



Consultative Document

**FRAMEWORK ON
NET NEUTRALITY IN
TRINIDAD AND TOBAGO**

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1 Introduction

1.1 Background

The topic of net neutrality has been prominent in global policy discussions for decades. At the heart of these discussions lies the importance of the open Internet, which has unequivocally driven innovation, commerce, individual expression and competition.

The Authority first touched on the topic of net neutrality in its consultative document, *Towards the Treatment of Over-the-Top (OTT) Services* in June 2015. That document explored the concept of OTTs and, in particular, sought to examine the interaction between the markets in which OTT service providers and authorised providers operate in Trinidad and Tobago. In reviewing the comments received through the public consultation on that document, the Authority noted that many of the comments were heavily focused on the issue of net neutrality. The Authority subsequently took the decision to revise the document to include a more comprehensive discussion on OTTs and the principle of net neutrality.

In July 2018, the Authority began public stakeholder discussions on the topics of net neutrality and OTT regulation around its expanded consultative document titled, *Discussion Paper on Net Neutrality and OTT Services in Trinidad and Tobago* (the Discussion Paper).¹ The Discussion Paper sought to solicit feedback from stakeholders on proposed guiding principles and regulatory approaches to net neutrality and the treatment of OTT services in Trinidad and Tobago. While both topics were addressed within the Discussion Paper, the document partitioned the discussions on net neutrality principles and OTT regulation, with the former contained in Sections 1-8 and the latter exclusively addressed in Section 9.

In October 2021, the Authority published the decisions on recommendations (DORs) and version 0.2 of the Discussion Paper. Based on feedback received within the first round of consultation on the Discussion Paper, and considering the dynamism of the industry, the Authority indicated in the Discussion Paper, that future consultations on the topics would continue within separate frameworks on both net neutrality and OTTs, along with any attendant regulations.

This document marks the Authority's framework on net neutrality. The framework on Over The Top Services is currently being drafted and shall also be published in due course.

¹ Discussion Paper on Net Neutrality and OTT Services in Trinidad and Tobago:
https://tatt.org.tt/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=1540&PortalId=0&TabId=222

1.2 Rationale

The open Internet has been credited for the explosion of innovation behind the innumerable applications and services impacting our everyday lives. The principle of net neutrality supports this continued innovation through the Internet's open platform, with freedom to access and distribute information.

Net neutrality is often referred to as a set of rules geared towards the equal treatment of lawful data by Internet services providers (ISPs), meaning, without discrimination, restriction or interference, subject to legal requirements. Proponents of net neutrality advocate ex-ante prohibitions on discrimination against particular content or applications to protect consumer rights and innovation (Schewic, 2007). In absence of these rules, policy makers and net neutrality proponents fear the potential adoption of certain policies and practices that will undermine the benefits to be derived from an open Internet.

On the other hand, to ensure the orderly development and sustainability of the telecommunications sector, it is imperative that network operators have incentives to invest and the freedom to employ traffic management measures for the optimal operations of their networks. A carefully considered regulatory framework is required to achieve the delicate balance of protected end users' rights to an open and free Internet, and Internet service providers' (ISP) ability to innovate both technically and commercially. In other words, net neutrality rules protect end users' freedom to access the Internet equally while enabling ISPs to remain commercially viable and innovate in the way their services are provided. As the Code of Practice of the Caribbean Association of National Telecommunications Organization (CANTO) notes, this balance will allow the region to become a proving ground for online services and to develop a distinct and unique environment to attract technology companies and investment (CANTO, 2016).

1.3 Purpose

This Framework specifies the Authority's policy positions on net neutrality. The outputs of the Framework shall help guide the Authority's future regulations on ISPs' treatment of traffic in the provision of Internet access services.

1.4 Objectives

The Framework outlines:

1. the balanced regulatory approach on net neutrality that aligns with the Government's broader policies on broadband development.
2. policy directions to guide the regulation of net neutrality practices in Trinidad and Tobago.
3. high-level descriptions of the Authority's process of assessing and remedying net neutrality violations in Trinidad and Tobago.

1.5 Legal and Regulatory Framework

The Authority, in its strategic and operational duties, is governed by its legal and regulatory framework, which comprises, inter alia, the following instruments:

1. The Telecommunications Act, Chap. 47:31 (the Act)
2. Concession for the Operation of a Public Telecommunications Network and/or Provision of Public Telecommunications Services and/or Broadcasting Services

The Act provides the legislative background for net neutrality. Section 3 establishes the objects of the Act, which include, inter alia: establishing conditions for fair competition at the national and international levels; facilitating the orderly development of a telecommunications system; protecting the interests of the public; promoting universal access to telecommunications services; and encouraging investment in, and the use of, telecommunications infrastructure to provide telecommunications services.

Further, Section 18 (1) outlines the functions and powers of the Authority, which include, inter alia: the establishment of national telecommunications standards; and ensuring the orderly and systematic development of telecommunications throughout Trinidad and Tobago.

Pursuant to Section 18 (3), the Authority is required to consider the interests of consumers, particularly in relation to the quality and reliability of the service provided; the fair treatment of consumers and service providers similarly situated; and non-discrimination regarding access, pricing and quality of service.

The concession document also speaks on anti-competitive behaviour. Concession condition A21 states: “The concessionaire shall not engage in conduct which has the purpose or effect of preventing or substantially restricting or distorting competition in any telecommunications or broadcasting markets or interfering with the operation of networks or the provision of services by any of its competitors”.

Concession A22 elaborates: “The concessionaire shall not enter into any agreement, arrangement or understanding which has or is likely to have the purpose or effect of preventing or substantially restricting or distorting competition in any market for the provision or acquisition of any networks, services or equipment”.

1.6 Review Cycle

This Framework will be revised periodically to meet changing and unforeseen circumstances. The Authority will review this document and, if necessary, make modifications, in consultation with stakeholders, to ensure that the Framework is guided by appropriate policy guidelines and objectives.

Questions or concerns regarding the maintenance of this Framework may be directed to the Authority via email at consultation@tatt.org.tt.

1.7 Consultation Process

The Authority seeks the views and opinions of the general public and other stakeholders regarding the proposals made in this document, in accordance with its *Procedures for Consultation in the Telecommunications Sector of Trinidad and Tobago*.

The Framework on Net Neutrality in Trinidad and Tobago is being issued for a second round of consultation, following consultation at the Discussion Paper level.

1.8 Other Relevant Documents

Other relevant policies, plans and regulations that inform the Framework on Net Neutrality in Trinidad and Tobago include:

1. Authorisation Framework for the Telecommunications and Broadcasting Sectors of Trinidad and Tobago (ver. 0.5, 2005)

2. Consumer Rights and Obligations Policy (ver. 1.0, 2014)
3. Discussion Paper on Net Neutrality and Over-the-Top (OTT) Services in Trinidad and Tobago (ver. 0.2, 2021)

2 Net Neutrality Definition, Traffic Management and Net Neutrality Interferences

2.1 Definition of Net Neutrality

Professor Tim Wu, one of the earliest proponents of equal treatment of data, has asserted that all content, sites and platforms should be treated equally. He defined net neutrality as “a network design principle. The idea is that a maximally useful public information network aspires to treat all content, sites, and platforms equally. This allows the network to carry every form of information and support every kind of application” (Wu, Net Neutrality FAQ, 2006).

