STATES OF JERSEY



JT GROUP LIMITED ("JERSEY TELECOM"): PROPOSED SALE

Lodged au Greffe on 20th February 2007 by the Minister for Treasury and Resources

STATES GREFFE

PROPOSITION

THE STATES are asked to decide whether they are of opinion -

to agree, in principle, that the States' shareholding in JT Group Limited ("Jersey Telecom") should be sold and to request the Minister for Treasury and Resources to take the necessary steps to identify a suitable buyer for Jersey Telecom in accordance with the principles set out in Tables 1 and 2 of section 8 of the Minister's report dated 20th February 2007, with the outcomes of the sale process brought back to the States for approval.

MINISTER FOR TREASURY AND RESOURCES

TABLE OF CONTENTS

	Executive Summary		
	Background to States Ownership of Jersey Telecom		
	Preparation of the Proposition		
	3.1 The Consultation Process		
	3.2Professional Advice 3.3Reports by Relevant Parties		
	3.3 Reports by Relevant Parties		
	3.4 Sale Principles		
	The Regulatory Framework, Infrastructure and Consumer Protection		
	4.1Overview of the Regulatory Framework		
	4.2 Competition in Jersey's Telecom Market		
	4.3 Maintenance of Essential Telecoms Infrastructure		
	4.4 Consumer Protection		
	4.5Structural Separation		
	Key Considerations for Jersey Telecom		
	5.1 Review of Jersey Telecom		
	5.2Strategic Challenges faced by Jersey Telecom		
	5.3 The Potential of Jersey Telecom		
	Employee Related Issues		
	6.1 <u>TUPE Legislation</u>		
	6.2Pensions rights		
States Investment in Jersey Telecom and Strategic Reserves Policy			
	7.1 Proposition 133/2006 and the Strategic Reserve		
	7.2 Suitability of Jersey Telecom as a Strategic Reserve Investmen		
	<u>7.3</u> <u>Form of Sale</u>		
	7.4 An Inclusive Sale Process		
	7.5Size of Stake to be Sold		
	Sale Principles and States Approval		

TABLE OF ANNEXES

Annex 1: The Consultation Paper

- A1.1 Discussion Paper issued by the Minister for Treasury and Resources on the proposed sale of Jersey Telecom
- A1.2 Summary of responses received to the Discussion Paper issued by the Minister for Treasury and Resources on the proposed sale of Jersey Telecom

Annex 2: Structural Separation

- A2.1 Background to the Discussion on Structural Separation
- A2.2 Views on Structural Separation
- A2.3 Experience of Other Incumbent Operators
- A2.4 Analysys Perspectives on structural separation
- A2.5 Jersey Competition Regulatory Authority
- A2.6 Jersey Telecom Representations on Structural Separation

Annex 3: States Economic Adviser's Recommendation

A3.1 Economic Adviser's report on the structure of the proposed sale of Jersey Telecom

Annex 4: P.133 2006 – Strategic Reserve Policy

A4.1 Establishment of a Stabilisation Fund and Policy for Strategic Reserve

1. Executive Summary

Until 1 January 2003 the States was the regulator, operator and owner of Jersey Telecom, the only major telecommunications provider in Jersey. The Telecommunications (Jersey) Law 2002 fundamentally transformed this model by splitting these three roles. The regulatory role, which includes consumer protection and ensuring the maintenance of the Island's telecommunications infrastructure, became the responsibility of the Jersey Competition and Regulatory Authority (JCRA). The operator became the incorporated organisation JT Group Limited, governed by an independent Board of Directors. And the owner became the Finance and Economics Committee, and subsequently the Treasury and Resources Minister, acting in the interests of the States as an investor in Jersey Telecom.

With the regulator protecting the interests of consumers the States now own Jersey Telecom primarily as a strategic investment. The purpose of States strategic investments is to provide an insurance policy against the Island suffering serious economic decline at some point in the future.

Yet Jersey Telecom does not meet the criteria for such investments: it is too large for a single investment, it could not be sold quickly and most importantly in the circumstances in which it would need to be sold, i.e. the Island's economy was struggling, it would not be as good an investment for a new owner and as a result its value would decrease. Accordingly, Jersey Telecom should be sold and the proceeds invested in an off-Island diversified portfolio of investments. This will not only provide a better annual return to the States but also a better price in the circumstances in which these investments would need to be realised.

Although the fundamental reason for the sale of Jersey Telecom is to enhance the Strategic Reserve, so that funds are available to support current or future generations in less fortunate times, there are clearly other very important issues to be taken into account when considering the sale of this company.

- Is Jersey Telecom more likely to thrive under public or private ownership?
- How can we ensure consumers are protected both in terms of price and quality of services?
- Will Jersey Telecom staff lose their jobs or have their pay reduced?
- How can we ensure we will have the excellent communications infrastructure which is so vital to our finance industry?

In the preparation of this Report and Proposition the Treasury and Resources Minister has consulted on these and other issues. The Minister has also sought extensive advice from experts on the sale of telecommunications companies, lawyers, and one of the top international consultancies on the telecommunications industry. Reports have also been produced by various directly interested parties such as the Minister for Economic Development and Jersey Telecom. It is unlikely that there has ever been such extensive research and analysis by a small jurisdiction in advance of a decision to proceed with the sale of a telecoms company.

The outcome of this extensive process has been to identify that the sale of Jersey Telecom should only proceed if four principles are met, based on protecting the interests of four key stakeholders: consumers, Jersey Telecom, the employees of Jersey Telecom, and the people of Jersey as the owners of the company. These principles, and a summary of the arrangements already in place, plus any additional actions proposed, for the benefit of stakeholders are:

- 1. For the continued success of the Jersey economy and for the benefit of all consumers a sale must provide for:
 - the maintenance and enhancement of the competitive environment
 - the maintenance of essential telecoms infrastructure to the benefit of both today's and tomorrow's Islanders
 - the continued provision of quality telecommunications services to Islanders

The States has enacted a modern robust regulatory framework which gives the JCRA sufficient powers to

promote sustainable competition and ensure the provision of affordable and reliable telecommunications services once the States ownership of Jersey Telecom is relinquished. Stringent licence obligations and the regulatory framework also guarantee the maintenance of high quality telecommunication infrastructure and the world class services required for continued development of Jersey as a leading financial centre. Moreover, if part of a larger entity, Jersey Telecom will be able to benefit from economies of scale to expand its product range and improve operating efficiency giving rise to a wider range of services and lower prices for consumers.

2. For the company, Jersey Telecom, a sale must achieve the best possible basis for its long term growth and development

Jersey Telecom is a well-run, efficient and attractive company with a strong financial track record. However it now faces competitive challenges from global telecommunications companies that could be better addressed if it was part of a larger entity. In addition, if Jersey Telecom were to be retained under public ownership, it will be constrained by the Treasury's ability to take significant risks with taxpayers' assets. A privately owned entity with better access to risk capital and economies of scale is more likely to succeed in the competitive environment, and expand its activities, than a small, publicly owned utility.

3. For Jersey Telecom employees a sale must ensure that their employment rights are safeguarded

As a result of existing contractual and collective arrangements (which reflect well on the good relations which the Company's employees have had with their management for many years), existing employment legislation and the additional measures the Minister and Company are prepared to enter into, should the proposed sale proceed, the employment rights of existing Jersey Telecom employees will be protected to an overall level at least as good as that which would exist were UK style TUPE adopted in Jersey.

The greatest risk to the employment prospects of Jersey Telecom staff, however, would be the failure of this small publicly owned utility to compete effectively with major international telecoms companies.

4. For all taxpayers and the people of Jersey a sale must enable the optimum price to be achieved for reinvestment on their behalf

Jersey Telecom is currently a valuable company, which could command a very attractive price in the present market climate. Expert professional advice is that the sale of a full stake through an inclusive sale process is the best option to maximise the sale proceeds for the benefit of the people of Jersey. The sale of a full stake would incentivise the prospective buyer to contribute towards the success of Jersey's economy and the long term development of Jersey Telecom, allowing for the realisation of the potential of both the Jersey telecommunications market and the company. The States has committed to the principle of safeguarding employee rights so retaining partial ownership is not necessary for employee protection purposes. The sale of a full stake is likely to generate the greatest buyer interest and realise the best price for the asset. In contrast a partial sale would realise a disproportionately smaller amount, be a far more complex transaction, would not meet the fundamental requirement of diversifying the States investments and building up the Strategic Reserve, and is less likely to attract the type of buyer willing to invest in developing Jersey Telecom.

In summary the extensive research and analysis has confirmed that there are no barriers to the sale of Jersey Telecom and that the sale would: contribute to the provision and development of world class telecommunications services to the Island, enable the company to grow and expand with a new owner that values its staff, and provide significant proceeds to be invested for the future benefit of the people of Jersey. Accordingly the Minister is seeking the approval of the States in principle to the sale of Jersey Telecom and the authority to enter into a sale process. The outcome of this sale process, including the buyer, the sale proceeds, and the buyer's investment and employee commitments, will be brought back to the States for approval before any sale is completed.

2. Background to States Ownership of Jersey Telecom

Until 1 January 2003, the States was the regulator, operator and owner of the only major telecommunications provider in Jersey.

The Telecommunications (Jersey) Law 2002 split the roles of the operator, owner and regulator whereby:

- The operator became the incorporated organisation JT Group Limited, governed by an independent Board of Directors
- The owner became the Finance and Economics Committee, and subsequently the Minister for Treasury and Resources, acting in the interests of the States as an investor in Jersey Telecom, and
- The regulatory role (i.e. the responsibility for protecting the public interest, particularly the need to maintain a robust telecommunications infrastructure and promote consumers' interests) fell to the Jersey Competition Regulatory Authority (JCRA) and the Minister for Economic Development

The Telecommunications (Jersey) Law 2002 also ended Jersey Telecom's monopoly in the local market by empowering the JCRA to issue licences to new operators.

In the past, the States was involved in the ownership of the operator because telecommunications had been seen as a natural monopoly best entrusted to a public sector organisation. This ensured that infrastructure investment took place to provide an Island-wide network and the provision of universal service that might not have been provided for at that time had the company been under private ownership.

Following the transformation of the industry model and the separation of operation, ownership and regulation, the States now owns Jersey Telecom purely as an investment. An independent Board of Directors is responsible for operating Jersey Telecom and the JCRA is responsible for regulating the industry. The current regulatory framework and the JCRA's responsibilities are discussed in detail in Section 4.

The States in recognition of the introduction of regulation and competition in the telecommunications market committed both in the Strategic Plan 2006 to 2011 and the States 2007 Business Plan to review the ownership of Jersey Telecom as well as all its other utilities.

The Council of Ministers considered a paper on the ownership of utilities, prepared by the Treasury and Resources Department, at its meeting on 15 June 2006. The Council was of the view that professional advice should be sought with respect to the possible sale of Jersey Telecom, but that the regulatory regimes for the other utilities were not sufficiently robust to warrant consideration of their disposal.#

The further investigation of the regulatory regimes of the utilities was considered by the States during the debate on the Strategic Plan 2006 to 2011 and responsibility for undertaking a review to provide criteria for the protection and efficient provision of services from these utilities was allocated to the Economic Development department.

The States, with the adoption of Commitment Six of the States Strategic Plan 2006 to 2011, in June 2006, recognised the importance of the Strategic Reserve as a prudent and necessary investment to safeguard the Island's future and agreed that if possible additional contributions should be made to the Strategic Reserve. Specifically, the States agreed it would consider the possibility of doing this through the sale of States-owned utility companies.

Recognising that the utility companies are strategic assets, the States agreed in Commitment Six that proceeds from the sale of any utilities would be added into the Strategic Reserve and would not be directly used as a source to fund current government expenditures.

Consequently, the 2007 Business Plan required the Minister for Treasury and Resources to review the policy for the ownership of utilities and bring proposals to the States for approval in 2007.

Following the States agreement of the Strategic Plan the Minister undertook to issue a consultation paper to gauge views on the possible sale of Jersey Telecom, and acknowledged, as did the Council of Ministers, that further investigation of the regulatory regimes for the other utilities should be undertaken before considering further the merits of changing the States ownership interest in these companies.

In the consultation paper issued, 13 July 2006, the Minister for Treasury and Resources set out his intention to bring forward proposals for the sale of Jersey Telecom and sought the views of all interested parties.

Summary

The introduction of the Telecommunications (Jersey) Law 2002 and subsequent transformation of the telecom industry model characterised by the separation of ownership and operation and the development of an independent regulatory framework means that the States is no longer required to own Jersey Telecom to ensure consumer protection and investment in essential infrastructure on the Island. As a result, the States owns Jersey Telecom purely as a strategic financial investment.

Recognising the financial nature of the investment in its strategic assets the States agreed, through the adoption of Commitment Six of the States Strategic Plan 2006 to 2011, to consider the disposal of Statesowned utilities such as Jersey Telecom to fund additional contributions to the Strategic Reserve.

3. Preparation of the Proposition

3.1 The Consultation Process

Jersey Telecom is more than just a significant investment. It is an important Island institution, which provides vital telecommunications to most Islanders. Its advanced products and services support Jersey's businesses, especially the finance industry. It also employs over 430 staff, the vast majority based in Jersey. In addition, through Wave Telecom Limited in Guernsey, Jersey Telecom is the leading alternative to the incumbent operator in Guernsey.

For these reasons, a consultation process was initiated prior to the lodging of this proposition.

A transparent and rigorous process was put in place to enable all aspects of the proposed sale of Jersey Telecom to be considered, and a public consultation was part of this open debate, enabling the people of Jersey, and particularly the stakeholders in Jersey Telecom, to make their views heard. This consultation paper is reproduced in Annex A1.1.

The consultation period ran from 13 July 2006 to 8 September 2006. A total of 35 written responses were received by the Treasury and Resources Department during this time.

The majority of these were from directly interested parties such as Jersey Telecom employees, the Board of Jersey Telecom, the JCRA and Amicus, bodies whose views on the proposed sale have already been published. Beyond the directly interested parties, responses were received from a small number of professional and other representative bodies, private businesses and individuals.

All views raised during the consultation period (both those raising concerns and those endorsing the process) were carefully assessed and a paper with a summary of these responses was published in November 2006. The paper is included in Annex A1.2. These views are also discussed and addressed in this report.

3.2 Professional Advice

Following publication of the consultation paper and in accordance with the States Strategic Plan 2006 to 2011, the Minister undertook the task of exploring strategic options for the sale of Jersey Telecom with the assistance of expert professional advisors.

A competitive tender process for the selection of advisors was undertaken, and following rigorous evaluation a consortium of advisors led by Citigroup was appointed to advise the Minister on the feasibility of the various strategic options for Jersey Telecom.

It should be emphasised that the advisors were engaged not to commence a sale of the Company but to conduct a thorough review of the feasibility and options for a sale including the option to retain the asset. They were also asked to highlight any material issues that would prevent or delay a sale, their terms of engagement reiterating that it is the States Members as a body, and not simply the Minister for Treasury and Resources, who have the authority to allow a sale to proceed.

The advisors were engaged in the evaluation of strategic options for the sale of Jersey Telecom as a completely independent project, the remuneration for which is not dependent on the commencement of a sale process but relates solely to the objective analysis conducted in the phase leading up to the lodging of this proposition.

This team of professional advisors conducted a detailed review of Jersey Telecom to assess its market positioning within the telecoms market and the feasibility of the various options under consideration. This included a review of relevant public and private information provided by Jersey Telecom as well as sessions with senior management at Jersey Telecom. In addition, the advisors held working group sessions, involving Jersey Telecom, to understand key employee-related issues and discuss appropriate ways to address these.

Furthermore, full consideration was given to a number of relevant reports produced by other parties, as detailed in

Section 3.3 and referenced throughout this report.

This report and proposition is thus based on the recommendation of professional advisors, after the review and assessment of issues relating to Jersey Telecom, the market and all stakeholders.

To summarise the advice received:

- There are no significant issues that would prevent or delay a sale of Jersey Telecom
- This report and proposition puts forward the best strategy in relation to the States investment in Jersey Telecom

3.3 Reports by Relevant Parties

Several directly interested parties to a sale of Jersey Telecom have provided their views in reports provided to the Treasury.

Reports in relation to the structural separation of Jersey Telecom were received from the JCRA, Jersey Telecom and the States Economic Advisor. In addition, the Minister was advised by international telecom consultants Analysys, in relation to the structural separation of Jersey Telecom. These reports have all been provided as Annexes 2 and 3 to this document.

Substantial time and effort have been devoted to analysing and understanding the various aspects relating to the proposed sale of Jersey Telecom. These findings and opinions have received due consideration in this report.

In the preparation of this report and proposition, responses to a consultative process, the advice of professionals and the opinions of various directly interested parties were all taken into account. It is unlikely there has ever been this level of detailed analysis undertaken in a small jurisdiction prior to a decision to proceed with the sale of a telecoms company.

3.4 Sale Principles

The consultation paper highlighted the key principles on which a sale would be considered. Following consideration of responses to the consultation document, extensive research and the receipt of expert advice, these principles have been more closely defined as follows:

- A sale must provide for the continued success of the Jersey economy, and in particular contribute to:
 - The maintenance of the competitive environment under the current regulatory framework;
 - The maintenance of essential telecoms infrastructure to the benefit of both today's and tomorrow's Islanders
 - The continued provision of quality telecommunications services to Islanders
- It must provide for the achievement of the best possible basis for the long term growth and development of Jersey Telecom
- It must ensure that the rights of Jersey Telecom's employees are safeguarded
- It must enable the optimum valuation to be achieved for reinvestment on behalf of taxpayers into the Strategic Reserve.

Each of these principles is examined in turn through Sections 4 to 7 of this report and the supporting annexes. The relevant sections set out the implications for a sale and demonstrate how the proposal has been constructed to address these principles and any concerns raised in connection with them.

Summary

In the preparation of this report and proposition, responses to a consultation process, the advice of professionals and the opinions of various directly interested parties were all taken into account. It is unlikely there has ever been this level of detailed analysis undertaken in a small jurisdiction prior to a decision to proceed with the sale of a telecoms company. A set of clearly defined sale principles governing any sale has been set out to provide for the continued success of the Jersey economy, for the long term development of Jersey Telecom, to safeguard the rights of employees and to enable the optimal valuation to be achieved for reinvestment on behalf of taxpayers. The proposal put forward addresses these principles.

4. The Regulatory Framework, Infrastructure and Consumer Protection

4.1 Overview of the Regulatory Framework

Through the Competition Regulatory Authority (Jersey) Law 2001 and the Telecommunications (Jersey) Law 2002 a robust regulatory framework in Jersey was set up to protect the interests of consumers whilst allowing operators to invest with confidence in the continued development of Jersey's telecommunications market.

Article 14 of the Telecommunications (Jersey) Law of 2002 empowers the JCRA to license any operator with respect to telecommunications that concern Jersey. Under the terms of this Law, the JCRA has a primary responsibility to perform its functions in "such manner as [it] considers is best calculated to ensure that (so far as in [its] view is reasonably practicable) such telecommunications services are provided, both within Jersey and between Jersey and the rest of the world, as satisfy all current and prospective demands for them, wherever arising".

