

Safaricom Telecommunications Ethiopia PLC

Reference Interconnection Offer (“RIO”)

**(As required by the Telecommunications Interconnection Directive
No. 791/2021 and Determination No. 1/2024 of the Ethiopian
Communications Authority, Dated 15th April 2024)**

October 2025

1. GENERAL LEGAL PRINCIPLES

1.1 Application of this RIO

This RIO is limited to wholesale termination services on the network used by Safaricom Telecommunications Ethiopia PLC (a company incorporated and operating in Ethiopia with its head office at Wello Sefer, Safaricom Ethiopia HQ, Kirkos Sub-City, Woreda 01, Addis Ababa, Ethiopia (“Safaricom Ethiopia”) of voice calls (Mobile and/or Fixed) and SMS (Short Message Service) Termination Service originating in the Territory.

1.2 Commencement

This Reference Offer shall become effective and enforceable on and from the date it is published on Safaricom Ethiopia’s official website upon its approval by the Authority.

1.3 Expiry

This Reference Offer shall remain effective until 30 April 2029, coinciding with the expiration of the Authority’s Network Cost Study Determination dated 19 February 2024. Notwithstanding the foregoing statement, Safaricom Ethiopia may amend this Reference Offer from time to time with the consent of the Authority. Any amendments made by Safaricom Ethiopia to this Reference Offer that the Authority may direct or approve will automatically form part of any existing Interconnection Agreement.

1.4 Definitions of Terms and Abbreviations

1.4.1 Unless the context otherwise requires, words and phrases used shall have the meaning and application given to them in the Communications Service Proclamation No. 1148/2019 and Telecommunications Interconnection Directive No. 791/2021.1.2.2.

1.4.2 In addition, in this Agreement where the context admits:

“**Authority**” means the Ethiopian Communications Authority established under the Communications Service Proclamation No. 1148/2019.

“**Accounting or Billing Period**” is the period of 1 (one) calendar month, terminating as close as is reasonably practicable to 23h59 on the last day of each calendar month, the first such Accounting Period commencing, unless otherwise agreed in writing between Safaricom Ethiopia and the entity requesting interconnection, on the Commercial Date.

“**Commercial Date**” is the date from which wholesale voice calls (Mobile and/or Fixed) and SMS Termination service shall be routed between the respective Electronic Communications Networks used by Safaricom Ethiopia and the entity requesting interconnection for commercial purposes, which date shall be agreed in writing between Safaricom Ethiopia and the entity requesting interconnection.

“Customer” is an End User who has subscribed to receive a telecommunications service from a Party.

“Entity Requesting Interconnection” shall mean a telecommunications operator that is requesting interconnection with Safaricom Ethiopia.

“Electronic Communications Network” means a system of transmission and, where applicable, switching or routing equipment, and other resources (including network elements that are not active), which permit the conveyance of electronic communications signals, such as voice, SMS, and multimedia, by means of wire, radio, optical, or other electromagnetic systems.

“Information” for purposes of this RIO includes, without limitation, any technical, commercial, scientific information, know-how, trade secrets, processes, machinery, technical specifications and data in whatever form relating to interconnection, communicated to or acquired by the receiving party during the course of negotiations or the receiving party’s association with the disclosing party;

“Interconnection” means the physical, technical and logical linking of the Telecommunications Networks of different Telecommunications Operators, to allow users of one operator to communicate with users from another, or to access services provided by another operator, regardless of the network to which they are connected to.

“Interconnection Fees” are the fees payable by Safaricom Ethiopia and the entity requesting interconnection to one another in terms of the interconnection agreement to be concluded between Safaricom Ethiopia and the entity requesting interconnection related to the conveyance of wholesale national Termination of voice calls (Mobile and or Fixed) and SMS services, which fees are based on the Interconnection Rates.

“Interconnection Rates” are the applicable per-minute rate, as specified in Determination No.2/2024 of the Authority (Network Cost Study Determination of 19th February 2024), payable by the entity requesting interconnection to Safaricom Ethiopia and *vice versa*.

“Interconnection Directive” means the Telecommunications Interconnection Directive No. 791/2021 and any subsequent amendment thereof.

“IP” is Internet Protocol.

“Point of Interconnection” or **“POI”** is the point at which Electronic Communications from the Electronic Communications Networks used by Safaricom Ethiopia are handed over and carried to the Electronic Communications Network used by the entity requesting interconnection and *vice versa*.