Wu, and many other academics, also recognised that the term “net neutrality” extends beyond network design. It touches on policy and regulatory strategies aimed at preventing negative spill overs of ISPs’ conduct in other industries, and in the wider economy. Primarily, net neutrality corroborates the open nature of the Internet to ensure competition is preserved, innovation can flourish and consumers have unprecedented access to information (Luca Belli P. D., Net Neutrality Compendium: Human Rights, Free, 2015).

Even in light of concerns for anti-competitive behaviour by ISPs, it is important to note here that Wu recognised the difficulty presented when forms of discrimination are required in order to “manage bandwidth and prohibit uses of the network that damage the integrity of the network or seriously impinge the rights of other users”. As Wu noted, “such restrictions are necessary if broadband carriage is to be a viable business” (Wu, <http://www.timwu.org>, 2021).

2.2 Traffic Management and Net Neutrality Interferences

In the early days of the Internet, data were transmitted primarily via “best effort”, that is to say, on a “first come, first served” basis. In best effort transmission, the network merely acts as a pipe through which packets traverse without any interference by ISPs. However, the Internet supports multiple end-user services which place varied demands on network resources such as bandwidth and performance metrics such as latency (delay). For example, good quality voice service requires low latency while good quality video service requires high bandwidth. Thus, in an era of a large volume of Internet users and a variety of bandwidth-intensive applications, some experts have debated that best effort transmission is unsustainable. As a result, traffic management mechanisms, intrinsic to Internet protocols, are required to enable efficient use of shared network bandwidth across diverse end user services. Traffic management activities that are reasonably required to manage the efficiency of the network, do not violate net neutrality principles.

Some traffic management mechanisms may entail the use of traffic management technologies, such as deep packet inspection (DPI)² which can be used for innocuous purposes, such as identifying malware, or for anti-competitive traffic discrimination activities. The latter represents a violation of the net neutrality principle, as it exceeds what is reasonably required to manage the efficiency of a network. Such actions are referred to in this document as “net neutrality interferences”.

The Authority identifies four net neutrality interferences that are potentially problematic. These comprise, blocking, throttling, paid prioritisation and zero rating.

2.2.1 Blocking

Advanced traffic management methods, such as DPI, provide network operators with extensive access to information on the data packets that traverse their networks. This form of data profiling assists network operators in the application of traffic management policies against harmful or illegal traffic. Where these practices, however, include the blocking of, or making effectively inaccessible, specific lawful applications, services or websites beyond what is reasonably required, they amount to a violation of net neutrality.

2.2.2 Throttling

Throttling is the intentional slowing of Internet traffic to reduce bandwidth congestion. In general, it is an intentional lowering of the “speed” that is typically available over an Internet connection (Fisher, <https://www.lifewire.com> 2019).

As with blocking, service providers rely on sophisticated traffic management methods to engage in this practice at certain times of the day, when data transfer is at its peak, if the traffic is of a particular type or from a particular website, or all types of data once a certain threshold is reached by the end user (Fisher 2016).

While throttling is often used to reduce network congestion, ISPs may employ the practice for other reasons. One study involving over half a million data traffic tests across 161 countries notes the lack of evidence that “any of these policies are only happening during network overload” (Grossman 2018). Throttling, in these cases, may be used by ISPs to drive users towards certain

² DPI refers to a method of examining the full content of data packets as they traverse a monitored network checkpoint. Conventional forms of stateful packet inspection only evaluate packet header information, such as source IP address, destination IP address, and port number. On the other hand, DPI looks at a fuller range of data and metadata associated with individual packets (Chickowski, 2020).

services, typically ones from which the ISP stands to profit. This is an inherent violation of the net neutrality principle.

2.2.3 Paid Prioritisation

Paid prioritisation is the practice that allows ISPs to offer preferential treatment or prioritised delivery to a content provider's traffic in exchange for monetary compensation. The imposition of fees for prioritised delivery has been a focal point of the net neutrality debate, as it is viewed as an exploitation of traffic management practices by ISPs for financial gain. According to proponents of net neutrality, such behaviour counters the established code of conduct for the treatment of traffic over the Internet. They believe that such a practice interferes with the net neutrality model that has been a catalyst for creativity and innovation.

This perspective is not shared by all, ISPs in particular, who, in some instances, demand flexibility in their traffic management practices and business models because of the challenges they face with the rise of OTT services. Moreover, paid prioritisation may be regarded as product differentiation and not product discrimination. According to this school of thought, ISPs should be able to offer higher quality services based on the customer's willingness to pay (Gharakheili 2017).

Furthermore, critics of net neutrality rules argue that a "light touch" approach is preferable in order to achieve gains in innovative services such as telemedicine, e-learning and Internet of Things (IOT) services. They argue that an outright ban on paid prioritisation would hinder consumers' ability to benefit from services that need prioritisation, such as latency-sensitive telemedicine services (Pai, Project Goal's Conference on "Aging and Technology: Creating Opportunities to Age Well with Innovation 2017).

2.2.4 Zero-Rated Pricing

Another commercial practice that raises concern vis à vis net neutrality is zero rating. This practice allows subscribers to access certain online content (e.g., a website or application) "for free", that is, without having the data counted against their usage (Eisenach, 2015). In addition to operator-initiated zero rating, i.e., where ISPs employ the practice on their own initiative as part of their marketing campaign, there is also sponsored zero rating. This occurs when a third-party content provider enters into a business arrangement with the ISP to zero rate the data associated with the use of their service. The ISP is compensated by the content provider, who agrees to cover the cost of the data charges.

The general concept of net neutrality is that all traffic on the Internet should be given equal treatment by ISPs. It is argued that zero rating violates this principle, as it involves manipulation

through economic means to give preferential treatment to some forms of data over others. Some proponents of net neutrality go as far as referring to zero-rated services as having, de facto, the same effect as blocking or throttling. As one article states, “At first glance it may appear that all traffic is handled equally in this charging model, but the fact is that once you have used your quota, the traffic that is exempted will be allowed to continue, while all other traffic will be throttled or blocked. This is clearly a case of discrimination between different types of traffic” (Sørensen, 2014).

Some opponents to strict net neutrality rules argue that zero rating as a legitimate business development strategy used by ISPs to drive demand for their services, by capitalising on network effects³. Moreover, in light of the growing demand for broadband infrastructure, it is argued that such a pricing strategy may prove beneficial to broadband investment, as it may improve operators’ revenues (Johns 2015). It is also often argued that zero rating helps to broaden access to the Internet by those who would otherwise be excluded from its use, thereby bridging the digital divide. For example, Free Basics (a rebranding of Internet.org) provides a service that allows users who have never been online to use zero-rated content for free. This brings connectivity to the previously unconnected in multiple countries in Africa and Asia, where research shows that consuming zero-rated content is one of many strategies used by the poor to save money (Galpaya 2017).

Supporters of the practice also point to benefits such as increased access to free content, the promotion of digital inclusion, the fostering of ISP competition through product differentiation, and the facilitation of market entry for new content providers.

³ Network effects occur when the customer's perceived value of a product increases with the number of people using that same product or a complementary product.