In so far as it is consistent with the above primary duty, the JCRA must:

- Protect and further the short-term and long-term interests of users, wherever appropriate, through the promotion of competition
- Promote efficiency, economy and effectiveness in commercial activities connected with telecommunications
- Further the economic interests of Jersey
- Impose a minimum set of restrictions on those engaged in commercial activities connected with telecommunications
- Ensure that those engaged in telecommunications activities have sufficient financial and other resources to conduct those activities, and
- Have regard to the special needs of the disabled or those who have limited financial resources or particular needs

The JCRA has been granted extensive powers to enable it to competently and fully address its responsibilities.

For instance, the JCRA has the powers to regulate the licence terms of operators that provide telecommunications services on the Island. Through this measure, the JCRA is able to control the abuse of any dominant position in the market through the application of a more stringent set of licence conditions than those which apply to smaller operators or new entrants. The JCRA can also impose obligations on the dominant operator to maintain an Island-wide infrastructure and provide Island-wide services.

As another example, the JCRA has the authority to monitor the behaviour of the telecom operators through the enforcement of reporting requirements, including accounting reporting along separate business lines to increase transparency.

Further, the JCRA has the authority to intervene at any time and to impose remedies on all licensed telecom operators to address situations with which it is not satisfied.

The Minister for Economic Development also has an important role within the regulatory framework in the maintenance of infrastructure and protection of consumers. Where he considers that it is desirable in the interest of the public to do so, he is authorized under the terms of the Law to give written directions to the JCRA in respect of principles, procedures or policies to be followed in relation to the implementation of any social or environmental policies regarding telecommunication. The Minister may issue guidance to the JCRA in relation to any other matter relating to the performance of its duties.

Having received a written direction from the Minister for Economic Development, the JCRA is obliged to ensure that the directions set out therein are observed and must consider any guidance given to it.

In short, the JCRA has considerable powers to ensure consumer protection and maintenance of essential infrastructure. The Minister for Economic Development has the ability to extend the responsibilities and the authority of the JCRA as appropriate. These together provide for a robust regulatory framework where the JCRA is able to implement wide-ranging actions where it considers appropriate to promote competition in the market place, ensure maintenance of infrastructure and protect consumers. The framework also ensures sufficient flexibility in the role of the JCRA as the market evolves and regulatory practices evolve accordingly.

4.2 Competition in Jersey's Telecom Market

The consultation paper, Annex A1.1, stated that given the development of a competitive marketplace and the powers currently available to the JCRA, there were no barriers, in relation to the market structure, that should prevent the sale of Jersey Telecom.

Many of the responses to the consultation paper recognised the high level of competition in the Jersey mobile market with each of the three licensed operators owning its own network. In its advice to the Minister for Economic Development, the JCRA notes that competition in the mobile sector is "developing on a sustainable basis under current regulatory rules".

In the fixed line market, Jersey Telecom faces competition from Newtel Solutions and Cable & Wireless Jersey while also facing threats from technological developments.

Jersey Telecom offers access to its network through the products and services contained in its Reference Interconnect Offer ("RIO"), which was published to meet licence obligations established by the JCRA, and which the Company will be required to follow even under new ownership.

The terms of the RIO ensure that the networks of other operators are able to connect to the network of Jersey Telecom, thereby ensuring a level playing field for any new entrants in the fixed line market. In addition, Jersey Telecom offers a full suite of wholesale broadband products whereby other licensed operators can utilise its fixed network to compete in the retail broadband market.

All of the tariffs offered by Jersey Telecom in these categories are regulated by the JCRA and proposed changes from the Company are subject to cost-justification submissions and 21-day notification periods before they can become effective.

The product offers referred to above ensure that an appropriate level of competition can thrive and the JCRA has the authority to involve itself where and when it believes necessary should problems be encountered.

An indication of the positive effects of competition can be seen in Jersey's fast growing broadband market where competition has served to drive the Island's broadband penetration of households to approaching 60%. Testimony to this is the success of Newtel in gaining market share through the take up of new broadband customers.

There were some comments, arising from the discussion paper, that retail tariffs for telecommunication services in Jersey are higher than those in UK or Europe. The reality of the situation is that all operators in Jersey are under constant pressure to make similar offers to the market to those available in the UK, despite the fact that operating a quality network on a small island like Jersey is subject to poorer economics.

It is interesting to note that the price cap put in place by the JCRA, covering the period 1 July 2004 – 30 June 2007, required that Jersey Telecom's prices for its core fixed line product fall, in real terms, by a factor of '2% below the rate of inflation' per annum. This requirement has been exceeded by the Company indicating that competitive forces (both on-Island and off-Island), rather than regulatory intervention, are playing a central role in the pricing decisions being adopted by the Company.

Moreover, there remain measures that can be effected such as different forms of access to the network which have proved successful in promoting competition in many European countries. Newtel has already expressed plans to become such an access-based competitor.

Sustainable competition is desirable and beneficial. The prospect of Jersey Telecom either now or under new ownership obliterating all competition is highly unlikely given:

- The existence of regulatory measures that favour new entrants over the incumbent Jersey Telecom, effectively creating a level playing field
- The scope of the JCRA's authority as set out in the Telecommunications (Jersey) Law 2002 and the Competition (Jersey) Law 2005
- The prospect for further JCRA and Ministerial intervention where this is considered appropriate

There have been concerns that an acquisition by an existing market player will reduce competition in the market but it must be noted that the JCRA will have to review and provide the final approval for any potential transaction under the terms of the Competition (Jersey) Law 2005 and the 'Change of Control' condition in Jersey Telecom's operating licence. The JCRA can refuse to approve any transaction that would have an undesirable impact on competition, as an acquisition by an existing player might, and it can apply conditions to any approval it does give to mitigate the situation where it believes the transaction would lessen competition. These powers are referred to later in Section 8 of this report.

Summary

There are many examples of regulatory measures put in place by the JCRA to promote competition, where it is considered appropriate, in Jersey's telecom markets and the effectiveness of these measures has been demonstrated. The scope of the JCRA's authority is sufficiently robust to allow it to continue implementing wide-ranging actions to promote competition as regulatory practices evolve.

4.3 Maintenance of Essential Telecoms Infrastructure

The consultation paper stated that the decision to sell Jersey Telecom would not adversely impact on the continued provision of essential telecommunications on the Island.

There were responses to the consultation in agreement and responses that felt independent owners of Jersey Telecom would not have the same level of interest in Jersey and would therefore be less inclined to ensure the maintenance of essential infrastructure.

Telecommunications is a network-based service and the maintenance and continued investment in network infrastructure is fundamental to ensuring the continued provision of products and services. The financial services industry in Jersey will continue to demand increasingly advanced products and services. Hence there is a commercial imperative for Jersey Telecom, irrespective of who its owner may be, to ensure that its fixed line network remains modern and resilient such that it can carry all necessary services, for example high-speed broadband access, to residential, business and wholesale customers across the Island. The continued investment and maintenance of the local fixed line infrastructure is essential if new revenue streams are to be secured and should the Company contemplate scaling back any investment, this would jeopardise future returns.

Furthermore, the threat of competing operators gaining market share through the provision of superior products would provide further incentive for any future owner to continue investing in Jersey Telecom's infrastructure.

There have been opinions that a private owner would be less willing to invest in telecoms infrastructure. The example of Manx Telecom is particularly relevant in this regard. Originally owned by BT, and now under wholly private ownership, Manx Telecom has developed a reputation for being at the leading edge of telecommunications development. The company has invested more than £50 million over the last five years in the Isle of Man's telecommunications infrastructure and is committed to a further £30 million investment over the next three years.

Manx Telecom was one of the first companies in the world to offer broadband ADSL services to its customers and, in December 2001, became the first telecommunications operator in Europe to launch a live 3G network. In November 2005, the company became the first in Europe to offer its customers an HSDPA (3.5G) service.

It should be noted that whilst the task of maintaining essential infrastructure remains with the telecom operators, the obligation to maintain essential infrastructure is one that is legally imposed through the existing Telecommunications Law and enforced by the JCRA. Hence, the risk that an independent owner would not invest in infrastructure is low.

Jersey Telecom's existing licence (issued by the JCRA) includes obligations to, inter alia:

- "Take all reasonable steps to ensure the integrity of the Network..." (licence condition 9.1)
- "Develop and operate the Licensed Telecommunications System so as progressively to achieve standards in line with international best practice and in particular, the Licensee shall achieve and comply with relevant standards established by ETSI, the ITU and such other international benchmarks as the JCRA may direct from time to time" (licence condition 17.1)
- Take "steps that the Authority considers necessary or expedient to ensure...the continuity and continuation of the provision of Telecommunications Services or any constituent parts thereof" (licence condition 23.2)

There are, therefore, a number of conditions already contained in Jersey Telecom's licence that could be relied upon in the unlikely event that the incumbent operator was not undertaking the required level of investment.

Further, through its authority to regulate the license terms of operators that provide telecommunications services on the Island, the JCRA can impose obligations on the dominant operator to maintain an Island-wide infrastructure and provide Island-wide services (i.e. universal services). It should be noted that the network requirements to facilitate the provision of universal services can largely be met on the existing network. In addition, the JCRA also has the authority to require all telecom operators to contribute towards funding the provision of such services.

The JCRA is able, within its current scope of authority, to further ensure the maintenance of essential infrastructure through strengthening existing provisions in the licenses to ensure the integrity of the network. It is common in other jurisdictions for the regulator to build in network roll-out obligations into license terms, or specify technical quality parameters. These are all measures available to the JCRA within its current scope of authority, to be exercised as deemed appropriate.

If any concerns regarding the level of investment were not being addressed through commercial necessity or existing licence conditions, then the JCRA has recourse to the Telecommunications (Jersey) Law 2002. If it were of the view that current and prospective demands were not being met through the prevailing investment program of the incumbent operator, it would be obliged to take action and could, with justification, require any operator to take the action that it deemed necessary.

Extract from the Law

"19 Direction to comply with licence conditions

- (1) Where, in the opinion of the Authority, a licensee is in contravention of a condition contained in a licence, the Authority shall give a direction to the licensee to take steps, or specified steps, to ensure compliance with that condition. [Continues...]
- (5) The obligation to comply with a direction is a duty owed to any person who may be affected by the failure to comply with the direction.

- (6) Where a duty is owed under paragraph (5) to any person
 - (a) any breach of the duty causing loss or damage to that person shall be actionable by that person; and
 - (b) any act that, by inducing a breach of that duty or interfering with its performance, causes loss or damage to that person and that is done wholly or partly in order to cause the loss or damage to that person shall be actionable by that person. [Continues...]
- (8) In addition to the right of any person to bring civil proceedings as referred to in paragraph (6), the Authority may bring civil proceedings, for an injunction or other appropriate relief, to compel compliance with the direction."

The JCRA has confirmed that the obligations of the licence issued to Jersey Telecom remains the same regardless of whether Jersey Telecom is in public or private ownership and the JCRA retains the ability to remove the licence in case of significant breach of its terms.

Measures that bind the prospective buyer to a certain level of investment in infrastructure, through commitments provided by the prospective buyer in the sale process, will also be examined and given due consideration as appropriate, depending on the nature of the buyer and the perceived need to incentivise the buyer.

Summary

The current regulatory framework and licence obligations are stringent enough to guarantee that the maintenance of high quality telecommunication services required for continued development of Jersey as a leading financial centre is not endangered. Also market competition is likely to provide further incentives for Jersey Telecom, regardless of ownership, to deploy a network that ensures the provision of innovative and superior products to protect its current market position.

4.4 Consumer Protection

The consultation paper stated that the framework for consumer protection is sufficiently robust to allow the States to relinquish control of Jersey Telecom, while preserving accessibility, affordability, high quality and reliability.

Responses to the consultation were broadly of the opinion that the existing framework was sufficient to ensure consumer protection although there were concerns about the effectiveness of the JCRA in enforcing decisions cost-effectively on an independently-owned Jersey Telecom.

The entry of new operators in both fixed line and mobile telecommunications provides for competition which is generally regarded as an effective mechanism in consumer protection, as the threat of losing customers over price and service quality ensures that operators consistently strive to deliver the best products and services to the consumer market. Hence, the competition presented by these operators should itself pose sufficient threat for Jersey Telecom to ensure accessibility, affordability, high quality and reliability to defend its market share.

There are, of course, many forms of competition and equally many mechanisms for regulating the market to ensure consumer protection, such as tariff regulation and increased license obligations, some or all of which could be explored and employed by the JCRA should it determine there is a need to do so.

As previously mentioned, the JCRA has considerable powers and scope within its current authority to implement such wide-ranging actions as it considers appropriate. The regulatory framework also ensures sufficient flexibility in the role of the JCRA as the market evolves and regulatory practices evolve accordingly.

With regards to the ownership of Jersey Telecom, the JCRA itself has communicated that it is neutral as to whether Jersey Telecom is States or privately owned.

However, ownership of Jersey Telecom by certain telecom operators, or possibly certain investors, is likely to be

beneficial for consumers, as it is likely to provide cheaper and quicker access to technologies, lower costs and improved operating efficiencies through economies of scale and transfer of knowledge.

Summary

The regulatory framework, JCRA's scope of authority and the competitive environment are sufficient to protect consumer interest and ensure provision of affordable and reliable services once the States control of Jersey Telecom is relinquished. Moreover, as part of a larger entity, Jersey Telecom will be able to benefit from economies of scale to expand its product range and improve operating efficiency translating into a wider range of services and lower prices for consumers.

4.5 Structural Separation

There is broad agreement that infrastructure or access based competition is not financially viable in Jersey given the economics of rolling out multiple fixed line networks on a small Island. The alternative is hence to operate a single network and provide wholesale access to the network to competing retail operators. Jersey Telecom is such a network operator and already provides wholesale access to other retail operators.

However, this gives rise to a conflict of interest: Jersey Telecom acts as both a supplier and a competitor in the retail of fixed line services to consumers. It is argued that structural separation of the wholesale and retail businesses of Jersey Telecom could align the incentives of the wholesale business to deal with any retail operator on exactly the same terms.

Careful consideration by various parties was given to whether structural separation of Jersey Telecom would, in the event of a sale, be the optimal structure for promoting competition and thereby economic growth.

The Minister of Treasury and Resources, reviewed the reports from the various parties on the subject of structural separation. A summary of the various views on structural separation is provided in Annex A2.2 to this report and proposition. The reports of the various parties are provided in Annexes A2.4, A2.5, A2.6 and A3.1.

In addition, the Minister sought and took professional advice from Analysys in consideration of the structural separation of Jersey Telecom from the perspective of the market, the incumbent and the regulator.

Setting aside the prospect of a sale, it is widely acknowledged by the JCRA, Jersey Telecom and Analysys, that structural separation would involve the radical restructuring of an industry that is one of the cornerstones of Jersey's success as a financial centre. It is noted that structural separation would result in a significant change in the dynamics within the telecoms industry in a way that the change in ownership of Jersey Telecom, given the existing industry model separating ownership, operation and regulation, would not.

A major disadvantage when evaluating some of the radical structural options is the lack of empirical evidence of its effect. This was again a concern cited by all parties. There are few known examples where the network and retail elements of a telecommunications operator have been completely separated and practically none where the wholesale and retail businesses have, post separation, come under separate ownership. Hence, it follows that there are few precedents with regards the competitive outcome of such a decision nor any model for regulation under such a regime. Waiting for precedents to emerge, and then for these precedents to chart a demonstrated and credible course would take a matter of several years.

Hence, in the absence of relevant empirical evidence the benefits of structural separation outweigh the cost, Jersey Telecom should not be subject to the uncharted territory of structural and ownership separation even if it involved erring on the side of caution at this stage.

If at a point in future, structural separation was to be considered the right path forward, it could be undertaken then. Either way, structural separation is a risky alternative at this stage until the benefits can be proven and the costs quantified.

Structural separation for regulatory reasons should only be pursued as a last resort. As mentioned in Sections 4.1 to 4.5 above, the regulatory framework is sufficiently robust to provide the JCRA with the scope of authority to

promote competition, and ensure maintenance of infrastructure and consumer protection through various measures (such as the reporting requirements, and measures to create a level playing field) without the requirement for structural separation to achieve the same effect.

Moreover, in the event of any separation, it is important that the boundary between the wholesale and retail business is defined correctly to minimise inefficiencies between the separated entities, with sufficient thought given to the fact that the logical boundary could shift over time with technological evolution.

As competition in the mobile segment is adequate and the three mobile operators in Jersey each own their infrastructure, there is no benefit from separating the network and retail elements of Jersey Telecom's mobile operation. Thus, any form of fixed line separation also raises the question of where the mobile business should reside within the restructured Jersey Telecom (i.e. with the wholesale or the retail business). A predominantly wholesale fixed line and mobile business would not compete efficiently in the retail market nor would a predominantly fixed line and mobile retail business operate a mobile network efficiently. Given the high level of co-location between the fixed line and mobile network infrastructure, aligning the mobile operations with the retail fixed line business would require significant duplication of network infrastructure and functions. Aligning the mobile operations with the wholesale fixed line business on the other hand, would required duplication of distribution, marketing and other customer functions and impact the ability to offer fixed-and-mobile converged services, products, tariffs and billing.

Representing the States shareholding in Jersey Telecom, based on advice taken from Citigroup in relation to the impact of structural separation on any sale process, the Minister is of the view that structural separation would significantly complicate any sale of Jersey Telecom.

The process is likely to be delayed by complexities in implementing structural separation. In the case of BT, operational separation was contemplated for five years before the creation of a separate wholesale business was undertaken last year. In addition, BT continues to implement undertakings provided to the regulator, the Office of Communications ("OfCom"), in relation to operational separation.

The reduced asset size would put the assets below the radar of certain strategic and financial buyers, who already view Jersey Telecom in its current form as a small asset. In addition, finding buyers for the separate divisions would be more complicated and expensive that searching for a single buyer of the entire entity.

From the perspective of any owner, the risk of investing in either of the separated entities relative to Jersey Telecom in its current form would increase significantly. The buyer would need to be comfortable buying into an asset with virtually no operating history. The operational risk involved in entering an unfamiliar vertically separated telecoms market structure for which there are few precedents is high. Moreover, the rationale for separation, if not carefully communicated, would undermine confidence in the regulatory regime.

With regards to maximising proceeds from a sale, the diseconomies of scale, increased cost of doing business (e.g. transactional costs) and requirement for duplication of network and operating functions will lead to lower profitability and value destruction.

The discussion on structural separation has been considered in depth by many parties. There has been no justification that structural separation is the best way forward and no cause to delay the proposition for the sale of Jersey Telecom.

