BOTSWANA TELECOMMUNICATIONS AUTHORITY (BTA)

BTA RULING NO. 2 OF 2003

[Pursuant to Section 47 as read with Section 19 of the Telecommunications Act, 1996 (No. 15 of 1996)]

RULING ON INTERCONNECTION CHARGES DISPUTE

BETWEEN:

MASCOM WIRELESS (PTY) LIMITED

AND

ORANGE BOTSWANA (PTY) LIMITED

24 September 2003

PER C.M. LEKAUKAU:

The disputants **in casu**, Mascom Wireless (Pty) Ltd and Orange Botswana (Pty) Ltd hereinafter referred to as Mascom and Orange respectively, are the only two mobile cellular licensees within our jurisdiction. Orange's previous name and stead was Vista Cellular (Pty) Ltd and any reference to "Orange" in this ruling should be understood to refer to "Vista Cellular" as well as predecessors in title. Before Mascom unilaterally referred this matter to the Botswana Telecommunications Authority, hereinafter referred to as the BTA or the Authority, the parties negotiated **inter se** on the review and or modification of their interconnection charging methodology, but could not agree thereto and as such Mascom triggered the present proceedings.

2. I will briefly highlight the key stages of the proceedings and how they have developed. Mascom declared a dispute and subsequently filed written submissions with the BTA on 12 December 2002 and Orange, in rebuttal to Mascom's submissions, also filed written submissions with the Authority on 20 March 2003. Mascom submitted its written reply to Orange's submission on 23 April 2003. The parties were further afforded an opportunity to make oral submissions (hereinafter referred to as the Oral Hearings). The first of these Oral Hearings were in the absence of each other on 9 July 2003, but on the same day and then a final one on 10 July 2003 in each other's presence (hereinafter referred to as the Joint Oral Hearing).

3. It is common cause that there is direct and physical interconnection between the parties' respective networks since February 1999. It is also not in dispute that there is a written "Interconnection Agreement" hereinafter referred to as the "Agreement," purportedly between the parties, and which only has the signature of Mascom, and not Orange. It is the validity and effect of this "Agreement" which shall be of prime and critical relevance to the present determination.

4. Before resolving the validity and effect of the said "Agreement," it is prudent for me to consider an issue raised by Orange, which in my view is a point **in limine**, though not presented as such by Orange, which pertains to the jurisdiction of the BTA over this matter. The essence of Orange's submission is that the BTA does not have jurisdiction on this matter because the matter was unilaterally referred to the BTA by Mascom and not by both parties as contemplated by section 47(7)(b) of the Telecommunications Act, 1996 (No. 15 of 1996), hereinafter referred to as "the Act". According to Orange, that section becomes applicable when both parties and not just one party refer the matter to the BTA for determination. Once I uphold the said argument by Orange, consideration of the main issue of the nature, form and content of the interconnection arrangement shall be rendered otiose and thereby bringing the matter to finality.

BTA's JURISDICTION ON THIS MATTER

5. According to Orange, it is only section 47 of the Act, which deals with interconnection issues including disputes arising therefrom and not any other provision of the Act. Orange is arguing that in terms of section 47(7) (b), one party cannot refer the matter to the BTA for determination and that it should be occasioned by all the parties. Section 47 (7) (b) cited **supra** provides as follows:

> "(7) If a dispute arises relating to
> (a) ……
> (b) the reasonableness of the interconnection charge, the parties (my underlining) shall refer the dispute to the Authority which shall have the power to decide on the matter and set down such terms and conditions for the interconnection as seem fair and reasonable to the Authority."

