



GUIDELINES FOR SHARING OF PASSIVE COMMUNICATIONS INFRASTRUCTURE

TABLE OF CONTENTS

SHORT TITLE, EXTENT AND COMMENCEMENT	3
EXPLANATORY NOTE	4
PART I: INTRODUCTION	7
1. DEFINITIONS.....	7
2. BACKGROUND.....	9
3. STATUS OF THE GUIDELINES	10
4. OBJECTIVES OF THE GUIDELINES.....	10
PART II: INFRASTRUCTURE SHARING	12
5. TYPES OF INFRASTRUCTURE AMENABLE TO SHARING.....	12
6. PROCEDURE FOR NEGOTIATING INFRASTRUCTURE SHARING.....	13
7. TERMS AND CONDITIONS FOR INFRASTRUCTURE SHARING	14
8. LIMITATION OF ACCESS.....	15
PART III: GENERAL RULES FOR INFRASTRUCTURE SHARING	16
9. REFERENCE OFFER AND STANDARD PRICE LIST	16
10. ALLOCATION OF CAPACITY	17
11. REFUSAL OF ACCESS	18
12. RESERVATION OF CAPACITY.....	18
13. RE-DEVELOPMENT/RE-LOCATION	19
14. EFFICIENT UTILISATION OF SPACE	20
15. STANDARDISATION	20
PART IV: THE ROLE OF THE AUTHORITY.....	22
16. DISPUTE RESOLUTION	22
17. SUPPORTIVE ACTION.....	22
FIRST SCHEDULE.....	23

SHORT TITLE, EXTENT AND COMMENCEMENT

- i) These Guidelines shall be referred to as:
“Guidelines for sharing of Passive Communications Infrastructure”
- ii) The Guidelines shall be applicable to all Licensed Operators in the Telecommunications Sector.
- iii) These Guidelines shall come into force with effect from **01 April 2012**

EXPLANATORY NOTE

1. The primary object of these Guidelines is to establish a framework within which communications operators can negotiate and conclude sharing arrangements for passive infrastructure.
2. All communication infrastructures erected, constructed or located within Botswana, except those exclusively used for purposes of State security and emergency services, shall comply with the terms of these guidelines.
3. The Guidelines are divided into four parts. A summary of each Part of the proposed Guidelines is provided below.
4. **Part I** sets out the background to the Guidelines, objectives of the Guidelines and provides definitions of technical terms used in the Guidelines. Words and or phrases defined in the Telecommunications Act are given the meaning given to them by the Act. This part deals with the responsibility of the Authority under the Telecommunications Act. The idea is to show the legal basis for the work of the Authority and its legal right and or power to encourage communications infrastructure sharing.
5. The second component under background deals with status of the Guidelines vis-a-vis other legal instruments. It subjects the Guidelines to the Telecommunications Act; Telecommunications Regulations, other relevant and applicable laws as well as the licence conditions of operators. It specifically recognises that there are other pieces of legislation and institutions of Government whose jurisdiction has a direct or indirect bearing on infrastructure sharing, installation or deployment. Such laws are public health laws, environmental laws, civil aviation laws, land laws etc. The Authority is enjoined under Part I, in performing its regulatory duties with respect to facilitating and or encouraging infrastructure sharing, to cooperate with such relevant and competent bodies, Government Departments and or agencies as are relevant.

6. **Part II** deals with substantive issues of infrastructure sharing. It specifies which infrastructure can be shared. In line with the Consultancy Report, the infrastructure to be shared is the one defined as passive infrastructure in the report. This is the non-electronic component of the network. Realising that the list in the Guidelines may not be exhaustive, BTA is given the right to change the list as it deems appropriate. One of the key provisions to note under this part is the one restricting sharing of ducts to Public Telecommunications Operators.
7. This Part also balances the dictates of infrastructure sharing and the policy goal of competition in the provision of communication services. Infrastructure sharing should be implemented in a manner that does not constrain competition and or violate licence conditions of operators. In the event infrastructure sharing is inconsistent with the relevant licence(s) and/or provide a risk of lessening of competition, the Authority may require such arrangement to be discontinued.
8. Part II also provides the procedure for negotiating infrastructure sharing arrangements. To address the possible unnecessary prolonged negotiations, specific timeframes are stipulated within which the negotiations should be concluded. In addition, the owner of infrastructure over which sharing is sought is prohibited from doing certain things considered inconsistent with infrastructure sharing. There is provision for appeals against unreasonable refusal to share infrastructure.
9. **Part II** also deals in detail with the minimum terms and conditions for Infrastructure Sharing. An operator which owns infrastructure is required to provide capacity to other operators on a “first-come, first served” basis, determined in accordance with the order in which the operator owning or having control over a facility, receives requests for infrastructure sharing. It provides circumstances under which an operator may not be able to accede to the application for sharing. These include the grounds of insufficient capacity, safety, and general engineering issues. Most fundamentally, the terms on which infrastructure sharing is offered should be in compliance with the principles of neutrality, transparency, non-discrimination and fair competition. Prices for infrastructure sharing should be non-

discriminatory, reasonable, and based on the actual costs incurred by the owner of the facility.

