

CONSULTATION DOCUMENT

**Recommendation of the Eastern Caribbean Telecommunications Authority ("ECTEL")
To the National Telecommunications Regulatory Commission to consult on**

**RECOMMENDED PRICE CAPS PLAN for the
REGULATION OF PRICE CAPPED RETAIL SERVICES PROVIDED BY LIME**

**Consultation Document
October 28, 2014**

1. The National Telecommunications Regulatory Commission is in receipt of a submission from ECTEL containing ECTEL's recommendation for the Price Caps Plan for the regulation of price capped retail services provided by LIME.
2. A copy of the Recommendation is attached to this Consultative Document.
3. The period for comments will run from **October 29, 2014 to November 28, 2014**.
4. The period for comments on comments will run from **December 5 to 19, 2014**
5. All responses to this Consultative Document should be written and sent by e-mail to the NTRC at ntrc@ntrc.vc and copied to ECTEL at consultation@ectel.int.

Disclaimer

This consultative document does not constitute legal, commercial or technical advice. The consultation is without prejudice to the legal position of ECTEL's duties to provide advice and recommendations to the Ministers with responsibility for telecommunications and the National Telecommunications Regulatory Commissions.

Suggested Guidelines for Responses to Consultations

In order to promote faster processing of views expressed and to reduce administrative lags in the public consultation processes, the Commission hereby recommends that parties desirous of making contributions to the attached consultation follow the procedures outlined below.

- 1) Responses to consultations should be clearly labeled as a response to the particular consultation and correctly referenced by title.
- 2) Documents should contain; the Name of Party commenting, address and telephone, fax number and email contacts of commentary author or corporate officer(s) responsible for document. This information will enable the Commission to clarify any comments where necessary, or to facilitate follow-up dialog where required.
- 3) Commenting parties should avoid making comments in the form of tracked changes to consultation documents.
- 4) Where possible, parties should make explicit reference to academic articles, legislative provisions in other jurisdictions, or other sources relied on, and should provide copies of these together with comments. Accurate citations of resources relied on will suffice if copies cannot be provided.
- 5) Where parties are commenting on specific provisions of legal language, alternative language should be proposed where possible. Such language should be appropriately highlighted and double spaced. Parties should avoid proposing alternative language in tracked changes to the consultation document.

The Commission is grateful to those parties adopting the recommended guidelines for submitting comments.

RECOMMENDED PRICE CAPS PLAN
FOR THE
REGULATION OF PRICE CAPPED RETAIL SERVICES
PROVIDED BY LIME

CONSULTATION PAPER

1 Introduction

Following the liberalization of the telecommunications sector in the ECTEL Member-States more than ten years ago, ECTEL and the NTRCs have implemented two successive price cap plans to regulate the prices of LIME's retail fixed services.

The first of these plans came into effect in December 2004 and was scheduled to expire in March 2008 but was extended until April 15, 2010 when it was replaced by the current price caps plan (the "2004 PCP" and "2010 PCP", respectively). The 2010 PCP was scheduled to expire on March 31, 2013 but has been extended by ECTEL, pending the development and approval of a new price caps plan.

The price capped services included in the 2004 PCP and 2010 PCP were the same and were based on the Price Caps Implementation Agreement signed between the ECTEL Member-States, ECTEL and LIME on July 30, 2004. With this in mind, ECTEL was mindful of the need to undertake a market assessment of LIME's retail fixed services that had been included in the 2010 PCP. The results of the market assessment would identify which of LIME's retail fixed services should or should not continue to be included in a new PCP, and if included in the new PCP, the nature and extent of any such pricing constraints. The results of the market assessment exercise are included in Annex 1. Based on interim market assessment work, ECTEL invited LIME to participate in a comprehensive bilateral discussion process with the objective of reaching agreement on a new PCP to replace the 2010 PCP. The result of this process is the proposed recommended PCP included in Annex 2. Annex 1 and Annex 2 should be read together.

2. Process

ECTEL engaged the services of Consultants to assist and advise it in all components of the bilateral discussion process to date, which may be summarized as follows:

- **Data Collection.** ECTEL relied on a number of data sources to review the 2010 PCP and to undertake the market assessment and design the proposed 2015 PCP, including the following:
 - The comprehensive database used by ECTEL for its annual Sector Review Report (which includes historical data up to fiscal-year end 2013) ("ECTEL DB");
 - LIME's annual filings pursuant to the 2004 PCP and 2010 PCP, including Annual Compliance Filings ("ACF"), which includes LIME's Enhanced Allocation Model ("EAM") historical accounting cost separations results;
 - LIME's confidential "Report on Market, and Economic Developments over the period of the Price Cap and the Impact on Price Caps" dated November 15, 2013 ("LMR"), filed in compliance with the 2010 PCP. The LMR provides historical data and information on LIME's telecommunications sector operations and performance
 - LIME's responses to ECTEL's request for information ("RFI") dated May 20, 2014.

- Responses to ECTEL's June 11, 2014 request for information sent to other licensed operators' ("OLO") providing retail fixed services.
- **Review of 2010 PCP.** The evolution of the telecommunications markets in the ECTEL Member States under price caps, beginning in 2004, has been significant. Further, forward-looking market trends and the fact that the new PCP would be the third PCP implemented in the ECTEL Member States suggest that a more light-handed and narrowly focussed approach would likely be appropriate. This approach is consistent with regional and international trends.
- **Discussions with LIME.** As in the process to conclude the 2004 PCP, ECTEL established a Working Group ("WG") process that included representatives from ECTEL directorate, LIME and the Consultants. The WG undertook a data collection, market assessment and PCP review process over the period from late May, 2014 to late September, 2014. The objective of the process was to reach a WG "consensus" Market Assessment and 2015 PCP for review with NTRCs prior to recommendation to ECTEL Board.
- **Market Assessment.** ECTEL adopted a standard market competitiveness assessment involving the following steps: (1) the definition of the relevant markets (2) the identification of market assessment criteria and (3) an assessment of the degree of competition in those markets based on the criteria. ECTEL adopted defined relevant markets and market assessment criteria based on experience and practice in other jurisdictions, ECTEL's 2007 "Framework for the Determination of Dominance and Assessment of Market Competitiveness" Proposal ("Framework Proposal") as well as the factors included in Regulation 14(2) of Dominica's 2012 Retail Tariff Regulations ("2012 RTR"). The final Market Assessment is included in **Annex 1**.
- **Recommended 2015 PCP.** As set out above, ECTEL was of the going-in view that a more light-handed and narrowly focussed PCP was appropriate. This approach was confirmed by the interim market assessment results. In this context the 2010 PCP Rules were reviewed and assessed with the objective of moving towards a more light-handed PCP. The services to be included in the PCP, the number of baskets and the corresponding constrains were similarly assessed based on the interim market assessment results. These were validated based on the final market assessment results. The 2015 PCP is more streamlined (includes only two service baskets) and narrowly focussed (includes only those services determined in the market assessment process), reflective of current and emerging market conditions. It includes pricing safeguards for "basic" residential and business access and standard domestic calling rates. It also includes an additional 20 free FTF minutes per month for residential subscribers (bringing the total to 100 free FTF minutes under the 2015 PCP). The Recommended 2015 PCP is included in **Annex 2**.
- **NTRC Workshop and Approval by ECTEL Board and Preparation of ConDoc.** With the objective of providing an opportunity for the NTRCs to provide comments on a version of the proposed 2015 PCP, the WG consensus market assessment and proposed PCP were presented to the NTRCs at a joint ECTEL/NTRC workshop in St. Lucia on August 21, 2014. The ECTEL Board subsequently considered the WG consensus market assessment and

proposed PCP at their meeting on September 12, 2014 and approved it for recommendation to the NTRCs for public consultation. The ECTEL Directorate prepared this Consultation Document and sent it to each of the NTRCs in October, 2014.

This section is only applicable to the Commonwealth of Dominica

3 Legal basis for the proposed price cap plan

In accordance with Regulation 29 (a) of the Telecommunication (Retail Tariff) Regulations, the Commission proposes to use a price cap plan to regulate the tariffs for some fixed line services offered by LIME. The services to be regulated were determined based on a market assessment, the results of which are presented in Annex 1. The Commission now invites comments from interested parties on Annex 1: Market Assessment and Annex 2: Recommended Price Caps Plan. Annex 1 and Annex 2 should be read together.

Following the Comments period, the Commission will submit comments received to ECTEL's Directorate for its assessment. In consultation with LIME, ECTEL may revise the Price Caps Plan and re-submit to the Commission for consideration, approval and adaption in accordance with the Telecommunication (Retail Tariff) Regulations.

This section is applicable to Grenada, St Kitts and Nevis, Saint Lucia and St Vincent and the Grenadines

3 Legal basis for the consultation

The Commission proposes to conduct a public consultation on the proposed price cap plan in accordance with Regulation 28 (2)¹ of the Telecommunication (Retail Tariff) Regulations. The Commission invites comments on Annex 1: Market Assessment and Annex 2: Recommended Price Caps Plan. Annex 1 and Annex 2 should be read together.