6. Orange is arguing that BTA's powers in relation to interconnection disputes are specifically identified, delimited and delineated under section 47(7) thereof, and that BTA cannot use powers from another section of the Act to change or broaden its powers granted under the aforementioned section. On the other hand, Mascom in reply thereto stated that the Authority has jurisdiction in this matter and that it can issue a ruling based upon the

general powers granted under sections 19 and 55 respectively of the Act. Sections 19 and 55 thereof provide as follows:

> "(19) The Authority shall settle any dispute that may arise between licensees, between licensees and other service providers, and between licensees and members of the general public.
>
> (55)(1). It shall be the duty of the Authority to consider any complaint which –
>
> a) relates to telecommunication services provided or telecommunication equipment supplied in Botswana; or
>
> b) is the subject of a representation (other than one appearing to the Authority to be frivolous) made to the Authority by or on behalf of a person appearing, to the Authority, to have an interest in the matter."

7. The strength or otherwise of Orange's submission with regard to unilateral referral of a dispute to the BTA is found or contained in the use of the word "parties" which is in plural under section 47(7) of the Act. According to Orange, BTA can only have jurisdiction if and only if both parties have referred the matter to the Authority and not just one party as the guiding word thereof is "parties." In my ruling, this argument is singularly unhelpful and does not advance the proponents' case any further. I am fortified in my conclusion by

section 44(3) (a) and (b) of the Interpretation Act, Cap 01:04, Laws of Botswana, which is self explanatory and postulates as follows:

> "3. In an enactment -
>
> a) words in the singular include the plural; and
>
> b) words in the plural include the singular."

Judicial pronouncement also recognise and embrace this form of interpretation and in this connection, the case of **Annicola Investment Ltd v Minister Housing and Local Government (1968)** 1 QB 631 is cited thereof which postulates that in an enactment, unless the contrary intention appears, words in the singular shall include the plural and words in the plural shall include the singular.

8. In the final analysis, Orange's preliminary point is therefore dismissed and as such I hereby hold that the BTA has jurisdiction to entertain this matter in terms of section 47(7) of the Act. Even if I were to hold otherwise, section 19 and 55 of the Act would still give the BTA mandate and authority to resolve this dispute, bearing in mind the panoply of powers and duties granted to the BTA by the Act, especially section 19 thereof. Any interpretation, which holds Orange's submission would render the regulatory process ineffective since any party could hold the other party at ransom by not agreeing to make a joint declaration of dispute and the Authority, would be precluded from determining the stalemate. This would be contrary to both the spirit and letter of the Act and would be nugatory to the main gravamen of the Act, which is to introduce competition among

operators and the settlement of any arising dispute therefrom. I shall now proceed to deal with the substantive issues raised by the parties.

SUBSTANTIVE ISSUES

9. At this stage, I will summarise the case for both parties to the present dispute. According to Mascom, what it is seeking against Orange is payment for services rendered, that is to say, termination of traffic from Orange. Furthermore, Mascom is arguing that its request is consistent with section 47(6) of the Act, which acknowledges a fair and reasonable charge, cost or payment for interconnection. Mascom submitted that the unsigned "Agreement" was merely a draft and that it is not applicable to the present dispute. It further argued that even if the said "Agreement" was found to be applicable, it cannot be invoked in this matter because of non-compliance with a **conditio sine qua non** for its validity, which is prior written approval of the "Agreement" by the BTA.

10. Mascom, however, recognises the existence of a tacit contract or agreement with Orange based on the physical interconnection of two networks, but that the formula for compensation between themselves could not be what is termed in telecommunications parlance as "Sender Keeps All" otherwise known as "SKA" or "Bill and keep." Mascom has not proffered what the basis or criteria for financial compensation between themselves was at the time of the physical interconnection in 1999, but is now seeking a fair and reasonable compensation as required by section 47(6) of the Act.

Furthermore, Mascom advocates for the application of the principles of fairness, symmetry and non-discrimination when determining the applicable interconnection charges and that Orange should pay for services rendered.

