



REGULATORY
AUTHORITY

Bermuda

Final Report of the Electronic Communications Sectoral Review

Final Report

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TABLE OF CONTENTS

I	INTRODUCTION AND EXECUTIVE SUMMARY	3
II	SUMMARY OF CONSULTATION RESPONSES	8
II.1	Service Continuity	8
II.2	Government Authorization Fees.....	10
II.3	Amendments to the RAA: Adjudication Process and Enforcement Process	11
II.4	Amendments to the RAA: Surplus Funds.....	12
II.5	Moratorium Review	13
II.6	Consumer Protection	14
III	FINAL REPORT IN RESPECT OF Section 17 RAA.....	15
III.1	Service Continuity	15
III.2	Government Authorization Fees.....	21
III.3	Amendments to the Regulatory Authority Act 2011	24
III.4	Amendments to the Electronic Communications Act 2011.....	30
III.5	Consumer Protection	33
IV	NEXT STEPS	36
	Annex 1 – Proposed Recommendations	37
	Annex 2 – Proposed Changes to ICOL Conditions and/or via General Determination	39
	Annex 3 – Sectoral Review – Detailed Analysis of Law and Regulations	41
	Annex 4 – Further Legislative Changes	62

I INTRODUCTION AND EXECUTIVE SUMMARY

1. This Final Report on the Electronic Communications Sectoral Review (the "**Final Report**") sets out the views of the Regulatory Authority of Bermuda (the "**Authority**") following its comprehensive review of the electronic communications sector in Bermuda (the "**Sectoral Review**"), pursuant to section 17 of the Regulatory Authority Act 2011 (the "**RAA**").
2. The purpose of the Sectoral Review was to conduct a comprehensive review of the electronic communications sector, including all policies, legislation, regulations and administrative determinations applicable to the sector.
3. This is the first sectoral review of the electronic communications sector in Bermuda conducted by the Authority, and it covers the period from when the Authority was established to regulate the electronic communications sector, on 28 January 2013, to the date of this Final Report.
4. This Final Report follows the publication of (1) the Review of the Electronic Communications Sector Consultation Document (the "**Consultation Document**"), issued by the Regulatory Authority on 17 October 2017; and (2) the Preliminary Report on the Electronic Communications Sectoral Review (the "**Preliminary Report**"), issued by the Authority on 17 April 2018. This Final Report discusses a number of key issues and recommendations from the Preliminary Report and sets out the Authority's final views, conclusions and recommendations following the completion of the Sectoral Review.
5. This Final Report is structured as follows:
 - (i) Section I sets out the background to the Sectoral Review and provides a summary of the Authority's findings;
 - (ii) Section 0 sets out the legal basis for the Sectoral Review and the consultation process followed by the Authority;
 - (iii) Section II provides a summary of the responses to the Preliminary Report and the Authority's responses;
 - (iv) Section IV details the Authority's findings; and
 - (v) Section V sets out general conclusions regarding the Sectoral Review.
6. For the avoidance of doubt, the Sectoral Review is separate from the process relating to the market review of the electronic communications sector (the "**Market Review**") required under part 4 of the Electronic Communication Act 2011 (the "**ECA**"), which the Authority has conducted with the Market Review. While this Final Report does not directly deal with the specific issues raised as part of the Market Review, the Authority has benefited from the concurrent industry engagement with both processes and has incorporated information obtained as part of the Market Review into the Sectoral Review. The Authority is of the opinion that this holistic approach to simultaneously conducting the Sectoral Review and Market Review has been important in managing the Authority's overriding principal functions set out in section 12 of the RAA (see paragraph 8).

7. This Final Report sets out the Authority's conclusions and further recommendations, which are summarised as follows:

Issue	Summary of Authority's conclusion
Service continuity	<p>The Authority recommends to the Minister the development of Regulations which identify underwater areas and/or zones to be designated as "protected" to prevent commercial fishing or dredging to avoid damage to sub-sea cables and safeguard service continuity, and further offers to enter into consultation with the relevant Government Ministries to aid in the drafting of relevant Regulations.</p> <p>The Authority recommends the inclusion of express language in appropriate legislation and/or an amendment to Integrated Communications Operating Licence ("ICOL") which imposes an obligation on sectoral providers to:</p> <ul style="list-style-type: none"> • establish a specific service restoration plan, which the Authority can order to be amended if it is considered inadequate; • submit periodic financial reports to the Authority to allow the Authority to effectively assess their financial stability; • notify the Authority of any risks to their future financial stability (i.e. legal proceedings) or significant changes in their financial position (i.e. risk of insolvency); and • notify the Authority before discontinuing any service to wholesale customers due to non-payment or insolvency;
Government Authorization Fees	<p>The Authority recommends to the Minister the adoption of a tiered Government Authorization Fee ("GAF") structure to replace the current GAF structure which has the unintended consequence of disincentivising prospective smaller sectoral providers from entering into, or participating in, the electronic communications market. The recommendation of a tiered GAF structure will thereby foster competition by encouraging the entry or expansion of prospective and/or existing smaller market participants.</p>
Amendments to the RAA	<p>The Authority recommends to the Minister the amendment of various sections of the RAA identified during the Authority's fully comprehensive review. These suggested amendments include, but are not limited to, the following:</p> <p>Amend the existing adjudication process and enforcement process to ensure that the Authority is afforded the ability to quickly and effectively resolve circumstances and impose remedies where there has been a breach, or alleged breach of an ICOL holder's legal obligations, or there are</p>

Issue	Summary of Authority's conclusion
	<p>disputes between two sectoral providers or a sectoral provider and a consumer.</p> <p>Provide the ability to carry forward Surplus Funds from one financial year to the next in order to remove unnecessary budgeting difficulties and to afford the Authority the ability to account for workstreams that are conducted across multiple fiscal years.</p> <p>Amend the statutory requirement to conduct an initial public consultation as part of the General Determination process to account for exceptional circumstances where an initial public consultation may not be required (i.e. due to technological and market developments, timing and sensitivity of the matter, inherent simplicity of the matter).</p>
<p>Amendments to the ECA</p>	<p>The Authority recommends to the Minister the amendment of various identified sections of the ECA in response to the Authority's fully comprehensive review. These suggested amendments include, but are not limited to, the following:</p> <p>Remove the references to the adjudication process in sections 41 and 50 of the ECA and replace with a reference to consultation. As currently constructed, section 41 of the ECA stipulates that in order to impose remedies for the inefficient use of Spectrum, the Authority must have completed a lengthy and cumbersome adjudication process. Similarly, section 50(2)(b) of the ECA stipulates that an adjudication must be completed in order to approve an electronic communications technology, in accordance with section 50(2)(b) of the ECA. The proposed recommendation will ensure that the processes outlined in sections 41 and 50 of the ECA are more efficient.</p>
<p>Moratorium review</p>	<p>The Authority recommends to the Minister that the current Moratorium restricting the issuance and re-issuance of ICOLs is lifted given the results obtained as part of the Sectoral Review and Market Review (i.e. technological, market developments).</p>
<p>Consumer protection</p>	<p>The Authority recommends to the Minister the imposition of consumer compensation provisions for consumers in the event of service failures, through a consumer protection general determination and the inclusion of supporting ICOL terms and conditions through an ICOL general determination.</p> <p>The Authority recommends to the Minister the imposition of email forwarding provisions for consumers that switch internet service providers, through a consumer protection general determination and the inclusion of supporting ICOL terms and conditions through an ICOL general determination.</p> <p>The Authority recommends to the Minister the adoption of additional Consumer Protection measures which will be</p>

Issue	Summary of Authority's conclusion
	considered as part of a consumer protection general determination.

LEGISLATIVE CONTEXT AND CONSULTATION PROCESS

8. The Authority's principal functions under section 12 of the RAA include ensuring that the regulation of the electronic communications sector promotes: (i) competition; (ii) the interests of residents and consumers of Bermuda; (iii) the development of the Bermudian economy, Bermudian employment and Bermudian ownership; and (iv) innovation.
9. Pursuant to sections 17(1) and 17(5) of the RAA, the Authority is required to conduct a comprehensive review of each regulated industry sector, including all policies, legislation, regulations and administrative determinations applicable to such sector no later than three years after the date of the coming into operation of the applicable sectoral legislation. This includes the electronic communications sector.
10. The ECA is the applicable sectoral legislation governing the electronic communications sector. The ECA received royal assent on 18 December 2011 and commenced on 28 January 2013. As such, this automatically set a deadline of 28 January 2016 (*i.e.* three years from the ECA commencement date) for the start of the sectoral review of the electronic communications sector.
11. However, section 75(4) of the ECA allows the Authority, after conferring with the Minister responsible for the electronic communications sector (the "Minister"), to delay the commencement of the first sectoral review for up to two years where the Authority has concluded that such a postponement is justified for certain reasons. The Authority considered that the need for the delay was justified in light of the market data obtained, or expected to be obtained, from the Market Review. As such the commencement date of the Sectoral Review was delayed.
12. On 17 October 2017, and in accordance with section 70 of the RAA, the Authority initiated the Sectoral Review with the publication of the Consultation Document on its official website. This Sectoral Review was the first sectoral review of the electronic communications sector conducted by the Authority.
13. The Consultation Document set out some of the issues that would ultimately form part of the Sectoral Review. Such issues were derived from the Authority's work prior to the Consultation Document's publication, including: (i) internal surveys; (ii) a review of market data submitted by sectoral providers; (iii) an analysis of numerous complaints received by the Authority; and (iv) an analytical legal review of key sectoral legislation, ministerial policies, internal policies and sectoral specific administrative determinations.
14. The Consultation Document invited comments from members of the public, operators of electronic communications networks, providers of electronic communications services, and other interested parties. Five responses were received, of which four were related to the Sectoral Review. These were

provided by: (i) LinkBermuda Limited ("**LinkBermuda**"); (ii) One Communications Limited ("**OneComm**"); (iii) The Bermuda Telephone Company Limited, Telecommunications Bermuda & West Indies Limited and Transact Limited (collectively "**Digicel**"); and (iv) TeleBermuda International Limited ("**TBI/Bluewave**").

15. Section 17(3) of the RAA requires the Authority to issue a preliminary report no later than six months after the date on which the Authority issued the Consultation Document. The Preliminary Report was, issued on 17 April 2018. The Preliminary Report included a summary of the responses received in relation to the Consultation Document, the Authority's analysis of those responses, and finalized the key issues that required further analysis and review as part of the Sectoral Review.
16. Interested parties were invited to provide responses to the Preliminary Report by 15 May 2018; which was later extended to 24 May 2018. Responses were provided by four industry participants, as further detailed in Section II below.
17. Section 17(4) of the RAA requires the Authority to issue a final report no later than nine months after the date on which the Authority issued the Consultation Document.
18. However, pursuant to section 5(6)(a) of the RAA, the Minister has the discretionary power to waive any deadline imposed on the Authority for good cause. The Authority requested such waiver from the Minister, with respect to the deadline for the Final Report, in order to allow further time for both input from the Department of Telecommunications ("DOT"), to further conduct a fully comprehensive review of all policies, legislation, regulations and administrative determinations applicable to the electronic communications sector and to further review the analysis of market data obtained, or expected to be obtained, from the Market Review. Such waiver was granted and the deadline for the issuance of the Final Report was extended from 17 July 2018 to 30 November 2018.
19. Section 72(4) of the RAA outlines the required contents of the final report. The final report should:
 - (i) summarise the responses received regarding the Preliminary Report;
 - (ii) provide reasoned explanations of the basis upon which the Authority has revised any significant factual finding, policy determination or legal conclusion contained in the Preliminary Report; and
 - (iii) state the Authority's final conclusions.
20. With respect to the legislative provisions contained in section 72(4) of the RAA, this Final Report constitutes the Authority's final report in accordance section 17(4) of the RAA.
21. In this Final Report, except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them by the ECA, the RAA and the Interpretation Act 1951.

II SUMMARY OF CONSULTATION RESPONSES

22. Details of the responses to the Consultation Document were set out in the Preliminary Report.
23. The Authority received responses to the Preliminary Report from the following entities:
 - (i) **LinkBermuda**;
 - (ii) **Digicel**;
 - (iii) **OneComm**; and
 - (iv) **TBI/Bluewave**.
24. These four responses to the Preliminary Report have been reviewed and considered by the Authority when developing its final conclusions and recommendations. A summary of the responses received to the Preliminary Report is set out below.

