

Statement of Results and Final Decision on the Disaster Management Regulations for the Electronic Communications Sector in The Bahamas

ECS 17/2020

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UTILITIES REGULATION & COMPETITION AUTHORITY

Contents

Con	tents	2
1.	INTRODUCTION	3
1.1	Background	
1.2	Objectives	4
1.3	Structure of the Remainder of this Document	5
2.	REGULATORY FRAMEWORK	5
2.1	Communications Act, 2009 (Comms Act)	5
3.	REVIEW OF THE SECOND ROUND OF THE CONSULTATION	7
3.1.	Review of General Responses to the Revised Proposed Regulations	8
3.2.	Review of Specific Responses to the Revised Proposed Regulations	8
4.	CONCLUSION OF THE PUBLIC CONSULTATION	18
5.	NEXT STEPS	20
ANN	NEX 1: Table of Changes to the Revised Draft Regulations	21

1. INTRODUCTION

This document may be cited as the Statement of Results and Final Decision on the Disaster Management Regulations for the Electronic Communications Sector in The Bahamas – ECS 17/2020 (the "Disaster Management Regulations Statement of Results").

URCA will publish simultaneously with this document the Disaster Management Regulations for the Electronic Communications Sector in The Bahamas (ECS 18/2020) on its website as a standalone document. URCA will revise the Disaster Management Regulations from time to time consequential to industry experiences, developing law and best practice, and any changes to URCA's powers and responsibilities.

1.1 Background

On 6 April 2020, URCA published its Disaster Management Regulations for the Electronic Communications Sector in The Bahamas (ECS 03/2020) ¹ consultation document (the "First Consultation on Disaster Management Regulations"). The purpose of the First Consultation on Disaster Management Regulations was to propose regulations for disaster management in the Electronic Communications Sector (ECS) in The Bahamas. The period for written submissions for that consultation document ended 19 May 2020 and URCA received responses from Cable Bahamas Limited, The Bahamas Telecommunication Company, and 5G Americas. In the First Consultation on Disaster Management Regulations, URCA identified Critical Electronic Communications Infrastructure (CECI) in the ECS in The Bahamas and proposed regulations designed to improve the resilience and restorative ability of the CECI and improve the probability that the CECI will be available before, during, and after a disaster emergency. URCA received substantive comments on its proposals. URCA reviewed the comments, took into consideration

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¹ https://www.urcabahamas.bs/wp-content/uploads/2020/04/Disaster-Management-Regulations-Consultation-Document 2020.pdf

the concerns and recommendations of Respondents, and amended the Proposed Disaster Management Regulations.

Upon its review of comments and recommendations received, on 28 August 2020, URCA published a Second Consultation on Disaster Management Regulations (ECS 12/2020)². The purpose of the Second Consultation was to invite further feedback on the revised Proposed Regulations. The period for written submissions for the Second Consultation document ended 30 October 2020. URCA received submissions from two Respondents, namely:

- 1. Cable Bahamas Limited and Be Aliv Limited (CBL/ALIV); and
- 2. The Bahamas Telecommunication Company (BTC).

URCA thanks the Respondents for participating in the public consultations on Disaster Management Regulations.

The full text of ECS 17/2020 and associated documents are available on URCA's website. URCA reserves the right to make all responses available to the public by posting responses on its website at www.urcabahamas.bs. URCA may publish or refrain from publishing any document or submission at its sole discretion.

1.2 Objectives

This Disaster Management Regulations Statement of Results document now sets out URCA's reasoning for its decisions on the issues and questions raised under the Second Round consultation document. This Disaster Management Regulations Statement of Results also forms the basis for the implementation of the Disaster Management Regulations for the Electronic Communications Sector in The Bahamas (ECS 18/2020), as a regulatory measure issued by URCA in accordance with the Communications Act, 2009.

² https://www.urcabahamas.bs/wp-content/uploads/2020/09/Draft-ICTs-for-Disaster-Preparedness-and-Management_Second-Consultation-Document_FINAL_17092020-002-2.pdf

1.3 Structure of the Remainder of this Document

The rest of this document is structured as follows:

- In Section 2, URCA sets out the regulatory framework for this consultation process;
- In Section 3, URCA presents the Statement of Results and Final Decisions;
- In Section 4, URCA issues a statement on the conclusion of the public consultation;
 and
- In Annex 1, URCA provides a table that shows the developmental process of the Regulations.

2. REGULATORY FRAMEWORK

In this section, URCA sets out the legal framework for issuing the proposed Regulations and identifies the specific ECS Policy objectives that URCA is seeking to advance in relation thereto.

2.1 Communications Act, 2009 (Comms Act)

The Comms Act empowers URCA as the independent regulator for the ECS and governs the extent to which URCA may intervene in its activities. The Comms Act also charges URCA with the responsibility of implementing the Electronic Communications Policy (the "ECP") which sets out the objectives of the Government of The Bahamas.

Under section 4 of the Comms Act, URCA has a statutory mandate to promote the economic and social welfare of the Bahamas and to further the interests of persons in the Bahamas by:

- i. promoting affordable access to high-quality networks and carriage services in all regions of The Bahamas;
- ii. maintaining public safety and security;
- iii. contributing to the protection of personal privacy;
- iv. limiting public nuisance through electronic communications;
- v. limiting any adverse impact of networks and carriage services on the environment;
 and
- vi. promoting the availability of a wide range of content services which are of high

quality.

To ensure that URCA brings into effect the electronic communications policy objectives section 8(1) of the Comms Act gives URCA the power to issues any regulatory and other measure and gives URCA the power to, inter alia:

...

- (c) impose conditions and penalties by order as specified in section 95 to 98;
- (d) issue regulations

..

When issuing regulatory or other measures section 11(1) (a) and (b) of the Comms Act requires URCA to provide persons with sufficient interest a reasonable opportunity to comment on proposed regulatory and other measures which URCA considers to be of public significance and those persons whose rights or interests may be materially adversely affected or prejudiced by the proposed regulatory and other measures. Section 11(1)(c) of the Comms Act prescribes that URCA must give due consideration prior to the introduction of these measures. Therefore, in accordance with section 11 and 13 of the Comms Act, URCA provided interested persons with a reasonable opportunity to comment on the proposed Disaster Management Regulations.