“Point of Interconnection Links” is a physical link over which voice calls shall be conveyed between the Electronic Communications Network used by Safaricom Ethiopia and the Electronic Communications Network used by the entity requesting interconnection.

“Point of Presence” or “PoP” is a point at a physical location, which provides network connectivity back to the core of an Electronic Communications Network used by Safaricom Ethiopia and the entity requesting interconnection, and also serves as a POI; and

“Territory” means the geographical area of the Federal Democratic Republic of Ethiopia.

1.5 Requirements Concerning the Exchange and Use of Information for the Purpose of Interconnection

- 1.5.1 Any Information communicated to or acquired by either Safaricom Ethiopia or the entity requesting interconnection for the purposes of interconnection is a valuable, special and unique asset proprietary to the disclosing party.
- 1.5.2 The receiving party;
 - 1.5.2.1 shall not utilize, employ, exploit or in any other manner whatsoever use the information disclosed for any purpose without the prior express written consent of the disclosing party; and
 - 1.5.2.2 accepts that the unauthorized disclosure of the information to a third party may cause irreparable loss, harm and damage to the disclosing party.
- 1.5.3 The receiving party undertakes not to use the information for any purpose other than the reason for which such information is disclosed, communicated or acquired.
- 1.5.4 The receiving party may disclose the information only to its officers, employees and professional advisors and then only on a strictly need-to-know basis.

1.6 Representations and Warranties

- 1.6.1 The Entity Requesting Interconnection represents and warrants that:
 - A. It has the power to enter into and observe its obligations under the Interconnection Agreement; and
 - B. It possesses full force and effect the authorizations necessary to enter into the Interconnection Agreement, observe obligations under it, and allow it to be enforced; and
 - C. Its obligations under the Interconnection Agreement are valid and binding and are enforceable

against it in accordance with its terms; and

D. The information it provided to Safaricom under the Agreement is (to the best of its knowledge) complete, true and correct, and not misleading.

1.6.2 Safaricom represents and warrants that:

- A. It has the power to enter into and observe its obligations under the Interconnection Agreement; and
- B. It has in full force and effect the authorizations necessary to enter into the Interconnection Agreement, observe obligations under it, and allows it to be enforced.
- C. Its obligations under the Interconnection Agreement are valid and binding and are enforceable against it in accordance with these terms.
- D. The information provided by Safaricom to the Seeker under the Agreement is (to the best of its knowledge) complete, true and correct, and not misleading.

1.7 Data Exchange Formats

1.7.1 Any notice to be given by one party to the other party in Connection with this RIO shall be in written form and signed by or on behalf of the party giving it.

1.7.2 For the purpose of clause 1.5.1, Safaricom Ethiopia's address is;

To: Safaricom Telecommunications Ethiopia PLC

Wello Sefer, Safaricom Ethiopia HQ,

Kirkos Sub-City, Woreda 01,

Addis Ababa, Ethiopia

Attention: Safaricom Ethiopia's Chief Enterprise Business Unit Officer

E-mail: Wholesale@safaricom.et

2. INITIATING NEGOTIATIONS AND EXECUTING INTERCONNECTION SERVICES AGREEMENT

2.1 Non-Discrimination and Transparency

2.1.1 An approved RIO will be made freely and easily available to any telecommunication operator that seeks an interconnection service from Safaricom Ethiopia.

2.1.2 No discrimination will be made between Interconnection Seekers, and all Seekers shall be treated equally in the provision of all aspects of interconnection services, including but not limited to technical standards, reliability, quality of service, maintenance, fault repair, and compensation mechanisms.

2.2 Good Faith and Non-Exclusivity

2.2.1 Each of the Parties agrees that it shall act in good faith in relation to the other Party with respect to all matters relating to or contemplated by an Interconnection Agreement.

2.2.2 Notwithstanding any provisions of this Reference Offer or Interconnection Agreement to be executed by

the parties, neither Party shall be prohibited in any way whatsoever from entering into an agreement with another person for similar services.

2.3 Initiating Negotiation

2.3.1. A written request for interconnection must be made to Safaricom Ethiopia to the address set out in clause 1.7.2 and must include the information specified in clause 3 of this RIO.

2.3.2. For enquiries in relation to the status of Safaricom Ethiopia's assessment of the Request to interconnect, the entity requesting interconnection may contact Safaricom Ethiopia by email at Wholesale@safaricom.et with the subject "Request for Interconnection".

2.4 Notification to the Authority

The entity requesting interconnection must notify the Authority in writing within five (5) working days of making the request.