11. Orange, in its submissions acknowledged the existence of a contract between the parties since the time of the physical inter-linking. Furthermore, Orange submitted that the "Sender Keeps All" arrangement was applicable at the material time and up to now taking into account the non-existence of reliable traffic data between themselves. With regard to the draft "Agreement", Orange is arguing that it formed the basis of their agreement with Mascom and further argued that Mascom should be estopped from denying the validity and existence or effect of the said "Agreement." It was further stated that the conduct of the parties since the physical interconnection was consistent with the terms of the said "Agreement", for instance, the "Sender Keeps All" arrangement.

12. According to Orange, the fact that there was disequilibrium of traffic between operators did not **ipso facto** mean that the "Sender Keeps All" arrangement could not be invoked. Orange argued that in certain market conditions, such arrangement or compensation method might be invoked, such as in France. Orange further argued that there has been a tacit relocation of the draft "Agreement" after it elapsed. It also submitted that the BTA should not invoke any of the principles enunciated in the previous BTA Ruling No.1 of 2003 (Ruling No. 1 of 2003) between Botswana Telecommunications

Corporation (BTC) and Mascom Wireless (Pty) Ltd to the present dispute because it was not granted a hearing in that dispute.

13. In rebuttal, Mascom stated that it cannot be estopped from denying the existence and validity of the "Agreement" because it never altered its position to its detriment, which is a requirement of the doctrine of estoppel. Mascom further argued that there was no tacit relocation of the "Agreement" since there was no agreement **ab initio.** In a nutshell, that concludes the arguments of the two parties herein; and derived therefrom, I hereby make the following findings of fact:

13.1 that there has been a direct physical inter-linking of the two cellular operators' networks since February 1999;

13.2 that since their operations and interconnection, there has never been any form of monetary compensation for terminating each others calls into their respective networks; and

13.3 that an "Interconnection Agreement" was drafted between the parties immediately after commencing interconnection operations which only bears Mascom's signature.

14. Armed with these three uncontroverted facts, the germane issue that arises for determination is the nature, form and content of the interconnection arrangement between the parties.

Nature, Form and Content of Interconnection Arrangement

15. The relevant indicator that is substantially helpful to identify the nature, form and content of the interconnection arrangement between the two parties is their conduct, either implied or expressed. Such material and relevant conduct shall be assessed **in extenso** from the initial phase of their operations in 1998 up to the present circumstances. In terms of the licence conditions of the parties, it is mandatory for each of them to interconnect with other operators. The aforementioned licence condition is also consistent with section 47 of the Act, which deals with interconnection of network operators.

16. The first item of conduct to be assessed is the actual physical interconnection of the two networks in question. In my view, this conduct evinces a form of interconnection agreement between the parties. It is a generally accepted norm or practice in the telecommunications fraternity that in most if not all of interconnection arrangement, there is a concomitant form of monetary compensation between the interconnecting network operators; bearing in mind that interconnection is a form of a commercial arrangement which entails the rendering of services in the form of termination of traffic into ones network and which ordinarily has cost implications. On the basis of the aforegoing, I therefore take quasi-judicial notice of this generally accepted practice.

17. Applying this generally accepted practice to the present case, what immediately comes to fore is the criteria or form of compensation that is applicable between the parties. In resolving this issue, I bear in mind that the parties, since commencement of the interconnection operations and up to now have never compensated each other for terminating calls on their respective networks. In my ruling this is a clear and crisp "Sender Keeps All" arrangement and as I do hereby hold.

18. A "Sender keeps All" arrangement arises where there are no interconnection charges payable between interconnecting operators for termination of each others' traffic and this arrangement is mostly prevalent between mobile operators because of the similarity of the networks, and also due to traffic balance between the interconnecting networks, or lack thereof of reliable statistics between two newly licensed network operators. It is not intended that such criteria is exhaustive in all respect. Both parties herein are cellular operators and at the time of interconnection, they did not have any reliable statistics with regard to the traffic pattern and therefore a "Sender Keeps All" arrangement was more than appropriate in the circumstances.

19. The next conduct of the parties to be assessed pertains to the "Agreement" which was only signed by Mascom and not Orange. In that "Agreement" in terms of clause 3 thereof, it is stated as follows:

"3.1 For an initial period, each party will retain the full receipts in respect of calls made to the other party.

