



SADC ROAMING REGULATIONS

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IT is hereby notified that SADC Member States have adopted the following regulations -



PART I

1. Title

- (1) These Regulations may be cited as Southern African Development Community Roaming Regulations, 2015.
- (2) These Regulations shall come into force on a date to be agreed upon by Member States.

2. Interpretation

In these regulations, unless the context otherwise requires: -

‘**Home country**’ means the country of origin of the roaming customer;

‘**Home provider**’ means a mobile network operator that provides a roaming customer with mobile communication services either via its own network or as a mobile virtual network operator or reseller;

‘**Home network**’ means a public mobile communications network located within a Member State and used by a home provider for the provision of mobile communications services to a roaming customer;

‘**Member State**’ means a country, which is a member of the Southern African Development Community;

‘**Region**’ means Southern African Development Community;

‘**Roaming**’ means the ability for a mobile subscriber to automatically make and receive voice calls, send and receive data, or access other services, including home data services, when travelling outside the geographical coverage area of the home network;

‘**Roaming service**’ means electronic communication service provided seamlessly to a roaming customer by a visited network in a visited country;

‘**Retail Charges**’ means prices charged to the end user of a roaming service;

‘**Roaming customer**’ means a customer of a terrestrial mobile communications services, by means of a mobile network situated in the Region, whose contract or arrangement with his home provider permits the use of a mobile telephone or other device to make or to receive calls, to send or receive SMS messages, or to use packet switched data communications or any other electronic communication service on a visited network by means of arrangements between the operator of the home network and the operator of the visited network;

‘**Use Cases**’ means the various modes of usage of roaming services;

‘**Visited network**’ means a terrestrial public mobile communications network situated in a Member State other than that of the home network and permitting a roaming customer to make or receive calls, to send



or receive SMS messages or to use packet switched data communications, by means of arrangements with the operator of the home network;

3. Application

These Regulations shall be applicable to all Members States of the Southern African Development Community (SADC).

4. Purpose of the regulations

(1) The purpose of these Regulations is to:

- a) Provide a coordinated regional response to the formulation of roaming regulations;
- b) Facilitate the development of regionally acceptable standards on roaming charges; and
- c) Ensure consumer protection on a regional level with regards to roaming.

(2) These Regulations shall be construed in such manner as best ensures the attainment of the SADC Minister's responsible for Postal, Telecommunications and Information Communication Technology Directive on Roaming.

PART II

TRANSPARENCY AND SAFEGUARD MECHANISMS FOR CONSUMERS

5. Information on applicable services and charges

(1) Member States shall ensure transparency of retail charges for roaming calls, data and SMS Messages.

(2) Member states shall ensure that Mobile Network Operators (MNOs) provide information on availability of roaming services and applicable charges, free of charge to the roaming customer's mobile telephone or other device by means of an SMS message, e-mail or any other mode of communication every time the roaming customer enters a visited member state.

(3) Member states shall ensure that the minimum information on applicable charges for roaming services provided by MNOs includes the following:

- a. tariff per minute of incoming and outgoing calls within the visited SADC country, the home country and elsewhere in the SADC region;
- b. tariff per SMS sent or received within the visited SADC country, the home country and elsewhere in the SADC region;
- c. tariff per megabyte of data used; and



- d. a link to the home provider's website or customer service telephone number where updated retail roaming tariff information can be obtained.
- (4) Member states shall ensure that MNOs provide the blind or partially-sighted customers with basic pricing information automatically, by a voice call, free of charge, when they so request.
 - (5) Member states shall ensure that MNOs afford roaming customers the right to request and receive, free of charge, more detailed pricing information on roaming charges that apply in the visited country on roaming services.
 - (6) Member states shall ensure that MNOs make information on applicable roaming tariffs easily accessible to the roaming customer on its website and other media.
 - (7) Member states shall ensure that MNOs inform the roaming customer of the risk of automatic and uncontrolled data roaming connections and downloads.
 - (8) Member states shall ensure that MNOs send an alert to the roaming customer when the data roaming services have reached fifty percent (50%) of the agreed volume limit in cases where the customer is using a roaming data package.

