



Public Consultation Document on the Licensing of the
Cable Consortium of Liberia.

Liberia Telecommunications Authority
9 September 2011

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

After relying for many years on satellite services for international communications, an undersea fibre cable will shortly be landing in Monrovia. The Africa Coast to Europe (ACE) cable will provide both lower cost and higher bandwidth, which has the potential to bring substantial service improvements to Liberian customers. The Cable Consortium of Liberia Inc. (CCL) has been established to host, construct and operate the cable landing station and supply bandwidth to service providers in Liberia. CCL is a special purpose vehicle, established through a public-private partnership: its shareholders are Government of Liberia (GoL) – 60%, Liberia Telecommunications Corporation (Libtelco) – 20%, Lonestar Communications Corporation (Lonestar) – 10%, and Cellcom Telecommunications Inc (Cellcom) – 10%.

The Liberia Telecommunications Authority (LTA) welcomes the imminent arrival of ACE and the establishment of CCL to manage the international landing station and facilitate distribution of bandwidth around the country. However, the LTA recognises that the full benefits of the new facility will only be realised if there is open access to the international cable, meaning that all service providers in Liberia must have access on reasonable and non-discriminatory terms. The principle of open access to international cable landing facilities is one that the LTA has signed up to as part of the WATRA (West Africa Telecommunications Regulatory Authorities) Regulatory Guidelines on Access to Submarine Cables.

It is LTA's responsibility under the Telecommunications Act of 2007 (the Act) to determine which operators in different markets in Liberia do or may hold a position of dominance¹ in those markets, and if so, whether they are or they may in future abuse that position by acting in a way that could substantially prevent or lessen competition in the relevant market. In particular it is LTA's responsibility to give effect to the principle of open access by determining which market CCL will operate in and determining if it may or will be dominant in that market, and if so, imposing appropriate remedies on CCL, whether by license conditions or otherwise.

1.2 REPORT STRUCTURE

The purpose of this document is to open for public consultation the LTA's analysis of the market within which CCL will operate and its preliminary conclusions on the controls that should be imposed on CCL. After an initial review of the legal and regulatory context (Chapter 2), the report

¹ In this report the term "dominance" and "dominant" are used in preference to Significant Market Power (SMP), but the terms may be seen as synonymous. A dominant service provider is defined in the Interconnection Regulations, 2009, as a service provider that has been designated as having SMP. SMP means a position of economic strength, acting either individually or jointly with others, permitting a service provider to act to an appreciable extent independently of customers or competitors, or otherwise constituting a position of dominance in one or more identified telecommunications service markets.

is divided into two parts: the first part (Chapters 3-5) deals with the formal market analysis, and the second part (Chapters 6-8) concerns the licensing arrangements.

In Part I, the market in which CCL will operate is defined (Chapter 3), and the LTA assesses whether CCL (or/and its constituent owners) may be in a position of Significant Market Power (Chapter 4), before determining appropriate controls for such dominance (Chapter 5) in order to give effect to the obligations and responsibilities of the LTA under the Act, and particularly under section 11 and Part VIII.

As this is the first market analysis undertaken by the LTA, the consultation includes questions about the general approach as well as the specific application of this approach to CCL. This is because the LTA intends to follow a similar approach to other market analyses that may be required in the future.

Part II addresses the question of how best to license CCL in terms of the Act and applicable regulations currently in force. In the interests of efficiency and saving time, it also considers what license fee might be appropriate and what license conditions might apply in order to give effect to the recommended remedies set out in Part I.

We begin by considering what might be appropriate license conditions (Chapter 6), we then consider LTA's powers and functions in relation to determining appropriate licence fees (Chapter 7) and finally, we set out the terms and conditions proposed to be included in the license (Chapter 8).

1.3 CONSULTATION PROCESS

In accordance with the Guidelines for Consultation Process to develop Regulations of 2009 (Consultation Guidelines) the LTA has formed a Consultation Group comprising international advisors, who will advise the LTA on the process for licensing CCL and determining whether or not CCL is dominant in a specific market, once the market has been defined. LTA has determined CCL and the cable landing point to be operated by CCL to be matters of priority for regulation consistent with the recent work of WATRA on developing regulatory guidelines for access to submarine cables in West Africa.

The LTA seeks the informed views of stakeholders and other interested parties on this analysis and the resulting proposals. All comments are welcome, but it would help the analysis of responses, if comments were referenced to the relevant question numbers in this document. Please note that all responses may be published, in whole or in part, by the LTA. Respondents should therefore indicate if they consider any specific information contained in their responses to be commercially confidential. The LTA will deal with such data in accordance with its Confidentiality Regulations.

The period for comments runs from 9 September to 7 October 2011. The LTA undertakes only to take account of comments received within this period. Comments should be addressed in writing, and sent preferably by email, to either of the following addresses:

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2 LEGAL AND REGULATORY CONTEXT

Effective regulation is no longer driven by force of law alone, but by observation of market practice and appropriate responses from regulatory authorities to activities of operators in the market and their effect on consumers. The usual policy goals include that there is availability of a number of high quality services to choose from, at reasonable prices, meeting demand at the level of both the sophisticated and the unsophisticated user.

LTA's challenge is how to facilitate entry by CCL to the market in the most efficient and legally correct way, whilst acknowledging that CCL's formation, activities and the distribution of ACE capacity by CCL are all entirely new matters in Liberia and likely to require special consideration. This report recommends the adoption of international best practice in licensing, maintaining the objectives and giving effect to the principles set out in the Telecommunications Act, 2007 (Act).

Licenses in Liberia at this time are not uniform in that licenses granted to various operators are not identical in their terms and conditions. This is largely because of the ad hoc nature of the award process in the past, as the Act was implemented. LTA intends to use this opportunity to introduce a template for licensing in the future, to ensure consistency across license types and certainty for investors and operators alike.

2.1 LICENSING UNDER THE ACT

The Liberian Telecommunications Authority (LTA) is empowered under Article 8 of the Telecommunications Act of 2007 (the Act) to "*exercise all powers and functions given to it under this Act*" and this therefore includes the power to exercise those functions set out in Article 11. Specifically LTA is mandated to:

- issue individual and class licenses including licenses for international telecommunications facilities and services and design and implement the processes for issuing such licenses;
- make regulations and rules for such matters as are contemplated by or necessary for giving full effect to the provisions of this Act and for the due administration thereof by LTA; and
- take such other actions as are reasonably required to carry out this Act and all related regulations, rules and orders, and to perform such other responsibilities, functions and powers conferred on the LTA under any other law.

Under Article 16 of the Act, LTA "*shall determine terms, conditions, procedures and criteria for granting telecommunications licenses in accordance with the Act and any related regulations, rules, orders or notices*". This section sets out procedures for the issuing of a license and makes it clear that the process of licensing should be public for each type of license.

2.2 LICENSING UNDER THE LICENSING REGULATIONS, 2008

Section 4 of the Licensing Regulations, 2008 (Licensing Regulations) stipulates that:

“The provision of telecommunications services to the public and the ownership or operation of telecommunications networks used to provide telecommunications services to the public shall require an Individual License where:

- (a) the licensee requires or is granted by LTA exclusive use of scarce physical or other resources, including radio spectrum (which shall be subject to, and require, a separate radio spectrum license or general authorization); or*
- (b) the licensing procedures specified in these Regulations indicate that the licensee will be subject to individually defined obligations or will have the benefit of individually defined rights”.*

Individual licences are also typically granted for activities that have or that may have a significant socio-economic impact. Any license proposed to be granted in relation to “essential facilities”² such as a cable landing station, would need to be in the form of an individual license.

Furthermore, the Licensing Regulations provide at section 23 that:

- (1) The LTA shall issue an Individual License, Class License and Frequency Authorization on terms that are non-discriminatory.*
- (2) For the purpose of article 24 (1) of these Regulations, an Individual License, Class License or Frequency Authorization is issued on non-discriminatory terms if:*
 - (a) telecommunications providers of similar types of telecommunications networks or telecommunications services are treated similarly;*
 - (b) the License or Frequency Authorization does not favor any one telecommunications provider or class of telecommunications providers; and*
 - (c) the issuance of the License or Frequency Authorization is likely to enhance competition in any market.*

To the extent that any other license might be applied for in the same or a similar category, LTA will ensure that the terms of this license are applied to that other license. On the basis of several studies carried out under the auspices of the World Bank in the past 2 years, LTA has every confidence that the grant of a license to CCL will enhance service competition in Liberia and contribute to the achievement of policy goals.

2.3 PROCEDURE FOR AWARD OF LICENSE TO CCL

The Act specifies in Articles 11 (4) and (5) that:

“11(4). The LTA shall ensure that, prior to issuing any order or any other exercise of its authority that is likely to have any substantial impact on network operators, service providers, any other

² “Essential Facility” is defined in the Interconnection Regulations of 2009 as a telecommunication facility owned by a service provider (including an Interconnection Provider) which cannot feasibly, whether economically or technically be substituted and is declared to be an essential facility by LTA.

market participant or the general public, it conducts a process of public consultation appropriate to the circumstances and shall take account of the results of the public consultation in the final exercise of its authority.

11 (5). All regulations, decisions, rules, orders, notices and other public documents issued by the LTA in performing the responsibilities, functions and powers set out in this Act and other applicable laws shall be posted on the LTA's official web site, and published in any other media that the Commission deems necessary or appropriate to provide adequate notice to interested persons. The Minister may issue directions to the LTA regarding the publication of regulations, decisions, rules, orders, notices or other public documents, as needed to provide adequate notice to interested persons."

LTA is mindful that section 8 of the Licensing Regulations requires that *"In granting an Individual License, the LTA shall conduct an open, fair and transparent public competitive bid process or such other open, fair and transparent process as LTA may determine to be appropriate in the circumstances."* In terms of section 9, *"LTA shall publish a notice identifying the intended terms and conditions of the license, the qualifications or other application criteria, and any additional procedures applicable to the grant of the license, including the time periods within which the LTA expects to assess license applications, notify applicants and reach any related decisions"*.

In the circumstances the award of the license to CCL fulfils the commercial goals of its shareholders and gives effect to a process which LTA has ensured has been inclusive and transparent. All licensees in Liberia have been invited to participate in CCL and since inception, LTA has communicated widely and often with stakeholders regarding Liberia's participation in ACE. LTA has therefore published this consultation document to give effect to the requirements of the Act and the Licensing Regulations including section 8.

Whilst LTA is not publishing a regulation for comment at this stage, if a new regulation or amendment of an existing regulation is regarded as necessary to give effect to the results of the market analysis or the remedies that may be adopted as a result of the market analysis, then LTA will follow the procedure set out in the Guidelines for Consultation Process to develop Regulations, 2009 (consultation guidelines). No further or new regulation is required for purposes of licensing CCL.

LTA will require CCL to make application for the license in the ordinary course by completing the requirements for applications set out both in the Licensing Regulations and on the LTA website. LTA will require compliance with these criteria. LTA will, however, expedite the application and consideration process in light of the need to license CCL without undue delay.

2.4 DETERMINING AN APPROPRIATE FORM OF LICENSE

Individual license

CCL will operate a cable landing station – the first of its kind in Liberia. Its shareholders will bear the considerable cost of building and operating facilities at the physical landing point and ensuring connectivity to backhaul facilities and access to any points of presence for purposes of

interconnection. Granting CCL access to beachfront property for this purpose amounts to the grant of rights to land and rights of way over state-owned and private land. In addition, the supply of capacity over the cable is a critically important function of CCL, with significant socio-economic impact. For the time being and potentially for some time in the future, CCL will be the only operator of a cable landing station in Liberia.

For all of these reasons it is clear to LTA that CCL must be granted an individual license.

Category of license

Whilst it is not always necessary to categorise types of individual licenses, LTA considers that in this case, a separate category may be useful. LTA does not wish to detract from the general move towards technology-neutral licensing and therefore the categorization should be carefully considered. The primary reason for referring to a category at all is that in this, as in all of its regulatory activities, LTA has been mindful to consider international trends and examples of similar activities in other countries.

In *Appendix A*, LTA has set out examples of licenses granted to operators for essentially the same activity – the landing of an international submarine cable, and the provision over it of capacity on a wholesale basis within the country concerned. In several countries we note that the term “international gateway license” is used, as this form of license is in effect, the greater set of rights and authorizations within which cable landing station rights and obligations form a subset. In general, an international gateway license may permit:

- the construction of the facilities associated with the international submarine cable, access to land (to the extent that LTA has the ability to grant this under Part XIII of the Act), access to numbers (to the extent required), use of certain approved technologies and equipment (as permitted under Part XI of the Act), and maintenance and operation of the landing station
- the provision of services (voice and data) over the landing station including provision of interconnection, facilities-leasing, co-location, access, provision of bandwidth on a wholesale basis, and resale activities.

An international gateway license may require:

- compliance with the Act and regulations, and any notices, rules or orders published by LTA
- compliance with the other terms of the license which may include price regulation, and special conditions regarding access and interconnection as a result of the control of an essential facility
- payment of license application and annual license fees
- contributions to a universal access fund
- reporting to the regulatory authority from time to time and provision of information when requested
- compliance with the international agreements to which (in this case) Liberia is a party and to which CCL is a party including the C&MA (although this need not be dealt with in the license, we consider it to be appropriate to include as a condition to ensure Liberia’s overall good standing in the international community as regards ACE)

- provision of access to services and infrastructure on a non-discriminatory basis

Licenses for landing stations specifically are not much different in practice from international gateway licenses, since an international gateway is any facility that provides an interface to send and receive electronic communications (voice, data and multimedia messages) traffic between one country's domestic network facilities, and those of another country. Other kinds of international gateways include satellite systems linked to earth stations which in turn are linked to domestic networks. The purpose of the gateway is identical no matter whether it is terrestrial (or submarine) or space-based – to aggregate and distribute incoming and outgoing international voice and data traffic that is increasingly accessible through broadband networks only.³ The license could also be termed a wholesale capacity license for all of the reasons set out in the consultation document in relation to the market study.

LTA intends to refer to the proposed CCL license as an international cable operation and landing station license to capture the unique nature of the license and so to preface the rights and obligations proposed to be included in it.