3.2 The length of this period will be dependent on the two parties having reliable statistics as regards the directional flows of traffic between the two networks. After this period, if the parties conclude that there is a significant desequilibrium (sic) of traffic flows between the two networks, they agree to review the situation and introduce any modification as regards the accounting methodology, in terms of compensating the party affected negatively."

20. The aforementioned clauses interpreted jointly and severally reflect a "Sender Keeps All" arrangement, taking on board the fact that since their operations, the operators in question never compensated each other for terminating calls in their respective networks. The only irresistible inference, which excludes all other possible inferences, is that the "Agreement" in question, which was only signed by Mascom, formed the basis or cornerstone of the interconnection arrangement between the two mobile operators. The conduct of the two parties is consistent with the material terms and conditions of the "Agreement" in question; more particularly the financial compensation arrangement of a "Sender Keeps All."

21. Mascom, in its endeavor to show the irrelevance of the said "Agreement" argued that it was invalid because of non-fulfillment of a

condition precedent to its validity, being its written prior approval by the BTA. In this connection, refer to clause 10 of the said "Agreement." As I have stated earlier, this "Agreement" formed the foundational framework upon which the operators interconnected. The BTA on the 19 March 1999 dispatched two similarly worded letters to parties herein, the contents of which **inter alia**, was to highlight the non-compliance of the parties in question with regard to the requirement of concluding a written interconnection agreement between themselves. The letters to Mascom and Orange are referenced BTA/6/1/2 II (62) and BTA/6/1/3/1 (97) respectively. Notwithstanding this non-compliance, the BTA permitted the two to continue with their operations for reasons of business efficacy.

22. The BTA condoned or granted them indulgence, which in my view translated into an implied acceptance of the status quo of the existing and prevailing interconnection framework which recognised an "SKA" arrangement between the operators; which was based on the "Agreement" as drafted. The parties gave the BTA an impression that the interconnection agreement between them was in place. In the premises, I therefore recognise the relevance of the foundational framework, that is to say the "Agreement" of the two parties, notwithstanding the lack of prior written acceptance by the BTA but the presence and existence of an implied acceptance by the BTA. In any event, an act done contrary to a certain procedural requirement is not always **ipso jure** null and void like in the the instant matter. Mascom is therefore estopped from refuting the existence and relevance of the "Agreement" alluded to above.

23. I therefore make a finding that a tacit interconnection agreement existed between the operators in question, based on the unequivocal conduct of the parties, which excludes any other possible inferences, on a preponderance of probabilities. The material terms of the tacit agreement in question are twofold namely:

23.1 that the parties directly and physically inter linked their networks; and

23.2 that "Sender Keeps All" arrangement has been the preferred form of charging methodology since their operations and up to now.

Tacit Relocation

24. According to Orange, because the "Agreement" which was only signed by Mascom contemplated a 12-month period of existence and validity (before renewal), once the 12 months thereof elapsed, the same "Agreement" was tacitly relocated. Taking into account that I have earlier recognised and acknowledged the relevance of the said "Agreement," as forming the foundational framework of the present interconnection arrangement between the parties, I equally embrace that the "Agreement" may have been tacitly relocated assuming that it lapsed, taking into account that there has been no clear and compelling proof to the contrary. The reasoning stated above is derived from the fact that the same terms and conditions of the initial

tacit interconnection agreement are the same hitherto and this presupposes a tacit relocation. For an authority dealing with tacit relocation, the case of **Doll House Refreshments v O'shea & others** 1957 (1) SA 345 is cited thereof, which states that if an agreement lapses by effuxion of time and it is not expressly renewed and yet the parties conduct themselves as if the contract has not elapsed, then it is implied that a new agreement with the same terms and conditions is in existence.

