Regional integration - a way forward for improved water and sanitation services in the Caribbean

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Regional integration – a way forward for improved water and sanitation services in the Caribbean

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Abstract

Regional integration has been used with varying success to overcome disadvantages associated with small size. The fundamental premise for regional cooperation in the Caribbean has been the promotion of economic development particularly in the manufacturing and industrial sectors. The opportunity exists however, for use of a regional approach to develop strategic responses to other issues essential to sustainable development such as service delivery.

Infrastructure, particularly water and sanitation, has a significant positive effect on regional socio-economic development. This capacity for development is however predetermined by investment and development policies and is limited by the financing capacity of governments. Fragmented spending on infrastructure may not be sustainable in the long-term and renewal of economic growth requires accompanying investment in infrastructure. The current trend of increased private sector involvement in water and sanitation provides an alternative to financing this sector, as well as the potential for better use of existing financing.

Determinants for attracting private investment include market size and institutional capacity. Regional cooperation in water and sanitation services across the Caribbean is an option for achieving market power and realising socio-economic benefits of increased investment on a large-scale. An integrated approach to water and sanitation service delivery in the context of sustainable governance is essential to regional development in the Caribbean. This concept of a regional approach poses several challenges which include:

(1) Determining an appropriate scale and geographical extent for regional cooperation;
(2) Prioritising national agenda for water and sanitation services within a regional framework;
(3) Determining the nature of private sector involvement within a regionally coordinated sector;
(4) Cross-boundary regulation of a regional strategy to water and sanitation services.

Keywords: Caribbean; regional integration; water and sanitation

1. Introduction

Infrastructure, particularly water and sanitation, has been empirically proven to have a significant positive effect on regional economic activity and development (Munnell and Cook, 1990; Moomaw et al., 1995). Disparities in levels of socio-economic development have been found to be partially attributable to differences in infrastructure stock, which is often the result of investment policies predetermined by the financing capacity of governments (Cutanda and Paricio, 1994). For water and sanitation, this financing capacity or ‘incapacity’ of governments is a major argument for increased private sector involvement. Compared to other types of infrastructure however, water and sewerage projects attract the lowest levels of private investment at 5% for the period 1990-2001 (Izaguirre, 2002). The prospects for private investment in the sector, especially in developing countries, are suggested by Briscoe (1999) to be conditioned by the unique characteristics of water and sanitation. In addition to these sector-specific factors, country-specific explanatory variables may also be important in attracting private investment. The foreign direct investment (FDI) literature identifies several country-specific determinants of which market size has been found to be the most robust and positive (Wong and Adams, 2002). Network utilities like water and sanitation are also expected to be positively influenced by size factors.

A regional breakdown of water and sewerage projects with private participation for the period 1990-97, shows a concentration of projects in Latin America and the Caribbean - 42% of private investment in developing countries (Silva et al., 1998). With a combined population of 60% of

1 For more on the characteristics of water and sanitation see Haarmeyer and Mody (1997); World Bank (1997); Werkman and Westerling (2000); Seppälä et al. (2001).
the region, Argentina, Brazil and Mexico are the recipients of at least 90% of this investment. The Caribbean can only boast to collectively represent about 7.5% of the region's populace ranging from 0.002% to 2.3% in the smallest and largest islands respectively (United Nations, 2002). Notwithstanding small size, attempts to date at sourcing private investment in water and sanitation have been an 'island' effort. The thesis of this paper is that a strategy of regional integration or cooperation as used in other spheres is a worthy option for attracting private sector investment in water and sanitation in the small islands of the Caribbean.

The paper is organised as follows. In Section 2, we discuss the concept of regional integration and its general application. In Section 3, we highlight different regional strategies in utility operation in general and the water sector in particular. A brief discussion of the Caribbean experience with regional integration is included in Section 4. Section 5 offers some closing remarks.

2. Regional integration

The classic definition of regional integration which stems from its roots in international trade is “a state of affairs or a process which involves the amalgamation of separate economies into larger free trading regions” (El-Agraa, 1999). More specifically, regional integration is concerned with the discriminatory removal of trade impediments between at least two participating nations and with the establishment of certain elements of cooperation and coordination between them. Several different forms of regional integration have been effected with varying success – (a) free trade areas such as the North American Free Trade Agreement (NAFTA); (b) customs unions such as the Caribbean Community and Common Market (CARICOM); (c) common markets; (d) complete economic unions such as the European Union (EU); and (e) complete political unions such as the unification of the two Germanies in 1990 (Ibid.). The driving forces for regional integration have predominantly been fuelled by the realisation of economic gains and include (a) enhanced efficiency in production due to increased specialisation; (b) increased production levels due to better exploitation of economies of scale through increased market size; (c) improved international bargaining; and (d) increased efficiency due to intensified competition (El-Agraa, 1999; Mattli, 1999).