3 Policy Considerations for Net Neutrality Recommendations in Trinidad and Tobago

In addressing net neutrality issues, many jurisdictions employ a variety of strategies designed to reflect the idiosyncrasies of their operating environment. In the case of Trinidad and Tobago, proposed approaches to net neutrality are made within the context of achieving the country's wider policy objectives, paying specific regard to the development and functioning of the telecommunications sector. Consideration has been given to the United Nations (UN) Sustainable Development Goals (SDGs), specifically Goal 9 – Industry, Innovation and Infrastructure which is geared towards the realisation of this country's macro-economic objectives as articulated in the Government of Trinidad and Tobago's Vision 2030. This, together with the National ICT Plan, the existing legal and regulatory framework, and industry best practices have guided the formulation of the Authority's recommendations on net neutrality.

Some of the objectives identified under Section 3 of the Act include but are not limited to: promoting investment in, and the use of, infrastructure; establishing conditions for fair competition; promoting and protecting consumer interests; and promoting universal service. Additionally, a key tenet of the net neutrality debate is the role that innovation plays in the socio-economic advancement of a country. Thus, the Authority's policy considerations also include provisions for fostering innovation in Trinidad and Tobago, which the Government of Trinidad and Tobago has highlighted as a strategy for information and communications technology (ICT) sector development.

3.1.1 The Promotion of Broadband Development and Uptake

One of the strategic thrusts of the National ICT Plan 2018-2022 (the ICT Blueprint), is to improve connectivity. This involves initiatives for enhancing ICT infrastructure, specifically through the ubiquitous deployment of next-generation networks (NGNs). According to the ICT Blueprint, "a key aim of this thrust is to facilitate and incentivise private sector investment and market actors to advance the national ICT infrastructure" (Ministry of Public Administration 2018).

This imperative is supported by one of the objects of the Act, which calls for the promotion of investment and the use of infrastructure. Further to this, in the interest of creating an enabling environment to ensure that opportunities exist for all to be connected in a digital age, actions taken regarding the subject of net neutrality should ensure that the industry remains sustainable, attracts investors and fosters a digitally inclusive environment.

A preliminary assessment of broadband development and uptake in Trinidad and Tobago, using data from the Authority’s statistical repository, reveals the following statistics as at September 2021:

1. Fixed broadband Internet was provided by 11 operational service providers.
2. The fixed Internet penetration per 100 household stood at 87.2.
3. Approximately 27 out of every 100 inhabitants subscribed to fixed broadband Internet.
4. Active [1] mobile Internet penetration stood at 58.5% of the population.
5. 100% and 75% of the population were covered by 3G and LTE/WiMAX mobile network respectively.

Despite the presence of 11 ISPs operating in Trinidad and Tobago, there may still be some pockets of the population that remain unserved⁴ or underserved⁵. The recommendations presented in this document are prompted by the drive for further rollout of infrastructure and to ensure the presence of conditions apt for increasing consumer uptake of broadband services.

3.1.2 Fostering Effective Competition within Trinidad and Tobago

In accordance with Section 3 of the Act, another object is to establish conditions for “an open market for telecommunications services, including conditions for fair competition, at the national and international levels”.

The concepts of competition and net neutrality are intricately linked. Proposed net neutrality rules in Trinidad and Tobago are chiefly motivated to prevent anti-competitive behaviour. A key issue is the form that regulation should take: ex-ante or ex-post. Consideration is given to whether the Internet access market is sufficiently competitive to self-regulate against any potentially adverse effects of practices such as blocking, throttling, paid prioritisation and zero rating. Theories on self-regulation suggest that, where the market is sufficiently competitive, market forces would correct anti-competitive behaviour adopted by providers. Where it is determined that conditions within the broadband market are sufficiently competitive, required corrective regulatory interventions may be limited. In light of these theories, some local service providers point to the competitive nature of the broadband industry in Trinidad and Tobago and recommended an approach where market forces and competition powers are used to monitor and correct anti-competitive network practices. They caution against the blanket prohibitions of practices such as

⁴ In accordance with the definitions in the Digital Inclusion survey, a community is considered unserved if no telecommunications services are available in the area.

⁵ A community is considered underserved if the community ICT Development Index (IDI) falls below the national IDI average or if the service is not affordable by persons within the community.

zero rating and paid prioritisation. They contend that allowing these practices can result in significant benefits to consumers.

On the other hand, local net neutrality proponents stress the importance of clearly defined rules in prohibiting actions that reduce consumer choice, and stifle innovation and competition. Furthermore, proponents of net neutrality often contend that competition laws are not sufficient alternatives for net neutrality regulations. One specific problem is that typically competition law focuses on quantifiable variables such as price and output effects. As such, some experts posit that it fails to protect nonpecuniary values such as freedom of speech and democratic participation. Net neutrality rules protect these rights by ensuring Internet users can access, without ISP interference, various platforms to consume and express their interests. As one United States-based non-profit entity explains, “preserving internet neutrality means preserving the power of individuals to make choices about how they use the Internet – what information to seek, receive, and impart, from which sources, and through which services.” (Media Defence, 2020)

In Trinidad and Tobago, as in other jurisdictions, there is concern over the extent to which current competition legislations can safeguard against anti-competitive network practices. While there are avenues under the existing regulatory framework to address deviations from net neutrality principles, which amount to anti-competitive behaviour, proposed amendments to the Act are underway, to grant wider powers to the regulator to treat with competition issues. In the interim, the codification of rules may provide the best regulatory solution to ensure fair network practices are maintained.

3.1.3 Promoting and Protecting the Interests of Consumers

The Authority has a mandate under Section 3 of the Act to protect and promote the interests of customers, purchasers and other users of telecommunications services. Additionally, Section 18 (3) requires that the Authority, in carrying out its functions, safeguard the interests of consumers, as follows:

“In the performance of its functions, the Authority shall have regard to the interests of consumers and in particular—

- (a) to the quality and reliability of the service provided at the lowest possible cost;
- (b) to fair treatment of consumers and service providers similarly situated;
- (c) in respect of consumers similarly placed, to non-discrimination in relation to access, pricing and quality of service”.

There is general concern that net neutrality interferences can hamper the quality of Internet service experienced by consumers. For example, there may be an incentive for ISPs to degrade customers’ Internet speeds for reasons unrelated to reasonable network management. It is, therefore,

imperative that net neutrality rules protect the interests of consumers from ISPs' unreasonable traffic management practices. Consumers should, therefore, have the requisite information that allows for informed choices, particularly with respect to the traffic management policies and the quality of service (QoS) offered by their ISPs.

3.1.4 Promoting Local Innovation

One of the strategies presented in the ICT Blueprint is the diversification of the economy through ICT sector development. Under this vision, a key initiative is to increase digital content production, by inculcating an “upload” culture that celebrates development and shares the ingenuity and diverse heritage of the people of Trinidad and Tobago. This requires a shift in the country's focus from being at the base of the value chain, that is, end consumers of foreign content, to creating content of both local and international relevance.

Fostering local innovation creates opportunities for customised solutions to local issues, resulting in increased social gains. Furthermore, cultivating such creativity may provide opportunities for economic diversification within the export market. There is, therefore, value in shaping policies that ensure a level playing field for all, especially emerging local content providers. The COVID-19 pandemic has highlighted even more the benefits to be gained by citizens through strategic partnership between ISPs and the creators of digital platforms. For example, as business models shift to becoming more online based, local services, such as online food delivery services can benefit from zero-rated programs leading to increased exposure and product differentiation.

Additionally, during the pandemic, the two major mobile service providers in Trinidad and Tobago provided zero-rated access to new education, health and public information related e-services. This allowed for the timely spread of information to the public and the continued learning by students via online platforms.