7. Obligation to provide information on roaming services

- (1) Member states shall ensure that, upon request, MNOs provide information to the National Regulatory Authorities (NRAs) on roaming services as and when requested in the prescribed format.
- (2) Member states shall ensure that the NRAs ensure that appropriate mechanisms are in place to safeguard confidentiality.

PART III

COSTING FOR ROAMING CHARGES

8. Role of member states in determination of charges

- (1) Member States shall take an active role towards establishing cost based roaming charges.
- (2) Member States shall empower NRA's to determine roaming charges through harmonised cost and pricing models.



9. Principles for determining roaming charges and tariffs

(1) Member States shall establish the basis of regional roaming costs in consultation with MNOs. The establishment of cost-based regional roaming tariffs shall take into account the related underlying wholesale and retail cost elements.

(2) Member States shall take into account the following direct cost elements among others in calculating cost based roaming tariffs:

- a. local access, origination, and termination costs;
- b. local transmission costs;
- c. international transmission costs;
- d. roaming specific charges, including contract, billing and signalling charges; and
- e. retail specific charges, including invoicing and international processing costs (including Call Detail Records (CDR) and Inter Operator Tariffs(IOT)).

(3) Member States shall consider the cost elements in subsection (2) for voice, SMS and data services and any other roaming services in line with the general trend towards universal use of roaming services.

(4) Member states shall ensure that the analysis of cost elements takes into account both prepaid and post-paid modes.

(5) Member States shall consider the cost elements in subsection (2) in constructing detailed and harmonised roaming cost models on a regional basis.

10. The glide path to cost based roaming charges

(1) Member States shall adopt a glide path in transitioning from existing roaming charges to cost based roaming charges. The glide path shall consist of the following:

- a. Roam Like At Home (RLAH) under which the charging and pricing of regional roaming services shall be calculated with specific reference to the roaming customer's home country rates plus a premium outlined in [First Schedule].
- b. Cost Based Pricing under which the charging and pricing of regional roaming services shall be calculated based on cost plus a premium in [First Schedule].

11. Application of the glide path

(1) The mechanisms for calculation of the wholesale and retail price ceilings in First Schedule, shall apply to the following use cases:

- a. Voice:



- i. Roaming mobile call made within the visited country to a local subscriber;
 - ii. International call back to home country from visited country;
 - iii. Incoming call while roaming that originates from home country or from within visited country; and
 - iv. Call from inside a visited country to a third country
- b. SMS;
 - c. Data; and
 - d. Any other roaming services

12. Ceiling for wholesale charges

(1) Member states shall ensure that the wholesale charge applied by MNOs of a visited network which they may levy from the operator of a roaming customer's home network for the provision of a roaming service originating on that visited network, including origination, transit and termination costs shall not exceed the price ceilings included under [First Schedule].

(2) Member states shall ensure that MNOs are permitted to make a distinction between peak and off-peak charges.

(3) Member states shall ensure that the wholesale charges referred to in subsection (1) apply between any pair of MNOs and shall be calculated over a twelve-month (12) period or any such shorter period as may remain before the end of the period of application of a maximum average wholesale charge as provided for in these regulations.

13. Ceiling for retail charges

(1) Member states shall ensure that the retail charge (excluding Value Added Tax (VAT)) for roaming services that a home operator may levy from its roaming customer for the provision of a regulated roaming service shall not exceed the price ceilings included under the [First Schedule].

(2) The retail prices referred to in subsection (1) shall be calculated over a twelve-month (12) period or any such shorter period as may remain before the end of the period of application of a maximum average retail charge as provided for in these regulations.

14. Approval process for roaming charges

(1) Member States shall ensure that NRAs approve wholesale roaming agreements to ensure compliance with these regulations.

(2) Member States shall ensure that MNOs do not impose any tariff or charge for the provision of regional roaming services unless the NRA approves the tariff rates in accordance with these regulations.



PART IV

CHARACTERISTICS OF ROAMING SERVICES

15. Technical characteristics

- (1) Member States shall ensure that MNOs of a home provider or operator of a visited network do not alter the technical characteristics of regulated roaming services in such a way as to make them differ from the technical characteristics of same services provided within its domestic network.
- (2) Member States shall encourage MNOs to establish direct routes to connect and roam with operators in other Members States.
- (3) Member States shall encourage MNOs to adopt a fair usage policy to avoid instances of Network abuse through permanent roaming by roaming customers.

