



Public Consultation on the Draft Outage Reporting and Mitigation Regulations for the Electronic Communications Sector in The Bahamas

Statement of Results and Final Decision

ECS 06/2024

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1. Introduction

In this document, the Utilities Regulation and Competition Authority (“URCA”) issues its Statement of Results and Final Decision with respect to URCA’s Public Consultation entitled “*Draft Outage Reporting and Mitigation Regulations for the Electronic Communications Sector in The Bahamas*” (“Proposed Regulations Regulations”).

URCA published the Consultation Document on 2 October 2023 (“Consultation Document”)¹ setting out, *inter alia*, the following:

- URCA’s objectives and legal framework for the public consultation;
- URCA’s rationale for the implementation of the Proposed Regulations;
- URCA’s review of current outage reporting practices in the Bahamian Electronic Communications Sector (“ECS”) and URCA’s findings on international best practices on outage reporting and related measures; and
- the Proposed Regulations.

In addition to seeking general comments and/or views on the Consultation Document, URCA also sought respondents’ views on the following questions (“Consultation Questions”):

- **Consultation Question 1:** Do you agree/disagree with the proposed scope and application of the proposed Regulations? Please give reasons why you disagree.
- **Consultation Question 2:** Do you agree/disagree with the number of outage categories proposed by URCA (i.e., planned, and unplanned outages)? Please give reasons why you disagree.
- **Consultation Question 3:** Do you agree/disagree with the proposed minimum time to notify URCA of planned outages? Please give reasons why you disagree.
- **Consultation Question 4:** Do you agree/disagree with the proposed categorization criteria and specific thresholds for outages (i.e., critical, and major outages)? Please give reasons why you disagree.
- **Consultation Question 5:** Do you agree/disagree with the proposal that Licensees designate a contact person to report outages to URCA? Please give reasons why you disagree.

¹ ECS 12/2023 available at <https://www.urbahamas.bs/consultations/ecs-12-2023-draft-outage-reporting-and-mitigation-regulations-for-the-electronic-communications-sector-in-the-bahamas/>

- **Consultation Question 6:** Do you agree/disagree with the four-step reporting process and timeframes proposed by URCA? Please give reasons why you disagree.
- **Consultation Question 7:** Do you agree/disagree with the information required at each stage of the reporting process? Please give reasons why you disagree.
- **Consultation Question 8:** Do you agree/disagree with the proposed forms and templates for outage notifications, outage updates, outage resolutions and outage reports? Please give reasons why you disagree.
- **Consultation Question 9:** Do you agree/disagree with the requirement to conduct root cause analyses with respect to critical and major outages? Please give reasons why you disagree.
- **Consultation Question 10:** Do you agree/disagree with the proposed duty on Licensees to take such measures as are appropriate and proportionate for the purpose of a) identifying risks of outages occurring; b) reducing risks of outages occurring; and c) preparing for the occurrences of outages? Please give reasons why you disagree.
- **Consultation Question 11:** Do you agree/disagree with the proposed high-level guidance setting out a non-exhaustive list of matters that URCA may consider when assessing a licensee compliance with its duty to mitigate and remedy outages? Please give reasons why you disagree.
- **Consultation Question 12:** Do you have any further comments on the proposed Regulations which have not been previously discussed?

The responses to the Consultation Document were initially due on 15 November 2023. URCA, however, extended the deadline for responses to 30 November 2023 to provide more time for Licensees and other interested persons to comment.

URCA received written responses to the Consultation Document from:

- (i) The Bahamas Telecommunication Company Limited (“BTC”); and
- (ii) a joint response from Cable Bahamas Limited (“CBL”) and Be Aliv Limited (“Aliv”) (hereinafter collectively referred to as “CBL/Aliv”).

URCA thanks the said respondents for their written responses and participation in the consultation process and encourages full participation by all stakeholders going forward. URCA notes that all comments received have been carefully considered by URCA.

In this document, URCA replies to the main comments it has received from BTC and CBL/Aliv and sets out its Final Decision with respect to the proposed Regulations. In doing so, URCA expressly states that failure on its part to respond in this document to any comment made by any of the respondents does not necessarily signify URCA's agreement in whole or in part with such comment, that URCA has not considered such comment, or that URCA considers the comment immaterial or without merit.

1.1 Legal and Regulatory Framework

This subsection sets out the legal and regulatory framework that governs URCA's power to conduct this consultation process.

Relevant Provisions of the Communications Act, 2009

Section 4 of the Communications Act, 2009 ("Comms Act") provides, *inter alia*, that the electronic communications policy has as one of its main objectives, to further the interests of consumers by enhancing the efficiency of the Bahamian ECS and the productivity of the Bahamian economy and promoting investment and innovation in electronic communications networks and services. Furthering the interests of persons in The Bahamas in relation to the ECS by promoting affordable access to high quality networks and carriage services in all regions of The Bahamas, maintaining public safety and security, and promoting the availability of a wide range of content services which are of high quality are other main objectives of the electronic communications policy.

Section 5 of the Comms Act states:

"All policy measures, decisions, and laws to take effect in the electronic communications sector in The Bahamas shall be made with a view to implementing the electronic communications policy objectives and shall comply with the following guidelines –

- (a) market forces shall be relied upon as much as possible as the means of achieving the electronic communications policy objectives;*
- (b) regulatory and other measures shall be introduced –*
 - (i) where in the view of URCA market forces are unlikely to achieve the electronic communications policy objective within a reasonable time frame, and*
 - (ii) having due regard to the costs and implications of those regulatory and other measures on affected parties;*
- (c) regulatory and other measures shall be efficient and proportionate to their purpose and introduced in a manner that is transparent, fair, and non-discriminatory; and*
- (d) regulatory and other measures that introduce or amend a significant government policy or regulatory measure (including, but not limited to, the sector policy) –*

- (i) shall specify the electronic communications policy objective that is advanced by the policy or measure; and
- (ii) shall demonstrate compliance with the guidelines set out in paragraphs (a), (b) and (c).”

Section 8 of the Comms Act grants URCA the power to issue regulations and other regulatory measures for the purposes of carrying into effect the electronic communications policy objectives.

Relevant Licence Conditions

Condition 13.6 of the Individual Operating Licence (“IOL”) mandates Licensees to take all appropriate measures to safeguard the security and integrity of its Carriage Services, including, where relevant and necessary, in conjunction with its Network.

Condition 14 of the IOL requires Licensees to comply with any relevant compulsory standards and/or specifications published by International Standards Bodies for the provision of Carriage Services, technical interfaces and/or Network functions in connection with any of its Networks or Carriage Services.

Condition 23.2 of the IOL mandates Licensees to notify URCA and, to the extent practicable, any affected Subscribers of any event of unplanned interruptions which prevents it from carrying out its obligations under this Licence as soon as reasonably practicable.

Condition 23.3 of the IOL mandates Licensees (i) to take all reasonable steps as are required to prevent and resolve unplanned interruptions to the provision of its Carriage Services and operation of its Networks and (ii) to inform URCA on a regular basis about measures taken to deal with the unplanned interruptions.

Condition 27.1.1 of the IOL requires Licensees to take all reasonably practicable steps to maintain, to the greatest extent possible:

- (a) the proper and effective functioning of any Public Telephone Network provided by it at all times, and
- (b) in the event of Force Majeure, the availability of the Public Telephone Services provided by it, including uninterrupted access to Emergency Organisations² as part of any Public Telephone Services offered by it.

Condition 27.2.1 of the IOL mandates Licensees to ensure that its Public Telephone Network is capable of providing any End-User with access to Emergency Organisations by using the Emergency Call Numbers at no charge and, in the case of a Pay Telephone, without having to use coins or cards.

² As defined in Part A of the IOL.

Condition 27.2.2 of the IOL requires the Licensee to ensure that any End-User can access Emergency Organisations via a public emergency call service, being an Electronic Communications Service that enables an End-User, at any time and without incurring any charge or requiring any token, to communicate with the police, the ambulance or fire services or the maritime search and rescue services and to notify them of an emergency.

Condition 1.19 of the Class Operating Licence Requiring Registration (“COLRR”) requires the Licensee to use reasonable endeavours to provide Carriage Services to a standard that could be reasonably expected by Subscribers, having regard to the nature of the services and any advertising or sales information provided by the Licensee.

1.2 Structure of the Remainder of this Document

The remainder of this document is structured as follows:

- Section 2 summarises the general comments and specific responses to the Consultation Questions received from BTC and CBL/Aliv and URCA’s responses and final decisions with respect to same.
- Section 3 sets out URCA’s Conclusion and Next Steps.

2. Responses to the Consultation

In this Section, URCA summarizes and responds to the key comments received from the respondents with respect to the Consultation Questions and any other matter relevant to the proposed Regulations.

In order to ensure that this document provides a useful and succinct assessment of the respondents' comments, URCA only discusses in this Section those responses which provide further material for discussion and/or clarification. Where the respondents have within their responses referred to matters that are outside of the scope of the Consultation Document, URCA has not provided a lengthy summary of those comments along with reasons supporting such position.

2.1 General Comments

Both BTC and CBL/Aliv provided general comments in their respective written responses. URCA summarizes below such general comments and provides its responses thereto.

BTC's Comments

BTC expressed its support for the introduction of outage reporting requirements and related measures. However, BTC noted that such obligations and guidelines should be efficient and proportionate.

According to BTC, most of the countries referenced in URCA's benchmarking exercise are not directly comparable to The Bahamas. Specifically, BTC stated that Canada, Finland, Lebanon, the United Kingdom ("UK"), and the United States of America ("USA") are all far larger than The Bahamas and as such the ECS licensees in these countries are better placed to meet outage reporting and mitigation regulations.

BTC stated that it agreed that looking to other countries, though preferably comparable countries, for guidance on best practices is a valuable tool for developing regulatory policy particularly in the context of outage reporting and mitigation regulations.

BTC went on to note that only two countries in URCA's benchmark sample are more directly comparable to The Bahamas, namely Jamaica and the Cayman Islands. Stating that the reason why only two Caribbean countries are included in URCA's benchmarking sample is because no other Caribbean countries have outage reporting and mitigation regulations in place.

BTC commented that while outages can be defined with one or more categories or levels of severity, the majority of the countries referenced in URCA's benchmark sample rely on a single major outage category for reporting purposes such as Canada, the Cayman Islands, the US. Further, only Canada and the Cayman Islands have major outage sub-categories. BTC stated that such an approach avoids unnecessary complexity and minimizes regulatory burden.

Further, the majority of URCA's benchmarked countries do not have specific follow up restoration process status notification requirements, i.e., Canada, Finland, Lebanon, the UK, and the US. Adding international best practices suggest that follow-up restoration process updates for major outages should be kept to a minimum so as to not unduly interfere with restoration efforts.

Additionally, section 5 of the Comms Act requires URCA to properly assess the costs and implications along with the efficiency and proportionality of new regulatory measures such as the proposed Regulations. While BTC appreciates the need for formalized outage reporting and mitigation obligations, such regulatory measures should be effective, proportionate in scope, and consider costs relative to expected benefits. In this regard, BTC has proposed some areas where the proposed Regulations could be simplified.

CBL/Aliv's Comments

CBL/Aliv thanked URCA for its Public Consultation on the proposed Regulations. CBL/Aliv said it has been submitting outage reports to URCA for some time, and it welcomes the opportunity to review this process.

