

ICT Regulatory Transformational Strategy and Roadmap for Somalia



This document is produced by National Communication Authority (NCA).

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Foreword by the Director General,

I proudly present the "ICT Regulatory Transformational Strategy and Roadmap for Somalia." This document is an essential step in improving Somalia's regulations for the Information and Communication Technology (ICT) sector. It aligns our national efforts with international best practices and the standards the International Telecommunication Union (ITU) sets.

We aim to create a solid and modern regulatory environment for Somalia's ICT sector. We are guided by the National Communications Law of 2017 and the Strategic Plan (2023 - 2027). These documents have established the National Communications Authority (NCA) as an independent regulatory body committed to transparency, fairness, and technological innovation. Our roadmap aims to elevate Somalia's ICT sector to a fourth-generation (G4) regulatory framework according to ITU standards. The plan revolves around four main pillars: strengthening regulatory authority, expanding the regulatory mandate, overhauling the regulatory system, and improving the competition framework. Each pillar is carefully crafted to encourage a competitive, innovative, and inclusive ICT environment, ultimately aiding Somalia's socio-economic development.

I would like to extend my sincere gratitude to the team led by Liban Abdulkadir, our regulatory expert, for developing this transformational plan. Their collective expertise has been pivotal in ensuring that our strategic approach aligns with the specific needs of our country while fully complying with the standards set by the International Telecommunication Union (ITU).

"As we progress, I urge all stakeholders—government agencies, private sector partners, and civil society—to work together to achieve this vision. Collectively, we can establish a regulatory framework that addresses current challenges and prepares for future opportunities, guaranteeing that all Somali citizens have access to top-quality digital services."

Thanks to everyone who has contributed to this strategy. Your commitment and efforts have laid the groundwork for a digitally inclusive and prosperous Somalia. Let's work together to bring this roadmap to life and achieve our shared goals.

Mustaf Yasin Sheikh

Director General, National Communications Authority, The Federal Republic of Somalia.

Qorshaha Istaraatiijiyadda Isbeddelka Awoodda Kor-Joogteynta ee Hay'adda

Istaraatiijiyadda Isbeddelka Xeernidaaminta Hay'adda waa qorshe faahfaahsan oo ku aaddan casriyeynta qaabdhismeedka xeerarka Isgaarsiinta iyo Tiknoolojiyadda ee Soomaaliya, iyadoo la jaanqaadaysa heerarka Jiilka Afraad (G4) ee Ururka Isgaarsiinta Caalamiga ah (ITU). Hay'adda Isgaarsiinta Qaranka (HIQ) ayaa hoggaaminaysa dadaalkan, iyadoo diiradda saareysa in Isgaarsiinta iyo Tiknoolojiyadda ee Soomaaliya ay noqoto mid horseedda horumarinta bulshada iyo dhaqaalaha iyada oo lagu horumarinayo tartanka, hal-abuurnimada, iyo helitaanka adeegyada dijitaalka ah.

Ujeeddooyinka Muhiimka ah

Ujeedka Istaraatiijiyaddan ayaa ah in la soo saaro qaab korjoogteyn oo fududaynaya in Soomaaliya ay ka gudubto heer Jiilka 2aad (G2) una gudubto heerka Jiilka 4-aad (G4), taas oo ku saleysan dejinta siyaasadaha horumarinta bulshada iyo dhaqaalaha, iyadoo aan la eegeyn kaliya arrimaha suuqa. Ujeeddooyinka waaweyn waxaa ka mid ah:

- **1. Xoojinta Maamulka Hay'adda:** Hagaajinta madaxbannaanida Hay'adda, go'aan qaadashada, iyo tayada tiknoolajiyada si loo yareeyo faragelinta siyaasadeed lana xaqiijiyo hufnaanta.
- 2. Ballaarinta Waajibaadka Hay'adda: HIQ waxa ay waajibaadkeeda ku dari doontaa kordhinta wadashaqeynta Hay'adaha kale ee dowladda sida warfaafinta iyo maamulka Xogta internetka, taas oo keeni doonta hab-maamul dhammeystiran.
- 3. Dib-u-habeynta Qaab-dhismeedka Xeernidaaminta: Fududeynta soo gelitaanka suuqa ee shirkadaha cusub, dhiirigelinta hal-abuurnimada, iyo xaqiijinta hufnaanta, gaar ahaan qiimaha isku-xirka iyo wadaagga kaabayaasha.
- **4. Hagaajinta Qaab-dhismeedka Tartanka Suuqa**: Dejinta xeernidaamin cad oo ku saabsan sida loo isticmaalayo Awoodda Suuqa (Significant Market Power -SMP) iyo dejinta tilmaamayaal xaqiijinaya ka hortagga waxyaabaha keenaya in tartanka suuqa la waxyeeleeyo.

Tiirarka Istiraatiijiyadda

Si loo gaaro ujeeddooyinkan, istaraatiijiyadda waxay diiradda saareysaa afar tiir oo waaweyn:

1. Xoojinta Xeernidaaminta Hay'adda:

- Madax-bannaanida iyo Isla-xisaabtanka: HIQ waxay balaarin doontaa ilaha maaliyadeed ee ka baxsan miisaaniyadda dawladda si kor loogu qaado awoodda xeer-nidaamineed ee Hay'adda.
- Horumarinta Tiknoolajiyada: Maalgelinta nidaamyada kormeerka, falanqaynta xogta, iyo howlaha amniga internetka waxay awood u siin doontaa HIQ inay si wanaagsan u maamusho oo u kormeerto qaybaha isgaarsiinta iyo tiknoolojiyadda.
- Kor-u-qaadida Aqoonta Shaqaalaha: Tababar joogto ah oo loo qabto shaqaalaha hay'adda si aqoontooda iyo khibradooda kor loogu qaado.

2. Ballaarinta Waajibaadka kor-joogteyn

O HIQ waxay la shaqayn doontaa hay'adaha kale ee dowladda, sida Wasaaradda Warfaafinta, Bankiga Dhexe, Hay'adda Duulista Hawada, iyo Hay'adda Tayodhowrka Soomaaliyeed, si loo abuuro qaab midaysan oo lagu kormeero warbaahinta, xogta dhijitaalka, Tiknoolojiyadda Maaliyadeed iyo teknoolojiyadda cusub.

3. Dib-u-habeynta Qaab-dhismeedka nidaaminta iyo korjoogteynta:

- Adeegyada Aan Shatiga Laga Rabin: Soo bandhigida adeegyada aan shati looga baahnayn, taasoo dhiirrigelinaysa hal-abuurka Tiknoolojiyadda.
- Wadaagga Kaabayaasha: Waajibinta in shirkadaha isgaarsiinta ay wadaagaan kaabayaasha waxay yareyn doontaa kharashaadka shirkadaha, isla markaana hagaajin doontaa helitaanka adeegyada. Sidoo kale Qiimaha isku xirka oo la shaaciyo waxa ay kor u qaadi doontaa hufnaanta adeegga isku xirka shirkadaha.
- Soo kordhinta Xeernidaaminta Lambarada Guurguura (Number Portability): In la oggolaado in macaamiishu ay sii isticmaali karaan lambarkooda, marka ay ka guurayaan shirkad isgaarsiineed, una guurayaan shirkad kale. Taas waxa ay u qaadi doontaa tartanka iyo tayada adeegga.

4. Hagaajinta Qaab-dhismeedka Tartanka Suuqa:

 Si loo Xoojiyo tartanka qaybaha muhiimka ah sida Internet ka baaxadda leh (broadband), kaabayaasha isgaarsiinta, Hay'addu waxay hirgelin doontaa qaab sharci ah oo loogu talagalay xakameynta Awoodda Suuqa (SMP) si loo dhiirigeliyo hal-abuurka.

Natiijooyinka La Filayo

Hirgelinta istaraatiijiyaddan waxay keeni doontaa isbeddello muhiim ah oo ka dhici doona qaybta isgaarsiinta iyo tiknoolojiyadda, iyadoo faa'iidooyin u keenaysa horumarka dhaqan-dhaqaale ee dalka:

- Adkeynta Tartanka Wanaagsan ee Suuqa: in loo gudbo qaab dhismeedka korjoogteyn Iyo nidaamin ee Jiilka 4-aad (G4) waxay soo jiidan doontaa maalgelinta, waxayna kobcin doontaa dhaqaalaha dhijitaalka ah.
- Kor u qaadidda Tayada Adeegyada: Tartanka iyo hal-abuurnimada oo la dhiirrigeliyo waxay keeni doonaan in la hagaajiyo adeegyada Isgaarsiinta iyo Tiknoolojiyadda, iyagoo ka dhigaya kuwo la isku halleyn karo oo la awoodi karo.
- Adeeg dhijitaal oo loo dhanyahay: Istaraatiijiyadda waxay xoogga saareysaa ballaarinta helitaanka adeegyada Isgaarsiinta iyo Tiknoolojiyadda meelaha aysan wali gaarin, si loo dhiirigeliyo helidda adeeg dhijitaal ah oo la awoodi karo.
- Ilaalinta Danaha Macaamiisha: Soo kordhinta xeernidaamiyaha ilaalinta danaha macaamiisha wuxuu awood u siin doonaa hay'adda in ay hubiso in aan lagu xadgudbin danaha macaamiisha, sida tayada adeegyada isgaarsiinta iyo hufnaan qiimayaashooda.