Summary

A review of the prospect of structural separation of Jersey Telecom was considered and carefully evaluated. There are few known precedents where the network and retail elements of a telecommunications operator have been completely separated and practically none where the wholesale and retail businesses have, post separation, come under separate ownership. There is a lack of empirical evidence that the benefits of structural separation would outweigh the costs. Rather, structural separation could result in the perverse outcome of lowering sale proceeds and increasing consumer prices without any apparent economic benefits.

5. Key Considerations for Jersey Telecom

5.1 Review of Jersey Telecom

Jersey Telecom is the incumbent telecoms operator in Jersey with deep understanding of the local market. Jersey, with a relatively affluent population and financial services as the primary industry, represents a sophisticated customer base and Jersey Telecom has performed well in meeting and exceeding the demands of these customers.

Jersey Telecom has been responsible for encouraging widespread adoption of telephony services with virtually all households in Jersey having a fixed telephony line. Owing to a variety to factors, including the use of multiple wireless devices, the number of mobile users actually exceeds the current population of Jersey. The resulting penetration in fixed line and mobile services in Jersey of 100% and in excess of 110% respectively compares favourably against those in other similar jurisdictions. In addition, Jersey Telecom has been a key driver to the take-up of broadband on the Island. Broadband penetration is approaching 60% of households today and continues to increase.

Jersey Telecom has successfully brought modern telecom technologies to the Island and through its technical excellence and expertise in infrastructure, developed a state-of-the-art telecoms network throughout Jersey and the other Channel Islands.

Much of this is the result of Jersey Telecom's dedicated, loyal and skilled workforce who have contributed to high productivity per employee. Full credit should also be given to the Board of Directors and the management who have taken the Company to where it is today.

There are several recent technological trends in telecoms that will have a significant impact on Jersey Telecom. Fixed-to-mobile substitution, being the migration of calls from fixed line to mobile networks, will continue. The migration of fixed line calls over the telephony network to calls over internet protocol (VoIP) will also have an impact on Jersey Telecom. These are challenges faced by all fixed line operators worldwide.

Through Wave Telecom Limited ("Wave Telecom") in Guernsey, Jersey Telecom has gained experience operating outside its home market and experience operating as a alternative provider to the incumbent. Wave Telecom Limited gained its fixed telecoms license in 2002 and established an efficient operating structure where substantial network elements and central functions leveraged of the existing business in Jersey. Since winning a mobile licence in 2004, Wave Telecom Limited, through targeted and innovative marketing, has increased its market share of mobile subscribers to in excess of 20%, with a notable concentration of high usage customers. It has established itself as the leading competitor to Cable & Wireless Guernsey and is expanding in the area of fixed line business services. There remains potential for Wave Telecom to continue to grow in Guernsey.

Jersey Telecom has demonstrated innovation and considerable success in branching out into initiatives such as providing mobile services on cruise ships and bulk text messaging services to mobile operations around the world.

It has demonstrated that it is a well run, efficient and attractive company with a strong financial track record. As a mature company, Jersey Telecom generates healthy cashflows and currently pays an annual dividend of approximately £7m to the Treasury.

5.2 Strategic Challenges faced by Jersey Telecom

However, Jersey Telecom, through no fault of its own, faces several key strategic challenges.

The telecoms market in Jersey has been liberalised and opened to competition. As a result, new operators have entered the market such as Cable & Wireless Jersey competing in both the fixed line and mobile businesses, Newtel, primarily in the resale of broadband, and Airtel in provision of mobile services.

In short, the competitive environment for Jersey Telecom is changing. Competition is desirable and beneficial from a consumer point of view. However, for the development of sustainable competition in Jersey, competitors must necessarily be able to gain meaningful market shares, and it follows logically that this must result in a loss of

market share for the incumbent, Jersey Telecom.

Unlike in certain other countries, where market liberalisation was introduced at a relatively early stage and fixed line and mobile penetration was low and growing, in Jersey, the telecoms industry is mature with high levels of fixed line and mobile penetration. Hence with little compensating market growth, the onset of competition could well result in the prospect of declining revenues and profits for Jersey Telecom in its core business.

Furthermore, operators such as Cable & Wireless Jersey and Airtel are backed by the Cable & Wireless Group and Bharti Televentures respectively, which provide them with operational know-how and experience from operating in other markets. As part of larger entities, Cable & Wireless Jersey and Airtel both naturally have advantages over Jersey Telecom such as stronger purchasing power, better access to financial capital and other economies of scale.

Jersey Telecom is constrained by its small size. The UK and Europe witnessed the introduction of new consumer hardware such as the Blackberry and the emergence of services such as mobile video downloads and internet protocol television (IPTV) before they were available in Jersey. In relation to much larger operators, Jersey Telecom has been relatively slow to provide these services to its customers. This is not through oversight, but because its small size means it is often not viewed as a priority by many suppliers and hence lacks purchasing power and clout in relation to securing access to content, consumer hardware, technology and equipment. As a result, access is either more expensive or delayed in comparison to other markets.

Similarly, Jersey Telecom's strategic options, such as its ability to make large acquisitions or expand into other jurisdictions are also constrained by its size.

Many of these challenges would be addressed if Jersey Telecom became a part of a larger company. For instance, it would then be better equipped to bring the latest technologies to Jersey, benefit from economies of scale and compete more effectively. Alternatively, as part of an investor's portfolio, it could have access to a range of technologies and content that would improve its strategic positioning. These benefits would be transferred directly to consumers, and to the local economy.

It should be reassuring to note that the Chief Minister's Economic Advisor's report analysing the economic implications of the proposed sale of Jersey Telecom, cites empirical evidence that efficiency gains are one of the key improvements post private ownership.

5.3 The Potential of Jersey Telecom

The Treasury, on behalf of the States, is rightly a conservative rather than speculative investor as it has responsibility for the taxpayers assets. Hence, it has been the Treasury's policy not to take unnecessary risks on the investments it holds on behalf of taxpayers. As such, Jersey Telecom's capital structure is deliberately a conservative one.

Amongst other things, likewise, whilst Jersey Telecom has pursued some initiatives such as mobile services on cruise ships and bulk text messaging services, these are still a small part of its overall revenues. There are other similar opportunities, of higher risk and return, that Jersey Telecom could pursue, although they would increase the risk profile of Jersey Telecom.

Under independent ownership, Jersey Telecom would be able to realise its full potential through new initiatives without being constrained by States ownership. Jersey Telecom's enterprising culture, willingness to explore "start up" options, existing roaming and interconnect agreements and the tax advantages of operating in Jersey are clear indications that Jersey Telecom is uniquely positioned to successfully explore these options.

Summary

Jersey Telecom is a well run, efficient and attractive company with a strong financial track record. It faces some strategic challenges that could be addressed if it was part of a larger entity. In addition, if Jersey Telecom were to be retained under public ownership, it will be constrained by the Treasury's reluctance to take significant risks with taxpayers' assets.

6. Employee Related Issues

6.1 TUPE Legislation

The protection of the rights (including rights as to pension) of the employees of Jersey Telecom (which for this purpose includes Wave Telecom in Guernsey) is a primary consideration in relation to any potential sale of Jersey Telecom. Such employees are important stakeholders in any sale process, and their support and confidence are key to both the future operations of the Company and to any sale of the shares in the Company. The interests of the Jersey Telecom employees have therefore been fully addressed in putting forward the various recommendations in this Proposition.

There has been concern expressed by some that the sale of Jersey Telecom should not occur until such time as Transfer of Undertakings (Protection of Employment) regulations 2006 or 'TUPE' style legislation (of the nature in force in the UK) has been adopted in Jersey – the suggestion having been made that this legislation was necessary in order to provide essential protection to the employees of Jersey Telecom. However the Jersey Telecom's employees are currently well protected already benefiting under the existing legal regime in Jersey and their existing contracts of employment to a degree similar to that afforded by UK TUPE, in many respects. Indeed many of the protections Jersey Telecom employees currently enjoy, and will continue to enjoy, are considerably in excess of those which would be afforded by UK style TUPE law.

Two points support the above conclusion:

- First, TUPE is of no relevance to the proposed transaction. Specifically, UK TUPE, even if adopted in its entirety in Jersey (which is, of course, not a certainty), would not apply to a sale of shares. In consequence, delaying any proposed sale of shares of Jersey Telecom until such time as TUPE style legislation is adopted in Jersey would not benefit employees in any way
- Second, in the event of a subsequent asset or business transfer following any sale (which is a transaction of a nature which would attract the operation of TUPE if in effect in Jersey even although such a transaction may never actually occur), the Jersey Telecom employees are protected to a level that is overall higher than that which would be provided by TUPE under their existing contracts of employment, collective arrangements and Jersey Law as currently in force.

It is clear that TUPE could apply to a sale of assets or a business following any sale of the shares of Jersey Telecom. This Report considers whether delaying any share sale until the adoption of new TUPE legislation could benefit the employees of Jersey Telecom in a manner which is not provided for or which cannot otherwise be provided for through their employment contracts and/or relevant share sale documentation. Although the employees have a high degree of protection currently, it is nevertheless possible to improve through the transaction documentation, (to a greater degree than would otherwise be provided through TUPE, were it applicable in Jersey) certain limited aspects of the protection which they would have post sale. In connection with key terms of TUPE, the position can broadly be summarised as follows:

- Statutory Protection against Dismissal and the Automatic Transfer Principle: a key provision of TUPE is the right of an employee to protection in the event of a business or asset transfer, where his/her employment is transferred by operation of TUPE. An employee who is dismissed for a reason that is connected to the Transfer (that cannot be justified by an employer under TUPE) may bring a claim for wrongful and unfair dismissal in which case the employee is entitled to recover compensation for such dismissal the level of compensation being determined by the relevant UK Employment Tribunal. In Jersey, an employee would be likely to have a claim for wrongful dismissal under common law (it being a fundamental change in the contractual position to change the identity of the employer without consent) and for unfair dismissal under the existing statute for failure to follow a fair procedure leading to redundancy. Pursuant to the Employment (Jersey) Law 2003, the Jersey Employment Tribunal is required to award a fixed payment for unfair dismissal based on length of service the maximum award being 26 weeks salary
- Further, in the event of any secondary asset or business transfer post sale, no transfer of an employee could

- be effected without the consent of the employee, thereby giving the employee an effective right to agree to the terms of any transfer which would not be available under TUPE. Currently, Jersey law will in the event of a transfer of assets or a business (including a purported transfer of employees without consent) give the Jersey Telecom employees a right to a claim for wrongful dismissal, unfair dismissal, and/ or an enhanced redundancy payment. In the case of Jersey Telecom, under their existing contracts of employment, the Company's employees are already entitled to an exceptionally high level of redundancy payments in certain cases amounting to up to 75 weeks salary. Therefore
 - In so far as there may be a transfer of employment post sale, the Jersey Telecom Employees have a greater say in such transfer under their existing contracts of employment than they would have under TUPE style regulations if in force in Jersey, because they would not be obliged to transfer to the new employer (which would be automatic under TUPE) and could choose to accept the enhanced contractual redundancy terms instead
 - The employees would have a greater degree of financial compensation under their existing arrangements than would exist under TUPE

It is therefore preferable (certainly from a Jersey Telecom employee's perspective) to retain the employees' existing contractual and collective rights, rather than to defer the transaction pending the adoption of TUPE style legislation in Jersey. In the context of the proposed transaction, it should be a condition of proceeding with the transaction that the share purchase agreement entered into with any proposed purchaser of Jersey Telecom would include a provision to the effect that the purchaser would not seek to transfer assets from the Company or enter into any outsourcing arrangement for an agreed period post privatisation - thereby ensuring that there is a contractual commitment given to maintain the business in its current form and not give rise to the events which could trigger either transfer of employment or redundancy payments;

- **Duty to Inform and Consult**: TUPE provides employees (or their unions or elected representatives) with rights of consultation in the event of any business transfer. Save for those Jersey Telecom employees who are not unionised, the existing collective agreement for Jersey Telecom employees which the Company has agreed with Amicus provides extensive rights of consultation. It is clear that the existing rights provide protection of a similar nature to TUPE, and there is no benefit to the employees of Jersey Telecom to delay any transaction solely for the purpose of enacting a right which is currently already recognised by Jersey Telecom. To the extent that any particular (non unionised) employees feel prejudiced by not having a statutory right, it is proposed, as part of any transaction, to amend such employee's contract terms with the Company to provide a contractual right of consultation in the event of a transaction to which TUPE would apply, in line with the existing Collective Agreement
- **Purchaser Consultation Obligation**: In addition to a right of consultation with employees, TUPE also extends to a potential purchaser of assets, requiring such purchaser to disclose to employees the intended purchaser's intention for the business being acquired. Such a consultation obligation of a nature commensurate with that afforded by TUPE already effectively exists for Jersey Telecom employees. In consequence, there is no need to delay any transaction for the purpose of enacting a right which already exists for the benefit Jersey Telecom employees
- **Prohibition on changing terms and conditions of employment**: Under TUPE, a purported variation to a contract of employment is void, if the reason for the variation is a transfer itself or a reason connected with a transfer, in each case entailing changes in the workforce. Under Jersey law and the existing contracts of employment of Jersey Telecom employees, no fundamental variation of employment terms is possible without consent (and consultation) a situation which provides a similar level of protection to employees to that which would be afforded by TUPE.
- Potential adverse effect of TUPE for Employees: TUPE not only protects employees' rights, but it can also
 serve to protect employers interests in making it easier to transfer employees from one employer to another
 without triggering potential redundancy dismissal liability. If the employee objects to the transfer under
 TUPE, employment is deemed to terminate without liability, and certainly in the case of an asset or business

transfer under a TUPE regime, recourse could not be had by the employee to enhanced redundancy payments as a result of the transfer itself. It is possible to provide employees with a choice as between redundancy payments and ongoing employment with any prospective purchaser of a business or assets beyond the sale of Jersey Telecom which would not be possible under a TUPE regime. Therefore TUPE, while providing certain important rights in favour of employees, does not provide any greater benefit to the employees of Jersey Telecom than they current have under Jersey law and their existing contracts of employment and collective arrangements

In addition, any purchaser of Jersey Telecom shall be required to commit contractually that, as part of any sale transaction, such purchaser will at all times respect and comply with the terms of employment of the employees of Jersey Telecom and will not (and will not require the Company to: (i) amend the terms of employment of Jersey Telecom employees (other than in a manner which is beneficial to the employees) for an agreed period post sale, and (ii) seek to transfer assets or part of the business of Jersey Telecom or enter into an outsourcing arrangement for an agreed period post sale.

Careful consideration has also been given to the protection of the employees in the Guernsey business. In terms of contractual and statutory protection, these employees are in a very similar position to the Jersey employees and will accordingly be treated in the same way.

As there is no union presence in the Guernsey business, the Guernsey employees will be given the opportunity to join with the non-unionised Jersey employees as regards consultation rights in any asset sale or outsourcing following the sale. The pension rights of the Guernsey employees will be protected in the share sale in so far as they are members of the Company's pension scheme which will transfer with the business.

6.2 Pensions rights

An over-riding principle of any potential sale is also to ensure that the existing pension rights of the employees of Jersey Telecom should be protected. In this regard, such rights are protected by virtue of the fact that in any sale the existing terms of PECRS as applicable to Jersey Telecom and its employees will continue to apply to the Company as a privatised entity.

In dealing with pension rights, irrespective of any possible sale, but in the context of allowing the Company appropriate commercial freedom to operate in a competitive market place it is essential that the Company be afforded the flexibility to deal with new employees in the manner it sees fit, and the PECRS rules (and any relevant regulations pertaining thereto (in particular the regulation requiring 90% participation)) will be amended, in a manner consistent with the arrangements already in place for Jersey Post, to afford the Company such flexibility.

Finally, the transaction documents in any sale, will reflect the over-riding criteria being that any financial shortfall in the existing fund should be funded by the purchaser as part of the sale process.

Summary

As a result of existing contractual and collective arrangements, existing employment legislation and the additional measures the Minister and Company are prepared to enter into, should the proposed sale proceed, the employment rights of existing Jersey Telecom employees will be protected to an overall level at least as good as that which would exist were UK style TUPE adopted in Jersey.

7. States Investment in Jersey Telecom and Strategic Reserves Policy

7.1 Proposition 133/2006 and the Strategic Reserve

This section explores in further detail the principles of the Strategic Reserve and evaluates the rationale of the States continued ownership of Jersey Telecom.

At its meeting on 5 December 2006, the States, with reference to the Economic Growth Plan, the development of a new Fiscal Strategy for the Island and the Strategic Plan, approved proposition 133/2006. This approval of this proposition established the Stabilisation Fund and more closely defined the purpose of the Strategic Reserve, both of which are measures designed to provide a framework for greater economic stability on the Island. A full copy of P.133 is set out in Annex A4.1.

There had been considerable debate in the past over the purpose of the Strategic Reserve. The original intention when the fund was established in 1986 was to provide the Island with a degree of insulation from external shocks to the economy. However, over the years the fund had also been used to finance capital projects when the Island was in recession and for investment in economic development.

This uncertainty was addressed by the States approval of the Strategic Reserve's purpose as follows:

"the Strategic Reserve, established in accordance with the provisions of Article 4 of the Public Finances (Jersey) Law 2005, should be a permanent reserve, where the capital value is only to be used in exceptional circumstances to insulate the Island's economy from severe structural decline such as the sudden collapse of a major Island industry or from major natural disaster".

In other words the Strategic Reserve is an insurance policy to insulate current, and future generations, from the worst effects of severe economic decline. Examples of the ways in which the fund could be used include:

- Preventative measures to protect the economy against threats with implications of a severe structural scale
- Proactive measures to assist change in the structure of the economy where uncontrollable factors force changes of a severe and structural nature
- Responsive measures to assist recovery in the aftermath of an event having severely damaged the economy

The States with the adoption of P.133 also agreed to continue to build up the Strategic Reserve as a proportion of annual expenditure and Gross Domestic Product (GDP) to a minimum level of approximately 20% of GDP and if possible further. In broad terms this would equate to an initial target of approximately £600 million. The current level of the Reserve is approximately £477 million. Clearly the sale of Jersey Telecom would assist the States to meet one of its key aims in respect of the long-term fiscal strategy and as such put in place a framework to safeguard the continued prosperity of all Islanders.

7.2 Suitability of Jersey Telecom as a Strategic Reserve Investment

Following the transformation of the industry model and the separation of ownership and operation and the development of an independent regulatory framework, the States ownership of Jersey Telecom is no longer required to ensure consumer protection and investment in essential infrastructure on the Island. As a result, the States owns Jersey Telecom purely as an financial investment.