Following the Comments period, the Commission will submit comments received to ECTEL's Directorate for its assessment. In consultation with LIME, ECTEL may revise the Price Caps Plan and re-submit to the Commission for consideration, approval and adaption in accordance with the Telecommunication (Retail Tariff) Regulations.

¹ Regulation 29(2) in Saint Vincent and the Grenadines

ANNEX 1: MARKET ASSESSMENT

As set out in the Consultation Document this market assessment involves the following steps: (1) the definition of the relevant markets (2) the identification of market assessment criteria and (3) an assessment of the degree of competition in those markets based on the criteria.

1. Relevant Markets

Defining a relevant market involves consideration of both the product and geographic dimensions of the market in question. A relevant *product* market comprises all those products and/or services which are regarded as interchangeable or substitutable by consumers due to the products' characteristics, prices and intended use. A relevant *geographic* market comprises the area in which the firms concerned are involved in the supply of the products or services and in which the conditions of competition are sufficiently homogeneous.

LIME's retail fixed services included in the 2010 PCP cover a number of separate relevant markets, each of which is considered independently. Table 1 provides a list of adopted relevant markets along with a description of the main services covered in each case, which include related vertical and/or ancillary services. Thus, Table 1 includes the totality of the services included in the Current PCP. Table 1 shows that the services included in the Current PCP may be included in seven separate defined relevant markets (Markets 1 through 7).

Table 1 – Defined Relevant Retail Service Markets

No.	Relevant Market	Service Inclusions
1.	Residential Access at a Fixed Location	<ul style="list-style-type: none"> • Standalone or basic local access • Residential value added services (“VAS”), including services such as caller ID and voice mail (“VM”) • Bundled local access services (including bundled basic local access, VAS and/or domestic and/or international calling services, etc.) • All related services such as installation, activation or re-connection
2.	Business Access at a Fixed Location	<ul style="list-style-type: none"> • Standalone or basic single-line local access (e.g., a Business DEL) • Multiline local access (including PBX and Government) • Business VAS • Bundled local access services (e.g., including single-line or multiline local access, VAS and/or domestic and/or international calling services, etc.) • All related services such as installation, activation or re-connection
3.	Domestic Calling from a Fixed Location	<ul style="list-style-type: none"> • Domestic Fixed-to-Fixed (“FTF”) calling • Domestic Fixed-to-Mobile (“FTM”) calling • Including domestic "on-net" calling (i.e., to LIME fixed and mobile subscribers) and "off-net" calling (i.e., to other local operators' networks)
4.	Internet Access at a Fixed Location	<ul style="list-style-type: none"> • Dial-up Access • Broadband Internet Access • Dedicated Internet Access (“DIA”) • All related one-time charges
5.	Domestic Private Leased Circuits	<ul style="list-style-type: none"> • All DPLC services (i.e., all transmissions speeds and technologies) • All related one-time charges
6.	International Private Leased Circuits	<ul style="list-style-type: none"> • All IPLC services (i.e., all transmissions speeds and technologies) • All related one-time charges
7.	Data Services	<ul style="list-style-type: none"> • X.25 • Frame Relay • Other Next Generation data services (including Ethernet)

Table 1 – Defined Relevant Retail Service Markets

No.	Relevant Market	Service Inclusions
		<ul style="list-style-type: none"> • All related one-time charges

In terms of geographic market definition, based on the Framework Proposal, the geographic scope of each of the service markets listed in Table 1 is treated as national for each ECTEL Member-State (“MS”).

Consideration of Mobile Services

An important issue that arose in the context of the defining the above-noted relevant markets is whether it remains appropriate to treat fixed and mobile access and calling as separate relevant markets.

For instance, LIME argued in the LMR that market trends suggest that mobile access and calling are now reasonable substitutes for residential fixed access and domestic call origination from a fixed location (including calls made by both residential and business customers), respectively. If this were the case, then Market 1 should be expanded in scope to include mobile access and Market 3 above should be expanded in scope to include mobile domestic call origination.

However, ECTEL considers that the definitions of Markets 1 and 3 – which are limited to access and call origination services provided at a fixed location – remain appropriate at this time. There are a number of factors supporting this position:

- *Penetration:* Fixed line penetration has declined gradually in the MS from 27% in 2006 to 23% in 2013 overall. On the other hand, mobile penetration has increased from 70% to 128% over the same period. These contrasting trends suggest that the degree of substitution between fixed and mobile is limited.
- *Consumer Survey Data:* Based on the limited Caribbean consumer survey information available (which applied to a Caribbean jurisdiction outside of the MS), ECTEL found very limited evidence, in support of the contention that mobile is viewed by consumers as a substitute for residential fixed access. For instance, the available survey information indicated:
 - that a large percentage of respondents had both fixed and mobile access, which suggests that most residential fixed access subscribers surveyed appear to view mobile as a complement rather than a substitute; and
 - that the majority of the respondents retained fixed access because they have always had it (i.e., tradition) and also because they consider it to be more reliable.
- *Relative Prices:* An analysis of relative fixed and mobile prices in the MS, based on typical fixed subscriber call usage patterns, indicates that fixed service is currently considerably less expensive than mobile service. This suggests that mobile would not be a strong substitute for fixed service at this time.
- *Calling Patterns:* The available evidence indicates that calling patterns among fixed and mobile subscribers are very similar in that the majority of calls are "on-net". This suggests that current calling rate differentials incent subscribers to use fixed access primarily to call other fixed lines and mobile access primarily to call other mobile

subscribers. That is, while mobile may be a relatively strong alternative to fixed when the destination of the call is a mobile network, mobile is a very weak (or not at all) alternative when the destination of the call is a fixed network. In other words, mobile calling is, overall, at best a weak alternative to fixed calling under present service plan rates.

- *Regional Precedents:* ECTEL is not aware of any other jurisdictions in the Caribbean that have defined the relevant markets for access or calling as including both fixed and mobile technologies. Consequently, there is no support for adopting this approach in the MS at this time.

Therefore, ECTEL considers that Markets 1 and 3 should not be expanded to include mobile services at this time.

2 Market Competitiveness Test Criteria

The range of alternative dominance and market competitiveness test criteria can be extensive and typically varies depending on the relevant market in question. For the case at hand, the objective was to adopt a manageable set of market competitiveness test criteria that provide an efficient and effective means to determine whether any or all of LIME's fixed retail services are currently or will in the immediate term be subject to sufficient competitive pressure to be potentially designated as unregulated or, alternatively, treated as uncapped regulated services. As well, the objective in this respect was to rely on quantifiable test criteria to the greatest extent possible.

With this in mind, and also based on the Framework Proposal and experience in other jurisdictions, Table 2 summarizes the market competitiveness test criteria adopted to assess the level of competition in each of the seven markets listed in Table 1. As well, given the harmonization objectives under which ECTEL was established, a single uniform market assessment was conducted jointly for all five MS. Table 2 shows a total of six test criteria.

Table 2 – Market Competitiveness Test Criteria

No.	Criterion	Description & Relevance
1.	LIME Relevant Market Specific Data	<ul style="list-style-type: none"> • Consideration of historical volume, price and revenue data for LIME's fixed services included in the relevant market in question. • Consideration of historical service-specific profitability for LIME's fixed services included in the relevant market in question (using LIME's cost separations model). • Consideration of forward-looking projections for same (where available). • <i>Relevance: Evidence of declining trends for one or more of these factors may be indicative of an increasing level of competition.</i>
2.	Competitive Alternatives (including evidence of rivalrous behaviour)	<ul style="list-style-type: none"> • Identification of all existing and potential substitutes or alternatives by technology: wireline, fixed wireless and mobile wireless (as may be applicable). • Including in each case, service coverage, supply capacity and alternative pricing information. • Evidence of falling prices, vigorous marketing activities and an expanding scope of activities by existing competitors. • <i>Relevance: Significant evidence of competitive alternatives and rivalrous behaviour would be supportive of a finding of a high level of competition.</i>
3.	Market Shares	<ul style="list-style-type: none"> • Estimation of LIME's current and historical market share (where possible). • <i>Relevance: Low or declining market share would be indicative of a high level of competition; however, high market share in and of itself would not preclude finding of sufficient competitiveness.</i>
4.	Market/Sector Trends	<ul style="list-style-type: none"> • Consideration of ongoing innovations and technological changes affecting the nature and scope of existing and potential competition.