URCA also recognises the authority granted to the Data Protection Commission (DPC) on 2 April 2007 under the Data Protection (Privacy of Personal Information) Act, which introduced basic rules to protect the privacy of individuals in relation to personal data and regulate the collection, processing, keeping, use and disclosure of certain information relating to individuals, which may be utilised by other agencies while in the process of planning for mitigation, preparedness, response and recovery from emergencies and disasters³. Further, URCA is also aware that the Bahamas Department of Meteorology (Met Office) provides weather and climate information to

³ Data Protection (Privacy of Personal Information) Act. Data protection Commission. http://laws.bahamas.gov.bs/cms/images/LEGISLATION/PRINCIPAL/2003/2003-0003/DataProtectionPrivacyofPersonalInformationAct 1.pdf

the public and the international community, which is critical at all stages of weather-related disaster management.

Recognising that the proposed Disaster Management Regulations will intersect with the areas of responsibility of other public agencies, URCA consulted with NEMA, Met Office, licensees and other interested parties. This, in URCA's view, ensured that the proposed Disaster Management Regulations would have the necessary input from relevant government ministries, agencies, departments, and interested parties, therefore, representing a balanced and well-considered approach to disaster management in the ECS.

3. REVIEW OF THE SECOND ROUND OF THE CONSULTATION

In the Second Consultation on Disaster Management Regulations, URCA addressed the additional concerns of the Respondents to the First Consultation on Disaster Management Regulations and proposed changes to the draft Disaster Management Regulations that were proposed under the First Consultation. After addressing those issues, URCA posed only one Consultation Question:

Consultation Question 1: Do you have comments regarding any of the rules set out in Part 1 through Part 11 of the Revised Proposed Regulation in Annex 2?

In this section, URCA will:

- summarise the responses of the respondents to the issues and questions raised under consultation; and
- provide URCA's Final Decision in relation thereto.

The lack of response to a comment or any issue raised by a respondent does not signify URCA's agreement in whole or in part with the comment, nor should it be taken to mean that URCA has not considered the comment or that URCA considered the comment to be unimportant or without merit.

3.1. Review of General Responses to the Revised Proposed Regulations

BTC's General Response

BTC reiterated that it fully supports the goal of improving disaster management and preparedness in The Bahamas through a cooperative, multi-stakeholder approach. BTC stated that it considers the Revised Proposed Regulations to be a significant improvement over the Initial Proposed Regulations. This Respondent commended URCA for taking into consideration and reflecting interested parties' comments and recommendations on the First Consultation Document in the Revised Proposed Regulations.

CBL/Aliv's General Response

CBL stated that it is pleasing to see that URCA has given serious consideration to its comments and made several changes as a result. CBL thanked URCA for its consideration and opined that the revised draft regulations are a significant improvement on the earlier draft. However, CBL/Aliv still had some significant concerns, especially in relation to the proposals on national roaming and reporting requirements.

URCA's Response to comments received

URCA was able to develop the Proposed Disaster Management Regulations further because the Respondents provided constructive and well-considered contributions. Therefore, URCA thanks the Respondents for their participation. URCA will address the specific concerns of the Respondents in this document in Section 3.2

3.2. Review of Specific Responses to the Revised Proposed Regulations

In this section, URCA sets out a summary of the Responses. Following the summary of each response, URCA sets out its Final Decision in relation thereto.

3.2.1. Summary of Responses to Part 2 of the Revised Proposed Regulations

Part 2 of the Revised Proposed Disaster Management Regulations is the Interpretation of Terms.

BTC was the only Respondent that commented on Part 2, specifically Part 2.1. Part 2.1 provides

an interpretation of the term "Critical Electronic Communications Infrastructure" ("CECI"), which among other things states that CECI "refers to carriage services, content services, electronic communications networks, and related facilities, supply chains, and information communications technology."

BTC's Response

BTC stated that the inclusion of "supply chains" in the interpretation of the term "CECI" is unclear and appears to refer to goods and services that are beyond URCA's authority. BTC argued that the supply chains of CECIP's are subject to change over time, and any decision regarding such inputs should be subject to the full discretion of the CECIP itself. Therefore, BTC recommended that the reference to "supply chains" be deleted from Part 2.1 or, if not, properly and fully defined in the Regulations.

URCA's Response and Final Decision

URCA is agreeable to BTC's position and its reasoning in this regard. Therefore, URCA will amend the Disaster Management Regulations to delete the reference to "supply chains" in the interpretation of the term "CECI."

3.2.2 Summary of Responses to Part 3 of the Revised Proposed Regulations

Part 3 of the Revised Proposed Disaster Management Regulations addresses the Application of the Disaster Management Regulations. CBL/ALIV was the only Respondent that commented on Part 3. Specifically, CBL/ALIV commented on Part 3.2.

CBL/ALIV's Response

Aliv and CBL advised URCA that the current wording of draft Part 3.2 can be interpreted as meaning all operators of the networks listed in sub-clauses (i) to (iv) are automatically designated as CECIPs. Aliv and CBL stated that there may be (if not now, in the future) some operators who fall into these categories of networks, but who should not be CECIPs (for example, because they are too small). CBL pointed out that in paragraph 3.7.3 of the Second Consultation document, URCA committed to notifying operators of their CECIP designation, and Aliv and CBL suggested that URCA include that in the revised Disaster Management Regulations. CBL recommended the following for the revised text:

Subject to section 3.1, URCA may designate as CECI the public networks, electronic communications services, and systems listed below:

- i. a provider of a public electronic communications network;
- ii. a provider of a public electronic communications service;
- iii. a public service broadcaster including radio and television broadcasters; and
- iv. any electronic communications service that is an essential part of the public network, or electronic communications service.

URCA shall notify the CECIP of its designation under this Part.

URCA's Response and Final Decision

URCA considers that the text proposed by CBL is a suitable amendment. Therefore, URCA agrees to replace the current text with the amended text.

3.2.3 Summary of Responses to Part 4 of the Revised Proposed Regulations

Part 4 of the Revised Proposed Disaster Management Regulations addressed the Application of the Disaster Management Regulations. Both BTC and CBL/ALIV commented on Part 4.3 (Revised) which states:

The ECS Disaster Task Force may consist of representatives from URCA, representatives from each Licensee designated as Critical Electronic Communications Infrastructure Providers (CECIP) and representatives from the Ministry of Disaster Preparedness, Management and Reconstruction, National Emergency Management Agency, Department of Meteorology, Data Protection Commission, Royal Bahamas Police Force, Royal Bahamas Defense Force, and other relevant government offices and departments, as determined by the ECS Disaster Task Force.