10. **Part III** of the Guidelines provides the general rules for sharing infrastructure. It requires operators that own infrastructure which could be shared, to have a Reference Offer and Standard Price List. The conditions under which capacity may be allocated, refused and or reserved are addressed under this Part. To facilitate improved coordination and compatibility of equipment, parties to an infrastructure sharing arrangement are required to develop and employ standard procedures for provision and operations under the sharing arrangement.

11. **Part IV** deals with the role of the Authority in the infrastructure sharing framework. The BTA's role is twofold. The first role is with respect to dispute resolution. The Authority has the power to intervene to resolve disputes at the request of either party and to impose facility/infrastructure sharing arrangements between operators after giving each and/ or all of the concerned parties a hearing. It is proposed that in resolving disputes, the Authority will rely on its dispute resolution procedures, processes and or mechanism as may be in existence from time to time.

12. The second role of the BTA in the infrastructure sharing framework as provided for under Part IV is what is referred to in the Guidelines as "Supportive Action." This refers to steps that the Authority would take to encourage infrastructure sharing.

PART I: INTRODUCTION

1. Definitions

In these Guidelines the following words and or phrases shall have the meaning assigned to them hereunder unless the context requires otherwise. All words and or phrases defined in the Telecommunications Act [CAP.72:03] shall have the meaning assigned to them under the said Act-

- (a). **Access** – Means the technical feasible means of reaching network facilities/infrastructure for purposes of sharing network facilities/infrastructure.
- (b). **Access Provider** – Means any licensed telecommunications operator who owns or is in control of a facility or infrastructure access to which another licensed operator desires for purposes of infrastructure sharing;
- (c). **Access Seeker** – Means any licensed telecommunications operator desirous of sharing a facility or infrastructure owned or in the control of another licensed telecommunications operator;
- (d). **Act** – Means the Telecommunications Act [CAP.72:03]
- (e). **Authority** – Means the Telecommunications Authority established in terms of the Act.
- (f). **Communications Laws** - shall mean such laws as may regulate the provision of communication services including but not limited to the Telecommunications Act and / or the Broadcasting Act)
- (g). **Facility or Facilities** – Means the same thing as, and are interchangeably used with the term “infrastructure”;

- (h) **Infrastructure Sharing** - Means the joint use of passive network facilities by two or more operators subject to agreement specifying relevant technical and commercial terms and conditions;
- (i) **Operator** - Means an undertaking, person and/or entity holding a licence granted under the Act to operate a telecommunications system or facility and to provide telecommunications services;
- (j). **Lessening of Competition** – Means the same thing as may have an effect specified under section 48 of the Act and or which may be so prescribed as such pursuant to and or under the Competition Act [Act No 17 of 2009].
- (k). **Passive communications infrastructure** - means infrastructure that does not include electronic devices and for purposes of these Guidelines include such infrastructure as appears in paragraph 5 (Part II) of these Guidelines.
- (l). **Passive Network facilities** shall have the same meaning as Passive communications infrastructure.

2. Background

2.1 The Authority has responsibility under the Act to:

- (a) supervise and promote the provision of efficient telecommunication services in Botswana;
- (b) take all reasonable steps to promote the provision, throughout Botswana, of such telecommunication services as will satisfy all reasonable demands for such services;
- (c) promote the interests of consumers, purchasers and other users of telecommunication services in respect of the prices charged for, and the quality and variety of, such services and equipment or terminal equipment supplied for the purposes of such services; and
- (d) promote and maintain competition among persons engaged in commercial activities for or in connection with the provision of telecommunication services, and promote efficiency and economy on the part of persons so engaged.

2.2 The Authority has determined that it is necessary to encourage and/or promote passive infrastructure sharing amongst licensees in order to achieve its purposes as specified in the Act and restated in sub-paragraph (2.1) above.

2.3 These Guidelines proceed from a premise that all operators have the liberty to negotiate passive infrastructure sharing arrangements in accordance with mutually agreed terms.