Table 2 – Market Competitiveness Test Criteria

No.	Criterion	Description & Relevance
		<ul style="list-style-type: none"> • <i>Relevance: Evidence of rapid innovation and technological advancement would be supportive of increasing competitiveness.</i>
5.	Barriers to Entry	<ul style="list-style-type: none"> • Identification of any financial, technical or regulatory barriers to market entry or expansion or, more generally, competition. • <i>Relevance: Absence of any significant barriers to entry would be indicative of increasing competitiveness.</i>
6.	Consumer Behaviour	<ul style="list-style-type: none"> • Identification of any barriers to switching • Survey information on customer perceptions on the substitutability service alternatives • <i>Relevance: Absence of any significant barriers to switching and positive consumer opinions of alternatives would be indicative of increasing competitiveness.</i>

Market Assessment Data and Information

The market data and information relied on by ECTEL for the purposes of the market assessment and analysis included the following:

- ECTEL's data base used for its annual Sector Review Report (which includes data up to fiscal-year end 2013) (“ECTEL DB”);
- LIME's annual PCP filings including Annual Compliance Filings ("ACF"), which includes LIME's Enhanced Allocation Model ("EAM") historical accounting cost separations results;
- LIME's LMR, which provides historical data and information on LIME's telecommunications sector operations and performance in the MS;
- LIME's responses to ECTEL's request for information ("RFI") of May 20, 2014 and additional related follow-up data and information; and
- Other Local Operators' ("OLO") responses to ECTEL's RFI of June 11, 2014.

Lastly, ECTEL carried out its own qualitative assessment (“ECTEL Assessment”) in considering some of the test criteria

3. Market Assessment

Tables 3 to 9 include a summary of market assessment evidence and conclusions for the seven Markets listed in Table 1.

Each table includes the six test criteria identified in Table 2, as well as other factors (if any), whether or not there are significant differences in one or more MS and ECTEL’s conclusion as to whether the corresponding services should or should not be included in the Recommended PCP.

Data sources are identified throughout Tables 3 to 9, based on the above-noted data and information summary. Note that some of the information in Tables 3 to 9 is competitively sensitive in nature in that its public release could cause direct and specific harm to LIME. Where this is the case, the summary information relied on by ECTEL is labelled as "*CONFIDENTIAL*".

Table 3: Market Assessment Results for Market 1: Residential Access at a Fixed Location

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Service Volumes	<ul style="list-style-type: none"> • LIME's RES fixed lines declining in all MS • Rate <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Service Prices	<ul style="list-style-type: none"> • No changes to headline fixed line prices since 2010 	<ul style="list-style-type: none"> • LIME ACFs
		PCP API vs PCI	<ul style="list-style-type: none"> • Basket 1 API \leq PCI (gaps due to differences MS vs regional CPI – largest gap = 4.4% in SVG) 	<ul style="list-style-type: none"> • LIME ACFs
		ARPU trends	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LIME • LMR
		Promotions	<ul style="list-style-type: none"> • Several examples of fixed access promotions provided for Dominica, Grenada, St. Kitts, and St. Vincent 	<ul style="list-style-type: none"> • LIME RFI Response
		Profitability (EAM)	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LIME EAMs
2	Competitive Alternatives	Direct Substitutes	<ul style="list-style-type: none"> • Cable telephony providers in each MS – including Marpin 2K4, Flow, The Cable, Caribbean Cable and Karib Cable • SAT Telecom offers fixed access service in Dominica (now owned by Digicel) • Fixed wireless could be an option in the future (e.g., via Digicel) 	<ul style="list-style-type: none"> • ECTEL DB
		Coverage/Capacity	<ul style="list-style-type: none"> • Cable coverage likely extensive, but actual footprint relative to LIME not available 	<ul style="list-style-type: none"> • NA
		Indirect Substitutes	<ul style="list-style-type: none"> • Mobile provides an indirect substitute for many others and, more generally, provides some competitive pressure on LIME's fixed line pricing • VoIP service provides an indirect alternative (although it requires broadband connection and may preclude local number) 	<ul style="list-style-type: none"> • ECTEL Assessment
		Coverage/Capacity	<ul style="list-style-type: none"> • Mobile generally nationwide • VoIP depends on broadband coverage, but should at a minimum include LIME's broadband network footprint 	<ul style="list-style-type: none"> • ECTEL Assessment
		Evidence of rivalry:	<ul style="list-style-type: none"> • Competitively priced alternatives being offered by cablecos, and LIME responding with promotional offers (although relatively limited in number based on examples provided to date) 	<ul style="list-style-type: none"> • LIME RFI Response • ECTEL DB • ECTEL Assessment
3	Market Shares	Revenue Based	<ul style="list-style-type: none"> • Likely very high based on fixed line market shares 	<ul style="list-style-type: none"> • ECTEL Assessment
		Volume Based	<ul style="list-style-type: none"> • As of 2013, very high 	<ul style="list-style-type: none"> • ECTEL DB • OLO RFI Responses
		Trend	<ul style="list-style-type: none"> • Relatively flat, with slight decline • To date, competitor inroads limited and increasing very slowly 	<ul style="list-style-type: none"> • ECTEL DB
4	Market/Sector Trends	Trends	<ul style="list-style-type: none"> • Residential fixed access lines generally decreasing gradually in most countries, while mobile access increasing • Generally, communications moving away from POTS to broadband (IP & 4G) • Fixed line penetration in ECTEL MS overall declining gradually (i.e., from 26% in 2009 to 23% as of 2013) 	<ul style="list-style-type: none"> • ECTEL Assessment • ECTEL DB
		Likelihood of Entry	<ul style="list-style-type: none"> • Other than the prospect of Digicel launching a RES fixed wireless service, the likelihood of further entry very low 	<ul style="list-style-type: none"> • ECTEL Assessment

5	Barriers to Entry	Financial	<ul style="list-style-type: none"> • Very high cost of entry for completely new entrants, but cable and fixed wireless networks already in market with access infrastructure deployed 	<ul style="list-style-type: none"> • ECTEL Assessment
		Technical/Regulatory	<ul style="list-style-type: none"> • Number portability and unbundled loops not currently available 	<ul style="list-style-type: none"> • ECTEL
		Other	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
6	Consumer Behaviour	Barriers to Switching	<ul style="list-style-type: none"> • Moderate given absence of local number portability 	<ul style="list-style-type: none"> • ECTEL Assessment
		Survey Evidence	<ul style="list-style-type: none"> • Hope Caribbean Consumer Survey conducted in Turks & Caicos Islands ("TCI") in December 2012 provides evidence consumer usage of and views on fixed, mobile and VoIP services which of relevance given the general similarities between TCI and the ECTEL MS 	<ul style="list-style-type: none"> • LIME commissioned survey
7	Other Factors	Countervailing buyer power	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • ECTEL Assessment
8	Significant differences in one or more MS		<ul style="list-style-type: none"> • None identified 	<ul style="list-style-type: none"> •
9	Conclusion		<ul style="list-style-type: none"> • While there are direct alternatives available to LIME's fixed line RES access services in each MS – i.e., primarily cable access – the take-up of these alternatives has been limited to date and, further, there is no current evidence to suggest that the slow rate of take-up is about to change in the near term. VoIP and mobile are both weak substitutes at best at this time, although ECTEL considers that mobile does provide some pricing pressure on LIME's fixed line RES access services. • On balance, based on currently available information, ECTEL considers that LIME's fixed line RES access services should be included in the Recommended PCP, but that a more narrowly focussed and light-handed price cap can be applied going forward – i.e., one focussed solely on basic standalone access. 	

Table 4: Market Assessment Results for Market 2: Business Access at a Fixed Location

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Service Volumes	<ul style="list-style-type: none"> • The ECTEL sector data indicates that LIME's BUS fixed access generally increasing in most MS • Rates <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Service Prices	<ul style="list-style-type: none"> • No changes to headline prices since 2010 	<ul style="list-style-type: none"> • LIME ACFs
		PCP API vs PCI	<ul style="list-style-type: none"> • Basket 2 API < PCI (on average by about 14% in total) 	<ul style="list-style-type: none"> • LIME ACFs
		ARPU trends	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Promotions	<ul style="list-style-type: none"> • Several examples of promotions provided for Dominica, Grenada, and St. Vincent 	<ul style="list-style-type: none"> • LIME RFI Response
		Profitability (EAM)	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LIME EAMs
2	Competitive Alternatives	Direct Substitutes	<ul style="list-style-type: none"> • Cable telephony service providers in each MS – including Marpin 2K4, Flow, The Cable, Caribbean Cable and Karib Cable • SAT Telecom in Dominica offers fixed services (now owned by Digicel) • Digicel reportedly offering a fixed wireless access service to business customers in all MS 	<ul style="list-style-type: none"> • ECTEL DB • LIME
		Coverage/Capacity	<ul style="list-style-type: none"> • Cable plant can be able to serve small businesses, but not necessarily large businesses • Digicel likely offering services to small and large businesses (using wireless technology, Digicel should be able to serve most business in each MS) 	<ul style="list-style-type: none"> • ECTEL Assessment
		Indirect Substitutes	<ul style="list-style-type: none"> • VoIP an indirect substitute (requires broadband connection and may preclude local number) • Mobile a weak substitute at best (likely only seen as so by some smaller businesses) 	<ul style="list-style-type: none"> • ECTEL Assessment
		Coverage/Capacity	<ul style="list-style-type: none"> • Mobile nationwide • VoIP depends on broadband coverage but should at a minimum include LIME's broadband network footprint 	<ul style="list-style-type: none"> • ECTEL Assessment
		Evidence of rivalry:	<ul style="list-style-type: none"> • Competitive alternatives being offered by cablecos and Digicel • LIME responding with promotional offers (although relatively limited in number based on examples provided to date) and introduced new bundles for business customers including local call, calling allowances and Internet service in all MS 	<ul style="list-style-type: none"> • ECTEL Assessment • LIME RFI Responses
3	Market Shares	Revenue Based	<ul style="list-style-type: none"> • Likely very high based on fixed line market shares 	<ul style="list-style-type: none"> • ECTEL Assessment
		Volume Based	<ul style="list-style-type: none"> • As of 2013, very high 	<ul style="list-style-type: none"> • ECTEL DB • OLO RFI Responses
		Trend	<ul style="list-style-type: none"> • Relatively flat 	<ul style="list-style-type: none"> • ECTEL DB
4	Market/Sector Trends	Trends	<ul style="list-style-type: none"> • Business fixed access line growth relatively flat in many countries • Communications migrating away from POTS to converged IP platforms along with increasing use of mobile technologies 	<ul style="list-style-type: none"> • ECTEL Assessment