2.5 Notification of Conformity

Within Ten (10) working days of receipt of the request for interconnection, Safaricom Ethiopia will notify the entity requesting interconnection in writing if it is able to:

2.5.1 Commence negotiation related to the interconnection request on the proposed date;

2.5.2 Supply the form of interconnection request;

2.5.3 Undertake interconnection within the time frame requested by the entity requesting interconnection.

2.6 Negotiation of the Interconnection Agreement

In the event that Safaricom Ethiopia notified the entity requesting interconnection that it is able to provide the requested interconnection service, Safaricom Ethiopia and the entity requesting interconnection each undertake to act in good faith in the negotiation of Interconnection Agreement on the basis of this Reference Offer, Article 10 of the Interconnection Directive and to use their respective good faith endeavors to:

A. commence negotiations of the terms and conditions of the Interconnection Agreement within ten (10) calendar days of receipt of the request for interconnection and

B. complete such negotiations and execute an Interconnection Agreement within fifteen (15) working days after initiating negotiation, or within a reasonable timeframe agreed by both parties.

2.7 Notification of non-conformity

2.7.1 Safaricom Ethiopia shall have the right to refuse the request for interconnection on the ground that it is not technically or financially feasible or the requested interconnection service is not available.

2.7.2 In the event that Safaricom Ethiopia finds a Request for Interconnection to be non-conforming, it will:

A. notify the entity requesting interconnection in writing within (Ten) 10 working days after receiving the request for interconnection.

- B. provide the entity requesting interconnection with reasons for rejection.
- C. File a copy of a refusal of the interconnection request with the Authority not later than five (5) working days after the refusal has been submitted to the entity requesting interconnection, and
- D. not be required to negotiate an Interconnection Agreement.

2.7.3 Safaricom Ethiopia shall, in its determination of economic and/or technical feasibility, determine if any request for interconnection:

- A. Contributes to the efficient use of the existing transmission capacity of the Electronic Communications Network used by Safaricom Ethiopia.
- B. The network meets the technical parameters of Safaricom Ethiopia's network at the time of interconnection.
- C. Offering connection to the entity requesting interconnection will not have a negative effect on Safaricom Ethiopia's network, network elements, capacity or integrity.
- D. The request does not result in additional requirements for capacity above or in excess of its budgeted spend; and
- E. The request does not cause material adverse financial consequences to Safaricom Ethiopia due to overloading of the Electronic Communications Network.

2.1.1. If modifications of the network of the entity requesting interconnection is necessary to accommodate the request for interconnection, costs associates with such modifications will be charged to entity requesting interconnection.

2.1.2. The entity requesting interconnection may submit a new Request following rejection by Safaricom Ethiopia where it satisfies the requirements to bring the request to conformity.

2.8 Interconnection Agreement

2.8.1. Following a successful conclusion of the negotiation for Interconnection, Safaricom Ethiopia and the entity requesting interconnection shall execute a written Interconnection Agreement on the basis of the minimum terms and conditions set out in this Reference Offer and Article 12 of the Interconnection Directive. This Agreement will be referred to as an “**Interconnection Agreement**”. Once an Interconnection Agreement is entered into, Safaricom Ethiopia will file a copy of such agreement with the Authority within ten (10) working days from the date of the agreement's execution.

2.8.2. Requests for the amendment of agreements, once concluded and implemented, shall be made in a similar manner and relevant information shall be provided on request by Safaricom Ethiopia.

3. General Information

3.1 A copy of the license(s) of the entity requesting interconnection; and

3.2 Copies of the commercial registration documents of the Entity requesting interconnection.

3.3 Financial Information including *inter alia*

- a) copies of its latest audited financial statements.
- b) a copy of its VAT certificate.
- c) copies of Tax Payer Identification (TIN) certificate or number
- d) copies of identity documents of its General Manager; and
- e) a business plan indicating projected call volumes.

3.4 Technical Information including *inter alia*

- A. In respect of interconnection utilizing IP technology, the Public IP Address.
a copy of the official numbering allocation, as allocated by the Authority; and
- B. a basic network diagram depicting the infrastructure to be rolled out, including the required Points of Interconnection.
- C. Form of interconnection.
- D. The proposed date for commencement of negotiation.
- E. The date for which the interconnection is required; and,
- F. An estimate of the interconnection capacity required.

4. DESCRIPTION OF INTERCONNECTION SERVICES TO BE PROVIDED

Wholesale Voice call Termination (Mobile), Wholesale Voice Call Termination Service (Fixed, where the service is available) and Wholesale SMS termination services as defined in the Interconnection Directive shall be provided by Safaricom Ethiopia.