3.2 Framing Net Neutrality Recommendations in Trinidad and Tobago

Giving due consideration to the outputs of the consultation process and, in particular, the factors identified in Section 3.1 of this Framework, the Authority proposes the adoption of a high-level regulatory approach to net neutrality in Trinidad and Tobago. Its recommendations are detailed under Sections 4, 5 and 6 of this Framework. They embody three core principles of net neutrality: reasonable traffic management, no unreasonable discrimination, and transparency. These principles are generally consistent with what local and regional ISPs have identified as their “code of practice for safeguarding the open Internet”.

The Framework recommends the codification of rules to protect the openness of the Internet. It is this openness that has been credited with the promotion of innovation, investment, competition, free expression, and other development goals. Complementary to these rules are provisions for reasonable traffic management. Section 4 outlines the Authority's recommendations on reasonable traffic management practices, identifying permitted exceptions to the general rules of net neutrality.

While the Authority appreciates the increasing role that industry self-regulation plays in addressing net neutrality concerns, it is also mindful of the persistence of regulatory gaps that may result in harm to consumers. Practices such as blocking and throttling of lawful content impede competition within the market and should, therefore, be prohibited through clearly defined rules. The Authority's positions on these practices are addressed in Section 5: No Undue Discrimination.

A key factor in achieving fair competition is transparency. Transparency provides consumers with the resources to make informed choices regarding the purchase and use of their Internet access service. This, in turn, promotes a competitive market and reduces ISPs' incentives, and ability, to violate net neutrality principles. The Authority's recommendations on transparency requirements are contained in Section 6.

Additionally, the Authority acknowledges that certain practices, although identified as net neutrality interferences, such as zero rating and paid prioritisation, may result in benefits to consumers. As such, the Authority proposes a more flexible policy approach to these practices, while still maintaining key measures that safeguard the openness of the Internet and promote fair competition. Sections 7 and 8 present the Authority's recommendations on zero rating and paid prioritisation respectively.

4 Reasonable Traffic Management

The Authority recognises that well-functioning broadband networks require the flexibility and ingenuity of reasonable traffic management. Deviation from the strict principle of net neutrality may be considered reasonable where a traffic management practice or measure is necessary to achieve a technical network management objective. These include, but are not limited to, the need to: preserve network security; mitigate the effects of temporary and exceptional congestion; meet QoS standards, prioritise emergency services; or enforce court ordered or legal provisions or requirements.

The Authority therefore recommends that rules on net neutrality expressly provide for reasonable traffic management. Thus, rules relating to the prohibition of discriminatory practices, should include exceptions for reasonable traffic management purposes. This ensures that ISPs retain the ability to manage their networks in a reasonable and efficient manner, resulting in optimal network performance and quality of services offered to consumers.

4.1 Definition of Reasonable Traffic Management

Traffic management involves a mix of both simple and complex technical solutions used to measure, analyse, classify and forward traffic in the network. The Authority defines reasonable traffic management as a set of practices and measures, legitimately implemented to treat with traffic on a telecommunications network primarily for technical network management purposes. Such practices and measures are legitimate where they are implemented in adherence to the principles of transparency, non-discrimination, proportionality, transiency, and fair competition.

4.2 Principles of Reasonable Traffic Management

The Authority's definition of reasonable traffic management centres around five key principles of reasonableness, aimed at ensuring legitimacy of the practice or measure within the greater context of net neutrality. Specifically, traffic management practices and measures are considered legitimate where they are implemented in conformance to the principles of transparency, non-discrimination, proportionality, transiency and fair competition.

4.2.1 Transparency

Traffic management practices should be transparent. That is, the end user must be broadly informed of the traffic management policies adopted by an ISP⁶. Traffic management policies and practices must also be disclosed to the Authority in a more detailed form, as described in Section 6. This enables the Authority to determine whether the practice or policy meets the “reasonableness” requirement.

4.2.2 Non-discrimination

Traffic management practices must, as far as is practical, be non-discriminatory. In other words, all data packets should be transmitted according to the same rules, unless differentiation is objectively justified for a technical network management purpose. Traffic differentiation may also be allowed for the treatment of traffic classes or categories based on objectively different requirements. Similarly, situations with objectively different technical QoS requirements can be treated in divergent ways if such treatment is justified.

4.2.3 Proportionality

Traffic management practices should be proportionate. This means the practice or measure should be geared towards addressing a specific and legitimate technical need, required for efficient network performance and the optimisation of overall transmission quality. Furthermore, the measure implemented should be a suitable, necessary and appropriate solution in relation to the technical need. This requires the practice or measure to be auditable and demonstrable.

4.2.4 Transiency

Traffic management practices should be transient. This means the practice should not be maintained longer than is necessary to resolve the issue at hand. If it is implemented as an ongoing traffic management measure, it should only be effected where necessary and in line with the proportionality principle detailed in 3.2.3.

⁶ This involves a high-level description of traffic management policies implemented by an ISP to ensure its network resources are used in an efficient manner to maximise the Internet experience of users, minimise congestion and deal with emergency situations.

4.2.5 Fair Competition

The traffic management practice should be based on fair competition, that is, the practice should not be implemented to effect anti-competitive arrangements.

Statements on Reasonable Traffic Management Definition and Principles

1. *The Authority's net neutrality rules shall include exemptions for reasonable traffic management practices and measures.*
2. *The Authority defines reasonable traffic management as a set of practices and measures, legitimately implemented to treat with traffic on a telecommunications network primarily for technical network management purposes.*
3. *These include, but are not limited to, the need to: preserve network security and integrity; mitigate the effects of temporary and exceptional congestion; meet QoS standards, prioritise emergency services; or enforce court ordered or legal provisions or requirements.*
4. *Reasonable traffic management practices and measures are legitimate where they are implemented in adherence to the principles of transparency, non-discrimination, proportionality, transiency, and fair competition.*

4.3 Notification of Changes to Traffic Management Policies and Practices

An ISP shall notify the Authority of any changes made to its existing traffic management policies. The Authority shall be also notified of new practices and measures implemented, or changes made to the purpose of use of an existing practice or measure. Such notification shall be submitted 30 days prior to implementation, or as required by the Authority. In the event of an emergency, an ISP shall notify the Authority within 7 days after the measure has been implemented.

An ISP shall also notify its customers of changes to its traffic management policies, at least 7 days in advance. Such notification shall include details on the potential impact on the quality of the Internet access service. The notification shall be included in the terms and conditions of the service and accessible on the service provider's website. The Authority's transparency requirements are elaborated in Section 6 of this Framework.

Statements on Reasonable Traffic Management Notifications

5. *An ISP shall notify the Authority of any changes to be made to its traffic management policies, practices and measures, 30 days prior to its implementation, or as required by the Authority.*
6. *In the event of an emergency, an ISP shall notify the Authority within 7 days after the measure has been implemented.*
7. *An ISP shall also notify its customers, at least 7 days in advance, of changes to its traffic management policies, including details on the potential impacts on the quality of the Internet access service.*

4.4 Assessment of Traffic Management Policies, Practices and Measures

Giving consideration to the definition and principles of reasonable traffic management as stated in Sections 4.1 and 4.2, respectively, the Authority may conduct periodic assessments of an ISP's traffic management policies, practices and measures to detect and investigate instances of unreasonable traffic management. ISPs shall submit documents or reports on their traffic management policies, practices and measures, which may include the purpose, scope, conditions, procedures and methods for managing their network traffic.