		Likelihood of Entry	<ul style="list-style-type: none"> • Low as far as fixed service providers are concerned 	<ul style="list-style-type: none"> • ECTEL Assessment
5	Barriers to Entry	Financial	<ul style="list-style-type: none"> • Very high cost of entry for completely new entrants, but cable companies and wireless network service providers already in market with access infrastructure deployed 	<ul style="list-style-type: none"> • ECTEL Assessment
		Technical/Regulatory	<ul style="list-style-type: none"> • Number portability and unbundled loops not currently available 	<ul style="list-style-type: none"> • ECTEL
6	Consumer Behaviour	Barriers to Switching	<ul style="list-style-type: none"> • Moderate to high given absence of local number portability available 	<ul style="list-style-type: none"> • ECTEL Assessment
		Survey Evidence	<ul style="list-style-type: none"> • Hope Caribbean Consumer Survey conducted in Turks & Caicos Islands in December 2012 provides evidence business user usage of and views on fixed, mobile and VoIP services which of relevance given the general similarities between TCI and the ECTEL MS 	<ul style="list-style-type: none"> • LIME commissioned survey
7	Other Factors	Countervailing buyer power	<ul style="list-style-type: none"> • Likely in the case of large multiline/bundled service customers 	<ul style="list-style-type: none"> • ECTEL Assessment
8	Significant differences in one or more MS		<ul style="list-style-type: none"> • None identified 	
9	Conclusion		<ul style="list-style-type: none"> • While there are direct alternatives available to LIME's fixed line BUS access services in each MS – i.e., primarily via cable and Digicel fixed wireless access – the take-up of these alternatives has been limited to date and, further, there is no current evidence to suggest that the slow rate of take-up is about to change in the near term. • On balance, based on currently available information, ECTEL considers that LIME's fixed line BUS access services should be included in the Recommended PCP, but that a more narrowly focussed price cap can be applied going forward – i.e., one focussed solely on basic standalone access. 	

Table 5: Market Assessment Results for Market 3: Domestic Call from a Fixed Location

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	<ul style="list-style-type: none"> • NA 	
		Service Volumes	<ul style="list-style-type: none"> • LIME's FTF and FTM voice traffic declining • Rates <i>CONFIDENTIAL</i> • LIME's FTF traffic accounts for very large percentage of domestic voice call traffic from a fixed location 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Service Prices	<ul style="list-style-type: none"> • No changes to FTF rates since 2010 • FTM rate reductions mandated under Basket 6 price cap rule 	<ul style="list-style-type: none"> • LIME ACFs
		PCP API vs PCI	<ul style="list-style-type: none"> • Basket 1 API < PCI (gaps due to differences MS vs regional CPI) • Basket 6 FTM API = PCI 	<ul style="list-style-type: none"> • LIME ACFs
		ARPU trends	<ul style="list-style-type: none"> • NA 	
		Promotions	<ul style="list-style-type: none"> • Examples of RES discounts promotions provided (such as limited term discounts on Cheap Chat plan) for Dominica, St Kitts and St Vincent 	<ul style="list-style-type: none"> • LIME Response to RFI
		Profitability (EAM)	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LIME EAMs
2	Competitive Alternatives	Direct Substitutes	<ul style="list-style-type: none"> • Same as RES and BUS fixed access markets 	<ul style="list-style-type: none"> • See Markets 1 and 2
		Coverage/Capacity	<ul style="list-style-type: none"> • Same as RES and BUS fixed access markets 	<ul style="list-style-type: none"> • See Markets 1 and 2
		Indirect Substitutes	<ul style="list-style-type: none"> • Mobile provides an indirect substitute more so for RES than BUS customers, but considered to provide some competitive pressure on LIME's domestic call pricing (it is also worth noting that a very large percentage of mobile call traffic is on-net MTM, indicating that that mobile is primarily used to call other mobile users on the same network) • VoIP service provides an indirect alternative (although it requires broadband connection and may preclude local number) 	<ul style="list-style-type: none"> • See Markets 1 and 2 • ECTEL DB
		Coverage/Capacity	<ul style="list-style-type: none"> • Mobile nationwide • VoIP depends on broadband coverage but should at a minimum include LIME's broadband network footprint 	<ul style="list-style-type: none"> • ECTEL Assessment
		Evidence of rivalry:	<ul style="list-style-type: none"> • Competitively priced alternatives being offered by cablecos and Digicel, and LIME responding with promotional offers (although relatively limited in number based on examples provided to date) 	<ul style="list-style-type: none"> • ECTEL Assessment • LIME • ECTEL DB
3	Market Shares	Revenue Based	<ul style="list-style-type: none"> • NA 	
		Volume Based	<ul style="list-style-type: none"> • As of 2013, very high 	<ul style="list-style-type: none"> • ECTEL DB
		Trend	<ul style="list-style-type: none"> • Relatively flat 	<ul style="list-style-type: none"> • ECTEL DB
4	Market/Sector Trends	Technology Trends	<ul style="list-style-type: none"> • Fixed access lines and calling volumes generally decreasing in most countries • Communication moving away from both fixed and mobile switched to IP 	<ul style="list-style-type: none"> • ECTEL Assessment • LIME
		Likelihood of Entry	<ul style="list-style-type: none"> • Low as far as fixed service providers are concerned 	<ul style="list-style-type: none"> • Low
5	Barriers to Entry	Financial	<ul style="list-style-type: none"> • Relatively high cost of entry for completely new entrants, but cable companies and mobile networks already in market with access infrastructure deployed 	<ul style="list-style-type: none"> • ECTEL Assessment

		Technical/Regulatory	<ul style="list-style-type: none"> • Number portability not currently available 	<ul style="list-style-type: none"> • ECTEL
6	Consumer Behaviour	Barriers to Switching	<ul style="list-style-type: none"> • Moderate given absence of number portability 	<ul style="list-style-type: none"> • ECTEL Assessment
		Survey Evidence	<ul style="list-style-type: none"> • Hope Caribbean Consumer Survey conducted in Turks & Caicos Islands ("TCI") in December 2012 provides relevant evidence of consumer and business user usage of and views on fixed, mobile and VoIP services given the general similarities between TCI and the ECTEL MS 	<ul style="list-style-type: none"> • LIME commissioned survey
7	Other Factors	Countervailing buyer power	<ul style="list-style-type: none"> • Likely in the case of large business customers 	<ul style="list-style-type: none"> • ECTEL Assessment
8	Significant differences in one or more MS		<ul style="list-style-type: none"> • None identified 	
9	Conclusion		<ul style="list-style-type: none"> • As in the case of Markets 1 and 2, while there are direct alternatives available to LIME's domestic calling serve from a fixed location in each MS – i.e., primarily via cable and Digicel fixed wireless access – the take-up of these alternatives has been limited to date and further, there is no current evidence to suggest that the slow rate of take-up is about to change in the near term. • On balance, based on currently available information, ECTEL considers that LIME's FTF and FTM call services should included in Recommended PCP. 	