Daneeyayaasha Qeybta ka ah Istaraatiijiyadda

Istaraatiijiyadda waxaa aasaas u ah iskaashi iyo ka qeybgal ka yimaada dhammaan daneeyayaasha isgaarsiinta iyo Tiknoolojiyadda ee kala duwan:

- Hay'adda Isgaarsiinta Qaranka (HIQ): Waa hay'adda hoggaamineysa hirgelinta istaraatiijiyadda.
- Wasaaradda Isgaarsiinta iyo Tiknoolojiyadda: waxa ay mas'uul ka tahay dajinta siyaasadaha isgaarsiinta iyo tiknoolojiyadda, iyo hubinta dhaqangalkooda.
- Hay'adaha kale ee Dawladda, sida Wasaaradda Warfaafinta, Hay'adda Duulista Hawada, Bankiga Dhexe iyo Hay'adda Tayowdhorka Soomaaliyeed.
- Shirkadaha Isgaarsiinta: Shirkadaha isgaarsiinta

waxa ay talooyin iyo fikrado ku biirin doonaan dhaqangelinta istaraatiijiyaddan.Ka qeyb qaadashadooda wada tashiyada dadweynaha ayaa kaalin muhiim ah ka qaadan doona hagaajinta siyaasadaha.

 Bulshada Rayidka ah: Macaamiisha iyo ururada difaaca xuquuqda macaamiisha ayaa la tashi lagula samayn doonaa si loo hubiyo in baahidooda la tixgeliyo, taas oo ka qayb qaadan doonta hagaajinta siyaasadaha kor u qaadaya tartanka cadaaladda ah iyo ilaalinta macaamiisha.

Jadwalka iyo Heerarka Dhaqangelinta

Istaraatiijiyadda waxaa lagu hirgelin doonaa afar weji:

- 1. Qiimeynta iyo Qorshaynta: waxaa la sameen doonaa dib u eegista xeer-nidaamiyaasha hadda jira, la tashiyo lala sameeyo daneeyayaasha, iyo diyaarinta qorshe hawleed faahfaahsan oo tilmaamaya ujeeddooyinka gaarka ah, tallaabooyinka, iyo jadwalka dhaqangelinta
- 2. Hirgelinta iyo Kor u qaadidda Aqoonta: Wajigaan wuxuu xooga saari doonaa hagaajinta xeerarka, fulinta mashaariicda tijaabada ah, iyo tababarida shaqaalaha hay'adda si ay ula qabsadaan qaabdhismeedka cusub.
- **3. Kor joogteyn iyo Sixid**: waxaa la sameen doonaa kormeer joogto ah, si loo hubiyo hirgelinta, qiimeynta natiijooyinka la gaaray, lana saxo wixii qaldamay.
- **4. Dib-u-eegis iyo Xaqiijinta U-hoggaansanaanta**: Qiimeyn kama dambeys ah ayaa la sameyn doonaa si loo hubiyo howlaha la qabtay ay waafaqsanyihiin heerarka jiilka 4-aad G4, iyadoo dib loo eegi doono si loo ogaado meelaha u baahan in lasii hormariyo mustaqbalka.

Qorshaha Istaraatiijiyadda Isbeddelka Awoodda Korjoogteynta Hay'adda waa qorshe ballaaran oo ku aaddan in la abuuro suuq isgaarsiineed oo leh tartan cadaalad ku dhisan, hal-abuurnimo, iyo dhaqaale dhijitaal oo loo wada siman yahay. Istaraatiijiyaddan oo Soomaaliya u guurineysa qaab-dhismeedka Jiilka 4aad (G4) ee xeerarka, kaliya ma ahan inay hagaajiso qaybta isgaarsiinta iyo Tiknoolojiyadda, laakiin sidoo kale waxa ay kor u qaadeyntaa horumarka ballaaran ee bulshada iyo dhaqaalaha.

1. Executive Summary

1.1. Strategy Overview

The "ICT Regulatory Transformational Strategy and Roadmap for Somalia" is a strategic plan to improve Somalia's Information and Communication Technology (ICT) regulatory environment. The main goal is to update the ICT regulatory framework by the targets outlined in the 5-year plan of the National Communications Authority (NCA) for 2023 - 2027. This will be done using the International Telecommunication Union's (ITU) Regulatory Tracker, which categorizes regulatory frameworks from Generation 1 (G1) to Generation 4 (G4)¹. The objective is for the NCA to be central in driving digital transformation and socio-economic development across Somalia. The strategy aims to upgrade Somalia from its current Generation 2 (G2) status to meet the ITU's Generation 4 (G4) standards.

Under Article 7 of the National Communications Law of 2017, the NCA is recognized as an independent Authority that implements the policies of the Ministry of Communications and Technology. NCA was established through the Communications Act of 2017, and its mandate is to regulate the Communications sector, including telecommunications, Internet, broadcasting, Information and Communications Technology, and e-commerce services. The NCA is responsible for facilitating the development of the ICT sector, enabling and ensuring fair and sustainable competition, carrier interconnection, transparency in implementing the Communication Law, protecting consumer interests and rights, and maintaining its role as an independent regulator.

The strategy aims to align Somalia's ICT regulations with standards and practices. It sets clear goals to promote a competitive and innovative ICT sector, improve service quality, protect consumers, and support broader socioeconomic objectives such as universal access to services. The document also provides a step-by-step plan to transition to a more advanced regulatory framework, addressing current regulatory gaps and proposing improvements to create a more investment-friendly environment and foster fair competition. This approach is expected to create a more inclusive digital ecosystem, contributing significantly to Somalia's development agenda.

Article 32 of the National Communications Law requires the Agency to make transparent and inclusive decisions by seeking input from the public, companies, customers, and other stakeholders. This helps ensure that decisions are well-informed and promote accountability and openness. In alignment with Article 62, which addresses promoting and maintaining fair competition within the communication market, this strategy directly supports the strategic pillar focusing on enhancing the competition framework. The NCA aims to drive innovation and improve service delivery by fostering a competitive environment. Lastly, Article 67 outlines the Agency's powers and responsibilities in implementing the law and ensuring compliance. This emphasizes the importance of regulatory enforcement and accountability, which are critical components of the transformational strategy.

The strategic foundation comprises four key pillars: Regulatory Authority, Regulatory Mandate, Regulatory Regime, and Competition Framework. These pillars encompass initiatives to expand decision-making autonomy, diversify funding sources, introduce license-exempt regimes, establish a comprehensive competition framework, and enhance technological capacity. These initiatives create a resilient and adaptive ICT regulatory environment that promotes economic growth.

1.2. High-level summary of the strategic goals and roadmap

Somalia's National Communications Authority (NCA) is undertaking a comprehensive strategic shift to elevate its regulatory framework to a fourth-generation (G4) standard. This transformation is underpinned by the structured development across four key pillars, which will guide the transition and implementation of the strategy.

Pillar 1: **Regulatory Authority** - The National Communications Authority (NCA) is set to improve its decision-making process, aiming for greater efficiency and effectiveness in handling all aspects of its operations. This shift is aimed at ensuring impartial and effective regulatory governance. The authority will diversify its funding sources beyond government appropriations to minimize political influence and enhance financial independence. Additionally, implementing the competition regulations in the ICT sector is a significant step in this pillar, intending to oversee and promote fair competition within the market.

Additionally, this pillar emphasizes upgrading the technological infrastructure and equipment to strengthen the NCA's regulatory capabilities. This includes upgrading monitoring systems, adopting advanced data analytics tools, enhancing cybersecurity measures, investing in testing and research facilities, and ensuring continuous professional development for NCA staff. These upgrades will enable the NCA to fulfill and enforce its regulatory

^{1 &}lt;a href="https://app.gen5.digital/tracker/about">https://app.gen5.digital/tracker/about

mandate effectively.

Pillar 2: Regulatory Mandate—The NCA needs to adapt its mandate to deal with new technologies. The objective is to establish a unified regulator to streamline coordination processes and improve the efficiency of introducing market services. A key part of this effort involves collaborating with other regulators for broadcasting, content, and related areas. This collaboration will follow international best practices for unified regulatory authorities, ensuring a coordinated and comprehensive approach to regulation across different sectors. By promoting partnerships and coordination among various regulatory bodies, the strategy aims to create a consistent regulatory environment that enhances oversight and leverages collective expertise to manage and regulate broadcasting content and other media sectors effectively.