II.1 Service Continuity

LinkBermuda

25. LinkBermuda submitted that given the low risk of significant fibre breaks and the limited ability of increased regulation to protect against the impact of service continuity damaging events, it is not necessary to impose regulation to address concerns over service continuity. LinkBermuda pointed out that given the competitive nature of the off-island connectivity market service providers need to ensure a robust service is available to attract and maintain their customer bases, and therefore further regulation is unnecessary.
26. With respect to the regulatory measures proposed following the insolvency of an ICOL holder, LinkBermuda submitted that this was not a significant risk. LinkBermuda highlighted that the regulatory measures proposed by the Authority are already taken by service providers. LinkBermuda also stated that the Authority's proposed "*service provider of last resort*" remedy, where customers are automatically transitioned to a designated provider in the event of insolvency, is inappropriate as it removes the element of choice for customers.

Digicel

27. Similar to LinkBermuda, Digicel submitted that the service continuity risks that the Authority seeks to mitigate are highly unlikely to materialise, particularly with respect to damage to sub-sea cables. Therefore, Digicel communicated that the Authority's identified service continuity risks do not warrant regulatory intervention. Digicel further submitted that the imposition of such additional regulatory obligations may be counterproductive and run a serious risk of increasing the costs associated with providing the underlying electronic communication services.

28. Digicel also submitted that the Authority's proposals regarding the specific, and discrete issue of the risk of insolvency of ICOL holders, may have the undesired effect of deterring companies from making significant investments in the electronic communications market and thereby impact the services delivered.

OneComm

29. OneComm does not consider that the off-island connectivity market warrants the imposition of regulation and stated its concern that regulatory intervention creates not only a risk of unbalancing the current commercial arrangements, but also of negatively affecting future investment. OneComm submitted that the proposed regulatory measures seek to govern steps that are already taken by service providers as part of their proper course of business.
30. Similar to LinkBermuda and Digicel, OneComm highlighted the ineffectiveness of the proposed imposition of service continuity measures, as well as the unlikelihood of such risks materialising; thereby making such remedial measures unnecessary.
31. OneComm also argued that any "*service provider of last resort*" measure was unnecessary because of customers' ability to switch service providers, before or after insolvency, within a short timeframe. Furthermore, the imposition of a service provider of last resort is undesirable. By designating a specific service provider, the Authority may create a market outcome that the customer may not want.

TBI/Bluewave

32. TBI/Bluewave submitted that given Bermuda's dependency on international connectivity, it is reasonable to impose an obligation on sectoral providers to have adequate restoration arrangements in place, as well as access to other service providers' cables. However, TBI/Bluewave does not consider that an obligation to notify the Authority of the status of submarine cables is effective or necessary. It stressed the need for each sectoral provider to adopt an independent, considered approach so as not to encourage reliance on other service providers, as well as to take due account of the costs involved.
33. TBI/Bluewave strongly believes that disconnection upon insolvency of an wholesale ICOL holder should be severely restricted and subject to approval by the Authority. In addition, while TBI/Bluewave acknowledged that the 'service provider of last resort' may be an effective remedy, it also pointed out that insolvent licence holders will generally make arrangements with another ICOL holder to migrate customers.

Authority Response

34. The Authority considers the proposed remedies regarding service continuity to be good practice, without being onerous, given that operators are likely to already have procedures and plans in place to meet such regulatory requirements. The proposed remedies will either formalise existing processes or will address inadequate processes. The proposed remedies are discussed in further detail at Part III.1 of Section III below.

II.2 Government Authorization Fees

LinkBermuda

35. LinkBermuda did not support the Authority's proposal to introduce a tiered fee structure, stating that the current method of applying a flat percentage of annual revenue is an equitable approach. It contended that any change in how regulatory fees are calculated will not address concerns the Authority may have in relation to incentives to investing in the electronic communications sector. LinkBermuda stated that the cost of making significant network investments into network facilities is the real deterrent to entry, rather than the current level of fees.
36. However, LinkBermuda did acknowledge that an exception to the current structure may be considered with respect to non-compliant service providers; particularly where costs incurred by the Authority are the direct result of specific non-compliance of a service provider. In that situation it was suggested that the non-compliant service provider should bear the responsibility for the costs directly associated with its non-compliance, so as not to pass such costs on to smaller operators through regulatory fees.

Digicel

37. Digicel does not support the Authority's proposal to introduce a tiered fee structure on the basis that the proposal is discriminatory in nature by unfairly targeting larger service providers. Digicel submitted that the imposition of a tiered fee structure would act as a deterrent to further investment in the market, and ultimately affect the development of Bermuda's electronic communications sector.
38. Digicel also proposed applying fees to data operators such as Facebook, Apple, Amazon, Netflix and Google ("**FAANG**"). Thereby capturing the value of services passing through telecommunications networks operated by ICOL holders.

OneComm

39. OneComm does not consider that the introduction of a tiered fee structure is to be objective or reasonable and is discriminatory as it institutionalises a regulatory bias. OneComm believes it can be argued that such a proposed remedy is a clear indication of the Authority favouring certain service providers at the expense of others. It considers that service providers should bear the costs of regulation in proportion to revenues, and that this is achieved by the current system.

TBI/Bluewave

40. TBI/Bluewave strongly supports a move to a tiered fee structure and submitted that such a tiered fee structure should be at a group level and differentiate between Bermudian and non-Bermudian companies. It was further suggested that the latter pay an increased government tax element as part of the regulatory fees payable by ICOL holders.

Authority Response

41. The Authority notes both the request for equitable treatment of all operators and Digicel's and OneComm's concerns regarding the potentially discriminatory nature of the proposed fee structure. The Authority recognizes that it has an obligation to ensure that any proposed fee structure must not be discriminatory in nature. At the same time, the Authority also notes the importance of incentivising new entrants into the sector and promoting increased competition in the sector. As this should be in accordance with government policy, the Authority suggest that this is a matter for the government to address in its fee structure. The Authority has taken these considerations into account with its updated recommendations to the existing fee structure; as further detailed in its conclusions disclosed in Part III.2 of Section III below.
42. With regards to Digicel's proposal to impose fees on data operators such as FAANG, the current governing legislation (i.e. RAA, ECA) does not allow fees to be charged to such entities as they do not fall under the jurisdiction of the ECA and are not licence holders. In practice it would be hard for the Authority to proportionately apply fees against data operators such as FAANG. The Authority is not minded to recommend a change in the law to allow the Authority to impose fees on such data operators.
43. The Authority notes the comments made by TBI/Bluewave in relation to regulatory fees but is not minded to differentiate between Bermudian and non-Bermudian companies in relation to fees at this point.

II.3 Amendments to the RAA: Adjudication Process and Enforcement Process

LinkBermuda

44. LinkBermuda did not object to the Authority's proposal to amend the existing enforcement procedure and remove the requirement to appoint an independent presiding officer. LinkBermuda acknowledged that affected parties will have the opportunity to appeal any enforcement penalties imposed by the Authority; thereby providing a fair enforcement process.

Digicel

45. Digicel acknowledged that the current enforcement procedure is somewhat complex and timely. However, Digicel stressed that the enforcement process remains a credible process and therefore does not support the Authority's proposal to remove the legislative requirement to appoint an independent presiding officer. Digicel argued that removing this element of independence will cast doubt on the fairness and constitutionality of the process.

OneComm

46. While OneComm recognised that difficulties exist in the enforcement process set forth under the RAA, it did not support the elimination of the role of the independent presiding officer. Save for judicial review or appeal, which may not always provide practical relief, OneComm claims that this proposed

amendment to the enforcement process would effectively remove the only “check and balance” on the Authority's enforcement powers.

TBI/Bluewave

47. TBI/Bluewave agreed that the Authority should be able to take direct enforcement action, provided that the Authority actually has the legal authority and technical capabilities to do so (*i.e.* any enforcement action should be undertaken by suitably qualified and experienced personnel).

Authority response

48. The Authority disagrees with the comments made by Digicel. The proposed changes to the adjudication process and enforcement regime are in line with international methods of best practice. The Authority also acknowledges OneComm’s point that judicial review may not be an effective remedy for appealing certain regulatory enforcement decisions.
49. However, the Authority is under an obligation to operate in a fair and constitutional way. The proposed changes to the adjudication process and enforcement regime will be subject to a merit-based appeal process. The opportunities for affected sectoral providers to reconsider adjudication results, in accordance with section 82 of the RAA, and/or appeal an enforcement decision imposed by the Authority, in accordance with section 96 of the RAA, will remain unaffected by the proposed change.

II.4 Amendments to the RAA: Surplus Funds

LinkBermuda

50. LinkBermuda was generally supportive of the Authority's proposal to carry forward surplus funds from one fiscal year to the next, to the extent it does not result in higher fees for service providers in subsequent years. LinkBermuda stressed the need for the Authority to provide service providers with certainty with respect to fee planning, and for the Authority to responsibly use its discretion in the allocation of surplus funds in order to avoid circumstances where there may be insufficient funds available for certain projects.

Digicel

51. Digicel was supportive of a change in the handling of the Authority’s surplus funds. However, Digicel suggested that any funds not spent in any given financial year should be returned to ICOL holders at the end of each fiscal year to ICOL holders on a proportionate basis.

OneComm

52. OneComm is supportive of the Authority's approach regarding the proposed use of surplus funds. However, provided that the carrying forward of surplus funds will result in a tax decrease for all sectoral participants and is not used disproportionately to benefit some providers at the expense of others. OneComm also submitted that further consideration needs to be given to the Authority's budgetary process and use of surplus funds.

TBI/Bluewave

53. TBI/Bluewave supports the proposal to allow the Authority to carry forward surplus funds. However, TBI/Bluewave emphasised the need for the Authority to be held accountable for ensuring that its budgeting process is accurate.

Authority response

54. The Authority is of the view that the proposed amendment to allow surplus finds to be used in a subsequent fiscal year will afford it greater flexibility when funding projects that span more than one fiscal year; as further described in Part III.3 of Section III below.

II.5 Moratorium Review

LinkBermuda

55. LinkBermuda supported a review of the Moratorium on issuing ICOL licences, stating that such a review should allow parties to comment on criteria to be considered in issuing any additional ICOLs.

Digicel

56. Digicel stated that the removal of the Moratorium is not desirable at this stage as the Authority does not yet have an empirically supported view of the competitiveness of the market. Digicel also stated that it would provide comments with respect to licence management once the Authority has established its position with respect to the Moratorium, as the two issues are inextricably linked.

OneComm

57. OneComm is supportive of the removal of the Moratorium, and the Authority's proposal with respect to licence management, as increased competition in the sector will have a positive effect.

TBI/Bluewave

58. TBI/Bluewave considers the proposed lifting of the Moratorium to be somewhat lacking. It is argued that the Authority should present what it considers to be the market problems that a removal will address, as well as detailed alternatives to the complete removal of the Moratorium.
59. TBI/Bluewave also suggested that in the long-term a change towards a more relaxed licencing regime may cause a reduction in the number of players in the market, rather than increased competition.

Authority response

60. The Authority disagrees with the position advocated by Digicel and TBI/Bluewave regarding the lifting of the Moratorium on the issuance of new ICOL licences. The Authority notes that the Moratorium was originally imposed to create stability in the electronic communications sector during a period

regulatory reform. However, the Authority notes that having little control on the number of ICOLs, particularly the inability to introduce new ICOLs, has resulted in unintended consequences. The Authority can see no justification for maintaining an artificial limit on the number of licensees and notes that the absence of a limit on licences confers no disadvantage on end users.

61. In fact, the Authority believes that the limited removal of the Moratorium will enable the market entry of new sectoral participants, promote further innovation in the electronic communications market in Bermuda and have the underlying effect of improving competitiveness within the market.
62. This issue is further discussed in Part III.4 of Section III below.

II.6 Consumer Protection

OneComm

63. OneComm considers that further regulatory intervention is not warranted, or that certain underlying issues are not the responsibility of the Authority. OneComm specifically highlighted that the imposition of mandated service compensation for service outages will ultimately result in higher operational costs and higher prices for consumers.

TBI/Bluewave

64. TBI/Bluewave's responses reflect its general approval of the proposed measures specifically geared towards improving consumer protection. TBI/Bluewave is in favour of an obligation to offer a porting facility for email addresses, similar to a phone number, on the grounds that it is essential to ensure effective competition in the market.¹
65. However, TBI/Bluewave does not agree that all ICOL holders should be subject to mandatory service guarantees and compensations schemes; only sectoral providers found to possess significant market power ("**SMP**") should be subject to such regulation. TBI/Bluewave is of the opinion that the imposition of service outage compensation on sectoral providers not possessing SMP would unfairly increase competitive pressure on smaller competitors in the market.