Table 6: Market Assessment Results for Market 4: Broadband Internet Access at a Fixed Location

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Service Volumes	<ul style="list-style-type: none"> • LIME's broadband Internet lines growing • Rates <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Service Prices	<ul style="list-style-type: none"> • LIME RES and BUS Internet rates reduced significantly in some cases 	<ul style="list-style-type: none"> • LIME RFI Response
		PCP API vs PCI	<ul style="list-style-type: none"> • Basket 3 API < PCI in all MS (but by very little in DOM, GND & SKN) 	<ul style="list-style-type: none"> • LIME ACFs
		ARPU trends	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Promotions	<ul style="list-style-type: none"> • Examples for RES customers provided for all MS and for BUS customers in most MS 	<ul style="list-style-type: none"> • LIME RFI Response
		Profitability (EAM)	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LIME EAMs
2	Competitive Alternatives	Direct Substitutes	<ul style="list-style-type: none"> • Cable telephony providers in each MS and other competitors in many MS as well (such as Sat Telecom in Dominica, Grencomm and Aislecom in Grenada, Tele in St Lucia) • Digicel may also offer a fixed wireless broadband Internet services 	<ul style="list-style-type: none"> • ECTEL DB • LIME RFI Response
		Coverage/Capacity	<ul style="list-style-type: none"> • Cable plant can be able to serve most residence customers small businesses, but not necessarily large businesses • Digicel likely offering services to small and large businesses (using wireless technology, Digicel should be able to serve most business in each MS) 	<ul style="list-style-type: none"> • ECTEL Assessment • LIME RFI Response
		Indirect Substitutes	<ul style="list-style-type: none"> • Mobile broadband a weak substitute (due to cost and more limited data allowances) 	<ul style="list-style-type: none"> • ECTEL Assessment
		Coverage/Capacity	<ul style="list-style-type: none"> • Mobile nationwide 	<ul style="list-style-type: none"> • ECTEL Assessment
		Evidence of rivalry:	<ul style="list-style-type: none"> • Competitive alternatives being offered by cablecos and Digicel, and LIME responding with promotional offers (although relatively limited in number based on examples provided to date) 	<ul style="list-style-type: none"> • ECTEL Assessment • LIME RFI Responses
3	Market Shares	Revenue Based	<ul style="list-style-type: none"> • As of 2013, LIME's revenue-based market share roughly 70% across the MS 	<ul style="list-style-type: none"> • ECTEL DB
		Volume Based	<ul style="list-style-type: none"> • As of 2013, LIME's subscriber-based market roughly 65% across the MS 	<ul style="list-style-type: none"> • ECTEL DB
		Trend	<ul style="list-style-type: none"> • LIME's market share eroding steadily since 2010 	<ul style="list-style-type: none"> • ECTEL DB
4	Market/Sector Trends	Trends	<ul style="list-style-type: none"> • Broadband penetration growing, service speeds improving, and per Mbps prices generally falling • Broadband penetration in MS increased from 13% in 2009 to 16% in 2013 	<ul style="list-style-type: none"> • ECTEL Assessment • ECTEL DB
		Likelihood of Entry	<ul style="list-style-type: none"> • Low as far as fixed service providers are concerned 	<ul style="list-style-type: none"> • ECTEL Assessment
5	Barriers to Entry	Financial	<ul style="list-style-type: none"> • Relatively high cost of entry for completely new entrants, but cable companies and mobile networks already in market with access infrastructure deployed 	<ul style="list-style-type: none"> • ECTEL Assessment
		Technical/Regulatory	<ul style="list-style-type: none"> • Resale and unbundled loops not available 	<ul style="list-style-type: none"> • ECTEL
6	Consumer Behaviour	Barriers to Switching	<ul style="list-style-type: none"> • Generally low; however, other than in Grenada, LIME currently does not offer a standalone or "naked" broadband service, which implies a subscriber would have to potentially consider changing both voice and Internet services in order to switch service provider, which could create somewhat greater barrier to 	<ul style="list-style-type: none"> • ECTEL Assessment

			switching than otherwise	
		Survey Evidence	<ul style="list-style-type: none"> • None available at this time 	
7	Other Factors	Countervailing buyer power	<ul style="list-style-type: none"> • Likely in the case of large business customers with multi service requirements 	<ul style="list-style-type: none"> • ECTEL Assessment
8	Significant differences in one or more MS		<ul style="list-style-type: none"> • None identified 	<ul style="list-style-type: none"> •
9	Conclusion		<ul style="list-style-type: none"> • There are competitive broadband Internet alternatives available in each MS and evidence that consumers have been and are increasingly switching to service providers other than LIME in this market. Therefore, in view of the clear evidence of direct competitive discipline on LIME in this market, ECTEL considers that LIME's broadband Internet should not be included in the Recommended PCP. 	

Table 7: Market Assessment Results for Market 5: Domestic Private Leased Circuits ("DPLC")

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	• <i>CONFIDENTIAL</i>	• LMR
		Service Volumes	• <i>CONFIDENTIAL</i>	• LMR
		Service Prices	• Prices unchanged over the term of the current PCP	• LIME ACFs
		PCP API vs PCI	• Basket 3 API < PCI in all MS (but price changes in this basket mostly Internet service related)	• LIME ACFs
		ARPU trends	• <i>CONFIDENTIAL</i>	• LMR
		Promotions	• No information or examples available	
		Profitability (EAM)	• <i>CONFIDENTIAL</i>	• LIME EAMs
2	Competitive Alternatives	Direct Substitutes	• At least two DPLC competitors in each MS (and three in GND), including Digicel, SAT Telecom, Karib Cable/Flow, Marpin, Green Dot, The Cable and Caribbean Cable Communications	• LIME RFI Responses
		Coverage/Capacity	• Cable plant able to serve many small businesses, but not necessarily large businesses and, further, cable plant not well suited to providing data services • Digicel likely offering services to small and large businesses (using wireless technology, Digicel should be able to serve most business in each MS)	• ECTEL Assessment
		Indirect Substitutes	• NA	
		Coverage/Capacity	• NA	
		Evidence of rivalry:	• Competitive alternatives being offered by cablecos and Digicel, but no examples of LIME promotions available	• ECTEL Assessment
3	Market Shares	Revenue Based	• NA (but considered to be high)	• ECTEL Assessment
		Volume Based	• NA (but considered to be high)	• ECTEL Assessment
		Trend	• NA	
4	Market/Sector Trends	Technology Trends	• PLCs generally transitioning from lower to higher speeds, and from legacy to IP technologies	• ECTEL Assessment
		Likelihood of Entry	• Further facilities-based possible • Entry based on use of wholesale services a low possibility	• ECTEL Assessment
5	Barriers to Entry	Financial	• Relatively high cost of entry for completely new entrants, but cable companies and wireless networks already in market with access infrastructure deployed	• ECTEL Assessment
		Technical/Regulatory	• Wholesale access no mandated	• ECTEL
6	Consumer Behaviour	Barriers to Switching	• Adjustment and CPE costs can be a considerable barrier (e.g., when moving from a legacy to next generation service)	• ECTEL Assessment
		Survey Evidence	• NA	
7	Other Factors	Countervailing buyer power	• Likely in the case of large business customers with multi service requirements	• ECTEL Assessment
8	Significant differences in one or more MS		• None identified	
9	Conclusion		• The available market data and information suggests that there is insufficient competition to in this market to exclude DPLC services from the Recommended PCP at this time.	

Table 8: Market Assessment Results for Market 6: International Private Leased Circuits ("IPLC")

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Service Volumes	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Service Prices	<ul style="list-style-type: none"> • Prices unchanged over the term of the current PCP 	<ul style="list-style-type: none"> • LIME ACFs
		PCP API vs PCI	<ul style="list-style-type: none"> • Basket 4 API < PCI in all MS (PCI = going prices) 	<ul style="list-style-type: none"> • LIME ACFs
		ARPU trends	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LMR
		Promotions	<ul style="list-style-type: none"> • No information or examples available 	<ul style="list-style-type: none"> •
		Profitability (EAM)	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • LIME EAMs
2	Competitive Alternatives	Direct Substitutes	<ul style="list-style-type: none"> • Other than LIME, there is at least one IPLC competitors in each MS – i.e., Digicel (including Middle Caribbean Network and Southern Caribbean Fibre) • Other operators that may currently or could potentially provide IPLC services include: SAT Telecom, Karib Cable, Flow, Marpin, Green Dot, The Cable and Caribbean Cable Communications 	<ul style="list-style-type: none"> • LIME RFI Response • OLO Responses to date
		Coverage/Capacity	<ul style="list-style-type: none"> • Digicel (including Middle Caribbean Network and Southern Caribbean Fibre) provide comparable IPLC service offerings • The extent to which the other operators offer comparable IPLC service offerings 	<ul style="list-style-type: none"> • LIME RFI Response • ECTEL DB
		Indirect Substitutes	<ul style="list-style-type: none"> • NA 	
		Coverage/Capacity	<ul style="list-style-type: none"> • NA 	
		Evidence of rivalry:	<ul style="list-style-type: none"> • Competitive alternatives being offered by cablecos and Digicel, but no examples of LIME promotions provided as of yet 	
3	Market Shares	Revenue Based	<ul style="list-style-type: none"> • LIME's revenue-based market share not high 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Volume Based	<ul style="list-style-type: none"> • LIME's volume-based market share not high 	<ul style="list-style-type: none"> • LMR • ECTEL DB
		Trend	<ul style="list-style-type: none"> • <i>CONFIDENTIAL</i> 	<ul style="list-style-type: none"> • ECTEL DB
4	Market/Sector Trends	Technology Trends	<ul style="list-style-type: none"> • PLCs generally transitioning from lower to higher speeds, and legacy to IP technologies 	<ul style="list-style-type: none"> • ECTEL Assessment
		Likelihood of Entry	<ul style="list-style-type: none"> • Further facilities-based entry unlikely • Further entry based on use of wholesale services a possibility 	<ul style="list-style-type: none"> • ECTEL Assessment
5	Barriers to Entry	Financial	<ul style="list-style-type: none"> • Very high cost of entry for completely new entrants, but alternative networks already deployed 	<ul style="list-style-type: none"> • ECTEL Assessment
		Technical/Regulatory	<ul style="list-style-type: none"> • Wholesale access not mandated 	<ul style="list-style-type: none"> • ECTEL
6	Consumer Behaviour	Barriers to Switching	<ul style="list-style-type: none"> • Adjustment and CPE costs can be a barrier to switching (e.g., when moving from a legacy to next generation service) 	<ul style="list-style-type: none"> • ECTEL Assessment
		Survey Evidence	<ul style="list-style-type: none"> • NA 	
7	Other Factors	Countervailing buyer power	<ul style="list-style-type: none"> • Likely in the case of large business customers with multi service requirements 	<ul style="list-style-type: none"> • ECTEL Assessment
8	Significant differences in one or more MS		<ul style="list-style-type: none"> • None identified to date 	
9	Conclusion		<ul style="list-style-type: none"> • There are competitive IPLC alternatives available in each MS and evidence that customers have been and are increasingly switching to service providers other than LIME in this market. Therefore, in view of the clear 	