URCA set out the summary of the responses below.

BTC's Response

BTC remarked that in its experience, power outages are a significant challenge to CECIPs during and after disaster events. Consequently, in BTC's view, the exclusion of the Bahamas Power and Light ("BPL") from the ECS Disaster Task Force is a significant oversight. BTC considers that URCA should add BPL to the list of parties that may be members of the ECS Disaster Task Force. BTC commented that URCA should not view ECS services in total isolation of other critical infrastructure in the context of disaster preparedness or management.

CBL/ALIV's Response

CBL/ALIV reiterated its suggestion that the BPL should be included and expressed disappointment that URCA did not specifically mention the BPL in Part 4.3. CBL/Aliv argued that the provision of

power is critical to the operation of communications networks, and some networks use the same infrastructure as the electricity network (in particular, BPL's pole network). CBL/Aliv stated that the experience of Hurricane Dorian underlined the importance of coordination between the ECS and the electrical power operator over restoration programs. Therefore, CBL recommended BPL's inclusion in draft Part 4.3.

URCA's Response and Final Decision

Throughout the consultation process, URCA has advised the Respondents that the lack of response to a comment or any issue raised by a Respondent should not be taken to mean that URCA has not considered the comment or that URCA considered the comment to be unimportant or without merit. URCA assures the Respondents that URCA did not disregard the Respondents' advice about the inclusion of BPL. Instead, URCA recognised that, in addition to BPL, other electrical power operators supply utility service in The Bahamas. Therefore, URCA added the phrase "other relevant government offices and departments, as determined by the ECS Disaster Task Force." By doing so, URCA intended to empower the ECS Disaster Task Force to decide its For example, as drafted in the Revised Proposed Disaster Management constituents. Regulations, the ECS Disaster Task Force could invite BPL to join the Task Force, if they choose to do so. However, URCA accepts the recommendation of the Respondents to include BPL in the list of representatives that may constitute the ECS Disaster Task Force. Hence, URCA will revise the Disaster Management Regulations to include BPL in the list of representatives that may constitute the ECS Disaster Task Force. Also, URCA notes that the phrase "other relevant government offices and departments, as determined by the ECS Disaster Task Force" can be taken to mean only government offices and government departments and exclude private entities. Such exclusion is not URCA's intention. Therefore, URCA will amend that phrase to state: "Any other public or private entity invited by the ECS Disaster Task Force".

3.2.4 Summary of Responses to Part 5 of the Revised Proposed Regulations

Part 5 of the Revised Proposed Disaster Management Regulations relates to Special Provisions, which include National Roaming. Both BTC and CBL/ALIV commented on Part 5.

Part 5.4 states:

"If a CECIP's network is impacted by a disaster or disaster emergency and that CECIP does not have a valid National Roaming Agreement with an interconnected CECIPs whose network was not affected by that disaster or disaster emergency, the impacted CECIP shall request National Roaming from the interconnected CECIP whose network was not impacted by that disaster or disaster emergency. Upon request, the unimpacted CECIP shall enable National Roaming immediately and shall continue to provide National Roaming at a cost until written consent to cease providing National Roaming is obtained from URCA."

BTC's Response

BTC surmised that Part 5.4 (Added) involves the provision of national roaming by one CECIP to another in the event of a disaster event where a National Roaming Agreement does not exist between the two CECIPs. BTC noted that according to Part 5.4, upon request for national roaming by the impacted CECIP, the other unimpacted CECIP would be required to "immediately" provide and continue to provide national roaming until URCA issues written consent to cease. BTC stated they do not oppose the provision of a National Roaming Agreement in the event of a National Disaster or National Emergency. BTC, however, took issue with the idea that where there are no such agreements in place, CECIP's should provide "immediate" roaming interconnection services between the affected and non-affected CECIP's. BTC argued that providing "immediate" roaming interconnection services between the affected and non-affected CECIP's was impractical due to implementation and other technical issues that may exist between CECIP's. BTC further stated and agreed that where such agreements are in place, "immediate" action can come into effect. Therefore, BTC recommends that the term "immediately" in Part 5.4 be replaced with "on an urgent and expedited basis".

CBL/ALIV's Response

CBL/ALIV agreed that national roaming arrangements could be implemented quickly and effectively and offered to discuss methods for effectively implementing national roaming

arrangements through regulations with URCA. However, CBL/ALIV proposed that URCA replace the draft Part 5.1 - 5.4 with the following wording:

- 5.1 State operators of mobile networks designated as critical electronic communications infrastructure providers must negotiate a national roaming agreement that enables the activation of national roaming when the appropriate government agency issues a warning of an impending national emergency or national disaster. The state operators of mobile networks designated as critical electronic communications infrastructure providers should submit the agreement for the approval of URCA within three months of the publication of these regulations or a date specified by URCA.
- When under the terms of this national roaming agreement the mobile operators decide to activate or de-activate national roaming in some parts or all of the areas impacted by the national emergency or national disaster, they shall inform URCA of the decision forthwith. If URCA decides that the decision is not in the public interest, or that it is in the public interest that roaming services should be activated or de-activated during the national disaster or emergency, it may require the operators to activate or de-activate roaming services accordingly.

CBL/ALIV further stated that the experience of Hurricane Dorian showed that the staff of mobile operators have to adapt quickly and work long hours in the aftermath of a disaster. They must make split minute decisions over short periods based only on partial information in an attempt to enable desperate customers to have access to communications services.

URCA's Response and Final Decision

URCA acknowledges the comments of the respondents regarding the inherent challenges with Part 5 as drafted. URCA considers the text proposed by CBL/ALIV would satisfy the intent and purpose of Part 5.1 and 5.2. Therefore, URCA agrees to replace the text in Part 5.1 and 5.2 of the Disaster Management Regulations specified in the Second Consultation on Disaster Management

with the text proposed by CBL/ALIV. URCA will keep Part 5.3 and Part 5.4 but with minor changes. Also, URCA accepts the rationale BTC set forth for revising Part 5.4. Therefore, URCA does not object to BTC's recommendation to replace the word "immediate" in Part 5.4 with the words "on an urgent and expedited basis."