Authority response

66. The Authority does not agree that compensation for outages would necessarily result in higher prices for customers. To the extent that such a remedy *could* have this effect, any ICOL holder with SMP may have retail prices constrained through *ex ante* regulation, as prescribed in the Market Review process.
67. Furthermore, in a competitive market, sectoral providers would not be able to increase their prices since their competitors would not have the same costs. This means that the risk of having to pay compensation for service outages should result in providers improving their quality of service and offer better

¹

In the Preliminary Report and Second Round Consultation, the Authority had proposed a forwarding service, not a porting service.

service levels to consumers. This is discussed further in paragraphs 147-154 below.

III FINAL REPORT IN RESPECT OF SECTION 17 RAA

68. Having considered the responses received from the consultation process, the results of in-depth sectoral research, and the Authority's review of all policies, legislation, regulations and administrative determinations applicable to the sector (as required under section 17 of the RAA), the Authority sets out below its conclusions on the following key issues following the Sectoral Review.
69. The Authority makes the following recommendations based on the responses received through the consultation process, as well as its own investigation and assessment of the Bermuda electronic communications market. The Authority notes that it has benefitted immensely from the engagement and input received from various stakeholders.

III.1 Service Continuity

70. Service continuity, and in particular the in-shore protection of submarine cable or "off-island" connectivity to Bermuda, was identified as a key issue in the Sectoral Review. The Authority has therefore considered the appropriateness of regulatory intervention in order to protect and ensure service continuity.
71. As set out in the Preliminary Report, the Authority has identified two separate risks that could impact service continuity:
- (i) *Damage to submarine cables:* The Authority has considered the ability for service providers to ensure service continuity in the event that its submarine cable infrastructure suffers due to a technical fault, or a particular submarine cable is cut or otherwise damaged.
 - (ii) *Insolvency of an ICOL holder:* As the financial stability of current ICOL holders will affect service continuity, the Authority has considered whether continuity of service for consumers and businesses, following an insolvency of any ICOL holder in Bermuda, can be ensured.
72. These issues are considered in turn below:

Damage to submarine cables

73. Bermuda is an isolated island, which together with its population, is heavily reliant on submarine cables to communicate with the rest of the world.
74. There are currently three submarine cables that land in Bermuda: two landing stations within close proximity to each other in St. David's, and a third landing station at Devonshire Bay. While all three cables arrive at different landing stations, the Devonshire Bay cable is viewed as being particularly at risk of being damaged. The Devonshire Bay submarine cable landing station is located at sea level, therefore this particular submarine cable faces increased exposure to damage in the event of flooding or hurricanes given its exposure

to the elements.² The remaining two submarine cables land in close proximity to each other in St. David's and may be susceptible to damage from the same event.

75. In its Preliminary Report, the Authority expressed its concern that Bermuda may be vulnerable in the event of damage to one or more of the submarine cables. This risk is exacerbated by the fact that there are currently limited options for restoring services on Bermuda via alternative routes. Ultimately, due to the possibility of lengthy interruptions to services on the island, damage to submarine cables presents a substantial risk to national security and to international commercial operations on the island - for example, Bermuda is seeking to position itself as a major FinTech jurisdiction.
76. In light of these concerns, in order to ensure service continuity, the Authority suggested in its Preliminary Report that it may be prudent to introduce regulations, ICOL conditions and legislative provisions in the ECA that would oblige operators of submarine cable infrastructure to put in place obligations to develop suitable restoration plans for dealing with any such event and the development of Regulations which would result in the creation of cable protection zones that would prohibit fishing, or anchoring near sub-sea cable lines, as far as reasonably practical.
77. The Authority set out the following two recommendations for such regulation:
- (i) Introduce reporting annual service continuity reporting obligations in the ECA, and the ICOL conditions for operators of submarine cable infrastructure. Whereby such operators would be required, both periodically and upon the request of the Authority, to provide details of the submarine cable operator's specific service restoration plans, specifically with regards to legislatively identified risks of major service interruption. Such restoration reporting would outline the processes required for ensuring service continuity in the event of damage to specific cables and where more than one cable has been damaged.
- Introduce legislative obligations and ICOL conditions, for operators of submarine cable infrastructure, which stipulate that they must enter into restoration arrangements, irrespective of whether it is likely or foreseeable that a sub marine cable might be damaged in the near future. The Authority also suggested the potential inclusion of a further requirement whereby operators must specify certain details of such arrangements (e.g. the relevant counterparties) in their annual reporting to the Authority.
78. The Authority considered imposing an obligation on the operators of submarine cable infrastructure to not unreasonably refuse access to spare capacity on their own cable in the event of damage to another submarine cable infrastructure. The intention behind this is to ensure that operators of submarine cable infrastructure have a recovery plan in place to ensure timely restoration of services.

² The other cables are less exposed to the elements as they are located above sea level and have greater exposure to water, wind and tree coverage during in climate weather (i.e. hurricanes).

79. In its Preliminary Report, the Authority invited views on whether the introduction of the above measures is a sensible, pragmatic and worthwhile approach. The Authority considered the responses received, following its Preliminary Report, and its final views on the issue of service continuity are set out below.

Continuity of service following insolvency

80. As identified in the Preliminary Report, continuity of service to customers, whether businesses or consumers, is also dependent on the continued solvency of the relevant ICOL holder. Therefore, the Authority has considered the risk of customers losing their service in the event that an ICOL holder becomes insolvent.
81. The Authority identified several factors that may suggest that the insolvency of an ICOL holder is not an appropriate concern for the Authority to address. In particular, the Authority considered:
- (i) Whether consumers can easily switch to another service provider in the event of the insolvency of their current provider:
 - a. In relation to mobile services, the Authority noted that the ability for customers to switch mobile service providers depends on their ability to port their existing telephone number to the new provider. This is dependent on whether the porting mechanism of the insolvent ICOL holder remains operational notwithstanding the insolvency.
 - b. In relation to other services, such as fixed internet access, the Authority considered if consumers would be able to manage with a substitute mobile service until a permanent replacement for the services provided by the insolvent ICOL holder has been put in place. However, the Authority noted in its Preliminary Report that, in the absence of regulatory intervention, the costs associated with using mobile internet services as a substitute for fixed internet access would be prohibitive, onerous and potentially expensive for consumers. The monthly limits on most mobile internet services creates a risk of users being cut off and/or incurring exorbitant fees.
 - (ii) Whether business customers need any additional protection or whether they should be responsible for making their own arrangements - for example, ensuring that they have in place adequate disaster recovery plans to safeguard service continuity.
82. The Authority considered available options designed to mitigate the risks of an ICOL holder's insolvency. The Authority noted the risk of insolvency of service providers such as OneComm or Digicel becoming insolvent to be relatively low, the Authority also acknowledged that such an event could have dramatic negative consequences for consumers. This risk is further compounded by the fact that some of the other smaller providers do not provide island-wide services.
83. The Preliminary Report discussed the following additional options to mitigate insolvency risks:

(i) Further monitoring or notice requirements:

- a) Under section 53 of the RAA, ICOL holders are required to submit certain information to the Authority (*i.e.* annual reports, financial statements and auditor's reports).
- b) The Authority considered recommending the imposition of an obligation (*i.e.* ICOL condition, legislative provision) to either require all ICOL holders, or all ICOL holders which offer a particular category/type of services (*i.e.* subject to SMP *ex ante* remedies), to submit periodic reports to the Authority containing sufficiently detailed information to allow the Authority to assess their financial stability. The information contained in the periodic reports could include, for example, profit and loss statements, balance sheets, cash flow statements, management accounts and certificates of good standing.
- c) To ensure the effectiveness of the submission of periodic reports, and mitigate the risk of insolvency, any new regulation would need to go beyond the requirements set out in section 53 of the RAA. The Authority is of the opinion that any new regulations or ICOL conditions would need to require ICOL holders to notify the Authority of any substantial changes in their financial position. This would expand the existing legislative obligation which requires ICOL holders to notify the Authority of any fact or market event likely to materially affect their ability to comply with licence terms., The proposed change(s) would afford the Authority the opportunity to identify, at an earlier stage, any potential risks of insolvency and to subsequently take appropriate action.
- d) The Authority also considered recommending the imposition of legislative obligations and ICOL conditions on ICOL holders to: (i) warn their customers that their service is at risk due to the potential insolvency; or (ii) engage with other sectoral participants in order to agree to a service continuity plan and put such plans in place prior to customers losing their existing service.

(ii) Disconnection Authorisation:

- a. The Authority considered the merits of introducing a requirement that ICOL holders must notify the Authority before disconnecting any wholesale customer, *i.e.* another ICOL holder, due to non-payment or insolvency.
- b. As an alternative, the Authority considered the imposition of a requirement whereby ICOL holders must first obtain permission from the Authority before effecting a disconnection. However, the Authority noted that such a requirement could be unduly onerous on the non-defaulting party, as that party would not only be incurring costs without payment at the time, but potentially also, in circumstances where there is no prospect of payment in the future.

- c. The Authority, therefore, specifically considered the possibility of drafting the requirement to always permit disconnection in the event of insolvency or breach of contract by one party *unless*:
 - i. the disconnection would materially threaten the Authority's ability to discharge its statutory duties (including to protect consumers and promote the development of the Bermudian economy); or
 - ii. the disconnection would have a material adverse impact on end-users (whether consumers or businesses) in Bermuda.
- d. To provide legal and commercial certainty for operators, the Authority considered the possibility of specifying a particular time period within which the Authority must respond to any notice of an intended disconnect. Where the Authority does not take any action in relation to the notice, within the prescribed time, the disconnection would be automatically permitted.
- e. In its Preliminary Report, the Authority noted that there is precedent in Bermuda for the approaches considered above. In particular, the Telecommunications Act of 1986, which has since been superseded by the ECA, contained a similar provision.

(iii) Service provider of last resort:

- a) The Authority considered the possibility of designating one or more ICOL holders as a "*service provider of last resort*". This remedy would involve the designated service provider(s) offering services on pre-agreed contractual terms to the customers of any insolvent ICOL holder.
- b) It was suggested that the concept of a "*service provider of last resort*" could include provisions whereby any customer of an insolvent service provider, that did not make alternative arrangements, would *automatically* be switched to the service offered by the "*service provider of last resort*" on the pre-agreed contractual terms. This would prevent any loss of service for such customers.
- c) The Authority noted that service providers could be designated as "*service providers of last resort*" either pursuant to a process set out in the regulation itself, or by granting the Authority a continuing power to make a designation if, and when, it appears to the Authority it is reasonably likely that a market participant is at risk of insolvency.
- d) However, the Authority ultimately concluded that the "*service provider of last resort*" proposal was unnecessarily intrusive and could potentially distort competition in the sector.

Conclusion on service continuity

Damage to cables and stations

84. **The Authority recommends that the Government of Bermuda enact regulation(s) designating certain underwater areas and/or zones as "protected" and preventing or limiting any commercial fishing or dredging from taking place over such areas and/or zones to reduce the risks of damage to submarine cables.** Further to this, the Authority is proposing to consult with the relevant ministries to assist in drafting such regulations. The Authority notes there are currently ongoing discussions within the Government of Bermuda regarding the development of sub-sea connectivity protection regulations. Recognizing the value in ensuring business continuity and the Authority's legislative obligations under section 12 of the RAA, the Authority would welcome further discussion with the relevant governmental and public bodies, including the ministries responsible for works and engineering and the environment, agriculture and fisheries.
85. Ultimately, such a recommendation would require the imposition of governing regulations. The Authority therefore recommends subsea cable protection regulations are enacted to achieve this goal.
86. **The Authority recommends to the Minister that ICOL holders that are in possession of submarine cables and/or provide services subject to SMP ex ante remedies should be required to have detailed service restoration plans and these should be reviewed periodically and made readily available at the request of the Authority.** Service restoration plans should set out the process for ensuring service continuity in the event of damage to submarine cables or other forms of outage. The imposition of mandated service restoration plans will enable the Authority to require remedial actions to be taken, including, but not limited to, obliging ICOL holders to enter into commercial agreements with alternative ICOL holders, in the event any submitted service restoration plan is deemed inadequate by the Authority. The Authority recommends that this performance obligation can be best imposed on identified sectoral providers through amendments to the ECA and/or through a General Determination (see paragraph 91 below). Pursuant to section 53(2) of the RAA, this amendment may require sectoral providers to submit restoration plans to the Authority, both periodically and on an ad-hoc basis.