2.4 These Guidelines are designed and developed to encourage passive infrastructure sharing between operators within a predetermined framework to remove uncertainty and create an environment for better co-operation.

2.5 While the guidelines are specifically directed at the sharing of specified passive infrastructure, the operators are encouraged and may voluntarily adopt the principles contained herein with respect to the sharing of any infrastructure not specifically mentioned herein.

2.6 The Guidelines also explain the Authority's role in achieving the most efficient use of passive infrastructure amenable to sharing.

3. Status of the Guidelines

3.1 These Guidelines are to be read subject to the Act, the Telecommunications Regulations and other relevant laws, and in conjunction with the licence conditions of the operators

3.2 Without limiting the generality of sub-paragraph (3.1), these Guidelines shall, with respect to other relevant laws, be subject to other laws with a bearing on the installation and or deployment of infrastructure such as public health, civil aviation, land ownership or leasehold and environmental laws. To this extent, the operators shall be subject to the jurisdiction of such entities and or bodies as may be responsible for the enforcement of such other laws (other than communications law) as may be applicable to them in the installation and / or deployment of infrastructure.

3.3 The Authority shall in performing its regulatory duties with respect to facilitating and or encouraging infrastructure sharing cooperate with such other competent bodies, Government Departments and or agencies as are relevant.

4. Objectives of the Guidelines

4.1 The Primary object of these Guidelines is to establish a framework within which communications operators can negotiate and conclude sharing arrangements for passive infrastructure, and for that purpose, specifically to:

- (a) Ensure that the incidence of unnecessary duplication of passive infrastructure is minimised or completely avoided;
- (b) Protect the environment by reducing the proliferation of infrastructure and facilities installations or deployment;

- (c) Promote fair competition through equal access being granted to the Passive infrastructure of operators, where applicable on mutually agreed terms;
- (d) Ensure that the economic advantages derivable from the sharing of infrastructure are harnessed for the overall benefit of all telecommunications stakeholders;
- (e) Minimise operators' capital expenditure on supporting infrastructures and to free more funds for investment in core network equipment and innovative new services.
- (f) Encourage operators to pursue a cost-oriented policy with the added effect of a reduction in the tariffs chargeable to consumers.
- (g) Encourage the operators to take public health and safety and the environment into account when constructing and or deploying infrastructure;
- (h) Encourage the Authority to coordinate and cooperate with other Government agencies whose mandate has a bearing on infrastructure deployment and/or installation.

PART II: INFRASTRUCTURE SHARING

5. Types of Infrastructure Amenable to Sharing

- 5.1 Infrastructures amenable to sharing are those that can be shared without an attendant risk of lessening of competition.
- 5.2 The Authority shall encourage and promote the sharing of the following infrastructures:
- (a) Rights of way;
 - (b) Antenna masts and towers;
 - (c) Poles;
 - (d) Antenna structures;
 - (e) Ducts;
 - (f) Trenches;
 - (g) Space in equipment shelters and buildings;

PROVIDED, however, that the obligation to share and or the right to demand access to ducts shall only be applicable to operators licensed as Public Telecommunications Operators.

- 5.3 The Authority may from time to time add to the list of infrastructure that can be shared.
- 5.4 The Authority shall at all times reserve the right to examine incidence of infrastructure sharing to ensure consistency with the relevant licence(s) and reduce the risk of a lessening of competition.
- 5.5 Where the Authority, acting pursuant to sub-paragraph (5.4) above, determines that an infrastructure sharing arrangement is inconsistent with the relevant licence(s), and/or identifies a risk of lessening of competition as a consequence of such infrastructure sharing, it may require such specific arrangement to be discontinued.

6. Procedure for Negotiating Infrastructure Sharing

- 6.1 Any operator who owns or has control of a facility or infrastructure amenable to sharing may enter into negotiations with another operator who submits a request to share in the use of that facility or infrastructure.
- 6.2 All negotiations for infrastructure sharing must be done with the utmost good faith. In particular the owner of a facility or infrastructure 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.
- 6.3 A request for infrastructure sharing should be in writing. A party to whom such a request is made should within 30 days either accede to the request and grant access for sharing, or where access is denied, advance reasons in writing for the denial.
- 6.4 If on the expiry of the 30 days referred to in sub-paragraph (6.3), the Access Provider has not provided access to the Access Seeker without valid and justifiable reasons; then the Access Seeker shall be entitled to appeal to the Authority for intervention.
- 6.5 Except in emergency situations, the replacement or modification of a shared facility which affects existing Access Seekers, may only be undertaken upon due service of no less than 60 days notice on the other parties.
- 6.6 A party on whom notice is served may file a petition with the Authority against the removal or modification of a facility within 10 days of receiving such notice, and the notifying party shall file a reply thereto within 7 days.