		evidence of direct competitive discipline on LIME in this market, ECTEL considers that LIME's IPLC services should not be included in the Recommended PCP.
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Table 9: Market Assessment Results for Market 7: Data Services

	Criterion	Considerations	Evidence	Source
1	LIME-Specific Relevant Market Data	Service Revenues	• NA	
		Service Volumes	• NA	
		Service Prices	• Prices unchanged over the term of the current PCP	• LIME ACFs
		PCP API vs PCI	• Basket 3 API < PCI in all MS (but price changes mostly Internet related)	• LIME ACFs
		ARPU trends	• NA	
		Promotions	• No examples provided to date	•
		Profitability (EAM)	• <i>CONFIDENTIAL</i>	• LIME EAMs
2	Competitive Alternatives	Direct Substitutes	• Likely provided by the same services listed for the DPLC market – i.e., primarily Digicel and the cablecos	• ECTEL Assessment
		Coverage/Capacity	• Cable plant able to serve many small businesses, but not necessarily large businesses and, further, cable plant not well suited to providing data services • Digicel likely offering services to small and large businesses (using wireless technology, Digicel should be able to serve most business in each MS)	• ECTEL Assessment
		Indirect Substitutes	• NA	
		Coverage/Capacity	• NA	
		Evidence of rivalry:	• Digicel appears to offer a range of competitive alternatives using primarily fixed wireless technology • LIME has introduced Ether net services with a range of transmission speeds	• ECTEL Assessment
3	Market Shares	Revenue Based	• NA	
		Volume Based	• NA	
		Trend	• NA	
4	Market/Sector Trends	Technology Trends	• Legacy X.25 and Frame Relay services largely obsolete today, current standard is Ethernet and IP-VPN services	• ECTEL Assessment
		Likelihood of Entry	• Nil in legacy data services market segment, but clear possibility in next generation data services market segment	• ECTEL Assessment
5	Barriers to Entry	Financial	• High cost of entry for completely new entrants, but alternative cable and wireless networks already deployed	• ECTEL Assessment
		Technical/Regulatory	• Wholesale access not mandated	• ECTEL
6	Consumer Behaviour	Barriers to Switching	• Inertia, adjustment and CPE costs can be a barrier to switching	• ECTEL Assessment
		Survey Evidence	• NA	•
7	Other Factors	Countervailing buyer power	• Likely in the case of large business customers with multi service requirements	• ECTEL Assessment
8	Significant differences in one or more MS		• None identified	•
9	Conclusion		• The available market information suggests that there is insufficient competition to exclude data services from the Recommended PCP at this time.	

ANNEX 2:

RECOMMENDED PRICE CAPS PLAN

INTRODUCTION

This document establishes the rules, procedures, and obligations constituting a recommended price cap plan (the “Recommended PCP” or “2015 PCP”) applicable to Cable & Wireless St. Vincent and the Grenadines Ltd//LIME (“LIME”), a company duly licensed in St. Vincent and the Grenadines and having its registered office situated at Halifax Street, Kingstown, St. Vincent and the Grenadines.

This Recommended PCP replaces the price cap plan approved and adopted by the NTRC of St. Vincent and the Grenadines in April 2010 (the “2010 PCP”). That is, the 2010 PCP will cease to have legal effect on the day the 2015 PCP takes effect.

RULE 1 – DURATION AND TERM OF PCP

1.1 Effective Date:

The 2015 PCP takes effect on January 15, 2015.

1.2 Duration and Periods:

The duration of the 2015 PCP is 3 years and 2.5 months and shall expire on March 31, 2018.

The 2015 PCP consists of the following time periods:

- a) Bridge Period: January 15, 2015 to March 31, 2015
- b) First Annual Period: April 1, 2015 to March 31, 2016
- c) Second Annual Period: April 1, 2016 to March 31, 2017
- d) Third Annual Period: April 1, 2017 to March 31, 2018

1.3 Review of PCP by ECTEL:

ECTEL may decide to undertake a review of the 2015 PCP not later than October 1, 2017 (i.e., at least 6 months prior to the 2015 PCP's expiry). The purpose of the review would be to determine whether ECTEL would recommend that the 2015 PCP should continue without change, be modified or eliminated altogether.

1.4 Automatic Renewal of PCP:

Absent an announced review of the 2015 PCP by ECTEL, the 2015 PCP will automatically renew for an additional 1 year (that is, through to March 31, 2019) unless opposed by LIME, the NTRC, or ECTEL within 90 days of the expiry of the 2015 PCP. Any party opposed to the renewal of the 2015 PCP must give notice to every other party at least 90 days before the expiry of the 2015 PCP. Automatic renewal of the 2015 PCP will not occur if any party opposes the renewal.

RULE 2 – FREE MONTHLY RESIDENTIAL FTF MINUTES

2.1 Free Residential FTF Minutes Provisions:

LIME shall provide a minimum of 100 free minutes per month of FTF on-network calling on Night and Weekend calling periods with each metered Residential access line through at least the duration of the 2015 PCP, based on following time period definitions:

- a) “Day” is the periods from 8:00 a.m. to 5:59 p.m. Monday through Friday
- b) “Night” is the periods from 6:00 p.m. to 7:59 a.m. Monday through Friday
- c) “Weekend” is the period from 11:59 p.m. Friday to 11:59 p.m. Sunday

RULE 3 – PRICE HARMONIZATION

3.1 Price Harmonization Provisions:

LIME shall comply with the following price harmonization conditions:

- a) **Residential:** The lowest monthly standard rate for a metered Residence access line must be equal to or more than 77% percent of the highest monthly standard rate for a metered Residence access line in any other ECTEL Member State.
- b) **Business:** The lowest monthly standard rate for a metered Business access line must be equal to or more than 90% percent of the highest monthly standard rate for a metered Business access line in any other ECTEL Member State.
- c) **Fixed-to-Fixed (“FTF”):** The lowest FTF Day/Evening/Night standard rate respectively must be equal to or more than 90% percent of the highest FTF Day/Evening/Night standard rate respectively in any other ECTEL Member State.
- d) **Fixed-to-Mobile (“FTM”):** The lowest FTM Day/Evening/Night standard rate respectively must be equal to or more than 90% percent of the highest FTM Day/Evening/Night standard rate respectively in any other ECTEL Member State.
- e) **Fixed International:** The lowest fixed international direct dial (“IDD”) Day/Evening/Night standard rate for each country destination rate respectively must be equal to or more than 90% percent of the highest Fixed IDD

Day/Evening/Night standard rate for each country destination respectively in any other ECTEL Member State

3.2 Exemptions from Harmonization Provisions:

LIME may submit a request to the Commission and ECTEL seeking an approval for an exemption to one or more of the above-noted price harmonization provisions. Any such submission must include the rationale for the requested exemption along with supporting relevant market data and information.