States investments that are financial in nature should rightly reside within the Strategic Reserve. However, given the purpose of the Strategic Reserve, the States' shareholding in Jersey Telecom is not a suitable asset to be retained under the Strategic Reserve for the following reasons:

• Jersey Telecom is an "On-Island" investment

- The Reserve will need to be utilised in the event that Jersey's economy suffers or is under threat of a severe structural decline. It is highly probable that under such circumstances, the value of Island-based assets would also be depressed and thus worth considerably less at a time when the States would wish to sell
- It is therefore logical to invest the Strategic Reserve in off-Island assets as the value of these assets are less likely to be correlated to the economic conditions in Jersey
- Jersey Telecom is an illiquid investment
 - There is a possibility that a significant proportion of the fund would need to be realised quickly in the event of a major natural disaster or severe structural economic decline
 - As a private company, Jersey Telecom would take at least four to six months to sell when the States wishes to realise its value, but it should be noted that the States decision to sell could well take even longer
 - In addition, if the States is forced to sell Jersey Telecom at short notice, it will have to do so regardless of whether it is a good time to do so, or whether there are many interested buyers. In these circumstances the States is likely to get a lower price than through a planned sale.
- Jersey Telecom does not offer sufficient asset diversification for the Strategic Reserve
 - Jersey Telecom represents too large a single investment for the fund, effectively meaning that the States risks having too many of its eggs in one basket
 - Having small investments in several assets provides for lower overall risk than having a large investment in a single asset, as its minimises losses resulting from asset-specific underperformance
 - Underlining the importance of diversification, the Treasury has a long standing investment rule
 that no single investment may have a value greater than 5% of the total value of the fund. The
 value of Jersey Telecom, even with the most conservative of estimates, would clearly exceed this
 limit by several times
- The returns on continued investment in Jersey Telecom are likely to be no greater than investment in a less risky diversified portfolio of investments
 - Based on analysis carried out (ignoring that owning Jersey Telecom is a riskier investment than
 a portfolio of diversified assets and assuming Jersey Telecom can be sold for intrinsic value)
 selling Jersey Telecom now and reinvesting in a portfolio of investments similar to those
 currently held by the Strategic Reserve should generate higher returns
 - If Jersey Telecom could be sold for a consideration at the high end of its fundamental value range, the benefit in ten years time of selling now and reinvesting over continued ownership of Jersey Telecom is estimated to be over £70 million.

The regulatory developments detailed in Section 4 and the investment rationale presented in this section are the primary reasons why the proposal to divest of the States shares in Jersey Telecom and reinvest the proceeds in assets more aligned with the objectives of the Strategic Reserve has been brought forward.

Summary

Following the establishment of a robust regulatory framework and the separation of ownership from operation the States owns Jersey Telecom purely as a strategic financial investment. The States strategic

financial investments provide an important insurance policy against the Island suffering serious economic decline.

Jersey Telecom is not a suitable financial investment for this purpose as in the circumstances in which the States would need to realise its investments Jersey Telecom would probably be difficult to sell and have a much lower value.

Accordingly, Jersey Telecom should be sold and the proceeds invested in an off-Island diversified portfolio of investments, which not only will provide superior annual returns but also a greater return in the circumstances in which they will need to be realised.

7.3 Form of Sale

The consultation paper indicated an initial preference for a trade sale, being the sale to another telecommunications operator, over other forms of sale, such as an Initial Public Offer ("IPO") or a sale to investors.

Supported by analysis from Citigroup, who have considerable experience in executing transactions, sale processes and IPOs, it is confirmed that a sale process (but not necessarily a trade sale) rather than an IPO would be the most appropriate route.

The main drawback of the IPO route is the risk exposure it presents in terms of transaction and price certainty. Unlike in a sale process where any discussions are conducted directly with the buyers and indications of interest is clear from the early stages of the process, an IPO is a very different process with many investors investing simultaneously in the final phase.

This makes the IPO route very exposed to equity market conditions – should markets turn for the worse the IPO route may cease to be viable or may not provide the desired valuation that would enable a sale to be executed.

In addition, investor demand for Jersey Telecom would only be determined at the final phase - hence the States as vendor would have relatively little feedback about investor enthusiasm for the investment story of Jersey Telecom, the level of interest and the quality of the eventual investors in Jersey Telecom. In addition, there is no indication of investor value expectations in relating to the price of Jersey Telecom shares until the final phase.

There would be no certainty on who the buyers of Jersey Telecom would be, what they could contribute towards Jersey Telecom, how long they would want to retain their ownership in the Company nor whether they would enable the States to achieve the sale principles.

By contrast, in a sale process, buyers can be shortlisted based on their ability to meet the States sale principles and the selected buyer can be engaged in a negotiation process around the sale principles, enabling constructive discussions in relation to employee issues and infrastructure investment.

Maximising the returns on a sale is a key objective. Because an IPO represents the sale of a large block of shares into the market, it typically requires a discount to the fair value of the company to execute. This is opposed to the case of a sale to a single buyer, who would be expected to pay a premium for control.

In addition, a sale through the IPO route would be subject to some further considerations that result mainly from the nature of equity markets. Equity investors generally prefer if part of the proceeds of the IPO went towards the company (i.e. they were investing directly in the business) rather than only towards exiting shareholders. Equity investors also prefer that the selling shareholder retains a significant shareholding in the company sold as this reinforces investor confidence in the prospects and value potential of the company. Whilst these two aspects are not requirements, they are regarded as attractive features of an IPO against which the States sale of its entire stake in Jersey Telecom would not stack up well. To look at it another way, to achieve a successful IPO would mean the States may not be able to exit its stake fully, hence not achieving its sale objective.

However, if only a partial stake was sold via an IPO, the States, as the largest shareholder in Jersey Telecom would retain a strong influence.

From the perspective of Jersey Telecom as a going concern, an IPO would not be able to address any of the strategic challenges currently faced by Jersey Telecom. In addition to a high level of disclosure required at the time of transaction, an IPO would place onerous regular financial reporting and disclosure requirements on Jersey Telecom in addition to the cost of maintaining a listing.

Post the listing, share price performance is dependent on continued investor interest in the stock which is helped by comprehensive research coverage. As a small company, trading volumes in Jersey Telecom may be low. This would also complicate a further sell down on the States shareholding if it does not exit fully in the initial IPO phase. It should also be borne in mind that the share price could move either up or down, it is by no means a forgone conclusion that share prices only move upwards.

Summary

A sale process is most likely to achieve the stated sale principles. A sale process will allow for the selection of a bidder on the basis of the bidder's ability to support the Jersey economy and to provide for the long term development of Jersey Telecom. In addition, it allows for constructive negotiations to safeguard employee interests and ensure the maintenance of essential infrastructure. Finally, a sale process will generate greater interest from the most desired investors, offer greater certainty of a transaction and better visibility on valuation, all of which will go toward realising an optimal outcome for the people of Jersey.

7.4 An Inclusive Sale Process

The professional advice received is that the sale process should be structured to be as broadly encompassing as possible, providing the opportunity for trade buyers, investors and possibly alternative investor groups to participate in the process, as this will maximise sale proceeds whilst also meeting the other criteria.

This is partly a result of varied responses to the consultation process. Many responses were received in support of a trade sale, some responses were received in support of a sale to an investor and some voices called for a 'local' solution' – the sale of Jersey Telecom to a group of local investors and / or Jersey Telecom employees followed by a flotation of Jersey Telecom on the Channel Islands Stock Exchange.

With regards to trade buyers, there were views that only trade buyers would be able to add value to Jersey Telecom and opposing views that a large trade buyer might be less likely to place sufficient emphasis on its investment in Jersey post any transaction owing to the small size.

With regards to investors, there were views that investors would be less desirable owners as they would be less able to bring economies of scale and access to technologies. However, such views may result from error of perception. It is unfair to work on the assumption that investors would categorically have nothing to contribute beyond reorganising the capital structure of Jersey Telecom. There are funds that would focus on growing Jersey Telecom rather than aggressively leveraging the Company. Investors with experience in growing operations and with a portfolio of investments in the relevant fields, such as mobile content aggregation, internet protocol private data networks and, most importantly, innovative products tailored for the financial services industry, would be equally well positioned to address Jersey Telecom's strategic challenges and help it fulfil its potential.

In addition, the process should not preclude individuals or investors with a credible background in telecommunications or original but sound ideas for Jersey Telecom. If a group representing local investors came forward, they would be considered.

However, the process is not intended to be undiscriminating at any cost to maximise returns on the sale. There is a balance to be achieved, through vetting the buyers to ensure that the bidders are credible and suitable owners of Jersey Telecom. It would also be important to make certain that bidders were serious and prepared to commit appropriate resources to their bids ensuring an expeditious sale process. Most of all, bidders would be expected to demonstrate the ability to ensure the success of the Jersey economy, a strategic vision for Jersey Telecom and readiness to work with the States to achieve the sale principles, including that relating to employee matters.

The criteria for determining buyers considered appropriate owners of Jersey Telecom, at the preliminary phase, and who would be invited to participate in the sale process is set out in Section 8. For instance, criteria that would qualify a trade buyer to participate in the process could include demonstrated expertise in various sectors within the telecommunications industry, and a track record of revenue and profitability for a number of years. Investors would be required to demonstrate an investment profile and track record compatible with the Island's interests, availability of funds of certain size thresholds, demonstrated ability to create value with regards their investments to qualify to participate in the process.

At more advanced stages of the process, buyers would be shortlisted on the basis of criteria including bidder credibility, valuation, terms and conditions to the sale, financing, contingencies required and ability to meet the sale principles.

Summary

An inclusive sale process would allow for the participation of a diverse range of buyers including trade buyers and investors, subject to the vetting of participants through clearly defined criteria. It is an efficient and structured process generating interest in the asset and allowing for the selection of a buyer that best meets the sale principles.

7.5 Size of Stake to be Sold

The consultation paper stated that a sale of the States entire stake would be the preferred option as it is the most likely to deliver on the sale principles of ensuring the continued success of the Jersey economy, providing for the long term development of Jersey Telecom, safeguarding employee rights and ensuring an optimal value for reinvestment on behalf of Jersey's taxpayers.

There were several responses that were in agreement that the entire stake should be sold for the same reasons cited. There were also responses that believed the States should retain a majority (51%) stake in Jersey Telecom. These people believed that it would be beneficial for the States to retain some control of an important asset and service.

Based on professional advice with regards to the size of the stake to be sold, the sale of a full stake is the best path forward. It is preferable to the sale of a majority stake (i.e. a stake between 100% and 50%) which is in turn preferable to the sale of a minority stake (i.e. a stake between 0% and 49%).

The sale of a full stake is more likely to attract buyers that are best positioned to fulfil the sale principles of ensuring the continued success of the Jersey economy and providing for the long term development of Jersey Telecom.

A full stake would draw interest from the widest pool of buyers. The number of buyers that would be interested in a full stake is likely to be higher than that which would be interested in a majority stake due to the greater opportunity for integration, synergy realisation and capital restructuring presented by a full acquisition. The sale of a full stake would also ensure that potential bidders are not discouraged by the lack of full control or the size of the transaction. Jersey Telecom is significantly smaller than the incumbent operators in many of the European countries, in the same way that the population of Jersey is significantly smaller. The size of Jersey Telecom is itself already a reason it may be overlooked by some of the prospective buyers and selling only a majority stake may put Jersey Telecom further below the radar.

The sale of a full stake is likely to best incentivise the bidders to provide products and services of the best quality at the most affordable prices for consumers. A full sale, conveying full control, provides the greatest incentive for integration and realisation of synergies. Hence, it would encourage the highest level of cost savings in the procurement of consumer devices and network equipment, transfer of technology and enhancement of product offering and improvements in operating efficiency resulting from economies of scale. To a certain extent, the continued presence of the States shareholding would hold Jersey Telecom back from full integration and synergy realisation.

The strategic challenges faced by Jersey Telecom are referenced in Section 5.2. The presence of a larger telecoms entity or an independent investor, would better position Jersey Telecom to address many of these issues. In addition, a larger entity would be able to provide Jersey Telecom with the strategic direction to further its potential. In this regard, continued States shareholding would limit Jersey Telecom's potential to pursue more enterprising opportunities.

Hence, for the reasons cited above the sale of a full stake is more like to achieve the sale principles of ensuring the success of the Jersey economy and the long term development of Jersey Telecom. The sale of a majority stake would deliver more modestly on these two principles with concerns over the level of influence the States is likely to retain and the level of operating flexibility the buyer would be granted. A minority stake would not deliver on the sale principles given the degree of influence conveyed and the resulting ability to add value.

With regards arguments that States ownership is desirable to ensure consumer protection and investment in essential infrastructure, even if the States engaged in the sale of a majority stake and continued to retain a stake in Jersey Telecom, it would be inappropriate for the Treasury, in its capacity as shareholder in Jersey Telecom, to interfere with the regulation of the telecoms industry.

Employee and pension issues has been one of the key issues at the core of reservations voiced in relation to any sale process and in particular to a complete exit from the States investment in Jersey Telecom. There were calls to

consider the retention of a significant stake by the States to ensure protection of employee rights.

Given the commitment to the principles underlying the sale, direct negotiations with the prospective buyer would be undertaken to ensure the protection of employee rights post transaction. It should be noted that, even if the States retained a minority stake in Jersey Telecom post any sale, its control and influence would be diminished, and the protection of employee rights through this approach could not be guaranteed.

In addition, as described in Section 6, measures will be put in place to ensure that the pension rights and employment terms of Jersey Telecom's employees are safeguarded sufficiently to ensure that employees will be no worse off under full, majority or minority ownership of Jersey Telecom as compared with States ownership.

Only the sale of a full stake would meet all of the States objectives with regards the purpose of the Strategic Reserve and optimising valuation and reinvestment on behalf of taxpayers.

Section 7.1 discussed the purpose of the Strategic Reserve, and Section 7.2 discussed the suitability of Jersey Telecom as a Strategic Reserve investment, concluding that it was not an appropriate investment as it was an on-Island and illiquid investment that did not provide for asset diversification nor returns to investment outweighing the these risks. Only the sale of a full stake in Jersey Telecom would adequately address these issues. The sale of either a majority or minority stake would continue to leave the States with a large exposure to an illiquid, "on-Island" asset without optimising returns from investment.

With regards the sale principle to optimise value for reinvestment on behalf of shareholders, the sale of a full stake is most likely to deliver given its ability to generate interest in the asset and its ability to extract an optimal valuation.

The sale of a full stake would generate the widest buyer interest in the asset. Apart from ensuring the participation of desired buyers, it will serve to generate enthusiasm for the asset through the perception of strong competition amongst buyers for the asset. This is critical to maximising proceeds from the sale of Jersey Telecom.

Over and above proceeds relating directly to the size of the stake sold, the sale of a full stake commands a fuller valuation than the sale of a majority or minority stake. This premium is attributable to the level of control of the asset attained, justified through a higher level of control enabling a higher level of integration and greater realisation of synergies. The sale of a majority stake would also command such a premium although to a lesser extent given the degree of influence retained by the States. The sale of a minority stake without the cessation of control and conveying limited influence would not command a premium over and above the value of the stake and more likely command a price inline with an IPO value range.

Moreover, the sale of a stake other than a full stake would require thought to be given to the ability to realise value on the retained stake in Jersey Telecom when required and at attractive valuations given the presence of a significant shareholder other than the States. Such a scenario is unlikely to lead to the attainment of an optimal valuation for the remaining stake in Jersey Telecom.

By contrast with the sale of a majority or a minority stake, the sale of a full stake represents a far cleaner and less complex transaction.

The sale of a majority or minority stake would result in the presence of two dominant shareholders, with potentially different views on Jersey Telecom and different investment profiles. To avoid any possible conflicts later on, the shareholders would need to agree on extensive issues upfront. These include board representation and corporate governance issues. The other shareholder, particularly if it is a minority shareholder, may need to be incentivised to treat Jersey Telecom as more than just a financial investment. Joint decisions would be required at every juncture, including with regards Company strategy, investments in infrastructure and pursuit of new opportunities.

Agreements would also have to be reached for a range of contingency scenarios, such as if one shareholder were to decide to exit in the future. Such agreements would need to capture whether the stake could be sold to a third party or if both shareholders had the same opportunity for exit.

A review of the sale of incumbent telecom operators by the European governments in a sample of the smaller countries reveals that some of these have involved the sale of a sizeable stake rather than a full stake, the sale of tranches of shares over time, or sometimes the sale of a sizeable stake alongside an IPO.

Nevertheless, in Europe as a whole, significant government stakes in the incumbent telecom operators is not the norm. Rather, there has been a clear trend towards governments completely exiting their stakes in the incumbent telecom operators, as illustrated below.

Unlike several of the governments who sold in tranches to finance immediate expenditure or service existing debts, the main reason for the proposed sale of Jersey Telecom is the adoption of investment criteria appropriate to the States Strategic Reserve's uses. As stated above, the sale of a majority or a minority stake would not fulfil this objective.

Furthermore, any plan to sell Jersey Telecom not through a single sale but through several tranches would be a long and expensive process, not suited for an asset the size of Jersey Telecom.

Summary

In summary, the professional advice taken has confirmed the sale of a full stake through an inclusive sale process as the best option. The sale of a full stake would incentivise the prospective buyer to contribute towards the success of Jersey's economy and the long term development of Jersey Telecom, allowing for the realisation of the potential of both the market and Jersey Telecom. The States has committed to the principle of safeguarding employee rights to the extent that the size of the stake sold would not be material to this. The sale of a full stake is likely to generate the greatest buyer interest and enable an optimal valuation for the asset. The sale of a full stake would also represent a cleaner, less complicated process.

Size of Government Stakes in Incumbent Telecom Operators

0%	< 50%	> 50%	100%
Armental	Austria Telecom Austria (25%)	Bosnia & Herzegovina Telekom Srpske (65%)	Albania Albtelecom
Bulgaria BTC	Croatia T-Hrvatski Telecom (49%)	Belgium Belgacom (50%)	Cyprus Cytanet
Czech Republic Telefonica 02 CZ	Estonia Eesti Telecom (27%)	Latvia Lattelecom (51%)	Faroe Islands Faroese Telecom
Denmark <i>TDC</i>	Finland TeliaSonera (14%)	Moldova MoldTelecom (51%)	Luxembourg EPT
Georgia Telecom Georgia	France France Telecom (32%)	Switzerland Swisscom (62%)	Slovenia Telekom Slovenije
Guernsey C&W Guernsey	Germany Deutsche Telecom (31%)		
Iceland Síminn	Greece OTE (39%)		
Isle of Man Manx Telecom	Hungary Magyar Telecom (0.3%)		
Ireland eircom	Lithuania TEO LT (2%)		
Italy Telecom Italia	Macedonia Makedonski Telekom (35%)		
Liechtenstein Telecom Austria	Malta Maltacom (40%)		
Montenegro Crnogorski Telekom	Monaco Monaco Telecom (45%)		
Netherlands KPN	Romania Romtelecom (46%)		
Norway <i>Telenor</i>	Slovakia Slovak Telekom (49%)		
Poland Telekomunikacja Polska	Sweden TeliaSonera (45%)		
Portugal Telecom	Turkey Turk Telecom (45%)		
San Marino Telecom Italia San Marino			
Serbia Telecom Serbia			

Note: Current government stake in brackets.

Spain Telefonica

United Kingdom British Telecom The Telecommunications (Jersey) Law 2002 obliges the Minister for Treasury and Resources "to act in the interests of the States as holder of securities", however the States explicitly retains the power, under the Telecommunications (Jersey) Law 2002 to dispose of the shares in Jersey Telecom or the associated ownership rights.