3.2.5 Summary of Responses to Part 8 of the Revised Proposed Regulations

Part 8 of the Revised Proposed Disaster Management Regulations addressed the Reporting Requirements. Only CBL/ALIV commented on Part 8. Part 8 states:

- 8.1 Following any Disaster or Disaster Emergency, every CECIP shall submit a Report on Schedule 1 of these Regulations (see Annex 3).
- 8.2 The CECIP shall begin submitting the Report to URCA beginning on the sixth working day following the all-clear notification issued by the relevant Government agency. After that, the CECIP shall submit a report once a week by the close of Friday of each week. The Reports shall provide information current as at 4 pm on the previous day (or later). The CECIP shall continue the submission of Reports until the CECIP's service(s) has been fully restored. URCA set out the summary of the responses below.

CBL/ALIV's Response

CBL/ALIV referred to the First Consultation in response to Part 8 of the Revised Proposed Disaster Management Regulations. CBL noted that URCA did not respond to its comments and suggested that URCA was ignoring CBL/ALIV's comments on URCA's reporting requirements, specifically concerning specifying URCA's role during a disaster. CBL/Aliv expressed that URCA had made minimal changes to the reporting requirements. CBL/ALIV reiterated their questions and reminded URCA that during Hurricane Dorian Aliv and CBL produced daily reports for NEMA, which were used for coordination with other agencies and communications with customers and felt it would be a duplication of effort to also have to prepare daily or even reports every two days for URCA. CBL/ALIV put forward the following changes in regard to URCA's reporting proposals:

- That Andros be included in Reporting Area 3 rather than Reporting Area 2.
- That URCA give CECIP at least one week to produce reports if reports are necessary.
- That customer numbers, as required in Schedule 1, should not be a requirement
 as many factors must be considered that can be tedious, inaccurate, and
 misleading.

CBL/ALIV suggested a redrafting of URCA's requirements on reports so that CECIPs are required to submit weekly qualitative reports on service restoration without customer numbers because they will be inaccurate and misleading. CB and ALIV also stated that what they suggest would give URCA a much better understanding of the position than the report format in Schedule 1.

URCA's Response and Final Decision

CBL questioned URCA's role in the aftermath of a disaster or disaster emergency. Specifically, in the aftermath of a disaster or disaster emergency, URCA is usually inundated with requests to issue licenses and coordinate frequency assignments for emergency telecommunications, disaster relief operations, and humanitarian response from domestic agencies, foreign governments and international agencies, which URCA must address expeditiously to minimise loss of life and property. Under section 7 of the Comms Act, among other things, in the aftermath of a disaster or disaster emergency, URCA has the statutory mandate to regulate the ECS by exercising the powers given to it, and in particular to issue licences and exemption determinations in accordance with Part IV and to manage state assets. The Licensees reports help URCA to approve requests for relief-related electronic communication services in the areas most in need of additional telecommunication support and reduce the potential adverse impact on URCA's Licensees. Additionally, as the regulator of the ECS, URCA must be able to apprise the Government of The Bahamas on demand regarding the impact of a disaster or disaster emergency on CECI and the progress of recovery efforts. To address those imperatives, URCA considers that the Disaster Management Regulations must include appropriate reporting criteria.

However, URCA noted the significant difference between the impact of Hurricane Dorian on The Bahamas as opposed to Hurricane Isaias. The long-term impact of Dorian made it more reasonable for weekly reporting, but the impact of Isaias was minimal and weekly reporting would not have made practical sense. Therefore, while URCA does not agree to remove the reporting requirement, URCA has considered the recommendations offered by CBL and agrees to:

- Include Andros in Reporting Area 3 rather than Reporting Area 2;
- Allow CECIPS to submit both qualitative and quantitative reports; and
- Reduce the reporting requirement to once a week, unless URCA, having regard to the nature of the impact of the Disaster on The Bahamas, adjust the reporting requirement.

3.2.6 Summary of Responses to Part 9 of Revised Proposed Regulations

Part 9 of the Revised Proposed Regulations addresses Billing. Both BTC and CBL/ALIV commented on Part 9, which stated:

- 9.1 Every CECIP shall publish on its website the schedule of any incremental fees/charges related to a customer's request for additional levels of network resilience service offerings or features. Such fees or charges should be fair, reasonable and reflect the actual incremental cost incurred in providing the additional feature or service.
- 9.2 If a CECIP's service is disrupted during a disaster or national emergency, the CECIP shall not bill a customer until the CECIP's service to the customer is fully restored.

BTC's Response

BTC argued that as drafted in the Revised Proposed Disaster Management Regulations, Part 9.1 is not a practical or feasible option for the types of emergency services under consideration. The Respondent explained that the emergency services subject to this provision are customer service arrangements and redundancy options and service providers need to assess those fees or charges on a case-by-case basis. Therefore, BTC submitted that developing a standard tariff schedule with incremental charges for added network resilience service offerings or features, as suggested in

the Revised Proposed Disaster Management Regulations would not be possible. In terms of an alternative approach, BTC suggests that Part 9.1 be revised to state the following: "Every CECIP shall offer, where feasible, additional levels of network resilience service offerings or features at a customer's request. Fees or charges for such offerings or features should be fair, reasonable and reflect the actual cost incurred for their provision."

CBL/ALIV's Response

CBL noted that draft Part 9.2 is a new clause that URCA did not propose in the First Consultation on Disaster Management, and CBL posited that URCA did not justify its inclusion anywhere in the Second Consultation on Disaster Management. This Respondent opined that the lack of justification is unfortunate as it raises some complex technical and regulatory issues. For example, CBL noted that according to the regulations, CBL has significant market power in its broadband and Pay TV services, and so the current compensation arrangements are governed by URCA's Consumer Protection Regulations (CPR). CBL argued that it followed the CPR in the aftermath of Hurricane Dorian. Aliv and CBL argued that the proposed clause 9.2 is not workable in a way that is fair both to the customer and the operator. Therefore, Aliv and CBL suggested that URCA should omit the proposed Part and rely on the arrangements set out in the Consumer Protection Regulations.

<u>URCA's Response and Final Decision</u>

URCA sees the practicality of BTC's suggestion and agrees to revise Part 9.1 as proposed by BTC. URCA has also considered CBL/ALIV's concerns regarding Part 9.2, and URCA will withdraw its proposal in Part 9.2 and rely on the provisions of the CPR.