7. Terms and Conditions for Infrastructure Sharing

- 7.1 An operator shall provide capacity to other operators on a “first-come, first served” basis, determined in accordance with the order in which the operator owning or having control over a facility, receives requests for infrastructure sharing.
- 7.2 Every operator shall reserve the right to decline an application for infrastructure sharing on grounds of;
 - (a) Insufficient capacity
 - (b) Safety, reliability, incompatibility of facilities and
 - (c) General engineering considerations.
- 7.3 The decision to refuse an application for infrastructure sharing shall be communicated in writing to the requesting operator specifying the reasons for such refusal.
- 7.4 Every infrastructure sharing 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 the Authority.
- 7.5 The terms on which infrastructure sharing is offered should be in compliance with the principles of neutrality, transparency, non-discrimination and fair competition.
- 7.6 Prices for infrastructure sharing should be non-discriminatory, reasonable, and based on the actual costs incurred by the owner of the facility.
- 7.7 Determination of the costs underlying prices should be transparent and neutral.

8. Limitation of Access

- 8.1 The licensee or access provider shall not be required to provide access where in the view of the Authority it is not reasonable to require the access provider to provide access including but not limited to circumstances where;
- (a) it is beyond the control of the access provider to provide infrastructure sharing and/or
 - (b) it is not reasonably practicable for the access provider to provide infrastructure sharing

PART III: GENERAL RULES FOR INFRASTRUCTURE SHARING

9. Reference Offer and Standard Price List

- 9.1 The Authority recognizes the right of operators to negotiate and agree on terms and conditions of Infrastructure sharing. The Authority however requires that such negotiation must be within the limits of an existing Reference Offer developed by each potential access provider.
- 9.2 Every access provider shall ensure that its Reference Offer is readily available to other operators with a view to promoting fairness in the negotiation process.
- 9.3 Access providers should in the process of developing the Reference Offer be responsive and work in close association with other operators, that is, prospective access seekers.
- 9.4 Parties involved in any negotiation for infrastructure sharing arrangement are at liberty to negotiate outside the Reference Offer provided that such negotiations are voluntary and non-discriminatory.
- 9.5 The Reference Offer should contain sufficient information on issues relevant to the access seeker for negotiation purposes as itemised in the First Schedule to these Guidelines.
- 9.6 Parties may request for other information which may be required in the process of negotiating for infrastructure sharing. Such information should be treated as confidential by the requesting party at all times.
- 9.7 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.
- 9.8 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.

- 9.9 Every access provider should develop a standard price list which shall provide guidance for determining the price for all infrastructure sharing arrangements with other operators.
- 9.10 Any standard price list developed should be reasonable, nondiscriminatory and cost-oriented.

10. Allocation of Capacity

- 10.1 There shall be no obligation on access providers to develop new infrastructure whenever its capacity has reached saturation level. However, access providers are expected to reasonably take into consideration the demand for infrastructure sharing when expanding their facilities and or installing or deploying new infrastructure amenable to sharing.
- 10.2 Where there is no capacity at the existing facilities to meet the needs of additional access seekers, the access provider should consider redevelopment as a means of increasing capacity at existing facilities.
- 10.3 The Authority will consider that capacity is available where the specific resource is not occupied nor reserved by the access provider.
- 10.4 In every situation where access is granted, the access provider should have the reserved right in the event of scarcity to demand that any allocated capacity be relinquished if such capacity has not been utilised within two (2) months of delivery of access. This right should be reserved with the intent to avoid the pre-emption of future capacity needs on the part of access seekers which would stifle the present needs of other access seekers.
- 10.5 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 merits by the access provider.

10.6 In every case, applications for access should be considered and granted by an access provider on a “first come – first serve” basis.

11. Refusal of Access

11.1 An access provider reserves the right to refuse an application for access in any of the following circumstance:

- (a) Where the access provider 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 health, safety and or reliability Standards

11.2 In all cases, the access provider should provide the access seeker with reasons for refusal in writing.

11.3 An operator who is refused access may refer such refusal to the Authority and the Authority shall be at liberty to inquire into the decision refusing access.

11.4 The Authority may upon due consideration:

- (a) Request that a decision refusing access should be reconsidered; and/or
- (b) Impose an infrastructure sharing arrangement on the parties.

