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PRE-REGULATORY RESEARCH PAPER

Telecommunications Interconnection in Somalia:

Market Assessment, Prior Experience, and Options for a Regulatory Framework

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**National Communications Authority
FEDERAL REPUBLIC OF SOMALIA**

Purpose: *This paper has been prepared to inform the development of a telecommunications interconnection regulatory framework in Somalia. It is research, regulatory analysis and review document. It assesses the current market, reviews prior interconnection attempts, surveys international models, and sets out options for the NCA to consider when designing a formal framework.*

1. Background and Context

1.1 Why Interconnection Matters

Interconnection is the linking of separately owned telecommunications networks so that subscribers on one network can communicate with subscribers on any other network. Without interconnection, a customer of Operator A cannot call or send messages to a customer of Operator B. This fragmentation harms consumers directly and distorts competition, because it creates incentives for subscribers to cluster on the largest network rather than choosing based on service quality or price.

In Somalia, multiple licensed mobile network operators serve different parts of the population. In the absence of mandated interconnection, subscribers of different operators cannot communicate across networks. This is a significant public interest problem, particularly given the importance of mobile communication to Somalia's economy and social fabric.

Beyond consumer welfare, interconnection is also a prerequisite for a functioning competitive market. The National Communications Law of 2017 recognises this, granting the NCA explicit authority under Articles 49–53 to establish and regulate interconnection among licensed operators.

1.2 The NCA's Mandate

Articles 49–53 of the National Communications Law of 2017 establish the NCA's legal basis to act in this area. Specifically, the Law directs the NCA to:

- Require licensed telecommunications service providers to offer interconnection to other licensed providers on fair and non-discriminatory terms;
- Establish the terms, conditions, and pricing principles for interconnection;
- Develop technical standards and guidelines to govern interconnection;
- Provide a mechanism for resolving disputes arising from interconnection negotiations or agreements.

This document is prepared in fulfilment of that mandate, as a foundational step before regulation is drafted.

2. Somalia Telecommunications Market Overview

2.1 Licensed Operators

Somalia currently has several licensed mobile network operators, including Hormuud Telecom, Golis Telecom, Somtel, Nationlink, Amtel, and Somlink, among others. These operators hold licences granted by the NCA and operate across different regions of the country, with varying subscriber bases and network coverage.

The market comprises existing market players and new entrants, operating across different regions with overlapping coverage in several areas. This structure is directly relevant to interconnection, as operators with larger established subscriber bases have historically had weaker commercial incentives to interconnect, given that a substantial proportion of calls made by their subscribers remain on-net.

2.2 Current State of Interconnection

As of the date of this document, there is no active interconnection agreement in force between any

of the licensed operators in Somalia. Subscribers on different networks cannot call one another. This is the baseline condition that this regulatory exercise seeks to address.

Somalia is unusual in this respect. Across sub-Saharan Africa, interconnection is standard practice, typically mandated by national telecommunications law and enforced by a regulatory authority. Somalia's prolonged absence of interconnection is a direct consequence of the absence, until recently, of an effective regulatory framework.

3. Prior Interconnection Attempts: Lessons Learned

Somalia has twice achieved interconnection among its operators, and on both occasions the arrangement collapsed. Understanding why is essential to designing a framework that avoids the same failures.

3.1 First Interconnection (December 2000)

In December 2000, operators including Al-barakat, Olymbic, and Nationlink established mobile interconnection by mutual commercial agreement. This was a voluntary arrangement negotiated directly between the operators, with no regulatory involvement and no enforcement mechanism. Documentation of the terms of this agreement is limited, but the arrangement is understood to have functioned for a period before breaking down.

3.2 Second Interconnection (2014)

In 2014, three operators Hormuud, Nationlink, and Somtel reached a new interconnection agreement. Again, this was a voluntary commercial arrangement with no regulatory underpinning. The agreement collapsed within a relatively short period due to disputes between the operators and the absence of any neutral body capable of resolving those disputes. Operators disconnected their networks.