25. Assuming I may be wrong in my finding that there was tacit relocation, which is not conceded, the same conclusion and or result is equally reached. The same conclusion thereof is that the parties in the present matter operated under the same terms and conditions since the inception of the interconnection. Whether the initial agreement has been tacitly relocated after it lapsed or not, does not change the end result thereof or help Mascom's case. The same terms and conditions namely, physical interconnection and a "Sender Keeps All" arrangement are still applicable up to now, whether or not the initial agreement was tacitly relocated. The next issue to be considered pertains to Orange's argument that the BTA cannot use the principles enunciated in its previous interconnection Ruling No. 1 of 2003 between Mascom Wireless and Botswana Telecommunications Corporation (BTC) to the present matter.

BTA's Use of Precedents

26. According to Orange, the BTA cannot invoke or rely on any of the principles enunciated in Ruling No.1 of 2003 to resolve the current dispute since it was not a party to the hearing in that previous determination despite its request to be joined therein. I maintain that the said determination or case was between Mascom and BTC only. The essence of the dispute in that previous ruling was a commercial interconnection agreement between those two parties only. Orange was not a party to the said interconnection agreement, which was submitted to the BTA for review, and as such the BTA was correct to refuse to join Orange in that matter. The determination between Mascom and BTC was therefore lawfully and properly reached and as such any principles enunciated therein may be invoked **mutatis mutandis** to the dispute at hand on the basis of the well-founded principle of **stare decisis**.

27. A sector regulator such as the BTA must always keep an open mind as it considers each matter that is brought before it. Although it is not strictly bound by the principle of **stare decisis**, it may from time to time change its views on how issues should be examined, taking into account the relevant prevailing circumstances at that material time. However, a regulator will usually make decisions in a manner that is consistent with its previous rulings. That said, the BTA may choose to adopt similar principles or similar rulings if the BTA believes that it would be fair and reasonable to do so. In this case the BTA will adopt a number of principles and rulings that are similar to

those adopted in the earlier ruling, as is evident below, and as such Orange's argument that the BTA should not invoke any of the principles enunciated in its previous **locus classicus** on interconnection charges is therefore unsuccessful.

INTERCONNECTION PRICING

28. Section 47 (6) of the Act provides the essential criteria for the pricing of interconnection and at this juncture I can do no better than quote, lock, stock and barrel, the said provision which states thus:

> "(b) the interconnection charge or cost of using such designated network, system, or equipment shall be as agreed between the licensee and the operator of the designated network, system, or equipment; and that charge or cost shall be fair and reasonable in relation to the service to be provided by the licensee, and to the additional costs that may accrue to the operator of the designed network, system, or equipment as a result of the connection."

29. A scrutiny of this provision shows that the interconnection charge should be mutually agreed and be fair and reasonable with respect to the service to be provided and also to any additional costs that may accrue to the operators.

30. Section 47 (7) (b) of the Act as cited in paragraph 5 above gives the BTA mandate and discretion to determine what would equate to a fair and reasonable interconnection charge. Such discretion, as it is always the case, shall be quasi – judiciously exercised herein. What amounts to a fair and reasonable interconnection charge depends upon a host of several considerations, such as, the parties' market power, subscriber base, traffic volumes, cost structure, level of competition, transparency, rate of return on investment, market structure, telecommunications policy objectives and interconnection pricing regimes. It is not intended that this list is exhaustive. A brief excursion of different but widely accepted and pursued interconnection regimes or principles shall now be undertaken in order to come up with a fair and reasonable interconnection charge.

INTERCONNECTION REGIMES/PRINCIPLES

31. There are generally three principal approaches to the pricing of interconnection used around the world, that is, Revenue Sharing Arrangements, Sender Keeps All (SKA) and the Interconnection Usage Charges (IUC). All of these principal approaches may be used in different market segments depending on the level of sector competition and concentration. For instance, prior to my Ruling No. 1 of 2003, Revenue Sharing Arrangement was applied in Botswana for fixed to mobile interconnection and now the existing regime is the

Interconnection Usage Charge as propounded in that ruling. I will briefly address these interconnection pricing principles.