Insolvency of ICOL holders

87. **The Authority recommends that ICOL holders should submit detailed periodic reports to the Authority that will allow the Authority to assess the financial stability of the ICOL holder,** to the extent that is not already provided for under section 4.6 of the Fee Filing Instructions).³ This may include, but is not limited to, financial statements, management accounts, any profitability concerns and warnings, or any legal proceedings that may compromise the ICOL holder's solvency. It is noted that the Authority is entitled

³

See the Fee Filing Instructions at Annex 1 of the Schedule to the General Determination: Process for Payment of Regulatory Authority and Government Authorization Fees, of 1 December 2016 (BR 109/2016), available at: <http://www.rab.bm/index.php/legislation-menu/tele-admin-determinations-landing-menu/1440-payment-of-fees-qd-december-2-2016/file>

to seek this level of information under existing ICOL conditions. The Authority recommends that this reporting obligation can be imposed on sectoral providers through the inclusion of additional ICOL conditions via a General Determination, in accordance with section 51 of the RAA or via a separate General Determination, in accordance with section 62 of the RAA.

88. **The Authority recommends that the existing ICOL conditions be revised so that ICOL holders are required to notify the Authority of any substantial change in their financial position** that is liable to affect their viability as an ongoing provider of electronic communication services in Bermuda. The Authority recommends that this reporting obligation be imposed on sectoral providers through the inclusion of additional ICOL conditions via a General Determination, in accordance with section 51 of the RAA.
89. **The Authority recommends to the Minister that the ECA be updated so that ICOL holders, particularly those offering services which are subject to SMP remedies, are required to notify the Authority before discontinuing any services to wholesale customers (i.e. other ICOL holders) due to non-payment or insolvency.** This could also be accomplished by amending the existing ICOL conditions. Under the proposed amendment to the ECA and/or the imposition of additional ICOL conditions, the Authority would have the power, if exercised within a specified time, to order the continuation of service for an interim period (i.e. maximum of 3 months). The non-defaulting party would only be refused permission to disconnect if the Authority is of the opinion that the disconnection would materially threaten the Authority's ability to discharge its legislative functions.⁴ The Authority recommends that this performance obligation can be imposed on sectoral providers through amendments to the ECA and/or through the inclusion of additional ICOL conditions via a General Determination, in accordance with section 51 of the RAA.
90. In accordance with section 51 of the RAA and section 16 of the ICOL, the Authority may modify ICOLs and the existing terms and conditions by either obtaining consent from the affected sectoral providers to modify from the ICOL holder, after consultation with the ICOL holder pursuant to section 51(2) of the RAA or through an administrative determination (including a General Determination) pursuant to section 9(2)(c)(i) of the ECA. As part of the General Determination process members of the general public will have an opportunity to submit their views, as set out in section 51 of the RAA. The consultation process will specifically seek input from sectoral providers regarding the proposed ICOL modifications.

III.2 Government Authorization Fees

91. The background to the setting of Government Authorization Fees (“GAF”) is as follows:

⁴ If, for example, a service continuity plan for end users were in place, then the Authority would not be likely to block the disconnection.

- (i) Pursuant to section 52(2) of the RAA, the Authority is required to submit a recommendation to the Minister to make regulations which establish the GAF payable in the upcoming fiscal year.
 - (ii) Section 52(3) of the RAA sets out that the GAF recommended by the Authority should give due consideration to:
 - i. The Regulatory Authority fees (“**RAF**”) imposed on the industry;
 - ii. The likely effect of the proposed fees on investment and employment in the sector;
 - iii. The extent to which the proposed fees will promote Bermudian ownership and employment; and
 - iv. Any other relevant factors.
92. Historically, electronic communications service providers have been charged the following two independent sets of fees: RAF and GAF. Under section 52 of the RAA, the Authority has a legislative obligation to make recommendations to the Minister regarding the level of GAF. Section 52(5) stipulates that the Minister, after giving due consideration to the recommendations made by the Authority, shall forward a recommendation to the Minister of Finance. Presently, GAF and RAF are calculated as a flat percentage of the relevant turnover of each ICOL holder. For the 2017/2018 fiscal year, GAF was based on 2.5% of Relevant Turnover (on an annual basis) and RAF was based on 1.75% of Relevant Turnover (total of 4.25% of Total Turnover). The updated fees for the 2018/2019 fiscal year are GAF of 3.5% and RAF of 1.75% of Relevant Turnover.
93. In its Preliminary Report, the Authority expressed concerns that the current RAF level may compound existing disincentives smaller market participants already face in respect of entry or expansion in the market. In particular, the Authority recognizes that it is difficult for smaller market participants in the Bermudian electronic communications sector as both wholesale charges and network infrastructure investment costs, relative to actual turnover, are high.⁵ For example, the Authority's research reveals that current ICOL holders are paying total fees (GAF and RAF) that range from approximately 10% to 40% of their total yearly operating expenditure, with smaller operators tending to be at the higher end of this range.
94. Further, for smaller market participants it may take time to generate profit, particularly in smaller niche markets. This means that any such fees, despite being the same percentage of turnover, may be a much higher proportion of profit generated. The imposition of a fixed percentage fee based on revenue, irrespective of the size or market share of the relevant ICOL holder can therefore result in overly burdensome regulatory fees for smaller providers. Due to economies of scale, the imposition of a fixed percentage fee based strictly on revenue can potentially have a disproportionate impact. Further analysis suggests that the fixed existing percentage fee can also act to

⁵ Any review of the current level of wholesale charges by SMP operators is to be addressed through the Market Review process, and not in this Sectoral Review.

constrain existing smaller businesses, especially local businesses, that may not have readily available access to outside capital or investment, and thereby limit their ability to expand. Failing to resolve this seemingly disproportionate regulatory fee structure may ultimately lead to reduced competition in the electronic communications sector.

95. The Authority considered alternative ways to calculate RAF charged to ICOL holders, with a view to enabling the Authority to better deliver on its statutory duties (*i.e.* to promote and preserve competition and to promote the development of Bermudian economy, Bermudian employment and Bermudian ownership).⁶ After reviewing the legislative provisions contained in section 52(3)(b) and 52(3)(c) of the RAA and section 19(2)(b) of the ECA, the Authority is of the opinion that to incentivise further investment in the electronic communications sector is to recommend to the Minister that a tier-based GAF structure be developed, as section 52(3) of the RAA and section 19(2)(b) of the ECA specifically require the Authority to consider various government policy objectives in making recommendations regarding the GAF. In contrast, the RAF are designed to cover the cost of regulating the electronic communications sector and the Authority's operating costs, as set forth in section 44(4) of the RAA.
96. The Authority has considered the merits of adopting a tier-based GAF structure where pre-determined bands of annual sales revenue will become subject to pre-determined rates of fees (*i.e.* revenue up to \$100k may be levied a fee at 0.5%, \$100k-\$250k may be levied a fee at 1%, \$250k-\$500k may be levied a fee at 2%). The practical application of this proposed tiered GAF structure will ensure that both smaller sectoral providers and larger sectoral providers will be equally able to benefit from the tiered structure and is effectively non-discriminatory.
97. The Authority is of the view that the proposed tier-based GAF structure would align with its legislative duty under section 12 of the RAA to promote competition in the electronic communications sector in Bermuda as it would encourage market entry and expansion by smaller market participants who may otherwise be deterred by high investment costs, as well as equitable treatment of operators as it will also mean that all ICOL holders may be obtain the benefit of the lower RAF for the lower band of their turnover. It would also be consistent with the requirements of section 52(3) of the RAA to consider certain objectives in making recommendations regarding GAF.
98. The Authority has considered the possibility of adopting a *de minimis* threshold, whereby providers whose turnover does not exceed a minimum threshold are completely exempt from paying GAF (*i.e.* revenue up to \$100k may be exempt from fees). At this stage, the Authority proposes to consult with the Minister and the Minister of Finance regarding the structure of the proposed tiered GAF structure.

⁶

RAA Section 12

Conclusion on GAF

99. **The Authority recommends the adoption of a tiered GAF structure which is based on Relevant Turnover to the Minister, in accordance with section 19 of the ECA and section 52 of the RAA.** If the proposed change is accepted by the Minister, the recommended tiered GAF structure would then have to be recommended to by the Minister to the Minister of Finance, in accordance with section 52(5) of the RAA.
100. **The Authority recommends to the Minister that the lowest band of the proposed GAF tiered structure be exempt from taxation.** The Authority proposes amending the GAF structure so that the first band of turnover, for all ICOL holders is exempt from taxation, with incremental turnover above that band charged at a higher rate.
101. Subsequently, *all* ICOL holders, irrespective of Relevant Turnover, will have equal opportunity to obtain the benefit of the tiered GAF structure for each band of their annual Relevant Turnover.

III.3 Amendments to the Regulatory Authority Act 2011

102. As stated in the Preliminary Report, the Authority considers certain provisions of the RAA should be amended to improve the efficiency of its operation and to remove, or eliminate, the possibility of unintended consequences. After conducting a review of the RAA, the Authority recommends that amendments be made to:
 - (i) *Enforcement process*: the provisions governing the enforcement process and the numerous provisions that refer to the enforcement process;
 - (ii) *Surplus funds*: amend the relevant legislation to afford the Authority the ability carry surplus funds forward to subsequent fiscal years;
 - (iii) *Consultation process*: the consultation process requires greater flexibility in its application; and
 - (iv) *Further Miscellaneous provisions*: the Authority has identified various sections of the RAA that require further revision in order to improve its regulatory activities.
103. These proposed changes to the RAA are discussed in further detail below. The miscellaneous provisions of the RAA that require further amendments or revocation are discussed at Annex 3 and 4.

Adjudication and Enforcement processes

104. A high-level overview of the current enforcement process was set out at Annex 1 of the Preliminary Report.
105. The Authority considers the operation of the current adjudication and enforcement processes to be somewhat counterproductive and cumbersome. The enforcement process is also problematic as it has the potential to place the Authority in a conflicted role when bringing an adjudication or enforcement case. In some circumstances the Authority may be faced with having to be both a party to an ongoing adjudication or enforcement process and the ultimate decision-maker.
106. The Authority highlights the following specific issues associated with the current enforcement procedure:
 - (i) Section 76 of the RAA stipulates that the existing enforcement process requires the appointment of an independent presiding officer. This officer must be independent, free from any conflicts of interest, a barrister, solicitor or attorney of good standing in the jurisdiction in which he or she practices and must also receive the approval of the Attorney General. The Authority notes that it has found the process of appointing an independent presiding officer to be extremely challenging due to the legislative requirements set forth in section 76 of the RAA, including the demand that it places on the Attorney General.
 - (ii) The Authority also notes that in practice the legislative requirement to appoint an independent presiding officer is conceptually very similar to a more conventional arbitration process. However, in a regulated context, international methods of best practice indicate that conventional regulatory arbitration processes usually function as part of a second stage appeal procedure, *i.e.* after the initial enforcement action has been imposed by the regulatory body. Therefore, the current enforcement procedure is somewhat unusual when compared to international methods of best practice.
 - (iii) Under the RAA:
 - a) Section 74 of the RAA stipulates that the Authority proceed by means of adjudication when conducting an enforcement proceeding or in any case in which the Authority is required to do by the RAA or the ECA.
 - b) In accordance with section 80 of the RAA, the presiding officer shall prepare a preliminary adjudicative decision and order, which shall be submitted to the Board and provided to the affected parties. It is the Authority, specifically the Board of Commissioners, that issues a final decision on the adjudication following the independent presiding officer's preliminary decision.
 - c) Pursuant to section 82 of the RAA, any party to an adjudication may seek reconsideration of the Authority's adjudicative

decision and order the grounds that they are: (i) inconsistent with the RAA, the ECA, regulations or general determinations; (ii) procedurally improper; or (iii) not supported by the administrative record. Any application for "*reconsideration*" must be filed within 21 days of the Authority's final adjudicative decision.

