

Regional Regulation of Telecom Markets in the Organisation of Eastern Caribbean States

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1. Introduction

The emergence of regional regulation in its different forms over the past decade seemed to signal the arrival of a new regulatory function, one that could be considered as distinct from the regulatory functions performed at national and international levels. Developments in this regard have raised issues around appropriate regional regulatory models to support market reform initiatives and the transition to competitive markets. Regions such as the European Union (EU) and the Southern African Development Community (SADC) illustrate different models adopted depending on the political, social and economic setting. In this chapter we discuss the regional model adopted by the Organisation of Eastern Caribbean States (OECS), as well as the market reform initiatives accompanying the model.

The OECS model provides for the centralised adoption of policy, the centralised and decentralised implementation of policy, and the centralised and decentralised enforcement of policy. At its core was the establishment of a regional telecom authority tasked with coordinating the implementation of telecom policies across the region. Our objective is to describe and analyse the early experiences of regional regulation in the OECS and to assess the implications of its regulatory model on industry development across the region.

1.1. Background to the OECS

The OECS is a nine-member grouping of states in the Eastern Caribbean, comprising Antigua and Barbuda, Dominica, Grenada, Montserrat, St Kitts and Nevis, St Lucia and St Vincent and the Grenadines as full members; and Anguilla and the British Virgin Islands as associate members. This area is regarded as a single internal market governed by an authority

comprised of the heads of state of the different islands.¹ Five of the nine member states – Dominica, Grenada, St Kitts and Nevis, St Lucia and St Vincent and the Grenadines – have signed a separate treaty within the framework of the OECS establishing the Eastern Caribbean Telecommunications Authority (ECTEL). The goal of the ECTEL Treaty is to promote the growth and development of a regional telecom market across the five islands.

The OECS represents an emerging and economically middle-income region. The combined population of the sub-region was slightly less than 600,000 at the time of the case

Figure 1. Map of the five OECS states (Dominica, Grenada, St Kitts and Nevis, St Lucia and St Vincent and the Grenadines) that make up Eastern Caribbean Telecommunications Authority



study. In terms of economic growth, the region as a whole is experiencing reductions in GDP growth rates. The region's economy is slowing down, while shifting from a traditional agricultural base, centred on exports of bananas, sugar, citrus fruits and spices, to a greater emphasis on services, especially tourism, financial services like offshore banking, and the information technology industry. The need to promote diversification has been forced upon the region by a combination of factors, including natural disasters, the loss of preferential trade treatment for agricultural products, and competition from Latin America.

1.2 Performance indicators of the OECS telecom industry

With respect to telecom revenue size, the market for telecom services in ECTEL states increased to XCD 676 million² as of March 2005. This represents an overall CAGR of 6% over 2001.

As for telecom services, there has been a decline in the market for fixed lines and a rapid expansion in the mobile market, while the market for Internet has remained relatively low since liberalisation. Between March 2002 and March 2005, the number of fixed subscribers declined from 152,940 to 127,948, the number of mobile subscribers increased from 37,922 to

300,000, and the number of Internet subscribers increased from 18,300 to 33,000.

Increased telecom sector investment in the region³ came hand-in-hand with the awarding of operating licences. In general, direct investment in the telecom sector has been significant within the ECTEL states and increased steadily over the period from 2001 to 2004, from XCD 128.66 million (2001), to XCD 127.65 million (2002), to XCD 240.90 million (2003), and finally to XCD 285.62 million (2004).⁴ This investment has come primarily from the roll-out of new infrastructure. Cable and Wireless (C&W), the incumbent, was the biggest investor over the four-year period, providing XCD 389.36 million of the XCD 782.83 million total. Of all the islands, investment has been greatest in St Lucia (XCD 267.2 million), followed by Grenada (XCD 183.4 million), St Vincent and the Grenadines (XCD 188.45 million), Dominica (XCD 106.63), and St Kitts and Nevis (XCD 37.6 million).

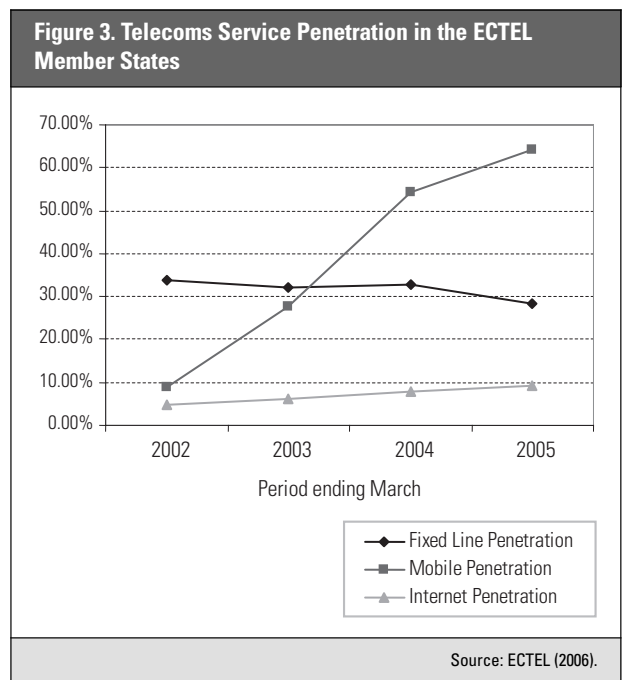
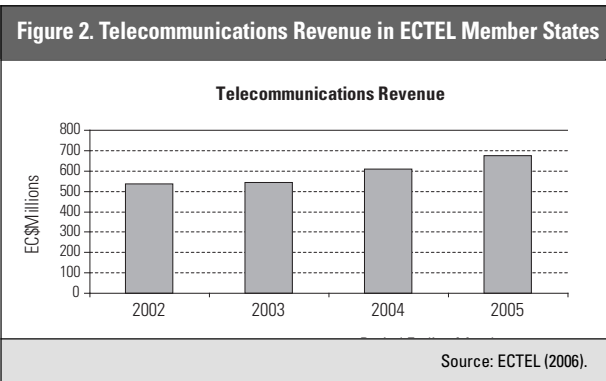
1.3 History of the OECS telecom industry

The telecom industry in the OECS has a long history characterised by a dominant operator. The provision of telecom services was ensured by C&W, which enjoyed a legal monopoly in all markets until 2000. C&W was exempted from private company law provisions, but was subject to restrictions on the range, amount and prices of the services it provided. The structure and level of prices were regulated by the respective national governments of the OECS to meet social goals and conform to constraints on rate of returns and universal service obligations. On some islands, the scope of C&W's monopoly

Table 1. GDP and human development indicators for the ECTEL member states

Country	Gross domestic product		Human development indicators	
	GDP (PPP) per capita (2005)	Rank	Human Development Index (2003)	Rank
Dominica	USD 6,520	91	0.783	70 – medium
Grenada	USD 8,198	72	0.787	66 – medium
St Kitts and Nevis	USD 14,649	47	0.838	49 – high
St Lucia	USD 5,950	98	0.772	76 – medium
St Vincent and the Grenadines	USD 7,493	82	0.785	87 – medium

Source: Wikipedia (2005); UNDP (2005).



covered fixed voice and mobile services, infrastructure, data and value-added services, Internet and satellite services. In some instances where its licences were terminated, the Eastern Caribbean governments were obligated to buy back its assets, creating a costly disincentive for these governments to interfere with C&W's private monopoly.

