

Public Consultation-Guidelines for Network Neutrality

December 14, 2023

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1 Part I Instructions for Responding to the Consultation

1.1 Introduction

1.1.1 Context

The ICT sector assumes a key role in the realization of Qatar's National Vision 2030¹ which aims to enable Qatar to become an advanced society capable of sustaining its development and providing a high standard of living for its people.

Under this vision, the Communications Regulatory Authority ("CRA") has designed its Strategy² around strategic objectives, sector targets and strategic initiatives in order to support Qatar's transition to a digital nation. Among these initiatives, the CRA has identified the need to develop a regulatory framework for Network Neutrality³.

Network Neutrality is an important principle which ensures that Internet Service Providers ("ISPs") treat all lawful internet traffic equally, without discrimination, restriction, or interference, independently of its sender or receiver, content, application or service, or terminal equipment. This prevents, for example, any positive or negative discrimination with regard to the source, destination or content of information transmitted over networks. ISPs may, however, implement some traffic management measures provided that they are proportionate and justified by legal or objective technical reasons. As such, Network Neutrality seeks to safeguard innovation, fair competition, and preserve an open internet ecosystem for users and businesses alike.

1.1.2 Draft Network Neutrality Framework

The current provisions of the Applicable Regulatory Framework ("ARF") already require ISPs to comply with the principle of Network Neutrality. However, the CRA believes it is important for the market to understand how these provisions should be interpreted and how, in the event of any cases arising, they should be applied to achieve Network Neutrality. Therefore, the CRA's draft Network Neutrality framework ("the Framework") aims to provide guidance to all parties on practices which the CRA considers acceptable and in line with the existing provisions of the ARF. It does so by providing examples of practices which are considered acceptable and describes the approach

¹ https://www.gco.gov.ga/en/about-gatar/national-vision2030/

² https://www.cra.gov.qa/document/cra-strategy-2020-2024-consultation-document

³ Initiative 13 in CRA's 2020-2024 Strategy.

that the CRA will take to assess different types of practices, should it be called upon to investigate alleged breaches of the framework as it relates to Network Neutrality.

The Framework is expected to deliver the following benefits:

- It will benefit end-users (business and residential customers as well as digital media providers and the local IT sector) by promoting non-discriminatory access to Digital media;
- It will promote market competitiveness and growth in ICT markets through non-discriminatory access for all players;
- It will provide clarity on the Network Neutrality principle and allow Service Providers to innovate and develop commercial models within these boundaries. This will then contribute to the development of the telecommunications sector and to promote national, social and economic development;
- It will send a signal to potential foreign investors in Qatar that the digital sector is open and competitive; and
- It will thus directly help the CRA towards achieving its targets in terms of increased level of adoption and usage of Digital media and increased digital transformation of business and organisations.

1.1.3 CRA's approach to developing the Framework

When preparing the draft Framework, the CRA has sought views, through bilateral meetings followed by written responses to a questionnaire, from different stakeholders on the current and potential future of Network Neutrality developments as well as on its policy approach towards Network Neutrality.

The CRA has also reviewed frameworks for Network Neutrality and Open Internet followed in the European Union, the UK, Saudi Arabia, Bahrain, and Singapore.

As part of these steps, CRA has found that there are currently very few concerns identified in the local market regarding Network Neutrality.

Any Net Neutrality regulatory framework needs to be flexible and take into consideration future technology developments and innovation. Where possible, it should further build on existing regulations and requirements with the ARF.

For the above reasons, and to avoid any adverse reaction or halting of innovation, the CRA considers that a light-handed policy relying on guidelines seems the most appropriate way to design the Framework for Qatar. In the CRA's view, the current provisions in the ARF remain adequate, but the market would benefit from additional guidance on how these should be interpreted by parties

(and how they would be interpreted by the CRA in the event of an alleged breach of the Net Neutrality principle) and hence on what the parties' obligations under the ARF are. Adopting a lighter-touch approach now does not prevent the CRA moving to issuing specific Network Neutrality regulations in future, if needed⁴.

The guidelines are structured as follows:

- Section 1 provides the context and legal basis to the draft Framework.
- Section 2 sets out the principles to be applied by ISPs in Qatar.
- Sections 3 to 5 then provide more details on specific aspects of the Framework, by elaborating on:
 - what are reasonable traffic management techniques and the exceptional circumstances that can justify a licensee going beyond these techniques when managing traffic (Section 3),
 - the conditions under which Service Providers can offer specialized services (section 4), and
 - what type of pricing differentiation is compatible with Network Neutrality principles (section
 5).
- Section 6 sets out how the CRA will implement the Framework and supervise compliance of ISPs.