CBL/Aliv noted that it has complied with Conditions 23.2 and 23.3 of the IOL by providing URCA with 24 hours' notice of planned outages and notifying URCA of unplanned outages that affect more than 500 customers and last longer than three (3) hours. CBL/Aliv also have clear procedures for informing affected customers of planned and unplanned outages. CBL/Aliv noted that Conditions 23.2 and 23.3 of the IOL are not well defined, for example "*to the extent practicable*" "*reasonable*" and "*regular.*"

CBL/Aliv commented that the Consultation Document provides a good opportunity to question the value of outage reporting to national regulatory authorities ("NRAs"). CBL/Aliv noted that URCA did not discuss how reporting of outages to URCA provides the customer, the Licensee, or itself with any value to justify the introduction of the proposed Regulations. Further, URCA gave no indication of what it will do with outage reports from Licensees. CBL/Aliv queried the value of outage reporting outside of office hours while URCA, during such time, does not have the capacity to receive and process such reports.

CBL/Aliv estimated that URCA will receive over seventy reports per day on outages if it were to proceed with its proposals emphasising that URCA does not have the capacity to process and act on such a high volume of report. Further, such a volume of reports imposes a significant cost on Licensees, especially the preparation and submission of updates during unplanned outages. The opportunity costs of these reports are significant. Yet URCA has not considered these costs contrary to section 5(b)(ii) of the Comms Act.

CBL/Aliv reasoned that Licensees have strong commercial incentives to minimize outages to retain customers and revenues. If Licensees' networks are not functioning, customers will not spend money on electronic communications services and will move to Licensees or services that provide better connectivity. CBL/Aliv stated that it considers the concerns over the reliability and quality of electronic communications services raised by participants in the 5G focus group meetings³ to be limited and not sufficient evidence that market forces are insufficient to minimize outages.

CBL/Aliv pointed out that Licensees are required to provide URCA with reports on unplanned outages by way of the condition in their IOL. CBL/Aliv has made proposals on how URCA could set guidelines on the interpretation and implementation of the said IOL licence conditions, which it believes will provide URCA and Licensees a more efficient and proportionate process. CBL/Aliv said its proposals will reduce the estimated 70 reports per working day to 1 report every 2 working days.

³ These meetings were a part of Phase I of URCA's 5G Public Consultation,

CBL/Aliv does not consider URCA's benchmarking exercise to be adequate evidence for the proposed Regulations for the following reasons:

- (i) The proposals in Canada and Jamaica are in consultation papers, and possibly may change as the comments from Licensees and other stakeholders are taken into consideration.
- (ii) In the UK, Ofcom has issued guidelines, not regulations, on the reporting of outages. On this basis, CBL/Aliv stated that actual practice may vary from Ofcom's guidelines.
- (iii) The Lebanese regulations referenced by URCA were published in 2009. It is unlikely that these regulations "work in practice" due to the political and economic factors in the country, which has resulted in severe disruption to communications networks.

CBL/Aliv stated that the Cayman Islands and Finland are the only useful references from URCA's benchmarking exercise. CBL/Aliv stated that it carried out additional benchmarking of five countries (i.e., Chile, Dominican Republic, the Falklands, the Netherlands, and Switzerland) and referred to these countries in its further comments and counterproposals.

Based on CBL/Aliv's own benchmarking exercise, the majority of NRAs do not require any outage reporting, and this is not reflected in URCA's Consultation Document. In the Caribbean, Barbados, Curacao, Eastern Caribbean and Trinidad and Tobago do not require Licensees to produce reports on outages for the NRA. Also, outage reporting is not required in the island nations of the Pacific region. CBL/Aliv stated that it believes that outage reporting is an exception rather than a rule.

CBL/Aliv stated that URCA should demonstrate that the reporting of outages to the NRA will produce tangible benefits to consumers that offset the cost imposed on Licensees and on URCA before it can go ahead with the proposed Regulations.

CBL/Aliv stated that URCA has not carried out any analysis to see whether the alleged increase in public concern over the reliability and quality of electronic communications services in The Bahamas is borne out in reality. CBL/Aliv stated that it agrees that customers are becoming more dependent on electronic communications, however it needs to be determined whether outages are becoming more frequent. CBL/Aliv stated that it does not believe that outages are becoming more frequent.

CBL/Aliv provided several diagrams relating to outages on CBL's network and Aliv's network from 2018 to 2023. URCA sets out below, CBL/Aliv's key takeaways and conclusion from the data set out in the said diagrams.

- (i) Outages on Aliv's mobile network are not increasing in number. The increase in outages on CBL's fixed network since 2020 is mainly due to problems with the electricity supply. For these reasons, any public perception that outages are worsening on CBL/Aliv's networks are not justified.
- (ii) However, outages on BTC's mobile network have been increasing over time with a much

higher outage incidence level. The public will not be able to differentiate between outages on Aliv's mobile network and BTC's network, which has a detrimental impact on Aliv's image in the market.

- (iii) A significant proportion of the outages on CBL/Aliv's networks involves other suppliers.
- (iv) Reporting outages to URCA will be problematic due to dependencies on other entities, i.e., getting estimate repair times and conducting root cause analyses where the root cause of the outage lies with another organization. CBL/Aliv has no power to compel the other organization to cooperate or conduct its own analysis within the timelines set out by URCA.
- (v) BTC does not offer its wholesale capacity services on and to the Family Islands on the basis of Service Level Agreements ("SLA") and BTC does not provide CBL/Aliv with the information required to inform its customers or URCA during outages. Given the prevalence of faults on BTC's network in the overall number of faults, CBL/Aliv proposed that wholesale SLAs on repair times be mandated by URCA and for BTC to be required to provide outage information to CBL/Aliv that allows for accurate communications with CBL/Aliv customers.

CBL/Aliv expressed its severe reservations about the need to provide outage reports to URCA, as proposed in the Consultation Document, arguing that:

- (i) Outage management is part of a Licensee's normal activities, and there are strong commercial pressures to minimize outages. Therefore, regulatory intervention should be kept to a minimum and as such, CBL/Aliv considers URCA's proposals to be intrusive, unnecessary, and an example of regulatory overreach.
- (ii) There is no value in reporting planned outages to the NRAs and some areas of the proposed Regulations should be dropped.
- (iii) The reporting of unplanned outages is required under the IOL, and it would be helpful to give guidance on the vague terms used in the Licence, however URCA's proposals are too detailed, onerous and provide no value for consumers, Licensees or for URCA. As such they need substantial revisions.

URCA's Responses/Final Decision

Regarding BTC's General Comments, URCA responds as follows.

URCA notes BTC's support for the introduction of outage reporting requirements and related measures in the ECS. URCA also notes and agrees with BTC's position that the proposed measures should be efficient and proportionate.

URCA acknowledges that most of the benchmarked countries are not directly comparable to The Bahamas. In this regard, URCA clarifies that the purpose of URCA's benchmarking exercise was to identify best practices on relevant regulations and policies in various countries to assist with the development of regulations suited for the local context.

URCA agrees that it may not be feasible to completely replicate policies and regulations that are used in much larger countries in this context. However, URCA considers that it is useful to identify policies and regulations in other countries so that same can be used to develop policies and regulations more aptly suited for the circumstances of The Bahamas. URCA notes that, in developing the Proposed Regulations, it used international best practices to develop outage reporting requirement and outage mitigation guidelines which URCA believes are best suited to the circumstances of The Bahamas.

URCA notes BTC's argument that the majority of the countries referenced in URCA's benchmarking exercise rely on a single major outage category as such an approach avoids unnecessary complexity and minimizes regulatory burden. URCA will address this point as part of its assessment of BTC's responses to Question 4 below.

URCA notes BTC's position that the majority of the countries referenced in URCA's benchmarking exercise do not have specific follow up restoration status notification requirements, and as such restoration status notifications on major outages should be kept to a minimum to not unduly interfere with restoration efforts. URCA assumes that BTC is referring to URCA's proposal to require Licensees to provide outage resolution notifications ("Outage Resolution Notifications"). URCA agrees that the proposed Outage Resolution Notifications should be proportionate and efficient so as to not impair Licensees' restoration efforts.

For the avoidance of doubt, URCA's clarifies that the objective of the proposed the Outage Resolution Notifications is to promote transparency and accountability in the outage management processes of Licensees. Additionally, the Outage Resolution Notifications would provide URCA with valuable information on outage incidents and Licensees' management of such incidents which URCA intends to rely on to make informed regulatory decision-making aimed at improving quality of services ("QoS") and network resilience.

As to BTC's assertion that Finland does not require restoration status update notifications, URCA disagrees. In this regard, URCA refers BTC to Regulation 19⁴ of the Finnish Regulation 66 on Disturbances in Telecommunications Services which requires Finnish Licensees to provide regular reports on the progress of outage restoration every three (3) hours or twelve (12) hours depending on the category of outage.

Furthermore, URCA notes that Jamaica proposed to require Licensees to provide outage resolution notices⁵, and the Cayman Islands require outage update notifications every four (4) hours detailing steps being taken and progress made in resolving the Outage⁶. Additionally, the FCC's Network Outage Reporting Rules requires Licensees to provide an initial outage report after filing an electronic notification of an outage⁷.

⁴ Available at https://www.traficom.fi/sites/default/files/media/regulation/EN_M66A.pdf

⁵ See paragraph 6.5 of the proposed Outage Reporting Protocols and Measures to Improve Network Resiliency in Disasters available at <https://our.org.jm/wp-content/uploads/2022/06/Outage-Reporting-Protocols-and-Measures-to-Improve-Network-Resiliency-in-Disasters-Consultation-Document.pdf>

⁶ See Part 5(j) of the ICT Outage Reporting Rules 2023 available at <https://www.ofreg.ky/consultations/ict-2023-2-determination-outage-reporting-rules-update>

⁷ See <https://www.fcc.gov/network-outage-reporting-system-nors>

Regarding CBL/Aliv's General Comments, URCA responds as follows.

URCA encourages CBL/Aliv to continue its efforts in providing information on outages to URCA and CBL/Aliv's customers and to comply with its obligations under Conditions 23.2 and 23.3 of the IOL.

URCA agrees with CBL/Aliv's observation that Conditions 23.2 and 23.3 of the IOL are not clear due to the use of words such as "*to the extent practicable*", "*reasonable*" and "*regular*". URCA advises that one of the objectives of the Proposed Regulations is to promote legal certainty and transparency by establishing well-defined criteria and reporting requirements that promote timely and standardized reporting of planned and unplanned outages by Licensees to URCA. Therefore, URCA believes that the Proposed Regulations address CBL/Aliv's concerns in this regard.

As acknowledged by CBL/Aliv, Licensees, holding IOLs issued by URCA, are currently required to provide URCA and their respective customers with notices of unplanned outages. Additionally, CBL/Aliv and other Licensees are required to provide their respective customers with advanced notice of planned outages by way of the Consumer Protection Regulations.

On the basis of Section 3.2 of the Consultation, URCA does not derive much value from the current reporting regime. As such, URCA considered it necessary to update the regime to the address the gaps and deficiencies and to improve the quality and value of information URCA obtains from Licensees in this regard. From URCA's viewpoint, the Proposed Regulations are intended to supplement and improve the current regime as opposed to introducing a regime that is entirely foreign to the ECS.⁸

Regarding the value of outage reporting to NRAs, URCA notes that the consultation aligns with URCA's assigned responsibilities with respect to section 4 of the Comms Act to *further the interest of consumers in The Bahamas by promoting competition* and to *further the interests of persons in The Bahamas in relation to the electronic communications sector*.