Additionally, ISPs shall maintain a log of their traffic management practices and measures initiated on the network for a period of 12 months. The log shall include information as to who initiated the command, the time and date the command was conducted, frequency of use, the timeframe implemented and the requisite effects of the commands on resolving the traffic management issue. The ISP shall provide the log to the Authority, at its request. This log may be used by the Authority, in addition to other monitoring strategies, for auditing and investigative purposes.

Statements on Assessment of Traffic Management Policies, Practices and Measures

8. *The Authority shall conduct periodic assessments of an ISP's traffic management policies, practices and measures to detect and investigate instances of unreasonable traffic management practices.*
9. *ISPs shall submit documents or reports on their traffic management policies, practices and measures, which may include the purpose, scope, conditions, procedures and methods for managing their network traffic.*
10. *ISPs shall maintain a log of their traffic management practices and measures initiated on the network for a period of 12 months.*
11. *The ISP shall provide the log to the Authority, at its request. This log may be used by the Authority, in addition to other monitoring strategies, for auditing and investigative purposes.*

4.5 Monitoring Strategies, Guidelines and Procedures

In addition to reviewing information submitted, the Authority, in its assessment of reasonable traffic management practices policy, and measures, may employ a mix of monitoring techniques that may include, investigating consumer complaints, conducting market surveys, and technical network monitoring.

Where it has been determined that industry clarification is required, the Authority may establish specific monitoring guidelines, policies, standards or procedures that detail its methods for measuring ISPs' compliance with their submitted and stated traffic management policies, practices and measures, and adherence to the Authority's guidelines on reasonable traffic management practices and measures.

Statements on Reasonable Traffic Management: Monitoring Strategies, Guidelines and Procedures

- 12. In its assessment of reasonableness, the Authority may, employ a mix of monitoring techniques that may include, investigating consumer complaints, conducting market surveys, and technical network monitoring*
- 13. The Authority may establish specific monitoring guidelines, policies, standards or procedures that detail its methods for measuring reasonable traffic management compliance.*

4.6 Determination of Unreasonable Traffic Management

Where, in its assessment, the Authority has reasons to believe that an ISP's traffic management policy, practice or measure is unreasonable, the Authority shall notify the ISP in writing. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.

An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.

A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.

Subsequent to the second notice, the Authority may make a determination of unreasonableness on an ISP's traffic management policies, practices, or measures and take such legal action as available to it under the Act.

An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered. The Authority shall consider the new information submitted and decide accordingly.

Statements on Determination of Unreasonable Traffic Management

- 14. Where, in its assessment, the Authority has reasons to believe that an ISP's traffic management policy, practice or measure is unreasonable, the Authority shall notify the ISP in writing.*
- 15. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance. An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.*
- 16. A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.*
- 17. Subsequent to the second notice, the Authority may make a determination of unreasonableness on an ISP's traffic management policies, practices, or measures and take such legal action as available to it under the Act.*
- 18. An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered.*
- 19. The Authority shall consider the new information submitted and decide accordingly.*

5 No Unreasonable Discrimination

The principle of “no unreasonable discrimination” follows from the Authority’s commitment to addressing anti-competitive pricing and acts of unfair competition, pursuant to its legislative mandate included in Section 29 of the Act and concession conditions A22 and A23.

The Authority recognises that the sophisticated technologies used by ISPs for traffic management measures and practices allow for detailed knowledge of the activities taking place within their networks. Additionally, ISPs have the structural capacity to determine the way in which data is transmitted and delivered. Concerns for the integrity of the open Internet arise where ISPs leverage their positions to engage in discriminatory treatment of certain content over others. Such discriminatory practices do not conform to the principle of net neutrality, which calls for the equal treatment of traffic.

The idea of non-discrimination within the network has clear implications for competition, innovation and fundamental human rights that go beyond economic consideration (Luca Belli, 2014). It involves the end user’s right to access and distribute lawful content free from ISP restrictions and interference implemented for the purposes of censorship or profit. To ensure benefits such as freedom of expression, access to knowledge and democratic participation are not compromised, the Authority underscores the importance of, as far as practical, non-discrimination-based network designs and traffic management practices.

The Authority therefore proposes rules prohibiting unreasonable discrimination in network practices. Specifically, it is the Authority’s position that an ISP shall not unreasonably discriminate in transmitting lawful network traffic in the provision of its Internet access service.

5.1 The Authority’s Definition of Unreasonable Discrimination

The Authority defines “unreasonable discrimination” as an unjustified network or commercial practice involving the management of traffic unequally, that impairs the end user’s ability to access, use or distribute lawful Internet content, ICT devices, and applications or services, via an Internet access service.

A network or commercial practice may be justified based on objective reasons for differential treatment that do not constitute anti-competitive behaviour. These include actions implemented based on the grounds of reasonable traffic management or pro-competitive benefits as discussed in Sections 4.1 and 7 and 8 respectively.

Statements on Unreasonable Discrimination Definition

- 21. Unreasonable discrimination is an unjustified network or commercial practice, involving the management of traffic unequally, that impairs the end user's ability to access, use or distribute lawful Internet content, ICT devices, applications or services via an Internet access service.*
- 22. A network or commercial practice may be justified based on objective reasons for differential treatment that do not constitute anti-competitive behaviour.*
- 23. In the provision of its Internet access service, an ISP shall not unreasonably discriminate in transmitting lawful network traffic.*

5.2 Consideration Factors in Determining Unreasonable Forms of Discrimination

The Authority shall generally consider as forms of unreasonable discrimination, policies, practices and measures, where an ISP blocks, slows down, alters, restricts, interferes with, degrades or discriminates between specific content, applications or services, or specific categories of content applications or services for anti-competitive reasons. Reasonable traffic management practices do not constitute unreasonable discrimination. As mentioned in Section 4, reasonable traffic management practices are those practices required to preserve network security and integrity, mitigate against the effects of temporary and exceptional traffic congestion, prioritise emergency services or to enforce court orders or legal provisions or requirements.

In distinguishing between reasonable and unreasonable forms of discrimination, the Authority shall look at the potential effects of the action on beneficial factors associated with net neutrality. Specifically, the Authority shall consider potential adverse effects the action may have on factors such as competition, innovation, investment, consumer protection and choice.

The Authority shall also pay regard to the extent to which the practice is application agnostic in nature. These are practices that differentiate in the treatment of traffic without reference to the content, application or device. Application-agnostic practices are less likely to be unreasonable since they do not interfere with end users' access to content, applications, services or devices, nor do they distort competition amongst edge providers⁷.

⁷ An edge provider is a website, web service, web application, online content hosting or online content delivery service that customers connect to over the internet

The Authority shall assess, on a case-by case basis, the reasonableness of commercial practices that may have pro-competitive effects within the industry. These include practices that provide specific solutions to market failures, or facilitate specialised services, i.e., those services where optimisation is needed to meet specific quality of service requirements. For example, the Authority may conduct individual assessments on commercial practices such as zero rating which may aid in bridging the digital divide.