3.3 Root Causes of Failure

Based on analysis of both prior experiences, the following structural deficiencies are identified as the root causes of interconnection failure in Somalia. Any regulatory framework must directly address each of these:

Deficiency	Explanation
No regulatory authority	Both the 2000 and 2014 agreements were entirely voluntary. Without a regulator, there was no mechanism to enforce terms, mediate disputes, or compel compliance.
No agreed pricing methodology	The absence of a standardized method for calculating Mobile Termination Rates (MTR) led to persistent disagreements between operators, ultimately causing the breakdown of the 2014 agreement.
No formal agreement structure	Agreements were informal and lacked standardized terms, making enforcement and amendment processes unclear.
No dispute resolution mechanism	When operators disagreed, there was no neutral body or procedure to resolve the conflict. Operators simply disconnected.

No technical standards	Without agreed technical guidelines, operators faced practical difficulties in establishing and maintaining interconnection links.
Market power imbalances	Larger operators had less incentive to interconnect, as their subscribers were already on the dominant network. Without regulatory compulsion, dominant operators could resist or delay interconnection.

The conclusion is clear: voluntary interconnection arrangements, without regulatory backing, do not hold in this market. A formal regulatory framework is necessary.

4. International Experience

A review of interconnection frameworks in comparable African telecommunications markets provides useful reference points for the NCA as it considers its regulatory options. The table below summarises the approach taken in five selected countries.

Country	Regulator	Interconnection Approach	Key Feature
Kenya	Communications Authority of Kenya	Cost-based MTR set by regulator; mandatory interconnection for all licensed operators; dispute resolution through regulator.	Mandatory regulatory framework with fixed MTR floor.
Ghana	National Communications Authority	Reference Interconnection Offer (RIO) required from dominant operators; MTR negotiated within regulatory bounds.	RIO-based model with regulatory oversight on dominant players.
Tanzania	Tanzania Communications Regulatory Authority	Asymmetric MTR initially applied to encourage new entrants; regulator mediates disputes.	Asymmetric pricing to support market entry.
Uganda	Ugandan Communications Commission	Interconnection mandated under telecommunications act; cost-based MTR; arbitration available.	Statutory mandate with arbitration backstop.
Rwanda	Rwanda Utilities Regulatory Authority	Full interconnection among all licensed operators; regulator sets MTR; strong enforcement record.	Fully enforced statutory interconnection.

Across these examples, several common elements emerge. First, interconnection is mandated by law, not left to commercial negotiation. Second, the regulator sets or approves pricing (MTR), removing the most contentious element from bilateral negotiations. Third, a dispute resolution mechanism is available to prevent impasse. Fourth, technical standards are prescribed to reduce barriers to implementation. These elements should form the basis of Somalia's framework.

5. Key Issues the Regulatory Framework Must Address

Based on the foregoing analysis, the NCA has identified the following as the essential issues that any interconnection regulatory framework for Somalia must resolve. These are not yet resolved they are the questions that the regulation must answer.

5.1 Scope: Who Must Interconnect?

The framework must define which operators are subject to mandatory interconnection obligations. The options are: all licensed operators without exception. The NCA's preliminary view is that universal mandatory interconnection is most appropriate for Somalia at this stage, given the relatively small number of licensed operators and the broad public interest in cross-network connectivity. However, this requires further stakeholder consultation.

5.2 Pricing: How Should Mobile Termination Rates Be Set?

The Mobile Termination Rate (MTR) is the rate one operator charges another to terminate a call on its network. It is the single most contentious element of interconnection negotiations. The prior failure of the 2014 agreement is understood to have been driven in significant part by MTR disagreements.

The options for MTR-setting include:

- Freely negotiated between operators, within a regulatory cap set by the NCA;
- A benchmarked rate, derived from MTR levels in comparable jurisdictions and adjusted to reflect local market conditions;
- Regulated cost-based rate, calculated by reference to the long-run incremental cost (LRIC) of termination;
- Uniform regulated rate set by the NCA and applied to all operators;
- Asymmetric rates, where smaller operators are permitted to charge higher MTRs to offset the competitive disadvantage of smaller networks.

Each approach has advantages and disadvantages. A fully negotiated rate risks reproducing the impasse seen in 2014. A benchmarking approach offers a pragmatic alternative where domestic cost data is limited, but its accuracy depends on the comparability of reference jurisdictions. A regulated cost-based rate provides predictability but requires cost data that may be difficult to obtain in the short term. A uniform regulated rate is administratively simple but may not reflect real cost differences. The NCA will need to consider which approach is feasible given current data availability and market conditions.