URCA considers that outage reporting in general and the Proposed Regulations promote the URCA's objectives as noted and as such provide value to URCA, consumers and the Licensees. More specifically, the contemplated measures:

- (i) allow URCA to monitor and assess Licensees' compliance with their IOL obligations, the requirements of the Consumer Protection Regulations⁹ and associated Minimum Required Service Standards and other relevant regulatory measures;
- (ii) allow URCA to obtain valuable information to assist in URCA in making informed and data-driven regulatory decisions aimed at promoting access to high quality electronic communications networks and services in The Bahamas and network resilience.

⁸ See Section 1.1 of the Consultation Document.

⁹ ECS 3/2024 available at <https://www.urbahamas.bs/decisions/ecs-03-2024-consumer-protection-regulations-for-the-electronic-communications-sector/>

- (iii) promote accountability and transparency with respect to Licensee’s outage management processes;
- (iv) provide URCA with reliable data on network reliability of respective Licensees should URCA consider publishing same for the benefit of consumers in The Bahamas as recently suggested by CBL/Aliv during URCA’s Competition Guidelines Seminar held on 18 January 2024; and
- (v) provide URCA with reliable information that could be used by URCA to facilitate engagement with Licensees on appropriate and proportionate ways aligned with relevant industry standards and international best practices to enhance outage management processes, improve QoS and strengthen network resilience where necessary.

URCA notes that Aliv’s calculations in Annex 1 and Annex 2 are estimates. Moreover, URCA notes that Annex 1 does not demonstrate that the figures therein were calculated based on URCA’s proposed reporting thresholds set out in Part III of the Proposed Regulations. Additionally, URCA notes that it not able to determine the veracity of the data set out in Annex 2. Therefore, URCA does not consider CBL/Aliv’s data as set out in Annex 1 and 2 to be reliable. URCA notes, in light of the foregoing, CBL/Aliv has not demonstrated reliable evidence to URCA to substantiate its claim that Proposed Regulations would result in over 70 outage reports per day and impose significant burden on Licensees and URCA.

If URCA were to accept that the figures set out in Annex 1 are reliable, URCA should be concerned about the number of outages there would be 70 reportable outages per day. Such volume of reportable outages would suggest that there are major network reliability and resilience concerns. And as such, the Proposed Regulations are even more necessary to verify whether CBL/Aliv’s estimations are correct.

URCA submits that it does have the capacity to act on outage reports. URCA advises CBL/Aliv that URCA has internal resources and capacity to engage external resources, if necessary. Moreover, the Proposed Regulations contain standard forms which should facilitate Licensees providing information on outages to URCA in a standard, clear, and comprehensible manner.

Based on URCA’s observations of the ECS, market forces alone do not appear to be sufficient to incentivize Licensees to be transparent and accountable with URCA on network outages and to adopt measures to minimise the occurrence of outages.

While URCA agrees that ideally competition should lead to improvement in QoS and network resilience, URCA is also cognisant that, particularly in small markets, competition often does not negate the need for effective regulation. URCA notes that even in large markets with more robust competition such as the USA, Canada, and the UK, the respective NRAs considered it necessary to implement outage reporting requirement and mitigation best practices. URCA refers to other island nations such as the Cayman Islands, Jamaica, and Singapore¹⁰ have implemented outage reporting requirements and network resiliency measures. Considering URCA’s observations of the ECS and the precedent, URCA has no basis nor has CBL/Aliv provided such basis to URCA to anticipate that the Bahamian market will behave

¹⁰Singapore’s Code of Practice for Telecommunication Service Resiliency available at https://www.imda.gov.sg/-/media/imda/files/inner/about-us/newsroom/media-releases/2014/0506_completesinvestigation/factsheet_telecomsserviceresiliencycode.pdf

differently.

Moreover, URCA notes that unreliable electronic communications networks and services can have devastating impact on businesses, critical infrastructure, and emergency services. Having regard to the foregoing, URCA considers that the Proposed Regulations are necessary to safeguard the interests of consumers in The Bahamas.

In keeping with the proportionality and other relevant principles of the Comms Act, URCA proposes to review its approach on a going forward basis to take account of experience and other changing circumstances.

Regarding CBL/Aliv's position that URCA's benchmarking exercise does not provide adequate evidence for the Proposed Regulations, URCA disagrees with CBL/Aliv's position and considers that URCA's benchmarking exercises provided valuable information which informed URCA's development of the Proposed Regulations.

URCA does not consider the absence of outage reporting requirements to the national regulatory authority in other Caribbean jurisdictions to be a reasonable and cogent argument to reject outage reporting to URCA. URCA notes that regulatory frameworks may vary across jurisdictions due to differences in market conditions, QoS, regulatory and policy objectives. Further, the fact that outage reporting to the national regulatory authority is not required in every jurisdiction does not mean that it is not accepted as international best practice.

As the regulator of the Bahamian ECS, it is intimately aware of the market conditions, QoS issues, regulatory and policy objectives relevant to the ECS. Therefore, URCA considers that it is in the best position to assess the need for certain regulations in the ECS.

Moreover, many regulatory authorities and industry experts recognize the value of outage reporting to NRAs. Also, regulatory frameworks evolve over time and as such the absence of outage reporting to the national regulatory authority in a jurisdiction does not mean that such obligation will not be implemented in such jurisdiction in the future.

Regarding CBL/Aliv's comments regarding costs, URCA advises CBL/Aliv that it had the opportunity to provide empirical evidence in support of its argument that the Proposed Regulations would impose significant costs on Licensees. Further, URCA notes that CBL/Aliv did not provide any evidence to substantiate its position in this regard for URCA's consideration in its response to the Consultation Document.

2.2 Specific comments on the Scope and Application of the Proposed Regulations

Consultation Question 1: Do you agree/disagree with the proposed scope and application of the proposed Regulations? Please give reasons why you disagree.

BTC's Comments

BTC stated that it is not opposed to the proposed scope and application of the Proposed Regulations, i.e., they apply to all ECS Licensees.

CBL/Aliv's Comments

CBL/Aliv stated that outages that affect more than one customer occur on public networks, and so any outage reporting should be restricted to the Licensees of public networks as proposed by URCA.

Further CBL/Aliv stated that URCA needs to distinguish between Licensees that control networks and Licensees that purchase network elements from other Licensees through wholesale agreements. A Licensee that is leasing the use of networks elements is unable to provide reports on unplanned outages because its staff are not involved in the repairs and reinstatement of service and cannot provide any root cause analysis because they do not have access to information about the wholesaling Licensee's network. In the context of wholesale services, outage reporting should be the responsibility of the network owner, not the leasing Licensee and this distinction needs to be reflected in the regulations.

URCA's Responses

URCA notes that BTC does not object to the proposed scope and application of the Proposed Regulations.

URCA notes that CBL/Aliv does not object to URCA's proposal that the Proposed Regulations be applicable to Licensees of public networks.

URCA considers that there may be some information inadequacy risks should URCA not require a Licensee to report on outages that affect its consumers on the basis that such Licensee is purchasing network elements on a wholesale basis from another Licensee. In URCA's view, both the wholesale Licensee and the reselling Licensee may have roles to play in outage management and outage resolutions. URCA notes there may be circumstances where there is an outage caused by a fault on a wholesale Licensee's network, but such outage does not meet any of the proposed outage reporting thresholds set out in Part III of the Proposed Regulations, i.e., less than 1,000 of the wholesale Licensee's customers in New Providence are affected by the outage. Whereas the same fault may have a more significant impact on the customers of the reselling Licensee, i.e., more than 1,000 customers of the reselling Licensee may be affected by an outage. If URCA were to accept CBL/Aliv's proposal, URCA would likely be unaware of a major outage affecting more than 1,000 customers in New Providence as none of the relevant licensee's would have a regulatory obligation to report to URCA in this circumstance.

Moreover, URCA asserts that its proposal in this regard is consistent with the requirements of the Consumer Protection Regulations. Under the Consumer Protection Regulations, CBL/Aliv and other Licensees are required to notify its affected customers of an outage in circumstances where CBL/Aliv may be purchasing network elements on a wholesale basis from another Licensee and the root cause of such outage is due to a fault on the wholesale Licensee’s network.

URCA recognises that CBL/Aliv (and other Licensees) may be dependent upon a wholesale Licensee to provide it with relevant information on an outage to comply with its outage reporting requirements. URCA will take this into account, in such circumstances, in assessing whether a Licensee is complying with its outage reporting obligations to URCA. However, URCA does not believe that a Licensee should be exempt from reporting outages to URCA on the basis that it is purchasing wholesale services from another Licensee.

Having regard to the foregoing, URCA will not accept CBL/Aliv’s proposal, in this regard, at this time. However, as stated previously, URCA proposes to review its approach on an ongoing basis to take account of experience and other changing circumstances and make relevant revisions where necessary.

URCA’s Final Decision

No changes to the Proposed Regulations required.

2.3 Specific comments on Outages and Categories of Outages

Consultation Question 2: Do you agree/disagree with the number of outage categories proposed by URCA (i.e., planned, and unplanned outages)? Please give reasons why you disagree.

BTC’s Comments

BTC noted that it is not opposed to categorizing outages as planned or unplanned.

BTC stated that it does not agree with the definition of an outage in the Consultation Document based on the degradation in service. BTC stated that it considers that this term ‘degradation’ to be vague and it may or may not involve actual service loss to end-users. As such, this may create confusion for outage detection and reporting purposes. BTC proposed that term ‘interruption in service’ to end-users to be clearer.

CBL/Aliv’s Comments

CBL/Aliv stated that the terms planned and unplanned are standard usage in the telecommunications industry and other industries. Therefore, CBL/Aliv does not disagree with the use of these terms.

CBL/Aliv stated that it does not agree with URCA’s proposed definition of planned outage. In this regard,

CBL/Aliv noted that URCA's proposed definition of planned outage requires a notice period of 72 hours before the outage occurs and justifies this with a reference to the Office of Utility Regulations' ("OUR") definition of planned outage. CBL/Aliv noted that the OUR's definition does not include any time-period or reference to notice given to itself or the public. The only country that includes a time-period in its definition of a planned outage is the Falklands. Further, CBL/Aliv stated that in the few countries that specify a notice period for planned outages, this is not set out in the definition but rather elsewhere in the regulations or guidelines. In this regard, CBL/Aliv proposed that planned outage should be defined as *"A foreseen interruption or degradation in the performance of the network services."*

CBL/Aliv stated it does not disagree with the proposed definition of unplanned outage.

URCA's Responses

URCA notes that BTC does not object to URCA's proposed categorization of outages as planned and unplanned. URCA acknowledges BTC's concern that the definition of the term outage as set out in the Proposed Regulations is vague. More specifically, URCA notes that BTC considers that the term degradation in services may or may not involve actual service loss to end-users.

URCA advises BTC that its proposed definition of the term outage is consistent with the definition used in the USA, the Cayman Islands and the definition proposed to be adopted in Jamaica. Additionally, the proposed definition of outage is intended to include complete loss of service and partial loss of service. URCA considers that circumstances where customers have not suffered complete loss of service but rather a partial loss of service resulting in degradation of the QoS must also be reportable to URCA once such partial loss meets the thresholds set out in Part III of the Proposed Regulations. Therefore, URCA believes that its proposed definition of outage is appropriate.