By 2000 the OECS Authority was dissatisfied with C&W and the services it provided. For example, the governments held minimal regulatory powers while C&W enjoyed the key powers that should typically have been invested in a regulator. Vague, ambitious and outdated telecom policies and licensing agreements were prevalent throughout the islands. The joint venture arrangements between C&W and the states of Grenada, Dominica and St Kitts and Nevis were inconsistent and confusing for all participants. C&W is a privately owned company with none of the OECS states holding shares in it. The state governments only received small returns in terms of royalties, licence fees, and dividend payments for joint venture agreements including the use of radio spectrum, the payment of customs duties and taxes, and the use of government property and land. In one instance – the case of Dominica – C&W's monopoly extended until 2020.

Dissatisfied with the C&W monopoly, the national governments began to look for ways to introduce competition into the telecom market. High ideological and political value had been attached to competition and to establishing pro-competition regulations. The credibility of this commitment was further underscored by the OECS obtaining a World Bank loan to establish competition in its telecom markets.⁵ The decision to develop a single internal competitive telecom market was seen as an important step towards regional economic integration, through which the telecom sector would bring about economies of scale, and was expected to provide better access to capital, i.e., to World Bank loans.

The OECS Authority's commitments to the World Bank allowed the OECS states to access World Bank expertise and obtain international support for their reform efforts. This access allowed the OECS states to at least attempt to match the expertise and experience of C&W, especially during crucial negotiations regarding autonomy and reducing monopoly within the telecom sector. In many respects the World Bank loan provided the OECS Authority with the confidence to embark upon aggressive pro-competition reforms. The OECS states had to repay the World Bank loans, and this could best be done by implementing real reform and development of the telecom sector. In this way, the OECS could generate profits that could be used to make loan repayments.

In the case of the OECS, those creating a single internal telecom market could build on the close cooperation already existing among the member states in such wide-ranging fields as banking (through a common central bank), sport (through regional cricket teams), and law (through the Eastern Caribbean Supreme Court). The trust that had been generated with these undertakings was easily brought to bear on the OECS telecom project. It was therefore relatively easy for the

national governments to delegate control to a multi-state authority like the OECS Authority through the ECTEL Treaty, in which a joint commitment was made to repay the World Bank loan.

2. Institutional reform initiatives in the OECS

This section briefly reviews the OECS telecom market reform initiatives, which comprise the formulation of the OECS telecom policy framework, the liberalisation of the OECS telecom markets, the creation of ECTEL as a regional regulator, the harmonisation of regulatory principles across the OECS, and the design of the OECS regulatory system of governance.

2.1 Formulation of the OECS telecom policy framework

On 5 May 2000 the heads of state of OECS members Dominica, Grenada, St Kitts and Nevis, St Lucia and St Vincent and the Grenadines signed the ECTEL Treaty.⁶ The treaty recognises the need for a harmonised approach to the regional management of the telecom sector. Its purpose, as defined in Article 4, is to promote liberalisation and competition in telecommunications, harmonised policies on a regional level, universal service, and fair pricing through the use of cost-based pricing methods by telecom providers, among other objectives. The authors of the treaty sought to achieve these objectives by establishing a regulatory body called the Eastern Caribbean Telecommunications Authority (ECTEL). ECTEL was created to deal with telecom liberalisation throughout the nine OECS member states, and was mandated to act on behalf of the heads of the member states. As such, ECTEL was required to harmonise and advise the individual National Telecommunications Regulatory Commissions (NTRCs) of its member states on matters concerning telecom sector liberalisation, and to promote collaboration and coordination within ECTEL. The NTRCs were expected to take all the appropriate measures to ensure implementation of ECTEL policy and recommendations. The treaty also defined the structure of ECTEL, of which the three key institutions are the Council of Ministers, the Board of Directors and the Directorate.

ECTEL was tasked with producing a telecommunication bill that could be transposed into national legislation as the telecom act for each of the member states. The telecom acts were passed in the ECTEL states to provide a new legal telecom framework that could be used as the basis for liberalising the telecom sector in the ECTEL area. From the viewpoint of delegation of responsibility, the treaty was significant in that it served to legalise the act of delegation.

The Telecommunication Bill (2000) and the subsequent transposed telecom acts in the member states were also designed to create the NTRCs as the means by which the objectives of the acts would be fulfilled. The NTRCs were established subject to the direction and control of the ministers responsible for telecom throughout the ECTEL states. The ministers were empowered to nominate five commissioners to

serve on the NTRC. Lastly, the national telecom acts made provisions for a number of regulations to be published, notably the Licensing and Authorisation Regulations and Tariff Regulations, both enacted in 2002.

2.2 Liberalisation of the OECS telecom markets

In the OECS area the move from monopoly to competition was characterised by a series of negotiated agreements between the incumbent and the OECS Authority, which culminated in the simultaneous opening up of fixed and mobile markets across all the islands.

