costs incurred by the owner of the facility.
- 10.2 Determination of the costs underlying prices should be transparent and neutral.
- 10.3 Costs and tariffs shall be sufficiently unbundled so that the Access Seeker shall be obliged to pay the Access Provider only for the network elements or Infrastructure Sharing services that it requires.
- 10.4 Costs shall be borne either by the Access Seeker or the Access Provider or both based on whether their respective requests and compliance with those requests cause those costs to be incurred; and in accordance with an Infrastructure Sharing agreement between the two parties.
- 10.5 Infrastructure Sharing rates shall be cost-based and shall be set to allow the Access Provider to recover a reasonable rate of return on its capital appropriately employed, all attributable operating expenditures including maintenance, depreciation and a proportionate contribution towards the Access Provider's fixed and common costs.
- 10.6 An Access Provider's charges for Infrastructure Sharing shall be:
- (a) determined in a transparent manner, subject to any confidentiality claims to which ATRA has to agree;
  - (b) non-discriminatory in order to ensure that an Access Provider applies equivalent conditions in equivalent circumstances in providing equivalent services, as the Access Provider provides for itself, any nonaffiliated licensee or any subsidiary or affiliate of the Access Provider;

- (c) reciprocal for the same service in order that the Access Provider and Access Seeker pay the same rate for providing each other the same services;
  - (d) preferably such that non-recurring costs shall be recovered through non-recurring charges and recurring costs shall be recovered through recurring charges;
  - (e) such that charges that do not vary with usage shall be recovered through flat charges and costs that vary with usage shall be recovered through usage-sensitive charges; and
  - (f) initially based on a fully-allocated cost methodology
- 10.7 Infrastructure Sharing rates shall not include compensation for loss of business as a result of providing infrastructure sharing services to the Access Seeker or *force majeure* events.

### **PART III - COLLOCATION**

#### **11. Collocation as an Element of Interconnection**

- 11.1 Collocation is an element of the interconnection of networks; hence, it is essential that Network Operators agree on terms of its implementation towards ensuring seamless interconnectivity. Collocation shall constitute part of the negotiations for interconnection and be governed by provisions of the Telecom Law.
- 11.2 Every major Network Operator, especially dominant operators as may be determined by ATRA should include in their Reference Interconnection Offer (RIO) an offer for the facilities available for Collocation, including a price list for the different components of Collocation.
- 11.3 A Network Operator wishing to interconnect with another Network Operator is at liberty to choose the type of Collocation suitable for its operation.
- 11.4 Where a request is made for Physical Collocation but such Collocation is not deemed feasible, Virtual Collocation should be offered by the interconnection-providing operator.
- 11.5 Where Virtual Collocation is not feasible, Remote Collocation should be offered in its stead.
- 11.6 A request for Remote Collocation shall not be rejected on any grounds.
- 11.7 Specifically, Remote Collocation shall not be refused on grounds of insufficient capacity, safety considerations, reliability or other general engineering considerations.

- 11.8 Save as may be specifically excluded by regulations and/or ATRA's decision, the terms and conditions of Collocation are in general to be governed by the same rules as Infrastructure Sharing.
- 11.9 The provisions of these Procedures, particularly PART II - Articles 9 and 10 and PART IV - apply to both Infrastructure Sharing and Collocation.
- 11.10 Collocation shall not negatively impact coverage of any of the Network Operators and/or consumer protection rights in any manner.

#### **PART IV - GENERAL RULES FOR INFRASTRUCTURE SHARING/ COLLOCATION (IS/C)**

### **12. Reference Offer and Standard Practice List**

- 12.1 ATRA recognizes the right of Network Operators to negotiate and agree on terms and conditions of Infrastructure Sharing and Collocation (IS/C). ATRA however requires that such negotiation must be within the limits of an existing reference offer developed by each Network Operator.
- 12.2 Every Network Operator shall ensure that its reference offer is readily available to other Network Operators with a view to promoting fairness in the negotiation process.
- 12.3 Network Operators should in the process of developing the reference offer be responsive and work in close association with other Network Operators, that is, prospective access seekers.
- 12.4 Notwithstanding the provisions of Article 12.1 above, parties involved in any negotiation for IS/C agreement are at liberty to negotiate outside the reference offer provided howsoever that such negotiations are voluntary and non-discriminatory.
- 12.5 The reference offer should contain sufficient information on issues relevant to the access seeker for negotiation purposes as itemized in the Annex to these Procedures.
- 12.6 Parties may request for other information which may be required in the process of negotiating for IS/C. Such information should be treated as confidential by the requesting party at all times and shall only be provided to ATRA by specific request.
- 12.7 The quality and nature of any information requested for will depend on what stage the negotiation process has reached. Response on any such request should be prompt to avoid delay.
- 12.8 A party may request for a site inspection if it is deemed necessary for the purpose of aiding that party to reach an informed decision.