URCA notes that CBL/Aliv does not agree with URCA's proposed definition of planned outage. URCA disagrees with CBL/Aliv's position that URCA's proposed definition requires Licensees to provide 72 hours' notice to URCA of planned outages.

URCA notes that it is proposed that Licensees provide 48 hours' notice of planned outages to URCA as set out in section 6.1 of the Proposed Regulations. As such, URCA did not propose for Licensees to provide 72 hours' notice to URCA with respect to planned outages. URCA further notes that, unlike CBL/Aliv's assertion, URCA's proposed definition is consistent with the approach proposed by the OUR in Jamaica. In this regard, URCA refers CBL/Aliv to section 3.1(g) of the OUR's proposed regulations.

URCA clarifies that it considers a planned outage to be an outage of a Licensee's electronic communications network and/or service that is a part of the Licensee's regular operation and maintenance activities where the Licensee knows at least 72 hours in advance that such an event will occur. URCA believes that an outage that does not fall within the scope of this definition is unlikely to be a part of a Licensee's regular operation and maintenance activities. Accordingly, URCA notes that any outage that does not fall within the scope of the definition of planned outage shall be considered an Emergency Planned Outage¹¹ or an Unplanned Outage.

¹¹ See URCA's Response to CBL/Aliv's comments with respect to Question 3 below.

URCA notes that CBL does not object to URCA’s proposed definition of unplanned outage.

URCA’s Final Decision

No changes to the Proposed Regulations required.

Consultation Question 3: Do you agree/disagree with the proposed minimum time to notify URCA of planned outage? Please give reasons why you disagree.

BTC’s Comments

BTC stated that the only country referenced in URCA’s benchmarking exercise which requires the reporting of planned outages is Jamaica. On this basis, BTC argued that outage reporting obligations do not normally apply to planned outages that are a part of a Licensee’s routine maintenance and upgrade activities.

BTC acknowledged that there is a current practice of reporting planned outages to URCA, and it could be continued and formalized in the Proposed Regulations. BTC believed that the proposed threshold for reporting planned outages should be equivalent to unplanned outages as this would limit the regulatory burden of reporting numerous minor planned outages that only affect a small number of customers.

Regarding the proposed 48 hours advanced notice for qualifying planned outages that are known to the Licensee at least 72 hours in advance, BTC stated that necessary emergency repair work may not be known to a Licensee 72 hours or even 48 hours in advance. BTC further stated that notice, in the context of emergency repair work, should only be reported on “*as soon as practicable*” basis. As such, BTC proposed that the proposed Regulations should state that “*48 hours advanced notice is required for planned outages known at least 72 hours in advance or otherwise as soon as practicable*”.

CBL/Aliv’s Comments

CBL/Aliv stated that it does not agree that Licensees should be required to inform URCA of planned outages. Further, CBL/Aliv stated that such outages are a normal part of a Licensee’s maintenance activities, and the need for them must be evaluated by the Licensee as a part of its maintenance planning. Therefore, a national regulatory authority is in no position to second guess the Licensee’s judgment, and such an effort is a waste of both the NRA’s and the Licensee’s time.

CBL/Aliv stated that URCA’s proposal to require the reporting of planned outages is not in line with international best practices as the countries referenced in CBL’s benchmarking exercise, namely the Cayman Islands, Chile, the Dominican Republic, the Falklands, Finland, the Netherlands, Switzerland, and

the UK do not require the reporting of planned outages to the NRA. On this basis, CBL/Aliv stated that this proposal should be withdrawn.

CBL/Aliv stated that the IOL only requires the reporting of unplanned outages, not planned outages. URCA's proposal to require the reporting of planned outages would be an additional regulatory requirement, and as such URCA needs to justify why it considers such a requirement necessary.

CBL/Aliv noted that it is essential that customers are informed in advance of planned outages that affect them and be kept informed of any changes to the plans and CBL/Aliv makes every effort to ensure that this is done. Adding that it considers URCA's proposed changes to the provision of information to customers about planned outages, set out in URCA's Consultation on the Consumer Protection Regulations, to be sufficient.

URCA's Responses

URCA disagrees with BTC's conclusion, based on its observations of URCA's benchmarking exercise, that Licensees are not normally required to report planned outages to a national regulatory authority. In addition to Jamaica, Licensees in the Cayman Islands¹² are also required to report planned outages to the national regulatory authority. Although, Qatar was not included in URCA's benchmarking exercise, URCA highlights that Licensees in Qatar are also required to report planned outages to the national regulatory authority.¹³

In reference to BTC's position that the current planned outage reporting practice to URCA should be formalized, URCA reiterates that one of the objectives of the Proposed Regulations is to standardize and formalize planned outage reporting procedures to promote legal certainty.

Regarding BTC's position that the reporting threshold for both planned and unplanned outages should be the same, after careful consideration URCA will revise the Proposed Regulations to reflect BTC's position.

URCA acknowledges BTC's concerns with respect to emergency repair work that may not be known by the service provider 72 hours in advance. However, URCA does not accept BTC's proposed revisions in this regard as URCA considers same to be too ambiguous. That being the case, URCA will revise the Proposed Regulations to reflect instances of emergency planned outages.

The CBL/Aliv comment that IOL does not require the reporting of planned outages to URCA is not in dispute.

URCA disagrees with CBL/Aliv's position that planned outage reporting to URCA is a waste of time. URCA reiterates that the reporting of planned outages by Licensees to URCA promotes transparency and accountability with respect to Licensees' outage management. Further, the reporting of planned outages provides URCA with valuable information that may be useful in assessing a Licensee's compliance with IOL conditions and other relevant obligations, such as those set out in QoS Regulations. Additionally, planned

¹² See Part 6 of the Outage Reporting Rules available at <https://www.ofreg.ky/viewPDF/documents/2023-08-29-14-12-12-ICT-2023-2-Determination---Outage-Reporting-Rules..pdf>

¹³ See Part 12 of the Regulation on Quality of Retail Public Services available at <https://www.cra.gov.qa/en/document/quality-of-service-regulatory-framework>

outage reporting provides URCA with information that can be used in making informed regulatory decisions.

Additionally, URCA notes that the major Licensees in the ECS, including CBL/Aliv, advised URCA that they currently report planned outages to URCA. Therefore, URCA considers that the Proposed Regulations will codify and formalize the reporting of planned outages to URCA, as suggested by BTC.

Regarding CBL/Aliv's assertion that NRAs are unable to second-guess a service provider's judgement on planned outages, as CBL/Aliv is aware, URCA has broad powers set out in section 8 of the Comms Act to assist with URCA's regulatory oversight of the ECS and carrying into effect the electronic communications policy objectives, including the power to issue regulations and directions, conduct inquiries and investigations and require Licensees to furnish information on its operations as deemed necessary by URCA.

Moreover, pursuant to Condition 5.1.2 of the IOL, Licensees are obligated to provide URCA with such information, documents, accounts, returns, estimates, reports, or other information required by URCA in the manner and at the times specified by URCA. URCA may use this information for the purpose of monitoring a licensee's performance, compiling statistics, and publishing periodical reviews of the ECS, amongst other things.

Indeed, the cumulative effect of URCA's remit allows URCA to conduct inquire, investigation, assess, request reports on planned outages and/or evaluate planned outage management procedures to ensure that adequate measures are in place to minimize disruptions to customers and ensure that Licensees are complying with the provisions of the QoS Regulations and other relevant measures. Additionally, URCA has internal resources and the capacity to engage external resources, where necessary, to carry out its functions and powers.

URCA acknowledges CBL/Aliv's representation that it makes every effort to ensure that its customers are provided advanced notice of planned outages and CBL/Aliv's support of URCA proposed revisions to the Consumer Protection Regulations. URCA encourages CBL/Aliv to continue its efforts to comply with its obligations under the Consumer Protections Regulations.

URCA's Final Decision

URCA will revise the Proposed Regulations as follows to include the following provisions (see section 1.4 of the Final Outage Reporting and Mitigation Regulations ("Final Regulations")):

"Emergency Planned Outage" means an Outage of Licensee's electronic communications network that is urgently scheduled to address critical maintenance and/or repair needs.

"Unplanned Outage" means an Outage that cannot be considered a Planned Outage or an Emergency Planned Outage.

Section 3.2 of the Final Regulations now provide that:

Licensees shall give URCA forty-eight (48) hours' advanced notice of any Major Planned Outage.

Licensees shall give URCA twenty-four (24) hours' advanced notice of any Major Emergency Planned Outage.

Consultation Question 4: Do you agree with the proposed categorization criteria and specific thresholds for outages (i.e., critical, and major outages)? Please give reasons why you disagree.

BTC's Comments

BTC stated that it considers the proposed eleven categories and sub-categories for reportable outages included in the proposed Regulations to be excessive and unnecessary as there are some redundancies. BTC commented that:

- (i) There is no need to distinguish between critical and major outages. Noting that the only difference between critical and major outages is the proposed hourly and bi-hourly outage update notifications, which is not significant enough to warrant separate reporting categories. Further BTC noted that it considers hourly and bi-hourly updates to be excessive and unrealistic.
- (ii) The sub-categories referring to access nodes/sites and core network elements are redundant and unnecessary. BTC explained that the failure of such network elements will result in a loss of service to customers. Should there be a loss of service to customers that exceed the proposed thresholds, an outage notification would be required.
- (iii) The sub-category requiring the reporting of outages affecting customers in a geographic area served by only one Licensee is unnecessary as there are no such areas in The Bahamas.

- (iv) The reporting of critical infrastructure and access to emergency communications services are reasonable reportable outage sub-categories. However, Licensees do not operate or control critical infrastructure or emergency communications services. Further, BTC noted that Licensees provide connectivity services to the Licensees of critical infrastructure and emergency communications services the source of an outage affecting critical infrastructure or emergency service may be the systems of Licensees of critical infrastructure and emergency communications services and as such Licensees may have no direct insight into the cause of such outages or be in a position to restore the affected service(s). In such instances, outage reporting should be the responsibility of the Licensee of the critical infrastructure or emergency communications service. BTC stated that the sub-categories relating to outages affecting critical infrastructure and emergency communications services should be revised to state that such outages pertain to the facilities and services *“under the control of and operated by the licensee.”*

Based on the foregoing, BTC proposed a single category of major planned and unplanned outages including the following five sub-categories:

- (i) National (multi-island) outages affecting more than 5,000 customers;
- (ii) New Providence specific outages affecting more than 2,000 customers;
- (iii) Grand Bahama, Abaco, Eleuthera, or Exuma outages affecting 1,000 or more customers;
- (iv) Family Island specific outages affecting 100 or more customers; or
- (v) Critical infrastructure and emergency services under the control of and operated by the licensee.

BTC stated that its proposals are reasonable and appropriate for reporting purposes, simplify the proposed regulations and reduce regulatory burden on both URCA and Licensees.

CBL/Aliv Comments

CBL/Aliv stated that URCA’s proposal for distinguishing critical and major outages are far too complex and should be simplified. Adding that URCA’s proposal would hamper staff by causing them to spend time assessing which category an outage falls into and determining the applicable reporting requirements. CBL/Aliv noted that the time of scarce resources should be devoted to rectifying the outage.