RULE 4 – PCP BASKETS

4.1 Baskets:

All the services included in the 2015 PCP shall be grouped in one of the following two baskets (each of which is described further below):

- a) Basket 1: Residential and Business Access and domestic FTF and FTM calling
- b) Basket 2: DPLC, Data Services and Other Services

RULE 5 - PRICE CAP INDEX AND ACTUAL PRICE INDEX

5.1 General Price Cap Formula:

Where applicable, the price cap formula specifies that the Actual Price Index (API), which represents changes in prices charged by the LIME for a specific basket of services (j) over a specific period/time (t), must always be less than or equal to the Price Cap Index (PCI):

$$API_j \leq PCI_j \quad \text{for each Basket } j.$$

5.2 Actual Price Index and Formula:

Where applicable, the API tracks LIME's actual price changes within a specific basket. Each time new prices are approved for LIME, the API shall be calculated for each applicable basket to show that the price changes do not exceed the PCI. The API is the revenue-weighted average level of aggregate prices implemented by LIME. The PCP uses the following general formula to calculate the API:

$$API_{j,t} = API_{j,t-1} * (1 + API \text{ adjustment}_{j,t})$$

Whereas:
j = Basket;

t = time; and

API adjustment_{j,t} = revenue-weighted average percent change in prices for all rate elements, k, for time t, in Basket j:

$$\frac{\sum_{k,t} \left[Revenue_{k,t} * \left[\frac{Price_{k,t}}{Price_{k,t-1}} - 1 \right] \right]}{\sum_{k,y} Revenue_{k,t}}$$

Whereas k is the relevant rate element; and

Revenue_{k,t} is the revenue included in Basket j, for element k, for the time period t.

5.3 Price Cap Index and Formula:

Where applicable, the aggregate level of actual prices for all service rate elements in any given service Basket, j, is subject to a PCI. The PCI changes annually subject to the price cap formula for each applicable basket. The PCI is allowed to change in each subsequent period according to the values of inflation (I), productivity (X), exogenous event (Z), any other applicable provisions of a specific basket, or any other provisions set forth in this PCP. The PCI for each applicable basket is generally calculated as follows:

$$PCI_{j,y} = PCI_{j,y-1} * (1 + I_y - X_j +/- Z_y)$$

Whereas j = Basket

y = Price Cap year

The inflation factor for each ECTEL member state is calculated as the percentage change in the average Consumer Price Index (CPI) between the two periods “y” and period “y-1” per the formula:

$$I_y = ((CPI_y / CPI_{y-1}) - 1),$$

Whereas for CPI:

- a) The CPI_y is the CPI for [ECTEL Member State] as published by the Eastern Caribbean Central Bank for year y.
- b) The time period for the CPI data is the same time period as Revenues used in any PCP formulas for applicable baskets so that there is a proper matching of CPI and related Revenues.

X_j = Productivity offset for basket j as set forth for each specific basket.

Z_y = Exogenous cost changes for year y as set forth for each specific basket.

RULE 6 – EXOGENOUS EVENTS AND CONDITIONS (Z FACTOR)

6.1 Exogenous Event Description:

The exogenous factor (Z factor) results from events or conditions that result in increases or decreases in the day-to-day operating costs of LIME.

6.2 Exogenous Event Criteria:

To qualify as an exogenous event (and related cost impact), an event must:

- 1) be outside of LIME's control;
- 2) not result from a transaction with a LIME affiliate, parent company, or related party, and must otherwise be caused by an independent or third-party event or condition and
- 3) be material in magnitude, so that any related exogenous event/condition must be at least equal to or greater than 1.5% of the regulated service(s) revenues affected by the exogenous event/condition for the most recent twelve-month period available.

An exogenous event/condition may be proposed by LIME, the NTRC, or ECTEL and will be considered on a case-by-case basis. The financial effect of any proposed exogenous cost change shall be quantified and explained in detail in the accompanying supporting documentation by the party proposing the adjustment. All documentation supporting proposed exogenous cost changes must include a proposed recovery mechanism, including a rationale for the proposed recovery mechanism. The recovery of any exogenous cost changes shall, to the extent possible, be recovered proportionally from the regulated service(s) affected by the exogenous cost change.

RULE 7 – BASKET 1

7.1 Basket 1 Services:

Basket 1 consists of the following services:

- a) Residential access / connection / reconnection
- b) Business access / connection / reconnection
- c) Government access / connection / reconnection
- d) Domestic Fixed to Fixed calls ("FTF") (day, night and weekend)
- e) Domestic Fixed to Mobile calls ("FTM") (day, night and weekend)

7.2 Basket 1 Pricing Formula:

Each rate element in the basket is subject to a PCI formula of $I - X$, where $X = 0$. This PCI shall apply on a partial year (2.5 months) basis in the case of the Bridge Period.

RULE 8 – BASKET 2

8.1 Basket 2 Summary of Services:

Basket 2 includes of the following services:

- a) Domestic/National Private Leased Circuits (“DPLC”)
- b) Data Services (such as X.25, Frame Relay, Ethernet)
- c) Other Services (such as VSAT)

A list of services included in this basket is provided in the Appendix to this Annex 2.

8.2 Basket 2 Pricing Formula:

Services included in Basket 2 are subject to a general PCI of $I - X$, where $X = I$. This PCI shall apply on a partial year (2.5 months) basis in the case of the Bridge Period.

RULE 9 – OTHER PRICING PROVISIONS

9.1 Maximum Price Increases:

Price increases for any individual service rate element in Baskets 1 or 2 shall not exceed 10% for any year of the PCP. This rate element constraint shall apply on a partial year (2.5 months) basis in the case of the Bridge Period.

RULE 10 – BUNDLING PROVISIONS

10.1 Categorization of Bundles including Regulated Services:

Any service bundle including one or more regulated services subject to the 2015 PCP is considered to be a regulated service bundle. For the avoidance of doubt, any such regulated service bundle would not be assigned to any one of the two defined PCP service baskets and nor would it be subject to price cap constraints.

10.2 Further Conditional Information Requirements:

When filing an application requesting approval to (i) change the price of an existing regulated service bundle or (ii) introduce a new regulated service bundle, LIME should provide supporting rationale for and information demonstrating that the proposed price and/or other terms and conditions of the regulated service bundle are not anti-competitive. Should such concerns arise with respect to any such application, the Commission or ECTEL may request that LIME also file an imputation test to demonstrate that the price of the regulated service bundle is above cost.

RULE 11 – NEW SERVICES AND DISCONTINUED SERVICES

11.1 New Services:

For any new service(s) that is determined to be a regulated service subject to the PCP by the NTRC pursuant to the RTR, the new regulated service, including the corresponding rate elements and associated revenues, shall be assigned to the applicable PCP Basket on the first day of the month after the coming into effect of the corresponding NTRC determination. For the avoidance of doubt, new services that are considered to be regulated service bundles under rule 10.1 are not subject to this rule.

11.2 Discontinued Services:

For a service(s) included in the 2015 PCP for which LIME is granted approval to discontinue by the NTRC pursuant to the provisions of the RTR, the service(s) shall be removed from the 2015 PCP on the first day of the month after the coming into effect of the corresponding NTRC determination.

RULE 12 - PROMOTIONS

12.1 Market Trials and Promotions Excluded from API:

Market Trials and Short Term Promotions, as defined in the RTR, are excluded from the calculation of the API.

RULE 13 - RCCF AND ACF REQUIREMENTS

13.1 LIME's Compliance with RCCF and ACF Requirements:

Subject to the above-noted PCP Rules, LIME may propose increases or decreases to the service rates covered by the PCP at any time during the term of the PCP. When it does so, it must submit a Rate Change Compliance Filing (RCCF) with the NTRC and ECTEL. In addition, it must also submit an Annual Compliance Filing (ACF) with the NTRC and ECTEL.

13.2 Rate Change Compliance Filing:

For any application for a price change during the term of the PCP, other than a price change in an ACF, LIME must file an RCCF with the NTRC and ECTEL. An RCCF must be compliant with established PCP Rules, and must contain a description of the proposed rate changes, a recalculation of each Basket's API reflecting any proposed rate changes, and a demonstration that each new API_j is less than or equal to its respective PCI_j established during the most recent ACF.

Information filed with the RCCF must include all data and information that allows the NTRC and ECTEL to verify LIME's API and PCI calculations, including a working EXCEL file that

incorporates all regulated services, rate elements and rate changes. Specifically, supporting documentation for all API calculations in an RCCF must include all service price elements by Basket and the associated revenues established in the most recent ACF. In addition, as may be applicable, LIME must also provide documentation in an RCCF for pricing changes involving special treatment, including, but not limited to, the introduction of volume or contract term discounts.

13.3 Annual Compliance Filing Deadlines:

For every full-year period during the term of the PCP, LIME shall file an ACF with the NTRC and ECTEL not later than March 1st of each year (or the first business day following any weekend or holiday that falls on March 1st).

In the case of the Bridge Period, LIME shall file an ACF with the NTRC and ECTEL not later than January 15, 2015.