The promise of regional integration however, goes beyond trade and has found favour as a strategic response to ‘non-economic’ issues of regional interest, especially where there is some resource constraint at the national level. The range of issues for which regional cooperation has been effected includes the environment, research, education, ocean and coastal governance, culture, sports and tourism. In fact, with respect to small islands, the Barbados Programme of Action adopted in 1994 specifically speaks to the need for a regional-scale implementation of programmes geared toward sustainable development (United Nations, 1994). Small island states like those in the Caribbean are generally recognised as possessing inherent disadvantages that derive from their size including costly public administration and infrastructure, limited institutional capacity, and domestic markets that are too small to provide significant scale economies. The particular advantages of a regional approach to develop strategic responses to issues of common interest include (a) sharing of investment and transaction costs for capital intensive activities; (b) pooling resources to promote and attract external funding; (c) augmenting capacity or capability constraints; and (d) achieving economies of scale in the provision of centralised services (Tutangata and Power, 2002).

Efforts at regional integration have met with varying levels of success. Despite the benefits of regional cooperation, a range of impediments exist at regional and national levels. Obstacles to a sustained effort include waning political will, changes in integration strategy, national rivalries and technical impediments to the implementation and enforcement of common policies. Oftentimes, the process is undermined as national and sectional interests are advanced over regional ones, or national adjustment programmes do not reflect the regional agenda (Vaitsos, 1978; Bryan and Bryan, 1999). This is especially true if member countries are at different levels

2 See El-Agraa (1999) for more detail.
3 For more on the disadvantages of small size see Srinivasan (1986); Farrugia (1993); Streeten (1993); ComSec and World Bank (2000); Easterly and Kray (2000); Pelling and Uitto (2001); Liou and Ding (2002).
of development and feel ‘hampered’ by the requirements of ‘weaker’ countries (Lewis, 2002). In addition, failure to provide adequate ‘core’ funding for regional bodies could compromise their operation by weakening efforts at regional coordination of key issues (Tutangata and Power, 2002). The key to sustained regional cooperation as seen by (Montero, 2002) is adherence to some basic principles, without which the probability of success is minimum or nil (Table 1).

The Programme of Action considers regional cooperation and institutions a necessary tool towards achieving sustainable development in small islands. Regional approaches have been used to develop strategic responses to issues beyond hardcore economic considerations. Service delivery especially in small islands is expected to similarly benefit from some form of regional approach.

### Table 1

<table>
<thead>
<tr>
<th>Key elements</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purposes</td>
<td>The conception of the programme must be based on the existence of common purposes among participants, in relation to a determined issue that is going to be the central theme.</td>
</tr>
<tr>
<td>National priority</td>
<td>There should be significant national priority in relation to these common purposes in order to ensure the necessary national support and follow-up.</td>
</tr>
<tr>
<td>Resources capacity</td>
<td>A minimum human and material resources capacity should be available at national level, or there should be the necessary political will to develop and put that capacity into the national and regional interest.</td>
</tr>
<tr>
<td>Leadership</td>
<td>A recognised individual and/or institutional leadership should be secured in order to allow proper guidance and development of the whole programme. The leadership has to demonstrate a proven scientific and moral authority, not imposed by any reason of economic power or institutional and material development.</td>
</tr>
<tr>
<td>Implementing and coordinating</td>
<td>The existence of a promoting, implementing and coordinating national and international institution or body should be secured and developed.</td>
</tr>
<tr>
<td>Contributions</td>
<td>The financial and in-kind contributions from international donor agencies and organisations, and also from participating countries, should be sustained in the long-term.</td>
</tr>
</tbody>
</table>