4. CONCLUSION OF THE PUBLIC CONSULTATION

With the publication of this Statement of Results and Final Decision (ECS 17/2020), URCA concludes the Public Consultation on Disaster Management Regulations for the Electronic Communications Sector in The Bahamas. For ease of reference, URCA has annexed the following document:

ANNEX 1: Table of Changes in Revised Draft Regulations.

5. NEXT STEPS

- 5.1 As previously stated, URCA reminds that it will publish the Disaster Management Regulations for the Electronic Communications Sector in The Bahamas ECS 18/2020 on its website as a standalone document simultaneously with this Disaster Management Regulations Statement of Results document.
- 5.2 URCA will revise the Disaster Management Regulations from time to time consequential to industry experiences, developing law and best practice, and any changes to URCA's powers and responsibilities.

ANNEX 1: Table of Changes to the Revised Draft Regulations

Table A1. Changes to Proposed Regulations after each Round of the Public Consultation Process.

	First Round of Consultation	Second Round of Consultation	Final Regulations
PART 1	INTRODUCTION		
1.1	In exercise of the powers and duties conferred upon it by section 8(1)(d) of the Communications Act, 2009 (Comms Act), the Utilities Regulation and Competition Authority ("URCA") hereby issues the following Regulations. These Regulations may be cited as the "Disaster Management Regulations for the Electronic Communications Sector in The Bahamas."	No change	No change
1.2	The purpose of these Regulations is to ensure network resilience and encourage the rapid restoration of Critical Electronic Communications Infrastructure and services after a disaster or national emergency, thereby furthering the interests of persons in The Bahamas in relation to the ECS.	No change	No change
1.3	These Regulations designate certain electronic communications networks, systems, and services as critical electronic communications infrastructure in The Bahamas, and mandate specific regulatory requirements which must be complied with by critical electronic communications infrastructure providers, to ensure adequate network resilience and service recoverability of the Critical Electronic Communications Infrastructure, particularly in the event of a natural disaster.	No change	No change
PART 2	INTERPRETATION		
2.1 REVISED	In these Regulations, unless the context requires otherwise, the following terms shall have the meaning ascribed below:	No change	No Change

"Critical Electronic Communications Infrastructure (CECI)" refers to the following network and services providers: of an electronic communications service; or a provider of a public network;	Critical Electronic Communications Infrastructure (CECI) refers to carriage services, content services, electronic communications networks, and related facilities, supply chains, and information communications technology (ICT), which if destroyed, degraded or rendered inoperable for an extended period, would significantly impact the social and economic well-being of the nation, or affect The Bahamas' ability to provide national security. CECI shall include the following network and services providers: i. a provider of a public network; ii. a provider of an electronic communications service; or iii. a public service broadcaster, including radio and television broadcasters; and iv. any electronic communications service that is an essential part of the public network, or electronic communications service.	Critical Electronic Communications Infrastructure (CECI) refers to carriage services, content services, electronic communications networks, and related facilities, and information communications technology (ICT), which if destroyed, degraded or rendered inoperable for an extended period, would significantly impact the social and economic well-being of the nation, or affect The Bahamas' ability to provide national security. CECI shall include the following network and services providers: i. a provider of a public network; ii. a provider of an electronic communications service; or iii. a public service broadcaster, including radio and television broadcasters; and iv. any electronic communications service that is an essential part of the public network, or electronic communications service.
Critical Electronic Communications Infrastructure Providers (CECIP)" refers to a Licensee whose network, service or system, or any part of it, has been designated under these Regulations as CECI;	No change	No change
"Disaster" shall have the meaning attributed to it in Schedule Two of the Disaster Preparedness and Response Act;	No change	No change
"Disaster emergency" shall have the meaning attributed to it in section 27(a) of the Disaster Preparedness and Response Act;	No change	No change
"First Level Responders" shall include the National Emergency Management Agency (NEMA) and	No change	No change

	emergencies and disasters in The Bahamas. "ICT" means Information and Communication Technology;		
	"Resilience" means the ability of an organisation to maintain business or service continuity to the end- user before during and after a disaster emergency.	No change	No change
REVISED	"Reporting Areas" shall, unless modified by URCA in accordance with these Regulations, be as follows: i. Reporting Area 1: New Providence subdivided into the constituencies and boundaries defined by The Parliamentary Registration Department of The Government of the Bahamas; ii. Reporting Area 2: Grand Bahama subdivided into the constituencies and boundaries defined by The Parliamentary Registration Department of The Government of the Bahamas; iii. Reporting Area 3: Abaco, Eleuthera, Exuma, and Andros subdivided into the constituencies and boundaries defined by The Parliamentary Registration Department of The Government of the Bahamas; and iv. Reporting Area 4: All other islands subdivided into the constituencies and boundaries defined by The Parliamentary Registration Department of The Government of the Bahamas.	Reporting Areas shall unless modified by URCA, be as follows: i. Reporting Area 1: New Providence and Grand Bahama, ii. Reporting Area 2: Abaco, Eleuthera, Exuma, and Andros, and iii. Reporting Area 3: All other islands.	Reporting Areas shall unless modified by URCA, be as follows: i. Reporting Area 1: New Providence and Grand Bahama, ii. Reporting Area 2: Abaco, Eleuthera, and Exuma, and iii. Reporting Area 3: All other islands.
2.2	Other terms used shall, unless otherwise expressly defined herein, have the meanings ascribed in	No Change	No change
	section 2 of the Comms Act.		

3.1	These Regulations shall apply to licensees that have been issued an Individual Licence or Class Licence by URCA and whose public network, and electronic communications services or system are designated critical electronic communications infrastructure (CECI) in accordance with section 3.2 of this Part.	No change	
3.2	Subject to section 3.1, the public networks, electronic communications services, and systems listed below are designated as CECI:	No change	Subject to section 3.1, URCA may designate as CECI the public networks, electronic communications services, and systems listed below:
3.2 (i)	a provider of a public electronic communications network;	No change	No change
3.2 (ii)	a provider of a public electronic communications service;	No change	No change
3.2 (iii)	a public service broadcaster including radio and television broadcaster;	No change	No change
3.2 (iv) REVISED	a person or entity who makes available facilities that are associated facilities by reference to a public electronic communications network or a public electronic communications service; and	any electronic communications service that is an essential part of the public network, or electronic communications service.	any electronic communications service that is an essential part of the public network, or electronic communications service. URCA shall notify the CECIP of its designation under this Clause.
3.2 (v) DELETED	a person or entity that is considered to form part of the CECI.	OMITTED	No Change
3.3	The holder of an Individual Licence, or Class Licence by URCA and whose public networks, and electronic communications services or system are designated as critical electronic communications infrastructure (CECI) in accordance with section 3.2 of this Part shall be referred to as a critical electronic communications infrastructure provider (CECIP).	No change	No Change