The CRA will review these guidelines as needed to ensure they are in line with market developments. The CRA will consider the option for different regulatory instruments, if it determines its approach is not working as intended.

1.2 Consultation questions

Stakeholders and other interested parties are invited to provide justified views and comments related to any aspect of the proposed Network Neutrality Guidelines. However, CRA would also be pleased to receive input in response to the following specific questions. Please provide full details with each answer.

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⁴ For example, in case the nature of the market changes and/or Network Neutrality related issues start to emerge or increase for any reason.

- 1. Reasonable traffic management: Do you agree with the principles proposed to qualify reasonable traffic management and do you see any other techniques which should be deemed reasonable?
- 2. **Specialized services:** Do you agree with the proposed definition of specialized services and the conditions for providing these services under the ARF, as set out in Section 4 of the draft guidelines?
- 3. **Zero rating:** Do you agree with the proposed conditions for providing zero rating offers under the ARF, as set out in Section 5 of the draft guidelines?

1.3 How to respond to the Consultation

1.3.1 Consultation procedures

In keeping with an open and transparent regulatory process, CRA is consulting on the attached draft Network Neutrality Guidelines. Stakeholders and interested parties are invited to provide their views and comments on any aspect of this consultation and to respond to the specific questions raised herein.

When responding, interested parties are asked to make clear reference to the related clause (paragraph) of the draft guidelines and/or question number and to provide background, context and supporting information. Respondents should provide evidence in support of their comments where necessary. This will enable CRA to understand why the submitted opinions are held by the respondent and take better account of the underlying reasoning.

Responses to this consultation (and questions about this consultation) should be submitted by email to: nN-consultation@cra.gov.qa. The subject reference in the email should be stated as "Consultation on the Network Neutrality Framework". It is not necessary to provide a hard copy of the responses.

The deadline to respond to this consultation is January 25, 2024.

All submissions received in response to this consultation will be carefully considered by CRA. However, it should be noted that nothing included in the draft guidelines is final or binding, and CRA is under no obligation to adopt or implement any comments or proposals submitted.

1.3.2 Consultation Response Template

Responses to this consultation must be in the template format (table) provided below. Responses that are not in this template format may be disregarded.

Respondent: [Name of company, organization, or individual].

Clause or question references	Responses and comments
	[Please provide your responses and comments in relation to the question or clause/paragraph mentioned in the first column]

1.3.3 Publication of comments

In the interests of transparency and accountability, CRA may publish the responses to this consultation on its website at (www.cra.gov.qa). All responses will be processed and treated as non-confidential unless confidential treatment has been requested by the respondents.

In order to claim confidentiality of information in submissions, respondents must provide a non-confidential version of such material in which all information considered confidential has been redacted and replaced with "[CONFIDENTIAL]" or "[CONFIDENTIAL INFORMATION]".

A comprehensive justification must be provided for each section of a response that respondents wish to be treated as confidential. Furthermore, respondents cannot request confidentiality for the entire response or whole sections of the response.

While CRA will endeavor to respect the wishes of respondents, in all instances the decision to publish responses (in full or in part) will be at the sole discretion of CRA.

By responding to this consultation, respondents will be deemed to have waived all copyright and/or intellectual property rights over the material provided. For more clarification concerning the consultation process, please contact us on (NN-consultation@cra.gov.qa).

2 Part II: Network Neutrality Guidelines Provided to the Public

2.1 Introduction

2.1.1 Context

2.1.1.1 Origins of the Network Neutrality Framework

The Communication Regulatory Authority ("CRA") is an independent regulatory authority in the State of Qatar. It was established in 2014 by virtue of the Emiri Decree (42) of 2014.

The CRA is responsible for regulating the Information and Communications Technology ("ICT") sector, the postal sector and access to Digital media and spectrum. In so doing, the CRA aims to establish and develop a sustainable and competitive telecommunications market to ensure the provision of innovative, advanced and reliable telecommunications services in the State of Qatar.

The Government of Qatar has launched the Qatar National Vision 2030⁵. This aims to enable Qatar to become an advanced society capable of sustaining its development and providing a high standard of living for its people. The ICT sector is seen as a key enabler in achieving the national development objectives set out within this vision.

Therefore, under this vision, the CRA has developed its 2020-2024 Strategy⁶. This set out a range of major initiatives that CRA would undertake during the strategy period, in order to support Qatar's transition to a digital nation.