Statements on Consideration Factors in Determining Unreasonable Forms of Discrimination

- 24. The Authority shall generally consider, as unreasonable discrimination, policies, practices and measures where an ISP unjustifiably blocks, slows down, alters, restricts, interferes with, degrades or discriminates between specific content, applications or services, or specific categories of content applications or service.*
- 25. The Authority shall consider potential adverse effects the action may have on factors such as competition, innovation, investment, consumer protection and choice.*
- 26. The Authority shall also pay regard to the extent to which the practice is application agnostic in nature.*
- 27. The Authority shall assess, on a case-by case basis, the reasonableness of commercial practices that may have pro-competitive effects within the industry.*

5.3 Assessment of Discriminatory Practices

The Authority shall generally adopt a case-by-case approach to its application of the “no unreasonable discrimination” rule, taking into consideration all available information. The Authority’s assessment approach may entail the adoption of a two-step process that involves first determining whether a specific content/application has or is being treated differently from those of a similar nature, and secondly determining whether there are objective grounds which could justify the difference in treatment.

Additionally, in detecting and investigating instances of unreasonable discriminatory action, the Authority shall conduct periodic assessments of an ISP’s agreements, network practices, and commercial offerings and conditions.

Statements on Assessment of Discriminatory Practices

28. *The Authority's assessment approach may entail the adoption of a two-step process that involves first determining whether a specific content/application has or is treated differently from those of a similar nature and secondly determining whether there are objective grounds that could justify the difference in treatment.*
29. *The Authority, in detecting and investigating instances of unreasonable discriminatory action may conduct periodic assessments of an ISP's agreements, network practices, and commercial offerings and conditions.*

5.4 Monitoring Strategies

The Authority, in its assessment of unreasonable discriminatory practices, may employ a mix of monitoring techniques that may include, investigating consumer complaints, conducting market surveys, and technical network monitoring.

Statement on Unreasonable Discrimination Monitoring Strategies

30. *The Authority, in its assessment of unreasonable discriminatory practices, may employ a mix of monitoring techniques that may include, investigating consumer complaints, conducting market surveys, and technical network monitoring.*

5.5 Determination of Unreasonable Discrimination

Where, in its assessment, the Authority has reasons to believe that an ISP's agreement, network or commercial practice constitutes unreasonable discrimination, the Authority shall notify the ISP in writing. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.

An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.

A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.

Subsequent to the second notice, the Authority may make a determination of unreasonable discrimination on an ISP's agreement, network or commercial practice and take such legal action as available to it under the Act.

An ISP may appeal the Authority's determination of unreasonable discrimination, in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered. The Authority shall consider the new information submitted and decide accordingly.

Statements on Determination of Unreasonable Discrimination

31. *Where, in its assessment, the Authority has reasons to believe that an ISP's agreement, network or commercial practice constitutes unreasonable discrimination, the Authority shall notify the ISP in writing.*
32. *Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.*
33. *An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.*
34. *A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.*
35. *Subsequent to the second notice, the Authority may make a determination of unreasonable discrimination on an ISP's agreement, network or commercial practice and take such legal action as available to it under the Act.*
36. *An ISP may appeal the Authority's determination of unreasonable discrimination, in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered.*

6 Transparency

The principle of transparency is a key requirement for net neutrality. It provides consumers with the requisite information for making informed choices, increases ISPs' incentives to uphold net neutrality principles, and strengthens confidence in Internet access services. Furthermore, the effective disclosure of relevant and accurate information encourages competition, innovation, and investment. The impact of an ISP's increased transparency in its terms and conditions associated with the provision of the service extends beyond the end user to providers of content, applications, services and devices (edge providers) who rely on comprehensive information to develop, market and effectively operate within the Internet ecosystem.

The Authority, guided by its object contained in Section 3(c) of the Act, and also in accordance with Section 24 (h), proposes recommendations on effective disclosure of network-related practices that conform to transparency requirements. More specifically, the Authority's recommendations on transparency call for ISPs to publicly disclose relevant information on their traffic management policies, performance characteristics, and some commercial practices. The meaningful disclosure of these parameters adds to the preservation of the open Internet, as it gives end users, edge providers and the Authority the information required for detecting net neutrality violations.

The Authority therefore proposes a requirement for ISPs to disclose their net neutrality-related policies, practices, and measures.

6.1 Definition and Scope of Transparent Network Practices

Transparency requires the effective disclosure of relevant information about an ISP's network practices. In the provision of Internet access service, an ISP shall therefore publicly disclose accurate information on the technical and commercial conditions of the service. Specifically, information regarding the ISP's traffic management policies, performance characteristics, and commercial terms and conditions relating to the provision of the service must be disclosed. Additionally, the disclosed information must be timely, accurate and meaningful. The published information must be sufficient, clear and comprehensive for consumers to make informed choices regarding the use of the services and for edge providers to develop, market, and maintain online content, applications, products and services.

Requirements for transparency do not include the disclosure of commercially sensitive information.

Statements on Transparency Definition and Scope

38. *In the provision of Internet access service, an ISP shall publicly disclose accurate information on the technical and commercial conditions of the service, including information on its traffic management policies, performance characteristics, and commercial terms and conditions.*
39. *Requirements for transparency do not include the disclosure of commercially sensitive information.*

6.2 Prescriptions on the Form and Content of Effective Disclosures

Effective disclosure requires, at minimum, that the ISP prominently displays, on an easily accessible website its disclosures or provide links to where the relevant information may be found. The relevant information must also be disclosed at the point of sale via contracts relating to the Internet access service.

The disclosed information may be presented in two formats, based on their level of detail. The first format may be high level, giving general information on the service and referencing the second part where more details are presented. The second part may consist of detailed technical parameters and their values and other relevant information.

As stated in its definition above, transparency requires ISPs to disclose traffic management policies, performance characteristics, and commercial terms and conditions. Transparency on traffic management policies encompasses, at minimum, descriptions of congestion management practices, security measures and device attachment rules. The description shall include, at minimum, the triggering conditions for which the policy would be applied; possible effects of the policy on the end user's experience; restrictions for end-user devices⁸; and where applicable, terms for ISPs' use of personal data, and protocols implemented for data privacy and protection.

Information on performance characteristics encompasses, at minimum, a general description of system performance and the effects, if any, of commercial practices such as conditional paid prioritisation on available capacity. Information on data caps, actual upload and download speeds, latency, jitter, web page load times, packet loss, DNS resolution times and other relevant quality of service parameters, particularly those potentially impacting the use of content, applications and online services, must also be reported.

⁸ These are any restrictions an ISP places on the end user on the types of devices that can be used to connect to the Internet via the service provided.

Information on the commercial terms of the service, including pricing, privacy policies and redress options, shall be disclosed. An ISP shall also disclose relevant information on its commercial practices, such as zero rating and conditional paid prioritisation, including a description on how the practice might impact the end user's Internet access service.

Statements on Form and Content of Effective Disclosures

- 40. An ISP must prominently display, on an easily accessible website its disclosures or provide links to where the relevant information may be found.*
- 41. The relevant information must also be disclosed at the point of sale via contracts relating to the Internet access service.*
- 42. The disclosed information may be presented in two formats based on their level of detail.*
- 43. Descriptions of congestion management practices, security measures and device attachment rules must be disclosed, including the triggering conditions and possible effects of the policy on the end user's experience.*
- 44. A general description of system performance and the effects, if any, of commercial practices such as conditional paid prioritisation on available capacity, must be disclosed.*
- 45. Information on data caps, actual upload and download speeds, latency, jitter, web page load times, packet loss, DNS resolution times and other relevant quality of service parameters, must be disclosed.*
- 46. Information on the commercial terms of the service, including pricing, privacy policies, and redress options, must be disclosed.*

6.3 Monitoring Strategies

The Authority shall monitor the industry for transparency in network-related practices. The Authority may employ monitoring strategies that involve a mix of investigating consumer complaints, conducting market surveys, and technical network monitoring of an ISPs' adherence to transparency requirements.