- 12.9 Every Network Operator should develop a standard price list which shall provide guidance for determining the price for all IS/C agreements with other Access Seekers.
- 12.10 Any standard price list developed should be reasonable, non-discriminatory and cost-oriented.

### **13. Allocation of Capacity**

- 13.1 There shall be no obligation on a Network Operator to develop new infrastructure whenever its capacity has reached saturation level. However, Network Operators are expected to reasonably take into consideration the demand for IS/C when expanding their facilities.
- 13.2 Where there is no available capacity at the existing facilities to meet the needs of additional requests for capacity, the Network Operator should consider redevelopment as a means of increasing capacity at existing facilities.
- 13.3 ATRA will consider that capacity is available where the specific resource is not occupied nor reserved by the Network Operator.
- 13.4 In every situation where a Collocation request is granted, the grantor should have the reserved right in the event of scarcity to demand that any allocated capacity be relinquished if such capacity has not been utilized within three (3) months of delivery of access. This right should be reserved with the intent to avoid the preemption of future capacity needs on the part of a requesting Network Operator which would stifle the present needs of other Network Operators.
- 13.5 At the expiration of the period for which access was granted to a party, an application for a further extension of the period will be in accordance with the procedure used for the initial application. The application will be considered on the merit by the access provider.
- 13.6 In every case, applications for Collocation should be considered and granted by a Network Operator on a “first come – first served” basis.

### **14. Refusal of Access to Collocate**

- 14.1 A Network Operator reserves the right to refuse an application for access in any of the following circumstances:
  - (a) where the Network Operator does not have available capacity (i.e. either that all capacity is occupied or reserved)
  - (b) where the grant of access is technically unfeasible
  - (c) where the request, if granted, will breach safety and reliability standards

In all cases, the Network Operator should provide the requesting Network Operator with reason for refusal in writing.

- 14.2 A Network Operator who is refused Collocation may refer such refusal to ATRA and ATRA shall be at liberty to inquire into the decision refusing access.
- 14.3 ATRA may upon due consideration:
  - (a) uphold a decision refusing access
  - (b) request that a decision refusing access should be reconsidered
  - (c) impose an Infrastructure Sharing Agreement on the parties.
- 14.4 Infrastructure Sharing Agreements imposed by ATRA may include rules for apportioning the costs of facility sharing.

## **15. Reservation of Capacity**

- 15.1 The right of a Network Operator to reserve capacity for which it has made long term investments will at all times be recognized but balanced against the need not to hamper the network rollout or expansion plans of new market entrants or other Network Operators.
- 15.2 Where available capacity is limited, the right to reserve capacity should not be exercised by a Network Operator in order to avoid discrimination and preemption.
- 15.3 However, where a Network Operator with significant investments exercises the option to reserve some rights in circumstances of limited capacity:
  - (a) the reserve period shall not exceed one (1) year after which the right will cease from being operational.
  - (b) not more than fifty percent (50%) of capacity shall be reserved.
- 15.4 Information and documentary evidence of the reservation and extent thereof should be held by the Network Operator and made available to other Network Operators on reasonable demand.

## **16. Redevelopment and Relocation**

- 16.1 To ensure that capacity is increased and made available to others, Network Operators are encouraged to constantly pursue a policy of re-development and relocation of facilities.
- 16.2 Where for optimal utilization of facilities a Network Operator undertakes redevelopment or relocation (i.e. reconfiguration of network as a result of technological or business reasons), the cost of the redevelopment or relocation

may be jointly assessed by the parties and shared with access seekers at a percentage mutually agreed by parties.