CBL/Aliv advocated for simple criteria for reportable unplanned outages without subdivisions. CBL/Aliv stated that such approach has been adopted by the Cayman Islands, the Dominican Republic, the Falklands, the Netherlands, and Switzerland.

CBL/Aliv said URCA’s proposed thresholds for different islands are confusing and difficult to operate under the pressure imposed by an unplanned outage. CBL/Aliv proposed one criterion being the number of the Licensee’s customers affected on the relevant island. CBL/Aliv said the impact of an outage on customers is best measured by the absolute number of customers affected and that no other country referenced in URCA’s benchmarking exercise varies this number by geography. CBL/Aliv proposed that the threshold for reporting outages should be 1,000 or more affected customers irrespective of where the outage occurs.

CBL/Aliv noted that reporting outages that affect core network or access nodes are unnecessary except for where they affect customers.

CBL/Aliv agreed that outages that affect emergency communications should be retained as a reportable sub-category as such outages impact customers.

CBL/Aliv stated that it does not consider the reporting criteria for geographic areas where there are single Licensees to be necessary. Further, customers are likely to have a second supplier in the form of a mobile Licensee (in the case of fixed outages) or a fixed Licensee (in the case of mobile outages), therefore such a criterion is irrelevant.

CBL/Aliv proposed that a duration threshold of 60 minutes as this would enable Licensees and URCA to focus on the most important outages.

Based on the foregoing, CBL/Aliv proposes that the thresholds for the reporting of unplanned outages should be as follows:

- (i) Affects 1,000 or more of the Licensee's customers on any island, or
- (ii) Affects the ability of customers to contact emergency services, and
- (iii) Lasts more than 60 minutes.

URCA's Responses

URCA acknowledges that BTC and CBL/Aliv consider that the proposed criteria and thresholds are too complex and should be simplified. URCA will streamline and simplify the Proposed Regulations, where possible.

In particular, URCA accepts the following arguments put forward by BTC's and/or CBL/Aliv and will revise the Proposed Regulations accordingly:

- (i) there is no need to distinguish between critical and major outages;
- (ii) the sub-categories of core network elements is redundant as failure of such key elements would result in the loss of service to customers and if such loss of service to customers meets the specified thresholds, then an outage notification would be required.

At the same time, URCA does not accept BTC's claim that hourly and bi-hourly outage update notifications are excessive, unrealistic, and counter-productive. URCA does not consider that BTC provided any basis to support its proposal. That being the case, URCA will revise the Proposed Regulations to require outage notifications update every four (4) hours to minimize the impact of reporting on service restoration efforts.

URCA considers that the term "Outage" as defined in the Proposed Regulations sufficiently clarifies that an outage of a critical infrastructure or emergency communications services is reportable by a licensee where the outage is a result of the failure of, or degradation in the performance of a licensee's network

or service¹⁴.

URCA disagrees with BTC's assertion that there are no geographic areas in The Bahamas that are only serviced by one Licensee. URCA notes that there are several Islands in The Bahamas where CBL exclusively provides Pay television services. However, URCA will revise the provision to clarify its intent. More specifically, the Proposed Regulations will be revised to require the reporting of any Outage that affects any Public Electronic Communications Service that is solely provided by a Licensee to customers situated in the geographic area of The Bahamas affected by such Outage, that lasts sixty (60) minutes or longer.

URCA does not accept BTC's position that the outage sub-category relating to access node and sites should be removed. URCA considers that this requirement will provide information on outages affecting mobile networks that may not be captured under any other sub-category in the Proposed Regulations. Upon further consideration to ensure that the Proposed Regulations account for the varying circumstances and populations densities across The Bahamas, URCA will revise the Proposed Regulations to provide for a sub-category relating to access nodes and mobile base stations in Grand Bahama, Abaco, Eleuthera, Exuma, and any other Family Islands.

URCA does not agree with CBL/Aliv's position that there should be a single, standard threshold for reporting outages with respect to all islands of The Bahamas, i.e., only outages that affect 1,000 or more customers in any Island of The Bahamas should be reported to URCA. The Preliminary Results of the 2022 Census for The Bahamas revealed that there are at least seven Family Islands with a population of less than 1,000 people.¹⁵ If URCA were to accept CBL/Aliv's suggestion, an outage affecting all of a Licensee's customers on any of such islands would not meet the reporting thresholds and as such a licensee would not be obligated to report such outage to URCA.

URCA accepts CBL/Aliv's proposal that an outage duration threshold should be included in the Proposed Regulations to remove the need to report certain outages that are quickly resolved. URCA will revise the Proposed Regulations to include an outage duration threshold of 60 minutes or longer, except for those outages that affect Critical Infrastructure and/or access to Emergency Communications Services. URCA considers it more appropriate to provide for an outage duration threshold of 30 minutes or longer with respect to Critical Infrastructure and/or access to Emergency Communications Services.

¹⁴ In this regard, URCA refers BTC to the proposed definition of the term Outage. The proposed definition states that an Outage "means a degradation in the ability of an end-user to establish and/or maintain a channel of communication as a result of the failure of, or degradation in the performance of a Licensee's network or service".

¹⁵ Available at https://www.bahamas.gov.bs/wps/wcm/connect/c0d9fae8-54df-49e3-b4b9-92e29e0b264c/2022+CENSUS+PRELIMINARY+RESULTS_FINAL+April+12+2023.pdf?MOD=AJPERES

URCA believes that these respective outage duration thresholds of 60 minutes and 30 minutes strike a reasonable balance between the reporting significant outages and avoiding undue regulatory burden on Licensees.

URCA's Final Decision

URCA will revise the Proposed Regulations as follows to include the following provisions (see section 2.1 of the Final Regulations):

A Major Outage is any Outage affecting –

(a) 1,000 or more of the Licensee's customers for the affected Public Electronic Communications Service situate on the Island of New Providence that lasts sixty (60) minutes or longer;

(b) 500 or more of the Licensee's customers for the affected Public Electronic Communications Service situate on the Islands of Grand Bahama, Abaco, Eleuthera, or Exuma that lasts sixty (60) minutes or longer;

(c) 20 or more of the Licensee's customers for the affected Public Electronic Communications Service situate on any other Family Island that lasts sixty (60) minutes or longer;

(d) the performance of 5 or more access nodes and/or base stations within a Licensee's network situate on the Island of New Providence that lasts sixty (60) minutes or longer;

(e) the performance of 3 or more access nodes and/or base stations within a Licensee's network situate on the Islands of Grand Bahama, Abaco, Eleuthera, Exuma or any other Family Island that lasts sixty (60) minutes or longer;

(f) any Public Electronic Communications Service that is solely provided by a Licensee to customers situate in the geographic area of The Bahamas affected by such Outage, that lasts sixty (60) minutes or longer;

(g) Critical Infrastructure that lasts thirty (30) minutes or longer; or

(h) access to Emergency Communications Services that lasts thirty (30) minutes or longer.

All references to Critical Outages will be deleted.

2.4 Specific Comments on the Designation of a Contact Person

Consultation Question 5: Do you agree/disagree with the proposal that Licensees designate a contact person to report outages to URCA? Please give reasons why you disagree.

BTC's Comments

BTC noted that each Licensee should have a designated senior management person responsible for outage reporting regulatory obligations. BTC, however, does not agree that a single contact person should be designated for outage reporting as it is not feasible to have a single person available 24/7 for outage reporting purposes.

BTC said URCA should established a dedicated "point of contact" for outage reporting reception purposes to ensure that URCA has a dedicated resource assigned to acknowledge receipt of respond to outage notifications, where necessary. Further, BTC suggested that an automated notification system be established by URCA for filing notifications to streamline the process. In this regard, BTC noted that the Cayman Islands have adopted a similar process.

CBL/Aliv's Comments

CBL/Aliv commented that it does not object to the designation of a contact point for outages noting that such point of contact should be a team within a licensee's organization. Adding that this approach should provide for continuity for staff absences and holidays.

CBL/Aliv also proposed that URCA designate a contact person within its organization for outage reporting.

CBL/Aliv stated that Licensees in the Dominican Republic are not required to report outages that occur outside of normal working hours until the start of the next business day. CBL/Aliv noted that URCA has not addressed the issue of out-of-hours reporting in its Consultation Document. In this regard, CBL/Aliv stated that reporting outages to URCA outside of business hours has no clear merit and would hamper CBL/Aliv's 24/7 efforts to restore services.

URCA's Responses

URCA notes that both BTC and CBL/Aliv suggested that the Proposed Regulations be flexible to provide for circumstances where the designated contact person is not available or unable to report outages to URCA. URCA clarifies that section 5.4 of the Proposed Regulations provides that Licensees may designate other specific contact persons in each Outage Notification. Based on the foregoing, URCA considers that the Proposed Regulations provide Licensees with the discretion to designate other contact persons should the person responsible for outage reporting be unavailable or unable to report outages to URCA.

URCA notes BTC's suggestion that an electronic filing system be established by URCA to facilitate the submission of outage reports by Licensees. URCA notes that it has considered the possibility of establishing an electronic filing system as contemplated in section 7.1 of the Proposed Regulations. URCA will continue internal discussions on this matter and notify all Licensees required to submit outage reports

to URCA should plans progress with the establishment of electronic filing of outage reports.

URCA acknowledges CBL/Aliv's position that outage reporting outside of normal working hours has no merit and would hamper restoration efforts. URCA will revise the Proposed Regulations to address outside of normal working hours outage reporting. Such revision will be set out in URCA's Response/Final Decision in Question 6 below.

URCA's Final Decision

No changes to the Proposed Regulations required.

2.5 Specific Comments on Reportable Outages

Consultation Question 6: Do you agree/disagree with the four-step reporting process and timeframes proposed by URCA? Please give reasons why you disagree.

BTC's Comments

BTC is not opposed to URCA's proposed reporting process for unplanned outage, however BTC considers some of the proposed outage notification timeframes to be unrealistic and impractical. BTC made the following comments on URCA's four-step process for reporting unplanned outage.

Regarding Step 1, BTC stated that the extensive details required for an initial outage notification report i.e., description of outage, geographical area(s) affected, network components affected, and the reasons for the outage would not necessarily be available within such a short timeframe. BTC noted that it would try to meet the proposed two-hour notification period, however in some cases depending on the nature and location of the outage, this may not be possible. Therefore, BTC proposed that the timeframe for initial unplanned outage notifications should be *"within two hours of detection or as soon as practicable"*.

With respect to Step 2, BTC restated that it does not consider two categories of unplanned outages to be necessary. BTC noted that the Canadian Radio-television and Telecommunications Commission ("CRTC") does not require outage update notifications as they recognized that the same technical and management team responsible for reporting outages will likely be fully engaged in the service restoration process. BTC further noted that it is unclear whether hourly or bi-hourly notifications submitted through the night or on the weekend would be reviewed by URCA or whether such a requirement serves any purpose. Further, BTC stated that URCA has not explained why such frequent updates are necessary. Having regard to the foregoing, BTC proposed that the timeframe for outage update notification should be set at *"every four business hours or as soon as practicable given the nature and location of the outage"*.