2.2.1 Negotiated agreements between Cable and Wireless and the OECS Authority

The development of the OECS telecom policy framework can only be understood in light of the binding agreements made between the incumbent C&W and the OECS states. As of 2006, a total of three agreements had been signed, in 2001, 2002, and 2004. The agreements are significant in that they operationalised the Act of Delegation and enabled ECTEL to act as an official body. The first agreement (2001), called the Memorandum of Understanding (MOU), resulted in the partial liberalisation of the telecom sector.⁷ The second agreement (2002), called the Amendment to the MOU, effectively ended the partial liberalisation of the telecom sector and moved the sector into full competition.⁸ The third agreement (2004), called the Price Cap Implementation Plan, set the foundation for an incentive-based rate regime for all participating states.⁹

The MOU of 7 April 2001 followed the completion of the reform project that culminated in the signing of the ECTEL Treaty, the formulation of new model legislation, and the creation of a means by which harmonised regulations could be promulgated. The agreements were intended to ensure a smooth transition to a fully liberalised competitive telecom sector, which would have far-reaching consequences for the exclusivity of C&W's licence rights and its monopoly in the sector. The first agreement contained key resolutions with respect to liberalisation. First, the telecom sector would be liberalised on a phased basis. Phase 1 would begin on 1 April 2001 and would last for no less than 12 months and no longer than 18 months. Under Phase 1, the following services would be licensed: domestic mobile network operations, resale of international switched minutes, very small aperture terminal (VSAT) services for call centres, and Internet services provision. In essence, Phase 1 of the agreement was directed towards C&W's network. Another provision dealt with the development of joint working groups comprising representatives from the OECS and C&W. One of the key groups was the tariff and rebalancing group. A further provision was the granting of new non-exclusive operating licences for C&W to provide the same network and services as provided by the company at the time the agreement was signed. Finally, the member states had to amend their telecom acts to ensure that C&W's existing licences did not expire before 30 September 2001.

The second agreement of 20 May 2002 was considered to be a follow-up to the MOU. Negotiations within the working group on tariffs had broken down and the OECS ministers spearheaded a new agreement with C&W. A key aspect of this agreement was Annex F, which set out the pricing rules to be adopted and provided for adjustments in the rates and tariffs charged by C&W for selected services. The agreement specified a new Annex F for C&W's fixed license. While the second agreement contemplated defining a process to develop price cap regulation, no guidance was provided as to how this was to be accomplished. The fall-back provision established in Annex F was its most critical component. In the event of ECTEL being unable to implement a price cap plan, this mechanism permitted annual increases of up to 20% for certain services, including line rentals, local call charges, fixed-to-mobile charges and connection charges. A principal output of the second agreement was an interim pricing mechanism which provided for transitional rates and pricing, effective until the implementation of a price cap regime to be brought in on 1 March 2003.

The third agreement of 30 July 2004 was entered into during a time of key judicial reviews. First, the various court cases between C&W and ECTEL arising from this process were resolved, all in C&W's favour. Second, there was an ongoing jurisdiction proceeding in Dominica to establish the rights of the NTRCs to regulate C&W's dominance in telecom services. Third, the dominance proceedings with regards to ECTEL services were still underway.

2.2.2 Granting access to competitive operators in the OECS

The granting of access to competitive operators was tightly managed in the sense that the initial number of licences (19 in total) was awarded by the OECS Authority through an administrative procedure comprising a dual licensing process. Under the new policy framework, telecom operators are subject to a rigorous licensing process involving ECTEL and the NTRCs. New applicants are expected to request authorisation to provide telecom services from the NTRC of the island in which they wish to operate. This application is then forwarded to ECTEL, which makes recommendations that are passed back to the relevant NTRC. If the recommendation is positive, the telecom minister of the island then awards the licence. The initial 19 licences for network operators to establish and operate network services were awarded in December 2003. The number of operators varies across the ECTEL states and includes five in Dominica, four in Grenada, and three each in St Kitts and Nevis, St Lucia and St Vincent and the Grenadines.

The major telecom competitors in the region are the incumbent, C&W West Indies, and Digicel. C&W has dominance in the fixed markets while new entrants like Digicel have increased their presence in mobile and broadband. Digicel, which operates in 22 markets spanning the English-speaking West Indies, the French West Indies and the Dutch Caribbean, is the largest GSM mobile operator in the region, with an average market share of 60%.

2.2.2.1 NUMBER OF LICENCES GRANTED IN EASTERN CARIBBEAN TELECOMMUNICATION AUTHORITY COUNTRIES

The awarding of the initial licences was preceded by a debate among the ECTEL states on the number that could be issued.¹⁰ It was argued that limitations existed regarding the allocation of sufficient frequencies for spectrum-dependent applications. Operators that wanted to invest argued that the number of licences awarded should be limited to ensure a suitable return on their significant capital investment. Due to the size of the market, it was deemed necessary to limit the number of individual licences granted for fixed and cellular services in each member state. An impact assessment carried out on behalf of the OECS Authority confirmed that this would be the most prudent approach. In the end, ECTEL used an administrative procedure to limit the number of licences granted.

The Council of Ministers (COM) agreed to consider all interested parties and set a deadline of 30 January 2002 for the submission of licence applications. In total, the COM received 34 applications for individual licences, 27 for class licences and 18 for frequency allocation. Evaluations were conducted by ECTEL for services falling under individual licences, and a short list of successful applicants was approved by the ECTEL Board of Directors. The final recommendations for the awarding of licences were made by the COM.

C&W, the incumbent, was granted licences in all member states in 2001. This was a significant measure, as it served to eliminate contention with the former monopoly operator. When the new framework of 2000 was introduced, C&W was deemed to have operating licences and was therefore the first to receive its licences, while all subsequent new entrants were subjected to the new licensing process. The awarding of licences to new entrants proceeded at varying paces in each of the five ECTEL states. Table 2 shows the individual licences that have been awarded to date.

2.3 Creation of ECTEL as a regional regulator

The opening up of the market in the OECS was accompanied by the simultaneous setting up of a regional regulator (in St Lucia) and national regulators on each of the other islands. The following discusses the emergence of ECTEL and then turns to a discussion of its stated aims and objectives.

2.3.1 The emergence of ECTEL

ECTEL emerged as a top-down, donor-funded, World Bank-sponsored initiative. ECTEL was initially conceived in the OECS Telecommunications Reform Project, created by the ECTEL Treaty, and inducted in subsequent acts and agreements.

The idea to establish a regional regulatory authority evolved from the OECS Telecommunications Reform Project sponsored by the World Bank in 1998.¹¹ The five OECS contracting states negotiated and signed a project agreement that included a loan of USD 6 million from the World Bank, complemented by USD 4 million counterpart funding from the participating states. The loan was divided equally between the

participating states and a separate project agreement was signed to give the OECS Secretariat administrative responsibility for the project administration.