4.1 SCHEDULE OF CHARGES FOR INTERCONNECTION SERVICES

4.1.1 General Financial Matters

- 4.1.1.1 Payment for interconnection services offered by Safaricom Ethiopia shall be on a post-payment basis and the following shall be required:
- 4.1.1.2 Safaricom Ethiopia shall have the discretion to conduct Credit vetting of the entity requesting interconnection.

4.2 Billing Procedures, Payment Terms and Conditions

- 4.2.1 Payment for interconnection Service shall commence from the Commercial Date.
- 4.2.2 All invoices shall be set out and paid in Ethiopian Birr.
- 4.2.3 Safaricom Ethiopia and the entity requesting interconnection shall be required to measure and record, at their own cost and expense, the duration of calls destined for the Electronic Communications Network used by Safaricom Ethiopia and entity requesting interconnection.
- 4.2.2. Within ten (10) Working Days of the end of each Billing Period, Safaricom Ethiopia will invoice the entity requesting interconnection for all Interconnection Fees during that Billing Period and any tax payable in connection with those Interconnection Fees.
- 4.2.3. All Interconnection Fees payable shall be paid on a “net-off” basis, so that the Party that owes the higher Interconnection Fees after invoices have been received (on or prior to the tenth (10th) Working Day after the end of the Billing Period) shall pay the net amount to the other Party within thirty (30) Working Days of receipt of the other Party’s tax invoice.
- 4.2.4 Obligations related to Keeping records of Billing data and Information (CDRs) will be stipulated under the Interconnection Agreement.
- 4.2.5 The entity requesting interconnection may consider, in good faith, that there is a discrepancy between the amount charged in an invoice (including the amount of any Credits) and the amount properly due under the Interconnection Agreement (“Discrepancy”). In these circumstances, the entity requesting interconnection shall notify Safaricom Ethiopia within ninety (90) Working Days of the date of receipt of the invoice, giving sufficient detail for the Provider to investigate the dispute.
- 4.2.6 Notwithstanding the provisions this Reference Offer or the Interconnection Agreement, a dispute shall only be raised if the aggregate amount in dispute exceeds the greater of (a) fifty thousand Ethiopian Birr (50,000 ETB) or (b) one per cent (1%) of the invoiced amount.
- 4.2.7 The consequences of a discrepancy notice shall be determined under the Interconnection Agreement.
- 4.2.8 In the event of any Discrepancy, the Parties shall use their reasonable endeavors to resolve the dispute within twenty (20) Working Days, or such longer period as agreed between the parties under the Interconnection Agreement. If no resolution is reached in that time period, the Parties shall refer the matter to the Authority for determination, and the Authority will govern the case as per the applicable laws.
- 4.2.9 Notwithstanding any dispute between the Parties as to any payment, the Parties shall, throughout the term of the Interconnect Agreement, remain obliged to observe and perform their obligations.

4.3 Wholesale Voice Call and SMS Termination Rates

Safaricom Ethiopia shall charge rates determined in the Authority's Determination No.2/2024 of 9th February 2024 for wholesale Mobile, fixed call and SMS termination rates to a mobile, fixed and SMS termination services:

4.3.1 Interconnection Rates for all Mobile Voice Call Termination Services

A. Rates applicable for the period from 1 May 2024 to 30 April 2025

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.23

B. Rates applicable for the period from 1 May 2025 to 30 April 2026

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.22

C. Rates applicable for the period from 1 May 2026 to 30 April 2027

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.21

D. Rates applicable for the period from 1 May 2027 to 30 April 2028

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.20

E. Rates applicable for the period from 1 May 2028 to 30 April 2029

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.19

4.3.2 Interconnection Rates for all Fixed Voice Call Termination Services

A. Rates applicable for the period from May 1,2024 to April 30,2025

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.15

B. Rates applicable for the period from May 1, 2025, to April 30, 2026

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.14

C. Rates applicable for the period from May 1, 2026, to April 30, 2027

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.13

D. Rates applicable for the period from 1 May 2027 to 30 April 2028

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.13

E. Rates applicable for the period from 1 May 2028 to 30 April 2029

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.12

4.3.3 Interconnection Rates for all SMS Termination Services

A. Rates applicable for the period from May 1,2024 to April 30,2025

Applicable Hours	Rate per SMS (Before Taxes)
All hours	ETB 0.05

B. Rates applicable for the period from May 1, 2025, to April 30, 2026

Applicable Hours	Rate per SMS (Before Taxes)
All hours	ETB 0.05

C. Rates applicable for the period from May 1, 2026, to April 30, 2027

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.05

D. Rates applicable for the period from 1 May 2027 to 30 April 2028

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.04

E. Rates applicable for the period from 1 May 2028 to 30 April 2029

Applicable Hours	Rate per minute (Before Taxes)
All hours	ETB 0.04

5. TECHNICAL CHARACTERISTICS

5.1 Points of Interconnection

5.1.1 IP Interconnection

The following table indicates the initial Signalling Gateways and/or STPs for the Interconnection to be established.