2.5 LTA'S POWERS AND FUNCTIONS IN RELATION TO COMPETITION

No market is perfectly competitive. Regulatory authorities are often required to intervene in a market which is not competitive at all or which is not effectively competitive. The motive, simply put, is to enhance competition and stimulate efficiency upstream and downstream in the supply chain. The objective is to ensure that the supply of goods and services to the consumer is achieved at a reasonable quality as well as a fair price. Achieving this objective requires a balance to be struck between returns on investment in the production and supply of goods and services to the consumer on the one hand, and the price (including quality and consumer protection measures) ultimately paid for such goods and services by the consumer, on the other hand.

Effective competition exists when:

- consumers have sufficient choice regarding who provides the services they seek, at reasonable prices
- sellers have access to buyers without justified restrictions imposed by external parties, including competitors and legislation
- the price charged for a product or service is a result of the interplay between consumers and licensees, i.e. no one firm has price-setting power
- any variation in price in products or services is a result of differences in the cost of provision or characteristics inherent to the product, such as quality

³ Source: "Trends in Telecommunications Reform", 2008, Chapter 6, published by the ITU.

Where any one, or a combination, of the above is not met, a licensee may have a dominant market position.

The Telecommunications Act of 2007 (“the Act”), grants various functions and duties to the LTA with respect to competition policy. In particular, Section 27(1) states that:

The LTA shall perform the following functions and duties in relation to competition among service providers in telecommunications markets in Liberia:

- (a) promote efficient and sustainable competition for the benefit of end-users;*
- (b) establish and maintain an open and transparent regulatory framework that minimizes regulatory and other barriers to entry into telecommunications markets;*
- (c) make orders defining markets for the purpose of this Act;*
- (d) make orders designating dominant service providers in relevant markets in Liberia, based on their market share and other factors as determined in accordance with regulations, rules and order;*
- (e) monitor and prevent abuses of a service provider’s dominant position, pursuant to Section 28;*
- (f) monitor and prevent practices that would restrict competition, in accordance with Section 29;*
- (g) review and decide upon proposed transfers of control of service providers, in accordance with Section 32;*
- (h) undertake market reviews from time to time, to evaluate market conditions and the state of competition in those markets; and*
- (i) dispose of complaints and resolve disputes related to anti-competitive practices in a timely and impartial manner.*

Several of these functions and duties, specifically (e), (f), (g) and (i) relate to identifying and resolving situations where an abuse of dominance has occurred. This situation clearly does not apply in the case of CCL and the ACE landing at the present time. However, other functions and duties concern effective regulation to constrain the behaviour of dominant service providers, regardless of whether any abuse has actually taken place. In such circumstances, the LTA notes that the Act provides in the following sections that:

- LTA should makes orders defining markets (27(1)(c))
- LTA should makes orders to designate dominant service providers (27(1)(d))
- LTA should determine dominance in terms of both market share and other relevant factors (27(1)(d))
- Any remedies proposed should be open, transparent and minimise barriers to entry into telecommunications markets ((27(1)(b)).

2.6 DETERMINING DOMINANCE

The Act identifies two specific areas of regulation pertaining to dominant service providers, namely interconnection and tariffing:

- Interconnection arrangements of dominant service providers must be published (Section 39) in a Reference Interconnection Offer (Section 38), and interconnection charges must be cost-based and comply with any regulations, rules or orders issued by the LTA (Section 37).
- Dominant service providers must obtain the approval of the LTA for tariffs of all telecommunications service in markets in which the LTA has designated them as dominant (Section 42), and the LTA may issue an order to adopt any method of tariff regulation (Section 45), and specifically it may require a dominant service provider to prepare or otherwise participate in the development of a cost study for this purpose (Section 46).

These are not, however, exclusive, and nor is LTA limited to making these findings alone as the Act endows LTA with more general powers. Several provisions of the Interconnection Regulations, 2009, for example, are also relevant to this consultation:

- An “essential facility” is defined in the Interconnection Regulations, 2009, as a telecommunications facility owned by a service provider (including an Interconnection Provider) which cannot feasibly, whether economically or technically, be substituted. The Authority may declare certain facilities to be essential facilities. This is an internationally standard definition.
- “Dominant Service Provider” means a service provider designated to have Significant Market Power in one or more telecommunications markets relevant to interconnection in accordance with section 4 of the Regulation
- “Significant Market Power” or “SMP” means a position of economic strength, acting either individually or jointly with others, permitting a Service Provider to act to an appreciable extent independently of customers or competitors, or otherwise constituting a position of dominance on one or more identified telecommunications service markets. This is a general definition following the Act.
- Regulation 4 and particularly 4.1.2 and 4.1.8 of the Interconnection Regulations provides that LTA may issue an order after designating a Service Provider as being Dominant in one or more telecommunications markets relevant to interconnection taking account of:
 - the relevant product and service markets including their geographic scope and territory;
 - criteria and methodology to determine the degree of market power in a relevant market; and
 - control of essential facilities within the relevant markets;

- price trends and pricing behaviour; and
 - any other factor that LTA determines may be relevant under Part VII of the Act.
- LTA may require a Dominant Service Provider to behave in a particular way, including as specified at section 4.8 of the Regulations, where the Service Provider is Dominant in a market for interconnection.

LTA is minded to apply similar principles in determining markets pursuant to this consultation, in determining whether any licensee is dominant in a relevant market, and if so, determining whether or not it would be appropriate to regulate that licensee's activities, for example by including specific pro-competitive measures in its license.

PART I – MARKET ANALYSIS

3 DETERMINING THE RELEVANT MARKET

3.1 WHY THE LTA NEEDS TO DETERMINE THE MARKET IN WHICH CCL OPERATES

This part of the discussion document assumes that CCL will be an individual licensee having been granted a network and services licence, authorised to construct, maintain and operate the landing station for ACE, and to sell or lease capacity from the cable to other requesting operators. If CCL is designated as being dominant pursuant to this consultation, LTA may include in the CCL licence, conditions to control that dominance and oblige CCL to grant access to the cable landing station and to the capacity over the cable, on prescribed terms and conditions.

Dominance describes the power that enables a service provider to make decisions and to act independently of its competitors and customers. Typically this means the ability to raise prices or to reduce output without being concerned that competitors will gain material advantage through taking revenue and share, or that material numbers of customers will exercise the choice to go elsewhere or to “switch”.

In an effectively competitive market it is the market that determines outcomes, not individual competitors. In a market characterized by dominance, the dominant service provider will invariably make decisions that are to its commercial benefit, which do not advance the economic welfare of customers. In such markets regulators are justified in acting and more often than not, required to act in advance of anti-competitive behaviour and to take *ex ante* action to address or limit the *potentially* harmful effects on customers of the exercise of SMP. On the other hand regulators need to recognize that their *ex ante* intervention will distort and may adversely affect the development of the market. This is particularly the case where markets are embryonic and the patterns of demands have yet to be established, such as in Liberia.

Before the LTA can make enquiries into the existence of dominance and determine how, if at all, it might intervene, it must define the relevant market under consideration. Dominance does not and cannot exist at large; it exists, if at all, in specific markets which need to be defined.

The purpose of this chapter is to define the markets in which CCL, as the operator of the ACE cable landing station, provides its services. Only after this has been done, can the question of dominance be addressed.

3.2 APPROACH TO MARKET DEFINITION

The theory of market definition is well-understood. Markets are formed at the intersection of the three dimensions listed below:

- **Consumer.** A group of consumers has a common set of objectives that are satisfied by services/products.

- **Product.** A supplier offers services/products to a market to satisfy consumer objectives.
- **Geography.** Consumer objectives, and the services/products that meet those objectives, have to be available in a common location, for a transaction to take place, and a market to exist.

The consumer dimension is particularly relevant because the existence of distinct sub-sets of consumers with different service requirements may well indicate that there are really two distinct markets. Most obviously there is a clear distinction between retail markets (serving end users) and wholesale markets (providing services to intermediary agencies which on-sell to end users). CCL plans to provide wholesale services to network operators and ISPs, which will then in turn provide retail services to end users.

The boundaries that separate different markets are understood in terms of the services/products that comprise each market, and specifically in terms of the ability of one product to be substituted for another. The degree of substitutability will depend on factors such as the characteristics of the underlying technology, the utility of the product, costs and prices, and trends in each of these areas (e.g. convergence of technologies, costs or service features).

Customer markets may also be defined in terms of geography. Within telecommunications regulation there is a general pre-disposition to define markets as national unless there are demonstrable regional variations in supply or demand. For example, the European Commission dealing with competition matters, which is generally regarded as setting best practice in market definition, makes the rebuttable presumption that all telecommunications markets are national in scope⁴.

3.3 TWO CRITICAL TESTS IN MARKET DEFINITION

The process of identifying relevant markets in the European Union⁵ is based on two specific regulatory tests. First, the scope of the market has to be established using the Hypothetical Monopolist Test. Second, the susceptibility of the market to ex-ante regulation (regulation prior to an abuse of dominance or the instance of anti-competitive behaviour) has to be confirmed using the Three Criteria Test.

The Hypothetical Monopolist Test

The Hypothetical Monopolist Test (HMT) starts by identifying a focal product, i.e. the most narrowly-defined product that is obviously in the named market. Other candidate products will be

⁴ SEC(2007) 1483, Explanatory Note accompanying [European] Commission Recommendation on Relevant Product and Service Markets, p12

⁵ 2007/879/EC, Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

included in the same market depending on the extent to which any of the following forms of substitution applies between the candidate product and the focal product:

- Supply-side substitution
- Wholesale demand-side substitution
- Retail demand-side substitution.

The HMT considers a hypothetical monopolist and asks whether a small but significant (taken to mean a 5-10% increase) non-transient (at least 1-year's duration) increase in price for the focal product is likely to be profitable. This will depend on the number of customers that move to a substitute service or/and the extent to which alternative suppliers are enticed into the market. If the small but significant non-transient increase in price ("SSNIP") is profitable, then this will be evidence of the absence of appropriate substitutes, and therefore that a discrete market exists. If the increase is not profitable, the service definition needs to be expanded to include the substitute service(s) in the same market.

The Three Criteria Test

The Three Criteria Test (3CT) refers to the three criteria that, in the EU legislation, must all be realized before a market is susceptible to ex-ante regulation. The criteria are:

1. The presence of high and non-transitory barriers to entry
2. No trend towards effective competition despite the barriers to entry
3. Insufficiency of Competition Law to resolve any likely market failure.

The European Commission summarises and explains these criteria as follows⁶:

The first criterion is that a market is subject to high and non-transitory entry barriers. The presence of high and non-transitory entry barriers, although a necessary condition, is not of itself a sufficient condition to warrant inclusion of a given defined market. Given the dynamic character of electronic communications markets, possibilities for the market to tend towards a competitive outcome, in spite of high and non-transitory barriers to entry, need also to be taken into consideration.

The second criterion, therefore, is that a market has characteristics such that it will not tend over time towards effective competition. This criterion is a dynamic one and takes into account a number of structural and behavioural aspects which on balance indicate whether or not, over the time period considered, the market has characteristics which may be such as to justify the imposition of regulatory obligations as set out in the specific Directives of the new [EU] regulatory framework.

⁶ EC (2007) 5406, page 8.

The third criterion considers the insufficiency of competition law by itself to deal with the market failure (without ex ante regulation), taking account of the particular characteristics of the electronic communications sector.

The LTA proposes to apply both the Hypothetical Monopolist Test and the Three Criteria Test to determine the scope of the market in which CCL operates, and to confirm the appropriateness of this market to ex-ante regulation. The LTA will then determine the most appropriate form of regulation.

3.4 CCL AND THE HYPOTHETICAL MONOPOLIST TEST

The focal product

The focal product is the most narrowly-defined product set that is obviously in the defined market. It is used as the key input to the HMT so as to determine the scope of the market. In the case of CCL the focal product is the specific service that CCL will be supplying, namely wholesale capacity on the ACE international submarine cable. This capacity will be provided by CCL to other licensees and may be used for the provision of any retail service, including voice, data and internet services. CCL will be the only licensee in Liberia with authority to operate a cable landing station and to distribute capacity from ACE within Liberia.

Possible substitute products

The candidate substitute products are:

- Wholesale access to another international submarine cable
- Wholesale terrestrial international access via fibre-optic cable
- Wholesale international access provided via satellite.

LTA considers that no other technically feasible alternatives are currently available in Liberia to the degree that they may be considered to be an adequate or appropriate substitute, and to benefit consumers.

Wholesale supply-side substitution

Wholesale supply-side substitution arises when an alternative supplier is attracted into the market in response to a SSNIP being implemented by a hypothetical monopolist. It may be assumed that this would only happen if the substitute supplier were able to transfer its existing resources to supplying the focal product within a period of no more than a year and without significant new investment. The question is whether this would occur to such an extent that the SSNIP would be unprofitable.

This substitution is inconceivable in the case of access to the ACE cable. Although other submarine international cables are currently being laid around the West African coast, and other consortia have approached LTA regarding the possibility of landing cables in Liberia, the LTA is

not aware of any concrete plans for a second landing point in Liberia and no application has been made to the LTA for a license in this regard. As has been evident in the case of CCL, substantial investment would be required to create a new landing point, and the lead time for achieving this would be well over one year. There is therefore no realistic opportunity for wholesale supply-side substitution in response to a SSNIP by a hypothetical monopolist.

Wholesale demand-side substitution

This is where the wholesale purchaser of wholesale broadband access is persuaded to use alternative products in response to a SSNIP taking place in relation to the cost of wholesale broadband access by a hypothetical monopolist. The question is whether this would occur to such an extent that the SSNIP would be unprofitable.

As there is no realistic prospect of a second cable landing point in Liberia, there is consequently no opportunity for wholesale customers to access an alternative submarine cable in response to a SSNIP by a hypothetical monopolist.

Wholesale customers may of course use satellite-based international connectivity in Liberia. However it is precisely because of substantial cost and service quality improvements likely from ACE when compared to the high cost of satellite, that they are likely to access capacity on CCL's network and in turn from the ACE submarine cable when it is available. It is highly unlikely that they would be prepared to return to satellite in response to a SSNIP from CCL (or the hypothetical monopolist). The situation may change in the future if low earth-orbiting satellites such as O3B were to provide comparable price and quality of service to submarine fibre-optic cables, however at present there is no clear evidence if or when this will happen. Hence international access via satellite cannot realistically be considered an effective supply-side substitute.

The final possible wholesale demand-side substitute is terrestrial international fibre-optic cables. This possibility was carefully considered during the due diligence phase of ACE (e.g. a fibre connection via San Pedro to Côte D'Ivoire) but it was not considered to be feasible on the grounds of construction cost, maintenance difficulties and security concerns.