Revenue Sharing Arrangement

32. The Revenue Sharing Arrangements are usually a result of negotiations between operators and are generally not cost-oriented, as they rather tend to reflect the bargaining power of the respective operators. Operators often focus on the relative ratio of revenues being assigned to each operator, rather than the level of the revenue amounts and the underlying efficient costs to provide interconnection services, hence leading to economic inefficiency. This type of arrangement becomes impractical and exhibits a number of policy disadvantages once competition is introduced in the market. Consumers are usually the most hit as this arrangement stifles vibrant consumer tariff competition because interconnecting operators would have no desire to support competitive tariff strategy of each other.

Sender Keeps All

33. The Sender Keeps All approach is generally adopted in mobile-to-mobile interconnection. Mobile operators have wholesale arrangements that allow payments to be effected to each other, but the practice worldwide is often to simply exchange traffic. In this case the mobile-to-mobile calls do not attract termination charges. As already stated above, Sender Keeps All arrangements may only be

considered appropriate and fair when the termination costs of both networks are similar and the traffic between the two networks is approximately balanced. If either one of these two conditions is not met a Sender Keeps All arrangement may not be equitable since the arrangement may impose an unfair cost burden on the operator providing high cost services and this sums up the pith and core of the present dispute.

Interconnection Usage Charges (IUC)

34. The other approach known as the Interconnection Usage Charge is an arrangement whereby interconnecting operators pay each other for the actual use of each other's network to originate or terminate a call. An originating operator would, from a consumer tariff that it determines and collects, pay a set and agreed amount to the corresponding terminating operator. The amounts paid would generally be independent of the consumer tariff, which is usually set by the originating operator. The residual amount from the consumer tariff after termination charges is the amount retained by the originating operator, which is usually referred to as the retention amount.

35. I have thoroughly researched these different approaches and I am of the view that Interconnection Usage Charges are currently the best practice approach for the pricing of interconnection. Interconnection Usage Charges are generally more compatible with cost-orientation and are thought to be the most practical of the

approaches to implement in a competitive environment. Interconnection Usage Charges are also most equitable because a terminating operator will charge all operators who terminate their traffic on its network the same interconnection charge.

36. I find that Interconnection Usage Charges are also more conducive to vibrant competition in the overlying consumer tariffs, since the originating operator has a more direct control on its retention rate, given that it has to pay the terminating operators the corresponding charges. On the basis of the foregoing discussion, I hold that an Interconnection Usage Charge approach, which is consistent with the objectives of dynamic consumer tariffs and a competitive sector is the most appropriate interconnection pricing principle.

OPERATOR POSITIONS

37. I note from the submissions of both parties that the current mobile interconnection framework in Botswana has been generally reflective of a Sender Keeps All arrangement and I have already ruled thereon. I find it normal, and not surprising that at the inception of mobile services by Mascom and Orange both parties agreed to the Sender Keeps All arrangement. This is because the SKA arrangement is usually reached when model predictions indicate that mobile traffic that will terminate on each other's network approximately display a symmetric pattern. The other reason why I find it normal for the two mobile operators to have used Sender

Keeps All arrangement is due to the fact that such arrangements are considered appropriate and fair when the origination and termination costs of both networks are similar, and I reasonably assume that at the time when both mobile operators started their operations this was a close to reality fact.

38. In its written submission, Mascom's point of contention is that the traffic patterns between the two mobile networks is very asymmetric and has argued that it is receiving more traffic from the Orange network hence the need to require compensation on the traffic imbalance and usage of its own network.

39. In its written reply submission, Orange does not dispute the asymmetric nature of the traffic volume, which Mascom argues is unfavourably skewed towards the usage of its own network. During the Orange individual Oral Hearing, however, Orange submitted that it is Mascom that terminates more traffic on Orange's network, a point contrary to Mascom's assertion.