A key driver for creating ECTEL was the need to strengthen the capacity of the member states to negotiate with the incumbent operator. While the position of the OECS had always been to negotiate with C&W as a group, the creation of a regional body would enable the member states to do so more effectively, particularly on the issue of seeking a common date for termination of existing C&W licences. Member states had hoped to do this in such a way that C&W would not seek compensation for the loss of its exclusive rights. A second driver was the need to address regulatory matters within the OECS. This ranged from reforming outdated laws, licences and agreements to terminating the exclusive provision of all main services by the incumbent operator C&W. Other major issues included reducing unbalanced profits, which were not cost based and thus led to excessive profit margins, and the adverse effects of monopoly provision, such as the failure to introduce new services and improve the quality of services already provided.

The OECS telecom sector reform project became effective on 10 October 1998, and its offices are located in Castries, St Lucia. The objective of the project was to introduce pro-competition reforms in the telecom sector and increase the supply of informatics-related skills in the five World Bank-supported OECS countries. The project aimed to establish an independent regional regulatory authority within two years, and to pass new sector legislation in each participating country within the three years of project effectiveness. A key component of the project was modernisation of the telecom policy framework. Deliverables included a framework to facilitate sectoral reform

Table 2. Individual Licences Granted

Country	Fixed Telephony		Mobile telephony	
	Fixed Licenses	Main players	Mobile Licenses	Main players
Dominica	3	C&W, SAT Telecoms, Marpin	3	C&W, Digicel, AT&T Wireless, Orange Caraibe
Grenada	3	C&W, Global Network Providers Inc., Trans-World Telecom Caribbean Ltd.	5	C&W, Digicel, Global Network Providers Inc., Trans-World Telecom Caribbean Ltd, AT&T Wireless
St Kitts and Nevis	2	C&W, The Cable	3	CariGlobe, AT&T Wireless, C&W
St Lucia	1	C&W	3	C&W, Digicel, AT&T Wireless
St Vincent and the Grenadines	1	C&W	3	C&W, Digicel, AT&T Wireless

Source: Stern (2006).

through changes in regulation, designing new telecom legislation, and establishing a coherent licensing regime and an appropriate regional regulatory authority. The most critical function of the project management unit was to transform itself into the new regulatory body. The establishment of this new body was intended to enhance financial management processes and internal controls within the area. This would facilitate the transition of oversight from the OECS Secretariat to the new ECTEL governance structure. Four areas of activities were undertaken and mandated by the OECS Authority: development of the policy framework and regulatory instruments, spectrum management, cost analysis and development of tariff policy, and technical assessment of the network.

The project was unique in the sense that five independent states would give up some measure of independence to establish a regional regulatory body. The organisation was established by a treaty signed in St. George's, Grenada on 4 May 2000; the ECTEL Directorate, or Secretariat, is located in Castries, Saint Lucia.

2.3.2 Aims and objectives of ECTEL

ECTEL's aims and objectives are contained in the treaty signed in May 2000 by the OECS member states of Dominica, Grenada, St Kitts and Nevis, St Lucia and St Vincent and the Grenadines. The treaty clearly defines ECTEL's purpose, functions and powers. Essentially, ECTEL is expected to harmonise and advise the individual NTRCs in its member states.

In terms of functions, ECTEL is responsible for:

- harmonising and coordinating telecom policies in its member states;
- managing and regulating telecom or radio spectrum;
- ensuring a competitive environment for telecom services;
- working towards the provision of affordable, modern, efficient, competitive and universally available telecom services to the people of its member states; and
- advising NTRCs and governments on matters relating to telecom and spectrum, including regional policy, types of telecom services, licensing, fees, pricing, and management and provision of universal service.

Each of the member states agreed to collaborate and coordinate with each other and with ECTEL to take all the appropriate measures to ensure the implementation of ECTEL policy and recommendations and to finance its efficient operation.

2.3.3 ECTEL's system of governance

ECTEL enjoys discretionary capacity when carrying out its functions of advising member NTRCs, managing regional radio spectrum, recommending regional policy, and so forth. The decisions made by ECTEL are not contingent on approval by the OECS Authority or the NTRCs of the participating member states.

The OECS Authority exercises control over ECTEL mainly through actively and formally monitoring ECTEL's activities. The procedures and mechanisms that the OECS has instituted are identified in typical principal agent relations.

The ECTEL Board of Directors is active in the day-to-day activities of ECTEL. In order for the Board to discharge its duties, some members are housed in the same building as the ECTEL managing director and support staff. In a sense, the Board representatives, alongside the managing director, set the ECTEL agenda and work pursuant to that agenda. The Board guides the operations of the Directorate for the Council of Ministers. Board members are nominated from member states and the chair is rotated annually.

According to Article 9 of the ECTEL Treaty, the Directorate is responsible for the day-to-day management of ECTEL. Its responsibilities include making recommendations for, and in relation to, the issues of licences and frequency authorisation, and the management of the ECTEL fund, among others. Actual accounting for ECTEL expenses is overseen by the managing director and approved by the Council of Ministers. ECTEL's operations are funded through the ECTEL fund, as well as revenues received in the form of payments related to the management of spectrum.

The ECTEL Directorate is headed up by a managing director who is assisted by a management team and support staff. The managing director was part of the original project management unit team that implemented the initial telecom reform project, and became the managing director of ECTEL upon the satisfactory transition from the telecom project unit under the OECS Secretariat to the ECTEL management structure.

2.3.4 Harmonisation of regulatory principles across the OECS

One of ECTEL's key deliverables was a set of regulatory best practices. These policy documents contained high-level regulatory principles intended to assist the national regulators in implementing their regional policy frameworks. The NTRCs were expected to comply with these regulations and to formulate their own methods of implementation to achieve the espoused regulatory principles. Below, two such regulations – for licensing and tariffs – are discussed.

2.3.4.1 REGULATION ON LICENSING

The OECS approach envisaged concurrent processes with regards to the issuing of licences. Licensing is considered to be a joint competency shared between the NTRCs and ECTEL. In this relationship, ECTEL provides overall guidance and support to the NTRCs.¹² The dual licensing process consists of different steps. First, applicants apply for licences in the local NTRC offices on the island in which they hope to operate. Second, the national regulatory authority forwards the applications to the ECTEL office in St Lucia. Third, ECTEL evaluates the request and makes a recommendation on whether to award the licence or not. Lastly, the telecom minister of the respective island awards the license or does not, based on ECTEL's recommen-

ation. In the case of the OECS, the ministers' discretion not to approve a licence is limited to procedural matters regarding the selection and evaluation process. ECTEL retains the responsibility for renewing the licence and is responsible for monitoring and enforcing compliance with licence conditions.