Regarding Step 3, BTC proposed that the timeframe for outage resolution notification should be *"two business hours after service restoration or as soon as practicable thereafter."* BTC stated that outage

resolution notifications will likely take longer than one hour to prepare and will likely be subject to other factors including the time of day, location, and scope of outage.

Regarding Step 4, BTC proposed that outage root cause reports should not be required where an outage is caused by power failure, power surge or poor quality of power. BTC noted that section 4.5 of the Consultation Document states that outage root cause reports should be submitted 28 days after the outage resolution notification, while section 7 of the Consultation Document states that that outage root cause reports should be submitted 21 days after the outage resolution notification. BTC considers 28 days to be more reasonable and appropriate in this regard.

Generally, BTC noted that the logistics for dealing with outages in more densely populated areas and sparsely populated areas differ significantly. Commenting that service restoration crews can generally be onsite relatively quickly in more densely populated areas, but not necessarily in the case of more remote areas such as the Family Islands. Additionally, factors including specialty parts, transport, and logistics impact restoration timelines. Accordingly, such factors should be reflected in the outage notification timelines. BTC noted that reporting timelines should not be absolute, but rather qualified as target timelines where practicable as BTC has suggested.

CBL/Aliv's Comments

CBL/Aliv noted that it does not agree with URCA's proposals. In this regard, CBL/Aliv restated that URCA's proposed reporting requirements are burdensome and without a clearly defined purpose. URCA should appreciate that during an unplanned outage, the staff of a Licensee must be completely focused on analyzing the cause of an outage, repairing it, and keeping affected customers informed. Where there is an outage, the priority is to resolve it quickly and efficiently, to minimize disruption to customers. CBL/Aliv argued that reporting to URCA is a diversion from these essential activities which may be detrimental to customers.

URCA should take note that outages have complex and multiple causes, and the situation can change as staff understand more about the cause of the outage, and as repair works progress. CBL/Aliv stated that while new information on outages is critical to the Licensee's staff, it may not be germane to the NRA.

CBL/Aliv provided a diagram relating to the reporting of unplanned outages to NRAs in several countries, namely the Cayman Islands, the Dominican Republic, the Falklands, Switzerland, the UK, and the USA. Based on CBL/Aliv's review of the outage reporting practices and other countries, CBL does not believe that URCA's proposals are aligned with international best practices for the following reasons:

- (i) URCA's proposals for an update frequency of 1 hour (in the case of critical outages) or 2 hours (in the case of major outages) is excessive, and the approach taken in Switzerland and the USA of requiring an update when new information becomes available is more efficient.
- (ii) A resolution notice is not required in most countries in CBL/Aliv's benchmark.
- (iii) A final outage report is not required in most countries in CBL/Aliv's benchmark.

CBL/Aliv put forward the following as an alternative to URCA's proposal:

- (i) URCA should be informed of any unplanned outage that meets the definition within 2 hours of its occurrence, subject to out of hours reporting.
- (ii) Licensees should update URCA as and when new information becomes available (i.e., any significant change in the number of customers affected or the estimated duration of the outage). Update reports should not be required outside normal working hours until the following business day.
- (iii) Licensees should inform URCA when an outage has been resolved without delay.
- (iv) An outage report should be submitted to URCA 20 working days after the resolution notice.

URCA's Responses

URCA notes BTC's concerns regarding the information that Licensees are required to submit for an initial outage notification and will revise the Proposed Regulations to reduce the amount of information required for an initial outage notification. As a result, the following information will be required for an Initial Outage Notification for a Major Unplanned Outage:

- (a) the Licensee's name;
- (b) the date and time of the Outage;
- (c) the geographical area(s) to be affected by the Outage;
- (d) the number of the Licensee's customers affected by the Outage;
- (e) the network components affected;
- (f) the electronic communications services to be affected by the Outage;
- (g) a description of the Outage and the reasons for its scheduling;
- (h) an estimate duration of the Outage;
- (i) confirmation on whether affected customers were provided 48 hours' advance notice of the Outage and if so by which means of communications; and
- (j) the contact details of the person(s) whom URCA may contact for the purpose of requesting additional information, if different from the default Contact Person designated by the Licensee.

URCA considers that Licensees should be able to provide URCA with the above information within two (2) hours of detection of the outage.

URCA has considered BTC's concerns regarding the proposed frequency of providing outage notification updates to URCA. URCA will revise the Proposed Regulations to require Licensees to provide outage notification updates to URCA every four (4) hours until the resolution of the outage.

URCA notes BTC's position that outage resolution notifications would generally take longer than one (1) hour to prepare. URCA notes that the category of critical outages has been deleted. URCA advises that, in the context of major outages, outage resolution notifications are required to be submitted to URCA within two (2) hours of the restoration of services.

URCA acknowledges BTC's and CBL/Aliv's concerns regarding outage reporting outside of normal hours. In this regard, URCA will revise the Proposed Regulations to include a provision that permits Licensees to

delay outage notification obligations that become due between the hours of 8:00 PM (ET) to 8:00 AM (ET). In this regard, URCA has also revised the Proposed Regulations to include a definition for the term “Reporting Hours”. URCA will also include a provision in the Proposed Regulations require Licensees to adhere to all timelines set out in the Outage Notification Process, save and except where a Licensee has made a request for an extension of time to URCA with supporting reason(s) and URCA does not object to such request.

Regarding BTC’s comments on the timeframe for the submission of Outage Reports, URCA clarifies that Licensees are required to submit such reports within 28 calendar days of the submission of Outage Resolution Notification. Further, URCA does not accept BTC’s proposal that Outage Reports should not be required where an outage is caused by a power failure, power surge, or poor quality of power. Licensees are required to submit an Outage Report regardless of the cause of the outage.

URCA notes BTC’s concerns regarding the logistical challenges of addressing outages in remote areas in The Bahamas. URCA does not accept BTC’s proposal that outage reporting timelines should be revised to reflect logistical concerns. URCA does not consider that such concerns are relevant to outage reporting timelines. URCA advises that Licensees may provide details on logistical challenges in relation to an outage in its outage notifications and reports to URCA.

URCA disagrees with CBL/Aliv’s position that the Proposed Regulations are burdensome and do not serve a clearly defined purpose for the reasons expressed above by URCA. URCA has considered CBL/Aliv’s proposed revisions to outage reporting process and timeframes in making its below revisions to the Proposed Regulations.

URCA will also revise the Proposed Regulations to include definitions for the terms “becoming aware” and “detecting” to clarify the meaning of such terms when used in the Proposed Regulations.

URCA's Final Decision

URCA will revise the Proposed Regulations to reflect that the following information will be required to be included in Initial Outage Notifications for Major Unplanned Outages:

- (a) the Licensee's name;
- (b) the date and time of the Outage;
- (c) the geographical area(s) to be affected by the Outage;
- (d) the number of the Licensee's customers affected by the Outage;
- (e) the network components affected;
- (f) the electronic communications services to be affected by the Outage;
- (g) a description of the Outage and the reasons for its scheduling;
- (h) an estimate duration of the Outage;
- (i) confirmation on whether affected customers were provided 48 hours' advance notice of the Outage and if so by which means of communications; and
- (j) the contact details of the person(s) whom URCA may contact for the purpose of requesting additional information, if different from the default Contact Person designated by the Licensee.

URCA will revise the Proposed Regulations to include the following (see section 1.4 of the Final Regulations):

"becoming aware" means the point in time at which a Licensee gains actual knowledge or constructive knowledge of a fact or circumstance.

"detecting" means becoming aware of an Outage by way of (i) network monitoring systems, network alarms, customer reports, reports from employees, agents, or independent contractors; or (ii) other means by which a Licensee would become aware of the existence of an Outage.

"Reporting Hours" means 8:00AM (ET) to 8:00PM (ET) on each day of the week.

URCA will revise the Proposed Regulations to include the following (see section 3.2 of the Final Regulations):

Licensees shall give URCA forty-eight (48) hours' advanced notice of any Major Planned Outage.

Licensees shall give URCA twenty-four (24) hours' advanced notice of any Major Emergency Planned Outages.

The Notice of Major Planned Outage to URCA shall include details of the nature of the public safety, maintenance or the upgrading of the network and the estimated duration of the Planned Outage. Where a Major Planned Outage exceeds the estimated duration for the service and network to be restored set out in the Notice of Major Planned Outage, such Outage shall be considered an Unplanned Outage. The Licensee shall notify URCA in writing, within two (2) hours after becoming aware that the Major Planned Outage is likely to exceed the estimated duration and provide reason(s) for the delay and a new estimated time for restoration of service.

The Notice of Major Emergency Planned Outage to URCA shall include details of the critical and/or emergency repairs and the estimate duration of the Major Emergency Planned Outage. Where a Major Emergency Planned Outage exceeds the estimated duration for the service and network to be restored set out in the Notice of Major Emergency Planned Outage, such Outage shall be considered a Major Unplanned Outage. The Licensee shall notify URCA in writing within two (2) hours after becoming aware that the Major Emergency Planned Outage is likely to exceed the estimated duration and provide reason(s) for the delay and a new estimated time for restoration of service.

Within two (2) hours upon detecting a Major Unplanned Outage, the Licensee shall submit an Initial Outage Notification of any such Outage to URCA.

For Unplanned Major Outages, lasting more than two (2) hours, the Licensee shall submit an Outage Update Notification to URCA periodic Outage Update Notifications every four (4) hours thereafter, until the resolution of the Unplanned Major Outage.

Licensees shall notify URCA of the resolution of any Unplanned Major Outage no later than two (2) hours after the normal functioning of the communication networks and/or services has been restored by submitting an Outage Resolution Notification to URCA.

Licensees shall submit to URCA a detailed Outage Report no later than twenty-eight (28) calendar days after the submission of Outage Resolution Notification.

A Licensee may defer its Outage notification obligations herein that become due outside of the Reporting Hours, to the next calendar day.

Where a Licensee elects to defer its Outage notification obligations pursuant to section 3.2.10 above, such Licensee shall submit the requisite Outage notification to URCA on or before 10:00 AM (ET) on the next calendar day.

Licensees shall adhere to all timelines set out in this Part, save and except where a Licensee has made a request for an extension of time to URCA with supporting reason(s) and URCA does not object to such request.

Consultation Question 7: Do you agree/disagree with the information required at each stage of the reporting process? Please give reasons why you disagree.

BTC's Comments

BTC is not opposed to the proposed reporting form templates set out in Annex A of the Consultation Document. However, BTC restated that requiring detailed information at the initial stages of an outage

may be counter-productive to restoration efforts as the same resources that are necessary to prepare outage notifications should be focused on restoring services. BTC suggested that brief details on the outage should be provided in the initial outage notification, outage update notification and outage resolution notification as detailed information can be provided in the root cause analysis report provided 28 days after service restoration.

CBL/Aliv's Comments

CBL/Aliv referred to its responses to Question 8 below.

URCA's Responses

URCA notes that BTC expressed similar concerns in its response to Question 6 and as such URCA refers to its response to BTC's comments regarding Question 6 above.

URCA's Final Decision

URCA will revise the Proposed Regulations to clarify that Outage Reports are required to be submitted within 28 calendar days of the Outage Resolution Notification (see section 3.2 of the Final Regulations).

Consultation Question 8: Do you agree/disagree with the proposed forms and templates for outage notifications, outage updates, outage resolutions and outage reports? Please give reasons why you disagree.

BTC's Comments

BTC referred to its responses to Question 7 above.