Retail demand-side substitution

In this context, the retail purchaser of international capacity is persuaded to use alternative products in response to the SSNIP by a hypothetical monopolist supplying wholesale access to capacity on international submarine cables. The question is whether this could occur to such an extent that the SSNIP would be unprofitable.

Retail customers would in this scenario, be able to choose an alternative service provider for international calls and internet access. However, they would either have to accept the service degradation and substantial price increases associated with satellite communications, or they would be faced with the choice of another service provider which is dependent on the same hypothetical monopolist for its wholesale international access. Neither choice is likely to be

preferable to accepting the SSNIP. So once again, there appears to be no credible substitute product for CCL capacity.

Conclusions on product market definition

Under the conditions presented in the HMT, there is no credible substitute for the focal product of wholesale access to the ACE international fibre-optic submarine cable. The focal product therefore defines the market. ACE is currently the only available international cable in Liberia, so without loss of accuracy this market may be expressed more generally as:

- *The market for wholesale capacity on, and access to, international fibre-optic submarine cables.*

The benefit of this wider definition is that it allows for the future possibility that a second cable landing station may be constructed in Liberia, even though that is not likely in the foreseeable future. Of course, the LTA would need to review its analysis of this market if a competitor to CCL were to emerge, but at least it could do so without amendment to this market definition. Such a review will in any event take place in due course, as part of LTA's mandate to keep the market under review.

3.5 CCL AND THE THREE CRITERIA TEST

The 3CT is designed to confirm that the identified market is an appropriate candidate for ex-ante regulation. In the case of the market for wholesale capacity on, and access to, international fibre-optic submarine cables, the LTA considers that:

- There are high and non-transitory barriers to entry: the difficulty of securing funding to persuade ACE to land in Liberia demonstrates the extent of these barriers, which are likely to be even greater in the case of a second landing point (since there will not be a captive national market) unless or until there is substantial growth in demand for international bandwidth into and out of Liberia.
- There is no trend towards effective competition behind the barriers to entry. Given technological differences, satellite access is not a credible competitor for international cables, except possible in remote locations (see discussion below on the geographical extent of the market), and there is no other access option available.
- Competition law is insufficient to resolve any likely market failure. There is no Competition Law as such within Liberia at present, although the Telecommunications Act provides significant powers to the LTA to resolve abuses of dominance on an ex-post basis, particularly under sections 28 to 30 of the Act, read with section 31 which provides a number of possible remedies for abuse of dominance and anti-competitive practices. However, the time and effort involved in confirming ex-post that CCL has actually abused its dominance, and then finding the means to rectify it, would likely cause substantial

damage to the downstream retail market for internet access in Liberia, and subsequently to the economic development of the country.

The LTA concludes that the market for wholesale capacity on, and access to, international fibre-optic submarine cables is an appropriate market for ex-ante regulation. We examine the nature of “wholesale” capacity below.

3.6 GEOGRAPHICAL MARKET

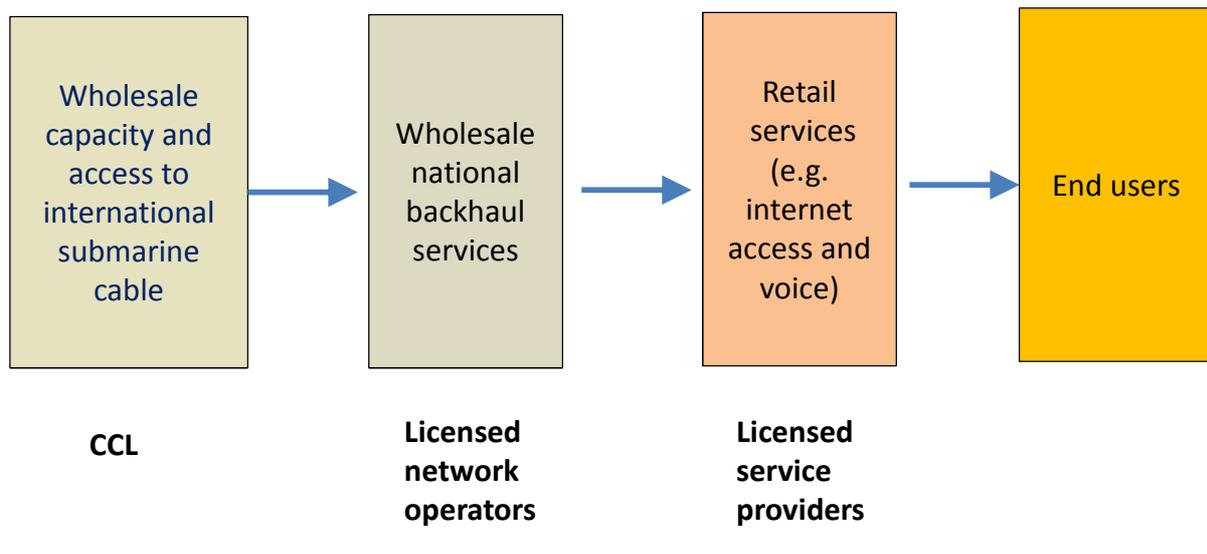
This defined market has a very specific geographical location. Physical access has to occur at the ACE cable landing station in Monrovia. Direct physical access to the ACE landing station is restricted to CCL and in terms of the shareholders agreement, the CCL shareholders (Libtelco, Lonestar and Cellcom, which have access to ACE capacity in proportion to their shareholding in CCL⁷) and any service providers that purchase capacity directly from CCL by interconnecting directly to CCL at the landing station. The service provider requesting access needs either to construct its network facilities up to the CCL landing station, or it must purchase backhaul facilities from another operator that is directly connected to the landing station.

This means that for downstream services, both retail and wholesale, there could be geographical variations in the supply conditions for international access. However, in this market analysis the LTA is reviewing only the market for wholesale capacity on and access to, international fibre-optic submarine cables. This is the market in which CCL operates and it is a single national market in the sense that the same supply conditions apply for all services regardless where the end-user is located throughout the country.

3.7 CLOSELY-RELATED DOWNSTREAM MARKETS

The relevant supply chain for the provision of access to international fibre-optic submarine cables is shown in Figure 1: (i) Wholesale international capacity is purchased from CCL, (ii) a backhaul component is either self-provided or purchased from another operator, and (iii) the relevant retail service elements (e.g. billing, customer care) are added by the retail service provider that supplies the end user.

⁷ Although a proportion of each shareholder’s capacity is placed in a pool, along with the GoL share of capacity, for CCL to sell on a wholesale basis.

Figure 1: The value-chain of markets relevant to CCL

The LTA therefore considers that there are three closely-related (groups of) markets that can be determined by looking at the supply chain for ACE capacity:

- Wholesale capacity on, and access to, international fibre-optic submarine cables (the market in which CCL operates and the one which this consultation is concerned with)
- Wholesale national backhaul services (in which CCL's shareholders compete with any other company purchasing wholesale international access from CCL)
- Retail service markets (e.g. international voice calls, international leased lines, internet access).

This market analysis focuses on the first of these markets, as the only one in which CCL operates. However, the LTA is mindful that CCL's shareholders together provide the lion's share of wholesale national backhaul services, and there is the potential for collusion or the leverage of CCL's dominance in the first market to bolster the shareholders' position in the provision of backhaul services (in the second market).

Therefore, if the LTA finds CCL to be dominant in the supply of wholesale capacity on, and access to, international fibre-optic submarine cables, it will also consider whether remedies need to be applied as a consequence of that dominance to individual shareholders in the market for the provision of wholesale national backhaul services.

3.8 CONSULTATION QUESTIONS

- Q1:** Please comment on the overall approach to market definition.
- Q2:** Do you agree with the proposed definition of the market in which CCL operates as “the national market for the provision of wholesale capacity on, and access to, international fibre-optic submarine cables”? Please explain your answer.
- Q3:** Do you agree that CCL shareholders compete in separate but closely-related downstream markets? Please explain your answer.

4 DESIGNATING DOMINANT SERVICE PROVIDERS

Having identified the market in which CCL operates, the next question is to determine whether CCL is dominant in this market.

4.1 APPROACH TO MARKET ANALYSIS

Dominance as defined in Section 27(1)(d) of the Telecommunications Act, and consistent with international best practice is determined by:

- Market share.
- Other relevant factors.

Assessment of market share

Market share is the primary indicator of dominance. No thresholds are pre-determined in the Act, but international practice, for example from the European Union, suggests that a hypothesis of dominance may be presumed in the event that market share exceeds 40-50%, rebuttable on consideration of other relevant factors.

Market share may be calculated in a variety of ways, including revenues, subscribers, installed capacity and traffic. The LTA considers that any one of these measures may be taken on its own unless it indicates a market share close to the threshold of 40%. However, in general the LTA prefers to use the measure of revenues as this measure takes account of the value of different subscribers (e.g. contract customers are usually significantly more valuable than pre-paid customers) and of different calls (e.g. the practice of bundling free call minutes into the subscription charge). In the circumstances of a market share close to 40% the LTA will endeavour to consider all of the relevant measures of market share, so as to provide a composite view of whether the 40% market share threshold has been reached.

A market share of at least 40% is a necessary, but not sufficient, condition for the designation of an individual supplier as having dominance within a particular market. To confirm the designation of dominance, the LTA must proceed to further market analysis as described below, to establish whether an operator can act to a significant extent independently of suppliers, competitors and consumers.

Other relevant factors

If one or more suppliers in a market has more than 40% market share, then a hypothesis will be formed that this operator is in a dominant position. However, this hypothesis needs to be confirmed by considering a range of other criteria.

The LTA will first test the hypothesis using the two factors specified in the Interconnection Regulations of December 2009, Section 4.1.2, namely:

- Control of essential facilities within the relevant markets
- Price trends and pricing behaviour.

These factors are referred to as “Phase 1 factors”. Together they form the first phase of market analysis to test a hypothesis of dominance. If either of these factors is found to be relevant and significant to the supplier in the market under consideration, this will generally confirm the hypothesis of dominance.

Secondly, the LTA will test the hypothesis against other (“Phase 2”) factors that international practice⁸ suggests may be relevant comprising:

- Overall size of the undertaking
- Technological advantages or superiority
- Absence of or low countervailing buyer power
- Easy of privileged access to capital markets / financial resources
- Product/service diversification (e.g. bundling)
- Economies of scale
- Economies of scope
- Vertical integration
- A highly developed distribution and sales network
- Barriers to expansion
- Absence of potential competition

Not all of the Phase 2 factors are likely to be relevant in every market, and the extent to which they are significant will vary between markets. The LTA therefore proposes to follow a two-step process:

- Firstly to assess the relevance of the criteria in the specified market. This will create a short-list of criteria for further consideration.
- Secondly, to assess the significance of the criteria for the specific supplier under consideration in the market, thus establishing the weighting to be given to that issue in the overall analysis.

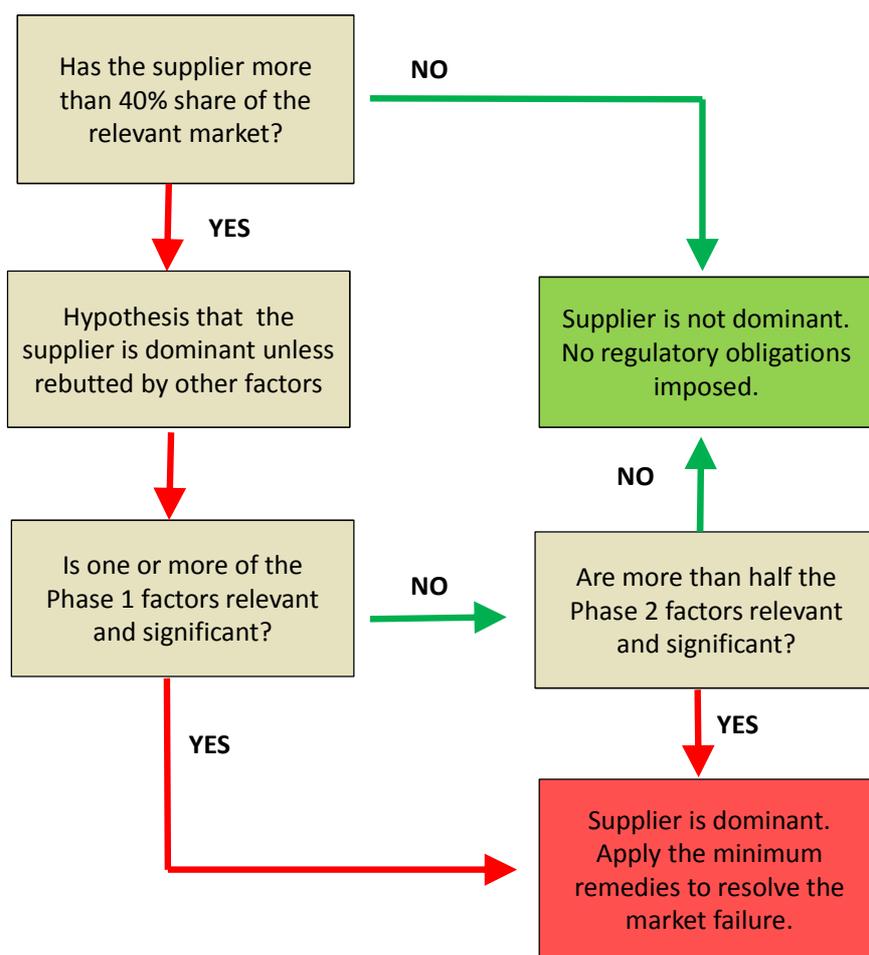
If more than half of the Phase 2 factors are found to be relevant and significant to the supplier in the market under consideration, this will generally confirm the hypothesis of dominance.

⁸ This list is taken from the EU Guidelines on Market Analysis (2002/C165/03) at <http://ec.europa.eu/competition/sectors/telecommunications/legislation.html>

Overall approach to determining dominance

The LTA therefore proposes to use the overall approach to determining dominance described in Figure 2. However, market analysis is not a mechanical process, and a degree of qualitative judgment is required. Specifically, the benefit of any doubt will be given such that minimum regulation is applied within the relevant market. In addition, if the decision is marginal, the LTA may keep that market under greater than usual scrutiny to observe competition trends in future.

Figure 2: The market analysis process.