The legal requirement for any disposal of shares in Jersey Telecoms is contained in the Telecommunications (Jersey) Law 2002, the relevant section being Article 32(5):

- (5) The Finance and Economics Committee [now Minister for Treasury and Resources] may exercise the powers of the States in their capacity as holder of securities in a principal company (or in any other capacity regarding a principal company), but not the following powers (which may be exercised only by the States)
 - (a) the power to dispose of the shares or share rights in a principal company, or create or dispose of security interests over those shares or share rights or otherwise charge those shares or share rights;

Consequently, as "holder" of the shares, the Minister of Treasury and Resources does not have the authority to conduct a sale as any changes to the shareholding of Jersey Telecom require the approval of the States.

Accordingly the Treasury and Resources Minister is proposing a two stage approval process:

- 1. Agreement in principle by the States to the sale of Jersey Telecom and to the Minister of Treasury and Resources entering into a sale process
- 2. States approval of the material terms of the proposed transaction including the buyer, the sale proceeds, and the buyer's investment and employee commitments

Sale Principles

Table 1

The Minister will commit to propose a sale of Jersey Telecom only if it is consistent with the following principles:

- (1) Sufficient arrangements are in place to protect the Island's consumers and ensure the maintenance of the Island's essential telecommunications infrastructure.
- (2) The best possible basis is provided for the long term growth and development of Jersey Telecom.
- (3) The existing rights of Jersey Telecom's employees are adequately safeguarded.
- (4) The best price is obtained on behalf of the people of Jersey, consistent with the above three principles, with the proceeds reinvested in the Strategic Reserve.

Process Principles

Table 2.

The Minister also commits to a smooth and well executed sale process in accordance with the following principles:

- (1) Selection of an appropriate buyer for Jersey Telecom.
 - The qualification of trade buyers and investors to participate in the process will be based on transparent and clearly defined criteria. Such criteria would include demonstrated expertise in various sectors within the telecommunications industry and a track record of revenue and profitability for a number of years in the case of trade buyers; demonstrated investment profile and track record compatible with the Island's interests, availability of funds of certain size thresholds, demonstrated ability to create value with regards their investments to qualify to participate in the process
 - The shortlisting of bidders will be based on criteria inclusive of the ability to meet the sale principles as detailed 1 to 4 above including those with regards to employee issues, investment in infrastructure, bidder credibility and valuation
- The Minister intends to propose the sale of the entire shareholding in Jersey Telecom, but may, if appropriate, propose the sale of a reduced shareholding, representing no less than a majority stake in Jersey Telecom.
- (3) The Minister intends to propose selling the shareholding in Jersey Telecom as a single entity in its current form. [Subject to the requirements of the JCRA as set out on the following page.]
- (4) The Minister intends to place conditions on the sale to protect the terms and conditions of employment of Jersey Telecom employees.
- (5) The Minister will only propose that the States enters into definitive and binding agreements with the selected buyer to effect a sale, if the sale process attains at least the fundamental valuation of Jersey Telecom as quantified by the Minister's professional advisers.
- (6) The Minister will also take all necessary professional and legal advice before proposing the sale to the States.

The approval in principle of the States to the sale of Jersey Telecom will not necessarily translate into a certain sale.

- If any of the principles in tables 1 and 2 above are not achievable the Minister for Treasury and Resources will not propose a sale for States approval.
- Should the Minister for Treasury and Resources successfully negotiate a proposed sale in accordance with the principles in tables 1 and 2 above the States will be asked to give final approval the material terms of the proposed transaction including the buyer, the sale proceeds, and the buyer's investment and employee commitments.

The sale of Jersey Telecom will also be subject to the terms of the Competition (Jersey) Law 2005, and in particular Part 4 of that Law concerning Mergers and Acquisition. This would involve receipt of approval for any transaction from the JCRA and would represent the only further approval needed before completion of any transaction, the States having approved material terms of a proposed sale. (There are also 'change of control' approvals contained in the operating licences of Jersey Telecom Limited and Wave Telecom Limited which would require separate approval by the JCRA and Guernsey's Office of Utility Regulation.)

Financial and Manpower Implications

Significant fees will be incurred in progressing the sale process. If the States agrees to the sale of Jersey Telecom these fees will be offset against sale proceeds. If the States does not ultimately decide to sell Jersey Telecom the fees will have to be written off and either financed from within approved budgets or through an additional charge to the Consolidated Fund. There are no manpower implications arising from this proposal.

ANNEX 1: THE CONSULTATION PAPER

A1.1	Discussion Pa	aper issued	by the Minist	er for Tr	easury and	Resources	on the proposed	l sale of Je	rsey
	Telecom								

Published 13 July 2006

A1.2 Summary of responses received to the Discussion Paper issued by the Minister for Treasury and Resources on the proposed sale of Jersey Telecom

Published 28 November 2006

A1.1 Discussion Paper issued by the Minister for Treasury and Resources on the proposed sale of Jersey Telecom

1.	INDEX
2.	Section 1: background
3.	Section 2: Jersey telecom and the local market
4.	Section 3: The global telecommunications market
5.	Section 4: Jersey Telecom as a strategic investment
6.	Section 5: Employee related matters
7.	Section 6: Maximising the return
8.	Section 7: next steps

SECTION 1: BACKGROUND

Until 1 January 2003, the States was the regulator, operator and owner of the only telecommunications provider in Jersey. The Telecommunications (Jersey) Law 2002 completely changed this by splitting the roles of the operator, owner and regulator whereby:

- The operator became the incorporated organisation JT Group Limited governed by an independent board of directors;
- The owner became the Finance & Economics Committee, and subsequently the Minister for Treasury & Resources, acting in the interests of the States as an investor in Jersey Telecom; and
- The regulatory role i.e. the responsibility for protecting the public interest, particularly the need to maintain a robust telecommunications infrastructure and promote consumers' interests, fell to the Jersey Competition Regulatory Authority (JCRA) and the Minister for Economic Development.

The Telecommunications (Jersey) Law 2002 also ended Jersey Telecom's monopoly in the local market by empowering the JCRA to issue licences to new operators where this is in the interests of users.

In the past, the States was involved in the ownership of the operator because telecommunications was seen as a natural monopoly best entrusted to a public sector organisation. This ensured that infrastructure investment took place to provide for such things as a universal service that might not have been provided for by private investment. The industry model has now changed and the separation of operation and regulation, as achieved on 1 January 2003 when the new law came into force, puts in place a regulator to decide on the appropriate level of competition in the marketplace and the controls in place to protect users' interests.

This being the case, the sole remaining reason for the States continuing to own Jersey Telecom is as an investment.

The Minister for Treasury & Resources is of the view that Jersey Telecom should be sold and the sale proceeds placed in the Strategic Reserve where they should be invested in a diversified portfolio of equities and gilts.

This Discussion Paper seeks the views of the public on this proposal and in particular requests responses to a number of questions contained in the report.

SECTION 2: THE COMPANY AND THE MARKET

Jersey Telecom

The National Telephone Company opened the first telephone exchange in Jersey in 1895. The Jersey exchange network was taken over in 1912 by the British General Post Office which was then bought by the States of Jersey in 1923 and named the States Telephone Committee. However, part of the network remained the responsibility of the United Kingdom Minister for Posts and Telecommunications and this was only changed with the introduction of the Telecommunications (Jersey) Law 1972, which vested in the States the exclusive privilege for the provision of all telecommunications on the Island. This model of exclusive privilege was exercised by the States through the Telecommunications Board (made up of members of the States) which was obliged to operate the statutory monopoly.

The process of incorporating the operational activities of the States of Jersey Telecommunications Board into JT Group Limited was completed on 1 January 2003 further to the bringing into force of the Telecommunications (Jersey) Law 2002.

JT Group Limited (which includes the operation of Jersey Telecom in Jersey and Wave Telecom in Guernsey) currently provides a complete range of fixed and mobile services to business and residential customers and for the year ended 31 December 2005 reported an operating profit (before interest and tax) of £14.3m on a turnover of £84.5m. In terms of a return paid by the company, the States was in receipt of £8.5m in dividends and a further £1.95m in taxation [1].

The company has maintained a strong balance sheet which places it in a sound position to fund investment in its Next Generation Network ("NGN") and 3G mobile network rollout, whilst allowing it to support a strategy of addressing competition in the Jersey and Guernsey markets arising from the presence of additional operators.

Trends in the telecommunications market in Jersey

As an international finance centre operating from an Island location, the provision of resilient and reliable telecommunications networks across which world-class services are available is fundamental to the continued success of Jersey. Business and residential consumers alike demand, and have come to expect, the availability of these services, and telecommunications companies in Jersey must invest heavily to ensure that they remain the provider of choice.

Evidence of this required investment is contained in recent announcements from Jersey Telecom that it will be investing a further £12m in upgrading its mobile network to offer 3G (high-speed) services over the next twelve months together with an investment of similar magnitude in its fixed network such that it will be well positioned to further expand its broadband and Voice over Internet Protocol (VoIP) services. Other operators have also announced that they will be investing heavily in order to launch mobile services: £15m in the case of Cable & Wireless Jersey [2] and £20m by Jersey Telenet (a subsidiary of Bharti Global Limited [3]).

The significant investment of each operator is indicative of the importance placed on high quality and resilient networks.

Regulation in Jersey's telecommunications market

A robust regulatory framework that protects the interests of consumers whilst allowing operators to invest with confidence is a fundamental prerequisite to the continued development of Jersey's telecommunications market.

The establishment of such a robust framework in Jersey was a key objective when the States agreed to the passing of the Competition Regulatory Authority (Jersey) Law 2001 and the Telecommunications (Jersey) Law 2002. Without such a framework, the sale of Jersey Telecom could not reasonably be considered an option for the States.

The Telecommunications (Jersey) Law 2002 ("the Law") empowers the JCRA to license any operators with respect to telecommunications that concern Jersey. Under the terms of this Law, the JCRA has a primary responsibility to perform its functions in "such manner as it considers is best calculated to ensure that (so far as in its view is reasonably practicable) such telecommunications services are provided, both within Jersey and between Jersey and the rest of the world, as satisfy all current and prospective demands for them, wherever arising." [4]

In so far as it is consistent with this primary duty, the JCRA is obliged to perform its functions in such a manner as is best calculated to:

- Protect and further the short-term and long-term interests of users, wherever appropriate, through the promotion of competition;
- Promote efficiency, economy and effectiveness in commercial activities connected with telecommunications;
- Further the economic interests of Jersey;
- Impose a minimum set of restrictions on those engaged in commercial activities connected with telecommunications:
- Ensure that those engaged in telecommunications activities have sufficient financial and other resources to

conduct those activities; and

 Have regard to the special needs of the disabled or those who have limited financial resources or particular needs.

The JCRA meets its obligations through a process of licensing operators that wish to offer regulated telecommunications services on the Island. It controls the abuse of any dominant position in the market through the application of a more stringent set of license conditions than those which apply to smaller operators or new entrants and ensures that the set of services offered to consumers are sufficient to meet the current and prospective demands for telecommunications services on the Island.

Consumer protection

In fulfilling its duties in respect of consumer protection the JCRA needs to have regard to matters such as accessibility, affordability, high quality and reliability.

The JCRA achieves these objectives in the first instance through the inclusion of a certain set of requirements in the licences that it issues to operators. There is a standard set of Public Service Conditions in the template operating licence and this contains obligations including, amongst others: universal service; public emergency calls; public payphones; and consumer protection.

The Minister for Economic Development also has a role in this connection and, where he considers that it is desirable in the public interest to do so, is authorised under the terms of the Law to give written directions to the JCRA in respect of principles, procedures or policies to be followed in relation to the implementation of any social or environmental policies regarding telecommunications. Having received a written direction from the Minister for Economic Development, the JCRA is obliged to ensure that the obligations set out therein are achieved; how this is done is a matter for the JCRA.

Furthermore, the Minister for Economic Development can change at any time by Regulation the objectives that the JCRA are obliged to have regard to in the carrying out of its duty under Article 7(1) of the Law. These explicitly include the provision of a universal service, social service or cross-subsidised service and the provision of certain tariffs.

The Minister for Treasury & Resources is of the mind that the above represents a more than adequate safeguard for successful regulation of Jersey's telecommunications industry such that the interests of consumers are secured. However, he is keen to hear the views of interested parties on whether the framework is sufficiently robust to allow the government to relinquish control of Jersey Telecom.

Maintenance of essential telecommunications infrastructure

The continued need for investment in essential infrastructure to ensure the provision of all current and prospective demands for high-quality services to residential and business consumers is a key feature of the Telecommunications (Jersey) Law 2002.

The Law provides that if demand for a certain service, in terms of quality or type, is not being met by licensed operators in the industry, the JCRA is legally required to take steps to deal with this issue. To do so, it has the powers to require licensed operators to make or contribute to investment in any infrastructure that is required for the purposes of ensuring that these current and prospective demands for telecommunications services are provided for.

It is therefore the Minister's view that any decision to divest of the States ownership in Jersey Telecom will not impact on the continued provision of essential telecommunications facilities on the Island. Views from interested parties on this opinion, and its basis, would be welcomed.

Competition in Jersey's telecommunications market

Jersey Telecom's licence to operate was issued by the JCRA and became effective upon incorporation on 1 January 2003. Since that date, several other licences have been awarded following a process of application and public consultation undertaken by the JCRA.

Amongst those licensed by the JCRA are a number of significant operators which include Jersey Telenet (a subsidiary of Bharti Global Limited), Newtel Solutions and Cable & Wireless. All of these companies are in the process of developing their presence on the Island. Furthermore, spectrum (radio) licences have been issued that may result in additional entrants to the marketplace over time – an example being COLT Telecom as a possible fourth competitor in the mobile market.

Given the development of a competitive marketplace and the powers currently available to the JCRA, the Minister is unaware of any barrier, in relation to market structure, that should prevent the sale of Jersey Telecom. He would be interested to hear whether respondents also subscribe to this view.

SECTION 3: THE GLOBAL TELECOMMUNICATIONS MARKET

Globally, telecommunications operators are facing two inter-related challenges: increased competition and technological change. The adoption of Internet Protocol (IP) as a standardised technology has further accelerated the pace of change in the already fast moving telecommunications market and the delivery mechanism of services is diversifying to include both fixed and mobile networks. Consequently, these technology changes are often described as "disruptive" to telecommunications operators as traditional revenue sources are eroded.

Technological change is coupled with increased competition amongst service providers. As markets are now widely liberalised, alternative providers (who do not own or operate infrastructure) have been licensed to compete in the same market place as network operators for telecommunications services. Competition is driving telecommunications operators to react in a number of ways that are changing the face of the industry:

- Operators are seeking opportunities to deliver growth and obtain economies of scale through acquisitions.
 An industry trend towards consolidation is evidenced by large numbers of telecommunication related transactions. This consolidation has seen both the acquisition of similar operations outside of the domestic market, and in response to the convergence challenges, the acquisition of operators in different domestic markets; and
- Operators are investing massively in the introduction of new emerging technologies, including broadband, Voice over IP (VoIP), IP Television, 3G mobile and mobile TV in order to:
 - position themselves as key players in the provision of the next generation of services; and
 - reduce their cost base in order to become more efficient and agile operators.

Maintaining appropriate levels of investment to deliver new products and services for small-scale telecommunications operators is increasingly challenging and is a further factor driving consolidation.

With the liberalisation of the global telecommunications markets, governments have recognised that in a competitive market, public sector management of the state owned telecommunications operator was not ideal. Most importantly the role of government has transformed into that of the regulator of a competitive market landscape rather than the provider of telecommunications services. The response for state-owned telecommunications operators has been full or partial privatisation to achieve this objectivity.

Jersey has successfully achieved the first part of this transformation through the introduction of independent regulation. While this is broadly viewed as having been successful, the question has now progressed to the form of risk attached to the States investment in Jersey Telecom rather than a debate about whether there is a requirement for the States involvement in running an operator for the purposes of providing services that might not otherwise exist.

Jersey Telecom is one of only a few operators of any note that remains fully state-owned [5] and it is interesting to note that the governments of international jurisdictions that are in competition with Jersey are, for the most part, not involved in the operation or ownership of the incumbent operators. Instead they have focused their efforts on ensuring the implementation of an appropriate regulatory framework within which the telecommunications market can effectively function. Examples of such jurisdictions include the Isle of Man, Guernsey and Monaco.

For the most part, European governments have divested all or part of their ownership in former state-owned

telecom companies. The success of these privatisations is demonstrated in the size, global footprint and scope of activity and performance of previously state owned companies such as Telefonica, France Telecom and BT, which are now global telecommunications leaders. While some governments have chosen to maintain a partial shareholding in the incumbent operator, for reasons set out in Section 6, this is not the approach being advocated by the Minister in this instance.

Given the pace of technological change and the requirement for economies of scale brought about by the consolidation in the world's telecommunications industry, the Minister is interested to hear whether stakeholders believe that Jersey Telecom would be better equipped to compete successfully if, under independent ownership, it could benefit from access to such scale economies?

SECTION 4: JERSEY TELECOM AS A STRATEGIC INVESTMENT

Jersey Telecom as a States investment

As referred to previously, the Telecommunications (Jersey) Law 2002 split the role of regulator and operator that was previous the responsibility of the States of Jersey Telecommunications Board. Regulatory responsibilities were transferred to the independent JCRA and the responsibilities for the operational aspects of the Telecommunications Board were incorporated into Jersey Telecom governed by an independent Board of Directors.

In establishing a separation of operation and regulation, the States appointed the Minister for Treasury & Resources as the party responsible for acting in the interests of the States as holder of the security interest in Jersey Telecom.

It should be re-iterated that the responsibility of the Minister for Treasury & Resources under the terms of the Law is "to act in the interests of the States as holder of securities". As a result, the Minister is legally obliged to maximise the value of the States shareholding in Jersey Telecom and exercise the States interest in the company solely on a commercial footing.

As a result of these obligations on the Minister for Treasury & Resources, the States investment in Jersey Telecom has been operated as a commercial shareholding since it was incorporated on 1 January 2003. A Memorandum of Understanding (MoU) between the Minister and Jersey Telecom establishes the basis for the relationship between the parties. The MoU recognises the independence of the Board of Directors in managing the business, while at the same time identifying the Minister as the shareholder representative with a focus on enhancing the long-term value of that investment.

Consequently, the decision on whether to sell Jersey Telecom must not be about maintaining an interest in a telecommunications operator for the purposes of consumer protection or the meeting of social obligations; it must be a decision on whether the investment strategy of the States of Jersey is best served by either maintaining or divesting of its shareholding in the company.

In other words, this must not be a discussion about "selling the family assets", but rather, a debate about how to protect and enhance the value and form of those assets.

Investment Strategy of the States of Jersey

On the basis of the previous section which makes clear the obligation of the Minister for Treasury & Resources, it is worth appraising Jersey Telecom purely as an investment within the context of the wider States Investment Strategy.