One of the initiatives identified by CRA to help meet that objective is for it to establish a regulatory framework for Network Neutrality⁷ ("the Framework"). The CRA Strategy states that through this initiative, that CRA will "develop a network neutrality regulatory framework to ensure that there is no undue discrimination by telecommunications service providers in relation to providers of digital media services", while allowing for "exceptions for security reasons and for reasonable traffic management purposes". It also states that "CRA will monitor traffic management to ensure operator compliance with the regulations" and that "Enhanced non-discrimination regulatory rules will protect digital media companies from undue discrimination by telecommunications service providers" in order to "benefit digital media companies and the local IT sector", "send a signal to potential foreign

⁵ https://www.gco.gov.ga/en/about-gatar/national-vision2030/

⁶ https://www.cra.gov.qa/document/cra-strategy-2020-2024-consultation-document

⁷ Initiative 13 in CRA's 2020-2024 Strategy.

investors in Qatar that the sector is open and competitive" and "benefit customers by ensuring that they are able to get non-discriminatory access to digital media"

To this end, CRA has now prepared these Network Neutrality guidelines (the "Guidelines") for the sector, setting out how it expects industry participants to ensure they comply with the key principles of net neutrality, how CRA will continue to monitor the extent of industry's compliance and the actions it may take, should it identify practices which do not adhere to the principles laid out herein.

2.1.1.2 The Network Neutrality principle

Network Neutrality refers to the principle that telecommunications Service Providers shall, unless they have just and proportionate cause not to do so, treat all lawful internet traffic equally, without discrimination, restriction, or interference, independently of its sender or receiver, content, application or service, or terminal equipment.

This principle is at the core of the Internet's open ecosystem and is critical to (i) support innovation, (ii) protect competition and (iii) protect end-users' ability to access and distribute information or run applications and services of their choice.

This is because, when Internet Service Providers ⁸ ("ISPs") implement traffic management techniques which block, alter or slow down specific applications or services, this can threaten the ecosystem⁹.

This principle of equal treatment of traffic is not limited to technical traffic management techniques and the implementation of these techniques to provide specialized connectivity services which are optimized for specific Digital media. Rather, it applies also to commercial practices of ISPs, such as differentiated pricing.

2.1.1.3 Structure of the document

This document provides CRA's views with regard to the acceptability of different practices as they relate to net neutrality. It first sets out the principles to be applied by ISPs in Qatar (section 2). It then elaborates on what are reasonable traffic management techniques and the exceptional circumstances that can justify a licensee going beyond these techniques when managing traffic (section 3), the conditions under which telecommunications providers can offer specialized services (section 4), and what type of pricing differentiation is compatible with Network Neutrality principles

⁸ See definition in section (1.5)

⁹ When specific applications or services are discriminated, this can create barriers to entry for new providers and threaten the functioning of the internet ecosystem as an engine of innovation. It can then result in situations where end-users' choice is materially reduced.

(section 5). Finally, it explains how CRA will implement the Framework and supervise compliance of ISPs (section 6).

2.1.2 Legal background

In this section, the CRA sets out the legal provisions on which the Framework is built and reminds ISPs of the obligations they face under the Applicable Regulatory Framework ("ARF") in respect of considerations related to the principle of Network Neutrality.

The legal provisions which provide the basis for the CRA to develop a Network Neutrality Framework follow, in particular, from its mandate under Article 4 of the Telecommunications Law to (i) develop and implement the appropriate measures to prevent Service Providers carrying out anti-competitive practices¹⁰ and (ii) to protect the interests of subscribers and users in respect of a range of matters, including quality of services¹¹.

Critically, there already exist, within the ARF, a number of provisions which require ISPs to comply with the principles of Net Neutrality. Specifically, the terms of Licenses for the provision of fixed and mobile services require that the Licensee shall comply (and shall cause its officers, subcontractors and agents to comply) with the terms and conditions of the License and with all other aspects of the ARF, including any amendments that may be adopted from time to time. Of particular relevance to these Guidelines, Clause 20 of the Licenses terms provides that "In exercising its responsibilities under this Clause 20, the Licensee shall be guided by the principle that end users should not be impeded by their service provider from accessing and distributing lawful content or running any lawful application or services, except in cases where the Licensee is required to intercept, block or otherwise impede such transmissions by a duly authorized agency of the State of Qatar or is otherwise authorized to do so in accordance with the laws of the State of Qatar."