4.2 ASSESSMENT OF CCL’S MARKET SHARE

ACE is the only international submarine cable currently authorised to land in Liberia and, once licensed, CCL will be the only licensee in Liberia with authority to build and operate the ACE cable landing station and to distribute capacity from ACE within Liberia. It follows that CCL has

(or will have when it commences commercial service) a market share of 100%. This market share, well in excess of the 40% threshold, gives rise to a presumption of dominance.

4.3 ASSESSMENT OF OTHER RELEVANT FACTORS

The hypothesis that CCL is dominant needs to be tested against other relevant factors.

Firstly, the LTA has considered the two factors specified in the Interconnection Regulations of December 2009, Section 4.1.2, namely:

- Control of essential facilities within the relevant markets
- Price trends and pricing behaviour.

It is indubitable that CCL has (or will have) control of an essential facility within the market for capacity and access to international fibre-optic submarine cables. No other licensee has rights to manage an international cable landing station in Liberia, and there is no foreseeable opportunity for another cable landing station to be created within the next few years.

At this stage, prior to the launch of commercial services, there is no empirical evidence to be gleaned from price trends or price behaviour. However, the LTA is aware of the provisions of the CCL shareholders' agreement, and notes that the arrangements through which shareholders have access to ACE capacity ("free" access to a pre-determined amount of capacity in proportion to their respective shareholding in CCL) differ from those of other service providers (who must pay a price per unit of capacity ordered). This gives rise to the possibility of anti-competitive (preferential) price discrimination, unless there is some form of regulation on CCL prices. The LTA thus considers price trends and (potential) pricing behaviour a significant factor in assessing CCL's market position.

Secondly, the LTA has considered a range of other factors that international experience suggests may be important:

- Overall size of the undertaking – **not significant**. CCL is owned by the operators (and the Government) so its size is not a source of competitive advantage.
- Technological advantages or superiority - **significant**. CCL is the only licensee with access to technologically superior fibre-optic cables (others have access only to satellite).
- Absence of or low countervailing buyer power - **significant**. While shareholders may be said to have countervailing buyer power (in that the shareholders agreement gives them priority access to ACE capacity), CCL has no commercial relationship with non-shareholders other than through the supply of ACE capacity, so they enjoy no countervailing buyer power.
- Easy or privileged access to capital markets / financial resources - **significant**. Raising capital to fund CCL has not been easy, but the company has gained from significant World Bank funds supplied through the Government's shareholding.

- Product/service diversification (e.g. bundling) – **significant**. CCL will be providing only one service (wholesale capacity and access to ACE) so it has no opportunity for bundling. However CCL shareholders also provide national wholesale and retail services, so they have the possibility of bundling CCL's product together with their services, so as to gain advantage for shareholders in downstream markets.
- Economies of scale – **not relevant**. CCL may enjoy economies of scale in the future (e.g. upgrades to ACE may come at a much lower price than an equivalent capacity provided via another international cable), but these are not currently relevant.
- Economies of scope – **not relevant**. CCL does not provide any other products or services, so has no possibility of gain from economies of scope.
- Vertical integration – **significant**. CCL provides only one wholesale product, so there is no direct possibility of vertical integration. However CCL shareholders also provide national wholesale and retail services, so together with CCL they exhibit the characteristics of vertical integration. This gives rise to the possibility of leveraging CCL's position in the market for capacity and access to international fibre-optic cables, so as to gain advantage for shareholders in downstream markets.
- A highly developed distribution and sales network – **not relevant**. CCL's wholesale customers are limited to a small number of network operators in Liberia which can roll-out network facilities to be co-located at the landing station. The company does not require a developed distribution or sales network.
- Barriers to expansion – **not relevant**. There are no significant barriers to expansion – there is more than enough capacity available on the current ACE cable and capacity upgrades will be available within 3 years.
- Absence of potential competition - **significant**. There is no possibility of a rival cable landing station in Liberia within the foreseeable future.

4.4 CONCLUSION

In summary the LTA's analysis of the relevant market in which CCL will operate has found that:

- a. CCL has a market share of 100%, which is well in excess of the threshold for a rebuttable presumption of dominance.
- b. The two key factors specified in the regulations (control of essential facilities and price trends/ pricing behaviour) are both relevant and significant factors, thus strongly supporting the hypothesis of dominance.
- c. 6 out of the 11 other relevant factors are considered to be relevant and significant indicators of CCL's dominance.

The LTA concludes that CCL is (or will be, once it has launched service) dominant in the market for wholesale capacity on, and access to, international fibre-optic submarine cables. As mentioned above, LTA will keep any determination of dominance and the market in which dominance is determined, under review.

4.5 CONSULTATION QUESTIONS

- Q4: Please comment on the LTA's proposed general approach to market analysis.**
- Q5: Do you agree with the LTA's view that CCL is (or will be) dominant in the market for wholesale capacity on, and access to, international fibre-optic submarine cables? Please explain your answer.**

5 DETERMINING APPROPRIATE REMEDIES FOR DOMINANCE

The market analysis of Section 4 has demonstrated the dominant position of CCL in the market for wholesale capacity on, and access to, international fibre-optic submarine cables. In this section the LTA considers the ex-ante remedies that are appropriate in this case.

5.1 STATUTORY REMEDIES

Pursuant to the Act:

- The interconnection arrangements of dominant service providers must be published (Section 39) in a Reference Interconnection Offer (Section 38), and interconnection charges must be cost-based and comply with any regulations, rules or orders issued by the LTA (Section 37). Interconnection includes access to capacity and access to infrastructure as set out in the interconnection regulations. Part II of this document deals with this in more detail.
- Dominant service providers must obtain the approval of the LTA for tariffs of all telecommunications service in markets in which the LTA has designated them as dominant (Section 42), and the LTA may issue an order to adopt any method of tariff regulation (Section 45), and specifically it may require a dominant service provider to prepare or otherwise participate in the development of a cost study for this purpose (Section 46).

The LTA considers that CCL will be leasing capacity on a wholesale basis to other operators as well as granting access to its facilities at the landing point for purposes of transiting calls to international destinations, and co-locating the equipment of other licensees who wish to carry out backhaul activities, for example. Therefore CCL's tariffs need to be approved by the LTA, the LTA has the authority to impose a methodology for setting these tariffs, and this methodology may require cost-based prices. CCL also needs to make access to its facilities (including co-location space) available to requesting licensees in terms of a Reference Interconnection Offer (RIO), as set out below. RIOs are dealt with extensively in both the Act and Interconnection Regulations.

5.2 OTHER APPROPRIATE REMEDIES

The remedies to be used depend on the problems that exist within the market. In the analysis presented in Chapter 4, the LTA has established the following major sources of CCL's dominance, the first two constituting Phase 1 factors and the balance constituting Phase 2 factors:

- a. Control of essential facilities
- b. Price trends and pricing behaviour
- c. Technological advantages or superiority
- d. Absence of or low countervailing buyer power
- e. Easy or privileged access to capital markets / financial resources
- f. Product/service diversification (e.g. bundling)
- g. Vertical integration
- h. Absence of potential competition.

In proposing remedies to be imposed on CCL, the LTA is mindful that in accordance with the principle of proportionality it should impose the minimum set of remedies that are necessary to resolve the identified market failure. Such an approach is consistent with the Act and international practice, and will ensure that regulation does no economic harm. This means that the remedies that may be imposed on CCL should address precisely the significant sources of market power that have been identified. On this basis the LTA considers that the remedies shown in Figure 3 are appropriate:

Figure 3: Proposed remedies for CCL dominance.

| Source of dominance | Potential abuse of dominance | Proposed remedy |
|--|--|---|
| Control of essential facilities | Refusal to supply | Open access. Co-location at the landing station. |
| Price trends / pricing behaviour | Excessive or anti-competitive prices | Price caps (cost-based) |
| Technological advantages or superiority | Refusal to supply | Open access. Co-location at the landing station. |
| Absence of or low countervailing buyer power | Excessive prices | Price caps (cost-based) |
| Easy or privileged access to capital markets / financial resources | Excessive prices | Price caps (cost-based) |
| Product/service diversification (e.g. bundling) | Bundling of other services (e.g. backhaul); price discrimination | Non-discrimination. Separation of activities. |
| Vertical integration | Bundling of other services (e.g. backhaul); price discrimination | Non-discrimination. Separation of activities. |
| Absence of potential competition | Excessive prices | Price caps (cost-based) |

5.3 PRICE CAPS

The application of price caps is the principal remedy to be applied to CCL, both as a statutory requirement under the Act, and as a means of responding to various sources of CCL's dominance.

Price caps need to be cost-based so that no undue advantage is gained by CCL's shareholders in downstream markets relative to other service providers. However, they also need to take account of:

- The investment risk taken by CCL shareholders. Although investment in CCL was open to all licensees in Liberia only three (Libtelco, Lonestar and Cellcom) were able to make such an investment, and the Government was left to fund 60% of the project. This indicates that a high degree of risk was perceived by the industry, and it is appropriate that any cost-based price cap reflects this risk in the allowed weighted average cost of capital (WACC).
- Reasonable estimates of capacity utilisation on the ACE cable. The capacity available from ACE is likely to exceed demand from Liberian consumers for some time. The LTA expects that demand will grow rapidly once consumers are aware of the quality of service benefits from use of fibre-optic submarine cables compared with satellite, always assuming that the price proposition is attractive. There is the possibility of establishing a virtuous circle in which low prices fuel demand which reduces unit costs and enables prices to fall further. The price cap should be set at such a level that entry into this virtuous circle is enabled. However, at the same time, it is important not to over-estimate demand (and underestimate costs) as this would result in CCL shareholders failing to recover their investment costs.
- The likely units of demand from CCL's potential customers. For example, licensees such as network operators may wish to purchase large units of capacity (e.g. STM1) to obtain volume discounts, while internet service providers may require smaller units such as E1s.

Before setting the level of the price cap, the LTA proposes to conduct further analysis and discussions with CCL shareholders and other stakeholders in the industry. Although initial price caps should be set at a level to stimulate demand, the LTA proposes to conduct an annual review so as to allow for any under- or over-recovery of costs to be carried forward and influence the following year's prices. Through this mechanism the price charged by CCL to its wholesale customers will be the equivalent of the implied price of capacity paid by CCL shareholders through their investment in CCL.

5.4 NON-DISCRIMINATION

The terms of supply offered by CCL, including but not be limited to price, functionality and service quality, must not differ materially when the same or similar service is supplied to different customers.

The LTA recognises that the pricing arrangements for commercial services to customers are necessarily different from those of ACE capacity provisioned to shareholders in return for their investment in CCL. However in all other respects CCL must not discriminate between its shareholders and other customers.

The LTA notes that non-discrimination is a condition built into the CCL shareholders agreement.

5.5 SEPARATION OF ACTIVITIES

The provision of wholesale capacity on, and access to, international fibre-optic submarine cables must be separated either structurally, functionally or in the accounts from the provision of any other business.

The LTA understands that the CCL shareholders' agreement limits CCL to the supply of capacity on, and access to, the ACE cable, whereas CCL shareholders are active in the provision of other wholesale and retail services in Liberia, including backhaul from the cable landing station. This provides for the necessary separation (in this case, structural) of CCL's activities in the provision of wholesale capacity on, and access to, the ACE cable, from the downstream activities of the CCL shareholders. However, should CCL at any time wish to widen its operations to provide other wholesale or retail services in Liberia, these services would also need to be separated from the provision of wholesale capacity on, and access to, the ACE cable, and a license amendment would be required to extend CCL's authorisation.

If there was a need in the second market in which the shareholders of CCL operate, to regulate anti-competitive behaviour in that market or to determine dominance, then LTA would need to impose accounting separation on those licensees as well.

5.6 OPEN ACCESS

CCL must offer open access to ACE capacity and co-location at the ACE landing station so that third parties can provide downstream services on equivalent terms to CCL shareholders. Co-location shall include physical co-location (where space permits) and virtual co-location. Any access seeker that is offered only virtual co-location must not be materially disadvantaged as a result, and the prices for co-location must be cost-justified, non-discriminatory and approved by the LTA.

The LTA notes that the shareholders agreement already commits CCL to operating on open access principles, and to providing non-discriminatory access to and use of co-location space, hosting and other facilities.

5.7 REMEDIES IN DOWNSTREAM MARKETS

With these requirements in place the LTA sees no immediate need for regulation of individual CCL shareholders with reference to the market for wholesale capacity on, and access to, international fibre-optic submarine cables. The LTA fully expects that downstream markets can and will become effectively competitive as a result of the remedies imposed on CCL.

Open access to CCL's facilities on terms that are non-discriminatory and cost-based should ensure that all network operators in Liberia can compete on an equal basis in the provision of wholesale and retail services that rely on access to international fibre-optic cables. LTA expects that other network operators (e.g. Comium, Libercell and WATS) will want to access CCL directly, rather than rely on capacity supplied via CCL shareholders. This in turn will ensure that pure retail suppliers, such as internet service providers (ISPs), have a choice of means of accessing international capacity – they can deal with any of the operators which are CCL shareholders or/and with any other operator that purchases wholesale capacity from CCL. The ISPs would also be able, either individually or collectively, to purchase capacity direct from CCL, possibly in conjunction with backhaul services purchased from one of the shareholders. With the probability of significant levels of competition in the other markets, the LTA considers that there is no reason at this stage to regulate the wholesale services supplied to ISPs (the second market or the market for wholesale national capacity), nor the retail market.

However, the LTA will monitor how the various markets develop, in particular the supply of backhaul services from the international landing station to the points of presence of service providers within Liberia. As this market matures, the LTA will be looking for evidence that CCL shareholders do not hold or exploit a position of joint dominance. There should, for example, be evidence of price competition between CCL shareholders, and evidence that other operators are able to compete effectively in supplying wholesale capacity to ISPs and (together with those ISPs) supplying retail services to end users.

LTA will shortly publish a guideline on its approach to market definition and the designation of dominance in future, in which it will give more clarity on its views on activities that might amount to anti-competitive behaviour.

5.8 CONCLUSION

The LTA proposes to establish an obligation on CCL to provide a Reference Interconnection Offer for the ACE landing station in terms of sections 34 to 38 of the Act. In addition, the LTA proposes to incorporate clauses in the CCL license that require it to:

- Offer wholesale capacity and access to any licensed service provider in Liberia
- Publish the terms on which it will receive, consider and accept requests for facilities leasing including physical or virtual co-location at the landing station
- Establish standard terms and conditions for the supply of capacity, including prices, that are offered to all service providers on an equal basis
- Set prices for capacity on a wholesale basis, on the basis of actual or predicted costs using a methodology to be developed by LTA.