16. Quality of service for roaming services

- (1) Member States shall ensure that the Quality of Service provided to a consumer of roaming services by the visited network shall not differ from the quality of service within its domestic network as provided under [Second Schedule].
- (2) Member States shall ensure that NRAs take necessary steps to reduce inadvertent roaming through cross border frequency coordination to avoid bill shock.
- [(3) Member States shall ensure that billing arrangements for roaming customers are provided on the same terms and conditions as those provided by MNOs within their domestic network.]

PART V

MONITORING AND ENFORCEMENT

17. Mechanisms for monitoring and enforcement

- (1) Member States shall ensure that NRAs monitor and enforce compliance with these regulations. In particular Member States shall ensure the following:
 - a. that NRAs submit up-to-date information to SADC on the implementation of these regulations as and when required;
 - b. that NRAs monitor developments in wholesale and retail charges for the provision of regional roaming services;



- c. that NRAs coordinate to reduce inadvertent roaming in border regions of neighbouring Member States and monitor whether traffic steering/manipulation techniques are used to the disadvantage of consumers of roaming services; and
- d. that NRAs may intervene on their own initiative in order to ensure compliance with these regulations. In particular, they shall, where necessary, make use of their national regulatory powers to ensure adequate access and interconnection in order to guarantee the end-to-end connectivity and interoperability of roaming services.

18. Dispute resolution

(1) Member States shall ensure that appropriate dispute resolution mechanisms are put in place. In particular, Member States shall take into consideration the following:

- a. disputes in connection with the obligations laid down in these regulations between MNOs providing electronic communications networks or services in a Member State; and
- b. disputes involving a consumer or end-user and concerning an issue falling within the scope of these regulations;

19. Penalties

Member states shall lay down the rules on penalties applicable to infringements of these regulations and shall take all necessary measures to ensure that they are implemented. The penalties provided for must be effective, proportionate and deterrent.

PART VII

GENERAL

20. Review

(1) Member states shall review these regulations as and when necessary. In so doing, the member states shall review, inter alia:

- a. the developments in wholesale and retail charges for the provision of roaming services to consumers of communication services, and the corresponding development in mobile communications services at domestic level in the Member States, both for pre-paid and post-paid customers separately, and in the quality and speed of these services;



- b. the availability and quality of services including those which are an alternative to roaming (voice, SMS and data), in particular in light of technological developments;
- c. the extent to which consumers have benefited through real reductions in the price of roaming services or in other ways from reductions in the costs of the provision of roaming services and the variety of tariffs and products which are available to consumers with different calling patterns;
- d. the degree of competition in both the retail and wholesale markets, in particular the competitive situation of smaller, independent or newly started operators, including the competition effects of commercial agreements and the degree of interconnection between operators.

(2) Member states shall submit reports to SADC on the implementation of these regulations as and when required.

(3) Member states shall also assess methods other than price regulation which could be used to create a competitive internal market for roaming and in so doing shall have regard to developments in the sector.

21. Binding nature

These regulations shall be binding in their entirety on all member states pursuant to Article 24 of the Communications Regulators' Association of Southern Africa (CRASA) Constitution and or subject to the adoption of a SADC Protocol/ Treaty on Regional Roaming.



FIRST SCHEDULE (section 10)

PART I

GLIDE PATH FOR CALCULATION OF WHOLESALE PRICE CEILINGS

The wholesale price ceilings and glide paths shall be determined as follows:

21 October 2014	Existing IOT Prices
1 October 2015	$WTA + ((IOT - WTA) * 0.67) * 1.05$
1 October 2016	$WTA + ((IOT - WTA) * 0.33) * 1.05$
1 October 2017	$WTA * 1.05$

The objective of the glide path is to annually reduce the premium on wholesale rates charged between two roaming partners over a three year period. Ultimately, the charges on wholesale roaming services shall not exceed cost plus 5%.