- d) Following the arrival of a final adjudicative decision and order the Authority, in accordance with section 93(5) of the RAA, may take enforcement action, which may include, *inter alia*, a warning, financial penalties or restitution.
 - e) In any case in which a sectoral participant appeals the imposition of an enforcement action pursuant to section 93, section 96(3) of the RAA stipulates that the appellant may seek a rehearing regarding all disputed matters of fact and law before the Court.
- (iv) As referred to above, the Authority recommends that the current adjudication and enforcement processes are revised to ensure that they are more efficient and lead to more effective results. The current enforcement process requires the adjudication to be conducted by a presiding officer, but then the Authority issues a final decision itself, after a recommendation from the presiding officer. The Authority subsequently considers and determines any effective appeals against that decision.
 - (v) The procedural inefficiencies associated with the requirement of a presiding officer has resulted in a less effective process which hinders the Authority's ability to address alleged breaches in a timely manner. This ultimately disadvantages non-breaching sectoral providers.
107. Following the Preliminary Report, the Authority considered that it would be preferable if the RAA was amended to allow the Authority, while strictly adhering to principles of due process, to take enforcement action directly against ICOL holders. This proposed change would bring the enforcement process in line with international methods of best practice.
108. The Authority proposes that there should be a process which can be used for both adjudication and enforcement decisions and for disputes resolution (i.e. disputes between two sectoral providers, or between a sectoral provider and customer). As such, the proposed enforcement process could apply to any situation involving a breach, or alleged breach, of an ICOL holder's obligations (e.g. legislative provisions, licence obligations, or SMP *ex ante* remedies). This proposed change could include, but is not limited to, the following situations:
- (i) an ICOL holder having breached, or being alleged to have breached, its obligations;
 - (ii) an ICOL holder's dispute with another ICOL holder, providing that one of the parties has breached, or it is alleged that it has breached, its obligations; and

- (iii) a customer's dispute with an ICOL holder, providing that such ICOL holder has breached, or it is alleged that it has breached, its obligations.
109. Under this new process the Authority would, following an investigation and consultation with relevant parties, make a decision on whether or not an ICOL holder is found to be in breach of any of its obligations (e.g. legislation, licence conditions, or SMP ex ante remedies) and decide on the appropriate consequences if so (i.e. financial penalties or performance directives).
 110. For the avoidance of doubt, where a dispute between parties (whether between two ICOL holders or between a consumer and an ICOL holder) does not involve an allegation of breach, the Authority would not have the power to mandate a resolution or a fine. The Authority would only have the legal power to make a binding determination if an ICOL holder were alleged to have broken a statutory or regulatory obligation. This would not of course prevent the Authority from acting as an informal mediator between disputing parties even if no breach of legal obligations is alleged.
 111. After an adjudication action has been taken by the Authority, affected parties would then have the opportunity to seek reconsideration, in accordance with section 82 of the RAA. If unsuccessful, the affected parties would be afforded the opportunity to appeal any subsequent enforcement decision to the Supreme Court of Bermuda, in accordance with section 96 of the RAA.
 112. It is suggested that any appeal against an Authority enforcement decision would be subject to a rehearing, in accordance with section 96(3) of the RAA. This means that the Supreme Court of Bermuda would be empowered to scrutinize all disputed matters of fact and law before the Court. Such rehearing process would ensure that the Authority's regulatory activities are in line with international methods of best practice and afford the Authority a much more efficient and effective enforcement and adjudication process.

Inability to carry over surplus funds

113. Section 41(1) of the RAA prescribes exactly how the Authority must treat surplus funds; subject to limited exceptions. After recouping any net losses for the fiscal year, and in accordance with section 40(5), the Authority must transfer any remaining surplus as follows: (i) 50% to the Consolidated Fund; (ii) 25% to paid-up capital; and (iii) 25% to the Authority's Reserve Fund.
114. Typically the Authority, in exercising due financial prudence, attempts to err on the side of caution in its spending throughout the fiscal year. This often results in a surplus at the end of the fiscal year in order to avoid a deficit. The likelihood of a surplus being generated is further increased by the fact that the Authority is required to begin estimating its likely operational costs several months in advance.
115. Therefore, section 41(1) of the RAA means that any net surplus that is available at the end of the Authority's fiscal year is not readily available for use by the Authority in the following fiscal year, even if such funds were allocated to projects that are still in process. The Authority has identified this as a key consideration that limits the Authority's ability to operate efficiently. The Authority recommends amending section 41(1) of the RAA so that net surplus

funds can be utilized for of any deferred projects, or projects that carry over from the previous fiscal years, as well as for start-up funding for any new sectors assigned to the Authority. An inability by the Authority to carry over net surplus funds may result in the Authority's budget for the following year being higher than necessary, and may lead to increased RAF fees for sectoral providers if there were to be a subsequent increase in regulatory fees as a result.

116. The Authority considers that if section 41 of the RAA were to be amended so that it is afforded the opportunity to use a surplus generated in one year (i) towards expenditures in the following year; (ii) for projects that span more than one fiscal year; (iii) in response to unforeseen sector developments or (iv) to fund new sectors; the Authority would be able to use excess funds in a more prudent manner.
117. Additionally, the Authority proposes that express language be included under section 111 of the RAA to allow the Authority to utilize initial and subsequent paid up capital to fund new sectors which may come under the remit of the Authority. The inclusion of this type of provision will ensure that the Authority has the financial capability and flexibility to build out, among other things, any appropriate regulatory framework(s).
118. See Annex 3 for further detail on the proposed changes to sections of the RAA relating to reserve funds, surplus, financial reporting and budgets.

Changes to the consultation process

119. The current consultation process set out in sections 69-73 of the RAA requires the Authority to obtain public responses at two stages: an initial Consultation Document and a preliminary report, recommendation or decision and order.
120. Section 72(1) stipulates that within a reasonable period after the conclusion of the initial consultation period that Authority shall issue (i) preliminary report; (ii) a preliminary recommendation; and (iii) a preliminary decision and order. Once the preliminary report, preliminary recommendation and preliminary decision and order are published, section 72(3) stipulates that the Authority shall provide the public with a reasonable period in which to file written responses. However, the practical application of these two requirements of the RAA can not only affect the Authority's ability to respond to market and technological developments quickly and effectively, but also allows potential respondents to delay the process by requesting extensions to the deadline to submit responses. The Authority has found that the public consultation process that is required as part of developing a General Determination can be lengthy and cumbersome, particularly where an issue requires a prompt resolution in response to market developments or where the subject of the consultation is not overly complex and does not require extensive deliberation. The Authority considers that the current process is not appropriate in all circumstances and therefore seeks to introduce an element of discretion to address this matter.
121. The Authority recommends an amendment to the consultation process set forth in sections 69-73 of the RAA so that it stipulates certain circumstances where Authority has the flexibility to bypass consulting on an initial Consultation Document. Subsequently, in certain circumstances, the Authority would have

the ability to proceed directly to a preliminary report, preliminary recommendation or preliminary decision and order which would be available to the public to provide written responses.

122. Such a change to the consultation process would not prevent the Authority from holding a longer consultation process where appropriate. This may include where a specific consultation process is legislatively prescribed, such as a market review. In these circumstances it may be that the process may only be amended subject to Ministerial approval.
123. The Authority further recommends that section 70(2)(f) be modified to be consistent with the language of section 72(2)(f) with the use of timelines as opposed to deadlines. This proposed legislative amendment would have the effect of removing any potential risk of judicial review in the event that the original anticipated deadline for completion is not satisfied.

Conclusion on the RAA

Enforcement process

124. As discussed above, the current enforcement process should be improved, as it is overly complex and may create inefficiencies and/or conflict issues between the different roles of the Authority and the presiding officer.
125. **The Authority recommends that sections 74-83 of the RAA should be amended in order to establish an adjudication and enforcement process whereby the Authority is afforded the authority to conduct investigations and impose initial enforcement action (i.e. financial penalties, performance directives), in accordance with international methods of best practice, the principles of natural justice and due process.** This would also include a power to issue an immediate cease and desist under certain situations where the magnitude of harm is so great that the Authority cannot wait to complete a full enforcement process before staying the action. Subject to the usual rules governing the process to challenge regulatory decisions under Bermuda law, any adjudicative decision would be subject to reconsideration in accordance with section 82 of the RAA. It must also be noted that under the proposed recommendation, any enforcement proceedings would be subject to a rehearing before the Supreme Court of Bermuda, in accordance with section 96(3) of the RAA. This process could also apply to the resolution of disputes involving any allegation that an ICOL holder has breached its legislative or regulatory obligations.

Surplus funds

126. **The Authority recommends that section 41 of the RAA be amended to afford the Authority the ability to carry forward any surplus funds and use them in a subsequent financial year.**

127. The Authority considers that the proposed amendments to section 41 of the RAA will ultimately improve the regulatory activities of the Authority and ensure that the funds of the Authority are used effectively and appropriately.
128. Further suggested amendments to the RAA concerning the use of regulatory funds are described at Annex 3.

Consultation process

129. **The Authority recommends that sections 69-73 of the RAA are revised and amended in order to streamline the consultation process.** The Authority proposes to the Minister that sections 69-73 set forth certain circumstances where the initial public initial consultation period, stipulated under section 71(1) of the RAA, may be waived. The Authority further recommends that section 70(2)(f) be modified to be consistent with the language of section 72(2)(f) with the use of timelines as opposed to deadlines.

III.4 Amendments to the Electronic Communications Act 2011

Inappropriate references to adjudication

130. Sections 41 and 50 of the ECA respectively set out the Authority's ability, following an "*adjudication*": to (i) enact amendments to spectrum licenses; and (ii) prohibit the use of any electronic communications network, radio apparatus, and certain equipment. See further Annex 3 for the text of these sections.
131. However, in each of these cases, in the absence of an alleged breach of obligations by a licensed sectoral provider, an adjudication process may be inappropriate as there may not be any matter or issue to "*adjudicate*" on. As such, these references to "*adjudication*" should be replaced with "*consultation*".

Moratorium Review

132. Under section 75 of the ECA, the Minister is required to direct the Authority to commence a review of the electronic communications sector no earlier than one year following, and no later than three years after, the commencement of Part 12 of the ECA. The purpose of such a review is for the Authority to determine whether any further liberalisation of the electronic communications sector, including the issuance of additional ICOLs, would be in the public interest. In making this determination, the Authority must consider the impact on investment and sustainable competition in the sector, and the benefits to consumers.
133. As a Moratorium is currently in place, no new ICOLs can be issued by the Authority until such a review has been carried out. As at the date of this Final Report, the Authority has been directed by the Minister to carry out a review of the Moratorium. The Authority deems that the review process undertaken with respect to the Sectoral Review, as it relates to the Moratorium, is sufficiently information to satisfy the review of the Moratorium on ICOLs.

134. The Authority noted that its current inability to grant additional ICOLs prevents the introduction of new service providers, and therefore competitors, from entering the electronic communications market. The Authority further observed that the Moratorium has contributed to a reduction in competition through corporate acquisitions that have further reduced the number of independently owned ICOLs.
135. In addition, the Moratorium has affected the Authority's enforcement powers. A consequence of the Moratorium is that the revocation of ICOL licences (e.g. for inefficient use, breach of ICOL conditions etc.) is a less attractive deterrent for the Authority to use, as an ICOL that is revoked cannot be reissued until the Moratorium is lifted. Therefore, any such revocation would simply have the effect of reducing the number of service providers and ultimately decrease competition in the market.
136. In the Authority's view, the artificial cap on the number of competitors in the electronic communications market is operating against the interests of the consumers of Bermuda, contrary to the Authority's legislative obligations set forth in the ECA. In particular, if one service provider raises prices, consumers have a limited pool of service providers to whom they may switch (especially if other service providers also raise prices), ultimately leading to artificially higher prices.
137. As referred to above at paragraph 60 above, the absence of a limit on the number of ICOLs confers no disadvantage on end users. Furthermore, when referring to international methods of best practice, it is suggested that in the absence of scarce resources, there is no need to limit the number of providers; the market will adjust itself as in the absence of a business opportunity, new entrants are unlikely.
138. In fact, the removal of the Moratorium would subsequently enable the market entry of new sectoral participants and further promote technological innovation in the electronic communications market in Bermuda. Removal of the Moratorium would also have the underlying effect of improving competitiveness within the electronic communications sector.
139. As part of the Sectoral Review, the Authority also carried out comparative research on the process by which electronic communications service providers are licensed or authorised to provide services in other comparable jurisdictions⁷. Whilst different jurisdictions take different approaches to issuing licenses in the electronic communications sector, it is noteworthy that not one of the jurisdictions reviewed have in place a Moratorium, or any similar restriction on the issuing of new licences. Therefore, the Moratorium in place in Bermuda is quite exceptional.
140. The lifting of the Moratorium would subsequently require the development of a licence application process under which new ICOLs would be issued, as set out below:

⁷ This research consisted of reviewing the licence application process for Canada, Eastern Caribbean, the British Virgin Islands and the European Union.