*Source: Montero (2002)*

3. Regional integration in utility operations

3.1. Energy

Complex integration structures have emerged and become important in industries that were previously regarded as monopolies as a result of deregulation, privatisation and advancement of technologies (Zhou, 2003). According to Hira and Amaya (2003), “the process of privatisation and deregulation of the energy sectors did not anticipate the possibilities for regional market integration”. This is evident from the different ‘routes’ taken by South America, Central America and Europe towards the integration of their energy markets (Table 2). The nature of integration appears to have been guided by specific supply and demand needs, differences in energy resource endowments and size of local markets. Hira and Amaya (2003) consider integration in South America among associate members of the Common Market of the South (MERCOSUR) to be ‘fuelled’ by Brazil’s growing demand for imported energy supplies, thereby creating a natural market for energy trading. Integration is also assisted by the presence of complementary resource endowments in member states. On the other hand, the small size of the Central American market and dependence on petroleum imports for electricity generation, have resulted in a deliberate attempt at integration through the *Sistema de Interconexión Eléctrica para América Central* (SIEPAC) project. The aim of the project has been to connect transmission
grids across member states to take advantage of variances in consumption patterns, hydroelectricity availability, reduce operating costs and improve attractiveness for foreign investment. Europe already has the benefit of a high degree of cooperation and policy convergence through the European Union which has set directives for liberalisation of energy markets, encouraged by heavy reliance on external energy sources and economic gains.

Table 2
Comparison of energy market integration efforts in South America, Central America and Europe

<table>
<thead>
<tr>
<th>Energy profile</th>
<th>South America</th>
<th>Central America</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural market for energy trading stimulated by Brazil’s demand</td>
<td>Natural complementarities of resource endowments</td>
<td>Dependent on petroleum imports for electricity generation</td>
<td>Significant variation in individual energy production and consumption profiles</td>
</tr>
<tr>
<td>Privatised and deregulated</td>
<td>Independent system and wholesale market operator</td>
<td>More difficult to create competitive markets and attract investment due to small market size</td>
<td>Significantly dependent on external energy sources</td>
</tr>
<tr>
<td>Partial privatisation</td>
<td>State-run monopolies</td>
<td>Partial privatisation</td>
<td>Countries free to choose their own method of regulation as long as they meet the criteria of the Electricity and Gas Directives</td>
</tr>
<tr>
<td>MERCOSUR working group No. 9 created for energy issues</td>
<td>Memorandum of understanding to promote regional gas/electricity markets</td>
<td>Privatised</td>
<td>Electricity Directive requires opening up of electricity markets to competition</td>
</tr>
<tr>
<td>Gas integration projects built under private bilateral agreements, e.g. Bolivia-Brazil pipeline</td>
<td>Trading of electricity via large-scale transmission lines between countries under private bilateral agreements</td>
<td>Partially liberalised</td>
<td>Gas Directive requires progressive opening up of gas markets to at least 33% of total gas consumption in 2008</td>
</tr>
<tr>
<td>Growth of integration haphazard as the private market has outpaced the ability of governments to deal with regional integration issues</td>
<td>Project has not attracted much private interest due to poorly developed national markets, lack of obvious complementarity of supply and demanding nations and small market size</td>
<td>Partially liberalised</td>
<td>Need to ensure that compliance with directives do not result in liberalised but separate and isolated gas/electricity markets</td>
</tr>
</tbody>
</table>

Adapted: Hira and Amaya (2003).

Since the 1990s, energy development has become a major focus of economic cooperation in the Greater Mekong Sub-region (GMS) which consists of Cambodia, Laos, Myanmar, Thailand, Vietnam and the Yunnan Province of China (Yu, 2003). The GMS is endowed with abundant resources with power generation potential. Unfortunately, these resources are located in areas far from major markets of electricity demand and separated by national borders. In addition, many countries in the GMS face difficulties in accessing financial resources and technologies to exploit these energy potentials. Regional cooperation with respect to power trade was considered to be a strategic solution to providing more equitable access to cheaper energy and developing an electricity market in the GMS (World Bank, 1999). The anticipated benefits from regional cooperation to develop the power market in the GMS include (a) cumulative savings in generation investment and operation expected to reach at least US$10.4 billion by 2020; (b) significant reduction in emissions due to substitution of coal-fired plants by hydropower generation; (c) improved international relations among the participating countries; and (d) enhanced foreign investment, technology transfer and human resource development (World Bank, 1999; Yu, 2003). The Association of Southeast Asian Nations (ASEAN) has played an important role in energy development in the GMS through its power grid and gas pipeline programmes aimed at ensuring energy supply security in the region (Yu, 2003). In addition, measures to facilitate coordinated planning such as the development of a strategic framework for regional cooperation are being formulated.
The progress and eventual success of regional energy integration relate to the basic principles set out in Table 1. While the SIEPAC project does yield some benefits of integration such as shared supplies markets, the ability to take advantage of differences in consumption and generation timings and outputs, and economies of scale, it has failed to attract much private interest (Hira and Amaya, 2003). Reasons cited for this include the lack of a clear regulatory framework and the poorly developed nature of national markets. Haphazard integration indirectly regulated by binational agreements has resulted in South America due to the private market outpacing the ability of national governments to deal with regional integration issues. The effectiveness of energy market integration in Europe is considered by Hira and Amaya (2003) to depend to a great extent on the conditions of cross-border trade between member states which is conditioned by the cost of access to transmission networks. Regional cooperation for energy development in the GMS is still subject to many actual and potential barriers. Domestic needs still dominate national energy policies and there are no regional protocols to encourage power trade (Yu, 2003). The GMS lacks compatibilities in laws, regulations and contracts. In technical areas, there is a lack of transmission facilities to connect member countries and there are no coordinated plans or operation protocols. No leadership has been established to facilitate a regional approach to power trade.