Furthermore, in its Annex D covering procedures for implementing and revising retail tariffs, the License also provides that Licensees are subject to an Undue Discrimination rule. This is further developed in the Retail Tarif Instruction¹² ("RTI") which that states that "Service Providers may offer differing terms if such terms can be objectively justified based on differences in supply conditions including differing costs, traffic volumes or a shortage of available facilities or resources".

 $(\underline{https://www.cra.gov.qa/en/document/decision-president-communications-regulatory-authority-no-3-2018-issuing-retail-tariff})$

¹⁰ Article 4(4) of the Telecommunications Law.

¹¹ Article 4(8) of the Telecommunications Law.

¹² Retail Tarif Instruction for Individually Licensed Service Providers in Qatar, November 2018

2.1.3 Objectives of the framework

As set out above, the CRA considers that Licensees already have an obligation to adhere to the common principles of Network Neutrality (as set out in these Guidelines). The primary objective of this document, therefore, is to provide guidance to all parties on practices which, with respect to Network Neutrality, the CRA considers acceptable and in line with the existing provisions of the ARF. To this end, this Framework provides examples of practices which are considered acceptable and describes the approach that the CRA will take to assess different types of practices, should it be called upon to investigate alleged breaches of the ARF as it relates to Network Neutrality.

This Framework will contribute to the CRA's strategy in multiple ways:

- It will benefit end-users (business and residential customers as well as digital media providers and the local IT sector) by promoting non-discriminatory access to Digital media;
- It will promote market competitiveness and growth in ICT markets through non-discriminatory access for all players, while not unduly constraining market players in their development;
- It will provide clarity on Network Neutrality principles and allow Service Providers to innovate and develop commercial models within these boundaries. This will then contribute to the development of the telecommunications sector and to promote national, social and economic development;
- It will send a signal to potential foreign investors in Qatar that the digital sector is open and competitive; and
- It will thus directly assist the CRA in achieving its targets in terms of increased level of adoption and usage of Digital media and increased digital transformation of business and organisations.

2.1.4 Application of the framework

This Framework is applicable to all licensed Service Providers, irrespective of the type of license they hold, who provide internet access services to the public. This includes services provided over fixed, mobile and satellite networks.

The Guidelines which set out the Framework shall apply after three months of being published.

2.1.5 Definitions and Interpretations

The definitions of the terms used in this document shall be consistent with those as set out in the Telecommunications Law, the Executive By-Law and their amendments or substitution.

For the purpose of this document the following definitions apply:

- Applicable Regulatory Framework (ARF): Includes but is not limited to the Telecommunications Law No (34) of 2006 as amended by Law No. (17) of 2017 and its Executive By-Law of 2009 and any other rules, regulations, decisions, orders, policies, guidelines, instructions, or notices issued by the CRA, as well as relevant laws of the State of Qatar and international treaties that the State of Qatar has subscribed to.
- **Best effort:** 'Best-effort' Internet traffic delivery refers to a situation in which the network does not provide any guarantee that data is delivered or that delivery meets any quality of service. Under best-effort, network performance depends on the current network traffic load, and the network hardware capacity. When network load exceeds the capacity of network nodes, this can lead to packet loss, retransmission, packet delay variation, and further network delay, or even timeout and session disconnect. Best-effort can be contrasted with the use of traffic management techniques, which can be implemented to maintain a defined quality of service¹³ for selected packets (measured using technical indicators such latency, throughput, packet loss, etc).
- **Digital media:** digital content (e.g. web pages, blogs, video) and/or applications (e.g. search engines, messaging applications) and/or services available over Internet access services.
- Emiri Decree: Emiri Decree No. (42) of 2014 Establishment of the Communications Regulatory Authority (CRA).
- Executive By-law: No. (1) of 2009 on the promulgation of the Executive By-Law for the Telecommunications Law.
- Internet Access Service (IAS): publicly available telecommunications service that provides access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used.

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¹³ NB: Service Providers do not need traffic management to satisfy the performance targets set in Qatar's QoS Regulation. Best effort delivery allows Service Providers to achieve high performance when networks are dimensioned with sufficient capacity.

- Internet Service Provider (ISP): refers to licensed Service Providers¹⁴ in Qatar who provide IAS to the public.
- Pricing Differentiation: There are application-agnostic differentiated pricing practices which the CRA would not, typically, consider to be in contradiction with the principles of Network Neutrality and the relevant aspects of the ARF. For example, these could include:
 - Data consumption during a certain time period (e.g. during the weekend or off-peak times or a given number of hours per month) not being counted against the general data cap; and
 - Different tariffs for different QoS levels, volumes, customers, contract length, bundles, as long as all traffic is priced equally.

