

SOUTHERN AFRICAN TRANSPORT AND COMMUNICATIONS (SATCC)

**POLICY
GUIDELINES
ON
TARIFFS
FOR
TELECOMMUNICATIONS
SERVICES**

(INITIATED BY TRASA AND APPROVED BY THE SATCC COMMITTEE OF MINISTERS)

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SECTION 1: INTRODUCTION

- 1.1 The SADC Protocol on Transport, Communications and Meteorology and the SADC Telecommunication Policies and Model Bill, the two fundamental documents that give direction on harmonization of telecommunication development in the region, formulate the requirements for the telecommunications sector to be reformed. Most governments in the region have already adequate pro-reform policies and have put into place legal framework to transform the telecommunication markets. Two such policies are promotion of access to new entrants and the realisation of universal services goal. To this end, tariffs are an enabling factor.
- 1.2 TRASA, taking cognizance of the requirement to harmonize policies and regulations in the region and noting the absence of up-to-date policies and regulations in this area, has determined that there is a need to have regional tariff guidelines. TRASA has, thereby, pursued the development of these tariff guidelines to assist national telecommunications regulatory authorities, operators and other stakeholders to align tariffs to the underlying costs of providing services.
- 1.3 The delivery of affordable, efficient and high quality services is the aim of regulations on telecommunications activities. In turn, the precondition of telecommunications operators (network/service providers), like any business enterprise, to satisfy regulatory requirements in the provision of telecommunications services is their ability to raise investment funds and operate business at a profit. To this end, tariffs are among the key factors to sell their services. Tariffs impact on the ability of any industry to expand service delivery and achieve economies of scale and profits, and are therefore classified as strategic factors.
- 1.4 In the telecommunications service industry, tariffs are used as decision bases of an operator to offer and sustain a service at a profit. Operators first and foremost use tariffs as an element to meet their profitability criteria. Tariffs are set differently under monopoly and competition market structures. In a monopoly market, operators operate on the principle of economies of scale and ought to reach a majority of the population while achieving reasonable profits to sustain development. In a liberalised telecommunications service market, tariffs are set to meet competition and achieve profits.
- 1.5 Tariffs are also strategic factors in the determination and implementation of a national universal service policy by national telecommunications regulatory authorities.

- 1.6 Tariffs, have to be closely monitored and, where necessary, regulated to ensure that a majority of the population is able to benefit from essential services.

- 1.7 Filing processes entail the provision of a set of relevant information concerning services, rates and charges including deposits, non-recurring charges, monthly charges as well as terms and conditions applicable to the provision of services. This includes rights and remedies available to consumers in the event of unauthorised charges or other disputes or claims over billing or provision of services. This information should facilitate the determination of a just tariffs level in relation to market demand.

SECTION 2: SCOPE OF TARIFFS REGULATION

- 2.1 The scope of tariff regulation covers all markets **without sufficient competition** in which public telecommunications systems and networks are used to offer services. These systems and networks may use any technology including fixed and mobile networks; circuit- and packet-switched; and OSI and IP to offer telecommunications services. These services can fall in the category of interactive, messaging, retrieval and distributive and offered in the form of voice, text, data and video or multimedia, which is a combination thereof.
- 2.2 However, regulation has to be implemented differently and with different intensity in each type of market and each sub-market so as to encourage both demand and supply. According to the SADC Telecommunications Policies, the criteria for choosing the principle of tariffs regulation should be first to choose a high telephone density, second to encourage the introduction of advanced information and communications services, and finally to provide a world-class quality of service. For instance:
- a) In a monopoly market, regulation is a means of introducing a proxy to competition. Accordingly, where a monopoly situation exists, regulatory principles are applied to moderate tariffs so as to stimulate demand, thereby increasing service density and improving quality through new technologies employed in expansion of the network.
 - b) Where there is sufficient competition, market forces in theory produce a uniform market price among suppliers. In practice, dominant operators may cause a distortion of both market conditions and price. Accordingly, regulatory principles have to ensure, on the one hand, the existence of a level playing field and, on the other hand, that there is no collusion among suppliers. In return, suppliers are encouraged to generate innovative services causing the delivery of advanced services and high quality of service.
- 2.3 Although networks are built differently using different technologies, like wire-line and wireless; fixed and mobile; circuit- and packet-switch; OSI and IP, the services on offer are similar like voice, text, data and video. In actual fact, customers have a choice among networks and, therefore, suppliers to use any of the desirable service/s. For instance, a user may choose to subscribe with a mobile operator instead of a fixed operator. Accordingly, different networks, providing similar services in the form of voice, text, data and video, are virtually in competition with each other.