The examples above suggest that regional energy development requires a well organised approach. Hira and Amaya (2003) propose the following prerequisites for energy integration – (a) physical and administrative infrastructure to run the market; (b) common regulatory principles and a regional regulatory authority to create rules, set up pricing mechanisms, manage transmission and contracts and resolve disputes; and (c) customisation of regulations towards the particularities of a region’s energy resources. The power trade has to be recognised in national energy strategies. Yu (2003) suggests the development of demonstration projects until the energy sector in each country matures and governments become more capable in handling energy issues. So far the focus has been more on the establishment of a regional power market. A broader framework for regional cooperation in energy development may be necessary to overcome the shortcomings experienced to date.

3.2. Water and sanitation

Even though the electricity supply sector has been considered most analogous to water utilities (Seppälä et al., 2001), the unique characteristics of water and sanitation have resulted in modest opportunities for regional cooperation. The water industry has not experienced major technological breakdowns or come close to exploiting economies of scale in management and operations as other utilities. As a result, separation into production and transmission components as is done for developing energy markets is rare and not considered cost effective. In addition, long distance and open access transmission is particularly problematic and costly (Beecher, 2000). Regional water and sewerage services in the conventional sense often refers to what Clark (1979) refers to as regionalisation\(^5\) aimed at achieving economies of scale, more so in water treatment than in distribution (Kim and Clark, 1988). For agencies like the World Bank’s Water and Sanitation Programme (WSP) with its small towns and multi-village initiatives, aggregation\(^5\) is often used to achieve economies of scale (WSP, 2001). The advantage of this approach is the ability to finance supplemental professional support services, attract larger and more experienced operators, and to simplify project implementation. For the purposes of this paper however, this ‘limited’ scale of water and sanitation operation will not be considered given our interest in cross-boundary regional cooperation efforts.

The driving force for regional cooperation in the water sector has primarily been the management of shared and/or limited water resources. There is a long history of regional cooperation through shared transboundary water resources\(^6\), especially river basins. Approximately 261 international watersheds and an untold number of transboundary aquifers cover about one half of the earth’s land surface affecting 40% of its population (Wolf et al., 1999). Countries sharing transboundary resources face a two-dimensional problem – (a) managing the

\(^4\) Regionalisation in this context refers to a central water supply system serving a large area versus several scattered, small systems.

\(^5\) Concept similar to ‘regionalisation’ - aggregated water supplies primarily exist as several small utilities bundled into a central service.

\(^6\) Defined as surface or groundwater resources shared by two countries or more (Kliot et al., 2001).
water resource holistically; and (b) sharing the source (Kliot et al., 2001). In the absence of balanced cross-country and cross-sectoral integration, the possibility exists for riparian countries to experience conflict over shared waters. The success of institutions involved in basin-wide joint management of water resources lies in their territorial coverage and broad functional frameworks (Ibid.). In general, the various institutional arrangements and mechanisms are reflected in treaties, conventions and agreements, which seek to outline the extent and intensity of cooperation and regulate the joint utilisation of water resources. According to Savenije and van der Zaag (2000) requisites for the successful establishment of an international regime for transboundary cooperation include (a) active support and long-term political commitment; (b) domestic governmental structure capable of effective international cooperation and collaboration; (c) a system of technical communication and cooperation; and (d) a level playing field implying that participating countries should have adequate capacities to analyse and develop their negotiating position. The ongoing challenge has been to develop and manage the various international water sources sustainably and efficiently in full agreement and with cooperation between co-basin countries so that the result is a ‘win-win’ situation for all the parties concerned.