- 16.3 The redevelopment or relocation cost borne by a collocator shall form part of the price paid for the IS/C agreement.
- 16.4 A party to a IS/C agreement should not undertake modifications with the sole aim of demanding the cost of such modification from collocators.
- 16.5 As a condition precedent for a Network Operator to commence any redevelopment or relocation at any facility, notice thereof should first be given to all Network Operators sharing the facility with the Network Operator. The notice period should be
  - (a) six (6) months in the case of re-development
  - (b) twelve (12) months in the case of re-location

## **17. Separation**

- 17.1 ATRA expects that parties involved in all IS/C agreements, will make efficient use of scarce space.
- 17.2 Parties negotiating for Collocation will be at liberty to request for separation of equipment to increase internal and external security, reduce interference problems and limit damage to each other's equipment.
- 17.3 The degree to which separation of equipment will be granted to a Network Operator will be determined, among other things, by
  - (a) Prevailing local circumstance
  - (b) Available space
  - (c) Special requirements of access seekers
  - (d) Level of standardization
  - (e) Risk of damage

## **18. Standardization**

- 18.1 To facilitate improved coordination and compatibility of equipment, parties to an IS/C agreement should endeavor to develop and employ standard procedures for provision and operations under the agreement.
- 18.2 The standard procedures to be developed by parties under the agreement will be in the areas of:
  - (a) Maintenance



- (b) Fault clearance
  - (c) Access at the facility
  - (d) Emergency
  - (e) Cleaning
  - (f) Safety
  - (g) Security
- 18.3 Parties are also to ensure that standardized equipment and unified techniques/technical interfaces are used for the IS/C.
- 18.4 The liberty to use assigned space for its own purpose notwithstanding, parties should not install incompatible equipment which may cause interference to other parties' equipment or impede usage of space allocated to them.

## **PART V - THE ROLE OF THE REGULATOR**

### **19. Dispute Resolution**

- 19.1 ATRA has the power to intervene to resolve disputes at the request of either party and to impose Facility Sharing or Collocation Agreements between Network Operators after consultation with the parties.
- 19.2 The power of ATRA to intervene in disputes shall include the right to request for and receive all such necessary information as may be required to reach a decision.
- 19.3 The decision of ATRA which shall be final, save for the right of appeal to a court of competent jurisdiction, will be notified to the parties and published.
- 19.4 In resolving disputes, ATRA will rely on its Dispute Resolution Procedures.

### **20. Quality of Service**

Infrastructure Sharing or Collocation shall not have any detrimental effect in the quality of service levels offered to the end customer.

### **21. Supportive Action**

- 21.1 ATRA will from time to time arrange for the dissemination of pertinent information on the subject of Infrastructure Sharing and Collocation.

21.2 ATRA will use its mandate under Article 6(14) of the Telecom Law to further the opportunities for Infrastructure Sharing and Collocation, provided there is no risk of the lessening of competition. In particular, ATRA will take action to

- (a) encourage redevelopment of existing facilities amenable to Infrastructure Sharing to increase their capacity.
- (b) advise local and regional authorities on the adoption of schemes which would encourage the sharing of infrastructure.
- (c) support the development of the capability among Network Operators to deal with the issues of Infrastructure Sharing in a competent way.

## **22. Additional Attributions**

ATRA may, from time to time, revise these Infrastructure Sharing and Collocation Regulatory Procedures and/or develop and approve additional ones in order to promote competition and enable access in the telecommunications market.

**ANNEX**  
**CONTENTS OF REFERENCE OFFER - ISSUES RELEVANT TO THE NETWORK  
OPERATOR REQUESTING COLLOCATION FOR NEGOTIATION PURPOSES**

(a) General Sharing Issues

- (i) Access and refusal
- (ii) Separation
- (iii) Standardization
- (iv) Redevelopment/Relocation
- (v) Study and preparatory work
- (vi) Requirements of requesting Network Operator
- (vii) Commencement/duration/renewal
- (viii) Liability
- (ix) Insurance
- (x) Confidentiality
- (xi) Security
- (xii) Arbitration
- (xiii) Modification/ Termination

(b) Provisioning

- (i) Time schedules
- (ii) Information requirements
- (iii) Constructional specifications
- (iv) Technical Specifications
- (v) Delivery of Access
- (vi) Testing

(c) Operation

- (i) Requirements on equipment
- (ii) Installation of equipment
- (iii) Maintenance
- (iv) Fault clearance

(v) Access conditions of persons

(d) Pricing

(i) Standard prices

(ii) Price components

(iii) Pricing of special requirements

(iv) Sharing of common facilities

(v) Penalties

(e) Technical

(i) Spurious emissions

(ii) Harmonics

(iii) Electromagnetic compatibility

(iv) Interference

(v) Heat Dissipation and thermal considerations

(vi) Wind loading