Pillar 3: Regulatory Regime - The NCA's third pillar will see the introduction of a license-exempt regime to promote innovation and simplify market entry procedures. Transparency will be ensured through the public disclosure of interconnection prices, encouraging stakeholder participation in discussions relevant to the environment. Mandated infrastructure and co-location/site sharing will reduce costs, incentivize service improvements, and expand coverage. Additionally, the NCA will require unbundled access to the local loop, which aims to foster competitive market entry by reducing initial investments. Allowing secondary spectrum trading and band migration will optimize spectrum usage, incentivizing market innovation and efficient network operation. Number portability for fixed-line and mobile services will be enhanced to promote competition and service quality. Lastly, a national broadband plan will systematically guide sector growth and digital infrastructure deployment.

Pillar 4: Competition Framework—An increase in competition is expected for cable modem, DSL, and fixed wireless broadband services, as well as leased lines. The development of legal concepts of dominance or Significant Market Power (SMP) will support this heightened competition framework. The NCA will implement comprehensive criteria for determining SMP, enabling the imposition of necessary ex-ante regulations to curb anticompetitive behaviors and ensure a fair market playing field.

The strategic goals and the roadmap outlined in this document are designed to establish a solid foundation for an ICT regulatory environment that is adaptive, resilient, and conducive to economic growth. Through achieving these goals, Somalia aims to enhance its global competitiveness, drive innovation, and provide high-

quality, accessible ICT services to all citizens.

2. Introduction

2.1. Purpose of the document

This document is a blueprint for transforming Somalia's Information and Communication Technology (ICT) regulatory framework. It outlines a comprehensive strategy and a clear roadmap for advancing the regulatory environment from its current 2nd Generation Standard (G2) status to Generation 4 (G4), as defined by the International Telecommunication Union's (ITU) Regulatory Tracker.

The primary purpose of this document is:

- To Provide a Vision: This document outlines a forward-looking vision for Somalia's ICT regulatory landscape, aligning with global best practices. By detailing regulations for G4 technology, the goal is to position the National Communications Authority (NCA) as a catalyst for digital transformation and socio-economic development.
- To Establish Clear Objectives: The strategy sets clear and measurable objectives that aim to create a competitive market, protect consumers, improve service quality, and support universal access and service for broader socio-economic development.
- To Serve as a Guiding Framework: This document is intended to guide policymakers, regulators, industry stakeholders, and international partners in understanding Somalia's intended pathway. It provides a structure for the transition process, identifies regulatory gaps, and outlines actionable steps for improvement."

Ultimately, the transformational strategy and roadmap aspire to create an enabling environment that stimulates investment, promotes fair competition, and encourages introducing advanced technologies and services. It is intended to foster an ecosystem where the benefits of a digitally inclusive society can be realized, contributing significantly to Somalia's overall development agenda.

2.2. Background information on Somalia's telecom sector

2.3. Overview of the ITU's ICT Regulatory Tracker and Regulatory Generation Model

In today's fast-changing digital economy, regulators and policymakers have the important job of promoting

a competitive, inclusive, and resilient ICT sector. Making decisions based on evidence is crucial for achieving this goal. To help with this, the International Telecommunication Union (ITU) has introduced the ICT Regulatory Tracker. This tool is essential for comparing regulatory practices across countries and regions. It provides a universal reference for achieving excellence and good governance in the ICT sector.

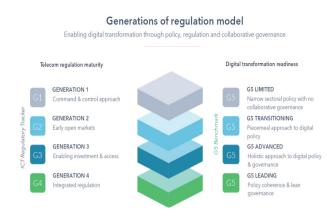


Figure 1: Generations of Regulation Model (Source: ITU)²

What is the ICT Regulatory Tracker?

The ICT Regulatory Tracker is an analytical tool designed to assist decision-makers and regulators in navigating the complexities of ICT regulation. It helps in benchmarking efforts by identifying changes and trends in the legal and regulatory frameworks governing ICT, enabling a deeper understanding of global practices. The Tracker records the existence and characteristics of regulatory frameworks without assessing their quality, implementation level, or performance. This approach helps to identify gaps and advocate for regulatory reforms to cultivate a dynamic and inclusive ICT environment.

Scope of the Tracker

The Tracker consists of 50 indicators organized into four main clusters: Regulatory Authority, Regulatory Mandates, Regulatory Regime, and Competition Framework. These clusters cover the operational aspects of regulatory bodies, the allocation of regulatory responsibilities, the scope of regulations across key areas, and the competitive landscape within the ICT sector. This comprehensive metric system provides a holistic view of a country's regulatory framework and its alignment with international standards.

The model of regulation evolution is delineated through five generations, offering a conceptual framework to assess and track the maturity of telecom markets and the broader digital policy and governance landscape. This document focuses on the first four generations, which chronicle the progression from a state of limited regulatory frameworks (G1) to more advanced stages of market liberalization and competition (G4).

Generations of Regulation

The different generations of regulation models trace the development of telecom and ICT policy from its initial stages to a mature, competitive market environment. This evolution signifies the transition from traditional telecom regulation to a broader ICT perspective, eventually leading to a collaborative approach to digital governance. The model has been continually refined by the global community of ICT regulators, primarily through the insights gathered at the Global Symposium for Regulators (GSR).

- **Generation 1 (G1)** represents the initial phase of telecom regulation, characterized by regulated public monopolies and a command-and-control approach.
- Generation 2 (G2) marks the beginning of reform, with partial liberalization and the introduction of competition in specific market segments.
- Generation 3 (G3) emphasizes the importance of investment, innovation, and access, aiming to balance competition in service delivery with consumer protection.
- Generation 4 (G4) signifies a shift towards integrated regulation, driven by economic and social policy objectives rather than mere market considerations.

The ICT Regulatory Tracker as a Strategic Tool

By mapping the trajectory of ICT regulation across these generations, the ICT Regulatory Tracker serves as a diagnostic tool and a strategic guide for countries aspiring to advance their regulatory frameworks. The Tracker supports national regulators and decision-makers in pinpointing areas ripe for reform, laying the groundwork for a transition towards higher generations of regulation. For Somalia, the Tracker provides a critical reference point as we embark on our journey to transform the ICT regulatory landscape, aiming to achieve a G4 regulatory standard and beyond.

2.4. Objectives of transitioning from G2 to G4 Standard

The ICT Regulatory Transformational Strategy and Roadmap

^{2 &}lt;a href="https://app.gen5.digital/tracker/about">https://app.gen5.digital/tracker/about

for Somalia aims to incorporate forward-looking objectives with the essence of collaborative and inclusive regulation. These objectives are developed to position Somalia at the forefront of digital transformation, fostering an environment conducive to innovation, competition, and consumer protection. Here are four key objectives:

- 1. Promote Collaborative Regulatory Model: One of the cornerstone objectives is to foster a regulatory environment that champions collaborative governance. This involves creating mechanisms for active participation from all stakeholders, including government entities, private sector players, civil society, and the technical community. The strategy aims to cultivate a multi-stakeholder regulatory model that encourages dialogue, consensus-building, and cooperative problem-solving, thereby enhancing the effectiveness and adaptability of ICT regulations.
- 2. Facilitate Digital Inclusion and Access: The primary objective is to ensure equitable access to digital technologies and services for all population segments. The strategy seeks to eliminate digital divides by advocating for policies that support widespread connectivity, affordable access, and digital literacy programs. This objective aligns with leveraging ICT as a catalyst for socio-economic development, enabling participation in the digital economy and ensuring society shares benefits.
- 3. Encourage Innovation and Economic Growth: A vital objective of the transformational strategy is to create a regulatory framework that stimulates innovation and supports the growth of the digital economy. This involves reviewing and adapting regulatory policies to keep pace with technological advancements, removing unnecessary barriers to entry, and creating an environment that encourages investment in ICT infrastructure and services. The strategy aims to position Somalia as a competitive player in the global digital economy, attracting investment and fostering homegrown innovation.
- **4. Ensure Consumer Protection and Trust**: The strategy is central to the commitment to safeguarding consumer interests and building trust in digital services. This objective focuses on enhancing consumer rights, privacy, and data protection through robust regulatory measures. It also involves promoting transparency, security, and reliability in providing ICT services to increase consumer confidence and encourage wider adoption of digital

technologies.

3. Current State Analysis

3.1. Assessment Of Somalia's Current Regulatory Environment

As the NCA drafts its ambitious journey towards enhanced digital regulation, an assessment of its current regulatory framework supports the strategic direction of the ICT Regulatory Transformational Strategy and Roadmap. Positioned within the second generation (G2)³ of the ITU's ICT regulatory framework, Somalia's regulatory landscape presents foundational strengths and pivotal areas for strategic enhancement.

Current Regulatory Foundation

Regulatory Authority: Establishing a separate telecom/ ICT regulator is crucial for regulatory autonomy. The current framework has partial decision-making autonomy and a moderate level of diversified funding, but there is room for improvement. It's important to move towards full decision-making autonomy and further diversification of funding sources. Additionally, establishing a dedicated department for Competition is vital for ensuring a fair competitive landscape and underlines the necessity for regulatory evolution.