PART 4	GOVERNANCE		
4.1	URCA shall have responsibility for the governance of these Regulations.	No change	No Change
4.2 REVISED	URCA may establish a multi-stakeholder industry group, which will be referred to as the Electronic Communications Sector Disaster Management Stakeholder Group (the "Disaster Management Stakeholder Group") whose purpose will be to assist URCA with determining approaches for the regulation of CECI with an aim to:	URCA will establish a multi-stakeholder group, which will be referred to as the Electronic Communications Sector Disaster Management Task Force (the "ECS Disaster Task Force") whose purpose will be to assist URCA with determining approaches for the regulation of CECI with an aim to:	No Change
4.2 (i) REPLACED	reduce disaster and disaster emergency mortality in The Bahamas	Develop a framework and prepare Guidelines for Voluntary ECS Critical Infrastructure Resiliency which shall include assessing resiliency gaps and proposing appropriate remedies to improve the network resiliency of CECIs.	No Change
4.2 (ii) DELETED	lessen the number of people affected by disaster and disaster emergencies in The Bahamas;	OMITTED	No Change
4.2 (iii) DELETED	reduce direct disaster economic loss in relation to the global gross domestic product (GDP);	OMITTED	No Change
4.2 (iv)	reduce disaster damage to critical infrastructure and disruption of basic services, among them financial, health and educational facilities;	NO CHANGE: Now 4.2 (ii)	No Change
4.2 (v)	improves the number of islands for which electronic communications service providers have a local business continuity and disaster recovery plan;	NO CHANGE: Now 4.2 (iii)	No Change
4.2 (vi)	increase the availability of multi-hazard early warning systems, and the public's access to disaster-related information.	NO CHANGE: NO CHANGE: Now 4.2 (v)	No Change
4.2 (vii) DELETED	enhance international co-operation regarding disaster preparedness and management.	OMITTED	No Change
4.3 REVISED	The ECS Disaster Management Stakeholder Group shall consist of representatives from URCA, at least	The ECS Disaster Task Force may consist of representatives from URCA,	The ECS Disaster Task Force may consist of representatives from URCA,

	one representative from Licensees designated as Critical Electronic Communications Infrastructure Providers (CECIP) and at least one representative from the Ministry of Disaster Preparedness, Management and Reconstruction, National Emergency Management Agency, Department of Meteorology, Data Protection Commission, Royal Bahamas Police Force, Royal Bahamas Defense Force and other relevant government offices and departments, as determined by the ECS Disaster Management Stakeholder Group.	representatives from each Licensee designated as Critical Electronic Communications Infrastructure Providers (CECIP) and representatives from the Ministry of Disaster Preparedness, Management and Reconstruction, National Emergency Management Agency, Department of Meteorology, Data Protection Commission, Royal Bahamas Police Force, Royal Bahamas Defense Force and other relevant government offices and departments, as determined by the ECS Disaster Task Force.	representatives from each Licensee designated as Critical Electronic Communications Infrastructure Providers (CECIP) and representatives from the Ministry of Disaster Preparedness, Management and Reconstruction, National Emergency Management Agency, Department of Meteorology, Data Protection Commission, Royal Bahamas Police Force, Royal Bahamas Defense Force, Bahamas Power and Light Company and any other public or private entity, invited by the ECS Disaster Task Force.
4.4 ADDED	The ECS Disaster Management Stakeholder Group shall meet a minimum of three (3) times a year and may meet more regularly if determined by the ECS Disaster Management Stakeholder Group.	The ECS Disaster Task Force shall meet at least three (3) times annually.	No Change
5	SPECIAL PROVISION	I	
5.1	A critical electronic communications infrastructure provider (CECIP) shall enable national roaming on its network in the impacted area immediately after the appropriate government agency issues a warning that a national emergency or national disaster will occur within twenty-four hours, and national roaming shall continue until URCA directs the CECIP in writing to discontinue national roaming in the affected area.	No change	The operators of mobile networks designated as critical electronic communications infrastructure providers must negotiate a national roaming agreement that enables the activation of national roaming when the appropriate government agency issues a warning of an impending national emergency or national disaster. This agreement should be submitted for the approval of URCA within three months of the publication of these regulations or a date specified by URCA.
5.2	Provided that authorisation is obtained from URCA prior to establishing, operating, and maintaining an electronic communications system during a disaster or disaster emergency, URCA may:	All CECIPs whose networks are interconnected shall commence negotiation of a National Roaming Agreement within 90 calendar days following the publication of these Regulations. The CECIPs shall submit the	When under the terms of this national roaming agreement the mobile operators decide to activate or de-activate national roaming in some parts or all of the areas impacted by the national emergency or national disaster, they shall inform URCA

		National Roaming Agreement to URCA for approval within 90 calendar days following the commencement date of said negotiations. The National Roaming Agreement must include a provision for National Roaming to take immediate effect on the occurrence of a disaster or disaster emergency.	of the decision forthwith. If URCA decides that the decision is not in the public interest, or that it is in the public interest that roaming services should be activated or de-activated during the national disaster or emergency, it may require the operators to activate or de-activate roaming services accordingly.
5.2 (i)	exempt specified electronic communications resources from certain regulatory measures if the resources are used for disaster mitigation and relief;	Delete	No Change
5.2 (ii)	pre-clear electronic communications resources for use in disaster mitigation and relief, in compliance with the regulations;	Delete	No Change
5.2 (iii)	expedite the review of electronic	Delete	No Change
5.2 (iv)	temporarily waive regulations for the use of electronic communications resources for disaster mitigation and relief.	Delete	No Change
5.3 ADDED		A Operating Licensee that provide fixed and mobile telecommunications services who receive a license after the publication of these Regulations (New CECIP) shall complete negotiation of a National Roaming Agreement with existing CECIPs within ninety (90) calendar days following the commencement date of the Licence. Following the completion of the National Roaming Agreement, the New CECIP shall within thirty (30) calendar days submit the National Roaming Agreement to URCA for approval. The National Roaming Agreement must include a provision for National Roaming to take	No Change