With these requirements in place the LTA sees no immediate need for regulation of individual shareholders. However, the LTA will monitor how the market develops, in particular the supply of backhaul services from the international landing station to the points of presence of service providers within Liberia.

5.9 CONSULTATION QUESTIONS

Q5: Please comment on the LTA's proposed remedies for CCL's dominant market position. Do you consider that the proposed remedies are necessary and sufficient?

Q6: What methodology would you propose for the price-cap?

Q7: Do you agree with LTA's proposal to adopt a wait-and-see approach to regulation of backhaul from the cable landing station? Please justify your answer.

PART II – LICENSING of CCL

6 INTRODUCTION TO THE CCL LICENSE

LTA is authorised to determine license procedures and conditions in terms of section 16 of the Act read with section 19, section 3 (specifically (e)) and section 11. Section 16 requires LTA to “*determine the terms, conditions, procedures and criteria for granting telecommunications licenses, in accordance with this Act and any related regulations, rules, orders or notices*”. Chapter 2 of this document sets out the LTA’s views in relation to the procedure for the grant of the license to CCL and examines the requirements of the Act in relation to licensing in general. In this Chapter 6, LTA sets out the more general shape of the license it proposes to grant to CCL, and sets it within context.

6.1 SCOPE OF LICENSE

The identity of CCL’s shareholders and their commitment under their shareholders agreement to the landing point, to the Government, to the ACE consortium and to one another, suggests that CCL should be treated differently from other individual licensees, such as the existing cellular operators. Existing licensees have taken steps to form CCL as a pass-through entity, an entity which will operate a facility for certain purposes, but which is not intended to compete on the open market for customers in a more general sense by providing services other than wholesale international capacity and access to the cable landing station. In other words, CCL will have a limited role within the market.

Policy decisions by Government, and discussions among shareholders and with the LTA also indicate that CCL’s operations should be limited to dealings with other licensed service providers but not with individual consumers. Limiting the authorization granted to CCL will allow licensees an opportunity to access only what they need from CCL, in a regulated way. When and if CCL requires additional rights in order to compete with other licensees, it would obviously be able to apply to LTA for an amendment to its license, in accordance with relevant regulations and the Act, in force at the time.

LTA therefore proposes that CCL’s rights and authority under its individual license should be limited to:

- (i) the provision of international capacity from the ACE cable on a wholesale basis; and
- (ii) the construction, operation and maintenance of the cable landing station.

Whilst section 5 of the Licensing Regulations suggests that a license might be granted for either the operation of a network or the provision of service, LTA considers that the two authorisations might be incorporated in the same document for reasons of efficiency and simplicity.

This consultation also considers the nature of CCL within the market for wholesale international capacity on, and access to international fibre-optic cables (which is a new market) and the extent to which CCL’s license obligations should be prescribed because of its dominant position in this

market. The first part of this consultation document considers the outcome of a market study in this regard.

6.2 AWARD OF SCARCE RESOURCES

Part VI of the Act deals with radio spectrum management. To the extent that spectrum is required by CCL itself in order to operate links to and from the landing station, CCL would be required to apply for the necessary spectrum. It is unlikely that spectrum in this case would be particularly scarce or within bands that might be considered to be in demand.

However, LTA understands that the limit of CCL responsibility, as the landing station operator, is to provide the international circuit interface and to provide co-location facilities (space, power, etc) at the landing station for the terminal equipment that an interconnecting operator would need for backhaul. LTA will address spectrum issues separately in consultation with CCL, and it will be licensed separately if required.

CCL will not require access to numbering resources as CCL should not be providing retail services or terminating calls. It will not deal with individual customers but only with licensed service providers purchasing wholesale international capacity.

6.3 LTA AND PRO-COMPETITIVE ACTION

The current investment model for CCL contemplated by its shareholders (the Government of Liberia, Lonestar, Cellcom and Libtelco) anticipates that a proportion of capacity will be apportioned in advance between the three licensees which are shareholders, based on their initial investments in CCL. Additional capacity will be available for sale by CCL to other licensees.

Although this arrangement is to some extent commercial and does not require LTA oversight, it will be important that LTA ensures that CCL is obliged to sell capacity to others even if they are not equity owners of CCL. It would not be sensible to permit CCL to make capacity available only to shareholders (and as noted above we understand CCL does not propose to limit such sales) for the following reasons⁹:

⁹ Richard Keck in his report to LTA on the CCL Shareholders Agreement dated June 2011 states: “On the whole, therefore, CCL already represents a solid step in fostering virtual facilities-based competition in the international gateway market, completely avoiding the creation of a bottleneck monopoly that some years ago might have seemed the only way to structure a critical infrastructure investment like an ACE cable landing station. Moreover, from an “open access” perspective, every operator in Liberia’s highly competitive telecom market was afforded an equal opportunity to participate in CCL as a founding shareholder and acquire direct access to a share of the ACE capacity. As discussed above, even those operators who did not participate will have multiple options for obtaining access to the ACE cable, ranging from purchase of Series A shares from GoL to purchasing wholesale capacity from CCL, Libtelco or another CCL shareholder”.

- The intention of the Government in joining ACE is to ensure that high speed bandwidth is made more accessible at more affordable prices within Liberia so as to enable the achievement of various policy goals for the ICT sector. Permitting capacity to remain within the CCL shareholders would exclude the rest of the market and defeat the purpose of the exercise
- One of the primary principles of the C&MA for ACE is to ensure that capacity is made available to members and operators within member countries on an “open access” basis. LTA understand this to mean that access to capacity and if required, infrastructure, will be permitted at fair and reasonable prices, to all those who request it. Restricting capacity sales to shareholders will be in breach of this important principle
- If CCL were to provide ACE capacity and access only to its shareholders, other operators in Liberia would be at a clear competitive disadvantage in downstream retail markets, as they would need to obtain international access from the CCL shareholders. For LTA to resolve this potential market failure it would first have to determine each of the shareholder/operators to have dominance, which would be unattractive to them and result in a significant regulatory burden on the LTA. As noted in Part I of this consultation, LTA will take action if required in the so-called “second” market for national capacity, as set out in Part I.

Part VII of the Act deals with competition policy and has been canvassed extensively in Part I of this document. Apart from the fact that a cable landing point is commonly referred to as an “essential facility”¹⁰ (a bottleneck for operators which need access to international bandwidth and cannot easily replicate the facility because of cost or limits on authorization), Part I of this document illustrates that CCL will be dominant not only because it will operate an essential facility but because it will supply international wholesale capacity on the cable to other Liberian operators.

Also as set out in Part I of this document, various remedies may be appropriate to curtail the potential for an abuse of this dominance by CCL. LTA considers it to be appropriate to include these remedies in the CCL license.

Tariff approval

The Act, as described in Part I of this document, stipulates that dominant service providers must obtain the approval of the LTA for tariffs of all telecommunications services provided by them in markets in which the LTA has designated them as dominant (section 42), and the LTA may issue an order to adopt any method of tariff regulation (section 45), and specifically it may require a dominant service provider to prepare or otherwise participate in the development of a cost study for this purpose (section 46).

¹⁰ “The definition of any type of network element as an essential facility is usually fundamental to a regulator’s decision to mandate open access or infrastructure-sharing. In the case of international gateway markets, several governments have determined that submarine cable landing stations (SCLSs) are bottleneck essential facilities”, Trends in Telecommunications Reform, 2008, ITU, p128.

Access obligations

Under sections 35 to 39 of the Act LTA may apply certain sections of the Interconnection Regulations dealing with dominant providers, to licensees dominant in a market relevant to interconnection. “Interconnection” as this is defined, includes “access” which in turn includes “co-location” in terms of the Act read with the Interconnection Regulations. CCL will be obliged to comply with the Interconnection Regulations as is every other licensee but may also be required, as one of the remedies flowing from the determination of dominance, to comply with those parts of the Interconnection Regulations dealing specifically with access obligations that apply to dominant service providers.

The Interconnection Regulations contain definitions which are important in the context of applying the proposed remedies to CCL:

- “access” in the context of interconnection between service providers, means “*the making available of telecommunications facilities and equipment, services or both facilities and services by one service provider to another service provider, for the purpose of providing interconnection, and includes access to network elements and associated facilities, access to physical infrastructure including buildings, ducts and masts, and access to network software systems including operational support systems*”¹¹
- “co-location” means “*accommodation of two or more switches, transmission equipment and antennas or other electronic communications equipment, or power generation equipment in, or on a single building tower or other structure for the purposes of interconnecting communications networks or for other telecommunications purposes*”
- “essential facility” means “*a telecommunication facility owned by a service provider (including an Interconnection Provider) which cannot feasibly, whether economically or technically be substituted [and] the Authority may declare certain facilities to be essential facilities*”

The Act defines “telecommunications facility” as “*any facility, apparatus or other thing that is used or capable of being used for telecommunications or for any operation directly connected with telecommunications*”. It is generally accepted that facilities leasing and collocation are connected and that the leasing of facilities includes the making available of collocation space.

The Interconnection Regulations require dominant operators to publish a Reference Interconnection Offer, being “*the statement of terms and conditions on which a Dominant Service Provider which is obliged to provide a RIO offers Interconnection to Interconnection Seekers, including a full list of services to be supplied to the Interconnection Seeker and charges for each of such services, prepared and approved pursuant to Section 4.4*”.

¹¹ An abuse of dominance can be identified if a network operator refuses access to its network, withdraws access or provides it but with unexplained delays or at high prices. Discriminating on the terms of access as between requesting operators also constitutes anti-competitive behavior and/or an abuse of dominance.

LTA considers it appropriate and necessary in the context of CCL's control of the cable landing station and associated facilities and its dominance as determined in Part I, to require CCL to publish a Reference Interconnection (which incorporates *access*) Offer or RIO, which should set out the terms and conditions on which access to facilities and services including co-location will be granted. LTA proposes to issue an order to this effect.

Implementing the remedies

LTA will also issue the following orders, a draft of which is presented in Appendix C:

- Determining the market for CCL
- Declaring CCL to be dominant in the market for wholesale capacity on and access to, international fibre-optic cables
- Declaring the ACE landing point to be an essential facility.

The combined effect of the orders will ensure that CCL is required to:

- comply with the provisions of the Interconnection Regulations and so to publish a RIO; and
- submit its tariffs for approval by LTA.

Failure by CCL to comply with its RIO or any provision of its license, will render it liable to penalties which LTA may determine in accordance with the Act, and the license conditions themselves.

6.4 CONSULTATION QUESTIONS

Q8: Please comment on the overall approach to the scope of the CCL license.

Q9: Do you agree with the approach proposed in relation to the implementation of proposed remedies for CCL's dominance, as determined in Part I of this document? If not, please set out your preferred approach.

7 SETTING LICENSE FEES

7.1 POWERS AND FUNCTIONS OF LTA IN RELATION TO LICENSE FEES

The objectives of sector legislation are useful in considering an approach to setting license fees. Section 3 sets out the objectives of the Act which are (amongst others) to:

- facilitate development of the telecommunications sector in order to promote social and economic development throughout Liberia;
- promote affordable telecommunications access in all parts and regions of Liberia, relying on market forces and private sector investment when feasible and Government initiatives when appropriate;
- establish a fair, objective and transparent licensing regime for service providers, including the licensing of service providers; and
- encourage sustainable foreign and domestic investment in the telecommunications sector.

Section 14(3) is particularly important in the context of this document, as it contains the principles that LTA should take into account when issuing fee regulations, which are:

- (a) fees may be used to fund, in whole or in part, the expenses of the LTA incurred in exercising responsibilities, functions and powers under this Act, and other laws and shall be proportionate to those expenses;
- (b) fees shall be levied on different licensees and users of spectrum and numbers in an impartial and competitively neutral manner; and
- (c) license fees may be based on a percentage of the revenues of licensees from the provision of their licensed telecommunications services.

Part VIII of the Licensing Regulations has also been taking into account in relation to the setting and publication of license fees applicable to CCL.

It is appropriate in Liberia given local conditions and historical treatment of license fees, and also given the approach taken in other African countries, to charge both an upfront license application fee and an annual fee, based on gross profit. However, if two such fees are to be charged, LTA considers that they should be moderate for all the reasons set out above.

In the past LTA has determined fees for licenses on a relatively ad hoc basis, as circumstances dictated, and in response to market demand specifically for spectrum. This is a different case. CCL's license is, as we have indicated in Chapter 6 above, a new category of individual license and one which may not be granted to any competing operator for some time, if ever.

Given the need to license CCL as quickly as possible, LTA considers that the determination of a license fee in these circumstances can be undertaken in the context of the license award and consultation process.

LTA intends to apply a non-discriminatory approach to the determination of license fees in future, based on similar principles where appropriate.

7.2 SETTING AN APPLICATION FEE

LTA proposes to charge CCL a license application fee taking into account the following factors:

- this is the first cable landing station license to be granted by LTA and substantial work will need to be done by LTA to finalise it in relation to consultation and preparation
- the license will permit a number of commercial entities to invest in an asset of significant value, and the license fee should reflect this
- charging an upfront fee is in keeping with the approach taken by LTA in the grant of other licenses in Liberia and with practice in a number of other countries
- the Act permits LTA to charge both application fees and annual fees
- the landing station will not be operational until 2012 and therefore CCL will not receive income until after that time – so its ability to fund a substantial license fee ahead of launch of commercial service will be restricted as it must focus on funding its participation in ACE, construction of the landing station and associated facilities, and hiring staff
- substantial license fees for applications tend to act as barriers to entry and may discourage investors, as LTA recognises that there are risks associated with the project and a high level of other fees payable to ACE
- substantial license fees for applications tend to be passed on to consumers in the cost of services, which in LTA's view will defeat one of the primary objects of the project.

LTA is aware that operators have expressed concern regarding “double taxation” as they term it, which means that LTA would charge for a license for the international gateway, or landing station, when they have already charged licensees for their existing licences. However this does not recognize that for each form of license granted, regulatory authorities are entitled to levy a fee for all the reasons set out in this document. It does not follow that a fee should be set by reference to the number or type of licenses already held by the same licensee. Licenses are a regulatory instrument enabling the provision of service and access to scarce resources, and these are factors that are relevant in all cases, regardless of the *identity* of the licensee.