Establishing Horizontal Cooperation: The current regulatory mandate covering communication technology regulation provides a strong foundation. In order to effectively navigate the changing digital landscape, it is important to establish collaboration with other sector regulators, such as the Central Bank of Somalia (CBS) and the Ministry of Information (MOI). This collaboration will ensure a more integrated and efficient regulatory approach, bringing Somalia in line with international best practices and supporting the country's digital transformation. By working across sectors, the NCA can effectively oversee emerging areas such as digital content and financial services, advancing Somalia's digital agenda..

Innovative Regulatory Regime: Somalia currently follows established licensing practices and transparent interconnection pricing, creating a stable regulatory environment. However, the strategic roadmap identifies the potential for transformation through the adoption of practices such as license exemption, mandated infrastructure sharing, and unbundled access to local loops. These reforms are intended to encourage innovation, facilitate market entry, and promote competition within

^{3 &}lt;a href="https://app.gen5.digital/tracker/country-cards/Somalia">https://app.gen5.digital/tracker/country-cards/Somalia

the ICT sector.

Strengthening the Competition Framework: While the current environment exhibits partial competition across several market segments, the strategy envisions further strengthening the competition framework. This involves recognizing and defining the concept of Significant Market Power (SMP) and implementing comprehensive criteria for its determination. Such measures are expected to safeguard market fairness, encourage healthy competition, and attract foreign investment and expertise.

Table 1: Current Status of Regulatory Framework

Regulatory Aspect (G2)	Current Status	Strategic Goals for G4 Transition
Separate telecom/ICT regulator	Yes	Maintain and enhance regulatory autonomy
Public consultations mandatory before decisions	Yes	Continue and expand public engagement
Enforcement power	Yes	Strengthen enforcement mechanisms
Sanctions or penalties imposed by regulator	Yes	Enhance regulatory compliance through effective sanctions
Dispute resolution mechanism	Yes	Improve and expedite dispute resolution processes
Appeals to decisions	Yes	Ensure transparency and fairness in appeal processes
Operators required to publish Reference Interconnection Offer (RIO)	Yes	Maintain transparency in interconnection arrangements
Interconnection prices made public	Yes	Continue ensuring price transparency to stakeholders
Quality of service monitoring required	Yes	Enhance QoS monitoring and enforcement
Infrastructure sharing for mobile operators permitted	Yes	Encourage and eventually mandate infrastructure sharing to reduce costs

The assessment of Somalia's G2 regulatory framework underlines the necessity and potential for a systematic transition towards G4 standards. By focusing on enhancing regulatory autonomy, expanding mandates to cover new digital spheres, adopting innovative regulatory regimes, and reinforcing the competition framework, the ICT Regulatory Transformational Strategy and Roadmap sets a clear course for Somalia's digital future. This strategic shift is instrumental in realizing the vision of a digitally inclusive, competitive, and resilient Somalia, propelling the nation towards a leading role in the global digital economy.

3.2. Summary of current strengths, weaknesses, opportunities, and threats (SWOT analysis)

A comprehensive SWOT analysis provides a strategic lens through which the current regulatory framework's strengths, weaknesses, opportunities, and threats can be assessed. This analysis is instrumental in identifying the internal and external factors that can influence Somalia's ICT regulatory transformation journey and transitioning from Generation 2 (G2) to Generation 4 (G4) ITU standard.

Table 2: SWOT Analysis Table

Strength	Weaknessess
Established separate telecom/ICT regulator ensuring some level of regulatory autonomy.	- Lack of a license-exempt regime, hindering innovation and market entry for new players.
Mandatory public consultations before decisions, fostering transparency and stakeholder engagement.	- Competition articles in the Telecom law is not implemented, impacting fair market competition assessment and intervention.
Existence of enforcement power and sanctions, enabling regulatory compliance.	- Inadequate infrastructure and co-location/site sharing mandates, limiting resource optimization and cost reduction.
- Quality of service monitoring required, ensuring service standards are met.	
Opportunity	Threats
- Implementing regulatory initiatives to manage emerging digital areas can foster a more integrated and dynamic ICT ecosystem.	- Rapid technological advancements may outpace the regulatory adaptation, leaving gaps in governance.
- Introducing a license-exempt regime and promoting infrastructure sharing can stimulate innovation and competition.	- Potential resistance from established operators towards changes in regulation that affect their market dominance.
- Development and implementation of a national broadband plan can significantly enhance connectivity and digital inclusion.	- Political instability or changes in governance can disrupt the continuity and focus of regulatory reforms.
- Strengthening competition framework with a clear definition and criteria for SMP can lead to a more competitive market environment.	- Risks of cyber threats and data breaches growing with digital expansion, necessitating robust cyber governance and security measures.
	Possible mandate disputes from different government entities could lead to regulatory inefficiencies.

Implications of SWOT Analysis

The SWOT analysis reveals how Somalia can develop a strong, future-focused ICT regulatory framework. By building on its current strengths, such as having an established regulatory authority and a commitment to transparency and enforcement, Somalia can take advantage of opportunities like expanding the regulatory scope and promoting market competition through strategic reforms. This approach can help Somalia address potential threats, including technological disruptions and market resistance. Such a strategic orientation aligns with the shift towards a G4 standard and prepares the regulatory framework to anticipate and adapt to the challenges and opportunities of the digital future.

4. Strategic Goals and Objectives

4.1. Long-term vision for the NCA

Somalia's National Communications Authority (NCA) envisions achieving regulatory excellence in the global digital economy. This long-term vision encompasses developing and implementing a comprehensive, forward-looking regulatory framework that achieves Generation 4 (G4) regulatory status and sets the stage for future advancements towards collaborative digital governance. The NCA aims to:

• Foster a Dynamic and Competitive ICT Sector: The NCA aims to create a sustainable regulatory environment by

cooperating with other regulatory bodies and adopting a diversified funding model. This collaborative approach will empower the NCA to oversee a vibrant ICT sector where innovation flourishes and competition drives quality and affordability.

- Ensure Inclusive Digital Transformation: By expanding its regulatory mandate to include emerging IT and Internet content areas, the NCA aims to guide Somalia's transition into a digitally inclusive society. This involves ensuring that digital services and infrastructure reach all corners of Somalia, enabling citizens and businesses alike to participate fully in the digital economy.
- Catalyze Infrastructure Development and Access:
 By mandating infrastructure sharing and co-location/
 site sharing, alongside introducing policies for
 unbundled access to the local loop and enabling
 secondary spectrum trading, the NCA intends to
 significantly reduce the costs of ICT infrastructure
 development and service provision. These measures
 will accelerate the rollout of essential digital
 services, including broadband, enhancing access and
 connectivity nationwide.
- **Protect Consumer Interests**: The NCA's vision centers on protecting consumer interests. By implementing number portability for fixed-line and mobile services, the NCA aims to empower consumers with choice and flexibility, fostering a service-oriented ICT market where consumer satisfaction is paramount.
- Support Fair and Sustainable Competition: The NCA
 is committed to developing a legal framework that
 effectively identifies and manages Significant Market
 Power (SMP), thereby preventing anti-competitive
 practices. This includes establishing clear criteria for
 determining market dominance and ensuring that
 regulatory measures are in place to maintain a level
 playing field for all market participants.
- Guide Sectoral Development with Strategic Planning: Adopting and implementing a National Broadband Plan signifies the NCA's commitment to strategic sectoral development. This plan will serve as a blueprint for broadband expansion to achieve universal access and drive socio-economic growth through digital infrastructure.
- Technological Capacity Enhancement: his vision involves transforming the NCA into a technologically advanced regulatory authority with state-of-the-art monitoring systems, leading-edge data analytics, and robust cybersecurity defenses. The enhancement

of technological capabilities will enable the NCA to effectively monitor compliance, predict and respond to market changes, and safeguard industry data against emerging cyber threats. Key initiatives include continuous upgrades to technological infrastructure, enhancing real-time oversight of the telecom sector, and adopting data analytics to improve regulatory decision-making and efficiency. Strengthening cybersecurity measures will protect the integrity of Somalia's ICT infrastructure and safeguard data privacy. Investment in testing and research facilities will foster innovation and ensure compliance with emerging technologies. At the same time, continuous professional development for NCA staff will ensure that the workforce is adept in the latest technological and regulatory advancements. This comprehensive approach aims to significantly enhance the NCA's capacity to enforce its regulatory mandate and drive Somalia's digital transformation and socio-economic development over the next decade.

The realization of this vision will position the NCA as a leader in ICT regulation, capable of navigating the challenges and seizing the opportunities presented by the rapid evolution of digital technologies. It reflects a commitment to advancing Somalia's ICT sector and the broader goal of harnessing digital transformation for national development and prosperity.

