



2008 GSR CONSULTATION INFRASTRUCTURE SHARING STRATEGIES TO PROMOTE AFFORDABLE ACCESS

INTRODUCTION

The Botswana Telecommunications Authority (BTA) has through various regulatory policies and instruments promoted infrastructure or facility sharing amongst telecom service providers. In a regime that espouses service neutrality and a fully liberalised market for provision of value added networks services, facility sharing is paramount in achieving ubiquity of infrastructure as a key step to universal service provision.

2. The BTA mandates facility sharing mainly through the telecom service provider licences which stipulate the principles to be observed when conducting facility sharing. The licences issued to operators require the licensees to offer other service providers access to essential facilities. Essential Facilities refers to any circuit, switch, tower, site duct or other facility owned or operated by the licensees, which other operators wish to use and for which there is no feasible technical or economic substitute or other satisfactory environmental solution. BTA's approach to the issues of facility sharing is to a large extent influenced by the historical background of the telecommunications market, where to a large extent the Government has invested heavily on the network operated by the incumbent operator, which is the Botswana Telecommunications Corporation (BTC). In this instance, it is deemed appropriate that other operators should not bear the burden of constructing parallel backbone network unless where they find it commercially viable. However, the BTA is ever vigilant to ensure that facility sharing is not used as a platform for collusion by operators. The dealing between operators must be at arm's length and solely for commercial considerations.

BENEFITS OF INFRASTRUCTURE SHARING

3. The BTA believes that facility sharing brings about the following benefits:

Efficient use of scarce resources

- 3.1 Scarce, expensive and non-replicable resources such as towers can be shared for installations that serve a similar purpose, which allows for optimal use and less waste.

Knowledge Sharing and Exchange of Ideas

- 3.2 Where facilities are shared, there is opportunity to exchange ideas on innovative ways of optimising facility/resource utilisation because the different players will bring in their experiences and knowledge with a view to extract the maximum benefit out of the minimal resources they have at their disposal.

Cost minimisation

- 3.3 Facility sharing promotes efficient scheduling and allocation of resources and consequently costs of operations are minimised.

Achievement of universal access and service provision

- 3.4 In instances where there is opportunity to share facilities, particularly core network or backhaul facilities, there is an incentive for service providers to participate in providing service to far-flung areas as they would not have to incur heavy CAPEX in building backhaul facilities. Hence universality of service will be easily achieved.

Affordability of service

- 3.5 Costs arising out of self provisioning of facilities, particularly where such costs may not be recovered within reasonable time could result in high and unaffordable prices, which would create a barrier in uptake of service. This situation may prevail where an un-savvy service provider chooses to self provide with expensive facilities instead of leasing from another service provider who has excess and unutilized facility available for lease. Leased facilities would naturally mean lower investment costs and affordable pricing for end users.

KEY PRINCIPLES

4. In an effort to encourage facility sharing, the BTA continually develops appropriate regulatory policies which are implementable through industry guidelines, regulations and licensing. Some of the key principles as

stated in the regulations and the Operator licences, which must be considered in facility sharing, are discussed below;

The right to Interconnect

- 4.1. All telecom service providers must have a right to interconnect their licensed systems to licensed systems of other telecom service providers. The right to interconnection is only on condition that the technical standards and specifications for interconnection have been complied with. Interconnection ensures universal communication between people connected in different and competing networks.

The right to request facility sharing of Essential Facilities

- 4.2. Any telecom service provider who is in need of Essential Facilities, may request for such facilities from any other telecom service providers, provided such facilities are available and the requesting party is able to comply with technical standards and specifications for access. The hosting party must clearly state the technical standards and specifications.

Transparency

- 4.3. It is important that the hosting telecom service provider must be transparent in dealing with other parties who are requesting for facility sharing. Transparency would entail upfront disclosure of the terms and condition for sharing facilities and clear and unambiguous service agreement with no hidden terms of agreement.

Non Discrimination

- 4.4. Whilst relationships between telecom service providers may not be the same, for the sake of market stability and fair competition, offering of shared facilities must not be biased towards any specific service provider. Discrimination is undesirable in that it may be used to suppress competition from other telecom service providers who are innovative and efficient.

Fairness and Reasonableness of terms of service

- 4.5. It is expected that main network operators should be seen to be fair and reasonable in their dealings with service providers requesting for facilities. The BTA would allow requesting parties legal recourse, should they view the terms of service offerings to be unfair and unreasonable.

Cost Orientation

- 4.6. Facility sharing, especially that of essential facilities must be cost oriented in order that market characteristics of prices are reflective of market conditions. Clear market characteristics promote objective and accurate assessment of viability of the market and new entrants are able to determine opportunities for market entry.

Promptness and Timeousness

- 4.7. Facility sharing should be offered on timely basis in order to promote quick rollout of services.

OPEN ACCESS TO INTERNATIONAL CAPACITY

5. The BTA believes that development of submarine cables will help close the digital gap in Africa's international communications infrastructure by connecting several countries to the global network of submarine cables. Botswana views this as increasing its own accessibility to high speed, high bandwidth connectivity, as well as affording its operators the opportunity to develop new products and services that would otherwise have not been possible due to bandwidth restrictions. For Africa to stimulate new business as well as handle increased international traffic, telecom regulators should support key improvements that need to be made in the interconnection between African countries and the rest of the world. To this end the BTA has further liberalised the telecommunications market and is issuing service and technology neutral licences to telecommunications operators in Botswana. The construction of such cables as EASSy could potentially contribute to the socio-economic development of Africa. Taking into consideration the development of backhaul transmission networks, which will be undertaken at nearly the same time with the construction of EASSy, the BTA finds that this will improve the connectivity particularly between inland African countries and reduce the cost of communication within and between them as well as the rest of the world.

6. Construction and ownership of submarine cables by African operators can significantly contribute to reducing payments to foreign communications operators, and reductions in connectivity costs, which can potentially lead to increases in profits and lowering tariffs and charges to end-users. It cannot be over-emphasised that submarine cables can also contribute to expanding intra-Africa trade by providing better communication in the region.

HARMONISED AND REGIONAL POLICY AND REGULATORY APPROACHES TO SHARING

7. The noble idea of constructing continental submarines would work if there are harmonised policy and regulatory frameworks in the region that are conducive to the development and operation of multi-country, cross-boundary terrestrial networks. This is the reason why Botswana Telecommunications Authority is actively participating in the on-going negotiations of developing and constructing the among others, the EASSy cable and Backhaul links. On another note the BTA supports the involvement of the Communications Regulatory Association of Southern Africa (CRASA) in the open access to international capacity mainly because CRASA could be used to fast track harmonisation of regulatory approaches needed to implement the infrastructure sharing initiatives.

8. Currently CRASA is drafting a Memorandum of Agreement that would be used to ensure harmonisation and co-ordination of the regulation and use of communication services within the Southern Africa Development Community (SADC). This is seen against the backdrop of uniformity and unity across the region, which will lead to a secure and consistent environment to attract investment needed for socio-economic development within the region. Through the MoU Member States would be requested to among others, note that frequency spectrum management plays a pivotal role in the regulation and use of communication services. Further to also note that due to the nature of radio wave propagation, it is unavoidable, if no proper co-ordination exists, for this to have cross-border impacts, some of which may have adverse commercial effects.

Botswana Telecommunication Authority

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