However, the CRA is aware that ISPs may also engage in application-based differentiated pricing practices and, in particular, 'zero tariff' or 'zero rating' options. Whilst the former category of pricing practices is not considered in these Guidelines, the latter category is, due to its potential impact on Network Neutrality.

- Service Provider: as defined in the Telecom law: A person that provides one or more telecommunications services or owns, establishes, or operates a telecommunications network or telecommunication facility to provide telecommunications services. This includes providers of information, or the content provided by means of a telecommunications network.
- Specialized Services: Specialized services can be defined as services which provide internet connectivity, and which are optimised for specific use cases. These services have a different scope to IAS: they can be restricted to certain types of users (such as defence forces or specific industries) and they can be limited to a subset of end points (identified machines within an M2M network, voice enabled handsets for VoLTE, set top boxes for IPTV, etc).

These specialized services should only be provided where the optimisation is necessary to meet requirements of the applications or services for a specific level of quality. They should not be provided to the detriment of the availability or general quality of IAS for end-users.

- **Telecommunications Law:** Telecommunications Law Promulgated by Law No. (34) of 2006 as amended by Law No. (17) of 2017.
- Traffic Management: Traffic management refers to a set of techniques which can be implemented at different layers of electronic communications systems and in different elements

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¹⁴ As defined in Qatar's Telecommunications Law.

of networks: in network nodes (functions that prioritise/block packets in internal routing nodes or in endpoints) or in transmission links (functions that arbitrate access to bandwidth between different packets).

• **Zero Rating:** This refers to a commercial practice where an ISP (usually a mobile Service Provider) applies a 'zero tariff', or a reduced tariff, to all or part of the data traffic associated with an application or category of specific applications, offered by a third-party Digital media provider. Such traffic is therefore not billed at all (or it is billed at a reduced tariff) or is not counted towards the data volume purchased by end-users as part of their package.

2.2 The CRA's principles for a Network Neutrality Framework in Qatar

2.2.1 General principles

The CRA considers Network Neutrality to be the principle where all end-users in Qatar should have the ability to access and distribute lawful¹⁵ Digital media of their choice via their Internet Access Service. As stated in section 1.3 this principle is key to achieve the objectives in the CRA's strategy. This principle applies irrespective of the terminal device¹⁶ used, location of the end-users or the origin or destination of the content.

In other words, ISPs must treat all internet traffic equally and are prohibited from discriminating between specific Digital media, or specific categories thereof. This means that data packets must be transmitted over the internet, without consideration for where they come from, where they go, or what application they are used for. This equal treatment supports the separation of the application and network layers of the internet. This, in turn, enables innovation of applications independent of the ISP, thereby enhancing end-user choice.

However, the CRA recognises that there are legitimate circumstances where ISPs need to manage the traffic in their network and hence cannot apply complete equality as set out above. These circumstances are discussed in the following parts of this document.

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¹⁵ Lawful refers to Digital media that complies with relevant Qatar laws. The provisions of this document do not seek to regulate the lawfulness of the content.

¹⁶ When accessing the internet, end-users should be free to choose between various types of terminal equipment unless there is an objective technological necessity for the equipment to be provided or vetted by the ISP.

2.2.2 Scope of the Framework

The concept of Network Neutrality refers explicitly to ISPs who operate networks, not to all stakeholders in the value chain. The CRA acknowledges that other technical intermediaries can interfere with the flow of packets and introduce unequal treatment of Digital media¹⁷. Such issues are not in the scope of this Framework but could be addressed using other competition or consumer protection provisions and in conjunction with other competent authorities.

This Framework only applies to internet access services delivered over the public networks of ISPs. It does not apply to those delivered over private networks (internal corporate networks, private M2M networks¹⁸).

The provision of Interconnection¹⁹ is a distinct service from the provision of IAS so the CRA's Network Neutrality principles do not directly apply to peering or transit agreements. However, the CRA may take into account the interconnection policies and practices of ISPs if these are implemented in a way which seeks to circumvent the Framework.

2.2.3 The CRA's views on equal treatment of traffic

The CRA considers that equal treatment does not necessarily imply that all end-users will experience the same network performance or quality of service. Traffic management which leads to varying performance in the transmission of packets (e.g., on parameters such as latency or jitter) can be considered to be providing equal treatment as long it does not discriminate between similar Digital media.