In the OECS case, both the incumbent operator (C&W) and the new entrants were issued operating licences. The incumbent received its licences outside of the competitive selection process used to select new entrants. In total, four licence categories were awarded in the OECS.¹³ These categories range from individual licences, for the provision of general network services; class licences, comprising A (value-added services), B (various radio licences) and C (type approval and wiring); frequency authorisation licences, required in addition to either individual or class licenses; and special licences, issued only on an emergency basis. For purposes of our case study, we examined individual licences and class A licences.

The ECTEL licensing procedure provides a local one-stop shop for all applicants. Local as well as transnational operators are obligated to apply for licences in each of the islands in which they wish to operate. Consistency seems to be applied at the regional level since all applications are forwarded to ECTEL for consideration and review. The approach also seems to harmonise the licence fees for all ECTEL members. The application fees for mobile public, fixed public and Internet services are the same for each of the islands. The approach also affords flexibility in allowing islands to advance national interests while at the same time allowing the OECS to advance regional interests. Operators are assured of consistency in practice. The national regulators draw on regional expertise and ECTEL draws on national expertise.

2.3.4.2 REGULATION OF TARIFFS

In the case of the OECS, the regulation of tariffs includes the implementation of a new price cap plan. This became the basis for much litigation within the context of the liberalisation process in the OECS. For example, C&W commenced litigation against four of the five participating NTRCs. In all of the cases, the courts decided in favour of C&W.

The importance of regulating tariffs was identified in all initial discussions and deliberations. As early as 1998, the World Bank-sponsored OECS Telecommunications Reform Project identified the need to reform tariffs in the region. World Bank Project Report No. PID5165 noted that the prices charged by the incumbent monopolies were in excess of the prices in states with sector competition. Two of the three performance indicators used to assess the effectiveness of the project were competitive prices and the development of cost-orientated methodologies for pricing telecom services. The ECTEL Treaty (2000) identified as one of ECTEL's purposes the need "to promote fair pricing and the use of cost-based pricing methods by telecommunications providers in the Contracting States." (Article 4e). Another of ECTEL's functions was stated as: "to recommend a regional cost-based pricing regime for implementation by each Contracting State".

The 2001 MOU provided for the creation of a tariff and rebalancing working group, comprised of representatives from C&W and the OECS team. The working group was required to negotiate with a view to arriving at an amicable termination of existing C&W licences in the respective member states. The terms of references included determining appropriate tariffs and making recommendations with respect to setting initial tariffs, and reviewing existing rates and proposals for rebalancing. In terms of methodology, the group was expected to make decisions by consensus. Due to a conflict of interest between C&W and the OECS members, negotiations within the group eventually broke down. The agreement reached on 29 May 2002 between the OECS and C&W resulted in an interim pricing mechanism, which provided transitional rates, effective until the implementation of a price cap regime. A price cap regime was expected to be in place by 1 March 2003, after which C&W would be entitled to raise local rates by a maximum of 20% per annum.

In the negotiated price cap plan, residential access line rates are specified, while business access line rates can only increase by inflation in any given year. The remaining regulated services must be reduced by a productivity factor of 2.5% per year, less inflation. International and mobile services were not included in the price cap as they were considered to be sufficiently competitive and therefore not to require regulation. The price cap plan also included concessions of an estimated USD 7.5 million for operators over the first two years of the plan. These took the form of reductions in fixed-to-fixed national calling rates, fixed-to-mobile national calling rates, and the inclusion of a significant number of free fixed-to-fixed national calling minutes with fixed C&W residential monthly metered rentals (ECTEL, 2004).

This approach to tariffs reduced the cost of the available telecom services, particularly in the long distance and cellular markets. For example, the average price per call from the region to the United States has fallen by more than 70% since the start of the liberalisation process. In 2000, calls to the US from the region averaged XCD 3.25 per minute, compared with XCD 0.90 per minute today. According to ECTEL, a further anticipated benefit of the new price cap plan¹⁴ will be to provide a significant reduction in costs for C&W fixed line consumers.

It was proposed that off-peak and weekend rates would further decrease to XCD 0.04 per minute on 1 January 2007. Beginning 1 January 2005, residential fixed customers were to

Table 3. ECTEL price plan

	1 January 2005	31 December 2006
Local calls (peak period)	XCD 0.09 per min.	XCD 0.07 per min.
Local calls (off-peak period)	XCD 0.07 per min.	XCD 0.05 per min.
Local calls (weekends)	XCD 0.06 per min.	XCD 0.05 per min.

receive 60 free minutes of local fixed-to-fixed calls after 8:00 p.m. and during weekends.

The new agreements, however, came at a cost. A full price cap regime would only become fully operational in 2006. Therefore, although ECTEL succeeded in obtaining regulatory harmonisation with regard to no further increases, it failed in its quest to protect consumers and other telecom providers who had to rely on C&W for non-cost based pricing. ECTEL therefore failed in its key role of facilitating the provision of affordable telecom services and in its objective of imposing cost-based regulation on C&W.

2.4 Design of the OECS regulatory system of governance

2.4.1 The process of regulatory decision-making in the OECS

Broadly speaking, the national telecom ministers adopted regulatory principles on a regional level, which they were expected to transpose into national legislation. ECTEL and the NTRCs were expected to implement all legislation, while the Eastern Caribbean Supreme Court (ECSC) and national courts were expected to enforce all legislation. This is a hybrid model in the sense that it is neither purely governmental nor purely market driven. Government provides the formal institutions, i.e. policy framework and model regulations, and the supporting structures, while firms are allowed to negotiate commercial contracts – for example, on interconnection terms, conditions and costs – between themselves pursuant to these formal institutions.

2.4.1.1 ADOPTION OF TELECOM REGULATION IN THE OECS

The OECS telecom policy was formulated by the OECS Authority, which consists of the prime ministers and chief ministers of the constituent islands and is the highest decision-making body of the Organisation. The policy formulation process was initiated by the heads of government and coordinated by the Secretariat.¹⁵ The policy outcomes are binding for participating member states, and include the ECTEL Treaty, the Telecommunication Bill, and the three agreements between the OECS and C&W.

Member states are responsible for transposing regional model policies and regulations into national legislation. National governments transpose regional legislation into national laws through their respective national regulatory processes, national parliaments, committees, ministries, government agencies, and so forth. Regional policy is considered law only when it has been transposed into national legislation in the member states. Policies that have been transposed include the telecom bill and regulatory instruments like the ECTEL decisions regarding price cap regulation and numbering.