2.4 Each of these networks constitutes a market and each market may be categorised by type. The national telecommunications regulatory authority has to distinguish between different types of market for regulating the provision of public telecommunications services. In this regard, the regulator faces two types of market structure. A first type operates under monopoly conditions and a second, where competition prevails. The second type is further segmented into specialised sub-markets depending on networks like mobile cellular, paging and Internet.

2.5 In a monopoly market structure, there is a sole supplier of a service for which there is no substitute. As a result, the relevant market demand curve exhibits a degree of price elasticity where a higher quantity of the same service can be supplied only with reduction of prices. The monopolist takes advantage of this price-demand relationship to set prices above costs with the sole objective of achieving maximum profits. Price is set at a level that may not necessarily meet demand fully. This price cannot be compared to any other price since there is no market reference for an exclusive service. In this way, monopolist exercises total control on market demand.

For example, applied to the PSTN, an operator with full exclusivity sets prices at a level that will allow generated revenue to be above the costs of meeting demand that is created at the set price. In this framework, the operator will meet only the portion of demand that the ensuing revenue-earning potential allows delivering, implying that total demand is never met.

2.6 In a competitive market, there are a number of suppliers. Demand curve is ideally infinitely elastic entailing that the market fixes price and, at that price, suppliers supply any quantity demanded by the market. In this case, there is a market price that acts as reference against which individual supplier will compare their price. As a result, suppliers in a competitive market deliver services as long as their incremental revenue exceeds their incremental costs. In this regard, SADC Telecommunication Policies prescribe that market forces apply in a competitive market and that there is no one dominant operator. In this case competition is working effectively and market forces determine tariffs.

For example, in each non-PSTN market, market forces act in a distinctive manner to determine tariffs. Based on this reference market tariffs, each supplier adjusts their price so as to align supply capacity to capture demand. This situation can be observed in mobile cellular and Internet services markets. As a result, total demand is met.

SECTION 3: OBJECTIVE OF TARIFFS REGULATION

The objective of tariffs regulation is to ensure that tariffs of telecommunications services are cost-based in any kind of market in SADC as if those tariffs were determined by the market forces in a perfectly competitive market. By encouraging movement towards competitive pricing, the regulation also aims at the provision of services at affordable tariffs while allowing the operators to generate reasonable returns.

3.1 Cost based tariffs

Cost-based tariffs imply that telecommunication services charges have to be aligned to the underlying costs of providing those services, especially in those markets where there are monopolies. This is to encourage operators to charge affordable prices effectively putting a ceiling on profitability.

3.2 Competitive pricing

In competitive markets, prices are set by referring to what customers are willing to pay for the products or services or by referring to prices being charged by other suppliers in the market. By achieving affordable tariff levels the welfare of citizens is improved thereby enhancing equity and equality of access to information.

3.3 Expansion of Network Provision (ENP) principle

Tariffs determine level of demand and supply of services. High tariffs constrain demand and low tariffs limit investment in network provision. In endorsing tariffs, national telecommunications regulatory authorities should be guided by Expansion of Network Provision principle. It entails that tariffs are set at a level that attracts the interest of both customers and operators. As a result, two requirements are fulfilled. The first is a requirement on affordability, relating the price of services to the purchasing power of users, to allow the widespread diffusion of services. The second is the requirement on profitability, relating returns of an operator to investment made, to attract investors in the industry for extending the network to more users.

SECTION 4: KEY PRINCIPLES IN SETTING TARIFFS

An operator is required to ensure that the following key principles are taken into consideration when setting tariffs:

4.1 Cost-based

The tariffs offered to the public should reflect the underlying costs of providing the services.

4.2 Unbundling

The tariffs offered by the operators have to be sufficiently unbundled, so that the customers do not have to pay for facilities which are not part of the service package.

4.3 Transparency

To discourage anti-competitive practices, operators should publish details of tariffs and fees and any other terms and conditions on which its services are provided by:

- (a) Making them available to the public, and
- (b) Sending the appropriate parts thereof to any person who may request same.

4.4 Non-discrimination

An operator should not offer different conditions to different customers for the same service provided. An operator, therefore, has to offer the customers the same tariff for identical services. An operator may, however, give discounts to customers based on volumes.

4.5 Restriction against changes to tariffs

No operator should offer tariff rates or charges that are below the true cost [in accordance with accepted guidelines for accounting principles established for the industry] for providing such a service .

4.6 Discount schemes

The Authority should be informed of all discount schemes available to customers so as to ensure that they are transparent and non-discriminatory.

4.7 Price regulation mechanism

4.7.1 In the transformation from a monopoly to competition, the price structure of the incumbent fixed operator will inevitably change. As the degree of competition increases to a situation where perfect competition prevails, prices will tend to align on market-determined prices. Until such a point is reached, price regulation is required.