The CRA recognises that the nature of certain services may require discriminatory treatment in the transmission and handling of the data traffic by ISPs. As such, the CRA would not consider it to be a breach of the ARF if ISPs introduced, under certain conditions, traffic management measures

¹⁷ Providers of terminal equipment, operating systems or browsers have the ability to interfere with the services provided over their products. For instance, Apple blocks certain types of content or payment services that can be used by applications available in its Appstore.

¹⁸ M2M (machine-to-machine) networks are networks linking machines or intelligent objects via mobile communications networks, generally without human intervention.

¹⁹ As defined in Telecommunications law no (34) of 2006, chapter one, article 1: Physical and logical linking of the Telecommunications

Networks used by the Service Provider itself or by a number of Service Providers, to enable the agents of the Service Provider to

communicate among themselves or with customers belonging to another Service Provider, or enable them access to the services

provided by another Service Provider.

which treat traffic differently (see section 3) and to offer services other than internet access services which are optimised for specific Digital media (see section 4).

In the CRA's view, equal treatment is not limited to technical traffic management practices but also applies to commercial practices of ISPs such as differentiated pricing (see section 5).

2.3 Traffic management

This section provides clarifications on traffic management techniques (such as, for example, blocking, throttling, prioritisation, and/or data compression) that do not treat traffic equally but which the CRA considers should not be viewed as breaching the provisions in the ARF, considering the objectives of the Framework.

2.3.1 Reasonable traffic management

The CRA is of the view that ISPs should be allowed to use reasonable traffic management techniques provided that these are:

- Not based on commercial considerations but on objectively different technical quality of service requirements (for example, in terms of latency, jitter, packet loss, and bandwidth); and
- Implemented in a non-discriminatory, transparent, and proportionate manner. Aspects which are important when considering reasonableness are: degree of end user control, application agnosticism and the degree to which traffic is throttled (full blocking vs. moderate throttling).

2.3.2 Conditions for more intrusive traffic management

The CRA considers it could be reasonable and not contrary to the provisions of the ARF for ISPs to use more intrusive forms of traffic management practices, going beyond the reasonable techniques set out in previous paragraph, in exceptional circumstances. These include the need to:

- Manage exceptional congestion (where, for instance, equipment failure is exceptional, but longlasting network congestion is not);
- Preserve network integrity and security (protection against spams, DDoS attacks, etc); and/or
- Comply with orders or directives from the Government of Qatar (for example, to block unlawful content or applications).

2.4 Specialized services

The CRA recognises that it can be important, in certain circumstances, for licensees to be able to offer specialized connectivity services, distinct from internet access services. As such, the CRA would not, in certain circumstances and cases, regard the provision of such specialized services to be a deviation of the principles of Network Neutrality and hence also not to be a breach of the related provisions of the ARF. To provide clarity to ISPs, the CRA sets out, in this section, the conditions under which it would not judge the provision of such services to constitute a breach of the ARF.

2.4.1 Conditions for provision of specialized services

Given the requirements for specialized services, the CRA would not expect to consider the provision of such services to be a breach of the provisions of the ARF, provided that the ISP in question is able to demonstrate that:

- Dedicated capacity is required. ISPs need to be able to describe the specific standards of quality required (i.e., they need to be able to set out the demand for services that need to be carried at a specific level of quality that cannot be assured by the standard 'best effort' delivery).
- Services are launched on a non-discriminatory and transparent basis. The introduction of specialized services should not distort competition between different Digital media providers in the same markets as this could restrict access of end-users to online content and services. An ISP must also ensure that end-users are fully aware of what these specialized services are, who uses these services and how they may impact their usage of their IAS. When it is technically impossible to provide the specialized service in parallel to IAS without detriment to the end-user's IAS quality, the CRA does not consider it to be to the detriment of the general quality of IAS when activation of the specialized service by the individual end-user only affects his own IAS²⁰. However, detrimental effects should not occur in those parts of the network where capacity is shared between different end-users.
- Services does not lead to a deterioration of 'best effort' internet. The provision of specialized services should not have a negative impact for the end-users. In particular ISPs need to ensure they have sufficient capacity to support the introduction of specialized services alongside internet access services; and

²⁰ This may be for example the case for an IPTV of VoLTE service.

• The requirements which apply in relation to the retail tariff approval process are fulfilled.

Where an investigation is undertaken, the CRA will determine on a case-by-case basis whether ISPs have provided sufficient evidence to demonstrate that these conditions are verified.

2.5 Pricing differentiation

This section provides clarifications on the different forms of differentiated pricing practices and their acceptability with regards to Network Neutrality principles.