CBL/Aliv's Comments

CBL/Aliv stated that it does not agree with URCA's proposal to require Licensees to report planned outages to URCA, and as does not agree with URCA's template A1 (planned outage template).

Regarding template A2 (unplanned outage notification template) CBL/Aliv made the following suggestions:

- (i) The category of the outage should be removed as only reportable planned outages would be reported to URCA under CBL/Aliv's proposals.
- (ii) URCA should note that the information submitted on any initial report may be tentative at this stage in the outage, especially regarding the cause of the outage.

Regarding template A3 (outage notification update template), CBL/Aliv suggested that only changes in relevant information should be required.

Regarding template A4 (outage resolution notification template), CBL/Aliv suggested that the line item on corrective measures should be removed as such measures may still have to be implemented after service has been restored. Further, full details on corrective measures would be included in the outage report.

URCA's Responses

URCA notes that CBL/Aliv repeated its disagreement with the proposal that Licensees be required to report unplanned outages to URCA. As such, URCA refers to its responses to CBL/Aliv's comments with respect to Question 3 above.

URCA also notes CBL/Aliv's proposed revisions to template A3 and template A4.

URCA's Final Decision

URCA has revised the Template Forms to reflect the accepted proposed revision from CBL/Aliv and BTC (see section 3.4 of the Final Regulations and Templates A.1 to A.6 annexed to the Final Regulations).

Consultation Question 9: Do you agree/disagree with the requirement to conduct root cause analyses with respect to critical and major outages? Please give reasons why you disagree.

BTC's Comments

BTC is not opposed to providing a Root Cause Analysis ("RCA") report for qualifying outages. BTC noted that URCA did not provide specific guidance on the contents of a final outage report. Arguing that template A5 is effectively blank and paragraph B2 of Annex B of the proposed Regulations lists some possible factors to be considered by the Licensee when preparing an Outage Report. As such, BTC proposed that template A5 should include an outline of the information that should be included in Outage Report.

BTC proposed that, in addition to the factors listed in paragraph B2 of Annex B, URCA adopt the approach taken in its September 2023 investigation of several BTC network outages by revising template A5 to include the following:

1. A chronology of events detailing the nature of the outages including, at a minimum;
 - a. Technical details of all points of failure;
 - b. The time at which each failure occurred;
 - c. The effect of each failure;
 - i. Network activity and service provision;
 - ii. The number of customers impacted in the respective service areas;
 - iii. Services impacted in each of the respective service areas.

- d. The time at which relevant personnel would have been made aware of the failure.
2. Details of the cause(s) of the outages, including to the extent within the licensee’s knowledge, the root cause(s).
3. Details of all systems in place, both physical and procedural, to prevent outages of this nature, and the extent to which those systems performed as intended or failed to perform as intended, thereby contributing to, or mitigating the extent of, the outages.
4. Steps taken to restore network functionality after the outages, including where appropriate escalation of the problem and any extraordinary actions taken.
5. Network Resilience Considerations:
 - a. Single Point(s) of Failure
 - b. Redundancy
 - c. Availability and proper functioning backup equipment or infrastructure
 - d. Capacity and proper functioning of network components and software
 - e. Power supply (including back-up)
 - f. Availability of replacement
 - g. Any other network resilience systems.
6. Any additional safeguards or changes to the Licensee’s standard operating procedures that the licensee proposes to implement in order to better guard against future outages of this nature.

BTC commented that the discussion on alternative RCA methodologies in Annex B is interesting but provides no useful guidance. Therefore, BTC suggested that Annex B be deleted in its entirety.

CBL/Aliv’s Comments

CBL/Aliv noted that root cause analyses for major network and service incidents is best practice. CBL/Aliv stated that it strongly disagrees that root cause analyses should be a regulatory requirement.

CBL/Aliv noted that regulatory intervention should only take place when policy objectives are unlikely to be achieved by market forces as per section 5 of the Comms Act. Further, any competent network Licensee will undertake a root cause analysis of a complex incident, so that the loss of customers and revenues and/or additional maintenance or capital cost can be avoided in the future. Therefore, CBL/Aliv noted that market forces are sufficient in this regard. Moreover, a national regulatory authority does not have the information or expertise to second guess a Licensee as to when a root cause analysis is necessary, or what form it should take.

CBL/Aliv stated that Annex B sets out some commonly used methods of analyzing the causes of incidents. CBL/Aliv stated that URCA intends that some of these methods be mandatory which is apparent by URCA’s use of the word “must”. CBL/Aliv stated that such detailed intervention in the normal business of a Licensee is completely unjustified and regulatory overreach. CBL/Aliv said it knows of no other regulatory agency that issued such detailed intervention and requested that URCA provide an example of such.

URCA’s Responses

URCA accepts BTC’s proposed revisions to Template A5 and will revise the Proposed Regulations accordingly.

URCA accepts BTC's suggestion that Annex B of the Proposed Regulations be deleted.

URCA notes CBL/Aliv's position that Licensees are incentivized to conduct root cause analyses due to market forces and as such URCA's proposal in this regard is unnecessary. URCA advises CBL/Aliv that it is aware of the provisions of section 5 of the Comms Act. URCA refers CBL/Aliv to section 1.1 of the Consultation Document. In section 1.1 and other sections of the Consultation Document, URCA explained the market failures it sought to address through the implementation of the Proposed Regulations. In the context of root cause analyses, URCA does not currently receive the necessary information from Licensees to assess the magnitude, frequency, and root causes of unplanned outages in The Bahamas.

URCA considers that such information will assist URCA in making informed regulatory decisions to advance the electronic communications policy objectives. Further, URCA considers that such information will assist URCA in assessing whether Licensees are complying with their IOL licence conditions, their obligations under the QoS Regulations and their obligations under the Consumer Protection Regulations with the aim of promoting access to high quality networks and carriage services in The Bahamas. Having regard to the foregoing, URCA is satisfied that market forces alone are unlikely to achieve such policy objectives within a reasonable time frame.

In response to CBL/Aliv's concern about the mandatory nature of some provisions of Annex B, URCA notes that Annex B has been deleted.

URCA's Final Decision

URCA has revised the Template Forms to reflect the accepted proposed revision from CBL/Aliv and BTC. (see section 3.4 of the Final Regulations and Templates A.1 to A.6 annexed to the Final Regulations).

2.6 Specific Comments on the Duty to remedy and mitigate outages and high-level guidance

Consultation Question 10: Do you agree/disagree with the proposed duty on Licensees to take such measures as are appropriate and proportionate for the purpose of a) identifying risks of outages occurring; b) reducing risks of outages occurring; and c) preparing for the occurrences of outages? Please give reasons why you disagree.

BTC's Comments

BTC agreed and accepted its duty and responsibility to take appropriate and proportionate measures to identify and mitigate risks and ensure that the affected services can be restored as quickly as possible. BTC further stated that such duty and responsibility is a part of BTC's longstanding operating practice and philosophy.

CBL/Aliv's Comments

CBL/Aliv noted that network Licensees identify risks of failures in their networks and services, reduce these risks, and make provisions for minimizing and repairing outages as a part of normal business. Furthermore, attracting and retaining customers, and maximizing revenue through the provision of reliable services is at the core of commercial telecommunications business. On this basis, market forces are entirely adequate to ensure that Licensees carry out the duties of managing outages effectively, and URCA has no justification in making such duty a regulatory requirement. Therefore, in light of section 5 of the Comms Act, CBL/Aliv stated that it forcefully disagrees with URCA's proposal to make outage management a regulatory duty.

URCA's Responses

URCA notes that BTC acknowledged its duty to take appropriate and proportionate measures to identify and mitigate risks and ensure that the affected services can be restored as quickly as possible.

URCA notes CBL/Aliv's claim that market forces are entirely adequate to ensure that Licensees carry out the duties of managing outages effectively, and URCA has no justification in making such duty a regulatory requirement. URCA advises CBL/Aliv that Condition 27.1 of the IOL mandates CBL/Aliv to take all reasonably practicable steps to maintain, to the greatest extent possible, the proper and effective functioning of its network(s) at all times. Therefore, URCA considers that CBL/Aliv currently has an obligation to manage outages on its network(s). URCA considers that the proposed duty to take measure to mitigate and remedy outages supplement Condition 27.1 of the IOL. URCA will revise the Proposed Regulations to clarify that Licensee must implement and comply with relevant industry best practices, standards, specifications, and/or recommendations for purposes of complying with their duty to mitigate and remedy outages.

URCA's Final Decision

The Proposed Regulations have been revised to include the following (see section 4.1 of the Final Regulations):

A provider of a Public Electronic Communications Network or a Public Electronic Communications service shall implement and comply with relevant industry best practices, standards, specifications, and/or recommendations for the purpose of –

- (a) identifying risks of Outages occurring;
- (b) reducing risks of Outages occurring; and
- (c) preparing for the occurrences of Outages.

A provider of a Public Electronic Communications Network or a Public Electronic Communications service shall implement and comply with relevant industry best practices, standards, specifications, and/or recommendations to –

- (a) ensure that Outages are remedied as soon as reasonably practicable; and
- (b) mitigate adverse effects from Outages.

Consultation Question 11: Do you agree/disagree with URCA’s proposed high-level guidance setting out a non-exhaustive list of matter that URCA may consider when assessing a licensee’s compliance with its duty to mitigate and remedy outages? Please give reasons why you disagree.

BTC’s Comments

BTC noted that it is not opposed to the establishment of high-level guidelines to mitigate and remedy outages. However, BTC stated that the purpose of URCA’s proposed guidelines as set out in Annex C of the proposed Regulations are unclear.

BTC stated that the proposed guidelines, on the one hand, offer a range of suggested resiliency and outage mitigation practices for Licensees to consider, such as organisational arrangements, avoiding single points of failure, where possible, implementing network monitoring capabilities, and cooperating with other Licensees by sharing information. However, on the other hand, Sections 8 and 9 of the Proposed Regulations, appear to address possible ex-post outage review process by which URCA would review and judge a Licensee’s service restoration preparedness, performances, and resiliency practices.

BTC noted that, if this is the case, such a process should have been proposed and outlined in the main body of the Proposed Regulations, so Licensees are properly informed and given a structured opportunity to comment on any ex-post outage review process URCA plans to undertake once the Proposed Regulations are implemented. This is especially important given the threat of sanctions and apparent board responsibility for non-compliance with any provision of the proposed Regulations.

CBL/Aliv’s Comments

In CBL/Aliv’s view the high-level guidelines set out in Annex C of the proposed Regulations should be withdrawn entirely as it is an unjustified intrusion into the operations and management of a commercial business. Licensees have their own well-established procedures for these matters, and URCA does not have the resources or expertise to second-guess these procedures.

CBL/Aliv said it is not aware of any other NRA that has implemented such detailed guidance on network outages. In the USA the Federal Communications Commission has produced guidance which covers just three pages, and mainly refers to best practice notes produced by Communications Security, Reliability, and Interoperability Council. Further, CBL/Aliv noted that in Annex C URCA used some ideas and wording from the Ofcom guidance document. However, this is not an appropriate model for URCA as it is mainly concerned with cybersecurity. In this context, Ofcom needed to explain how it will interpret its general duties in terms of cybersecurity threats, which are a much more complex, less understood, and more rapidly evolving issue compared to network outages. Moreover, Ofcom had to explain its approach to a wide range of communications providers, who vary considerably in their size and capabilities. In The Bahamas there are only two network Licensees, who are well established and have no need for the guidance proposed by URCA.