[entity requesting interconnection] SGW/STP	Safaricom Ethiopia STP	Safaricom Ethiopia Site Name
TBA	MDC1	ICT Park
TBA	MDC2	Kality

5.1.2 Public Internet Exchange Points

The table below indicates the Public Internet Exchange Points.

Name	Location
MDC1	ICT park
MDC2	Kality

5.2 Routing Principles

5.2.1 IP Interconnection

- Both dynamic protocol (BGP) and static routing can be used to advertise IP routes, bi-directionally between Safaricom Ethiopia and the entity requesting interconnection but if BGP is used it is required to put control policies.
- Safaricom Ethiopia and the entity requesting interconnection shall ensure that all IP addresses used for the purposes of Interconnection are not disclosed to any third party in any form whatsoever.
- Calls from within the network used by Safaricom Ethiopia shall be routed via a PoP to the network used by the entity requesting interconnection in accordance with the Safaricom Ethiopia Network routing plan and the Interconnection Directive ; and
- Safaricom Ethiopia bound Calls from within the network used by the entity requesting interconnection shall be routed via a PoP as elected by the entity requesting interconnection, to the network used by Safaricom Ethiopia.

5.3 Route Diversity and Security Arrangements

5.3.1 IP Interconnection

- For reliability, Peering Connections shall be provisioned over physically diverse paths where such diversity exists. Any deviation from this condition shall be negotiated and agreed in writing between Safaricom Ethiopia and the entity requesting interconnection.
- Safaricom Ethiopia and the entity requesting interconnection shall have at least 2 (two) geographically redundant PoPs in each region that complement each other by offering route and equipment diversity and each PoP shall have a unique single demarcation IP. All packets (signalling and user information) shall terminate on single demarcation points;
- Each “physical link” shall be related to 1 (one) each of the demarcation IPs specified in bullet point 2; provided that any deviation from this condition shall be negotiated and agreed between Safaricom Ethiopia and the entity requesting interconnection and provided further

that where the Safaricom Ethiopia and the entity requesting interconnection fail to agree on such deviation, no deviation shall be permitted;

- “Keep-Alive” messages (SIP Options) shall be exchanged and positively acknowledged (200 OK) between all demarcation points so that failover can be managed appropriately in the event of an outage; and
- The entity requesting interconnection shall share the traffic load terminating on the Electronic Communications Network used by Safaricom Ethiopia equally across the 2 (two) regional Safaricom Ethiopia PoPs.

5.4 Numbering

5.4.1 Calls Originating on the Electronic Communications Network used by the Entity Requesting Interconnection and Terminating on Safaricom Ethiopia.

5.4.2 IP Interconnection

- The PoPs shall be configured to forward pass numbers in the E.164 format +CC NDC SN, where
 - “CC” is the country code 251 (two hundred fifty-one);
 - “NDC” is the national destination code or geographical area code allocated to and utilized by either Safaricom Ethiopia or the entity requesting interconnection (national significant ‘0’ excluded); and
 - “SN” can be any digit, i.e. any numeral from 0 (zero) to 9 (nine), and any number of digits (refer to the Telecommunications Numbering Directive No. 795-2021 of the Authority , which shall for purposes of this RIO, include any subsequent Directives or guidelines).
- All dialled digits, excluding leading “00” (NADI indicator), shall be passed across the PoPs.

5.4.3 Other Calls

In the event of any other calls passed across the POI, deviating from the numbering guidelines, Safaricom Ethiopia and the entity requesting interconnection shall consult with each other in order to agree on the format of the numbers to be forward passed.

5.4.4 Calling Line Identification

5.4.4.1 The entity requesting interconnection shall forward to Safaricom Ethiopia, across the Points of Interconnection, the individual subscriber numbers /MSISDN/ of their subscribers, irrespective of whether their subscribers have restricted the forwarding thereof.