2.5.1 Conditions for provision of zero rating offers

In cases where they are not in contradiction with the objectives of the Framework, 'zero rating' should be deemed admissible. This is, for example, the case for reduced or free prices for non-commercial applications such as:

- Online self-service portals to facilitate account management; and
- Information and services from public sector organizations that provide a public benefit and are not in competition with other suppliers.

However, zero rating offers for commercial services could lead, without mitigating measures, to competition distortions and reduction in consumer choice, which could undermine the open internet and eventually limit the ability for smaller providers of Digital media to innovate in the long term. Therefore, the CRA considers that:

- A zero rating would be considered acceptable and not contrary to the ARF if it is genuinely open to all providers of Digital media of the same category. This means that ISPs should process their requests in a reasonable timeframe and should not charge them for the inclusion in the zerorating offer. ISPs shall also ensure that they communicate clearly to their customers what category of services is included in a zero-rating offer. This is to reflect the desire of ISPs to promote consumption of digital media without compromising the preferences of end users; and
- In other circumstances, and unless ISPs can set out a clear case to the contrary, zero rating would be likely to be deemed to be out of line with the current ARF.

2.6 Implementation and supervision of the Framework

This section provides guidance on transparency measures that should be required from ISPs to comply with the Framework and then lists the CRA's possible interventions to monitor, investigate and bring ISPs into compliance.

2.6.1 Transparency requirements

Information asymmetries on the quality of Internet access services could undermine customer choice²¹. Regulatory instruments such as mandatory information disclosure to customers (hereafter "Transparency requirements") can reduce information asymmetry.

Transparency on the performance of networks and on traffic management, specialized services and pricing differentiation implemented by ISPs are thus key for the functioning of the market.

This need for transparency goes beyond Network Neutrality considerations and has led to the adoption of the CRA's QoS framework²² and Retail Tariff Instruction, for example.

In order to comply with the provisions in the ARF ISPs should provide information to end-users in a clear, accurate, accessible and comprehensive format. This information should cover factors that could impact the quality of internet access services or potentially limit the ability of end-users to access and distribute lawful Digital media via their internet access service.

Information on pricing differentiation directly relates to provisions on Undue Discrimination²³ stated in the RTI. ISPs should therefore describe and justify any price discrimination practice on a case-by-case basis in the Tariff information²⁴ submitted to the CRA as part of the RTI.

Information provided by ISPs specifically to the CRA is considered in the following section dealing with monitoring of the market.

²¹ The asymmetric information theory states that high-quality products and low-quality products can be sold at the same price because buyers don't have enough information about the products.

²² https://www.cra.gov.qa/en/Law-and-Regulations/Policies-and-Strategy/Qos-Policy

²³ Retail Tariff Instruction, section 3.10.

²⁴ Tariff information covers all terms and conditions related to the sale of a specific service. This may be included in various documents, e.g. in (i) Standard Terms and Conditions (T&Cs), describing terms and conditions applicable to a group of tariffs or (ii) Specific Tariff Documents for permanent or temporary offers.

As part of their existing transparency requirements ISPs shall disclose on their websites, any relevant marketing material, and in contracts, that include IAS, clear and comprehensive information on the following:

- any internet traffic management practices applied and how it could affect end-user experience, their privacy and the protection of customer information²⁵;
- any type of specialized services offered on the same connection of internet access services; and
- any differential pricing of certain categories of traffic, and how it will affect end-user experience.
 For example, once the data envelope is consumed, how is the non-zero-rated traffic handled?
 Is it charged, throttled, or blocked?

2.6.2 Monitoring and investigations by the CRA

To monitor the degree to which ISPs comply with the principles set in this Framework, the CRA will rely on information collected by its own dedicated methods and tools, and provided by ISPs as part of their transparency requirements and on possible complaints from end-users it might receive.

The CRA may also undertake annual meetings with SPs to gauge compliance.

End-users are allowed to lodge a complaint directly to the CRA without lodging it first to their ISP. This can be done online using the CRA's dedicated online complaint form and other existing channels²⁶.

Where an investigation is undertaken, the CRA will engage with the ISP concerned and ask for objective justifications for its practices. The CRA will examine both the intended object of any measure or practice as well as its effect.

The CRA also reserves the right to carry out its own tests to detect or quantify the impact of reported practices. These tests may involve random targeted verifications and may be carried out by the CRA itself or through a third party.