Statement on Transparency Monitoring Strategies

- 47. The Authority shall monitor the industry for transparency in network-related practices.*
- 48. The Authority may employ monitoring strategies that involve a mix of investigating consumer complaints, conducting market surveys, and technical network monitoring of an ISPs' adherence to transparency requirements.*

6.4 Determination of Failure to Meet Transparency Requirements

Where, in its assessment, the Authority has reasons to believe that an ISP fails to meet its transparency requirements, the Authority shall notify the ISP in writing. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.

An ISP may respond, in writing, detailing its case, including justifications for the action or measure. The Authority shall consider the ISP's case in its investigations on the matter.

A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.

Subsequent to the second notice, the Authority may make a determination of failure to meet transparency and take such legal action as available to it under the Act.

An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered. The Authority shall consider the new information submitted and decide accordingly.

Statements on Determination of Failure to Meet Transparency Requirements

- 49. Where, in its assessment, the Authority has reasons to believe that an ISP fails to meet its transparency requirements, the Authority shall notify the ISP in writing.*
- 50. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.*
- 51. An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.*
- 52. A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.*
- 53. Subsequent to the second notice, the Authority may make a determination of failure to meet transparency and take such legal action as available to it under the Act.*
- 54. An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered. The Authority shall consider the new information submitted and decide accordingly.*

7 Net Neutrality Exemption: Zero Rating

Zero rating is a widely used commercial practice which allows mobile subscribers to access certain online content “for free”, that is, without having the data counted against their usage allowance. The zero rating of a specific content or service may result in consumer bias towards it since, all other factors held constant, the content or service is cheaper to the consumer. Zero rating therefore challenges the principle of net neutrality and its requirement for both technical and economic non-discrimination in the treatment of traffic.

On the other hand, there is evidence to suggest that the commercial practice may result in significant benefits to consumers, for example, increased Internet access and demand, digital inclusion and the promotion of competition. A blanket ban on zero rating could deprive consumers of these benefits, without evidence of actual harm.

The Authority acknowledges that, while there are potential benefits of zero rating to consumers and competition, the practice may also, based on its structure, have deleterious effects on consumer choice, competition, and innovation. In light of this, the Authority’s shall pursue a case-by-case approach to this commercial practice, giving consideration to the presence of unreasonable discrimination and the actual and potential effects on consumers and competition.

7.1 Notification of Zero-Rating Practices

An ISP shall notify the Authority of its plan to zero rate specific content or services 30 days prior to implementation, or as required by the Authority. Subject to the Authority’s non-objection to the plan, an ISP may implement the plan after the 30-day notification period has passed. On the Authority’s request, an ISP shall submit information related to the zero-rated plan, inclusive of its terms and conditions, contracts and agreements related to the commercial practice.

Statements on Notification of Zero-Rating Practices

55. *An ISP shall notify the Authority of its plan to zero rate specific content or services 30 days prior to implementation, or as required by the Authority.*
56. *On the Authority’s request, an ISP shall submit information related to the zero-rated plan, inclusive of its terms and conditions, contracts and agreements related to the commercial practice.*

7.2 Assessment of Zero-Rating Practices

The Authority shall evaluate each plan on a case-by-case basis. The Authority shall also perform assessments on the submitted zero-rated plan throughout its duration. In assessing whether a specific zero-rating plan comports to the Authority's rules on net neutrality, the Authority shall consider the extent to which the practice conflicts with the Authority rules on unreasonable discrimination, as outlined in Section 4. Specifically, the Authority shall evaluate whether the practice is used as a mechanism to engage in a policy, practice or measure that constitutes unreasonable discrimination.

Additionally, the Authority shall consider the distortionary effects on competition associated with the commercial practice. Thus, the Authority shall consider whether the zero-rating plan is application agnostic; is only available, or available in more favourable terms, to its direct affiliates; creates exclusionary arrangements; or involves discriminatory pricing models. The Authority shall also take into account the existing competitive environment, inclusive of the respective market positions of the ISPs and edge providers involved.

The Authority shall also assess the structure and nature of the plan for reasonableness. It shall evaluate, at a minimum, the extent to which the plan is offered in a fair and transparent manner. The Authority shall examine the terms and conditions associated with the plan, inclusive of the commercial and technical conditions offered to consumers and edge providers. The Authority shall also consider the level of transparency associated with the plan, meaning the extent to which consumers and edge providers are informed about the terms and conditions, and their ability to their track usage. Other factors for consideration include the effect of the plan on end-user choice and the level of end-user control retained in opting in and out of the zero-rating plan.

The Authority shall consider the general purpose of the plan. It shall generally consider as reasonable plans offered to serve a specific civic engagement purpose, such as increasing broadband adoption, closing the digital divide, or facilitating the online presence and adoption of health care, education, national security purposes and other government services. These service offerings are generally considered pro-competitive due to the benefits gained by consumers.

Statements on Assessment of Zero-Rating Practices

57. *The Authority shall generally consider as reasonable plans offered to serve a specific civic engagement purpose, such as increasing broadband adoption, closing the digital divide, or facilitating the online presence and adoption of health care, education, national security purposes and other government services.*
58. *The Authority shall:*
- a. *Evaluate each plan on a case-by-case basis, giving consideration to the extent to which the practice conflicts with the Authority's rules on unreasonable discrimination.*
 - b. *Assess the structure and nature of the plan for reasonableness.*
 - c. *Evaluate, at minimum, the extent to which the plan is offered in a fair and transparent manner.*
 - d. *Examine the terms and conditions associated with the plan, inclusive of the commercial and technical conditions offered to consumers and edge providers.*

7.3 Monitoring Strategies

The Authority shall monitor zero-rated practices for competition distortion. In assessing an ISP's zero-rated practices for reasonableness, the Authority may employ monitoring strategies that involve a mix of investigating consumer complaints, conducting market surveys, and technical network monitoring.

Statements on Zero-rated Monitoring Strategies

58. *The Authority shall monitor zero-rated practices for competition distortion.*
59. *In assessing an ISP's zero-rated practices for reasonableness, the Authority may employ monitoring strategies that involve a mix of investigating consumer complaints, conducting market surveys, and technical network monitoring.*

7.4 Determination of Anti-competitive and Unfair Zero-Rating Practices

Where, in its assessment, the Authority has reasons to believe that an ISP's zero-rated plan is anti-competitive, or constitutes an unfair commercial practice, the Authority shall notify the ISP in writing. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP has the opportunity to respond to the notification and the Authority's proposed requirements for compliance.

An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.

A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.

Subsequent to the second notice, the Authority may make a determination of anti-competitiveness or unfair commercial practice on an ISP's zero-rated plan and take such legal action as available to it under the Act.

An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered. The Authority shall consider the new information submitted and decide accordingly.