- (i) The Authority would review and evaluate applications for new ICOLs to establish whether the applicant is a fit and proper person to provide electronic communications services in Bermuda. Such applications would be submitted electronically on the Authority's website.
 - (ii) Prospective service providers would be required to provide relevant information such as financial, technical and legal documentation and a business plan.
 - (iii) To facilitate the review process, the Authority would be given powers to request clarifications from the applicant as well as any additional information required, further to its current information gathering powers.
 - (iv) Timeframes for each stage of the application process would need to be established, with the intention of striking an appropriate balance between the need for ensuring commercial certainty and technical capabilities of the applicants and the ability of the Authority to properly evaluate prospective providers.
141. In order to ensure that ICOLs are only awarded to applicants which are fit and proper to provide electronic communications services in Bermuda, the Authority would develop a minimum set of qualifying criteria. Such criteria may include legal requirements (*i.e.* valid legal entity or domicile requirements), financial and technical criteria. Such criteria would be justified on the grounds that they effectively assess each applicant with the specific intention of protecting consumers from unwittingly obtaining services from potentially disreputable persons, or from persons which may not have sufficient financing in place to ensure the continued provision of such services.
142. Upon lifting the Moratorium, the Authority would undertake the following:
- (i) the commencement of a general determination process to finalise the criteria required for eligibility of applicants for an ICOL and establish a general licence application process;
 - (ii) following the completion of the general determination outlining the new ICOL application process, the Authority would recommend to the Minister that an additional ministerial policy would need to be developed in support (*i.e.* issuance of new licences, amendments, and revocation); and
 - (iii) with respect to the results of the general determination and the new ICOL application process, further amendments would also need to be made to the existing Electronic Communications (Integrated Communications Operating Licence) Regulations 2013.
143. However, if after conducting the Moratorium review that that results dictate that the Moratorium be ultimately retained, or if only a limited number of new licences can be issued, the Authority considers that licences that have been terminated for any reason should not be irretrievably "lost". Instead, any such licences that are revoked or terminated should become available for the Authority to re-issue to new parties. For similar reasons, the Authority is of the opinion that the Authority should have the power to review any ICOL holder

which has not made efficient use of its licence for a specified period of time. Based on the results of this review, the Authority may require the sectoral provider to surrender its inefficiently used ICOL. This would address the issue raised at paragraph 135 above with respect to effective enforcement powers.

144. With respect to other issues raised in the Preliminary Report, the Authority does not consider it to be in the public interest to propose changes allowing the issuance of ICOLs which cover entire corporate groups structures, rather than an individual legal entity within a corporate group structure. Such an approach would be unworkable in practice given the complexities involved in monitoring compliance with the terms of an ICOL, especially with respect to the frequency within which corporate group structures change through acquisitions and divestments.

Conclusion on amendments to the Electronic Communications Act 2011

Moratorium Review

145. **The Authority recommends that, in accordance with section 75(3) of the ECA, the Moratorium on issuing new ICOLs be lifted.** The Authority is of the view that the consultation process completed under the present Sectoral Review has been sufficiently informative to discharge the Authority's obligation under Section 75(2) of the ECA and a separate Moratorium Report will be submitted to the Minister by 31st January 2019.
146. **The Authority subsequently proposes that to establish an application process for new ICOLs and to set qualifying criteria.** The Authority recommends that the licence application process should be established through a general determination and the revision of the existing Electronic Communications (Integrated Communications Operating Licence) Regulations 2013.

III.5 Consumer Protection

147. As part of the Sectoral Review the Authority also identified a number of potential measures that could be adopted in order to further enhance consumer protection in terms of:
- i. quality of service;
 - ii. customer service;
 - iii. billing issues; and
 - iv. contractual terms and conditions of services provided.
148. The Authority considered that one method of enhancing consumer protection would be to introduce regulations which establish provisions for outage compensation. These regulations would require service providers to offer compensation to consumers in the event of pre-determined periods of outages

or service failures. This could potentially be a fixed amount of money for a specified amount of outage time, irrespective of retail prices.

149. As set out in paragraph 66, the Authority considers that such fines should not result in higher prices for consumers. Instead, the Authority is of the view that in a competitive market prices will be constrained by competitors who have not made these compensation payments, whereas, in a non-competitive market, operators with SMP may have other obligations that constrain the price that they charge. In conjunction with the results of the Market Review, the Authority would address how outage compensation payments would be treated by SMP providers.
150. It is also noted that sectoral providers are currently under an obligation to report unplanned outages which cover a prescribed period of time (e.g. 24-hour outage, 48-hour outage). The Authority is therefore considering incorporating this outage compensation requirement as part of a consumer protection general determination (see paragraph 155 below) so that sectoral providers have further incentive to proactively manage the services they provide. As planned outages can be reported to the Authority, advance notice from a sectoral provider would be taken into consideration and save the sectoral provider from incurring financial penalties via outage compensation.
151. The Authority has also considered other forms of consumer protection measures including: (1) specific protections for vulnerable consumers, such as those whose income is below a certain level or are of a certain age or possess a mental impairment; and (2) requiring ICOL holders to adopt policies which provide specific services to assist vulnerable consumers. These are considerations that will be reviewed in-depth as part of a consumer protection general determination.
152. Finally, the Authority has also considered the potential effects caused by a customer's inability to retain their existing email addresses following a switch of internet service provider. The Authority is of the view that the inability to migrate e-mail addresses might act as a barrier which prevents and/or discourages customers from switching internet service providers.
153. A possible solution considered by the Authority is to require internet service providers to offer a low cost, e-mail forwarding service for a prescribed period of time following a customer's decision to switch to a different internet service provider. This proposed solution would allow incoming mail, sent to the customer's old email address, to be forwarded to the email address provided during the prescribed forwarding period.
154. The Authority also considered that another solution would be for customers to register their own domain names to allow them to port their email addresses immediately. However, most consumers are unlikely to have their own domain name and this is a significantly more complex and costly solution to implement than simply mandating email forwarding for a limited period as annual costs to maintain domain names increase.
155. The Authority proposes to consider these forms of consumer protection as part of a consumer protection general determination following the completion of the Sectoral Review.

Conclusion on consumer protection

156. **The Authority recommends to the Minister to consider amending the ECA and/or to amend ICOL conditions to require sectoral providers to compensate consumers, based on established levels of compensation, in the event of service failures resulting in service outages such as mobile outages or leased line outages.**
157. As part of a consumer protection general determination process, the Authority will seek views on what the prescribed outage periods should be, what the appropriate levels of compensation should be, the process for reporting service outages and subsequent investigation as well as whether it should be an automatic payment or subject to an application process.
158. **The Authority recommends to the Minister to consider amending the ECA and/or the Authority amend ICOL conditions to impose a requirement on ISPs to offer an email forwarding service for a nominal fee and for a prescribed period of time to customers who have switched, or wish to switch, to an alternative provider, in order to facilitate customer switching.**
159. The Authority considers that these improvements can best be achieved by the inclusion of legislative provisions in the ECA, a consumer protection general determination, and/or an ICOL general determination in accordance with section 51 of the RAA. An ICOL general determination may also include proposing changes to the existing ICOL conditions (see paragraph 160 below).
160. **The Authority also proposes to consider these and further consumer protection measures as part of a consumer protection general determination.** As part of a consumer protection general determination process the Authority will invite comments from the public on the proposed consumer protection provisions.

IV NEXT STEPS

161. The Authority has set out its final conclusions in Section III above and the steps it will consider following the completion of the Sectoral Review.
162. These include:
 - (i) making the proposed recommendations to the Minister, as set out in Annex 1 to this Final Report.
 - (ii) undertaking consultations to determine whether the changes as set out in Annex 2 of this Final Report should be made to the ICOLs and/or via general determination; and
 - (iii) considering any further proposals as set out in Annex 3 and 4.
163. The Authority notes that these recommendations are to cover the period until the next sectorial review of the electronic communications sector commences (i.e. 3 years).

Annex 1 – Proposed Recommendations

The Authority recommends to the Minister the following proposed recommendations required legislative changes:

1. Service continuity:

- In order to further reduce the risk of damage to submarine cables, legislation should be passed designating certain underwater areas and/or zones as "protected" and prevent any commercial fishing or dredging from taking place over such areas and/or zones. This will reduce the risks of damage to the submarine cables.
- The Authority proposes working with the relevant ministries to assist in any reviews or reports required, and to consult on the drafting of such legislation.

2. Amendments to the RAA - enforcement procedure:

- Amendments to the relevant provisions of the RAA (including sections 93(3) and (4) of the RAA) in order remove the role of the Presiding Officer and to establish a more streamlined enforcement and adjudication process.
- This amended process would allow the Authority to independently pursue enforcement action and actively resolve any alleged breach by a sectoral provider of its obligations. Subject to any rules governing the challenge of regulatory decisions under Bermuda law, the Authority's adjudicative decisions should remain subject to reconsideration in accordance with section 82 of the RAA and a rehearing of any enforcement decision shall remain subject to the Supreme Court of Bermuda, in accordance with section 96(3) of the RAA.
- The Authority also proposes an amendment allowing it to issue an immediate "cease and desist" in situations where the alleged harm is great enough to warrant it.

3. Amendments to the RAA - surplus funds:

- Section 41 of the RAA should be amended to allow the Authority to carry forward any surplus funds from one financial year to any subsequent financial year.

4. Amendments to the ECA:

- Sections 41 and 50 of the ECA should be amended so that any references to the "adjudication" process are substituted with references to "consultation".

The Authority also makes the following recommendations to the Minister:

5. GAF structure:

- In accordance with section 52 of the RAA and section 19 of the ECA, the Authority recommends that the Minister changes the GAF structure for ICOL holders.

- The Authority recommends the implementation of a tiered GAF structure so that all ICOL holders are charged fees at a certain level for the first tranche of Relevant Turnover up to a certain point, and a higher proportion of fees for Relevant Turnover above that point.
- This means that the ICOL holders with lower Relevant Turnover will have lower fees. This will also mean that all ICOL holders will obtain the benefit of the amended fee structure.
- The Authority would welcome the opportunity to discuss suitable percentages and turnover thresholds with the Minister.

6. **Lift the Moratorium:**

- In accordance with section 75(3) of the ECA, the Minister directed the Authority to conduct a review of the Moratorium on issuing new ICOLs and the Authority recommends that the Moratorium be lifted.
- If the Minister agrees with this recommendation then the Authority proposes the commence of a general determination, in accordance with section 51 of the RAA, which will outline the application process for the issuance of new ICOLs.

Annex 2 – Proposed Changes to ICOL Conditions and/or via General Determination

The Authority proposes to address the changes below through a general determination, in accordance with section 62 of the RAA, or via a modification to the existing ICOLs, in accordance with section 51 of the RAA.

1. Service restoration plans

- Requiring ICOL holders to have specific service restoration plans that should be reviewed on a periodic basis.
- Such plans should set out the process for ensuring service continuity in the event of damage to submarine cables, or another form of outage, or in the event of insolvency.
- The Authority should be entitled to require remedial action(s) to be taken in the event that any submitted service restoration plan is deemed inadequate by the Authority.

2. Submission of periodic financial reports

- Requiring ICOL holders to submit periodic reports to the Authority containing detailed information, which will afford the Authority the ability to assess the financial stability of the ICOL holder.

3. Notification of change in financial position

- Requiring ICOL holders to notify the Authority of any substantial change in their financial position that is liable to affect their continued viability as a provider of electronic communication services in Bermuda.

4. Notification prior to discontinuation of services

- Requiring ICOL holders to notify the Authority before discontinuing any services to wholesale customers (*i.e.* other ICOL holders) due to non-payment or insolvency.
- This should allow the Authority to require continuation of service for an interim period of up to 3 months with an ability to extend as necessary. In view of the potential impact of being refused permission to disconnect, the non-defaulting party would only be refused permission to disconnect if the Authority considered that the disconnection would materially threaten the Authority's ability to discharge its statutory duties.

5. **Compensation for Service Outages**

- Requiring ICOL holders to compensate customers in the event of service failures resulting in service outages such as mobile outages or leased line outages.
- As part of the consultation on this proposal, the Authority will seek views on what the appropriate level of compensation should be, for what duration, when it should be paid out, and whether it should be an automatic payment or subject to an application process.

6. **Email forwarding service**

- Requiring ICOL holders operating as ISPs to offer a customer an email forwarding service where that customer has moved to an alternative internet service provider, in order to facilitate customer switching.
- The Authority will consult on the details but proposes that the forwarding service should be provided at minimal charge and for a transitional period.

The actual wording and final determination on these changes will be subject to the outcome of the consultation process.

Annex 3 – Sectoral Review – Detailed Analysis of Law and Regulations

This Annex 3 sets out the process that the Authority undertook in reviewing the relevant regulatory framework, in accordance with its legislative obligation specified under section 17(1) the **RAA**.

Pursuant to section 17(1) of the RAA, the Authority has conducted a comprehensive review of the documents related to the governance of regulatory activities with respect to the electronic communications sector (the "**Review**"), including all policies, legislation, regulations and administrative determinations applicable to the sector.

Upon completing the Review, the Authority has concluded that **the documents listed in the tables below either need to be amended or revoked as appropriate.**

1. Public Consultations

Consultation	Authority comments	Proposal(s)
Regulatory Authority Email Mobility Consultation	The Authority reviewed this document and concluded that although a large amount of preliminary work was conducted, this project never reached the final general determination stage.	The Authority is proposing to implement an email forwarding requirement as part of its proposed consumer protection measures.