11.5 Infrastructure sharing arrangements imposed by the Authority may include rules for apportioning the costs of facility sharing.

12. Reservation of Capacity

12.1 The right of an access provider 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 roll-out or expansion plans of new market entrants or other operators.

- 12.2 Where an access provider with significant investments exercises the option to reserve some rights in circumstances of limited capacity;
- (a) The reserve period shall not exceed two (2) years after which the right will cease from being operational.
 - (b) Not more than 50% of capacity shall be reserved.
- 12.3 Information and documentary evidence of the reservation and extent thereof should be held by the access provider and made available to access seekers on reasonable demand.

13. Re-Development/Re-Location

- 13.1 To ensure that capacity is increased and made available to access seekers, operators are encouraged to constantly pursue a policy of redevelopment and re-location of facilities.
- 13.2 Where for optimal utilisation of facilities an operator undertakes redevelopment or re-location (i.e. reconfiguration of network as a result of technological or business reasons), the cost of the redevelopment or re-location may be jointly assessed by the parties and shared with access seekers at a percentage mutually agreed by parties.
- 13.3 The re-development or re-location cost borne by an access seeker would form part of the price paid for the infrastructure sharing arrangement.
- 13.4 Parties to an infrastructure sharing arrangement should not undertake modifications with the sole aim of demanding the cost of such modification from access seekers.
- 13.5 As a condition precedent for an access provider to commence any redevelopment or re-location at any facility that will affect operators that share the facility with the access provider, notice thereof should first be given to all such operators. The notice period should be
- (a) 4 months in the case of re-development
 - (b) 9 months in the case of re-location

13.6 All licensed operators should in installing and or deploying new infrastructure amenable to sharing make provision for future request for sharing. In order to give effect to this requirement, any operator that installs new infrastructure amenable to sharing should share amongst others its development plans with such operators as can reasonably be expected to require access to such infrastructure in future.

13.7 The licensed operator that installs or plan to install infrastructure amenable to sharing as contemplated in (6), may require potential access seekers to express their requirements in writing and both the potential access provider and access seeker may, subject to mutual agreement, share the development costs of new the infrastructure amenable to sharing.

14. Efficient Utilisation of space

14.1 The Authority expects that parties involved in all infrastructure sharing arrangements will make efficient use of scarce space.

15. Standardisation

15.1 To facilitate improved co-ordination and compatibility of equipment, parties to an infrastructure sharing arrangement should endeavour to develop and employ standard procedures for provision and operations under the arrangement.

15.2 The standard procedures to be developed by parties under the arrangement will be in the areas of:

- (a) Maintenance
- (b) Fault clearance
- (c) Access at the facility
- (d) Emergency
- (e) Cleaning
- (f) Safety
- (g) Security

15.3 Parties are also to ensure that standardized equipment and unified techniques/technical interfaces are used for the infrastructure sharing where applicable.

15.4 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 IV: THE ROLE OF THE AUTHORITY

16. Dispute Resolution

- 16.1 The Authority has the power to intervene to resolve dispute at the request of either party and to impose facility/infrastructure sharing arrangements between operators after giving each and/or all of the concerned parties a hearing.
- 16.2 The power of the Authority 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.
- 16.3 The decision of the Authority, which shall be notified to the parties, may be published in such a manner as the Authority may deem appropriate.
- 16.4 In resolving disputes, the Authority will rely on its dispute resolution procedures, processes and or mechanisms as may be in existence from time to time.

17. Supportive Action

- 17.1 The Authority will from time to time arrange for the dissemination of pertinent information on the subject of infrastructure sharing.
- 17.2 The Authority will use its mandate under the Act to further the opportunities for infrastructure sharing, provided there is no risk of the lessening of competition. In particular, the Authority will take action to
- (a) Encourage redevelopment of existing facilities amenable to infrastructure sharing to increase their capacity.
 - (b) Advise local and other Authorities on the adoption of schemes which would encourage the sharing of infrastructure.
 - (c) Support the development of the capability among operators to deal with the issues of infrastructure sharing in a competent way.

FIRST SCHEDULE

CONTENTS OF REFERENCE OFFER

(a) General Sharing Issues

- (i) Access and refusal
- (ii) Separation
- (iii) Standardization
- (iv) Re-development/Re-location
- (v) Study and preparatory work
- (vi) Requirements of access seeker
- (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) Inspection and Maintenance
- (iv) Fault clearance
- (v) Access conditions of persons
- (vi) Removal of abandoned or unusable towers
- (vii) Signage

(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