4.2. Specific goals for the ICT Regulatory Transformation and transition to G4

The National Communications Authority (NCA) of Somalia is prepared to transform from a second-generation (G2) to a fourth-generation (G4) regulatory framework. This ambitious transition is driven by specific goals aimed at crucial regulatory reforms and enhancements. These goals are intended to address the deficiencies identified in the current G2 framework and propel the Somali ICT sector towards a state of innovation, inclusivity, and competitiveness.

Pillar 1: Regulatory Authority

- **1. Diversify Funding Sources**: Broaden the NCA's funding model beyond government appropriations to include a variety of financial sources, ensuring sustainability and reducing susceptibility to political influences.
- **2. Upgrade Regulatory Monitoring Systems**:

 Develop and deploy advanced monitoring systems that can provide comprehensive oversight of the telecommunications sector. This goal aims to enable

market entry.

real-time data collection and analysis, ensuring the NCA can monitor compliance with regulations and quickly respond to infractions.

- 3. Implement Advanced Data Analytics: Invest in and integrate state-of-the-art data analytics platforms. These tools will help the NCA to analyze large volumes of data for better regulatory decision-making, forecast sector trends, and assess the impact of regulatory policies. Enhanced data capabilities will also help the NCA develop more informed strategies that promote innovation and competition.
- 4. Develop Infrastructure Security Measures: Develop and implement robust infrastructure security measures to protect the integrity of Somalia's digital and physical telecommunications infrastructure. This goal involves upgrading physical security systems, enhancing network security protocols, and establishing rapid response capabilities to address cyber and physical threats. Such measures are crucial for maintaining system integrity and ensuring the reliability and safety of telecommunications services nationwide.
- **5. Create Dedicated Testing and Research Facilities:**Set up specialized facilities for testing and researching new technologies and regulatory approaches. These centers will allow the NCA to stay ahead of technological advancements, test new regulatory models, and ensure that introducing new technologies into the market is safe and beneficial.
- **6. Professional Development and Training Programs:**Launch continuous professional development and training programs for NCA staff focused on the latest ICT regulatory practices and technologies. This goal is to build a skilled workforce capable of adapting to and managing the rapidly changing telecom landscape.

Pillar 2: Regulatory Mandate

 Establish Cooperation with Other Regulators: Collaborate with other regulatory bodies to incorporate emerging domains such as IT and Internet content into the governance framework. Adopting a converged regulatory approach will streamline ICT and media/broadcasting governance, ensuring comprehensive oversight and efficiency.

Pillar 3: Regulatory Regime

1. Implement a License-Exempt Regime: Introduce a license-exempt regime for certain ICT services and technologies to foster innovation and simplify

- **2. Publish Interconnection Prices**: Ensure transparency and open dialogue by publicly making interconnection agreements and pricing available.
- **3. Mandate Infrastructure Sharing**: Infrastructure sharing among operators and other industries is required to reduce costs and promote efficient use of resources.
- **4. Enforce Co-location/Site Sharing**: Mandate colocation or site sharing for infrastructure to enhance aesthetic, environmental, and economic efficiency.
- **5. Require Unbundled Access to the Local Loop:** Mandating unbundled access will stimulate market entry and competition, minimizing the need for redundant infrastructure investments.
- **6. Enable Secondary Spectrum Trading**: Allow secondary spectrum trading to optimize its use and encourage a more efficient and competitive market.
- **7. Allow Band Migration**: Facilitate service innovation and network efficiency by enabling existing licensees to migrate bands under their current licenses.
- **8. Implement Number Portability**: Introduce number portability for fixed-line and mobile services to enhance consumer choice and service quality.

Pillar 4: Competition Framework

- **1. Increase Competition across Broadband and Leased Lines**: Foster a higher level of competition in providing cable modem, DSL, fixed wireless broadband, and leased line services.
- 2. Develop and Enforce SMP Legal Framework: Establish a clear legal concept of dominance or Significant Market Power (SMP), including comprehensive criteria for its determination, to prevent anti-competitive practices and ensure a fair market.

Strategic Implementation of the National Broadband Plan

1. Formulate and Execute a National Broadband Plan: Develop and implement a strategic plan to guide the evolution of broadband services across Somalia, aiming for universal access and integrating digital technologies into the broader economy.

The table below summarizes the specific goals for the transition to the G4 Regulatory standard.

Table 3: Specific goals for transition to G4 Standard

Pillar	Specific Goals		
	1. Diversify Funding Sources		
Pillar 1: Regulatory Authority	2. Upgrade Regulatory Monitoring Systems		
Pillar I. Regulatory Authority	3. Implement Advanced Data Analytics		
	4. Develop Infrastructure Security Measures		
	5. Improve the cooperation with other regulatories such as digital financial services and media		
Pillar 2: Regulatory Mandate	6. Introduce a Broadcasting Content Mandate		
	7. Formulate and Execute a National Broadband Plan		
	8. Implement a License-Exempt Regime		
	9. Publicize Interconnection Prices		
	10. Mandate Infrastructure Sharing		
Dillor 2: Bogulatory Dogima	11. Enforce Co-location/Site Sharing		
Pillar 3: Regulatory Regime	12. Require Unbundled Access to the Local Loop		
	13. Enable Secondary Spectrum Trading		
	14. Allow Band Migration		
	15. Implement Number Portability for fixed-line and mobile services		
	16. Establish a Competition Department		
Pillar 4: Competition Frame- work	17. Increase Competition across Broadband and Leased Lines		
	18. Develop and Enforce SMP Legal Framework		

These goals form the backbone of the NCA's strategic effort to advance Somalia's ICT regulatory framework to G4 standards. Achieving these goals will fulfill the identified gaps within the current regulatory setup and position Somalia as a leader in ICT regulation and governance in Africa and beyond.

4.3. Key performance indicators (KPIs) to measure success

Pillar	KPI	Target/Measurement
Pillar 1: Regulatory Authority	Improving regulatory capacity of the NCA	Implementation of Market observatory framework Establish regulatory monitoring systems
	Diversity of Funding Sources	Balanced mix of funding beyond government appropriations
	Establishment implementation plan of competition regulatory frameworks	Implementation plan of competition regulatory frameworks established
	Develop Cybersecurity Capability	Establish CERT
Pillar 2: Regulatory Mandate	Establish cooperation with other regulatories	Memorundum of Understanding (MOU) signed with other regulators

Pillar	KPI	Target/Measurement
	Collaboraiton with Broadcasting Content Regulators	Number of policies or guidelines developed for broadcasting content regulation in collaboration with other regulators
Pillar 3: Regulatory Regime	License-Exemption Adoption	Introduction of license-exempt regime and entities operating under it
	Public Access to Interconnection Prices	100% compliance among service providers
	Infrastructure Sharing Implementation	Percentage of operators engaging in mandated sharing
	Number Portability Introduction	Comprehensive coverage by service providers
Pillar 4: Competition Framework	Market Competition Levels	Increased competition in broadband and leased lines sectors
	SMP Framework Effectiveness	Number of anticompetitive cases identified and resolved

5. Pillar 1: Regulatory Authority Enhancement

5.1. Accountability and Operational Effectiveness

The essence of regulatory authority enhancement lies in strengthening accountability and operational effectiveness. These elements are crucial for the NCA to function without undue influence, allowing it to make impartial and effective regulatory decisions. To achieve this, the strategy involves several key actions:

- **Financial Independence**: Develop mechanisms for the NCA to achieve financial independence. This involves diversifying funding sources beyond government appropriations, such as licensing fees, regulatory levies, and service charges. A financially independent NCA can operate without fiscal pressures that may compromise its regulatory decisions.
- **Strengthening Organizational Structure**: Optimize the NCA's organizational structure to support effective decision-making. This includes establishing clear roles and responsibilities, creating specialized departments for emerging ICT domains, and recruiting skilled personnel.

5.1.1. Establishing a Framework for Accountability

While autonomy is vital for the NCA's effectiveness, it must be balanced with mechanisms for accountability to ensure transparency, integrity, and public trust. Key initiatives include:

- **Transparent Decision-Making Processes**: Implement processes that ensure decisions are made transparently. This involves public consultations, publishing regulatory decisions and their rationale, and engaging stakeholders in the regulatory process.
- **Performance Monitoring and Reporting**: Introduce a comprehensive performance monitoring and reporting system. The NCA should regularly evaluate its effectiveness and report its activities, outcomes, and impact on the ICT sector to the public and relevant governmental bodies.
- **Establishing Appeals Mechanisms**: Provide clear and accessible mechanisms for appealing regulatory decisions. This will ensure that the NCA's decisions are subject to scrutiny and reinforce its commitment to fair and just regulation.

 Collaboration with Oversight Entities: Foster constructive relationships with governmental oversight bodies to ensure the NCA operates within its legal mandate while maintaining operational independence. This includes regular briefings to legislative committees and engagement with audit institutions.