5.3 Technical Standards: What Must the Interconnection Link Look Like?

Operators need technical guidance on the type of interconnection links required, the points of interconnection, signalling protocols, and quality of service standards. Without agreed technical guidelines, operators may face practical difficulties even where commercial terms are agreed. The NCA should develop or adopt technical guidelines before or concurrent with the regulation.

5.4 Negotiation Procedure: How Should Agreements Be Reached?

The framework should specify a clear procedure for operators to follow when negotiating interconnection agreements: the timeframes within which an offer must be made and responded to, the information that must be exchanged, and the process for registering a concluded agreement with the NCA. Without a defined procedure, negotiations can stall indefinitely.

5.5 Dispute Resolution: What Happens When Negotiations Break Down?

Experience from 2000 and 2014 shows that operator disputes will arise. The framework must provide a clear, accessible dispute resolution mechanism. This could take the form of NCA-led mediation, NCA adjudication, or a hybrid approach. The mechanism must be credible and timely delays in dispute resolution can cause operators to simply disconnect, as occurred previously.

5.6 Enforcement: How Will Compliance Be Ensured?

Regulation without enforcement is ineffective. The framework must specify what sanctions apply if an operator refuses to interconnect, fails to implement an agreed interconnection, or breaches the terms of a registered agreement. Sanctions should be proportionate and should include the ability to impose financial penalties and, in extreme cases, licence conditions.

6. Options for the Regulatory Framework

The NCA considers three broad options for the structure of the interconnection regulatory framework. These are set out below for the purpose of stakeholder consultation. The NCA has not yet reached a final position.

Option A: Negotiation-First with Regulatory Backstop

Under this model, operators would be required to negotiate interconnection agreements bilaterally, within a framework of regulatory principles (non-discrimination, transparency, reasonable terms). The NCA would set a maximum MTR and would only intervene to impose terms if negotiations failed within a defined period. This approach preserves commercial flexibility but risks prolonged negotiation impasses.

Option B: Regulated Reference Offer

Under this model, operators with significant market power would be required to publish a Reference Interconnection Offer (RIO) a standard set of terms on which they will offer interconnection to any requesting operator. Smaller operators would negotiate on the basis of the RIO. The NCA would approve the RIO before it is published and would set or approve the MTR. This model is used widely across Africa and reduces the scope for negotiation failure.

Option C: Fully Regulated Framework

Under this model, the NCA would prescribe the terms of interconnection, including MTR, technical standards, and agreement structure, with operators required to comply. There would be little room for commercial negotiation outside of the regulatory parameters. This approach provides the greatest certainty and is most resistant to operator resistance, but is administratively demanding and may not reflect commercial realities if regulatory capacity is limited.

The NCA's preliminary preference is for a model combining elements of Options B and C a regulated Reference Interconnection Offer with a regulated MTR and a robust dispute resolution mechanism. This view is subject to stakeholder consultation.

7. Proposed Next Steps

This document represents the first step in a process that will lead to the adoption of a formal interconnection regulatory framework. The NCA proposes the following sequence of steps:

1. Circulation of this document to licensed operators and other stakeholders for comment.
2. Stakeholder consultation workshop to discuss the key issues identified in Section 5 and the framework options set out in Section 6.
3. Capacity-building engagement with operators on technical interconnection requirements.
4. Development of a draft Interconnection Regulation, incorporating stakeholder input and international best practice.
5. Public consultation on the draft Regulation.
6. Finalisation and adoption of the Interconnection Regulation by the NCA Board.
7. Development of supporting Technical Guidelines and Agreement Registration procedures.
8. Implementation: operators to negotiate and register interconnection agreements within a specified period following adoption of the Regulation.

8. Conclusion

Somalia has the legal basis, the institutional mandate, and critically the practical experience of two failed non-regulatory interconnection attempts to inform the design of an effective interconnection framework. The evidence is unambiguous: voluntary arrangements without regulatory backing do not hold in this market, and the consumer harm caused by the current absence of interconnection is significant.

This document does not prescribe a solution. It frames the problem, identifies the key issues the regulation must resolve, surveys international approaches, and sets out options for stakeholder discussion. The NCA is committed to a consultative process that produces a framework with broad operator buy-in not because buy-in is a prerequisite to regulatory action, but because experience shows that implementation is smoother and more durable when operators understand and accept the rationale for the rules.

The NCA invites responses to this paper from all licensed operators and other interested parties. Comments should be submitted to the NCA by the date specified in the accompanying public notice.