40. I note, however that during the joint Oral Hearing both parties submitted that the traffic patterns have changed during the last eighteen (18) months. I am baffled that when both parties were asked to state the direction of change none proved that its own network was used more than the other's.

41. I further requested clarification on whether both parties have ever at any point reconciled the traffic data since they interconnected.

The parties submitted that they have never reconciled nor taken any initiative to establish whose network was being used more. Notwithstanding that the main point of contention is the alleged traffic imbalance between the two networks, both parties were not able to supply me with reconciled traffic data that I could use to verify this point. I therefore find myself in great difficulty to use the unreconciled data from both parties. In the absence of reliable and reconciled data from the two parties, which is palpably regrettable, I am therefore unable to determine the traffic pattern.

42. The inconsistent positions of Mascom and Orange as to the direction and magnitude of the traffic imbalance, and the failure of the parties to reconcile this traffic data, means that the BTA cannot know whether or not the traffic is balanced. As I mentioned above, an underlying premise of an SKA approach is that the traffic between the networks should be approximately balanced. Where I cannot be assured that such an approximate balance is in place, my view is that an IUC approach as explained above is the more fair and reasonable approach to take. Under an IUC approach, each operator pays the other for its use of the other operator's network in proportion to the amount of that usage.

43. In its written reply submission, Orange is adamant that it reached an understanding with Mascom that in the event of negotiations arising due to traffic imbalances the termination charge should be P0.25, which Orange feels is the price that reflects the current underlying cost of providing the interconnection services. In

reply thereto, Mascom submitted that this point has been overtaken by events, as it was just the basis for starting negotiations in July 1998, which never materialised, and therefore could not be said that the P0.25 reflects the current underlying cost of providing the interconnection services. I agree with Mascom that the P0.25 as contained in the "Agreement" has been overtaken by events and under the current circumstances there is need to review the terms and conditions relating to the financial compensation mechanism so as to satisfy the fair and reasonable criteria as required by the Act.

44. I note that Mascom and Orange have agreed that should traffic imbalances occur, both parties would negotiate compensation for the services rendered, which I find to be a normal practice. Whenever circumstances materially change, there ought to be re-negotiation of the existing terms to suit the changed circumstances.

SETTING INTERCONNECTION CHARGES

45. In deciding on the appropriate methodology that could be applied for termination charges I consider it pertinent to focus my attention on a methodology that would reflect investment, operational and technological efficiencies of the operator as well as the reasonableness and fairness of the interconnection as required by the Act. In this regard one would consider methodologies that closely approximate the prices that would otherwise be present in effective competitive markets. I have identified costing methodologies and benchmarking approaches as the two broad principal approaches to

the setting of interconnection charges under the present circumstances.

46. Both parties have advanced reasons for and against the use of costing methodologies. In its submission, Orange firmly advocates for efficient cost based interconnection charges, which I agree in principle to be the most appropriate. Based on the BTA's extensive review of approaches used by other Regulators around the world to set mobile interconnection charges, and taking into consideration the policy and practical advantages and disadvantages of each approach, I consider that the current best practice approach for the setting of interconnection is a forward-looking Long Run Incremental Cost methodology. I do recognise however, that due to the complexity and time required to develop and implement such a methodology, it would not be feasible to implement such an approach within the context of the current dispute.

47. I am therefore left with benchmarking approaches as the only practical option. There are different benchmarking methodologies. Based on the same reasoning I enunciated in my Ruling No. 1 of 2003, I hold that an efficient benchmarking methodology is the most likely to result in efficient benchmark termination charges for Mascom and Orange. An efficient benchmarking approach would use actual or projected efficient prices in similarly situated countries. Efficient prices would result from effective competition or where the regulator has established prices based on an acceptable costing methodology.

48. I will therefore use an efficient benchmarking approach for the determination of interconnection charges and I will use such an approach on a transitional and interim basis until reliable costing methodologies are in place.