2.4.1.2 IMPLEMENTATION OF TELECOM REGULATION IN THE OECS

The NTRCs are sector specific regulators established under the Telecommunication Bill to regulate and maintain the development of the telecom sector of the member states. These authorities were created in 2000 as the key telecom implementation agents. Their functions and powers are stated in their local telecom acts and can be summarised into the following broad categories: sector regulation; sector administration of policy, especially with respect to licensing; revenue collection and management, including the collection of fees and tariffs; and adjudication, as a tribunal. They also play an advisory role for the respective member state telecom ministers.

2.4.1.3 CONTROL OF TELECOM REGULATION IN THE OECS

Telecom policies that have been formulated by the OECS and transposed into national legislation are enforced by the NTRCs and the national courts. In the case of the OECS, enforcement of telecom matters is also done through a regional judiciary agency, the Eastern Caribbean Supreme Court (ECSC), which was established in 1967 by the West Indies Associated States Supreme Court.¹⁶ The ECSC has unlimited jurisdiction in the member states to make rules of court for regulating the practice and procedures of the Court of Appeal and the High Court. The national legislations in the states served by the Court confer rule-making authority on the ECSC Chief Justice in relation to matters outside the Court of Appeal and the High Court. To date, national courts have made numerous rulings on matters of dispute between ECTEL and C&W.

The institutional structures of the OECS telecom sector can be considered to be innovative since the creation of the NTRCs was preceded by the functioning of a regional regulator. The ECTEL Treaty created the NTRCs and legitimised ECTEL simultaneously. At the time, ECTEL was functioning in the form of a regulatory unit for the World Bank project. This situation is unique to regional regulation. In other regions, national regulators have been set up first, with regional regulators growing out of cooperation between NRAs. In the case of the OECS, the NTRCs were set up with the express view of relating to the regional organisation and being supported by it. In this regard, ECTEL's decisions are to be considered important inputs to all NTRC decisions at a national level. The NTRCs often look to ECTEL for guidance given its greater experience with regulatory matters. From the outset, there was a strong regional orientation in the OECS region, as opposed to a national orientation.

2.5 Assessment of the institutional effects in the OECS

We examined the institutional reform initiatives in five parts: the formulation of the OECS policy framework, the liberalisation of telecom markets, the creation of ECTEL to act as a regional regulator, the harmonisation of regulatory principles across the OECS, and the design of the OECS regulatory system of governance. Below we summarise these issues and discuss the implications of this experience for regional regulation and its impact on sector performance within the OECS.

2.5.1 Formulation of the OECS telecom policy framework

The OECS policy framework spelt out a clear policy for regional regulation. The ECTEL Treaty of 2000 recognised the need for a harmonised approach to the management of telecom in the region. The regional policy framework was made legally binding for the participating OECS member states. Virtually all the OECS states perceived the framework to be relevant and cooperated with ECTEL in its implementation. Where the framework has been implemented effectively, the OECS has experienced dramatic growth; where its penetration has been limited – for instance, due to problems with cost-based pricing methods – growth has been limited for the state in question.

Perhaps a contributing factor to the difficulties in implementing the framework has been the relative inexperience of ECTEL and the NTRCs in relation to the experience and information asymmetry in favour of C&W. Even with the support from the World Bank, this information asymmetry served the interests of C&W, which was able to operate in a manner that allowed it to circumvent early regulatory objectives and use this regulation to its advantage.

In addition, the actual policy framework is scattered across various documents and covers different periods, i.e., the ECTEL Treaty and the various agreements with C&W. Moreover, the objectives of the policy framework since its inception in 2000 have been directed towards promoting competition, harmonising policies and developing cost-based pricing methods, and some of these objectives have become largely irrelevant given the progress made in the region since 2000.

Nevertheless, the OECS regulatory objectives have created a number of benefits for regional regulation. In the case of the OECS, emphasis has been placed on the promotion of competition, harmonised policies on a regional level, universal service, fair pricing and the use of cost-based pricing methods by telecom providers. The homogeneity of the region, in terms of economic growth, stages of reform, etc., meant that these issues were considered to be relevant by all the islands' governments.

2.5.2 Liberalisation of the OECS telecom markets

The phased liberalisation of markets created benefits and challenges for regional regulation. The phased opening up of the market was intended to allow all the stakeholders – the incumbent, new entrants and policymakers – adequate time to prepare for competition. However, it soon became evident that the policymakers and regulators were ill prepared for the opening up of the telecom market. Many states had not set in place the relevant regulations as specified in the ECTEL Treaty and telecommunications bill. In addition, many of the early regulatory decisions were successfully challenged by the incumbent C&W in court.

Nonetheless, the simultaneous opening up of the telecom markets across the OECS states was significant from the perspective of regulatory harmonisation. It placed the five participating states on an equal footing with regards to dealing with regulation. In addition, coordination of telecom activities by

ECTEL was relatively easy, as the region is not characterised by large economic disparities.

Market liberalisation benefited sector performance. This was seen in the increase in the number of new entrants across all the OECS islands and in the levels of competition in mobile. Overall, the OECS experienced year-on-year growth, increased investment and employment growth after telecom market liberalisation. In the case of the OECS, it is easy to link these benefits directly to the reform efforts, since it was ECTEL that facilitated the licensing process that resulted in new entrants. These developments would probably not have happened in the absence of reform, given the conduct of the incumbent C&W.

2.5.3 Creation of ECTEL as a regional regulator

The creation of the ECTEL as a regional regulator generated benefits for regional regulation: C&W was compelled to negotiate with ECTEL as a regional authority on regional matters, spectrum, numbering, etc., and to pursue individual terms and conditions with individual member states through the NTRCs. ECTEL provided the means to collectively constrain (to some extent) the dominance of C&W and to provoke it into investing in modern telecom technologies to the benefit of the region. It seems that this result would not have been achieved without the creation of a regional regulator with real powers.

ECTEL's achievements increased its credibility as an institution, as demonstrated by the willingness of member states to adopt, implement and enforce its decisions. In addition, the willingness of states to collaborate with each other and with ECTEL to ensure the implementation of regional policy contributed towards more efficient regulation.