13.4 Annual Compliance Filing Information:

The following is a list of ACF information that LIME must provide for all full-year periods during the term of the PCP:

- a) Updated API and PCI calculations, including related CPI/Inflation and productivity data, for each related Basket. This information must include all regulated services and rate elements for each established Basket, and must also be provided in a working EXCEL file format that allows the NTRC and ECTEL to verify LIME's calculations.
- b) If the ACF includes rate changes to an existing regulated service(s), consistent with RCCF requirements, the ACF must also include the calculation of the new API(s) reflecting any such changes along with a description and proposed rate changes.
- c) If the ACF includes a proposed exogenous cost change, the ACF must also include all required supporting documentation as set out in the exogenous events Rule.
- d) A written summary of any regulated service price changes, new regulated service introductions and related pricing, promotions, and any other relevant matters impacting prices, terms or conditions of LIME's regulated services implemented during the preceding PCP period.

For avoidance of doubt, this Rule does not require any additional ACF requirements beyond those established under the preceding 2010 PCP.

For the Bridge Period, the ACF information that LIME must provide is limited to items (a), (b) and (c) above. In this specific case, the applicable PCI, CPI/Inflation and productivity factors are to be adjusted to reflect that abbreviated length of the Bridge Period (i.e., 2.5 rather than 12 months in the case of the full year PCP Periods).

RULE 14 – OTHER COMPLIANCE REPORTING REQUIREMENTS

14.1 Audited Statutory Financial Statement Filings:

LIME must submit audited statutory annual financial statements (for fiscal year-end March 31st period) to the NTRC and ECTEL not later than July 1st of each year (or the first business day following any weekend or holiday that falls on July 1st).

LIME's financial statements in this respect shall include: i) an Income Statement or Profit/Loss Statement showing revenues, operating expenses, depreciation, taxes and non-operating amounts; ii) a Balance Sheet showing assets and liabilities, and capital accounts (retained earnings, common and preferred stock, and other); iii) other applicable statements commonly provided with the audited financials, such as Cash Flow, Retained Earnings, and other data; and iv) all notes and explanations provided with the financial statements.

14.2 Enhanced Allocation Model (EAM) Filings:

During the term of the PCP, LIME shall submit two updated EAMs to the NTRC and ECTEL as follows:

- a) The first EAM shall be provided not later than October 1, 2015 using data for the fiscal period ending March 31, 2015.
- b) The second EAM shall be provided by October 1, 2017 using data for the fiscal year ending March 31, 2017.

These two EAMs will be used to assist in the review and evaluation of the PCP prior end of the fourth PCP Period in 2019.

Consistent with historical practice, LIME's EAM's should be provided in working EXCEL file format, and should include all supporting methodological documents, assumptions, and explanations. Any changes in methodology or assumptions relative to earlier EAMs filed with the NTRC and ECTEL (e.g., the fiscal year 2012-13 EAM) should also be identified and explained. It should be noted that receipt of an EAM filing does not constitute agreement with amounts or assumptions within any such EAM; discretion is reserved by the NTRC and ECTEL for contesting specific results and assumptions as may be appropriate.

For avoidance of doubt, this Rule does not preclude the NTRC and ECTEL from requiring LIME to provide EAMs for additional fiscal year periods should such a need arise in the context of PCP-related or other matters.

RULE 15 – GENERAL COMPLIANCE AND EXTENSIONS

15.1 Non-Compliance with Provisions of the PCP:

In the case of non-compliance by LIME with the provisions of the PCP, the NTRC and ECTEL may select from one or more of the following mechanisms to address same, depending on the type of non-compliance the circumstances and other considerations:

- a) Request LIME for an explanation of the non-compliance and request LIME to prepare a plan of action to comply with the relevant provisions.
- b) Reject or refuse to consider any or all of LIME's current or pending price increases and decreases, exogenous cost increases, promotions or market trials, and any other substantive matters addressed in this PCP.
- c) Escalate the issue of non-compliance pursuant to Regulation [[XX]] in the [[2004 RTR or the 2012 RTR, as the case may be]].

LIME may seek a waiver or extension when it expects to be in non-compliance, by submitting a written request of an extension of time and any other remedies it seeks, including supporting justification, with the NTRC and ECTEL at least 30 days before such action or information is required.

RULE 16 – PRECEDENCE OF THE RETAIL TARIFF REGULATIONS

16.1 Relationship between the 2015 PCP and the Retail Tariff Regulations:

[[For Dominica]]: The 2015 PCP was developed pursuant to the relevant provisions included the Telecommunication Act No. [XX] of 2001 (the "Act") and corresponding regulations, in particular the Telecommunications (Retail Tariff) Regulations No.[XX] (the "2012 RTR"). For the avoidance of doubt, as may be applicable, the provisions of the Act and the 2012 RTR, including any amendments thereto, take precedence over the 2015 PCP.

[[For Grenada, St. Lucia, St. Kitts and Nevis and St. Vincent & Grenadines]]: The 2015 PCP was developed pursuant to the relevant provisions included the Telecommunication Act No. [XX] of 2001 (the "Act") and corresponding regulations, in particular the Telecommunications (Retail Tariff) Regulations No.[XX] (the "2004 RTR"). For the avoidance of doubt, as may be applicable, the provisions of the Act and the 2004 RTR, including any amendments thereto, take precedence over the 2015 PCP.

- a) In this respect, pursuant to ECTEL recommendation [[Month Year]], [ECTEL Member State] is committed to adopting new regulations that are substantially identical to those adopted by Dominica in [[Month]] 2012 (the "2012 RTR").
- b) Similarly, as may be applicable, the provisions of the Act and the 2012 RTR, once adopted and including any amendments thereto, take precedence over the proposed 2015 PCP.

Appendix: List of Services and Rate Elements included in 2015 PCP

Basket	Service(s)	Rate Element(s)
1	Residential fixed line access	1: Connection 2: Reconnection 3: Metered monthly rental 4: Unlimited monthly rental
1	Business fixed line access	5: Connection 6: Reconnection 7: Metered monthly rental 8: Unlimited monthly rental
1	Government fixed line access	9: Connection 10: Reconnection 11: Monthly rental
1	On-net Fixed To Fixed Calling	12: FTF (Day) 13: FTF (Evening) 14: FTF (Night)
1	Off-net Fixed To Fixed Calling	15: FTF (Day) 16: FTF (Evening) 17: FTF (Night)
1	Fixed To Mobile Calling	18: FTM (Day) 19: FTM Evening 20: FTM (Night)
2	Domestic Leased Circuit	21: DPLC 64 Kbps Installation 22: DPLC 128 Kbps Installation 23: DPLC 192 Kbps Installation 24: DPLC 256 Kbps Installation 25: DPLC 384 Kbps Installation 26: DPLC 320 Kbps Installation 27: DPLC 448 Kbps Installation 28: DPLC 512 Kbps Installation 29: DPLC 768 Kbps Installation 30: DPLC 1024 Kbps Installation 31: DPLC 1544 Kbps Installation 32: DPLC 2048 Kbps Installation 33: DPLC 64 Kbps Monthly 34: DPLC 128 Kbps Monthly 35: DPLC 192 Kbps Monthly 36: DPLC 256 Kbps Monthly 37: DPLC 384 Kbps Monthly 38: DPLC 320 Kbps Monthly 39: DPLC 448 Kbps Monthly 40: DPLC 512 Kbps Monthly 41: DPLC 768 Kbps Monthly 42: DPLC 1024 Kbps Monthly

Basket	Service(s)	Rate Element(s)
		43: DPLC 1544 Kbps Monthly 44: DPLC 2048 Kbps Monthly 45: [DPLC – all alternative speeds]
2	Frame Relay	46: Frame Relay Port 56 Kbps Monthly 47: Frame Relay Port 64 Kbps Monthly 48: Frame Relay Port 128 Kbps Monthly 49: Frame Relay Port 192 Kbps Monthly 50: Frame Relay Port 256 Kbps Monthly 51: Frame Relay Port 384 Kbps Monthly 52: Frame Relay Port 512 Kbps Monthly 53: Frame Relay Port 768 Kbps Monthly 54: Frame Relay Port 1024 Kbps Monthly 55: Frame Relay Port 1544 Kbps Monthly 56: Frame Relay Port 2048 Kbps Monthly 57: Frame Relay Port 56 Kbps Installation 58: Frame Relay Port 64 Kbps Installation 59: Frame Relay Port 128 Kbps Installation 60: Frame Relay Port 192 Kbps Installation 61: Frame Relay Port 256 Kbps Installation 62: Frame Relay Port 384 Kbps Installation 63: Frame Relay Port 512 Kbps Installation 64: Frame Relay Port 768 Kbps Installation 65: Frame Relay Port 1024 Kbps Installation 66: Frame Relay Port 1544 Kbps Installation 67: Frame Relay Port 2048 Kbps Installation 68: Frame Relay CIR 1024 Kbps Monthly 69: Frame Relay CIR 348 Kbps Monthly 70: Frame Relay CIR 512 Kbps Monthly 71: Frame Relay CIR 768 Kbps Monthly 72: [Frame Relay – all alternative speeds]
2	X.25	73: X.25 Installation 74: X.25 Monthly
2	Ethernet	75: [Ethernet – all alternative speeds]