5.4.4.2 The Calling Line Identification (CLI) format shall be in accordance with ITU-T Recommendation E.164.

5.4.5 Safaricom Ethiopia and the entity requesting interconnection shall ensure that their subscriber’s CLI information does not alter from the point of entry to the point of exit of the Network used by Safaricom Ethiopia and the entity requesting interconnection; save in accordance with the instructions of the subscribers of Safaricom Ethiopia and the entity requesting interconnection. Where Safaricom Ethiopia

or the entity requesting interconnection is not capable of ensuring that the CLI information remains consistent, the CLI information shall not be presented to the called subscriber.

5.4.6 Equal Treatment

Safaricom Ethiopia and the entity requesting interconnection shall each ensure that a voice call originating on;

5.4.6.1 the Electronic Communications Network used by such party and destined for the Electronic Communications Network used by the other party; and

5.4.6.2 the Electronic Communications Network used by the other party and destined for the Electronic Communications Network used by such party, when passed to it across a Point of Interconnection, is treated no less favourably than a voice call originating on and destined for the Electronic Communications Network used by either Safaricom Ethiopia or the entity requesting interconnection and that the interconnection is seamless across the Point of Interconnection.

5.5 Requirements to ensure Network Security or Integrity

5.5.1. Protection of the Electronic Communications Network

Safaricom Ethiopia and the entity requesting interconnection shall not do or permit to be done or omit or permit the omission of anything in relation to the Electronic Communications Network used by such party that may reasonably be expected to

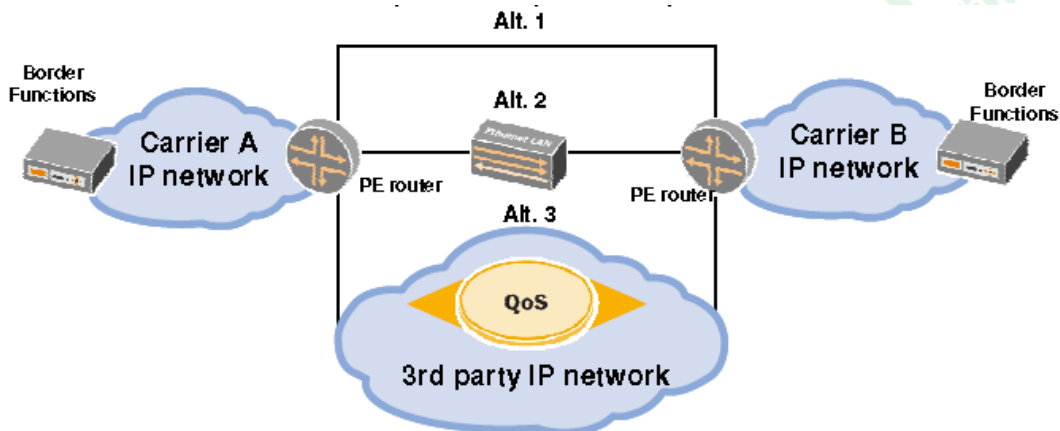
- cause any damage to the Electronic Communications Network used by the other party; or
- materially interfere, in any way whatsoever, with the proper and normal operation of such Electronic Communications Network.

5.5.2. Safety

Safaricom Ethiopia and the entity requesting interconnection shall not endanger the health and safety of any party including, without limitation, to one another's employees, agents, directors, sub- contractors and subscribers, and in this respect the entity requesting interconnection and Safaricom Ethiopia shall each be responsible for the safe operation of the equipment compromising the Electronic Communications Network.

6 ARRANGEMENTS FOR ESTABLISHMENT OF INTERCONNECTION

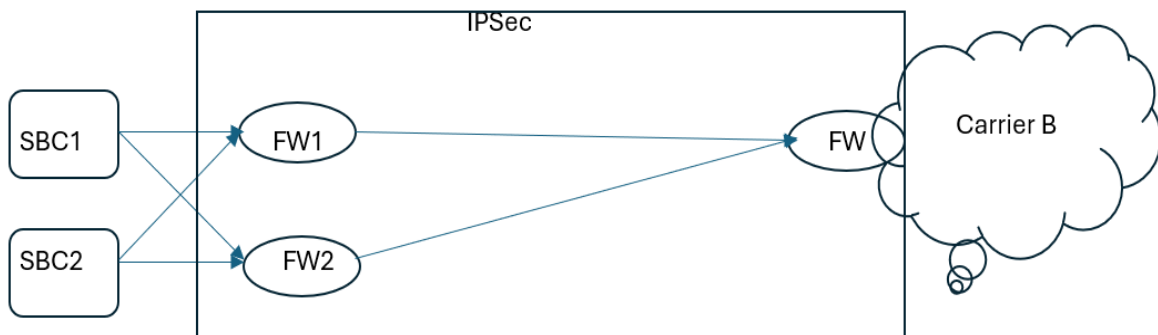
6.1 IP Interconnection



The connectivity diagram above shows a connectivity between two network operators, with the three options of connection between Provider Edge routers, Alt.1 one being a layer 1 connection, Alt.2 a layer 2 connection and Alt.3 a layer 3 connection.