5.2. Diversified Funding

In its strategic efforts to transition from a Generation 2 (G2) to a Generation 4 (G4) regulatory framework, the National Communications Authority (NCA) of Somalia recognizes the critical role of financial sustainability and independence. A diversified funding model is essential to ensure the NCA's operational autonomy and enhance its capacity to regulate effectively, innovate, and respond to the rapidly evolving ICT landscape. This section outlines the NCA's strategy for achieving diversified funding..

Strategic Importance of Diversified Funding

Diversifying funding sources reduces reliance on a single stream, which is typically government appropriations. This helps minimize potential political influence on regulatory decisions. Financial autonomy strengthens the NCA's ability to enforce regulations, conduct research, invest in human resources, and engage with international regulatory bodies and standards. It is a cornerstone for establishing a regulatory environment that encourages innovation, competition, and the growth of the digital economy...

Strategies for Achieving Diversified Funding

- **1. Licensing Fees and Service Charges**: One of the primary sources of funding for regulatory authorities globally is the collection of licensing fees from operators and service providers. Additionally, service charges for regulatory services such as spectrum allocation, equipment certification, and numbering resources can contribute to the NCA's revenue.
- **2. Regulatory Levies**: Implementing a regulatory levy system, where a percentage of the fees collected by NCA is contributed to the NCA. This offers a stable funding mechanism that grows with the industry it regulates.
- **3. International Grants and Technical Assistance**: The NCA should actively seek opportunities for international grants and technical assistance from global organizations, donor agencies, and development partners specializing in ICT development and regulatory capacity building.

Implementation Considerations

- Financial Governance and Transparency: Implementing diversified funding requires strong financial management and transparent mechanisms, including clear accounting, auditing, and reporting practices to ensure effective fund utilization aligned with NCA's strategic objectives.
- Legal and Regulatory Framework: Amendments to existing laws or new regulations may be necessary for specific funding mechanisms. Ensuring a sound legal basis for diversified funding is essential for successful implementation..
- Capacity Building: Building the NCA's capacity in financial management, negotiation, and partnership development is crucial for managing various funding sources effectively.

Diversifying the NCA's funding sources is essential for achieving autonomy and enhancing its regulatory capacity. By implementing a diversified funding model, the NCA will be better positioned to support developing a competitive, innovative, and inclusive ICT sector in Somalia, paving the way for a successful transition to a G4 regulatory standard.

5.3. Public Consultation and Decision- making Processes

To meet the Generation 4 (G4) regulatory standard, Somalia's National Communications Authority (NCA) needs to change how it involves stakeholders and the public in decision-making. Moving to G4 highlights the importance of a transparent, inclusive, and participatory approach to regulation. This means that public consultation should be a key part of the regulatory framework. This section explains the strategic plans to make public consultation and participatory decision-making central to NCA's operations. This will improve the quality, effectiveness, and acceptance of regulatory decisions.

5.3.1. Enhancing Transparency through Public Consultation

"The NCA is dedicated to incorporating public consultation as a crucial part of its regulatory process. This effort guarantees that the viewpoints, ideas, and requirements of all stakeholders, such as consumers, industry participants, civil society, and other concerned parties, are considered when creating regulations, policies, and decisions. Key actions include:"

Establishing a Formal Public Consultation
 Framework: Create and implement a detailed

plan that clearly outlines the steps, schedule, and approaches for conducting public consultations. This plan should define how information will be shared, the structure for submitting feedback, and the procedure for incorporating inputs into the final decision-making process.

- Utilizing Multiple Platforms for Engagement: Employ different platforms, such as digital platforms, public forums, workshops, and written submissions, to encourage wide participation in public consultations, ensuring accessibility for all stakeholders, regardless of location or resources.
- Feedback Loop and Accountability: Commit
 to providing feedback on how public input has
 influenced regulatory decisions, enhancing
 transparency and accountability, and demonstrating
 the NCA's responsiveness to stakeholder concerns
 and suggestions.

5.3.2. Participatory Decision-making Processes

Beyond holding public consultations, the NCA aims to incorporate participatory mechanisms into its decision-making processes, ensuring that the regulatory environment evolves in sync with the needs and expectations of the Somali ICT ecosystem. Strategic measures include:

- Stakeholder Advisory Panels: Establish advisory panels comprising representatives from key stakeholder groups. These panels can provide expert advice, sector-specific insights, and diverse perspectives to enrich decision-making.
- Impact Assessments: Incorporate regulatory impact assessments as a standard practice before finalizing decisions. This involves evaluating proposed regulations' potential economic, social, and technological impacts, with findings shared with stakeholders for further comment.
- Continuous Engagement and Dialogue: Foster an ongoing dialogue with the ICT sector, consumer groups, and other stakeholders to ensure that the NCA remains attuned to emerging issues, challenges, and opportunities in the rapidly evolving digital landscape.

Public consultations and participatory decision-making processes are essential for meeting G4 regulatory standards. They signal a move toward more democratic and responsive governance within the ICT sector. By incorporating these practices into its operational

framework, the NCA improves the legitimacy and quality of its regulatory actions and nurtures a collaborative, trust-based relationship with stakeholders. This approach is essential for achieving Somalia's balanced, innovative, and inclusive digital ecosystem.

5.4. Dispute Resolution and Appeals

To achieve the ICT Regulatory Transformational Strategy and Roadmap for transitioning Somalia's National Communications Authority (NCA) to a Generation 4 (G4) regulatory standard, it is crucial to enhance the dispute resolution and appeals mechanisms. This involves establishing clear, comprehensive, and accessible procedures for resolving disputes and appealing regulatory decisions. The aim is to reflect a commitment to best practices in regulatory governance and to ensure accountability, fairness, and the rule of law in regulatory processes. This section provides details on the strategic approach to developing a robust framework for dispute resolution and appeals.

Establishing a Comprehensive Dispute Resolution Framework

The NCA aims to implement a structured and transparent framework for dispute resolution that addresses the needs and concerns of all stakeholders, including the state, service providers, and consumers. Key elements of this framework include:

- Clear Dispute Resolution Procedures: Develop and publish detailed procedures for initiating, processing, and resolving disputes within the ICT sector. These procedures should outline the steps involved, expected timelines, and the roles and responsibilities of the disputing parties and the NCA.
- Accessible Mechanisms for Dispute Submission:
 Ensure that dispute submission mechanisms are accessible to all stakeholders, including digital submission platforms and traditional channels.
 This inclusivity guarantees that all parties can seek resolution, regardless of their technological capabilities or geographic location.
- Expert Dispute Resolution Panels: Constitute panels comprising experts in ICT law, technology, and alternative dispute resolution methods. These panels will bring impartiality and specialized knowledge to the dispute resolution process, enhancing the quality and credibility of decisions.

Enhancing Appeal Procedures

The strategy recognizes the importance of allowing interested parties to appeal regulatory decisions, reinforcing the NCA's accountability and affirming its credibility. To this end, the NCA will establish:

- Detailed Appeals Procedures: Establish and communicate clear and detailed procedures for appealing the NCA's decisions. This includes specifying the grounds for appeal, the submission process, and the timeline for review and decisionmaking.
- Independent Appeals Body: Consider establishing an independent body or using existing judicial or quasi-judicial entities to review appeals. This independence ensures that appeals are handled impartially and decisions are based solely on the case's merits.
- Transparency and Public Reporting: Commit to transparency throughout the appeals process, including the publication of appeal outcomes and the rationale behind decisions. This transparency builds trust among stakeholders and contributes to the regulatory body's learning and development.

The strategic enhancement of dispute resolution and appeals processes is foundational to the NCA's transition to a G4 regulatory framework. By establishing transparent, fair, and accessible mechanisms for addressing disputes and appealing decisions, the NCA adheres to international best practices and fosters a regulatory environment characterized by accountability, stakeholder trust, and the rule of law. This approach ensures that the regulatory framework remains responsive and adaptable to the evolving dynamics of the ICT sector, supporting Somalia's vision for a vibrant and inclusive digital economy.

Pillar 2: Establishing Cooperation with Other Regulators

Moving towards a Generation 4 (G4) regulatory framework requires working closely with other sector regulators to effectively regulate all aspects of the Information and Communication Technology (ICT) sector. This includes the fast-changing broadcasting and internet content domains. Collaborating with other regulators is essential to create a comprehensive and integrated regulatory framework that follows international best practices and can adapt to the merging of digital technologies and services.

6.1. Signing MoUs with Regulators of

Broadcasting and Internet Content Rationale for Converged Regulation

In the digital era, the boundaries between traditional telecommunications, broadcasting, and internet services have become less defined. As a result, a unified regulatory approach is now necessary. By signing Memorandums of Understanding (MoUs) with other regulators, such as the Ministry of Information (MOI), the NCA can effectively oversee ICT and media/broadcasting services. This cooperation eliminates redundancies and inefficiencies in multiple agencies that manage closely related domains. This consolidation fosters a more agile and responsive regulatory body capable of adapting to technological advancements and market dynamics, thereby enhancing the planning and deployment of converged technologies and services.