2. General Determinations

General Determination	Authority comments	Proposal(s)
Process for Payment of Regulatory Authority and Government Authorization Fees Policy (the “Fees Policy”)	<p><u>Submission of Annual Financial Statements</u></p> <p>Sectoral providers have an ongoing obligation to provide the Authority with their most recent year-end financial statements.</p> <p>However, in the Authority's experience, sectoral providers often fail to comply with the deadline for submission or submit management (unaudited) financial statements / draft audited financial statements, and fail to provide status updates regarding the submission of the final versions.</p> <p>Furthermore, the Authority has observed numerous circumstances where sectoral providers will only provide their financial statements following a number of reminders from the Authority.</p>	<p><u>Submission of Annual Financial Statements</u></p> <p>The Authority is of the view that active management of the Fees Policy is its underlying responsibility. In order to aid the Authority in managing its ongoing responsibility, the Authority considers that the development of further internal guidelines which outline the management process are in needed.</p> <p>In addition, the proposed amendments to the enforcement procedure, outlined in this Sectoral Review, will enable the Authority to manage non-compliance problems more effectively going forward (<i>i.e.</i> imposition of financial penalties and/or performance directives).</p>

General Determination	Authority comments	Proposal(s)
	<p><u>Treatment of late filing</u></p> <p>ICOL holders are required to file their most recent year-end financial statements within 60 days of their fiscal-end. In the past the Authority has experienced complications in enforcing this reporting obligation.</p>	<p><u>Treatment of late filing</u></p> <p>The Authority has also concluded that in the event audited, or finalized year-end financial statements, are not available within 60 days of its fiscal year-end, ICOL holders should have readily available management accounts. As the Directors have a statutory duty to present true and fair financial statements to the Authority, management accounts could be submitted to the Authority in order to meet the required deadlines. Any submitted management financial statements could then be supplemented by the audited financials once available. There should not in most cases be any material differences between the two.</p> <p>The late filing deadline for <u>audited accounts</u> may also need to be extended from 60 days to allow sectoral providers more time to comply with their obligations. If the deadline is extended, imposing penalties for missing it could be considered.</p> <p>Amending the legislation to reflect the possibility of filing management accounts rather than audited accounts should also be considered.</p>
		<p><u>Amendment of Fee Filing Instructions</u></p> <p>In light of the proposed amendments above, it may be necessary to revisit the Fees Policy and the supplemental Fee Filing Instructions.</p>

General Determination	Authority comments	Proposal(s)
		This would have to be completed by a General Determination and would subsequently have to be considered as part of the 2019/2020 Work Plan.
Regulatory Authority (Adjudication Rules) General Determination 2014 and Schedule	The Authority discusses the new enforcement/adjudication procedure at Section IV of the Final Report.	<p>As part of the changes discussed as part of the Sectoral Review, this General Determination should be revoked in accordance with section 62(2)(d) of the RAA.</p> <p>In support of the proposed legislative changes to the enforcement process, a further Adjudication Rules General Determination may need to be developed following the completion of the Sectoral Review</p>
General Determination: Criteria and Procedures for Assigning High Demand Spectrum	The purpose of this General Determination was to develop a process that would facilitate the allocation of HDS-1 Frequencies to sectoral providers. It established the procedures, criteria and conditions for the assignment of designated HDS-1 frequencies in the 850 MHz, 700 MHz and 2100 MHz bands in the form of a request for applications in the schedule.	<p>The process that this document is related to is now completed, and so is no longer directly relevant.</p> <p>However, this document may be used as a template for any future spectrum allocations and may subsequently require revision in the future.</p>
Regulatory Authority (Consumer Rights: Residential Contracts) General Determination 2014	<p>Due to limited Authority resources this General Determination has not been fully enforced.</p> <p>However, the Authority considers that the measures outlined above in Section IV of the Final Report will provide sufficient consumer protection going forward.</p>	<p>This Generation Determination should be revoked or amended in accordance with section 62(2)(d) of the RAA.</p> <p>Additionally, the Authority anticipates the commencement of the consultation process for a Consumer Protection General Determination in the 2019/2020 fiscal year which would address contract rights, amongst other things.</p>
Regulatory Authority (Electronic Communications Price	As part of the Sectoral Review, it was identified that this General Determination appears too burdensome on the	It is proposed that this General Determination be revoked.

General Determination	Authority comments	Proposal(s)
Comparison Website) General Determination 2015	<p>sectoral providers to regularly submit tariff updates and is not actively used by consumers.</p> <p>Given the associated financial costs and the administrative burden, the benefits of the price comparison website do not seem to outweigh the costs to the Authority.</p> <p>Ultimately it has been determined that consumers have other means of comparing prices (i.e. physical premises of sectoral providers, product descriptions and tariff lists on sectoral provider website).</p>	

3. Administrative Determinations

Administrative Determination	Authority comments	Proposal(s)
Change in BTC's Local Access Charge	<p>When introduced, the Bermuda Telephone Company Limited ("BTC") proposed that the Local Access Charge ("LAC") rate remain unchanged for five years, which would have allowed for the proposed rate to remain in effect until 2019.</p> <p>LinkBermuda opposed this, submitting that the dynamic nature of Bermuda's newly liberalized electronic communications market makes it hard to predict for such a long period how the cost components and future usage of the BTC network will change.</p> <p>The Authority agreed with LinkBermuda that a fixed term of five years for the LAC rate was too long since the sector changes rapidly due to technological advancements and</p>	<p>The Authority now suggests that this administrative determination should be revoked as it will be replaced with the results of the Authority's current Market Review.</p>

	<p>suggested that a three-year term for the LAC rate would be more appropriate.</p> <p>BTC subsequently provided a new cost model using the required three-year period, which was submitted on 10 February 2014. It was decided that the administrative determination would be subject for revision after three years, <i>i.e.</i> on 10th February 2017.</p>	
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4. Regulations

Regulation	Authority comments	Proposal(s)
Electronic Communications (Integrated Communications Operating Licence) Regulations 2013	<p>It is proposed in the Sectoral Review that the Moratorium currently imposed on the issuance of new ICOL licences be lifted in order to promote a more competitive electronic communications sector.</p> <p>Should it be lifted, this General Determination document will need to be reviewed and amended.</p>	<p>The Authority is proposing amendments to the following sections of the General Determination / standard ICOL template:</p> <ul style="list-style-type: none"> • Section 6 – Compliance; • Section 7 - Operation of Networks and Provision of Services; • Section 11 – to be amended in line with the new SMP Remedies; • Section 13 – Confidentiality of Personal Data: to be amended to comply with the Personal Information Protection Act ("PIPA"), coming into force at the end of 2018; • Section 14 – Consumer Protection: to be amended to comply with the Consumer Protection General

Regulation	Authority comments	Proposal(s)
		<p>Determination that is to be passed following the Sectoral Review;</p> <ul style="list-style-type: none"> • Section 16 - Modification: to be amended to afford the Authority greater flexibility to issue and modify ICOL licences without having to conduct an overly onerous public consultation; • Section 17 – Enforcement and Revocation: to be amended to reflect the proposed changes to the proposed adjudication process and subsequent enforcement proceedings outlined in this Sectoral Review; • Section 20 - Change of Control (to be expanded). <p>Consequently, administrative policies, procedures and guidance for the assignment of new ICOLs would have to be passed.</p> <p>Additionally, applicants will require formal guidance on the application process which is both transparent and based on relevant criteria.</p>

5. Internal Policies & Procedures and Ministerial Policies

Administrative Determination	Authority comments	Proposal(s)
Spectrum Policy Statement issued by the Government of Bermuda on 22 September 2014	The Authority considers the Spectrum Policy to be a rigid document.	Given that it is now outdated, the Authority is of the opinion that it is prudent to undertake a separate review of the Spectrum Policy to consider whether a new Frequency Allocation Table should be developed and whether other

Administrative Determination	Authority comments	Proposal(s)
(the “Spectrum Policy”)	When the Spectrum Policy was drafted it was initially intended to be amended frequently to afford the Authority greater flexibility in the assignment of Spectrum.	changes should be made in response to technological and market developments.
RAB Outage Report Procedures 2013 (the “Outage Reporting Procedures”)	<p>Under the Outage Reporting Procedures sectoral providers have an ongoing obligation to report any scheduled or unscheduled service outages to the Authority.</p> <p>In support of the Outage Reporting Procedures under condition 7.5 of the ICOL, licensees are compelled to report planned and unplanned outages of the Electronic Communications Networks and Electronic Communications Services in accordance with any requirements established by the Authority. However, the Authority has observed that sectoral providers have not complied with this reporting requirement.</p>	<p>The Authority considers the reporting important and is of the view that the proposed changes to ICOLs regarding the compensations for consumer outages and subsequent Consumer Protection General Determination will address this ongoing issue more effectively.</p>

Legislative Analysis – Electronic Communications Act 2011

TABLE OF CONTENTS

A. Inappropriate references to adjudication 50

B. Lifting of Moratorium and Liberalization of Types of COLs 51

C. Liberalization of Spectrum and Trading..... 52

A. Inappropriate references to adjudication

Relevant sections of the ECA

Area	Section	Text
Measures to ensure the efficient use of spectrum	41(1)	The Authority may at any time, following an adjudication, issue an order requiring a spectrum licence holder to release or vacate any or all frequencies covered by its licence in order to ensure efficient use of the spectrum and may re-licence the vacated spectrum to others.
	41(3)	The licence holder shall comply with any adjudicative decision and order duly issued by the Authority which mandates the vacation of a frequency or band of frequencies in accordance with this section.
Type approval procedures	50(2)	The Authority may – (a) following an adjudication, prohibit the sale, supply or use of any electronic communications network, radio apparatus or customer premises' equipment which does not comply with the requirements of any such standard.

Authority analysis

1. See paragraphs 130 and 131 of the Final Report.

B. Lifting of Moratorium and Liberalization of Types of COLs

Relevant sections of the ECA

Area	Section	Text
Integrated communications operating licences	18(2)	The Minister shall by regulations establish the maximum number of ICOLs, if the number is limited, and the procedures pursuant to which the Authority may grant ICOLs.
	18(5)	An ICOL may be revoked by the Authority for cause or based on a determination that revocation is necessary in the public interest; provided, however, that no such decision may be taken without -
Moratorium on the award of ICOLs and other public communications operating licences	75(1)	No earlier than one year following the date of commencement of this Part and no later than three years after such date, the Minister shall direct the Authority to commence a review to determine whether further liberalization of the electronic communications sector would be in the public interest, including by means of awarding any additional ICOLs or other types of public COLs, taking into account among other factors the impact on investment and sustainable competition in the electronic communications sector and the benefit to consumers.

Authority analysis

1. See paragraphs 132 of the Final Report.

C. Liberalization of Spectrum and Trading

Relevant sections of the ECA

Area	Section	Text
Spectrum liberalization and trading	39(1)	Spectrum licences and permits shall, to the extent practicable, allow the radio frequencies to which they pertain to be used liberally with all types of technologies and for all types of electronic communications, subject to the prohibition against harmful interference contained in section 42 in respect of any superior usage rights held by other authorized users of the same frequencies.
	39(2)	The Authority, following a public consultation, may make recommendations to the Minister proposing the liberalisation of specific frequencies or frequency bands in any or all of the following ways –

Authority analysis

2. The Authority's experience in managing Spectrum licences, and liberalizing radio frequency usage, is that the current process is onerous and does not afford the Authority the ability to quickly and effectively respond to technological developments or promote effective competition in the sector.
3. If the changes to the consultation process (see paragraphs 119 to 123 of the Final Report) are made it should become easier in the future for the Authority to ensure further spectrum liberalization measures are taken.

Legislative Analysis – Regulatory Authority Act 2011

A.	Use of Regulatory Funds to Regulate Electronic Communications Sector	54
B.	Annual Financial Reporting Restrictions.....	56
C.	Presiding Officer	58
D.	Dispute Resolution.....	59
E.	Investigation and Enforcement	60
F.	Consultation Process	61

A. Use of Regulatory Funds to Regulate Electronic Communications Sector

Relevant sections of the RAA

Area	Section	Text
Funds of the Authority	38(2)	The Authority may create special funds with the express approval of the Minister of Finance.
Reserve Fund	40(1)	The Authority shall establish a fund to be known as the Regulatory Authority Reserve Fund.
Net Surplus	41(1)	<p>In any year in which the Authority realizes a net surplus, the Authority, after recouping any net losses pursuant to section 40(5), shall transfer the remaining surplus in the following manner –</p> <ul style="list-style-type: none">(a) 50% shall be transferred to the Consolidated Fund(b) 25% shall be transferred to paid-up capital of the Authority; and(c) 25% shall be transferred to the Reserve Fund
Initial Paid-Up Capital	111	On or before the day on which the Board conducts its initial meeting, the Government shall make an initial payment of \$2 million as paid-up capital, which shall be used -

Authority analysis

1. The Authority is of the opinion that section 38 of the RAA restricts the Authority from exercising discretion in creating special funds. The Authority is of the view that it should be able to exercise its discretion to create such funds for contingencies, as long as it is appropriate and in accordance with Generally Accepted Accounting Principles (GAAP). This should also apply to section 40 (reserved funds).
2. The Authority also considers that it should have greater flexibility to develop contingency funds to promote and improve upon the Authority's regulatory activities.
3. Furthermore, the Authority is of the opinion that section 40 requires further elaboration as the Reserve Fund should have a legislatively defined purpose. This proposed amendment would directly affect the Authority's ability to use its Reserve Fund towards regulatory activities that were not forecasted in the previous fiscal year. Unexpected projects or sectoral events occur frequently throughout the fiscal year; therefore it is recommended that the liberalization of the use of the Reserve Fund is an ideal outcome as it will further promote the Authority's overriding objectives. The proposed amendment is intended to enable the Authority to use any realized net surplus with greater flexibility.
4. This is further discussed at paragraphs 113 to 118 of the Final Report.