While ECTEL has been promoted as the first regional regulator, in practice its function in the OECS region has been primarily directed towards supporting the NTRCs in their national tasks. In terms of fulfilling its regulatory objectives, ECTEL is perceived to have done well. This can be seen in the manner in which it has addressed matters such as regulatory harmonisation and the licensing process in its management of radio spectrum; the provision of more affordable telecom services; and the extent to which it has advised the NTRCs and national governments on regional policy matters. In terms of stimulating competition, however, ECTEL has been less effective. While levels of competition have increased in some markets, such as mobile telephony in particular, they have remained virtually unchanged in others, such as fixed telephony. To a large extent, ECTEL's ability to bring about change was constrained by the problem of incumbent dominance. The manner in which it responded to C&W with regard to the significant market power (SMP) process and introducing a new price cap illustrates this.

Based on the evidence as a whole, it would seem that the benefits created by the work of ECTEL have far outweighed the problems created. As a regulatory organisation, it has facilitated credible and effective regional regulation. Nevertheless, ECTEL's initial effectiveness has also been greatly reduced by

the market power of the incumbent. Despite receiving real powers, its lack of adequate regulatory tools has undermined any real authority it might have to introduce efficient regional regulation. The formulation of effective regional regulatory tools that can be used to advance the objectives of a regional telecom policy is perhaps the biggest challenge at present for the OECS region.

2.5.4 Harmonisation of regulatory principles across the OECS

The specific harmonised regulations for licensing and a price cap plan created both benefits and problems for regional regulation.

With respect to licensing during the initial opening up of the telecom market, the use of administrative procedures to award fixed and mobile licences accounted for most of the licences granted. The subsequent process has been relatively slow as a result of the decision by the OECS Authority to distribute functions across two levels. The dual competency approach of licensing came at the expense of speed and efficiency. Some in the telecom sector have already complained about the length of time it takes new entrants to obtain a licence. While this dual competency served a useful purpose during the early stages of regulatory reform, it has become a barrier to competition rather than a means of facilitating it. Thus, while the OECS approach has successfully contributed towards unifying licensing, the changes in technologies suggest that this approach will not suffice in the foreseeable future. Already in the EU, for example, licensing regimes have been replaced by simple registration: new entrants inform regulators of their intention to enter the market, rather than requiring permission to do so.

The initial licensing procedure and dual licensing processes used within the OECS region allowed for equity and participation by all, but came at the expense of speed and efficiency. A process once designed to be a conduit for change is now considered to be a barrier to competition. In addition, the introduction of newer technologies such as WiFi and VoIP has rendered access to the OECS regulation unenforceable.

With respect to the price cap plan, the OECS had an extremely difficult time with price regulation during the initial reform of its telecom market. The OECS case shows the challenges that must be faced when establishing a regional price cap regime. After six years of discussions, negotiations and court cases, all that the parties concerned achieved was a decision to delay implementation of a price cap regime. This will have far-reaching consequences for private institutional arrangements such as interconnection arrangements between firms.

Experience in the OECS has shown how asymmetry of information and negotiating power between a strong incumbent like C&W and new entrants yields inefficient results. Once a price cap is implemented, ECTEL will need to reassess the situation for fixed and mobile and fixed-mobile convergence.

The failure to implement a cost-based price cap regime within the OECS region remains a cause for concern. Once a price cap is introduced, and regulators succeed in enforcing it, discussions on wholesale and retail pricing and ex-ante and ex-post design considerations will become important.

2.5.5 Design of the OECS regulatory system of governance

The OECS regulatory regime is characterised by the adoption of principles at the OECS level and by shared implementation and responsibilities for enforcement. In the OECS context, this has taken the form of allocating tasks like spectrum management to ECTEL and leaving most of the other tasks to the national NTRCs, including pricing and interconnection. Licensing, for its part, has been allocated as a dual competency. While the commitment of the national governments to reform is credible, this reliance on the member states and their NTRCs to implement and enforce regulatory policy has weakened regional effectiveness with respect to enforcement of liberalisation measures. This was seen especially in the early stages of the regulatory reform process, when the incumbent C&W was able to exploit the weaknesses within the system. Regulatory effectiveness has at times been compromised by the lack of procedural clarity inherent in the regulatory procedures and the time it took to enforce procedures. In addition, the reliance on courts to handle non-compliance with regulations reduced flexibility, self-regulation and cooperation.

The legality of the policy framework created benefits for regional regulation, since it effectively meant that the OECS members were obligated to transpose regional regulations into national legislation. The NTRCs, with support from ECTEL, were expected to implement the regulations, and the courts, both national and regional, were expected to enforce them. The commitment of the OECS states to establish and enforce national regulations further enhanced regional regulation.

The setting up of ECTEL as the regional regulator created further benefits. Greater coordination became possible as ECTEL worked alongside and in support of the national regulatory authorities. The delegation of functions such as spectrum management and numbering to ECTEL rather than individual states meant that limited resources could be allocated in a more efficient manner. The decision to make licensing a dual competency meant that both regional interests and national interests could be advanced. Individual ministers could accept or reject ECTEL's recommendations given their national market conditions. In general, expertise at the national level was enhanced by advice and support from ECTEL concerning regulatory matters like setting price caps, interconnection, and so forth.

The presence and participation of both the national and regional judiciary as a regulatory tool created benefits and problems for regional regulation. The participation of a regional judiciary enhanced the regulatory situation in the sense that it provided a forum for debate when matters could not be resolved at the national level. The litigation between the incumbent C&W and the NTRCs provides ample evidence of

this. In one particular case, the regional Supreme Court served as a deterrent and a catalyst to negotiation: C&W and ECTEL opted to settle out of court rather than face a negative judgment, as such a judgment had the potential to impact ECTEL's decisions and C&W's operations in other states. In this way, the judiciary assisted in constraining the behaviour of the incumbent while ensuring the consistent application of regional policies. However, the length of time it took to hear cases acted as a constraint on regional effectiveness.

3. Conclusions and policy recommendations

In this chapter we discussed the OECS regulatory model adopted as part of a broader set of regional market reform initiatives. One of the features of the model was its attempt to combine national and regional interests. This allowed national structures to participate alongside centralised structures in all aspects of the regulatory process. For example, national ministers responsible for telecom participated with the OECS Authority in the adoption of policy. At the same time, ECTEL supported the NTRCs in implementing telecom regulations, while the national courts generally take their cue from the regional Supreme Court when addressing telecom disputes. The role of ECTEL was particularly important since it was seen as the mechanism responsible for coordinating OECS telecom policies. In many respects, this approach allayed the initial fears of national authorities when they ceded sovereignty to centralised authorities.