The two interconnect sites shall be used for interconnection to other regions in addition to National interconnect/roaming services.

For the Interconnect logical setup eBGP Inter-AS Option A (VRF Back-to-Back) shall be used with strict import and export policies applied to ensure only relevant prefixes are exchanged. AS_PATH attribute shall not be modified by either of the parties to ensure loop detection and avoidance. Public or Private ASN shall be used to peering, agreement between the parties.



The connectivity diagram shows the connection between the two operators with two options of connection guaranteeing service assurance in case of incidents.

A Border Function or Session Border Controller (SBC) at both provider network edges, amongst others the SBC, shall provide the following key function:

- Topology hiding .

6.2 Traffic forecasting has to be supplied by the entity requesting interconnection for the agreed Points of Interconnection.

6.3 Subsequent to installation, the links are configured and tested. Testing includes *inter alia* the following:

6.3.1 Transmission (end to end IP connectivity), incoming and outgoing voice calls

6.3.2 SIP

6.3.3 MTP Level 3; ISUP Level 4; and

6.3.4 billing validation on both sides, Signalling and SIP testing shall be performed in accordance with Q.781, Q.782, Q.783, Q.784 and Q.785 recommendations of the Telecommunications Standardization Sector of the International Telecommunications Union.

6.4 Signalling and SIP testing shall be performed in accordance with Q.781, Q.782, Q.783, Q.784 and Q.785 recommendations of the Telecommunications Standardization Sector of the International Telecommunications Union.

6.5 Upon successful testing, information is exchanged between Safaricom Ethiopia and the entity requesting interconnection in respect of the switching and transmission interfaces. Such information includes *inter alia* the following:

- Signalling and traffic routing details between Safaricom Ethiopia and the entity requesting interconnection;
- Exchange name.
- Signalling Point Code as allocated by the Authority.
- Public IP Addresses, port numbers.
- Official number allocations, as allocated by the Authority and address information.
and

- A basic network diagram depicting the infrastructure to be rolled out, including the required Points of Interconnection.

6.6 A Network Management Center (NMC) procedure (Inter ISD) document is created, establishing the following procedures for fault management:

6.6.1 Safaricom Ethiopia and the entity requesting interconnection shall be required to establish an interconnection service desk (“ISD”) to address any malfunctioning of the interconnection in order that such be rectified promptly and efficiently. All matters relevant to the proper functioning of the interconnection (generally of a technical nature) are to be reported to the ISD. Each ISD shall

6.6.2 be staffed on a 24-hour basis and equipped with the necessary infrastructure to facilitate efficient communication;

6.6.2.1 offer its full assistance for the rectification of interconnection outages and other faults;

6.6.2.2 be responsible for processing reported interconnection outages and other faults; function as the traffic controlling party for the circuit on which it loads outgoing traffic; and

6.6.2.3 be used as the contact point for any inter-service assistance required.

6.7 Upon detection of an unplanned interconnection outage, the ISDs of Safaricom Ethiopia and the entity requesting interconnection shall immediately notify each other. At the time of notification the outage could have ceased to exist or could still be persisting. In cases where the outage has ceased to exist, the ISDs shall note the occurrence, duration and details of the failure. In cases where the outage is persisting, immediate action shall be taken to localize the fault causing the failure and to identify the party responsible for clearing the fault (should this have been unclear at first). The ISDs shall thereafter and until full restoration of service inform each other every 15 (fifteen) minutes, or at mutually agreed upon intervals, of the progress of the repair. Once full service has been restored the ISDs shall note the outage duration and details of the failure.

6.8 Planned interconnection outages shall be kept to an absolute minimum and shall not be carried out during busy traffic times. The party planning such an outage shall inform the other party’s ISD 14 (fourteen) days in advance (by mutual agreement this time scale may be reduced) and agree upon a suitable time and expected duration for such an outage. If the planned outage does not directly affect the other party, such other party’s ISD shall nevertheless be informed of the planned time and duration of the outage. During a planned outage the responsible party shall, at regular intervals and until full restoration of service, inform the other party’s ISD of the progress. Once full service has been restored

the ISDs shall note the outage duration. If full service is not restored within the expected duration, the outage shall be regarded as an unplanned outage (occasioned by a planned outage).