The aim of the States is to maximise the long-term value of its strategic assets. The investment strategy and policy for the States Strategic Reserve are currently under review by the Minister for Treasury & Resources; however, the current policy which is low risk, and constituted of a diversified portfolio of fixed interest and equity

listed investments in entities with high credit ratings, is likely to be confirmed.

The Minister considers the investment in Jersey Telecom, for all intents and purposes, as a component of the Strategic Reserve. If the investment is considered on the basis of the criteria used for the Strategic Reserve though, it falls well outside the current and likely future policy for the following reasons:

- it is not listed on a stock exchange;
- the investment amount is far in excess of that permissible for single investments within the current investment mandates; and
- the risk profile is over and above that considered acceptable.

Against those criteria therefore, this investment would not be included within the Strategic Reserve.

The introduction of competition into the marketplace means that the risk profile of the company, in particular in terms of an investment, has significantly deteriorated from the days when the company was a largely unregulated monopoly. While the Minister has every confidence that the Board of Directors has robust strategies to counter competition within the local market, the competitive pressure will only intensify. As a result, while the level of risk increases, the compensating returns generated for the shareholder are likely to face downward pressure from those enjoyed currently and in recent years.

Also, viewed in the longer-term, perhaps the biggest risk of holding a significant proportion of the States assets in on-Island companies is that in the circumstances when the States might need to realise these assets they might be worth much less. Whilst strategic investments, such as those in Jersey Telecom, provide a buffer if ever the Island were to suffer an economic catastrophe, it would be at such a time that the value of the company would also fall dramatically and it would therefore be difficult to sell. This is the principal argument for disposing of the States holdings in Jersey Telecom and reinvesting the funds in a more diversified international portfolio. It is for similar reasons that Norway, for instance, has a policy that its surplus oil revenues are invested outside the country.

It is therefore the view of the Minister that as the continued ownership of the shareholding in Jersey Telecom represents a risk that is inconsistent with the profile that he wishes to maintain for States investments, the shareholding in the company should be sold with the proceeds placed in the Strategic Reserve to be invested in a balanced portfolio of international equities and gilts. The Minister would welcome views from interested parties on whether they also subscribe to this view.

SECTION 5: EMPLOYEE RELATED MATTERS

Jersey Telecom employees

Employees of Jersey Telecom are recognised by the company as the prime reason for its success in the marketplace. This is evidenced by their treatment through the recent incorporation process where great care was taken to ensure a smooth transition, with every term and condition of all contracts of employment and every collective agreement in place pre-incorporation being carried forward to the post-incorporation status without a single change. The importance of this element of the business is also reflected in the Memorandum of Understanding between the company and the Minister for Treasury & Resources, where it confirms an objective that the company should continue to be a good employer.

In its recently published Annual Review, the company recognises that delivering services to the highest standards requires the best employees and this objective is underpinned by a company that prides itself on ensuring a high degree of job satisfaction, good working conditions and good terms and conditions of employment.

The Minister is conscious that any decision to divest of the States shareholding in the company will inevitably impact upon the employees and there are two principal issues on which the views of interested parties would be welcomed:

- pensions; and
- the process of transferring employees.

Pensions

As part of the process of incorporating Jersey Telecom, employees were seamlessly transferred to a ring-fenced element of the Public Employees Contributory Pension Scheme (PECRS) to which Jersey Telecom became an admitted body. The financial statements of Jersey Telecom for the year ended 31 December 2005 show an actuarial deficit of £695,000 on a total pension asset value of £42.2m and it can therefore broadly be considered as fully funded.

An existing obligation of the Law requires that at least 90% of Jersey Telecom employees must participate in PECRS [6]; the Board of Jersey Telecom has made known its dissatisfaction with this obligation and has stated its preference to close the scheme to new members once the above restriction is removed. Although the Board has the commercial freedom to deal with all other aspects of how it runs the company, the obligation in regard to pensions for future employees is considered to be entirely inconsistent. It is noteworthy that States thinking on this issue has progressed with the agreement of the Postal Services (Jersey) Law 2005 which placed no such obligation on an incorporated Jersey Post. Irrespective of responses to this paper, it is the intention of the Minister for Treasury & Resources to come forward shortly with a Regulation to address this development and request that the States removes the existing requirement on Jersey Telecom.

Should Jersey Telecom be sold in any form and thereby pass into private ownership, this will raise the question of whether it could remain as an admitted body to PECRS.

Under one possible scenario, in order to avoid jeopardising the favourable taxation position enjoyed by PECRS as a result of there being no private company participating in the scheme, the Committee of Management may be obliged to require the new company to exit the scheme.

On the other hand, any new company may choose to give notice that, despite closing the availability of the scheme to new employees and establishing a manner of staying within the scheme, it may wish to give notice to leave the PECRS in its entirety.

While the Minister for Treasury & Resources is of the view that pension matters are best dealt with by the company itself, he is cognisant of the concerns that may be raised by respondents on this issue. The Minister is therefore keen to establish whether interested parties feel that any new owner should be obliged to meet the current pension arrangements for existing employees either by way of membership of PECRS as an admitted body (if that is possible), or by replication with an identical scheme should the continued membership of PECRS not be possible.

The Minister is also interested to know whether respondents are satisfied that the sale price would be reduced to reflect the cost of placing such an obligation on any company that expresses an interest in purchasing Jersey Telecom.

Transfer of Undertakings (Protection of Employment) ('TUPE') obligations

As a consequence of the process by which employees were passed from the Telecommunications Board to Jersey Telecom without changing their terms and conditions of employment, there were no TUPE issues to be dealt with.

However, the States of Jersey does not have any TUPE type legislation to protect the transfer of employees from one employer to another. Therefore, the manner of transferring any employees would be subject to the particular arrangements agreed with a potential purchaser.

The Minister is interested to hear whether respondents believe that any minimum set of employee-related obligations (over and above those that would normally be expected) should be considered as part of any future negotiations.

Sale Process

Although the Law obliges the Minister for Treasury & Resources "to act in the interests of the States as holder of securities", the States explicitly retains the power to dispose of the shares in the company or the associated share rights.

Consequently, the Minister for Treasury & Resources would have to obtain the approval of the States to make any changes to the shareholding in Jersey Telecom.

The sale of Jersey Telecom would also be subject to the terms of the Competition (Jersey) Law 2005, and in particular Part 4 of that Law concerning Mergers and Acquisition. This would involve receipt of approval for any transaction from the JCRA before completion.

In order to obtain the best outcome for the States, particularly in terms of best value, the Minister needs to be able to determine the exact timing of the sale dependent on market conditions. Prospective purchasers also need certainty in their dealings with the Minister, particularly as they will be committing substantial sums of money in progressing the purchase.

The Minister recognises the significance of the transaction that he is contemplating but, as already stated, considers that the absolute requirement is to ensure that the States receives full value for it shareholding. A sale process which is contingent on the outcome of a future States debate would almost certainly be prejudicial to the value of an eventual transaction.

It is therefore the Minister's intention to bring a proposition to the States seeking the authority to enter into a binding agreement for the sale of Jersey Telecom on behalf of the States. The proposition will include clear principles and parameters within which the sale must progress. The Minister will also appoint high quality, expert advisors to manage the sale process.

The Minister's view is that best value will be obtained by the States authorising him to enter into binding agreements for the sale of Jersey Telecom through a transparent sale process and clear criteria agreed by the States. He is keen to hear the views of interested parties on this point.

Form of sale

There are two elements to any decision on the form of sale that must be considered. The first element relates to the method by which the States may choose to divest its shareholding and the second relates to the whether any sale would involve the full (100%) or partial sale of the States shareholding in the company.

In regard to the first element, the principle options available to the Minister include:

- a process by which shares in the company would be offered to the public (referred to as an Initial Public Offering ("IPO")); or
- a sale to a purely financial investor (referred to as Private Equity); or
- a sale to a telecommunications operator (referred to as a Trade Sale).

The Minister's view, at this stage, is that an IPO would not be likely to achieve the best value for the States investment. An IPO is a costly exercise with no guarantee of success and in order to ensure sufficient demand for shares, a discount on the overall value of the company would be necessary. It would also not result in the company benefiting from economies of scale or access to new technologies or expertise.

The Private Equity option could ensure that additional financing is available to the company. Private Equity, however, is normally considered as a short-term ownership solution whereby the new investors have an objective of increasing the value of its holding prior to exiting the business.

A Trade Sale, on the other hand, would be likely be a long-term outcome that would allow Jersey Telecom access to economies of scale that it does not currently enjoy. It would also allow the company the space to grow within the context of a larger operator rather than continue operating as a small independent provider within an increasingly competitive marketplace.

On the above basis, the Minister's current preference is for a Trade Sale but he would be interested to hear opinions on this view.

Moving on to the second element of the decision, in general terms, the Minister views that there are two critical themes that need to be considered in connection with a decision on the matter for a full or partial sale of the company: control, and value.

In terms of control, the States could maintain partial ownership, or a "golden share" through which it would exert its power on certain items deemed to be of importance, such as employee or investment matters. However, the use of such shares would potentially come under scrutiny from the JCRA if it leads to an imbalance in the operation of the marketplace and would undoubtedly reduce the value of the enterprise.

On the subject of value, while some jurisdictions have chosen to transfer their wholly-owned incumbent to full private ownership in a staged fashion, this is normally only considered to be effective if the government were to take advantage of a subsequent improvement in value. However, there is no substantial restructuring required in Jersey Telecom that is likely to lead to a significant increase in value over time. In the main, the company has been operating as though it were in private ownership since incorporation on 1 January 2003 and the local market, from which its principle value obtains, is coming under increasing competitive pressure as a result of new entrants and developing technologies.

A further disadvantage of a staged sale is that it requires the development of a complex exit strategy with some duplication of the initial cost of sale.

Accordingly it is the Minister's view that a full sale is the preferred option as it will maximise the value that can be obtained from the disposal of Jersey Telecom and involves a clear and transparent way forward on the part of the States. Any opinions on whether this is the best course of action would be welcomed.

SECTION 7: NEXT STEPS

This consultation period will run from 13 July 2006 until 8 September 2006.

During that period, the Minister for Treasury & Resources would welcome any comments on the matters set out in this Discussion Paper and these can be forwarded in writing to:

Jersey Telecom Consultation
Treasury & Resources Department
Cyril Le Marquand House
The Parade
St Helier
Jersey
JE4 8PF

or via e-mail to: jtconsultation@gov.je

The intention is to bring a proposition to the States on the sale of Jersey Telecom for debate during October 2006.

A1.2 Summary of responses received to the Discussion Paper issued by the Minister for Treasury and Resources on the proposed sale of Jersey Telecom

Section 1: Executive Summary

Section 2: The Company and the Market

Section 3: The Global Telecommunications Market

Section 4: Jersey Telecom as a Strategic Investment

Section 5: Employee Related Matters

Section 6: Maximising the Returns

Section 1: Executive Summary

This document summarises the views expressed in the responses to the Discussion Paper issued in July 2006 by the Minister for Treasury & Resources ("the Minister") regarding the proposed sale of Jersey Telecom.

The Minister has put in place a transparent and rigorous process to enable all aspects of the proposed sale of Jersey Telecom to be considered and the public consultation was part of this open debate; the Minister's aim was to enabled the people of Jersey – as well as directly interested parties in the sale - to participate in the discussion and make their views heard.

The consultation period ran from 13 July 2006 to 8 September 2006. A total of just [35] written responses were received by the Treasury & Resources Department during this time. The majority of these were from directly interested parties such as Jersey Telecom employees and the Board of Jersey Telecom, the JCRA and Amicus, bodies whose views on the proposed sale have already been well-publicised.

Beyond the directly interested parties it is clear that very few others felt a need to respond to the document; responses were received from a small number of professional and other representative bodies, private businesses and individuals.

The Minister has taken careful note of all views raised during the consultation period (both those raising concerns and those endorsing the process), is considering them and would like to thank respondents for taking the time to communicate their views.

It should be stressed that the final form of the Proposal regarding the sale of Jersey Telecom that the Minister will put to the States Assembly next year, and on which States members will then vote, has yet to be decided upon.

For the sake of simplicity, the comments and suggestions received are summarised under the same section headings as set out in the Minister's July Discussion Paper. However, headline findings are summarised below.

JERSEY TELECOM AND THE LOCAL MARKET

Consumer Protection: responses were broadly of the opinion that the existing framework was sufficient to ensure consumer protection, although concerns were raised around the effectiveness of the JCRA and its ability to enforce decisions cost effectively on an independently owned Jersey Telecom.

Maintenance and Essential Telecommunication Infrastructure: Concerns were voiced that independent owners of Jersey Telecom would not have the same level of interest in Jersey and would therefore be less inclined to ensure the maintenance of essential infrastructure. However, there were also responses received in agreement with the Minister's view that a decision to divest of the States ownership in Jersey Telecom would not impact the continued provision of essential telecommunications facilities on the Island.

Competition in Jersey's Telecommunications Markets: overall, there were few responses to the Discussion Paper that felt that there were barriers in relation to the market structure that should prevent the sale of Jersey Telecom, although the sale to an existing operator is thought to warrant review by the JCRA.

THE GLOBAL TELECOMMUNICATIONS MARKET

Although there were many responses acknowledging the quality of services and breadth of products Jersey Telecom has been able to offer as a standalone entity, overall the responses received were broadly in agreement that Jersey Telecom would be better equipped to compete successfully if it could benefit from access to economies of scale.

JERSEY TELECOM AS A STRATEGIC INVESTMENT

The majority of responses recognised the size of financial investment that JT represents and therefore related to the need to ensure that the best risk/return balance is achieved for Jersey when considering any sale. A number of responses highlighted the importance of protecting the value of Jersey Telecom to the Island's economy in the event of a sale by ensuring that it is not just sold to the highest bidder but that it also ends up in the best possible hands for the long term development of the business.

EMPLOYEE RELATED MATTERS

In responses to the Discussion Paper, there is widespread comment that employee rights must be protected and the existing pension scheme maintained. Concerns were also raised that a sale could lead to redundancies. There is also an almost unanimous endorsement of the comments regarding the quality of Jersey Telecom employees.

MAXIMISING THE RETURN

The majority of respondents who provided a view were in agreement with the Minister that in the event of a sale the best value would be obtained by him having the authority to negotiate and enter into a binding agreement but on the basis of a States vote and clear criteria agreed by the States. In terms of the preferred form of sale, responses varied (trade, "local solution", possible break-up, etc) as they also did regarding the question of the size of the stake in Jersey Telecom that the States should sell.

In summary, the feedback received has reaffirmed the Minister's belief that the proposition to be lodged with the States for decision must be constructed in accordance with four key principles:

- It must provide the basis for an outcome that will contribute to the maintenance and enhancement of the
 competitive environment and quality of telecommunications services to the benefit of both today's and
 tomorrow's islanders;
- It must ensure that the rights of Jersey Telecom's employees are adequately safeguarded;
- It must provide for the achievement of the best possible basis for the long term growth and development of Jersey Telecom;
- It must provide for the attainment of the highest possible sale proceeds for the benefit of the people of Jersey.

Section 2: The Company and the Market

2.1 Consumer Protection

In the Discussion Paper, the Minister stated that he felt the framework for consumer protection was sufficiently robust to allow the States to relinquish control of Jersey Telecom, while preserving accessibility, affordability, high quality and reliability.

Responses received were broadly of the opinion that the existing framework, through the obligations of the licenses, and the authority of the JCRA and the Minister of Economic Development, was sufficient to ensure consumer protection.

"It is as a result of these three elements, that [...] considers the current framework to be sufficiently robust that government ownership of any operator is not required."

Several respondents were however concerned that if Jersey Telecom was acquired by a significantly larger telecoms operator, the resources and influence that the parent company would provide Jersey Telecom would undermine the ability of the JCRA in fulfilling its role. Whilst agreeing that the fundamental framework is in place, these concerns mainly centre around the effectiveness of the JCRA and its ability to enforce decisions cost effectively on an independently owned Jersey Telecom.

"The JCRA lack the financial clout should consumer protection be at stake."

However, Jersey Telecom is at present either compliant with JCRA requirements or in discussion with the JCRA on these requirements. Jersey Telecom enjoys a strong relationship with the JCRA. No change is expected in JCRA's approach in the event of a change in ownership.

Other respondents felt that an independently owned Jersey Telecom would not provide the quality nor reliability of services or price affordability that a States owned company would. It was also felt that an independent owner would not adopt a long term approach to the development of telecom services in Jersey and that priorities placed on consumer protection would be lower and subject to economic conditions.

"Call prices may rise as a result of the sell off to a large telco which has the potential to dominate the market."

The Minister takes notes of these concerns and concludes that ways to improve the effectiveness of the JCRA could be considered in the future should there be grounds to do so. Furthermore, the Minister notes that there are other available mechanisms (e.g. tariff regulation) that can be effected to regulate the market to ensure consumer protection.

2.2 Maintenance and Essential Telecommunication Infrastructure

In the Discussion Paper, the Minister wrote that a decision to divest of the States ownership in Jersey Telecom would not affect the continued provision of essential telecommunications facilities in the Island.

There were responses received in agreement with this view. The rigorous demands for quality communications by

the finance industry present on the island and the Company's management ability to tailor its investment programme and service provision have to date ensured that the level of essential infrastructure exceeds that of jurisdictions of similar population size.

Concerns were voiced that independent owners of Jersey Telecom would not have the same level of interest in and loyalty to the island, and hence would be less inclined to ensure the maintenance of essential infrastructure.

"There can be no guarantees given, that once another company buys Jersey Telecom that this investment in the telecom infrastructure will continue to take place."

Concerns were also voiced that investments in infrastructure by the various operators is duplicative and without due returns.

"The provision of multiple overlapping infrastructures by multiple operators all providing the same services, cannot be seen as the best way to ensure the provision of essential telecoms infrastructure."

It should be noted that whilst the task of maintaining essential infrastructure remains with the telecom operators, the obligation to maintain essential infrastructure is one that is legally imposed through the Telecommunications Law and enforceable by the JCRA. The JCRA retains the ability to remove the license in case of significant breach of its terms.

The JCRA has confirmed that the obligations of the license issued to Jersey Telecom remains the same regardless of whether Jersey Telecom is in public or private ownership. In addition, JCRA's authority to enforce and ensure that the investment in infrastructure and provision of certain services holds under all circumstances.

2.3 Competition in Jersey's Telecommunications Markets

In the Discussion Paper, the Minister expressed that given the development of a competitive marketplace and the powers currently available to JCRA, the Minister is unaware of any barrier, in relation to market structure, that should prevent the sale of Jersey Telecom.

There were many responses in recognition of the potential for high level of competition in Jersey with the licensing of four mobile operators and liberalization of the fixed line market.

"The number of licenses issued is highly misappropriate to the number of people on the island."

"There is a real danger of market saturation on Jersey which in turn could lead to diminishing profits for all companies."