While the system of governance initially set up has served the OECS region well in the initial stages of telecom sector reform, some concerns remain. The manner in which the current policy framework was formulated by negotiations between the OECS Authority and the incumbent serves as a case in point. The lack of transparency may have been necessary and helpful for dealing with the region's incumbent. However, today's changed circumstances require a more transparent and accountable manner of policymaking within the OECS region, especially with respect to participation by all the region's telecom operators. We thus recommend that the policy adoption processes within the OECS be made more transparent and accessible to all stakeholders. In addition, the OECS Authority should improve the process of policy adoption by allowing for the continual reviewing, improving and revising of the regulatory frameworks.

The current system also brings to question the independence of ECTEL with respect to political influences. For example, concerns remain about the role that the Board of Directors has played in the day-to-day running of ECTEL. To ensure sufficient independence with respect to ECTEL, the role and functions of the Board of Directors need to be clarified. The Board of Directors currently runs the day-to-day activities of ECTEL and guides the operation of the ECTEL Secretariat. We recommend that the Board of Directors should be given a set of limited objectives and should focus mainly on procedural issues

rather than occupying itself with operational matters. This would enhance the overall credibility of ECTEL and allow its management to run an effective regulatory organisation. It would also free the ECTEL Secretariat to focus on advancing regional markets without interference from the collective national interests represented by the Board of Directors.

An important question is the extent to which the OECS model of regional regulation is replicable. While some aspects of the model may be transplantable, others may be too specific to the OECS institutional environment. For example, the creation of a specialised regional regulator with real powers may become an important consideration in other regions. In regions such as the EU and SADC, policymakers have opted for high-level coordinating groups rather than formal regional regulatory agencies. The OECS experience highlights the benefits to be gained from such a centralised structure. For one, ECTEL was able to achieve more in its negotiations with the regional incumbent than the previous practice of individual negotiations between each country and the incumbent. The extent to which other regions find the model useful, however, is a function of the specificities of each region's institutional environment. In the case of the OECS, the different member states were more or less on an equal economic footing, have similar histories, and faced a common enemy in the form of C&W.

Notwithstanding the early successes, the OECS case highlights the difficulty of designing a model capable of addressing the problem of incumbent monopoly power across national jurisdictions. The ability of C&W to delay the introduction of a price cap regime, stop the SMP process and use the courts as a source of competitive advantage suggests that the model is unable to constrain the anti-competitive practices of the incumbent. These activities have greatly reduced ECTEL's effectiveness. We recommend that greater support be provided to institutions like ECTEL and the NTRCs. Support should take the form of greater resources (access to experts, training programmes and new regulatory tools) from policymakers to assert their independence and allow ECTEL to at least resolve the problems with respect to pricing and the SMP process.

The OECS case also highlights the difficulty of allocating regulatory responsibilities across national (NTRCs) and regional (ECTEL) levels. While the dual licensing process did allow for equity and participation by all, it came at the expense of speed and efficiency of the licensing process. A process designed to be a conduit for change has now become a barrier to competition. Moreover, the introduction of newer technologies such as WiFi and VoIP has rendered the present access regulation process unenforceable. With respect to access regulation we recommend that the dual licensing procedures be reviewed. The plethora of fixed and mobile licences already awarded in the region suggests that perhaps the time is right for the licensing procedures to be replaced by an authorisations regime. Such an arrangement would only require individual rights of use for scarce resources such as spectrum and numbers.

During the initial stages of regional reform in the OECS, the NTRCs focused primarily on regulating the incumbent. The establishment of some competition in fixed and mobile suggests a change in emphasis from regulating the incumbent to regulating the market as a whole. We therefore recommend a review of the tasks of ECTEL and the NTRCs with respect to their preoccupation with regulating the dominant incumbent. A shift in their focus from regulating C&W to applying standards that enhance competition and opportunities to participate in the market at any level would be more appropriate.

Two decisions are key in this respect. First, the decision to withdraw the assessment into SMP should therefore be restored and the market analysis should be undertaken. This would impose on C&W all obligations required of SMP and operator and would allow for more effective regulation of asymmetric power in the OECS region. Second, the OECS should introduce a price cap regime as soon as possible, and the decision to delay its implementation should be re-examined. The ability of the incumbent to negotiate and fix prices until 2006 has not facilitated the establishment of an effective price cap plan. This decision should be revisited with the view of introducing a rate-based regime as soon as possible. Failure to do so will result in the ECTEL states being locked into an outdated price regime while prices for telecom services are expected to drop steadily elsewhere. Once a price cap is introduced, and the regulators acquire experience with enforcing it, further discussions on wholesale and retail prices and ex-ante and ex-post design considerations would become important.

Notes

¹ The OECS was created by treaty in 1981 when seven Eastern Caribbean countries agreed to promote co-operation, unity and solidarity, to harmonise policies and undertake economic integration among the member states. In 1991 the OECS heads of government agreed to the creation of an OECS single market. Efforts had been directed at removing barriers to the free movement of goods, services, labour and capital, harmonising macro-economic policies and accelerating the economic development of the region. At the 34th Meeting of OECS Heads of Government (July 2001) a decision was made to deepen economic integration by creating an economic union.

² The East Caribbean dollar (currency code XCD) is the currency used in all OECS member states except the British Virgin Islands, which uses the US dollar (USD).

³ For more details, see the impact assessment report on the ECICT Project by USAID/Carana (Carana Corporation 2004).

⁴ This is a projected flow for 2004 based on the entrants of new players. Note: investment pertaining to cable landing licences is not included in the projections.

⁵ For a description of the project see World Bank (1998).

⁶ For more details see OECS Contracting States (2000).

⁷ For a description of the first agreement see OECS Contracting States (2001).

⁸ For a description of the second agreement see OECS Contracting States (2002).

⁹ For a description of the third agreement see ECTEL (2004).

¹⁰ See NTRC St Lucia Annual Report (NTRC St Lucia 2003).

¹¹ For a description of the project status see OECS (2002).

¹² See ECTEL's Guidance Notes on the application for a telecommunications licence (ECTEL, 2002).

¹³ For a description of the telecom bill see OECS Authority (2000).

¹⁴ ECTEL negotiated the proposed price cap plan based on its analysis of current cost data rather than on past pricing data.

¹⁵ Working groups may be created for specific purposes (as was the case with the OECS Telecom Reform Project).

¹⁶ The ESCS is a superior court of record for the nine OECS member states, which comprise six independent states (Antigua and Barbuda, Dominica, Grenada, St Kitts and Nevis, St Lucia, and St Vincent and the Grenadines) and three British Overseas Territories (Anguilla, the British Virgin Islands and Montserrat).

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