Benefits of Collaborative Regulatory Authority

- Streamlined Regulation: Collaboration among regulatory authorities overseeing ICT and broadcasting/media content simplifies the regulatory landscape. It makes it easier for service providers to comply with regulations and for consumers to understand their rights and the standards of service they can expect.
- Enhanced Efficiency: Cooperation allows for more efficient resource use for the regulators and the entities they regulate. It eliminates duplicative processes and fosters a more coordinated approach to policy development and enforcement.
- Market Integration: By working together, regulatory bodies can facilitate market integration, ensuring that regulations are harmonized across different sectors. This integration is crucial for promoting innovation and competition in a converged environment where traditional distinctions between services are increasingly irrelevant.
- Adaptability to Technological Advancements: A
 cooperative regulatory approach is better positioned
 to respond to the rapid pace of technological change.
 It can more effectively anticipate and address
 the regulatory implications of new technologies
 and services, ensuring that the legal and policy
 framework supports innovation while protecting
 public interests.

Implementing Collaborative Regulation

To realize the vision of a cooperative regulatory framework, the following strategic actions are proposed:

- Signing MoUs: Establish formal agreements with other regulatory bodies, such as the Ministry of Information, to clearly define the scope of cooperation and responsibilities in regulating broadcasting and internet content.
- Capacity Building: Enhance the NCA's institutional capacity to collaborate effectively with other regulators. This involves training staff, developing expertise in content regulation, and establishing specialized departments or units focused on media and online services.
- Stakeholder Engagement: Engage with ICT and broadcasting stakeholders to ensure that industry insights inform the transition to a collaborative regulatory framework and consider the potential impacts on different market players.
- Public Awareness: Conduct awareness campaigns
 to inform the public and industry stakeholders about
 the benefits of a cooperative regulatory approach.
 This transparency is essential for building trust and
 ensuring compliance.

In order to achieve a high regulatory standard in Somalia, it is essential for the National Communications Authority (NCA) to work together with other regulatory bodies responsible for overseeing broadcasting and internet content. Creating a collaborative regulatory environment will enable the NCA to effectively supervise the digital landscape, promoting efficiency, innovation, and market integration. This approach ensures that Somalia's regulatory framework remains responsive and relevant in light of ongoing digital changes, ultimately supporting the nation's broader digital transformation and socioeconomic development goals.

7. Pillar 3: Regulatory Regime Transformation

7.1. Introducing License Exempt Categories

Introducing license-exempt categories is a strategic step toward creating an open-entry market, which is essential for promoting competitive behavior and a self-regulating market environment. By removing the licensing barrier, service providers are encouraged to invest more in infrastructure development, innovation, and the delivery of competitive services.

• Strategic Objectives:

• Eliminate unnecessary regulatory barriers to entry for new services and technologies.

 Encourage investment in new and innovative service offerings, enhancing consumer choice and market dynamism.

7.2. Transparency in Interconnection

Ensuring transparency in interconnection is crucial for providing new entrants with vital information about network conditions. This is achieved through the mandatory publication of Reference Interconnection Offers (RIO). Such transparency facilitates informed decision-making and establishes a fair negotiation baseline, ultimately reducing entry time and preventing discriminatory practices.

• Strategic Objectives:

- Make interconnection agreements publicly available to ensure transparency and fairness within the market.
- Provide a transparent and equitable basis for interconnection negotiations, promoting a more competitive market environment.

7.3. Infrastructure Sharing and Co-location

Mandating infrastructure sharing and co-location can significantly optimize network usage and reduce operational costs. This strategy benefits service providers and consumers by facilitating network expansion and enhancing service coverage at lower costs.

• Strategic Objectives:

- Promote network-sharing agreements and Mobile Virtual Network Operator (MVNO) arrangements to maximize resource utilization and market participation.
- Encourage cross-industry infrastructure sharing to decrease deployment costs and improve service efficiency.

7.4. Number Portability and Band Migration

Implementing number portability and allowing band migration are crucial measures to enhance competition and service quality in the ICT sector. Number portability enables consumers to keep their telephone numbers when switching providers, leading to increased competition among service providers. Band migration allows operators to offer new services within their current licenses, promoting innovation and efficient network usage.

• Strategic Objectives:

- Ensure comprehensive number portability across fixed and mobile services to foster consumer choice and market competitiveness.
- Facilitate band migration to allow for more flexible and efficient use of spectrum resources, supporting the introduction of advanced technologies and services.

7.5. National Broadband Plan

Developing and implementing a National Broadband Plan is essential for coordinating infrastructure deployment and regulating broadband services. A strategic national plan underscores the importance of consensus, accountability, and coordination in accelerating innovation, attracting investment, and enhancing productivity, ultimately leading to increased broadband penetration and competition.

• Strategic Objectives:

- Establish a cohesive framework for broadband expansion, targeting universal access and the integration of broadband into economic and social development initiatives.
- Mobilize stakeholders towards achieving highspeed internet access for all Somalis, driving socioeconomic benefits through digital inclusion.

The initiatives under Pillar 3, Regulatory Regime Transformation, lay the groundwork for Somalia's more open, competitive, and innovative ICT sector. By prioritizing license exemption, interconnection transparency, infrastructure sharing, number portability, and a national broadband strategy, Somalia positions itself to leapfrog into a future where digital technologies drive growth, inclusivity, and resilience.

8. Pillar 4: Competition Regulatory Framework

A robust competition framework is essential to achieving a fourth-generation (G4) regulatory framework. This pillar ensures fair competition across various market segments, defines legal concepts of dominance and Significant Market Power (SMP), and sets clear criteria for determining market dominance. These efforts aim to create a level playing field that fosters innovation, protects consumer interests, and stimulates growth in the ICT sector.

8.1. Competition in Market Segments

Ensuring a competitive landscape in primary service segments such as local fixed-line services, domestic fixed

long distance, and international fixed long distance is crucial. These segments represent foundational elements of the telecommunications infrastructure and play a significant role in the overall health and competitiveness of the ICT sector.

• Strategic Objectives:

- Monitor and evaluate the level of competition within these primary service segments to identify any barriers to entry or practices that may hinder fair competition.
- Implement regulatory measures to promote greater competition and diversity of choice for consumers, thereby driving down costs and improving service quality.
- Market Analysis and Oversight: Carry out comprehensive market analyses to monitor competitive dynamics and identify potential anticompetitive practices.
- Regulatory Measures and Enforcement: Implement regulatory measures to prevent market dominance abuses and take enforcement actions against entities engaging in anti-competitive practices.
- Consumer Interest Protection: Ensure that the benefits of competition, such as fair pricing, highquality services, and innovation, are passed on to consumers.

8.2. Legal Concepts of Dominance and SMP

The definition and understanding of Significant Market Power (SMP) are central to the regulatory framework's ability to prevent anti-competitive behavior. Recognizing operators with SMP and subjecting them to specific regulatory measures ensures that no single entity can unfairly dominate the market, detrimenting competition and consumer choice.

• Strategic Objectives:

- Formally define the concept of SMP within the legal and regulatory framework, ensuring clarity and enforceability.
- Establish regulatory obligations for operators identified as having SMP, such as the mandatory publication of Reference Interconnection Offers, to prevent the abuse of market power and protect competitive market conditions.

8.3. Criteria used in determining market

dominance or SMP

Identifying operators with Significant Market Power requires an integrated approach beyond mere market share analysis. Multiple criteria should contribute to this determination, including geographical presence, control of essential facilities, access to financial resources, consumer countervailing power, and economies of scale and scope. These criteria help assess an operator's ability to influence market conditions and engage in anticompetitive practices.

• Strategic Objectives:

- Develop a comprehensive set of criteria for determining SMP that includes, but is not limited to, market share, control of essential facilities, and financial strength.
- Use these criteria to conduct regular market assessments, ensuring operators with SMP are accurately identified and appropriately regulated to maintain a healthy competitive environment.

Developing a comprehensive Competition Framework as part of Pillar 4 is crucial for advancing Somalia's ICT sector towards a more competitive, fair, and innovative marketplace. By placing emphasis on competition in key market segments, clarifying the legal definitions of dominance and SMP, and using a multi-criteria approach to determine SMP, the National Communications Authority is paving the way for a dynamic ICT ecosystem. This ecosystem will benefit consumers with improved services and prices and will encourage operators to innovate and expand, ultimately contributing to the overall growth and development of Somalia's digital economy.

9. Roadmap for Transformation

9.1. Phase 1: Assessment and Planning

The initial phase thoroughly assesses the current regulatory framework and market conditions. This involves identifying gaps between the existing G2 and the targeted G4 standards and understanding market dynamics and stakeholder needs.