The JCRA, however, is of the view that the current number of licences issued and hence level of competition is beneficial for the development of telecommunications services and the consumers of those services in Jersey.

"We are delighted that Jersey businesses and consumers can look forward to a new era of competition and advanced services in mobile communications, allowing them to benefit from the prospect of greater choice, innovation, service quality and price competition. We will continue to work hard to ensure the benefits of new

services and competition are realised."

There were several voices that felt that the sale of Jersey Telecom to an existing player in the market would have an undesirable impact on competition and market structure.

"If Cable & Wireless take over, then we will be back to having a monopoly."

"It should also ensure that any change of ownership would not prejudice the competitive regime established, for example by leading to market dominance and undue pricing power. Bids from competing businesses should therefore be scrutinised with special care."

The JCRA formally needs to approve any proposed transaction. It will also be possible for the JCRA to address any areas of competition concerns with the appropriate remedies.

Overall, there were few responses to the Discussion Paper that felt that there were barriers in relation to the market structure that should prevent the sale of Jersey Telecom although the sale to an existing operator warrants review by the JCRA.

Section 3: The Global Telecommunications Market

_

In the Discussion Paper, the Minister expressed an interest in knowing whether stakeholders believe that given the pace of technological change and the requirement for economies of scale brought about by consolidation in the world's telecommunications industry, Jersey Telecom would be better equipped to compete successfully if, under independent ownership, it could benefit from access to such scale economies.

There were many responses acknowledging the quality of services and the breadth of products Jersey Telecom had been able to offer as a standalone entity, which is a view the Minister also subscribes to.

"Jersey Telecom currently provides a top class telecommunications infrastructure and advanced services to the Island."

"Jersey Telecom, for very many years, has been managed successfully not only as a public utility, but as a successful, commercial limited company. It has been able to, not only provide services which are at the forefront of technology, but for many years has made healthy profit, and simultaneously fund new services which have used the latest technology. This has benefited all sections of the community."

It was also noted that the Company's local approach and proximity to clients enabled it to respond quickly to the demands of its customers.

"Its proximity to its clients has enabled it to respond quickly and imaginatively to demands and expectations in its core market, and to anticipate technological changes."

However, we have also received comments that felt the Jersey Telecom would not be able to perform as competently in the future as it has in the past without access to technology, content and other such economies of scale. In the face of competition on the island with operators backed by larger telecom entities, it was felt that Jersey Telecom would derive tangible benefits from access to such economies of scale that it could in turn pass on to customers.

"Developments in technology, competition and investment has reached a stage where the Company on its own may not be able to sustain into the future its unique performance in Jersey without the economies of scale in research and investment, buying power and operational factors available to larger companies."

Overall, the responses received were broadly in agreement that Jersey Telecom would benefit from access to such scale economies.

Section 4: Jersey Telecom as a Strategic Investment

It is the view of the Minister that as the continued ownership of the shareholding in Jersey Telecom represents a risk that is inconsistent with the profile that he wishes to maintain for States investments, the shareholding in the company should be sold with the proceeds placed in the Strategic Reserve to be invested in a balanced portfolio of international equities and gilts.

Consideration of the extent to which the broader financial security of Jersey would be changed by transferring the States' investment in JT to a broader portfolio of assets, provided the main context for responses received.

The majority of observations recognised the size of financial investment that JT represents and therefore related to the need to ensure that the best risk / return balance is achieved for Jersey when considering a decision in respect of a potential sale.

In particular, a number of responses noted JT's profitable track record in providing income to the States in the form of annual dividends and tax receipts and the consequential requirement for the States to aim to ensure that the proceeds and reinvestment returns arising from a sale are equal to or exceed the current level of benefit.

"In 2005 the States received £1.95m in taxes and £7.1m in dividends. If Jersey Telecom is sold this reliable income will be lost. Currently there is no estimated value for Jersey telecom therefore it is difficult to tell whether the revenue from the sale would be enough to compensate for the permanent loss of returns."

While the Minister's duty to adopt the most appropriate risk/reward profile for States assets in the best interests of Jersey was broadly recognised, the importance of assessing a sale against a wider set of criteria than the pure maximisation of immediate returns for reinvestment was also noted by some respondents, including, in particular, the importance of the continuing prosperity of JT under private ownership.

"A decision to sell Jersey Telecom may seem like the best option within the limited context of the Minister's responsibility, but this should not exclude other social and economic factors from being considered."

In that respect a number of responses highlighted the importance of protecting the value of JT to the island's economy in the event of a sale by ensuring that it is not just sold to the highest bidder but that it also ends up in the best possible hands for the long term development of the business.

"This means not just selling the company to the highest bidder but ensuring that it has the best chance of prospering under new ownership and where possible maintaining a significant trading presence in Jersey."

A number of respondents also put forward specific views on the nature / composition of the States portfolio investment strategy and approach. These highlighted the importance of achieving an appropriate risk / reward profile through the effective diversification of its investment assets.

In the event of a sale and reinvestment of proceeds, respondents concurred with the Minister's view of achieving a balanced portfolio of international equities and gilts but also suggested that other types of asset class should not be ruled out.

"As far as investing the proceeds then agree a diversified (international) portfolio should be established whilst this should include global equities and gilts should not rule out asset classes such as investment grade bonds, commercial property funds and commodities."

In addition, the view was put forward that such a balanced approach should not also exclude investment in parts of the local economy provided such investments are genuinely of a long term and strategic nature.

Section 5: Employee Related Matters

5.1 Jersey Telecom Employees

The Discussion Paper highlights the quality of the employees, and recognises the employees as the prime reason for the success of Jersey Telecom in the market. There is also recognition that the continued success of JT will depend on retaining (and employing) the best employees - ensuring a high degree of job satisfaction, good working conditions and good terms and conditions of employment. Particular focus is made in relation to Pensions and TUPE - both of which are addressed further below.

In responses to the Discussion Paper, there is an almost unanimous endorsement of the comments regarding quality of employees, and comment that employee rights must be protected. There is also wide concern that privatisation is likely to bring redundancy.

"For many years the staff and management have performed a superb job in the provision of telecommunication services to the Public and business community of the island. In short that they can be regarded as "Crown Jewels" in the Public domain."

5.2 Pensions

In its consideration of employee related issues, the Discussion Paper specifically highlights the issue of pensions - highlighting the existing ring-fenced situation whereby employees of JT benefit from a Public Employees Contributory Pension Scheme (PECRS). Highlighting that the existing scheme is essentially fully funded, the Minister invites comment in relation to two issues:

- Whether, in the event of a sale, any new owner should be obliged to meet the current arrangements either
 by way of continued membership of PECRS or, if continuation is not possible, establishment of an identical
 scheme; and
- Whether respondents would be satisfied to see a reduction in the sale price to reflect the cost of placing such obligations on a purchaser of JT

In responding, there are numerous comments (many from employees or ex-employees) to the effect that the existing scheme should be retained, and that there would be considerable detriment caused to the employees by providing an alternate arrangement.

Most specific comments regarding the PECRS situation indicate some form of expectation that the existing arrangements will continue or at least similar benefits will be maintained, and there is broad consensus that a

purchaser should be obliged to commit to ongoing arrangements.

"I do feel that a pension scheme should be carried on as part of a sale agreement. This will affect the sale price, but is an obligation. The question of other obligations could include a minimum time span for the new employment."

As regards the question of whether respondents would be prepared to see a reduction in the sale price to reflect the cost of placing pension obligations on a purchaser, there are few comments on the subject. Where specific comment is made, there are some quite strong views to the effect that there should be no price reduction:

"It is probably inevitable that some redundancies will occur as a result of the disposal and the Minister can do his best to minimise this by selecting the right long term buyer rather than writing onerous conditions into the sale agreement."

A number of respondents express an ambivalent or "undecided" view. Against this should be considered the general view (expressed above) that respondents believe a purchaser should be responsible for pensions - which suggests that there is an over-riding expectation that the cost should be borne by the purchaser.

By way of additional background, it should be noted that, on 7 November 2006, the States adopted an amendment to the legislative framework under which PECRS is established (the Public Employees (Retirement)(Jersey) Law 1967). The amendment, which is expected to be brought into force by the States in 2007, will give additional flexibility to the States to adopt regulations in respect of the parts of PECRS which relate to persons not employed directly by the States, such as JT employees. It is planed that these will include a provision which would allow the employees of a privatised JT to continue to participate within the PECRS.

5.3 TUPE Obligations

The Discussion Paper seeks views on whether respondents believe that any minimum set of employee-related obligations should be considered as part of any future negotiations, highlighting that Jersey does not have any TUPE-style regulations currently in place to transfer employees from one employer to another.

The overall view <u>from respondents</u> is that <u>employees should have their contractual terms respected and that TUPE-style regulation is considered highly recommended. In most cases <u>respondents consider</u> that it should be adopted pre-privatisation of Jersey Telecom:</u>

"It is unfortunate that there is as yet no protection in law for the terms and conditions of employees involved in any transfer of ownership of Jersey Telecom."

Certain respondents do not see the need to delay the privatisation process for the adoption of TUPE-style legislation. The Minister's view, shared by certain respondents, is that, as part of the privatisation process, protection to address the perceived concerns regarding the absence of TUPE-style regulation can and should be dealt with fully as part of contractual arrangements with the successful purchaser.

Certain respondents consider that, in any event, the employees of JT are of sufficient quality to prosper in a free

market environment without special protection:

"In the twenty first century there is absolutely no reason for this telecommunications service to be provided by a government."

_

In commenting on the need for TUPE-style regulations, it would appear that there is some misunderstanding as to the effect of TUPE. Any privatisation is likely to take the form of a share sale and therefore would fall outside the scope of TUPE (were it to apply in Jersey in the same manner as in the UK), as any purchaser would acquire JT subject to all existing contractual arrangements, including employee contracts.

_

The Minister recognises that the absence of TUPE-style regulations may be relevant if, following privatisation, the successful purchaser were to transfer part of the business currently employing JT employees. In this scenario, employees would be protected by existing Jersey employment law (in relation to redundancy procedures and unfair dismissal) but, depending on the circumstances, the existing terms and conditions of such employees would not automatically transfer on the same terms and conditions.

The Minister, on behalf of the States, will therefore obtain appropriate contractual protection in the transaction documentation to require the transfer of any such affected employees on such terms and conditions as would be provided for under TUPE-style regulations, and will also seek to amend the terms of employment of Jersey Telecom's employees in advance of any sale to provide direct contractual protection for such employees in anticipation of TUPE-style regulations being introduced in due course

Following propositions lodged by Senator B E Shenton on 26 September 2006, the States have unanimously adopted the proposal to adopt TUPE-style regulations but rejected the deferral of the sale of all public utilities (including Jersey Telecom) until such protection is in place.

In presenting comments to the States on the above proposition, the Minister for Social Security noted that the Employment Forum commenced a consultation process on the introduction of TUPE-style legislation which ended on 11 August 2006 and would finalise its recommendation before the end of 2006. After consideration of the Employment Forum's recommendation, the Minister would prepare a proposition for the States outlining the principles to be adopted. It is anticipated that a draft law might be presented to the States during 2008.

Section 6: Maximising the Returns

6.1 Sale Process

The Minister's view is that best value will be obtained by the States authorising him to enter into binding agreements for the sale of Jersey Telecom through a transparent sale process and clear criteria agreed by the States.

A number of respondents raised the concern that consideration of the sale process should not be rushed, with the completion of public consultation and a full States debate taking place prior to a sale process starting.

"I believe that there should be a full States debate prior to any decision and that the Minister is being overly hasty in his desire to affect a "quick" sale."

In this respect, the Minister is satisfied that the consultation process has enabled the views and opinions of all stakeholders who wish to make them heard to do so in order that they may be duly considered. In addition it is planned that the detailed proposition will be lodged for full review within a States debate and that the commencement of a sale process will be subject to a full States decision to proceed.

In respect of Ministerial authority to enter into a binding agreement, a few respondents however felt that no single individual can be responsible for the any part of the sale, which should be a States decision.

"It should not indeed, never be the Minister who has sole control when it comes to any part of this sale...It should be a full States house decision."

One respondent also highlighted this view citing that as any such decision might set a potential precedent for future sales of States assets, it should be taken by the full assembly. Others, however, noted that full States involvement in the negotiation process would neither be viable nor in the interests of Jersey.

"It will clearly not be to the advantage of JT, its employees or tax payers if the sale is being negotiated in public by 53 participants on the vendor's side."

In addressing the requirement to reconcile the need to maximise value through bilateral negotiation with potential investors on the one hand, with full States involvement in deciding the process on the other, most respondents agreed with the Minister's view that the States debate and vote on the proposition lodged by the Minister should set the detailed objectives, parameters and terms for his negotiations. In that way, it was suggested, the Minister would act on behalf of the States on the basis of a clearly defined mandate.

"We would agree that the way to obtain the best value would be for the Minister, with due specialist advice and support, to be empowered to enter into binding agreements which are not contingent on a States debate. The key to this is a clear set of parameters which should be debated and agreed in the States."

6.2 Form of Sale

In the Discussion Paper, the Minister expressed a preference for a trade sale, being the sale to another telecommunications operator, over other forms of sale, such as an IPO or a sale to investors.

Many responses were received in support of a trade sale as the best option.

"In choosing between potential buyers, the States should ensure Jersey Telecom's ability to provide the Island with continuing world-class telecommunications facilities is enhanced – in short, that the buyer should bring more than just money to the table."

In certain instances, preferences were expressed with regards to the identity of the telecoms operator. There were mixed views about whether a larger telecoms operator would be best suited to ensuring the long term development of Jersey Telecom's infrastructure and protecting Jersey's consumers.

"A large company worth billions could easily not invest in the infrastructure."

There were other opinions that only certain large operators would be able to increase the efficiency of Jersey Telecom and enable Jersey Telecom to benefit from the economies of scale.

In addition, responses were received that the sale of Jersey Telecom to investors was a viable, although to some a less attractive option for the reasons described above.

There were voices that called for a "local solution" and believed that the sale of Jersey Telecom to a group of local investors or to Jersey Telecom employees should be explored. Another alternative that the Minister was urged to consider was the flotation of Jersey Telecoms on the Channel Islands Stock Exchange.

"Rather than selling Jersey Telecom to a global telecom provider the interests of stakeholders would be better served by retaining majority local ownership in a commercial environment."

In addition, the Minister received several requests to investigate a possible break up of Jersey Telecom and the sale of the various business subsidiaries separately and at the same time several expressions against the notion. It is unclear at this stage that a break up of Jersey Telecom would bring tangible benefits outweighing potential risks. The Minister is grateful of all respondents views and can confirm he is reviewing all these options in the preparation of his proposition.

6.3 Size of Stake to be Sold

In his Discussion Paper, the Minister stated his opinion that a sale of the States entire stake would be the preferred option as it will maximize the value that can be obtained from the disposal of Jersey Telecom and involves a clear and transparent way forward.

There were several responses that were in agreement with the Minister's views for the entire stake to be sold for the same reasons cited by the Minister.

"A partial sale would only be beneficial to the shareholder if it were to be the case that some significant restructuring would lead to a substantial increase in value over time. Additionally, because the regulatory

environment is advanced and competition is intense, the future value of the Jersey-based revenues is increasingly under threat and the maintenance of a partial shareholding in the Company will not lead to any change in that position. "

There were also responses that believed the States should retain a majority (51%) stake in Jersey Telecom. These people believed that it would be beneficial for the States to retain some control of an important asset and service.

"I ask that a partial sale be considered so that Jersey is able to retain some control on its telecoms infrastructure and services, and ultimately, be able to protect the terms and conditions of the local people it employs."

There were several advocates for a "golden share" to be retained by the States. Such an arrangement would enable the States, despite not having any economic ownership, to veto any decision by Jersey Telecom which it felt contravened the strategic interests of the States. The feasibility and implications of such an arrangement are under consideration by the Minister in the preparation of his proposition.

Annex 2: Structural Separation

- **A2.1** Background to the Discussion on Structural Separation
- **A2.2** Views on Structural Separation
- **A2.3** Experience of Other Incumbent Operators
- **A2.4** Analysys Perspectives on structural separation
- **A2.5** Jersey Competition Regulatory Authority
- **A2.6** Jersey Telecom Representations on Structural Separation

A2.1 Background to the Discussion on Structural Separation

Understanding that the sale of Jersey Telecom could potentially have major implications for Jersey's telecommunications market and for the economy of the Island, the Minister for Economic Development, wrote to the JCRA on 2nd October 2006, requesting advice regarding a structure for Jersey Telecom, in the event of any sale, that would promote competition and thereby economic growth.

Due consideration and analysis was given to the prospect of structural separation of Jersey Telecom by several parties: the JCRA, Jersey Telecom, the Chief Minister's Economic Advisor, and the telecom consultants Analysys advising the Minister. These reports of the various parties have been included in Annexes A2.4, A2.5, A2.6 and A3.1 of this document.

Structural separation can take place along many boundaries, for instance, between the fixed line and mobile businesses, between the businesses in Jersey and Guernsey or between the wholesale and retail businesses.

In the JCRA report, the JCRA states that it is satisfied with the level of competition in the mobile sector and the objective of any form of structural separation contemplated would be to promote competition in the retail segment of the fixed line telecoms market.

Hence, the scope of any discussion on structural separation in this report relates to separation of the wholesale and retail fixed line services of Jersey Telecom to bring about increased competition in the retail of fixed line services.

The theory behind structural separation is as follows. Facilities/infrastructure-based competition (i.e. competing networks) and to a certain extent access-based competition (i.e. leased lines from a dominant network operator, otherwise known as local loop unbundling (ULL)) are not viewed by the JCRA to be sustainable forms of fixed line competition in the long run owing to the economics of rolling out multiple networks on a small island. The alternative is hence to operate a single network in Jersey, and to provide wholesale access to the network to all retail operators. Currently, Jersey Telecom is the network operator and already provides wholesale access to other retail operators. However, this gives rise to a conflict of interest as in the retail market, Jersey Telecom acts as both a supplier and a competitor. It is argued that structural separation of the wholesale and retail businesses of Jersey Telecom would align the incentives of the wholesale business to deal with any retail operator on exactly the same terms.

A2.2 Views on Structural Separation

The views of the JCRA, Jersey Telecom, the Chief Minister's Economic Advisor together with extracts from their comments have been noted and summarised in this section.

The JCRA explores forms of structural separation as possible regulatory solutions and the benefits of structural separation to the telecoms market and economy. The main benefit of structural separation is that it removes the incentives for the incumbent network provider to discriminate in favour of its own downstream retail business and against other retail providers.

The monopoly network provider will thus be incentivised to maximise profits through the provision of wholesale services to all retail operators equally. In this process, the JCRA believes the monopoly network provider will be incentivised to invest in network capacity to cater for the increased demand in downstream markets brought about by intensified retail competition, rather than restrict network capacity.

With the removal of the incentive to discriminate in the retail market, the need for regulation designed to prevent such conduct can be expected to decrease, allowing for a lighter-handed form of regulation in this regard.