49. There are two principal variables in implementing an efficient benchmarking methodology. The first is the countries to be included in the benchmark sample. The second is the selection criteria of the actual benchmark level or range within that sample.

50. Based on the analysis and discussion in my Ruling No. 1 of 2003, it is my considered view that the 15 member countries of the European Union (EU) provide the most appropriate efficient benchmarking sample to be used in the setting of efficient termination charges for Mascom and Orange.

51. I further hold that an average or mid-range of the “current best practice” range, (as defined by the EU), constitutes an efficient benchmarking methodology and hence a fair and reasonable basis on which to determine the efficient benchmark termination charges for Mascom and Orange.

52. I note that the discussion above reflects the efficient benchmarking approach, which I first established and implemented for fixed to mobile, and mobile to fixed interconnection charges for BTC and Mascom in my Ruling No. 1 of 2003. I believe that this is the

most appropriate approach to implement in the present proceedings for, among other reasons, purposes of non-discrimination, objectivity and fairness.

DETERMINATION OF MASCOM AND ORANGE TERMINATION CHARGES

53. In the absence of specific cost guidance in this matter, I consider that a reasonable balance would be struck if I take the mid-point of the EU's current best practice, which is 11.5 Euro Cents (approximately P0.69 using the prevailing exchange rate of 1 Euro equals to P6.00), as the efficient termination charge. However, I do also recognise that the economic and telecommunications development conditions in the EU are different from those of Botswana. One possible risk in this regard is that the selection of the EU sample may result in benchmark termination charges for Mascom and Orange that are below their efficient forward-looking costs. I have fully considered this possibility and have taken the necessary precautions.

54. As I upheld under paragraph 35 above, the Interconnection Usage Charge is the most appropriate arrangement to use under the circumstances and I direct that the parties should implement the same with immediate effect.

55. Based on the analysis and discussion above, I now decide on the mandatory termination charges for mobile termination applicable

for mobile to mobile calling. The termination charges are presented in the table below and are in nominal (current) terms and should be treated as ceilings (i.e. the respective mobile operator may choose to set lower termination charges).

Mobile termination charges applicable for mobile to mobile calling		
Operator	Time-of-Day Period	Effective from the date of the ruling (Charges in thebe/minute)
Mascom	Peak	75.0
	Off-Peak	60.0
Orange	Peak	75.0
	Off-Peak	60.0

56. During weekdays, that is Monday to Friday, Peak shall refer to the period of time from 07:00 hrs to 19:00 hrs and Off-peak shall refer to the period of time from 19:00 hrs to 07:00 hrs the following day. During weekends, Peak shall refer to the period of time from 07:00 hrs to 13:00 hrs on Saturdays and Off-peak shall refer to the period of time from 13:00 hrs on Saturdays to 07:00 hrs on Mondays. Public holidays shall also be Off-peak.

57. I also direct that the parties should conclude and enter into a written interconnection agreement within 90 days from the date of this ruling and submit the same to the Authority for approval.

58. Before I conclude I wish to note that I am unable to accede to Mascom's request for the retro activation of this order because of its **mora** or breach of its licence condition requirement that it should conclude a written interconnection agreement, despite the BTA's reminder to it to regularise its activity and notwithstanding the subsequent indulgence granted to Mascom by the BTA. In addition as I have already ruled that a Sender Keeps All was in place, the request for retro activation of the order is not appropriate in the premises.

59. This ruling shall remain valid and binding on both parties for a period of 24 months effective from the date of the ruling. In the event that the two parties herein reach any other agreement during the subsistence of this ruling, the Authority reserves the right to uphold and confirm such an agreement in so far as the essence of such agreement does not substantially breach the fundamental framework or tenet as espoused by this ruling.

60. Any party aggrieved by the decision of the Authority may appeal to the High Court in terms of section 56 of the Telecommunications Act, 1996 (No. 15 of 1996).

Delivered on the 24 day of September 2003 in the presence of the parties herein.

C. M. LEKAUKAU
EXECUTIVE CHAIRMAN