Key Actions:

- A comprehensive review of existing regulations, policies, and practices against G4 criteria.
- Stakeholder consultations to gather insights and identify concerns.
- Development of a work plan that outlines specific

goals, actions, timelines, and responsibilities for the transition to G4.

9.2. Phase 2: Implementation and Capacity Building

With a strategic plan in place, this phase concentrates on implementing identified regulatory reforms and enhancing the NCA's capacity to manage and enforce the new framework.

Key Actions:

- Legislative and regulatory amendments to establish a legal basis for the G4 framework.
- Strengthen institutional structures and processes to support new regulatory functions.
- Training and development programs for NCA staff and stakeholders to build necessary competencies and understanding of the G4 standards.
- Launch of pilot projects to test and refine new regulations and practices.

9.3. Phase 3: Monitoring and Adjustment

This phase is dedicated to monitoring the implementation process on an ongoing basis, evaluating the effectiveness of the new framework, and making necessary adjustments based on feedback and evolving market conditions.

• Key Actions:

- Establishing a monitoring and evaluation (M&E) mechanism to track progress against the strategic plan.
- Regular reporting on implementation outcomes, challenges, and lessons learned.
- Adaptive management practices to refine and adjust strategies in response to feedback and new insights.

9.4. Phase 4: Final Review and G4 Compliance Verification

The final phase involves a comprehensive review of the entire transformation process, verification of compliance with G4 standards, and preparation for future enhancements beyond G4.

• Key Actions:

Conducting an in-depth evaluation of the

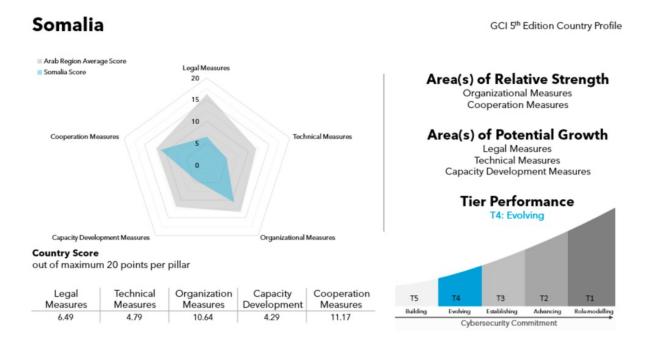
regulatory framework against G4 criteria and international best practices.

- Independent audit and assessment to validate G4 compliance and identify areas for further improvement.
- Development of a forward-looking plan that addresses emerging trends and technologies, setting the stage for continuous evolution towards collaborative digital governance (G5) standards.

Phase	Objective	Key Actions
Phase 1: Assessment and Planning	Thorough assessment of the current regulatory framework and market conditions. Identifying gaps between existing G2 and targeted G4 standards. Understanding market dynamics and stakeholder needs.	 Comprehensive review of existing regulations, policies, and practices against G4 criteria. Stakeholder consultations to gather insights and identify concerns. Development of a work plan that outlines specific goals, actions, timelines, and responsibilities for transition to G4.
Phase 2: Implementation and Capacity Building	Implementing identified regulatory reforms and enhancing the NCA's capacity to manage and enforce the new framework.	 4. Development of a cooperation with other regulatios to enhance the regulatory effectiveness of the market. 5. Strengthening institutional structures and processes to support new regulatory functions. 6. Training and development programs for NCA staff and stakeholders. 7. Launch of pilot projects to test and refine new regulations and practices.
Phase 3: Monitoring and Adjustment	Ongoing monitoring of the implementation process, evaluating the effectiveness of the new framework, and making necessary adjustments.	 8. Establishing a monitoring and evaluation (M&E) mechanism. 9. Regular reporting on implementation outcomes, challenges, and lessons learned. 10. Adaptive management practices to refine and adjust strategies.
Phase 4: Final Review and G4 Compliance Verification	Comprehensive review of the transformation process, verification of compliance with G4 standards, and preparation for future enhancements.	 11.In-depth evaluation of the regulatory framework against G4 criteria and international best practices. 12. Independent audit and assessment to validate G4 compliance. 13. Development of a forward-looking plan for continuous evolution towards G5 standards.

10. Somalia's Cyber Security Progress in ITU GCIv4 2024

Somalia has made significant progress in the International Telecommunication Union (ITU) Global Cybersecurity Index (GCIv5 2024), with its score rising from 17.25 out of 100 in 2020 to 37.38 out of 100 in 2024. This improvement reflects a substantial enhancement across five key pillars: legal measures, technical measures, organizational measures, capacity building, and cooperation. The advancement indicates Somalia's transition from Tier 1: Building in 2020 to Tier 2: Evolving in 2024. The country's strengthened legal and technical frameworks, improved organizational structures, increased in cybersecurity capacity building, and expanded regional and international collaboration have contributed to its elevated cybersecurity posture. These efforts have collectively elevated Somalia's cybersecurity posture and demonstrated its commitment to meeting global standards.



Pillar	Missing Indicators Needed needed to be Established/Developed		
	1. Cybercrime Law		
Legal Measures	2. Electronic Transactions Law		
	3. Privacy Law		
	4. Regulations for Critical Infrastructure Protection		
	1. Enhance National CERT/CIRT		
	2. Establish Sectoral CERT/CIRT		
	3. Improve Incident Reporting Mechanism		
Technical Measures	4. Adopt Public Key Infrastructure (PKI) and Digital IDs		
iecinnal measures	5. Implement Standardized Protocols		
	6. Set up a Malware Analysis Lab		
	7. Building Digital Forensics Lab		
	8. Establish Cyber Security information-sharing Platform		
	1. Develop a National Cybersecurity Strategy		
	2. Establish Cyber Security Council/Committee		
	3. Initiate Public-Private Partnerships		
Organizational Measures	4. Create Sector-specific Cybersecurity Plans		
	5. Develop Cybersecurity Metrics and Measurement		
	6. Develop Cyber Security Risk Management Framework		
	7. Develop a Business Continuity and Disaster Recovery Plan		

Pillar	Missing Indicators Needed needed to be Established/Developed
	1. Broaden Cybersecurity Training and Awareness Programs
Canacity Davidanment	2. Expand Professional Development Opportunities
Capacity Development Measures	3. Promote Research and Development in Cybersecurity
	4. Introduce Academic Programs in Cybersecurity
	5. Strategize Workforce Development in Cybersecurity
	1. Engage in Bilateral Agreements
	2. Participate in Multilateral Agreements
ooperative Measures	3. Strengthen International Cooperation and Initiatives
	4. Enhance Information Sharing Mechanisms
	5. Increase Engagement in Global Cybersecurity Efforts

Improving cybersecurity capability is an ongoing process that requires commitment, resources, and a strategic approach. By focusing on these key areas, Somalia can build a resilient cybersecurity framework that addresses its current challenges and lays a solid foundation for future technological advancements and regulatory reforms. This initiative is crucial to achieving a secure, prosperous, and digitally inclusive society.

11. Conclusion

The ICT Regulatory Transformational Strategy and Roadmap for the National Communications Authority of Somalia represents a significant step forward in establishing a strong digital governance framework for the country. This document outlines a comprehensive approach to moving from a Generation 2 (G2) regulatory framework to Generation 4 (G4) standards, setting the stage for a transformative shift in Somalia's ICT sector. The goal is not just to adopt new regulations, but to create an environment that fosters innovation, competition, and inclusive digital transformation.

The roadmap is structured around four key pillars: enhancing regulatory authority, transforming the regulatory regime, and refining the competition framework. Each pillar addresses specific challenges and opportunities within the ICT sector. This ensures that the regulatory framework is resilient, dynamic, and aligned with international best practices. The strategic goals of this document are ambitious and achievable. They include achieving diversification of funding sources, implementing a license-exempt regime, and establishing a comprehensive competition framework.

The phased approach involves assessment and planning, followed by implementation and capacity building, then monitoring and adjustment, and finally, a comprehensive review and G4 compliance verification. This structured pathway ensures careful planning and execution at each step, allowing for continuous evaluation and adjustments. Financial sustainability and strategic partnerships are crucial for this transformation. By securing the necessary budget and fostering collaborations with international bodies, private sector stakeholders, and civil society, the National Communications Authority (NCA) can leverage external expertise, resources, and support to effectively implement the strategy.

Somalia is embarking on an ambitious journey, guided by the ICT Regulatory Transformational Strategy and Roadmap. This strategy aims to lead the country towards a future where digital technologies drive socio-economic development, foster innovation, and make high-quality, affordable ICT services accessible to all citizens. The strategy represents a commitment to building a digitally inclusive society, ensuring that everyone can benefit from the digital age. Successfully implementing this strategy is expected to position Somalia as a leader in ICT regulation in Africa and beyond, highlighting the country's dedication to fostering a competitive, innovative, and inclusive digital economy. The journey ahead may be challenging, but with steadfast commitment, collaboration, and strategic execution, the vision of a digitally transformed Somalia is within reach.