4.7.2 A national telecommunications regulatory authority should enforce tariff regulation schemes with a view to fulfil the ENP principle. These schemes should be enforced with the aim of achieving cost-based tariffs; the essential objective set for developing tariffs regulations. In pursuit of this objective, tariffs regulation should contribute to the realization of high telephone density, promoting the diffusion of information services and providing an adequate quality of service.

4.7.3 To this end, Price Cap and Rate of Return, among others, are the proposed schemes. As competition develops, regulations have to be substituted by market forces and regulations should ensure the existence of a level playing field.

4.8 Rate of return

4.8.1 The Rate of Return method provides freedom to enterprises to adjust their prices according to their costs. In a competitive market, incentives to cut cost are provided by market forces. Therefore, regulations do not have to impose any means to encourage productivity gain.

4.8.2 Rate of return is based on a notion of targeted profits and the expected profits are equal to a fair rate of return on the value of capital invested. To this end, the rate of return is set above the cost of capital.

4.8.3 If profits fall below this level, the operator can request approval for a new set of prices. The operator negotiates with the regulator on the basis of the rate of return to be applied above costs to determine new prices. However, with growing competition, it can be

expected that regulatory intervention will be a minimum. The prevailing competitive environment provides for price control, as it can be observed in the mobile cellular and Internet services markets.

4.9 Price cap

- 4.9.1 Price cap sets a limit on price of any service and, therefore, acts as a proxy to market forces. It is designed to encourage an enterprise to undertake a productivity programme to reduce its costs over a period of time. It is suitable in a monopoly market and in a competitive market with a dominant operator. Price Cap is based on the notion that, for a monopoly or dominant operator in a competitive market, prices should increase at a rate equal to the general consumer price index (CPI) less an allowance (X) for the expected productivity gain of the operator.
- 4.9.2 Price cap is applicable to a basket of services and these services may be direct exchange line, leased lines, local calls, domestic long distance calls, overseas long distance calls, pay phones and any other service that forms part of the core business. In this basket, each service may not have equal weight depending on importance and market conditions.
- 4.9.3 The regulator sets a maximum allowed price for an operator, according to a $CPI - X$ formula, to reflect changes in annual consumer price inflation less a productivity factor. The price cap formula is $CPI - X$ where:
 - 4.9.3.1 CPI is Consumer Price Index that indicates the national cost of living.
 - 4.9.3.2 X is the productivity improvement factor and refers to a level of efficiency gain that the regulator considers achievable by an enterprise.
 - 4.9.3.3 Just like CPI, X is determined for a selected set of services grouped in a basket. It implies that prices of services, in a basket, should not increase more than the annual percentage change of $CPI - X$.
 - 4.9.3.4 The CPI is provided by national statistics bureau whereas X limit has to be set by the national telecommunications regulatory authority and reviewed periodically. X has to be determined through a statistical process. In this case, X may be derived as

a Service Price Index (SPI) from a basket of services. The X-factor should be determined based on the change in, for example, operating costs per line of the operator but also based on profitability, return on capital and the level of tariffs in international/regional comparisons.

4.9.3.5 The basis is that, in the long run, technology change and modernization of working processes cause productivity improvement. Based on demand for a class of services, grouped in a given basket and the desirable price limit resulting from technology-induced productivity, the productivity improvement factor X can be determined, leading to price reduction. For different baskets, different X may be determined. Similarly, the X-factor may differ between the different customer categories and will naturally differ depending on country and operator.

4.9.3.6 For instance, rebalancing of tariffs implies that some tariffs will be decreased while others will be increased. In telephone segment, for example, most likely local call charges will be higher and long distance and international call charges will be lower. On average, residential customers account for a higher proportion of local call charges than do business customers. The effects on the bills are therefore likely to be adverse to residential customers, than to business customers. In order to safeguard the interest of the residential customers (that is, the private consumers) separate price-cap baskets can be introduced for the residential category and the business category respectively. The services thus included can be the most important fixed telephone services, normally connection and rental charges and local, national and international call charges.

4.9.3.7 In determining X in the price cap, a regulatory authority should consult and agree with operators on the method being adopted and on the services to be included in the basket. To reflect market conditions for specific services, especially essential services falling under the sole responsibility of an incumbent operator, individual services may be maintained outside the basket and a sub-cap can be established. In this sub-cap, the X value may be different.

Furthermore, it should ideally agree with operators on a program of cost reduction and on improvement of their capacity to generate expanding services at reduced cost. In so doing, the regulatory authority should agree with operators on a progress review interval. In no case should the interval between two reviews exceed three (3) years.