At a scale more on par with the Caribbean, regulatory weaknesses at the national level for utility industries such as telecommunications, power, and water supply have encouraged initiatives in the Pacific Islands for regional regulatory cooperation for these services (Zieroth, 2001). For the Pacific member countries, the advantages of a regional regulatory framework include (a) overcoming capacity constraints; (b) achieving economies of scale to overcome limitations of small size; and (c) attracting private investment through improved credibility. The Pacific Water Association (PWA) operates as a regional non-governmental organisation that promotes direct cooperation of water utilities in technical training, exchange of information, sharing of expertise and product services. Although operations are conducted at the national level, recognition of the unique geographic and physical characteristics and fragility of water resources unite efforts at the regional level. The guiding principles for the PWA are embodied in a 2002 communiqué summarised in Table 3.

### Table 3
Guiding principles adopted by the Pacific Water Association

<table>
<thead>
<tr>
<th>Key Elements</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water resources management (WRM)</td>
<td>• Strengthen capacity to conduct water resources assessment and monitoring as a key component of sustainable WRM.</td>
</tr>
<tr>
<td></td>
<td>• Implement strategies to utilise appropriate technologies for water supply and sanitation systems for rural and peri-urban communities.</td>
</tr>
<tr>
<td></td>
<td>• Implement strategies to improve WRM.</td>
</tr>
<tr>
<td>Technology</td>
<td>• Establish appropriate and well-governed institutions, infrastructure and information to support sustainable water and wastewater management.</td>
</tr>
<tr>
<td></td>
<td>• Encourage utility collaboration in regional partnership to reduce unaccounted for water.</td>
</tr>
<tr>
<td></td>
<td>• Develop island specific regional training programmes to result in sustainable levels of skilled persons within the sector.</td>
</tr>
<tr>
<td>Institutional arrangements</td>
<td>• Develop a shared national vision for WRM via a consultative process encompassing good governance.</td>
</tr>
<tr>
<td></td>
<td>• Recognise and share WRM knowledge and skills of all stakeholders at a national and regional level in the process of developing and implementing the national vision.</td>
</tr>
<tr>
<td></td>
<td>• Recognise and encourage national and regional leadership in WRM.</td>
</tr>
<tr>
<td>Financing</td>
<td>• Create an environment for investment by both the public and private sector by developing and implementing national, sector and strategic plans that identify the economic, environmental and social costs of different services.</td>
</tr>
<tr>
<td></td>
<td>• Establish financially viable enterprises for water and sanitation that result in improved performance by developing appropriate financial and cost recovery policies, tariffs, etc.</td>
</tr>
</tbody>
</table>

*Source:* (PWA, 2002).
Zieroth (2001) considers that the remit of the PWA does not advance its adoption of the role of independent regional regulator for water and sanitation services. The PWA is directly funded through annual subscriptions from its members. As such, it is unlikely that it is able to engage in independent regulatory activities that require transparency and an unbiased outlook towards competition. The potential exists however for the PWA to play a role in harmonising regional standards and developing best practice guidelines. Better potential for the establishment of a regional regulator is believed to exist within the South Pacific Applied Geoscience Commission (SOPAC), an independent inter-governmental regional organisation, especially in light of intentions to establish a ‘utility’ section to specifically address the needs of the sector (Ibid.). A phased approach to establishing a regional regulator is suggested by Zieroth (2001). Activities aimed at supporting existing initiatives at the national level would precede development of a regional dimension as experience with national projects progress. With respect to the authority of a regional initiative, Zieroth recommends starting at a low level of information sharing and advisory assistance before moving to harmonisation and arbitration efforts.

4. The Caribbean experience with regional integration

Bryan and Bryan (1999) describe the history of regional integration in the Caribbean as cyclical, characterised by “surges of excitement and optimism, sobriety, a sense of failure, disenchantment, then renewed optimism”. The Caribbean Community and Common Market (CARICOM) established in 1973 by the Treaty of Chaguaramas, represents the most recent expression of Caribbean integration with a membership of 14 countries. The Organisation of Eastern Caribbean States (OECS) exists as a smaller subgroup within CARICOM, and has been described as demonstrating more cohesiveness and resilience with respect to macroeconomic performance on occasion, than some of the larger CARICOM countries (Ibid.) (Figure 1).