However, considering the limited number of issues reported and the limited incentives for ISPs to engage in practices which would infringe the Network Neutrality principles, the CRA considers that an amendment of its existing QoS policy to introduce a tool to detect deviations from the Network

²⁵ Cf Chapter 10, Article 52 of Telecommunications Law No (34) of 2006.

²⁶ CRA's Complaint Process includes the following channels: Call CRA hotline 103, or +97444069938 from overseas, Email: consumervoice@cra.gov.qa, via CRA's Social media platforms @craqatar, via "Arsel" app or via an online complaint form . https://www.cra.gov.qa/en/Services/General/Consumer/Consumers-Complaints.

Neutrality principles described in this document, or a dedicated reporting on compliance with the Framework, is not required at this stage.

2.6.3 Enforcement

The enforcement actions that the CRA may take against a non-compliant ISP after completing its investigations could, without limitation include the following:

- The CRA could issue a formal notice describing the non-compliant practice and calling to put an
 end to the practice within a week. In case of specified constraints which would require a longer
 time period to achieve compliance, ISPs should provide the CRA with clear justification and
 evidence and the CRA may allow for a longer specified delay; and
- In case the CRA identifies serious or deliberate violations of the ARF and of the interpretation
 provided in these Guidelines or repeated non-compliance to the instructions given by the CRA,
 escalated legal actions may be taken by CRA against the ISP, using the general compliance
 framework set out in the Telecommunications Law, the Executive By-Law and the Licenses.

In doing so, the CRA will aim to achieve appropriate balance between the harm caused by the practice to the end-users and the legitimate interests of the ISPs. The CRA will in particular consider the following aspects of the practices:

- What are the possible benefits to users, businesses and/or Service Providers?
- What volume of customers was impacted?
- How long did the effects of the practice last?
- What was the extent of degradation of service? (was it completely blocked? slower?)
- Did the ISP directly profit from it?
- Are there elements suggesting that the practice might have been unintentional?

2.6.4 Revision of the Framework

The CRA may revise the Framework if required, including but not limited to, where it is necessary to ensure that:

- ISPs comply with the principles of the Framework and do no seek to circumvent the principles set out in this document; and
- The Framework reflects developments in the Internet access service market and remains future proof. To that end, the CRA will continue to monitor developments in the Qatari market, as well

as Network Neutrality-related regulatory developments in overseas jurisdictions, to assess if further adjustments to the Framework are required.

In case the CRA finds sufficient grounds for revision of the Framework, it will seek further comments and input from relevant stakeholders.

3 Annex: White List and Black List

In addition to principles and views stated above this section provides, for illustrative purposes, two lists to assist stakeholders to appreciate the acceptability of certain practices. The Blacklist indicates practices that the CRA would presume to be in breach of the ARF. The Whitelist indicates practices that the CRA would presume to be acceptable. The lists are indicative and are not meant to be exhaustive.

Measure Type	Blacklist	Whitelist	
Blocking or restricting content, applications and services	Domain blocking: if authorities request to block access to a specific content, the blocking should not affect lawful content hosted in the corresponding domain / content hubs (such as Facebook, Twitter of other forums and social media platforms). Restricting of tethering ²⁷ constitutes a restriction on choice of terminal equipment.	chosen by end users (e.g. to	

²⁷ Tethering allows an end-user to share the internet connection of a phone or tablet with other devices such as laptops.

²⁸ A hotspot is a physical location where end-users can access the Internet, typically using Wi-Fi, via a wireless local area network (WLAN) with a router operated by individuals or businesses and connected to an Internet Service Provider.

	tenants or customers. Examples of criteria which could be used to make assessments of what is included in this list include the contractual relationship under which the service is provided and the range of users. Spam blocking DDoS attacks protections
Slowing down, degrading or throttling	Reasonable traffic management: traffic management based on certain classes of content, applications or services due to bandwidth or other objective network limitations is allowed if objectively justified, proportionate and transparent (e.g if a cell site is affected by power failure from the grid and relies on batteries it can protect voice service by locking down layers with a higher power usage such as 5G and some 4G layers).

Altering or interfering

Network level Ad injection or filtering: ISPs are not allowed to inject, or filter adds in lawful content provided by third parties.

Ad filtering by ISPs may severely affect providers of Digital media business models and cannot be justified absent consent from the providers of Digital media whose content is being modified.

Compression:

compression techniques enable a more efficient use of scarce resources and serves the endusers' interests by reducing data volumes, increasing speed and enhancing the experience of using the content, applications or services concerned. These should be deemed acceptable as long they are applied in similar way to similar content.