Practically, the LTA recognizes that the concern goes to whether or not the licensees will be able to access financial resources sufficient to meet their existing obligations and in addition, fund their investment in a new license. We have taken into account the overall sector objectives within the context of the Liberian landscape, but without losing sight of important regulatory imperatives and international best practice.¹²

¹² Richard Keck comments on this in his report to LTA dated June 2011 stating that GoL may also consider whether CCL and its shareholders who self-provision their capacity should be charged any license fees in excess of the LTA's administrative costs. According to Keck, the usual grounds for charging licensing fees in excess of administrative costs are (1) to ration scarce resources and (2) to recover economic rent for the use of a public asset. Here, neither factor is present. The ACE cable system appears to offer significant excess capacity, at least initially, and hence GoL is acquiring 80% of that capacity

LTA has also considered the quantum of upfront license fees or application fees charged in other countries, as set out in *Appendix A*.

LTA proposes to charge CCL a license application fee of USD75,000. This figure settles well within the average charged for specific rights or that might be apportioned to infrastructure licenses when licenses are granted which authorize more than the operation of networks. Coupled with annual license fees, LTA considers the price to be fair. The LTA proposes that the license application fee is payable on or before the effective date of the license.

7.3 SETTING AN ANNUAL FEE

The international data presented in *Appendix A* shows annual license fees ranging from 0.5% to 2.5% of eligible revenues. Eligible revenues sometimes refer to gross revenues, but are often based on costs net of certain costs (e.g. outpayments to other operators). LTA has also noted that in some jurisdictions the annual fee is the same regardless of license category in the sense that the formula is the same. In Liberia, the licenses granted to other operators provide for payment of 1.5% of the quarterly gross margin generated from licensed services, payable within the last week of the first month after the quarter.

LTA is in the process of reviewing its license fee policy, and intends to issue a new License Fee Regulation in due course. With this in mind the LTA proposes the following annual fees to apply to CCL:

- An annual license fee equal to \$100,000 plus 2% of gross revenue, and
- An annual regulatory fee equal to \$150,000 plus 2% of gross revenue.

The LTA advises that the above figures are for consultation purposes and that it remains amenable to changes.

(20% indirectly through Libtelco, which confesses not having business plans to use it all, and 60% directly) due to lack of demand in the private sector. So, no rationing protocol is needed or useful. The core assets of the ACE cable system are also comprised entirely of private property, with each cable landing station being owned by the landing party in the country in which it is located, and the main cable being jointly owned by all members of the ACE consortium. The only public properties used are rights of way to land the cable, and for these each landing party is paying the public authority that controls the property traversed for use of the public right of way. So too for CCL. Again says Keck, in contrast with the use of radio spectrum, which is owned by the public, there are no public assets involved in the ACE cable. Given these facts, it is submitted by Keck that GoL should not view the licensing of CCL and its shareholders as an opportunity to capture revenues in the form of licensing fees in excess of the LTA's incremental administrative costs. Moreover, Keck says, to the extent GoL believes it may be able to extract a premium for use of the ACE cable, it can do so through its pricing in the divestiture. However, based on the excess of the supply of ACE capacity over initial demand, any attempt to extract a premium is likely to have the unintended consequence of depressing demand and resulting in suboptimal commercialization of the capacity on the ACE cable system.

7.4 CONSULTATION QUESTIONS

Q10: What level of fee do you recommend for CCL and why (please specify whether you agree with the application fee and annual fee and then answer in relation to each)?

Q11: Are there any other factors that should be taken into account?

8 PROPOSED LICENSE TERMS AND CONDITIONS

8.1 ADOPTING DETAILED TERMS AND CONDITIONS FOR CCL

In line with section 19(3) of the Act the CCL draft license creates a template (based loosely on the license awarded to Lonestar), with appropriate modifications to both update the license and ensure it is applicable to CCL.

8.2 PROPOSED LICENSE FOR CCL

The license for CCL should, in LTA's view, include the terms and conditions set out in *Appendix B*, explanations for which are set out below. The license conditions described below will, to the extent applicable, be repeated in other licenses as LTA moves forward to a standardized licensing regime.

1. Part I: Interpretation and definitions

The licence uses terms specific to the cable and to the ACE consortium such as ACE, and Backhaul Provider, Cable Landing Point and, importantly, Open Access. "Customers" is defined as excluding end users, with the aim of restricting CCL to providing wholesale services to licensed network operators or service providers. Definitions that are already defined terms within the Act or relevant regulations have been omitted.

2. Part II: Grant of license

Authorization and scope of rights

Networks: CCL is licensed to construct, operate and maintain a cable landing station and associated facilities. CCL's network must include space for other licensees to co-locate their equipment at the cable landing station.

Services: CCL is authorized to provide wholesale capacity and access to international fibre-optic cables. CCL is authorized to provide services to any other service providers in Liberia, but not to provide retail services or services to end users.

This is a necessary obligation which will as a matter of practicality, be fulfilled. However international precedent suggests that this is a sensible precondition to authorization to construct facilities and is appropriate from an environmental preservation point of view. LTA is willing to assist with the liaison with other Ministries in this regard.

Term and termination

The lifetime of a cable is typically regarded as 15 years and this is the term provided for in the ACE C&MA, so this license should also be for 15 years. The license may be terminated if CCL's membership of ACE is terminated, or if CCL consistently breaches its license conditions, or if CCL is dissolved.

Renewal provisions

Provided the licensee complies with its license terms, renewal can be applied for.

Amendment

The license may be amended as set out in the Act.

3. Part III: Financial obligations***Payment of license fees and other fees (universal service fund contributions)***

LTA proposes to charge a once-off license application fee to CCL and an annual fee as a percentage of revenue from licensed services, as set out above. Given the nature of CCL and the limitation on service authorisation, LTA does not intend to impose any universal service obligations on CCL and nor does LTA intend to require contributions by CCL to a universal service fund at this time.

4. Part IV: General obligations***Reporting, monitoring and giving access to LTA on request for inspection***

This clause follows existing license templates. These requirements are subject to the Guidelines for Treatment of Confidentiality, Dispute Resolution, Compliance and Enforcement, LTA-REG-0002. In particular LTA may wish to inspect the monitoring equipment that licensees are obliged to install on their networks in terms of section 34(1)(c) of the Act.

Privacy and confidentiality of communications

This clause follows existing license templates.

Accounting requirements

CCL must submit to LTA within 12 months its proposals for accounting principles that should apply, which LTA may approve or reject, and CCL must deliver its financial statements in compliance with these principles, once a year to LTA or otherwise on request.

Force majeure and interruptions to service

This clause follows existing license templates.

Public safety obligations

This clause follows existing license templates.

5. Part V: Relationship with customers

This Part V shall apply to the Licensee only if and to the extent that it is not designated to be Dominant. If it is Dominant then Part VII applies and the provisions regarding terms and conditions and quality of service shall be dealt with in accordance with the requirements of Part VII. We have included these provisions by way of indication of what can be expected in a more standard version of a telecommunications license.

Terms and conditions

These must be standard for all customers, available publicly and filed with the LTA.

Quality of service

The licensee must maintain ITU-standard quality of service parameters and maintain records relating to quality which must be furnished to LTA on request.

6. Part VI: Relationship with the LTA***Dispute resolution***

This clause follows existing license templates.

Breach, default and notice to remedy, consequences including penalties, suspension and termination

This clause follows existing license templates. LTA must ensure that any sanctions applied are proportionate and reasonable, having regard to the nature of the breach.

7. Part VII: Pro-competitive obligations

These obligations are applicable to licensees who are declared to be dominant in a relevant market. In this case the obligations are remedies that are specific to CCL, consequent upon the market

analysis and findings of dominance in the market for wholesale international capacity on and access to international submarine cables. In other licenses, similar remedies may be included where the licensee is found to be dominant, relevant to the particular market in which dominance is established.

Obligation to provide Licensed Services and to operate the CCL network

Since CCL is proposed to be declared dominant it shall provide services to requesting parties on non-discriminatory terms except if LTA agrees that service should not be provided. Requests for service should be made in terms of CCL's RIO. The Landing Station should be operated on an open access basis. CCL must permit services to be requested on an unbundled basis.. In addition, as CCL is dominant in a market relevant to interconnection, it must make co-location space available to requesting parties along with other facilities.

These obligations are contained in the interconnection regulations as these may be amended from time to time, but CCL's license conditions will confirm that in the event that CCL is declared dominant, it will need to comply with such regulations. LTA proposes to issue orders in this regard.

Ownership and control of the licensee and conflicts of interest

Because of the nature of the consortium, CCL is a special case. Therefore special conditions must apply to transfers of its shares and changes in ownership and control. In the main these echo the CCL shareholders agreement. The license is personal to CCL as a corporate entity. Transfers of the license are not permitted without LTA's permission. Transfers of shares by shareholders must follow the shareholders agreement submitted to LTA. Transfers by shareholders of greater than 5% of the shares require LTA approval. LTA is of course aware of the Government's intention to sell its shares in CCL, but LTA must approve the transfer because of the nature of the license and control by CCL of an essential facility.

Given that the shareholders are also licensees providing services in the national capacity market but relying on capacity made available to them as wholesale international capacity in proportion to their shareholding, it will be appropriate for CCL to put in place "Chinese walls" and to this end LTA has made reference to the protection of confidential information. If LTA believes that confidential information belonging to CCL has been used to CCL's or the market's detriment by a shareholder, it may take steps against CCL or that shareholder. The same can be said in the case where LTA has reason to believe that any one or more licensees (whether shareholders or not) are acting in an anti-competitive fashion, either on their own or together.

LTA has determined that because of the special nature of the CCL ownership structure, CCL's board of directors should not comprise any office bearers of the shareholder appointing that director, or office bearers of any other shareholder, To the greatest extent possible, board members of CCL and its operational staff should be appointed independently and from outside any shareholder.

Compliance with Part VII of the Act

This part of the Act need not be repeated but the licensee as a dominant service provider must comply. This requires the licensee to act in a non-discriminatory way as regards all Customers, and to not show undue preference towards any person. In addition, CCL shall not abuse its dominant position.

Tariffs

The licensee must submit its tariffs for wholesale services to LTA for approval. LTA will engage in a cost analysis discussion with CCL at the appropriate time.

Accounting separation

CCL must maintain separate accounts for each of its services and the operation of its network elements including provision of co-location space and leasing of facilities.

Making capacity available to shareholders

Shareholders will reserve some ACE capacity and allocate it between them in proportion to their shareholding. However, some capacity must be retained by CCL for commercial use within this corporate entity and to enable it to maintain and operate the landing station. LTA has emulated the provisions of the CCL shareholders agreement in the license, regulating this provision through the license.

8.3 CONSULTATION QUESTIONS

Q12: Please set out your views on the proposed license conditions, with reasons.

Q13: Are there any further conditions that you consider should be included – please stipulate?

Q14: Please comment on section 23 of the license (“making CCL capacity commercially available”).

APPENDIX A: LICENCE CATEGORIES AND FEES

| Country | Licence category | Fees |
|---------------|---|--|
| Kenya | Submarine cable landing licence for landing the cable and an international systems and services licence for provision of services/capacity | Application: USD195,000 Annual: 0.5% of annual gross turnover or USD65,000 whichever is greater |
| Mauritius | Facilities-based licence or service-based licence (network infrastructure provider licence), including rights to operate international gateways and offer international services/capacity | Application: USD3,600 Annual: USD1,500 |
| Nigeria | International cable infrastructure and landing station licence or full gateway licence | Application: full gateway licence fees are USD335,000, submarine cable licence fees are USD210,000 Annual: 2.5% of audited net revenue |
| Sao Tome | Facilities and service based license to establish and operate an international public telecommunications network for public use and supply international capacity using specifically the ACE submarine cable. | Application: USD100,000 Annual license fee: USD10,000 if it does not exceed 1% of annual gross revenue |
| South Africa | Individual electronic communications network service licence or individual electronic communications service licence | Application: as specified in the ITA Annual: 1.5% annual turnover from licensed activities less costs incurred in carrying out those activities |
| Tanzania | Network facilities licence or international submarine connectivity licence | Application fee for network licence: USD10,000 Once off fee for network licence: USD300,000 Application fee for submarine connectivity licence: USD1,000 Once off fee for submarine connectivity licence: USD100,000 Annual fees: 0.8% gross annual turnover |
| United States | Submarine cable license | Dependant on capacity, between USD15,000 for less than 2.5Gbps, and USD250,000 for 20Gbps and more |

APPENDIX B: DRAFT CCL LICENSE

INDIVIDUAL INTERNATIONAL CABLE OPERATION AND LANDING STATION LICENSE

LICENSE NUMBER: **xxx**

Granted by:

The Liberia Telecommunications Authority (“**the LTA**”)

To:

Cable Consortium of Liberia, Inc (“**CCL**” or “**the Licensee**”)

Under authority of:

the Telecommunications Act of 2007 of the Republic of Liberia (“**the Act**”)

and

the Licensing and Authorisation Regulations, 2009 (LTA-REG-0001) (“**the Regulations**”)

Date: xxxx

PART I: Definitions and interpretation

1. Definitions and application

- 1.1. Any word, phrase or expression used in this License shall, unless the context requires otherwise, have the same meaning as it has in the Act.
- 1.2. The following terms shall have the following meanings:
 - 1.2.1 “**ACE**” shall refer to the submarine cable system to be laid along the west coast of Africa, with various landing points including in Liberia, and “**ACE consortium**” shall mean those founding country and operator members of ACE which have signed the C&MA, of which CCL is one;
 - 1.2.2 “**Affiliate**” means a shareholder in the Licensee or an entity which itself owns 100% of that shareholder;
 - 1.3.1 “**Backhaul Provider**” means a service provider which has an appropriate license to construct a backhaul facility and to provide backhaul services in Liberia;
 - 1.3.2 “**Cable Landing Point**” or “**Landing Point**” means the beach joint at the cable landing locations, or mean low watermark of ordinary spring tides line if there is no beach joint at which the ACE cable is terminated in Liberia, which is operated by CCL, also referred to as the “**Terminal Station**”;
 - 1.3.3 “**Co-location**” shall have the same meaning as set out in the Interconnection Regulations, namely accommodation of two or more switches, transmission

equipment and antennae or other telecommunications facilities or equipment, or power generation equipment in, or on a single building, tower or structure for the purposes of interconnecting telecommunications networks or for other telecommunications purposes;

- 1.3.4 “**Customer/s**” shall have the meaning given to it in the Act save that in the context of this License it shall mean only those persons being other service providers or licensees which apply for and receive Licensed Services from CCL regardless of whether the services are required for the Customers’ own use, but not end users, and it shall also include other members of the ACE consortium;
- 1.3.5 “**CCL network**” means the telecommunications network referred to in 2.1 below;
- 1.3.6 “**CCL shareholders agreement**” means the agreement entered into by Cellcom, Libtelco, Lonestar and the Government, which establishes CCL as a commercial enterprise to participate in the ACE consortium; finance, construct, own, operate and maintain the Landing Station; and provide Licensed Services, subject to the terms and conditions of this License and the ACE C&MA;
- 1.3.7 “**C&MA**” means the ACE Construction and Maintenance Agreement dated 5 June, 2010;
- 1.3.8 “**Dominant**” shall have the same meaning as if it were used in the term “dominant service provider” as defined in the Act, and in the context of the Licensee means that CCL is designated to have significant market power or otherwise to be dominant in one or more markets pursuant to sections 27(d) and 36 of the Act;
- 1.3.9 “**End Users**” means any subscriber to or consumer of telecommunications services, whether an individual, corporation, governmental body or other public or private legal entity, but provided that the services are acquired for that person’s or those persons’ own use;
- 1.3.10 “**Government**” means the Government of the Republic of Liberia;
- 1.3.11 “**Interconnection Regulations**” means the regulations published by LTA entitled Interconnection Regulations, 2009, LTA REG-0003;
- 1.3.12 “**Open Access**” means the ability for other service providers including Backhaul Providers to obtain access to the Landing Point on a non-discriminatory basis, for the provision of onward connectivity beyond the Landing Station into Liberia; and

- 1.3.13 “RIO” means a reference interconnection offer which the Licensee is required to publish by the LTA as a consequence of it being found to have Dominance in a particular market.