4.9.3.8 The determination of X and, therefore, the success of implementing a price-cap mechanism is dependent on the availability of accurate cost and revenue data. It is also critical that the regulator should possess sufficient resources and develop processes adequate to produce data and enforce price-cap.

4.9.3.9 The regulatory authority should follow up on the development of the mobile tariffs on a regular basis. In the evaluation of mobile tariff proposals, the regulatory authority should be satisfied that the mobile tariffs are reasonable and fair.

4.10 Financial reporting and accounting separation

Tariffs filings should be accompanied by all accounting and costing information as the Regulator may require. The Regulator should prescribe reasonable accounting procedures for the costs of operations, which procedures should be followed and implemented by all operators.

4.10.1 Financial reporting should contain proper accounting records of an enterprise as a whole in accordance with method/s prescribed by the Regulator. These records should maintain separate accounts with cost allocation made on the basis of different business/cost centres, networks and services. The primary requirement is that the operators produce cost, revenue and traffic information that provide accurate information on the need for rebalancing and the effects of different rebalancing options on customer bills.

4.10.2 The objective of accounting separation is to provide an analysis of information derived from the financial report to reflect as closely as possible the performance of parts of an enterprise as if they were

operated as separate businesses. It gives a good picture of the networks and services that are provided and it provides a link between costs and tariffs. It helps to keep track on money flows and traces cross-subsidisation. It therefore facilitates tariffs re-balancing among various components of the enterprise. Furthermore, it identifies the cost breakdown of unbundled elements of networks, providing the possibility to determine price to the extent of details.

4.10.3 As part of the financial reporting mechanism, revenue and costs data have to be submitted. They encapsulate implied tariffs of services on offer that are derived on the basis of the cost of the service. Costing is a technique and process for determining costs for which cost data are fundamental elements. A number of costing principles is available and used invariably in diverse industries.

4.11 Filing and review of tariffs

4.11.1 An operator should submit proposals in writing to the Regulator of the tariffs, rates and charges it intends to apply for the use of its system and facilities.

4.11.2 Tariffs should contain all relevant information concerning rates, charges for services including deposits, non-recurring charges, monthly charges, as well as terms and conditions applicable to the provision of services including rights and remedies available to consumers in the event of unauthorised charges or other disputes or claims over billing and provision of services.

4.11.3 Tariffs proposed by the Operator should be effective thirty business days after filing with the Regulator unless within the thirty-day period the Regulator issues a counter proposal or notice of modification to the Operator.

4.11.4 No operator shall increase rates or charges for services offered which exceed tariffs approved by the Regulator

4.11.5 Any failure to make a counter proposal or to approve the proposed tariffs should entitle the Operator making the proposal to impose the tariffs proposed and the Regulator should be deemed to have approved the proposed tariffs.

4.11.6 Where the Regulator and the operator fail to reach an agreement on the proposed tariffs and counter-proposal, the operator may appeal under an appeal system existing in the country.

4.12 Accuracy of record of tariffs

Every operator should keep an accurate record of its tariffs, which should be filed with the Regulator.

DEFINITIONS

1. Customer(s) : persons who receive and pay for telecommunication service over a period of time under an agreement with or pursuant to terms and conditions established by the service provider with approval of the Regulatory Authority.
2. Harmonization : means the dynamic process of establishing mutually complementary policies, legislation, rules, standards, practices or systems between member states on the basis of agreed minimum requirements
3. Incumbent Operator: the existing operator in a market which is being opened to competition.
4. Interconnection : the physical and logical linking of telecommunication networks used by the same or different operators in order to allow users of one operator to communicate with users of the same or another operator or to access services provided by another operator.
5. Operator : a person that operates telecommunication facilities.
6. Period of Exclusivity: a period of monopoly whereby operator(s) is given conditions to provide certain services.
7. Regulatory Authority: an agency empowered to regulate and monitor the activities of telecommunications operators or any other into communications providers in the public interest.
8. Subscriber : any person who subscribes to the service or any part thereof, provided by the operator.
9. Tariffs : any charges raised by an Operator for telecommunication service(s).
10. Tariffs Rebalancing : the process of aligning the tariffs to the underlying costs of providing the service(s).
11. Telecommunication(s) Service(s) : any service(s) provided by transmission of information by wire, waves, optical, media or other electromagnetic systems, between or among points of the user's choice.

12. Value Added Services :

1. The manipulation of the format, content code, protocol, or other aspect of information transmitted via telecommunications by a customer.
2. The provision of information to a customer, including the restructuring of information transmitted by a customer or
3. The offering of stored information for interaction by a customer.

TELECOMMUNICATIONS COMMITTEE

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