Statements on Determination of Anti-competitive and Unfair Zero-Rating Practices

60. *Where, in its assessment, the Authority has reasons to believe that an ISP's zero-rated plan is anti-competitive, or constitutes an unfair commercial practice, the Authority shall notify the ISP in writing.*
61. *Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP has the opportunity to respond to the notification and the Authority's proposed requirements for compliance.*
62. *ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter..*
63. *A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.*
64. *Subsequent to the second notice, the Authority may make a determination of anti-competitiveness or unfair commercial practice on an zero-rated plan and take such legal action as available to it under the Act.*
65. *An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered.*
66. *The Authority shall consider the new information submitted and decide accordingly.*

8 Net Neutrality Exemption: Conditional Paid Prioritisation

Paid prioritisation is typically referred to as the optimisation of data transfer rates for edge providers in exchange for commercial considerations. There is a concern that this commercial practice may be at variance with the principles of net neutrality. Some opponents of the practice contend that it allows for “fast lanes” and makes ISPs gatekeepers of the Internet. This in turn, stifles competition and innovation.

On the other hand, an outright ban on the practice raises concerns for the consequent loss of pro-competitive effects it may engender, specifically with respect to new Internet-based services that require additional optimisation. With the assertion that traffic prioritisation is not a zero-sum proposition, some experts argue against the idea of the “slow lanes” and “fast lanes” disparity. For example, one technical advisory group observed in its report that “when differentiated treatment is applied with an awareness of the requirements for different types of traffic, it becomes possible to create a benefit without an offsetting loss.” The report further contends that “some differentiation techniques improve the performance or quality of experience (QoE) for particular applications or classes of applications without negatively impacting the QoE for other applications or classes of applications” (Broadband Internet Technology Advisory Group, 2015).

The Authority acknowledges that, in the correct context, paid prioritisation can result in significant pro-competitive benefits within industries and improved end-user experiences. This is particularly true for a wide variety of innovative online applications that require specialised treatment for their optimised provision. For example, advancements in telemedicine rely on these services. The Authority also remains mindful of the potential harm of the practice to fair competition, if left unmitigated. The Authority’s approach, therefore, allows for the commercial practice of paid prioritisation on a case-by-case basis, within stated parameters. Underscoring the importance of established safeguards, the Authority stipulates that certain conditions must be met before an ISP can engage in the commercial practice. These safeguards ensure that the continued availability and the general quality of the “best effort” Internet are upheld, as far as practical.

8.1 Definition of Conditional Paid Prioritisation

The Authority defines conditional paid prioritisation as a commercial practice involving the offering of specialised services other than general Internet access services, optimised for specific content, applications or online services, where such optimisation is necessary to meet specific QoS standards. Examples include IPTV services, high-definition video conferencing, dedicated educational curriculum applications, automated driving services and e-health services (e.g., remote surgery). By their nature, these services are quality sensitive and require guaranteed fast and stable data-transfer rates for their provision.

8.2 Notification and Requirements for Conditional Paid Prioritisation

An ISP shall notify the Authority of its intention to enter a commercial arrangement involving conditional paid prioritisation 30 days prior to its implementation. The Authority may approve the commercial practice where, at a minimum, the following conditions are met:

1. The practice is only offered to content, applications and services requiring the specialised service. In other words, it must be objectively necessary for the functionality of the content, application or service.
2. The ISP's network must have sufficient capacity to deliver the specialised service in addition to the Internet access service provided.
3. The commercial practice does not reduce the availability or general quality of the Internet access service for end users.
4. The commercial practice is not offered as a replacement for the general Internet access service.
5. The commercial practice is not provided on a discriminatory basis. In other words, it is not exclusively offered to a specific application or service, but open to all applications or services within that category of applications or services, where applicable.

An ISP shall provide, on request by the Authority, relevant information on the commercial practice offered. This includes supporting evidence that the practice is objectively necessary to ensure that the requirements of one or more specific and key features of the content, applications, or services are met, and to enable a corresponding quality assurance to end users.

The Authority may also request relevant information regarding capacity sufficiency and the scale on which the services are offered, (e.g., networks, coverage and end users). This includes assurance that network elements and connections have sufficient capacity available to provide conditional prioritisation in addition to any Internet access service provided.

In addition to new commercial agreements, an ISP shall also notify the Authority of changes to the terms and conditions associated with the commercial practice.

8.3 Other Factors Considered in the Assessment of Conditional Paid-Prioritisation Practices

The Authority shall conduct initial and periodic assessments of the commercial practice, considering potential violations of its rules on unreasonable discrimination outlined in Section 5 of this Framework.

The Authority shall assess the structure and nature of the practice for reasonableness, fairness and transparency. The Authority shall consider, at minimum, the extent to which the commercial arrangement is application agnostic; is only available to, or available in more favourable terms to its direct affiliates; creates exclusionary arrangements or involves discriminatory pricing models. The Authority shall also consider the existing competitive environment, inclusive of the respective market positions of the ISPs and edge providers involved.

Statements on Other Factors Considered in the Assessment of Conditional Paid-Prioritisation Practices

- 67. The Authority shall conduct initial and periodic assessments of the commercial practice, considering potential violations of its rules on unreasonable discrimination.*
- 68. The Authority shall assess the structure and nature of the practice for reasonableness, fairness and transparency.*

8.4 Monitoring Strategies

The Authority shall monitor conditional paid-prioritisation practices for competition distortion. The Authority may employ monitoring strategies that involve a mix of investigating consumer complaints, conducting market surveys, and technical network monitoring.

Statements on Conditional Paid Prioritisation Monitoring Strategies

- 69. The Authority shall monitor conditional paid-prioritisation practices for competition distortion.*
- 70. The Authority may employ monitoring strategies that involve a mix of investigating consumer complaints, conducting market surveys, and technical network monitoring.*

8.5 Determination of Anti-competitive and Unfair Commercial Practices

Where, in its assessment, the Authority has reasons to believe that an ISP's conditional paid-prioritisation agreement is anti-competitive, or constitutes an unfair commercial practice, the Authority shall notify the ISP in writing. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.

An ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.

A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.

Subsequent to the second notice, the Authority may make a determination of anti-competitiveness or unfair commercial practice on an ISP's conditional paid-prioritisation agreement and take such legal action as available to it under the Act.

An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered. The Authority shall consider the new information submitted and decide accordingly.

Statements on Determination of Anti-competitive and Unfair Commercial Practices

- 71. Where, in its assessment, the Authority has reasons to believe that an ISP's conditional paid-prioritisation agreement is anti-competitive, or constitutes an unfair commercial practice, the Authority shall notify the ISP in writing.*
- 72. Such notification shall set out the findings of the Authority's investigations, suspected instances of non-compliance, the period during which the ISP can respond to the notification and the Authority's proposed requirements for compliance.*
- 73. ISP may respond to the Authority, detailing its case, including justifications for the action or measure. Such response must be in writing. The Authority shall consider the ISP's case in its investigations on the matter.*
- 74. A second notice of non-compliance may be issued by the Authority where an ISP has already been given an opportunity to respond to the first notification and the period for response has expired and no steps have been taken to come into compliance.*
- 75. Subsequent to the second notice, the Authority may make a determination of anti-competitiveness or unfair commercial practice on an ISP's conditional paid-prioritisation agreement and take such legal action as available to it under the Act.*
- 76. An ISP may appeal the Authority's determination in accordance with Section 83 of the Act. The ISP may request that the Authority's decision be reconsidered based on information not previously considered.*
- 77. The Authority shall consider the new information submitted and decide accordingly.*

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