PART II: GRANT OF LICENSE

2. Network authorisation

- 2.1. The Licensee is hereby granted a license to install, maintain and operate the Landing Station and associated equipment and international submarine cable landing systems, which comply with ITU standards and such other internationally recognised standards as may be adopted within Liberia from time to time, within the territory of the Republic of Liberia.
- 2.2. The Licensee is authorised to:
- 2.2.1. connect the CCL network to systems operated by other operators licensed by the LTA in accordance with the Act; and
 - 2.2.2. co-locate its telecommunications facilities with the facilities of other operators licensed by the LTA under the Act.
- 2.3. This License does not grant the Licensee the right to deploy, maintain, and/or operate any other telecommunications network.
- 2.4. Subject to the Act, LTA regulations and any other applicable laws and subject to compliance with all applicable government processes and approvals, the Licensee shall be entitled to install telecommunications equipment and facilities that are part of the CCL network on public property, and to access telecommunications equipment and facilities as reasonably required for the smooth operation and maintenance of the CCL network. Such access shall extend to third parties acting on behalf of the Licensee.

3. Service authorisation

- 3.1. The Licensee is authorised to provide any telecommunications service which the Licensee is under obligation to provide under this License (the “**Licensed Services**”), but not retail services or any form of telecommunications services to End Users.
- 3.2. Subject to 3.3 and 3.4 below, the Licensee shall not intentionally interrupt the operations of the CCL network or any part thereof, or the Licensed Services, in the normal course of business, nor shall it in the normal course of business suspend the provision of any type of Licensed Service without having first sought approval from the LTA in writing and subsequently providing reasonable advance notice to its Customers who are affected by such interruption or suspension.
- 3.3. In the event of an unintentional/unforeseen interruption of the Licensed Services or part thereof, which are significant in nature, the Licensee shall inform Customers and notify the LTA in writing within twenty-four (24) hours outlining the cause of such interruption and the steps being undertaken to rectify such interruption.

- 3.4 The provision in 3.2 shall not apply if, the interruption or suspension is to a Customer to whom the Licensee provides the Licensed Service and whose own telecommunications facilities or network or use thereof is endangering the integrity or operation of the CCL network.
- 3.5 The provision in 3.2 shall not apply if the interruption of service is as provided for under the relevant interconnection and/or commercial agreements between the Licensee and the Customer.

4. **Additional authority required and applying**

- 4.1. Before putting this license into operation, the Licensee shall first seek and obtain authorisation from:
- 4.1.1. the relevant maritime authority. The Licensee shall build and construct the CCL network in accordance with that Authority's directives including but not limited to the location of the Terminal Station within the territorial waters of Liberia and the shore; and
- 4.1.2. the relevant government environmental authority. The Licensee shall build the Landing Point in accordance with the said authority's directive including but not limited to submitting periodic environmental assessment or environmental impact reports for approval by that Authority.
- 4.2. The Licensee shall at all times comply with any requirements by the LTA or relevant government authority regarding the location and concealment of the cable facilities, buildings, and apparatus especially for the purpose of protecting and safeguarding the cables from injury or destruction in order to secure the national interest.
- 4.3 The Licensee shall at all times comply with the terms and conditions of any international agreement or treaty to which it or the Government of Liberia is or to which it or the Government becomes a party.

5. **Term and termination of license**

- 5.1. This License is issued on (the "**Effective Date**") for a period of fifteen (15) years (the "**Term**") with effect from the Effective Date unless it is revoked earlier in accordance with the License Conditions below.
- 5.2 The LTA may at any time revoke this License by giving six (6) months' notice in writing in any of the following circumstances:
- 5.2.1 if the Licensee agrees in writing with the LTA that this License should be revoked;
- 5.2.2 if the Licensee is dissolved, or otherwise ceases to provide the Licensed Services;
- 5.2.3 upon expiry of the Term unless it is renewed in accordance with 6 below;
- 5.2.4 for unremedied default by the Licensee, by exercise of the powers and processes described in 17; or

- 5.2.5 if the Licensee's membership of the ACE consortium or its right to land the ACE cable should terminate for any reason other than force majeure.
- 5.3 Prior to any termination of this license, the LTA may prescribe Customer migration or other Customer support procedures reasonably required to ensure the smooth transfer of Customers to one or more alternative service providers, and the Licensee shall participate in and give effect to such transitional requirements.
- 5.4 No termination under this 5 shall take effect while the circumstances or related decisions of the LTA are the subject of any judicial review or arbitration proceedings.
- 6. Renewal**
- 6.1 Renewal of this license is subject to the LTA review process which requires the Licensee to have complied with the Act, regulations, orders and rules of the LTA, other applicable laws, and this license.
- 6.2 Subject to 6.1, this license shall be renewed on such terms as are agreed between the LTA and the Licensee in accordance with the Act, and applicable regulations.
- 7. Amendment**
- 7.1 This license may be amended as set out in section 20 of the Act, at any time, subject to 7.2 below.
- 7.2 The LTA shall have:
- (a) given the Licensee at least three (3) months' advance written notice of the proposed amendment;
 - (b) consulted fully with the Licensee;
 - (c) not amended the license within the previous twelve (12) months; and
 - (d) taken adequate account of the impact of the amendment on the Licensee, its Customers, and with the objective of making the required change with the minimum disruption or other negative impact for the Licensee and its Customers; or
 - (e) decided that changes are required to implement this Act in a manner consistent with the objectives prescribed in Part I, section 3 and Part IV, section 20 of the Act.
- 7.3 No amendment to the license pursuant to this 7 shall be made while the proposed amendment is the subject of a judiciary review or arbitration proceedings pursuant to the Act.

PART III: FINANCIAL OBLIGATIONS

8. License fees

- 8.1 The Licensee shall pay an upfront application fee for the license of the amount of USD[amount], payable on or before the effective date of the license.
- 8.2 The Licensee shall pay the amount of USD[amount] plus [percentage]% of quarterly gross revenues generated from Licensed Services, or such other amount as may in the future be specified by LTA in a License Fees Regulation, payable within the last week of the first month after the quarter in the manner and at the place stipulated in *Annex 1*. Proof of payment shall be submitted to the LTA.
- 8.3 The Licensee shall pay all applicable Government taxes to the relevant department on demand.
- 8.4 Late payment shall incur a penalty based on the prevailing landing interest rate published by the Central Bank of Liberia.

PART IV: GENERAL OBLIGATIONS

9. Inspection, information and reports

- 9.1 All notices required to be given to the Licensee by the LTA shall be satisfied by delivering the notice to the Licensee at the Licensee's last known registered office.
- 9.2 The Licensee shall establish and maintain records in regard to its operations, in a format prescribed by the LTA from time to time, for a minimum period of two (2) years from the date such records came into being, or any later date required by any other law applicable to the Licensee.
- 9.3 The Licensee shall permit the LTA (or a person authorised by the LTA) and relevant Government Authorities to inspect the Licensee's systems, premises, facilities, files, records and other data to enable it to exercise its functions under the Act, on reasonable notice.
- 9.4 The Licensee shall furnish the LTA with quarterly network performance reports to include all network accounting records and call statistics, in the form determined by the LTA.
- 9.5 This 9 shall be subject at all times to the provisions of the Regulations for the Treatment of Confidentiality, Dispute Resolution, Compliance and Enforcement, LTA-REG-0002.
- 9.6 LTA may inspect the equipment and network of the Licensee at any time in particular to ensure that the Licensee has complied with section 34(1)(c) of the Act and that LTA can monitor calls originating from Liberia and terminating in Liberia.

10. Privacy and confidentiality

- 10.1. The Licensee shall use all reasonable endeavours to ensure the privacy and confidentiality of proprietary information and business secrets obtained in the course of its business from any traffic passing through the CCL network by establishing and implementing reasonable procedures for maintaining confidentiality of such information.
- 10.2. Except where a law enforcement agency may require otherwise, the Licensee shall:
- 10.2.1 make every reasonable effort to inform the parties whose traffic is to be recorded, silently monitored or intruded into before commencing the recording, silent monitoring or intrusion, that the traffic is to be or may be recorded, silently monitored or intruded into; and
 - 10.2.2 maintain a record of the means by which the parties have been informed that their traffic is to be or may be recorded, silently monitored or intruded into; and
 - 10.2.3 furnish the LTA with such information on request.

11. Accounting requirements

- 11.1. The Licensee shall submit to the LTA within twelve (12) months after the Effective Date a proposal for accounting principles which relates solely to the running of the CCL network and the provision of the Licensed Services and which allows the recording of investments, expenses and revenues in accordance with accounting principles generally accepted in Liberia.
- 11.2. The LTA shall approve or reject the proposed accounting principles within three (3) months after submission and may, in case of disapproval, propose modifications or order the Licensee to adopt prescribed accounting principles within a reasonable time period but in no event later than one (1) year from the date of approval. The LTA will accept any accounting principles generally accepted in Liberia.
- 11.3. Within ninety (90) days of the end of each fiscal year of the Licensee, the Licensee shall deliver to the LTA the balance sheet of the Licensee as at the end of such fiscal year and the related statements of operations, equity and cash flows of the Licensee, in each case accompanied by a report by the Licensee's independent auditors stating that such financial statements fairly present the financial position of the Licensee at the dates indicated and were prepared in accordance with accounting principles approved by the LTA in accordance with 11.2 above.
- 11.4. The LTA may request the Licensee to submit other accounting information it may require in order to effectively supervise and enforce the terms of this Licence, if the Licensee fails to comply with its obligations under 11.1 above or if the accounting principles established by the Licensee fail to achieve the objectives set out in that subsection.

12. Public safety

- 12.1 The Licensee shall take all proper and adequate safety measures to safeguard life against any danger, including radiation, emanating from the CCL network.
- 12.2 The Licensee will ensure that the provision of the Licensed Services does not become a health, environmental or a safety hazard and is not in contravention of any statute, rule or regulation and public policy.

13. Force majeure

- 13.1 Where in its opinion, the Licensee is impeded, hindered or otherwise prevented from carrying out any obligation contained in this License or as required by the LTA, by an act of God, fire, flood, natural disaster, action of Government, state of war, civil common or insurrection, riots, embargo, industrial disputes or any other cause beyond the control of the Licensee, the LTA may exempt the Licensee from performing such obligation for so long as and to the extent that the performance of the obligation is affected by force majeure.
- 13.2 The Licensee shall take all reasonable steps to minimize the impact of the force majeure on the performance of its obligations and where any part of the CCL network is damaged by such force majeure, shall take reasonable steps to repair or rebuild the affected telecommunications facilities once the force majeure has ceased or been eliminated.

PART V: RELATIONSHIPS WITH CUSTOMERS

This Part 5 shall apply to the extent that the Licensee is not obliged to formulate and publish a RIO in which case the following provisions shall be included in the RIO.

14. Terms and conditions

- 14.1 The Licensed Services shall be provided on standard terms and conditions which must include provision for an effective dispute resolution mechanism to be implemented in relation to disputes with Customers, an indicative quality of service standard as set out in 15, the terms and conditions of any warranty and maintenance services provided by the Licensee, and the terms and conditions of payment by the Customer.
- 14.2 A copy of the current version of the Licensee's terms and conditions shall be provided to Customers on request and published on the Licensee's website.
- 14.3 The Licensee shall file the standard terms and conditions upon which it proposes to offer the Licensed Services with LTA for approval prior to the date on which it is proposing to introduce them.

14.4 The Licensee shall comply with the provisions of Part X of the Act unless it is exempted by LTA, taking account of the fact that the Licensee may not provide the Licensed Services to End Users.

15. Quality of service

15.1. The Licensee shall make reasonable efforts to maintain at the minimum the Quality of Service (“QoS”) parameters as per the prevailing ITU recommendations pertaining to Quality of Service for the Licensed Services and the requirements of applicable regulations.

15.2 The Licensee shall ensure that it maintains records relating to the QoS requirements, which shall be readily available to the LTA for the purposes of satisfying the LTA that the Licensee is meeting the QoS Requirements.

PART VI: RELATIONSHIP WITH THE LTA

16. Dispute resolution

The dispute settlement mechanism set out in the Regulations for the Treatment of Confidentiality, Dispute Resolution, Compliance and Enforcement, LTA-REG-0002 shall apply to any dispute or disputes that arise out of the interpretation, application or implementation of the provisions of this License, without prejudice to the dispute resolution procedure that is included in the RIO, as required under the Interconnection Regulations.

17. Breach of licence conditions

17.1 In addition to any specific penalties or consequences for non-compliance under the Act, regulations and any other applicable laws, the Licensee agrees that failure to remedy non-compliance with any material condition of this license within thirty (30) days or such longer period as is agreed by LTA, shall entitle LTA to:

17.1.1 reduce the remaining term of this license;

17.1.2 refuse to renew or extend the term of this license;

17.1.3 impose a monetary penalty on the Licensee;

17.1.4 terminate this license; or

17.1.5 take any such other action as is permitted under applicable laws or the Regulation.