Illustration 1: Calculation of Country Wholesale Price Ceiling											
	WTA	+	((IOT	-	WTA)	*	(%)	* 1.05	Ceiling	Existing Rate	% Reduction
VOICE	0.039		0.65		0.039		67%	1.05	0.47	0.65	-28%

Definitions:

For the purposes of calculating the wholesale price ceilings, the components of the formula above shall be defined as follows:

- i. **IOT** – means Inter Operator Tariff:

These are the wholesale rates charged between two roaming partners. The IOTs shall be calculated as the outbound roaming traffic weighted average per country. This entails calculating a weighted average of the IOTs faced by each MNO within a specific country.

Illustration: Calculation of IOTs for Home Country				
Country	Operator	Wholesale Inter Operator Tariff for an Originating Call Within the Visited Country (US\$)	Outbound Roaming Traffic (From Country B to Home Country) – (Minutes)	Traffic Weighted IOT (US\$)
COUNTRY B	MNO 1	0.55	400,000	0.15
	MNO 2	0.20	850,000	0.12
	MNO 3	0.90	220,000	0.13
			1,470,000	0.40



NB: This applies to all MNOs within a Home Country and should cover all the use case scenarios under section 11 (1).

ii. **WTA** – means Weighted Traffic Average:

The Weighted Traffic Average shall be calculated as the weighted average of domestic Mobile Termination Rates (MTR) within the SADC Region. The weighting shall be based on domestic off net outbound traffic for each country.

For countries that have asymmetric domestic MTR, a national weighted average MTR shall be determined on the basis of off net outbound traffic for each MNO in that country. The WTA will be calculated by the CRASA Roaming Task Team (CRTT) and updated annually.

Illustration 2: Calculation of WTA (Floor Price for Regional Wholesale Roaming Charges)			
Country	Domestic MTRs (US\$)	TRAFFIC OFF-NET (Outbound) -(Minutes)	Traffic Weighted MTR
ANGOLA	0.040	200,000,000	0.002
BOTSWANA	0.030	145,000,000	0.001
CONGO DRC	0.020	350,000,000	0.002
LESOTHO	0.032	120,000,000	0.001
MADAGASCAR	0.060	100,000,000	0.002
MALAWI	0.080	200,000,000	0.005
MAURITIUS	0.040	170,000,000	0.002
MOZAMBIQUE	0.090	200,000,000	0.005
NAMIBIA	0.017	260,000,000	0.001
SEYCHELLES	0.070	110,000,000	0.002
SOUTH AFRICA	0.020	500,000,000	0.003
SWAZILAND	0.070	180,000,000	0.004
TANZANIA	0.020	650,000,000	0.004
ZAMBIA	0.050	260,000,000	0.004
ZIMBABWE	0.050	250,000,000	0.004
TOTAL		3,495,000,000	
		Regional Traffic Weighted MTR	0.039

The floor price for IOTs shall be the WTA while the ceiling will be determined by the glide path formulae above.



PART II

GLIDE PATH FOR CALCULATION OF RETAIL PRICE CEILINGS

The retail price ceilings and glide paths shall be determined as follows:

2014	ROAM
1 October 2015	$RLAH + (ROAM - RLAH) * 0.67$
1 October 2016	$RLAH + (ROAM - RLAH) * 0.33$
1 October 2017	$RLAH * 1.05$
1 October 2018	$COST + (RLAH - COST) * 0.67$
1 October 2019	$COST + (RLAH - COST) * 0.33$
1 October 2020	$COST * 1.05$

The objective of the glide path formulae is to annually reduce the premium on retail roaming charges by 33.3% over a three year period. Ultimately, the charges for roaming services shall not exceed cost plus 5%.

Definitions:

For the purposes of calculating the retail price ceilings, the components of the formulae above shall be defined as follows:

- i. **ROAM** – means existing retail roaming prices per country as at 21st October 2014
“Roam” shall be determined as the average of all MNO roaming charges within a specific country for each of the various roaming services and or use cases.
- ii. **RLAH** – means Roam Like At Home

RLAH refers to a pricing framework for roaming where the prices charged to a roaming subscriber for voice calls, SMS and mobile data access are similar to the prices faced by the subscriber in the home country rather than those of the visited country.

RLAH shall be determined as the traffic weighted average of existing current DOMESTIC prepaid headline retail charges (i.e. basic charges for electronic communication services before any distorting factors such as bundled offers and periodic promotions that offer discounted charges) for each of the various services on offer by each MNO in the Region.