5. The Authority aims to operate a balanced budget and would therefore be expected to have minimal retained surplus at the end of the financial year. This ultimately raises the question of how any contingency fund would be financed. Consideration should be given to this question when amendments are made.

Additionally, the Authority proposes that express language be included under section 111 of the RAA to allow the Authority to utilize initial and subsequent paid up capital to fund new sectors which may come under the remit of the Authority. The inclusion of this type of provision will ensure that the Authority has the financial capability and flexibility to build out, among other things, any appropriate regulatory framework(s).

B. Annual Financial Reporting Restrictions

Relevant sections of the RAA

Area	Section	Text
Work plan and budget	43(2)	Not later than six months before the commencement of each financial year, the Authority shall initiate a public consultation regarding its work plan for the upcoming financial year, which shall include –
	43(3)	Not later than three months before the commencement of each financial year, after giving due consideration to the comments submitted in the public consultation specified in subsection (2) shall submit to all Ministers responsible for regulated industry sectors and to the Minister of Finance -
Accounts and audit	46(1)	The Authority shall – (c) for each financial year, prepare financial statements in such form as the Accountant General may direct.
	46(2)	The accounts of the Authority shall be audited by the Auditor General or such other auditor as may be appointed by the Auditor General.

Authority analysis

6. The Authority considers that these sections place an obligation on the Authority to accurately forecast all work expected to commence during the upcoming fiscal year, half-way through the Authority's current fiscal year.
7. The combined effect of sections 43(2) and 43(3) of the RAA is that the Authority has 3 months to commence the consultation process, consult the public for comments on the proposed work plan, adopt these public comments as part of the work plan, receive Board approval and subsequently submit to the Minister for approval. Consequently, any estimations that are made are speculative and subject to forecasting errors. The documents will therefore be of limited accuracy and value.
8. Additionally, the supporting subsections to sections 43(2) and 43(3) do not grant the Authority much flexibility in accounting for unexpected projects and budgets. The Authority has therefore found that even though it may allocate a portion of its budget towards unexpected projects, this approach to developing the Work Plan restricts it in performing its regulatory activities. The legislative provisions currently governing the Work Plan are overly restrictive as market developments occur rapidly and cannot be accurately predicted so far in advance.
9. The consultation period affects the Authority's ability to respond to market developments and impacts the use of funds on regulatory activities that were not forecasted and/or planned for.

10. **It is also proposed that the subsection 46(2) is removed on the basis that it would be redundant following the proposed amendment to subsection 46(1).** Removal of subsection 46(2) would afford the Authority more control over the timely delivery of its audited financial statements.

C. Presiding Officer

Relevant sections of the RAA

Area	Section	Text
Presiding Officer	76	In any adjudication, the Chairman shall select a qualified person to serve as a presiding officer, provided that the person selected-

Authority analysis

11. See paragraphs 102 to 112 of the Final Report.

D. Dispute Resolution

Relevant sections of the RAA

Area	Section	Text
Resolution of disputes between users and sectoral providers	57(3)	If the parties are unable to resolve a dispute through direct negotiation within 60 days, or within the time period specified in any applicable dispute resolution procedure contained in an approved code, the end-user may file a complaint with the Authority, which shall contain relevant information, provided that any complaint filed with the Commissioner pursuant to this section must be filed –
	57(4)	If the Authority is unable to facilitate an informal resolution of the dispute within 30 days after receiving the complaint, the Authority shall – (b) conduct an adjudication;
Resolution of disputes between sectoral providers	58(3)	If the parties are unable to resolve a dispute after 90 days of direct negotiation, the sectoral provider may file a complaint with the Authority which shall contain relevant information, provided that any complaint filed with the Commissioner pursuant to this Section must be filed –
	58(4)	(4) If the Authority is unable to facilitate an informal resolution of the dispute within 60 days after receiving the complaint, the Authority shall – (b) conduct an adjudication;

Authority analysis

12. **The Authority is of the opinion that reducing the negotiation period to 30 days in both section 57 and 58 of the RAA would enhance the timely resolution of disputes.** It is proposed that this period be shortened as part of the changes to the adjudication process discussed above.
13. **It is also suggested that sections 57(4)(b) and 58(4)(b) are removed to reflect the changes to the adjudication process proposed as part of this Sectoral Review.** See further paragraphs 130 and 131 of the Final Report.
14. Additionally, sections 57 and 58 **should stipulate that if an informal resolution of the dispute is not achieved with the prescribed period of time, the Authority may conduct an investigation into any alleged breach by a sectoral provider.** This proposed alternative to the dispute resolution process would also encourage sectoral providers and consumers to negotiate in good faith because of the possibility that the Authority might otherwise impose a legally binding resolution.

E. Investigation and Enforcement

Relevant sections of the RAA

Area	Section	Text
Investigative hearings	90(1)	In any case in which the Authority chooses to conduct an investigative hearing, the Chairman shall designate a presiding officer.
Failure to comply with orders issued by a presiding officer	101	Any sectoral participant that knowingly fails to comply with any order issued by a presiding officer in an adjudication or an investigative hearing commits an offence triable either way and is liable on conviction to a fine of up to \$20,000.00 or imprisonment for up to six months, or both.

Authority analysis

15. **It is proposed that these sections be either removed or amended to reflect the proposed changes to the adjudication process** (*i.e.* removal of Presiding Officer). See further paragraphs 102 to 112 of the Final Report.

F. Consultation Process

Relevant sections of the RAA

Area	Section	Text
Consultation document	70(2)(f)	The consultation document shall include – the deadline for completion of the consultation process and the issuance of a final report, recommendation or decision and order;
Consultation document	72(1)	Within a reasonable period after the conclusion of the initial consultation period, the Authority shall issue -
Preliminary and final reports, recommendations and decisions	72(3)	The Authority shall provide the public with a reasonable period in which to file written responses to the preliminary report, recommendation or decision and order

Authority analysis

16. See paragraphs 119 to 123 of the Final Report.

Annex 4 –Further Legislative Changes

The Authority proposes the following general legislative changes.

REGULATORY AUTHORITY ACT 2011- SUGGESTED AMENDMENTS

No.	Section	Existing Legislation	Proposed Amendment	Rationale
1.	30	Any public officer who accepts employment with the Authority, or is transferred to the Authority, may elect to continue to participate in the Government pension fund and health insurance plan as if he were continuing in the service of the Government, and shall remain subject to the Public Service Superannuation Act 1981.		Remove “and shall remain subject to the Public Service Superannuation Act 1981.” Any public officer who continues to receive a Government Health Insurance benefit provision creates the potential for employment benefits to be lost.
2.	33(6)	In any case in which the Authority grants a request for confidential treatment, the information may only be disclosed -	Add provision to expressly include to consultants, advisors, agents and/or representatives	The Authority often needs to engage external experts in order to carry out its functions.
3.	33(6)(e)	Where necessary to conduct a public consultation or adjudication, to specific parties pursuant to a non-disclosure agreement or protective order	Amend to state “where necessary to exercise the functions of the Authority”	The Authority should be able to act freely, for example disclosure of information.
4.	42(3)	The Authority shall maintain the Reserve Fund in – (a) Interest-bearing banking accounts; (b) Certificates of deposit; and (c) Treasury bills issued by the Government of the United States of America	Amend the current requirement that the Authority invest its Reserve Fund in <u>all</u> 3 types of specified investment instruments to allow the Authority the flexibility to invest in <u>any or all</u> of them.	The existing requirement is too restrictive.
5.	47(1)	The Authority, within 30 days of receiving the auditor’s report referred to in section 46(6), shall prepare and transmit to each Minister responsible for a regulated industry sector -	Amend the Authority’s current requirement of 30 days to 90 days of receiving the auditor’s report referred to in section 46(6), to prepare and transmit to each Minister responsible for a regulated industry sector— (a) a report on the operations of the Authority during the preceding financial year, including a discussion of— (i) the major activities undertaken; (ii) any significant deviations from the work plan adopted by the Authority pursuant to section 43; and (iii) the results achieved; and	In addition to the Authority’s current Electronic Communications Code, the Authority’s powers should be expanded to regulate the telecommunications sector in 2016. Further, the Authority’s assignment of the Broadband and Digital Communications sectors being assigned to the Authority in the near future while the Authority is still in its infancy. Therefore, the Authority’s current 30-day requirement should be amended to 90 days to prepare and submit the report.

			(b) a copy of the annual financial statements of the Authority certified by the auditor.	
6.	48(5)	<p>In any case in which the Authority grants a licence, permit or other authorization, the Authority, consistent with sectoral legislation may –</p> <ul style="list-style-type: none"> (a) Modify; (b) Authorize the assignment of; (c) Authorize the transfer of control of; (d) Suspend; or (e) Revoke; <p>The licence, permit or other authorization, pursuant to procedures to be established by the Authority be general determination</p>	Change <i>general determination</i> to <i>administrative determination</i>	This would allow the A and ensure that the A technological develop
7.	64, Supporting Legislation: 74,75,80,93	<p>In any case in which the Authority concludes that a sectoral participant is acting in a manner that is not in accordance with its duties and obligations under this Act, sectoral legislation, any regulations, any administrative determination, an adjudicative decision or any authorization, the Authority may direct the sectoral participant to take, or refrain from taking, such actions as the Authority reasonably determines to be necessary to ensure that the sectoral participant acts in conformity with its duties and obligations.</p>	<p>Enable the Authority to enforce a Direction under s. 64 to penalize sectoral participants for a breach of sectoral legislation and/or Administrative Determination without first being required to enter into an adjudication process.</p> <p>The adjudication process should be reserved for the resolution of disputes (i) between sectoral providers; and (ii) between sectoral providers and end users; or for investigation or other ancillary purposes.</p> <p>Any sectoral provider who is dissatisfied with the Authority's decision to penalize and/or the nature or extent of the penalty will be entitled to seek reconsideration under section 82 as if it were an adjudication under that section.</p>	<p>The competitive environment (sectoral providers operate den of swift action) to dea</p> <p>Consumers should al practices of pow</p> <p>Addressing the issue in a timely manner providers.</p>
8.	71(f)	<p>The administrative record in a public consultation shall include –</p> <ul style="list-style-type: none"> (f) any additional material, not generally available to the public, on which the Authority relied; 	Add "except where confidential" to provision	Self-explanatory

9.	71(g)	The administrative record in a public consultation shall include – (g) any reports, recommendations or decisions, whether preliminary or final, adopted in the course of the public consultation; and	Add “final” between “any” and “reports” to limit the scope to final versions of these documents except when it concerns reports, recommendations or decisions for the purposes of section 72.	The draft versions of has the potential of versions and contrib process should not be
10	93(5)	If the Authority determines that a sectoral participant has committed a contravention, the Authority may take on or more of the following actions – (a) issue a warning; (b) direct the sectoral participant to take such actions as may be necessary to remedy the violation; (c) impose financial penalties in accordance with section 94; (d) require the sectoral participant to make restitution to any person directly injured as a result of the contravention; or (e) issue a decision and order modifying, suspending or revoking any authorization held by the sectoral participant.	Add “, through the procedures set forth in subsections (3) or (4),” after “If”	There has been some under subsection (4) subsection (5) because with subsection (3). To clarify this.
11	95(1)	In lieu of taking enforcement action pursuant to section 93, the Authority may issue a decision and order accepting, from any persons subject to enforcement action, an undertaking to take or not take specific actions	Add a provision to allow sectoral participants to propose voluntary penalties/fines as part of their undertaking in lieu of enforcement and/or undertake to pay a penalty if they violate the undertaking.	This would give the u