CBL/Aliv felt that URCA’s proposed guidelines will clash with advice produced by specialist standards bodies, equipment suppliers, and the Licensees’ own internal processes, and will be difficult for URCA and Licensees to interpret and use the guidelines. Furthermore, URCA will need to keep any guidelines up to

date. If URCA continues with its proposal to make outage management a regulatory duty, we suggest that it refer to guidelines and standards produced by a recognized specialist institution (for example the Communications Security, Reliability, and Interoperability Council) as the basis for any assessment of outage management. CBL/Aliv noted that Licensees are already required to comply with such international standards under Condition 14 of the IOL.

URCA's Responses

URCA clarifies that section 9 of the Proposed Regulations imposes a duty on Licensees to mitigate and remedy outages whilst section 10 allows URCA to assess a licensee's compliance with duties to mitigate and remedy Outages.

In response to BTC and CBL/Aliv's concerns, URCA has deleted Annex C of the Proposed Regulations, as suggested by CBL/Aliv.

URCA considers that public, including persons with sufficient interest, were given a reasonable opportunity to comment on the Proposed Regulations and as such URCA is satisfied that it has complied with the requirements of sections 11 and 13 of the Comms Act.

URCA's Final Decision

URCA has deleted Annex C and update the Proposed Regulations accordingly.

2.7 Further Comments on the Proposed Regulations

Consultation Question 12: Do you have any further comments on the proposed Regulations which have not been previously discussed?

BTC's Comments

BTC stated that it had nothing further to add at this time.

CBL/Aliv's Comments

CBL/Aliv made the following additional comments:

- (i) Regulation 6.7 refers to 21 calendar days. In the text (paragraph 4.5, page 30) URCA proposes 28 calendar days as the period for the submission of an outage report. URCA will need to amend the draft regulations accordingly.

- (ii) Regulations 9.1 and 9.2 refer to measures that are “appropriate and proportionate” but do not define who decides the appropriateness and proportionality of the measures which is open to considerable varying legal interpretations. This illustrates that a national regulatory authority is in no position to second-guess a Licensee’s judgement on outage management. CBL/Aliv felt that the words “in the reasonable opinion of the Licensee” should be inserted after the word “proportionate”.
- (iii) While URCA has powers under Section 8(k) of the Comms Act to require licensed Licensees to provide information, CBL/Aliv does not believe that it has powers under this Act or any other Act to require Licensees to carry out tests, to interview specific persons, or observe operations or equipment. Noting that pursuant to section 5(2) of the URCA Act, 2009 URCA must obtain a search warrant from a magistrate before it can enter a Licensee’s premises. CBL/Aliv suggest that URCA ensures that Regulation 10.4 is consistent with its existing powers before proceeding further.
- (iv) Overall, CBL/Aliv stated that it does not believe the Proposed Regulations are necessary. Instead, URCA should publish guidelines that give Licensees advice on how URCA interprets the vague terms used in Conditions 23.2 and 23.3 of the IOL.
- (v) CBL/Aliv supports URCA in attempting to make the terms used about outage reporting in the IOL clearer. CBL/Aliv expressed that it hoped that it assisted URCA by providing an analysis of its outage records and carrying out more extensive international benchmarking. CBL/Aliv stated that it is deeply concerned that URCA’s current proposals will impose a significant and unnecessary burden on both the Licensees and URCA itself and will constitute an unjustified regulatory over-reach into Licensees’ normal operations. As CBL/Aliv’s estimates in Annexes 1 and 2 show, URCA’s proposed reporting system will impose a substantial and disproportionate burden on both URCA and the Licensees.
- (vi) CBL/Aliv’s proposals will enable both URCA and the Licensees to focus on the most important outages and on ensuring that these are minimized in the best interests of our customers.

URCA’s Responses

URCA clarifies that Licensees are required to submit the Outage Report within 28 calendar days of the submission of the Outage Resolution Notification.

URCA acknowledges CBL/Aliv’s concerns that URCA’s use of the words “appropriate” and “proportionate” creates legal uncertainty. To this end, URCA points out that it has revised the relevant provisions to clarify that, in assessing a Licensee’s compliance with its duty to mitigate and remedy outages, URCA will consider whether the Licensee has implemented and adhered to relevant industry best practices, including standards, specifications, and/or recommendations by the Federal Communications Commission’s Communications Security Reliability and Interoperability Council (“CSRIC”), and the European Network and Information Security Agency (“ENISA”).

URCA notes CBL/Aliv’s position that URCA lacks the power to require Licensees to carry out tests, to interview specific persons, observe operations or equipment or inspect a licensee’s premises without a

search warrant. URCA has now revised the relevant provision to clarify that URCA has the power to require a Licensee to commission an audit of its network components, facilities, systems, personnel, and procedures and any other relevant aspect of its operations to assess whether such Licensee is complying with its duty to mitigate and remedy Outages. This is in line with Condition 5.1 of the IOL. In this regard, URCA has included definitions for the terms “Auditor” and “Compliance Audit” to clarify the meaning of the terms in the context of the Proposed Regulations.

As to the assertions that the Proposed Regulations are unnecessary, URCA addressed this issue in section 2.1 above.

URCA’s Final Decision

The Proposed Regulations have been revised to clarify that Licensee have duty to mitigate and remedy outages by implementing and complying with relevant industry best practices, standards, specifications, and/or recommendations (see section 4.1 of the Final Regulations).

With regard to CBL/Aliv’s concerns that URCA lacks the power to require Licensees to carry out tests, to interview specific persons, observe operations or equipment or inspect a licensee’s premises without a search warrant, URCA notes that it does have the power to require Licensees to conduct audits of their networks.

URCA notes that intent of the proposed requirement for Licensees to carry out tests, interview specific persons, observe operations or equipment or require an inspection of a Licensee’s premises is to assess the Licensee’s compliance with industry best practices in the context of outage remedying and mitigation. In light of CBL/Aliv’s concerns, URCA has revised the Proposed Regulations to reflect that URCA may require a Licensee to commission an audit of its network components, facilities, systems, personnel, and procedures and any other relevant aspect of its operations to assess whether such Licensee is complying with its duty to mitigate and remedy Outages. This is in line with Condition 5.1 of the IOL. URCA has also revised the Proposed Regulations to provide clarification on matters ancillary to the audit.

The Proposed Regulations will be revised to include the following (see section 4.2 of the Final Regulations):

Where URCA has reasonable grounds to suspect that a Licensee is failing or has failed to comply with its obligations under sections 4.1.1 and 4.1.2 of these Regulations, URCA may request such Licensee to commission and bear the cost of a Compliance Audit by an Auditor to assess whether such Licensee is complying with its obligations under sections 4.1.1 and 4.1.2 of these Regulations.

Where URCA requests a Licensee to commission a Compliance Audit under this Part, the Licensee concerned shall prepare a Request for Proposal and Terms of Reference (“RFP-TOR”) seeking an Auditor to conduct the Compliance Audit and submit such RFP-TOR to URCA for review and URCA’s non-objection within thirty (30) calendar days of the date of URCA’s request under section 4.2.1 above.

Within fifteen (15) calendar days of a Licensee’s receipt of URCA’s non-objection to the RFP-TOR, the Licensee shall issue the RFP-TOR for responses and advise URCA of the date of the issuance of the RFP-TOR.

Within thirty (30) calendar days of a Licensee’s issuance of the RFP-TOR, such Licensee shall submit the name(s), respective curriculum vitae(s), the Proposal and Terms of Reference and any other relevant information with respect to the Auditor that the Licensee proposes to engage to conduct the Compliance Audit to URCA for review and URCA’s non-objection.

Within thirty (30) calendar days of the Licensee’s receipt of URCA’s non-objection to the Licensee’s proposed Auditor, the Licensee shall engage such Auditor to conduct the Compliance Audit and advise URCA of the date of the engagement of the Auditor.

Where URCA objects to the Licensee’s engagement of a proposed Auditor, the Licensee concerned shall submit the name(s), respective curriculum vitae(s), the Proposal and Terms of Reference and any other relevant information with respect to an alternative proposed Auditor for URCA’s review and non-objection within thirty (30) calendar days of URCA’s objection under section 4.2.4 above.

Where URCA requests a Licensee to commission a Compliance Audit under this Part, the Licensee concerned shall fully co-operate with the Auditor and provide unrestricted access to all relevant information, personnel, network components, systems and facilities as deemed necessary by the Auditor.

Where URCA requests a Licensee to commission a Compliance Audit under this Part, such Compliance Audit shall define and implement a suitable audit methodology, including data sampling, interviews with the Licensee’s relevant personnel (employees, agents, and contractors), and any other methods deemed necessary by the Auditor.

Licensees shall submit a detailed Compliance Audit report prepared by the Auditor setting out the findings of the Compliance Audit, and any recommendations and corrective measures to address identified non-compliance issues (“Report”) to URCA within ninety (90) calendar days of the date of the engagement of the Auditor.

At the time of the submission of the Report to URCA, a Licensee may submit a written request to URCA for the deferral and/or rejection of any recommended corrective measure(s) set out in the Report. In this regard, the Licensee shall provide supporting reason(s) for its request, including evidence demonstrating undue burden, technical limitations, and/or an alternative measure(s) that achieve the same objective. URCA shall notify the Licensee in writing whether it objects or does not object to the Licensee's request.

Save and except where URCA does not object to Licensee's request pursuant to section 4.2.10 above, Licensees shall implement all recommendations set out in the Report and provide a report to URCA with supporting evidence demonstrating the corrective actions taken by the Licensee as recommended in the Report within ninety (90) calendar days of the date of the Report.

Licensees shall adhere to all timelines set out in this Part, save and except where a Licensee has made a request for an extension of time to URCA with supporting reason(s) and URCA does not object to such request.

Where URCA requests a Licensee to commission a Compliance Audit under this Part, the Licensee concerned shall provide updates (including relevant information and documents to URCA) on the progress of the Compliance Audit, where requested to do so by URCA.

The following definitions can be found in section 4.1 of the Final Regulations:

"Auditor" means a suitably qualified and independent person(s) capable of conducting the Compliance Audit.

"Compliance Audit" means an examination of the network components, facilities, systems, personnel, procedures, and any other relevant aspect of a Licensee's network to assess such Licensee's compliance with relevant industry best practices, standards, specifications, and/or recommendations with respect to mitigating and remedying Outages.

3. Conclusion and Next Steps

Having considered the responses to the Consultation Document as expressed within this Statement of Results and Final Decision, URCA has published in ECS 07/2024 the updated and finalised *“Outage Reporting and Mitigation Regulations for the Electronic Communications Sector”*.

Within three (3) months of the publication of the finalised Outage Reporting and Mitigation Regulations, all Licensees of URCA that have established, maintain, and operate a Public Electronic Communications Network and/or provide Public Electronic Communications Services pursuant to an Individual Operating Licence or a Class Operating Licence Requiring Registration must comply with all provisions of these Regulations.

URCA will periodically review the Outage Reporting and Mitigation Regulations as necessary to ensure that same remain effective and relevant. Where in URCA’s view, amendment to these Regulations is necessary, URCA will seek comments from all relevant stakeholders in line with the provisions of the Comms Act.