- iii. **COST** will be derived by means of a harmonised regional ‘Cost model’ which takes into account all underlying cost elements for the various use cases for roaming services.

Illustration: Calculation of Retail Price Ceilings										
	RLAH	+	(ROAM	-	RLAH)	*	%	Ceiling	Existing Roaming	% Reduction
Voice	4.2		156.8		4.2		67%	106.442	156.8	-32%
SMS	1.2		12		1.2		67%	8.436	12	-30%
DATA	0.06		8.03		0.06		67%	5.40	8.03	-33%

SECOND SCHEDULE (section 16)

PART I

ROAMING QUALITY OF SERVICE PARAMETERS

The quality of service parameters regarding all types of roaming services provided in the roaming region shall include the following:

- 1. Seamless caller ID:** (where a “caller” should be understood as a customer calling or sending an SMS to another customer who is roaming): the roaming customer should be able to identify a caller in the same way as when using his/her home network;
- 2. Areas where no service is available:** – where a domestic mobile service is available, the roaming service should be available as well; this does not mean that the home provider should provide roaming services in any area of the visited country covered by at least one operator; in practice it only means that in a competitive roaming market the home operator should be able to conclude an interconnection contract with at least one operator with national coverage;
- 3. Transparency –:** operators should fulfil their obligation of providing roaming customers with appropriate basic personalised pricing information on the roaming charges according to Article 6 of the Regulation; they should also be able to limit the number of legitimate bill correctness complaints; the number of bill correctness complaints regarding roaming services should not be much higher than those regarding domestic services.
- 4.** In the case of voice and SMS, the reference point for quality of service parameters should be the quality of the international equivalents of these services.

PART II

SPECIFIC QUALITY OF SERVICE PARAMETERS

1. Voice Services

Additional quality parameters, resulting from the specific nature of voice services should include the following:

- (1) **Call set up time:** the time to establish a voice call should be the same for a roaming customer making a call as a domestic customer on the same network making an international call;
- (2) **Possibility to access the home operator's general customer information centre/information hotline:** the possibility of using it should be similar, irrespective of whether the customer is roaming or using his/her home network; however, where at home user usually connects to the hotline with a short code, the operator may choose to provide an appropriate regular phone number for the same purpose when the customer is roaming;
- (3) **Response times for customer information centre/information hotline regarding roaming services:** the waiting time to connect to the information hotline on roaming services should be reasonable and should not prevent customers from using it;
- (4) **Unsuccessful call ratio:** the ratio of unsuccessful to successful roaming voice calls on one hand should not be higher than the ratio of unsuccessful to successful international voice calls originated from the same network, and on the other hand not significantly higher than in the case of national calls – both for non-roaming users;
- (5) **Aborted calls (drops):** the ratio of interrupted to uninterrupted roaming calls on one hand should not be higher than the ratio of interrupted to uninterrupted international voice calls originated from the same network, and on the other hand not significantly higher than in the case of national calls – both for non-roaming users;
- (6) **Sound:** the quality of sound during the roaming voice call should be equal to the quality of an international call on the same network and not significantly lower than in the case of national calls – both for of non-roaming users.

2. Short Message Service (SMS)

Additional quality parameters, resulting from the specific nature Shot Message Services should include the following

- (1) **Number of SMS undelivered:** the ratio of undelivered to delivered roaming SMS on one hand should not be higher than the same ratio for international SMS messages sent from the same network, and not significantly higher than in the case of national messages – both for non-roaming users;
- (2) **Number of SMS delivered late:** the ratio of SMS delivered late to SMS delivered on time should not be higher than the same ratio for the international SMS messages sent from the same network, and not significantly higher than in the case of national messages – both for non-roaming users.



3. Data services

Additional quality parameters, resulting from the specific nature of data services should include the following

- (1) **Speed of data transmission:** actual speeds of roaming data transmission should be equal to the ones provided for domestic users of the visited network for non-roaming users;
- (2) **Transparency:** the roaming market should be transparent enough so that customers do not experience bill-shock and that clear information is available on the tariffs to be applied for the service.