5.4 ADDED	immediate effect on the occurrence of a disaster or disaster emergency. If a CECIP's network is impacted by a disaster or disaster emergency and that CECIP does not have a valid National Roaming Agreement with an interconnected CECIPs whose network was not affected by that disaster or disaster emergency, the impacted CECIP shall request National Roaming from the interconnected CECIP whose network was not impacted by that disaster or disaster emergency. Upon request, the	If a CECIP's network is impacted by a disaster or disaster emergency and that CECIP does not have a valid National Roaming Agreement with an interconnected CECIPs whose network was not affected by that disaster or disaster emergency, the impacted CECIP shall request National Roaming from the interconnected CECIP whose network was not impacted by that disaster or disaster emergency. Upon request, the unimpacted CECIP shall enable National Roaming on an
	unimpacted CECIP shall enable National Roaming immediately and shall continue to provide National Roaming at a cost until written consent to cease providing National Roaming is obtained from URCA.	urgent and expedited basis and shall continue to provide National Roaming at a cost until written consent to cease providing National Roaming is obtained from URCA.
5.5 ADDED	Provided that authorisation is obtained from URCA prior to establishing, operating, and maintaining an electronic communications system during a disaster or disaster emergency, URCA may: i. exempt specified electronic communications resources from certain regulatory measures if the resources are used for disaster mitigation and relief, ii. pre-clear electronic communications resources for use in disaster mitigation and relief, in compliance with the regulations, iii. expedite the review of electronic communications resources for use in disaster and disaster	 i. exempt specified electronic communications resources from certain regulatory measures if the resources are used for disaster mitigation and relief; ii. pre-clear electronic communications resources for use in disaster mitigation and relief, in compliance with the regulations; iii. expedite the review of electronic communications resources for use in disaster and disaster emergencies, in accordance with extant regulations; or iv. temporarily waive regulations for the use of electronic communications resources for disaster mitigation and

		emergencies, in accordance with extant regulations, and iv. temporarily waive regulations for the use of electronic communications resources for disaster mitigation and relief.	relief. ⁴
6	DISASTER PREPAREDNESS		
6.1	A CECIP shall, within three months after the publication of these Regulations:	A CECIP shall, within three months after the publication of these Regulations, develop and implement procedures to improve Disaster Preparedness to enhance the resilience of its networks against potential threats. The procedures of the CECIP shall be detailed in the BCP submitted to URCA following the requirements of Part 7.1	No Change
6.1 (i) DELETED	Develop and implement procedures to improve Disaster Preparedness to improve the resilience of its networks against potential threats. The procedures implemented by the CECIP shall be detailed in the DR report to be submitted to URCA in accordance with the requirements of Part 9 for consideration;	OMITTED	No Change
6.1 (ii) DELETED	liaise with the Bahamas Power and Light Company Ltd. (BPL) to coordinate priority notification of potential power outages; and	OMITTED	No Change
6.1 (iii) DELETED	establish repair teams that can be quickly deployed in the aftermath of a disaster for rapid restoration and repair of any damaged electronic communication facilities.	OMITTED	No Change

 $^{^4\,9824645}E,\,https://treaties.un.org/doc/source/RecentTexts/25-4eng.htm\,(accessed\,June\,20,\,2017).$

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DELETED	A CECIP shall ensure the security and resilience of its	OMITTED	No Change
6.2	network and services against potential disaster		
	emergencies by implementing the following:		
	i. Business Continuity Plan: CECIPs shall create		
	a strategic plan for improving		
	business resilience and service		
	sustainability during disasters and disaster .		
	emergencies.		
	ii. Telecommunications Asset Management:		
	CECIPs shall maintain appropriate		
	protection of CECI.		
	iii. Physical Security: CECIPs shall prevent		
	unauthorised physical access,		
	damage, and interference to CECI.		
	iv. Communications and Operations		
	Management: CECIPs shall ensure the		
	correct and secure operation of CECI.		
	v. Information Security: CECIPs shall ensure		
	the safeguarding of information in networks		
	and the secure operation of information		
	processing facilities		
6.3	In addition to the Section 6.2 requirements listed	OMITTED	No Change
DELETED	above, an existing CECIP whose CECI include a fixed-		
	line network shall, within eighteen months of the		
	issuance of these Regulations demonstrate to URCA		
	that it has improved the resilience of that network by		
	incorporating at a minimum the:		
	i. Use of diverse routing and dynamic re-routing		
	on failure. The fixed-line CECIP should ensure that		
	there are no common ducts or switches and that		
	ideally, except for very few points (usually close to		
	termination), the routes are several miles apart		
	(to ensure that they are not Simultaneously taken		
	out by a disaster);		
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	ii. Use of network physical layer technologies		
	ii. Use of network physical layer technologies based on self-healing rings like SDH (Synchronous		
	based on self-healing rings like SDH (Synchronous		
	based on self-healing rings like SDH (Synchronous Digital Hierarchy);		
	based on self-healing rings like SDH (Synchronous Digital Hierarchy); iii. Use of high availability equipment. All switches		

6.4 DELETED	iv. where there is not a diversely routed backup submarine cable, the CECIP should arrange for backup land routes to redirect traffic if the submarine cable is cut. Licensees that establish CECI after the publication of these regulations must comply with the condition set out in 6.3(i) through 6.3(iv) from the date such Licensee commences service delivery in The Bahamas.	OMITTED	No Change
6.5 DELETED	In addition to the Section 6.2 requirements listed above, all mobile CECIPs shall further improve the resilience of their networks by considering the following: i. For higher resilience of Mobile Switching Centers (MSCs): a. have duplicate MSCs in critical areas; and b. in non-critical areas, have overlaps in the geographic coverage between MSCs, and keep spare capacity in all MSCs to allow switching of traffic between the MSCs within the network. ii. Establish a backup Home Location Register (HLR) for each production HLR and locate it at a different site. All updates to the primary HLR should be mirrored at the backup unit. iii. Deploy a hot standby unit containing a backup Visitor Location Register (VLR) at each MSC. iv. Deploy transportable (mobile) base stations (BSs) to cover for failing fixed BSs in locations within the networks, where duplicate or overlapping BSs don't exist.	OMITTED	No Change
7	DISASTER RECOVERY		
7.1 REVISED	Every CECIP shall, within three months from the publication of these Regulations submit, for URCA's approval, a Business Continuity Plan that makes best efforts to ensure the continuous provision of electronic communications services during all phases of a disaster or disaster emergency and shall include: i. a Disaster Recovery (DR) Plan; ii. a Stakeholder Notification (SN) Plan; and iii. a Business Impact Analysis.	Once every three years, beginning three months after the publication of these Regulations, every CECIP shall submit a Business Continuity Plan to make best efforts to ensure the continuous provision of electronic communications services during all phases of a disaster or disaster emergency.	No Change