The three main objectives of CARICOM are:

(a) to facilitate regional economic integration through the Caribbean Common Market;
(b) to provide a mechanism for the coordination of the foreign policies of member states; and
(c) to promote functional cooperation in as many areas as possible, especially in relation to various areas of social and human endeavour (CARICOM Secretariat, 2001).
The mandate of functional cooperation is of particular interest due to its potential of embracing the thesis of this paper — regional cooperation in water and sanitation. Specific objectives for enhanced functional cooperation within CARICOM as set out in Article 6 of the Treaty of Chaguaramas include:

(a) more efficient operation of common services and activities for the benefit of its peoples;
(b) accelerated promotion of greater understanding among its peoples and the advancement of their social, cultural and technological development; and
(c) intensified activities in areas such as health, education, transportation and telecommunications (Ibid.).

While progress towards true regional economic integration has been slow, CARICOM is perceived to have done well with respect to both foreign policy and functional coordination (Bryan and Bryan, 1999). No other regional integration group in the Western Hemisphere has demonstrated such a vocal commitment to coordination of foreign policy. Functional collaboration efforts have also resulted in several successful regional ventures. A number of institutions established by or under the auspices of CARICOM are responsible for formulating policies in relation to functional cooperation. Notwithstanding these successes, the current regional integration movement in CARICOM is considered weak in practice due to several generic political and institutional factors including:

(a) constant undermining of the integration process as national and sectional interests are advanced over regional ones;
(b) inadequacies in the regional institutional structure where problems persist with respect to the decision-making process and the capacity for implementing and enforcing agreements; and
(c) the institutions of CARICOM have not become an integral part of the political environment of its member states (Bryan and Bryan, 1999).

A distinctive example of Caribbean regional cooperation in utility operations was the establishment of the Eastern Caribbean Telecommunications Authority (ECTEL) by the OECS. The objective of the project was to introduce pro-competition reforms in the telecommunications sector and increase the supply of informatics-related skills in the five participating OECS countries — Dominica, Grenada, St. Kitts & Nevis, St. Lucia and St. Vincent & the Grenadines (World Bank, 2002). The establishment of a regulatory framework through the ECTEL has been greatly enhanced by a legal ruling in one of the member countries regarding the legality to monopoly provision of telecommunication services 7 (DeFreitas et al., 2001).

Benefits from the regional telecommunications regulatory framework are expected to accrue to consumers and providers in the participating OECS countries. Consumers are expected to benefit from increased choice and competition in the provision of services. Businesses for which long distance telecommunications and data communications are important intermediate inputs are expected to benefit from increased price and quality competition. Incumbent and prospective providers and governments are expected to benefit from the modernisation of telecommunications legislation to cover new technologies and from the upgrading of OECS regulatory capacity. Greater investor confidence in the objectivity and stability of the regulatory authority combined with more competitive rates, are expected to lead to greater foreign and domestic investment (World Bank 2002). The overall success of this regional attempt at regulatory reform will eventually be determined with time.

5. Closing remarks

Although there is little precedent of regional cooperation in water and sanitation, the potential exists for a regional approach particularly with respect to developing and effecting a regional regulatory framework. Regulatory risks - the risk of adverse regulatory decisions are often

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7 Cable and Wireless, the incumbent monopoly telecommunications company was taken to court by Marpin, an internet service provider. Marpin argued that the legislation and licence conferring monopoly powers on the incumbent amounted to unconstitutional hindrance to free speech (Zieroth, 2001).
perceived by private investors to be the largest business risk in the water sector (Whelan, 2003), hence the need for a competent regulatory mechanism. Regional agreements and cooperation have shown that they can lower the cost of providing services and alleviate the lack of specialised expertise at the national level, a problem more pronounced in small islands. Recurring themes from the above discussion highlight the importance of developing regional protocols that reflect national interests and garner full political commitment to regional cooperation endeavours. The constraints faced by other regional efforts in utility operations give an indication of the challenges to be anticipated in developing a regional water and sanitation strategy. The challenges however, are believed to be outweighed by the likely benefits of improved water and sanitation services and its effect on other areas such as health and overall socio-economic development. The Caribbean through CARICOM has achieved some success in regional integration, particularly with respect to functional cooperation. The authors believe it is possible to build on this success by developing a regional approach to water and sanitation services. The establishment of the ECTEL to address deficiencies in the telecommunications sector in the OECS attests to the potential for a regional approach to utility operations in the Caribbean.

References