17.2 In applying any sanctions or penalties, the LTA shall ensure that the applied sanctions or penalties are proportionate to the breach or failure to remedy non-compliance. Prior to imposing any penalty for non-compliance by the Licensee, the LTA shall deliver written notice identifying the specific default that needs to be remedied by the Licensee. The Licensee shall have thirty (30) days or such longer period as is agreed by LTA, to propose a specific plan for remedying the identified default within an identified period of time. No penalty shall be imposed if the Licensee implements the remedial plan within the time period agreed to by LTA and the Licensee.

- 17.3 In imposing any penalty for non-compliance, the LTA shall be reasonable and ensure that the penalty is proportionate to and that the financial or other impact of the penalty does not significantly exceed the costs or other public impact associated with the default without good reason. The provisions of this section shall not apply to punitive action that the LTA brings against the Licensee.
- 17.4 No penalty shall be imposed while the circumstances or related decisions of the LTA are the subject of any judicial review or arbitration proceedings pursuant to the Act.

PART VII: PRO-COMPETITIVE OBLIGATIONS

18. Obligation to provide Licensed Services and to operate the CCL network

This Part 7 shall apply if and to the extent that the Licensee is declared to be Dominant in the market for international wholesale capacity on and access to submarine cables.

- 18.1 The Licensee shall provide the Licensed Services by means of the CCL network to any person who qualifies as a Customer and who requests the provision of such Services, in accordance with the Licensee's RIO.
- 18.2. The obligation in 18.1 above shall not apply in the event that, it is not, in the LTA's view, reasonable to require the Licensee to provide the Service requested by means of the CCL network because:
- 18.2.1 provision is obstructed by events that are beyond the Licensee's control;
 - 18.2.2 provision of the Service would expose any person engaged in its provision to undue risk to health or safety; or
 - 18.2.3 it is not reasonably practicable or economically feasible to provide the requested Services on the terms sought.
- 18.3 For the avoidance of doubt, a request for provision of Service shall not be unreasonable where the request is made in terms of any RIO published by the Licensee.
- 18.4. The operation of the Terminal Station shall be on an Open Access basis subject to applicable regulations, rules, decisions and orders by LTA.
- 18.5 The Licensee shall furnish and maintain, in working order for the duration of the Licence, the necessary telecommunications facilities as may be reasonably required within the Landing Point, for providing capacity to a requesting party on terms and conditions which shall be no less favourable than those granted to other Customers.
- 18.6. The Licensee shall ensure that Customers are entitled to choose their own Backhaul Provider.
- 18.7 The Licensee shall ensure that its RIO provides for the terms on which Co-location, connection facilities and any other necessary and associated services shall be made available at the Landing Point. Such facilities shall be provided with best reasonable

efforts, in a timely manner, without discrimination and subject to the provisions of the Interconnection Regulations, 2009.

- 18.8 CCL shall ensure it makes capacity in the form of international bandwidth on ACE available on an Open Access basis, and shall to this end, provide Co-location at the Landing Station. Co-location shall, in this License include physical Co-location and virtual Co-location. Any Interconnection Seeker that is offered only virtual Co-location must not be materially disadvantaged as a result, and the prices for Co-location must be cost-justified, non-discriminatory and approved by the LTA under 21.
- 18.9 The Licensee shall comply with any regulations, decisions, orders, technical specifications or guidelines issued by the LTA to ensure interoperability of the CCL network and Licensed Services with telecommunications services and systems of Customers.

19. Ownership and control of the Licensee and conflicts of interest

- 19.1 The Licensee shall not assign, delegate, transfer or encumber the rights, interests or obligations under this License without the prior, express and written consent of the LTA, such consent not to be unreasonably withheld or delayed. The LTA may impose conditions on any such assignment, delegation, transfer or encumbrance.
- 19.2 The Licensee shall notify LTA ninety (90) days prior to any change in equity holdings of five (5) percent or more as well as prior to entering into any arrangements which lead to or give effect to a change in control of the Licensee, or which may or which do lead to the Licensee acquiring any other business or a part of any other business, and seek the approval of the LTA (not to be unreasonably withheld) prior to giving effect to that change.
- 19.3 The CCL shareholders shall have access to confidential information concerning the business of the Licensee, which, if disclosed to third parties including the office bearers of the shareholders, might give rise to anti-competitive behaviour. The LTA may give written notice to the Licensee that intends to investigate a possible conflict of interest which does or which is likely to have the effect of unfairly preventing, restricting or distorting competition in Liberia in relation to any business activity related to the Licensed Services.
- 19.4 If LTA is of the view that there is a contravention of 20 below or of any other section of this License, LTA shall give the Licensee notice of the reasons why it is of the view that there is a contravention, and set out the steps that LTA requires the Licensee to take in order to remedy the alleged breach, allowing the Licensee a reasonable time within which to remedy the breach. The Licensee shall be permitted to make representations within the time period and at the place notified to it by the LTA in respect of the alleged contravention and the steps required to be taken.
- 19.5 Without prejudice to any other remedy which LTA may consider to be appropriate to remedy the contravention, LTA may impose conditions on the Licensee in relation to

the conduct of its shareholder meetings, representation on the CCL board by its shareholders, and the protection of its confidential information.

- 19.6 LTA has determined that because of the special nature of the CCL ownership structure, CCL's board of directors should not comprise any office bearers of the shareholder appointing that director, or office bearers of any other shareholder. To the greatest extent possible, board members of CCL and its operational staff should be appointed independently of and from outside any shareholder.

20. Compliance with Part VII of the Act

- 20.1 The Licensee shall comply with the provisions of Part VII of the Act at all times.
- 20.2 The Licensee shall not (whether in respect of the rates or other terms and conditions applied or otherwise) show undue preference to, or exercise undue discrimination against, particular persons or persons of any class or description in respect of the provision of the Licensed Services.
- 20.3 The Licensee may be deemed to have shown such undue discrimination if it unfairly favours to a material extent a business carried on by it in relation to the provision of the Licensed Services so as to place at a significant competitive disadvantage persons competing with that business, or if it favours an associated business or person, or an Affiliate.
- 20.4 Any question relating to whether any act done or course of conduct amounts to undue preference or undue discrimination shall be determined by the LTA.

21. Tariffs and price caps

- 21.1 The Licensee shall, prior to introducing any tariff for the Licensed Services or any part of them, submit that tariff to LTA for its written approval. The Licensee shall submit with each proposed tariff the methodology used to calculate the tariff and any supporting documents and calculations.
- 21.2 The LTA shall approve or reject a tariff within thirty (30) days of submission and notify the Licensee accordingly in writing. If the Licensee has not been so notified the tariff will be deemed to be approved.
- 21.3 If LTA rejects a proposed tariff it shall furnish reasons. The Licensee may re-submit the tariff for approval taking account of those reasons.

22. Accounting separation

The Licensee shall, until and unless directed otherwise by the LTA, maintain separate accounts in its financial books of account for income received from provision of each type of Licensed Service whether provided as capacity or Access to Facilities or Co-location, and costs associated with that provision.

23. Making CCL capacity commercially available

Each Shareholder shall in respect of its own share of CCL capacity, contribute at least twenty-five percent (25%), or such percentage that LTA may in the future determine, to a commercial capacity pool to be managed and distributed by CCL to Customers subject to the terms and conditions of this License.

Signed for and on behalf of Liberia Telecommunications Authority on _____

Chairperson:

Annex 1

All fees payable to LTA under this License shall be paid either:

- (i) to the following account by electronic funds transfer:

[details]

or

- (ii) to the LTA at its offices by cheque made payable to the LTA.

APPENDIX C: DRAFT ORDER ON CCL

PART I: PRELIMINARY

1.1 Preamble

This Order is made by the Liberia Telecommunications Authority (the “LTA”) pursuant to Sections 11 and 35 and Part VII of the Telecommunications Act, 2007 of the Republic of Liberia (the “Act”).

1.2 Purpose

The purpose of this Order is (i) to determine a relevant market having carried out a market study and having consulted on the results of that market study; (ii) to designate Cable Consortium of Liberia Inc. (“CCL”) as having Dominance in a market relevant to interconnection; and (iii) to determine the additional conditions that shall apply to CCL in consequence of the designation.

1.3 Scope of Application

This Order applies to CCL.

1.4 Terms and Definitions

The terms used in this Order shall have the same meaning as given to them in the Act and the Interconnection Regulations, 2009. The LTA notes its intention, contemporaneously with the publication of this Order, to amend the Interconnection Regulations, 2009.

PART II: POWERS AND FUNCTIONS OF THE LTA

- 2.1 Part IV of the Act sets out the functions and duties of the LTA in relation to competition among service providers in telecommunications markets in Liberia.
- 2.2 The LTA may issue an order designating a service provider as being Dominant in one or more telecommunications markets relevant to interconnection taking account of:
- (a) the relevant product and service markets including their geographic scope and territory;
 - (b) criteria and methodology to determine the degree of market power in a relevant market; and
 - (c) control of essential facilities within the relevant markets;
 - (d) price trends and pricing behaviour; and
 - (e) any other factor that LTA determines may be relevant under Part VII of the Act.

- 2.3 Under Section 11 the LTA may make orders respecting any matter or thing within the jurisdiction of the LTA under this Act, a regulation or a rule, including orders to compel a person to comply with or implement the purposes of this Act, a regulation, rule or licence, and, upon publication by the LTA such orders shall have the same legal force as a rule. In addition, the LTA may take such other actions as are reasonably required to carry out this Act, and all related regulations, rules and orders, and to perform such other responsibilities, functions and powers conferred on the LTA under any other law.
- 2.4 Furthermore, LTA shall ensure that, prior to issuing any order or any other exercise of its authority that is likely to have any substantial impact on network operators, service providers, any other market participant or the general public, it conducts a process of public consultation appropriate to the circumstances and shall take account of the results of the public consultation in the final exercise of its authority.

PART III: GRANT OF LICENSE TO CCL

3. In the exercise of its powers under the Act and the Licensing Regulations, 2008, the LTA intends to grant an individual license to CCL without a competitive tendering process, but having conducted a public consultation.

PART IV: DESIGNATION OF DOMINANCE

4. Designation of an essential facility

- 4.1 LTA is entitled to determine a telecommunications facility to be an essential facility pursuant to the Interconnection Regulations, 2009. An essential facility is defined as one that is owned by a service provider which cannot feasibly, whether economically or technically be substituted.
- 4.2 LTA has determined that the cable landing station to be licensed to CCL is an essential facility in that it cannot feasibly be economically or technically substituted.

5. Determination of a relevant market

- 5.1 Pursuant to a market study and a public consultation, the LTA has determined that there is a market for wholesale capacity and access to international fibre-optic submarine cables ("relevant market").
- 5.2 In this market, LTA has determined that CCL has or will have:
- (a) a 100% market share;
 - (b) control of an essential facility;
 - (c) technological advantages or superiority over other service providers;

- (d) easy or privileged access to capital markets / financial resources;
- (e) product / service diversification (e.g. bundling); and
- (f) the ability to structure itself so as to result in vertical integration.

5.3 In this market LTA has also determined that there is no or very little:

- (a) countervailing buyer power; and
- (b) potential competition.

6. Designation of dominance

Taking these factors into account, the LTA hereby designates CCL as dominant in the relevant market.

PART V: APPROPRIATE REMEDIES TO BE IMPOSED ON CCL

7. Choice of remedies

7.1 Pursuant to Sections 37, 38 and 39 of the Act, the interconnection arrangements of dominant service providers must be published in a Reference Interconnection Offer, and interconnection charges must be cost-based and comply with any regulations, rules or orders issued by the LTA. Interconnection includes access to capacity and access to infrastructure as set out in the interconnection regulations.

7.2 Under Section 42 of the Act, Dominant service providers must obtain the approval of the LTA for tariffs of all telecommunications service in markets in which the LTA has designated them as Dominant. Section 45 provides that the LTA may issue an order to adopt any method of tariff regulation.

8. Price caps

Before setting the level of the price cap, the LTA proposes to conduct further analysis and discussions with CCL shareholders and other stakeholders in the industry, as required under Section 46 of the Act. Although initial price caps should be set at a level to stimulate demand, the LTA proposes to conduct an annual review so as to allow for any under- or over-recovery of costs to be carried forward and influence the following year's prices

9. Non-discrimination

The terms of supply offered by CCL, including but not be limited to price, functionality and service quality, must not differ materially when the same or similar service is supplied to different customers.

10. Accounting separation

The provision of wholesale capacity and access to international fibre-optic submarine cables must be separated either structurally, functionally or in the accounts from the provision of any other wholesale or retail business provided by CCL.

11. Open access

CCL must offer open access to ACE capacity and Co-location at the ACE landing station so that third parties can provide downstream services on equivalent terms to CCL shareholders. Co-location shall include physical Co-location (where space permits) and virtual Co-location. Any Interconnection Seeker that is offered only virtual co-location must not be materially disadvantaged as a result, and the prices for Co-location must be cost-justified, non-discriminatory and approved by the LTA.

12. Reference interconnection offer

CCL's license shall require it to:

- a) offer wholesale access to any licensed service provider in Liberia;
- b) publish the terms on which it will receive, consider and accept requests for facilities leasing including physical or virtual Co-location at the landing station;
- c) establish standard terms and conditions for the supply of capacity, including prices, that are offered to all service providers on an equal basis; and
- d) set prices for capacity on a wholesale basis, on the basis of actual or predicted costs using a methodology to be developed by CCL and approved by LTA.

13. Incorporating the conditions in the CCL license

The license is attached.

PART VI: REVIEWING A DESIGNATION OF DOMINANCE

14 Procedure

- 14.1 A service provider which has been declared to be Dominant by LTA may at any time request LTA to review the declaration by making a written application supported by evidence to indicate that the declaration is no longer applicable, in the form prescribed by LTA from time to time, or if no form is prescribed, then in accordance with the provisions of the Confidentiality, Dispute Resolution and Compliance and Enforcement Regulations ("Dominance Review Request").
- 14.2 LTA shall review the declaration and advise the service provider of its decision within a period of no longer than sixty (60) calendar days from the date of the Dominance

Review Request, provided that no further market study is required to confirm the evidence provided by the service provider in the Request. If a further market study is required, then LTA shall not be bound by this time period until such time as the market study has been completed.