	URCA may require the CECIP to make necessary amendments to any DR or SN Plan and re-submit any report or part thereof as a consequence of such amendment before granting approval.		
7.2 DELETED	The CECIP shall: i. identify one representative from senior management that shall have overall responsibility for implementation of its DR Plan; and take necessary actions to ensure the safety of its employees and agents on active duty during a disaster or disaster emergency.	OMITTED	No Change
7.3 DELETED	The CECIP shall test its DR Plan at least once every two years.	OMITTED	No Change
7.4 DELETED	The CECIP shall invite URCA to attend the full-scale testing of its DR Plan once every two years after the publication of these Regulations.	OMITTED	No Change
8	REPORTING		
8.1	Following any Disaster or Disaster Emergency, every CECIP shall submit a Report to URCA setting out: i. all network and services outages caused by a disaster or disaster emergency and the impact on its domestic and international services; ii. the estimated time to repair and restore outages; and iii. any outage that affects First Level Responders communication centres for 30 minutes or more.	No change	Following any Disaster or Disaster Emergency, every CECIP shall commence submission weekely reports to URCA
8.2 REVISED	The CECIP shall begin submitting the Report to URCA beginning on the sixth working day following the all-clear notification issued by the relevant Government agency. After that, the CECIP shall submit a Report daily by noon. The Reports shall provide information	The CECIP shall begin submitting the Report to URCA beginning on the sixth working day following the all-clear notification issued by the relevant Government agency. After that, the	The CECIP shall begin submitting the Report to URCA beginning on the sixth working day following the all-clear notification issued by the relevant Government agency. After that, the CECIP

	current as at 4 pm on the previous day (or later). The CECIP shall continue the submission of Reports until the CECIP's service(s) has been fully restored.	CECIP shall submit a Report every two days by the close of the working day. The Reports shall provide information current as at 4 pm on the previous day (or later). The CECIP shall continue the submission of Reports until the CECIP's service(s) has been fully restored.	shall submit a Report once a week by the close of Friday of each week. The Reports shall provide information current as at 4 pm on the previous day (or later). The CECIP shall continue the submission of Reports until the CECIP's service(s) has been fully restored.
8.3 REVISED	URCA may by the publication of a notice on its website, and by direct written notification to affected Licensees, extend or reduce the six working days or vary Reporting Areas defined in section 2 of these Regulations after considering the impact of the disaster or disaster emergency.	URCA may by the publication of a notice on its website, and by direct written notification to affected Licensees, vary the reporting requirement is set out in these Regulations after considering the impact of the disaster or disaster emergency.	No Change
8.4 REVISED	URCA may, at the request of a CECIP or on its own volition, permit a CECIP to combine two or more Reporting Areas in its reports. In considering whether to do so, URCA shall take into account, without limitation to URCA's discretion, the following factors: i. the value of information about variations in the quality of service between separate Reporting Areas; ii. the relationship between the network structure and corporate organisation of the relevant Licensee, and the physical boundaries of the Reporting Areas; iii. The number of customers using the relevant services in the Reporting Areas; and/or iv. The difference in costs to the relevant Licensee that can result from taking measurements for separate Reporting Areas and taking measurements for combined Reporting Areas.	URCA may, at the request of a CECIP or on its own volition, permit a CECIP to combine two or more Reporting Areas in its reports.	No Change
8.5 DELETED	The CECIP shall advise the general public by publishing, by noon, on the homepage of its website and/or in another appropriate media, a daily report on recovery efforts to restore services.	OMITTED	No Change

			
8.6 DELETED	The daily report must be in the format set out in the attached Schedule 1, and shall include, at a minimum, the following information: a. The name of each area impacted (each area shall be delineated based on the Licensee's network comprising groups of customers expected to be impacted and restored at or near the same time); b. The number of customers impacted; c. The nature of the interruption (e.g., poles/lines damaged, power supply interruption, tower destruction, etc.); d. The date/time when services were interrupted in that area; e. The date/time when which the Licensee commenced or expected to commence work to restore services in that area; f. The nature of the work being undertaken (e.g., restoration of lines, restoration of electronic communications systems and towers, restoration of power supplies, repair of nodes/transformers, etc.); g. The expected date on which services will be restored; and, h. Any other information which the Licensee wishes to provide about service availability or restoration work.	OMITTED	No Change
8.7 REVISED	URCA may publish in its Annual Report, on its website and/or in other appropriate media updates regarding the CECIPs service availability in areas affected by a disaster or disaster emergency.	Not included in the second round of consultation	No Change
9	BILLING		

9.1 REVISED	A CECIP shall not bill Government Agencies for provision of carriage services specifically related to the dissemination of messages from its early warning and disaster relief systems.	Every CECIP shall publish on its website the schedule of any incremental fees/charges related to a customer's request for additional levels of network resilience service offerings or features. Such fees or charges should be fair, reasonable and reflect the actual incremental cost incurred in providing the additional feature or service.	Every CECIP shall offer, where feasible, additional levels of network resilience service offerings or features at a customer's request. Fees or charges for such offerings or features should be fair, reasonable and reflect the actual cost incurred for their provision.
9.2 REVISED		If a CECIP's service is disrupted during a disaster or national emergency, the CECIP shall not bill a customer until the CECIP's service to the customer is fully restored.	Deleted
10	INVESTIGATION		
10.1	URCA may investigate the veracity of a CECIP's disaster management report under these Regulations in accordance with its powers under section 9(1) of the Comms Act and may exercise its powers of information gathering under section 9(2) of the Comms Act, and the Conditions of the relevant license.	No change	No Change
11	PENALTIES		
11.1	Any Licensee that contravenes or fails to comply fully with any provision of these Regulations shall be liable to a fine, other penalty or enforcement action to be determined by URCA in accordance with the provisions of the Comms Act	No change	No Change