6.9 Safaricom Ethiopia and the entity requesting interconnection shall each maintain records, preferably in electronic format, containing details of all interconnection outages and other faults and the corresponding restoration times which were handled between it and the other party's ISD for a running 12 (twelve) month period. These records should be used to assess the fault performance of interconnection once implemented.

6.10 It is accepted that certain scheduled and unscheduled maintenance actions shall be carried out by Safaricom Ethiopia and the entity requesting interconnection on the items comprising the interconnection.

7 Limitation of Liability

7.1. Exclusion of liability

The liability of a Party under the Interconnection Services Agreement for Indirect, consequential, special or punitive loss or Damages in respect of any and all defaults, negligent acts or omissions or breaches of statutory duty is excluded.

7.2. Exceptions to the limitation and exclusions of liability

The limitation under clause 7.1. do not apply to certain categories of liability which are commonly subject to unlimited liability, namely (a) fraud or willful default, (b) death of personal injury arising from a Party's negligence, (c) breach of confidentiality, (d) infringement by a Party of the other Party's intellectual property rights or (e) which cannot be excluded by law. These exceptions will be set out in the Interconnection Services Agreement.

7.3. Limitation of Liability.

Subject to clause 7.2, each party's total aggregate liability for any and all losses arising out or in connection with performance of contemplated performance of the Interconnection Service Agreement shall be limited to a sum equal to one hundred (100%) of the total fees paid or payable by that party under the Agreement for the last 12 months.

8. Amendment and Termination

8.1. Amendment

Requests for the amendment of agreements, once concluded and implemented, shall be made in a similar manner and relevant information shall be provided on request by Safaricom Ethiopia. Any amendment or modification shall follow the Authority's determination and be made in compliance to the Interconnection Directive and applicable laws.

8.2.Termination

The termination of an Interconnection Agreement shall be affected strictly in accordance with the terms and conditions set forth therein and in compliance with all applicable laws, regulations, and directives issued by the Authority.

9. Governing Law and Dispute Resolution

9.1. Governing Law

The Interconnection Agreement shall be governed by the laws of the Federal Democratic Republic of Ethiopia

9.2. Dispute Resolution

9.2.1. Meet to Negotiate in Good Faith

Should any dispute arise between the Parties in connection with the Interconnection Services Agreement, or in relation to any matter affecting the interests of the Parties in terms of the Interconnection Services Agreement, the Parties shall meet to negotiate in good faith in an effort to settle such dispute.

9.2.2. Referral to the Authority

Should the Parties fail to resolve any dispute between themselves within Thirty (30) Business Days of the meeting referred to in clause 8.1. (or such longer period as mutually agreed by the Parties in writing), either Party may refer the matter to the Authority for resolution by the Authority in accordance with Clause 24 of the Interconnection Directive or other relevant directives of the Authority.

9.3. Under no circumstances shall an interconnection be interrupted by either party while an interconnection dispute is being resolved.

10. Quality of Service

10.1. Safaricom Ethiopia and the entity requesting interconnection shall adhere to the quality standards set forth under the Interconnection Agreement based on Quality-of-Service Directive of the Authority and deliver an interconnection quality similar to the quality that each provide to their own customers.

11. Prevention of Fraud

Safaricom Ethiopia and the entity requesting interconnection under an interconnection agreement shall cooperate in the detection and control of fraud. The Interconnection Agreement will regulate the level of cooperation between the parties, the information to be shared and any measure involving blocking suspicious or fraudulent traffic.

12. Intellectual property rights

- 12.1.** Except as otherwise expressly provided herein, intellectual property rights shall remain the property of the Party creating or owning the same and nothing in this Reference Offer shall be deemed to confer any right or title whatsoever or license of the intellectual property rights of one Party to the other, and nothing in this Reference Offer shall be deemed to restrict the rights of any Party to own, use, enjoy, license, assign or transfer its own intellectual property.
- 12.2.** Where the Intellectual Property is developed in connection with performance of this Reference Offer then in the absence of any other agreement between the Parties, the ownership of the Intellectual Property shall remain with the Party that developed the same. Where Intellectual Property is developed jointly by the Parties, each Party agrees to grant the other Party a license for the use of such Intellectual Property for the purposes of implementation of this Reference Offer.