The JCRA also acknowledges that operational and structural separation would both incur ongoing economic costs. The primary disadvantage of structural separation is the loss of economies of scope that currently derive from vertical integration such as efficiency of information flow, reduced transaction costs within a single business entity and centralised corporate and other functions.

The loss of synchronisation of demand and supply for telecommunication services, through the loss of direct communication between retailers who have greater understanding of customer requirements and the wholesale network provider supplying the services, may result from structural separation. In addition, the welfare enhancing effects of efficiently pricing assess to networks (such as peak-load pricing and differentiation between different classes of customers and demand) may diminish given that lower transparency under a separated structure would reduce the ability to price differentiate.

In addition to the loss of any economies of scope, vertical separation may involved a substantial one-time cost associated with the break-up of the integrated firm. This cost would also need to be considered in the cost-benefit trade-off associated with separation.

Whilst JCRA's approach to evaluating structural separation may be considered philosophical and conceptual, and focussed on the overall impact on competition and the economy, Jersey Telecom, in presenting their views on the subject, sought to address, at a more practical level, the costs, feasibility and implications of implementing structural separation on Jersey Telecom and the wider market.

Jersey Telecom currently operates as a single entity, Jersey Telecom Limited, in Jersey with no separation between the various business segments at an organisational level. Its fixed and mobile networks are co-located (e.g. duct and trench sharing between transmission and access networks, transmission network sharing between fixed and mobile operations) and many services are provided through shared divisions within Jersey Telecom (e.g. IT, billing, call centres and network maintenance). The existing sharing of business functions would lead to significant one-off separation costs.

Structural separation would entail significant duplication of network and business functions resulting in significant ongoing diseconomies of scale and scope. The duplication of staff required in the various functions would make recruiting scarce talent all the more difficult due to the limited pool of people with the relevant experience. Furthermore, the number of transactions between the separated entities (e.g. supplier and vendor contracts and invoices, inter-company transactions and customer redirection) would increase the cost of doing business.

Jersey Telecom also argues that there is little evidence that structural separation would reduce the cost of

regulation. Given the existence of a dominant operator, it is likely that regulation of the retail market would still be required to ensure healthy and sustained competition, as regulatory measures favouring new entrants will likely continue and require active supervision. Moreover, structural separation does not remove the requirement or cost of regulating the network facilities.

Stephen B. Pociask, in his paper "Structural Separation of BellSouth Telecommunications and its Effects on Florida Consumers", estimated that a separated wholesale operator in Florida would need to raise wholesale prices by over 45% to make a modest rate of return and if costs were passed to end consumers, retail prices would increase by at least 11%. Given the size of Jersey, the ongoing costs of implementing structural separation is likely to be much greater.

The Organisation for Economic Co-operation and Development (OECD) has strongly advocated careful cost benefit analysis and informed decision making with regards the subject, emphasising that there is inadequate evidence to be comfortable that separation would enhance competition to a degree necessary to justify the cost. Consequently, the OECD concluded that the more sensible option would be to persevere while making improvements to the current regulatory approach, backed by sanctions to deal with anti-competitive behaviour.

Jersey Telecom is strongly of the view that structural separation should only be considered as a last resort. A decision to implement structural reform is a highly burdensome and significant obligation that will have far-reaching and irreversible consequences and as such, should not be taken lightly.

The JCRA, whilst arguing that a optimally structured Jersey Telecom would aid the competitive landscape, refrains from recommending any particular option for the structure of Jersey Telecom. However, it points towards the version of structural separation employed in Faroe Island.

The Chief Minister's Economic Advisor, having considered the views of various parties, including the JCRA and Jersey Telecom, concludes that there is little evidence to suggest the benefits from structurally separating Jersey Telecom would outweigh the costs. The scale of potential benefits – additional competition and reduced regulation – are less certain, whilst the cost of lost of efficiencies and costs of effecting a break-up are clearer. The Economic Advisor believes that the Faroe Island precedent is of limited relevance given the different nature and size of the economy and telecoms industry. The Chief Minister's Economic Advisor's recommendation is thus to pursue a sale of Jersey Telecom as a single entity.

A2.3 Experience of Other Incumbent Operators

In order to encourage competition in the telecommunications market, Faroese Telecom, the incumbent telecoms operator on Faroe Island, was restructured into three parts – a holding company, a network company and a service company after lengthy debate between the regulator, Faroese Telecom, the new entrants and the Ministry. This was considered largely a pre-emptive move rather than in response to specific issues. The network company is focussed on supplying infrastructure to the service company and its competitors on the same basis. To achieve this Chinese walls separate the two divisions. However it should be noted that in terms of governance, the Boards of the holding company, the service company and the network company are made up of the same people.

The cost of the separation of Faroese Telecom is estimated to have been around £500,000 to date, although further costs may be incurred (both companies still co-locate in the same building for the time being). There is very limited investment in fixed line infrastructure by the main competitor and competition is solely on price and pricing structures. This is despite the fact that the main competitor has achieved a 20-30% market share in fixed line services and operates a mobile network. It should be noted that Faroese Telecom remains as one entity owned by the Faroese government and the implications of such separation on a potential sale have not been accessed.

Owing to the uncertainties involved in structural separation, operators have gone to great lengths and undertaken significant remedies to avoid the prospect of structural separation.

For instance, BT agreed to significant undertakings including the voluntary operational separation of its wholesale and retail divisions to pre-empt possible regulatory recommendation to structurally separate the wholesale business. The creation of the wholesale division cost £70m. Results of the separation to date have been mixed – implementation issues included less efficient customer service levels at BT, and the Openreach wholesale division encountering a lack of technically skilled staff. Residential customers were presented with lower cost bundled products and faster broadband speeds, driven in part by deeper infrastructure investment, but businesses experienced difficulty in comparing offerings and in switching suppliers for advanced data services. BT continues to work closely with the regulator, the Office of Communications ("OfCom"), in meeting its obligations.

In Australia, discussions on the structural separation of Telstra began in 2003 and amidst much public debate. Telstra estimated that the process would have an estimated one-off cost of AUD 2 billion (equivalent t £1 billion). This estimate included the cost of development of certain duplicate operational support systems to enable structural separation costing, which added between AUD400-500m. Telstra further estimated that the incremental ongoing operating costs would be of the order of AUD 80 million per annum. A substantial obstacle to the structural separation of Telstra would have been compensating the existing shareholders of Telstra. Consequently, in 2006, Telstra announced a voluntary Operational Separation Plan, similar to that implemented by BT.

In August 2006, Telecom New Zealand announced plans to voluntarily separate its wholesale and retail businesses, again along lines similar to BT's separation. Telecom New Zealand expects that the transition to the new operating model to incur costs of £70 million. This cost is equivalent to that estimated by BT, however, in the case of Telecom New Zealand, this amount represents over 35% of its annual capital expenditure budget.

There is an exception in Ireland, where the incumbent operator, eircom, under private ownership by Babcock & Brown, is considering structural separation, mainly for financing reasons. The key motivation for undertaking the separation is to use proceeds from the disposal of the retail arm to pay off part of the debt burden of the network business. It would also be easier to raise financing on the retained network business owing to its stable and predictable cash flow. 94% of eircom's shareholders voted in support of a potential separation, under which eircom's employee share ownership trust would take control of the retail division and the network infrastructure would be put into a Babcock fund. The process is still ongoing and at an exploratory stage.

A2.4 Analysys – Perspectives on structural separation

rspectives on structural separation

Final Report for Treasury and Resources Department, Jersey



Perspectives on structural separation

> 16 February 2007 Our ref: 243-464

Analysys Consulting Limited, 20-23 Greville Street, London. EC IN 8SS



Contents

1	Introduction	2
2	Perspectives on structural separation	3
2.1	General Perspectives	3
2.2	Operator perspectives on structural separation	6
2,3	Regulatory perspectives on structural separation	9
2.4	Market perspectives on structural separation	11
3	Structural separation in the context of Jersey Telecom	13

Annexes



Introduction

We have undertaken an initial review of Jersey Telecom, and this document provides preliminary recommendations on potential future ownership options that might be open to Jersey Telecom, including consideration of the option of structural separation. Our work in this preliminary phase has been based on meetings with the management of Jersey Telecom, and consideration of high-level operating and financial information that Jersey Telecom has provided us with.

We have interviewed Jersey Telecom's management team and gained an understanding of Jersey Telecom's plans and strategies in areas including marketing and distribution, products and services, network coverage and performance.

This document summarises our findings, and, in particular, includes:

- an outline of the principles underlying the concept of structural separation of an incumbent telecommunications operator;
- a discussion of structural separation, and operator, regulator and market perspectives on structural separation;
- a discussion of structural separation in the context of Jersey Telecom;
- · annexes that detail examples of vertical, horizontal and geographic separation.



2 Perspectives on structural separation

2.1 General Perspectives

Introduction

There are varying degrees of separation that have been implemented (either by the national regulatory authority (NRA), or voluntarily by the incumbent operator). These range from accounting separation - the least intrusive form of separation to structural or ownership separation, which is the most radical form of separation. Between these two forms of separation is operational separation, under which the wholesale division is operated separately, however the company retains ownership of both its network and retail businesses. Operational separation within the existing corporate structure is less controversial than structural separation. These types of separation are outlined in Exhibit 1.



	Accounting separation	Operational separation	Ownership separation
Description	Production of accounting information	Separate wholesale unit	Requires the splitting of the telecom company into two separate companies
	Information disclosure on performance of	Company retains ownership of both its	
	regulated services vs retail performance	network and retail businesses.	Separation ownership of wholesale and retail
	Provision of information enables effective monitoring of the	ion Clear rules on how the two parts of the business interact (e.g. "Chinese walls", "arms- length" basis, and non- discriminatory service delivery)	operations - separate CEOs and separate boards
	company		Prohibition on retailing by wholesale operation
		Independent monitoring	
Examples	Telstra (Australia), TeleDanmark (Denmark), Finland, Ceofetel (Mexico), Telenor (Norway), Telefonica (Spain), Switzerland	BT Telecom New Zealand	Rochester Telecom (USA)
			Faroese Telecom

Exhibit 1: Types of separation [Source: Analysys]

In the following sections, we discuss three types of structural separation:

- Vertical Separation: the separation for wholesale and retail businesses.
- · Horizontal separation: the separation of businesses along service lines, for instance into separate mobile and fixed operating units.
- Geographic separation: the separation of a company on the basis of geographic locations.



Vertical separation

The vertical structural separation of incumbent telecoms providers to date has typically been driven by regulatory concerns and either imposed by regulators, or introduced by incumbents attempting to pre-empt regulation.

A vertically integrated incumbent telecoms operator may be viewed as having significant competitive advantages, arising in large part from a monopoly in the local loop, enabling that operator to leverage its dominance into retail services. Such advantages are usually considered as being anti-competitive, and as being to the detriment of the overall functioning of the telecoms market

From a regulatory perspective, the main purpose of structural separation is to remove behavioural obstacles to competition. Structurally separating retail and wholesale businesses is a way of splitting an organisation into separate, functionally independent business units.

A regulator's intent when enforcing structural separation is typically to:

- encourage telecoms service providers to take up the incumbent telecoms operator's wholesale access network services, particularly LLU
- increase competition in the wholesale telecoms market due to service providers repackaging the incumbent's wholesale access network services.

However, as stated in the Hogan & Hartson and Analysys's recent paper' for the EU, structural separation should be considered as a remedy of last resort for national regulatory authorities in ex ante regulation, due to the inherent complexities of such a transformation.

Horizontal separation

Horizontal structural separation (for instance when a fixed operator divests its interest in a mobile division), however, has typically been driven by operators either looking to refocus

[&]quot;Preparing the Next Steps in Regulation of Electronic Communications" (Hogan & Hartson and Analysys).



business operations, or to raise cash. An exception to this general trend is in Italy where the regulator has restricted the roll-out of fixed-mobile converged (FMC) products, on the basis that Telecom Italia (TI)'s FMC plans amounted to anti-competitive behaviour, since no other operator was in a position to compete with TI's FMC offering.

Geographic Separation

Geographic structural separation is a much more commonplace occurrence, generally driven by commercial priorities and generally taking place at an international level.

The one example of geographic separation at national level is American Telephone & Telegraph (AT&T), where AT&T agreed to divest the Regional Bell Operating Companies (RBOCs) in return for opportunities to participate in the emerging internet services market.

2.2 Operator perspectives on structural separation

Advantages

Despite the fact that operators usually consider structural separation either because they have been required to do so by a regulator, or to pre-empt such a request, there are a number of potential benefits to operators for undergoing some form of structural separation.

The Irish incumbent, eircom, recently purchased by private equity fund Babcock & Brown is currently considering a voluntary vertical structural separation which would result in eircom's employee share ownership trust taking control of the retail business whilst the network infrastructure would be placed in a Babcock & Brown fund. Such a separation has the benefits of separating the potentially high growth retail divisions from the more stable and cash-generative wholesale divisions, and increasing the overall value of the entity by better matching assets with investors.



By mandating that the wholesale organisation needs to be separate to that of the retail arm, it allows the management of a structurally separated incumbent to focus on the wholesale portion without the need to consider the impact of its policies on the retail division, and which should theoretically improve efficiencies.

In addition, in exchange for adopting structural separation, incumbents could potentially negotiate with regulators and seek greater regulatory freedom on their retail-only operations.

Lastly, it should be noted that an incumbent that voluntarily undergoes a degree of vertical structural separation may avoid, or at least delay, a more comprehensive level of structural separation that could otherwise potentially be imposed by the relevant regulator.

The main benefit of horizontal structural separation to an operator is the generation of short-term cash to fund growth and product and service development, additionally, a horizontally separated company will enable both management teams to focus more on each of the separated entities.

Additionally, in many markets, an incumbent that divests itself of a mobile business can expect to be able to re-enter the market for mobile service provision either via an MVNO, or the purchase of a smaller mobile operator. In some circumstances, this approach may enable the divesting incumbent to increase overall returns, mainly by leveraging the crossselling of mobile services to currently existing fixed customers. However, the incumbent may subsequently be limited in the range of services it can offer and may not be able to lead the market in offering FMC services.

The advantages of geographic separation to operators are well known, and include, amongst other things:

- efficiencies of management time
- alignment with corporate strategy
- divestiture of unwanted exposures, or operational problems
- cash generation.



Disadvantages

The disadvantages to an incumbent operator of structural separation can be significant.

Probably the most significant disadvantage to an incumbent of vertically separating is the cost:

- · the creation of BT Openreach (an operational separation only) in 2006 cost GBP70 million, and a full separation could be expected to cost more
- Telstra estimated that full structural separation would cost an estimated AUD2 billion in 2003, and would require an annual incremental operating cost of AUD80 million per
- in August 2006, TCNZ estimated that creating an operational separation along the lines of BT Openreach would have cost TCNZ GBP70 million, which amounts to 35% of TCNZ's annual capital expenditure budget.

Many of the implementation costs of structural separation are well understood. These costs include: branding (stationary, vehicles etc); buildings; communications (advertising, PR/media relations, website etc); financial and management reporting systems; hardware and software; information systems; legal; office equipment; recruitment; and transition planning.

Other disadvantages include:

- loss of scale
- the organisational inefficiencies implied in implementing and managing Chinese walls within an organisation
- reduced scale and ability to move resources within the business
- reduced flexibility: once an incumbent has divested itself of an asset, it can be difficult to gain access to any experience, or capabilities, that have been divested.

Lastly, it should be noted that although BT received two bids for its wholesale business (Earthlease in 2001, offering GBP8 billion or BT's local loops, and West-Deutsche Landesbank in offering GBP18 billion for BT's entire fixed network), BT accepted neither offer. This may be seen simply as a failure to agree commercial terms, but could also be



regarded as a measure of the value that BT places on control of its supporting facilities either directly, or due to the perceived risks to its' retail businesses should supporting network infrastructure service levels fall.

2.3 Regulatory perspectives on structural separation

Advantages

From a regulatory perspective, arguments for vertical structural separation of the local loop are based on the premise that it removes the incumbent's behavioural opposition to competition, resulting in increased competition levels and in turn promoting innovation. It does this by forcing the incumbent's wholesale arm to deal with its retail arm on a nondiscriminatory basis, i.e. on the same terms that it deals with any other retail competitor.

Structurally separating the incumbent's operations in this way allows the regulator to focus on the wholesale network to guarantee service quality, network reliability, and access to essential network facilities at cost-based prices. In particular, structural separation helps to eliminate cross-subsidization from the access revenues to the retail prices.

Some commentators view vertical structural separation as the most efficient tool to ensure local competition where a large incumbent monopoly controls the market. In addition, a number of proponents of structural separation suggest that it will ease the burden of regulation because the change in incentives decreases the requirement for government oversight.

Disadvantages

Several organisations and commentators have identified several potential and claimed costs to structural separation.

The process of splitting an integrated telecoms operator is likely to be difficult. There is no guarantee that the separation will result in the desired regulatory outcome. It can also be



argued that structural separation will result in a loss of efficiency due to a reduction in economies of scale and scope, which may lead to an increase in prices. Additionally, regulating a structurally separated incumbent may be no less resource intensive, nor cheaper, than regulating a vertically integrated operator.

Organisations across the world - including UK regulator Ofcom, the US Federal Communications Commission (FCC), the Organization for Economic Cooperation and Development (OECD) and the New Zealand Ministry for Economic Development (MED) - have noted that the case for structural separation is hard to prove. In its Strategic Review of Telecommunications document, the UK regulator, Ofcom, concludes that the arguments in favour of and against structural separation are "finely balanced", while practical considerations suggest that it may be wise to avoid the cost and disruption of a break-up.

The general view, as confirmed by two recent OECD reports23, is that complete structural separation is rarely justified in the communications sector - the OECD's 2003 report concluded: "Vertical separation is a significant intervention in the marketplace, with substantial and – unlike behavioural regulation which can be reversed – irreversible costs. It should not be undertaken lightly. Seemingly simple in concept, structural separation of the local loop is in practice complex with uncertain outcomes and many questions to be answered. The benefits of structural separation of the local loop are uncertain while the costs are certain and appear potentially large. There is little evidence that the benefits of structural separation of the local loop are sufficiently in excess of costs." This view is also shared by the EU.4

The MED shares the view that there are material risks involved with implementing structural separation. The MED in its 28 April 2006 Stock-take paper concluded: "In view of the likely costs relative to the benefits in a small market like New Zealand, ownership or operational separation may not be the preferred solution where behavioural modifications can be achieved by less intrusive interventions".

[&]quot;Impact Assessment" Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions (28 June 2006).



[&]quot;The Benefits and Costs of Structural Separation of the Local Loop" Working Party on Telecommunication and Information Services Policies, OECD (03 November 2003).

[&]quot;Structural Separation in Regulated Industries". OECD (10 April 2001).

Ofcom believes that there is no evidence that operational separation has resulted in an increase in take-up of broadband services in the UK.

Other economists have emphasised the case against structural separation, for example, Crandall and Sidak in their 2002 paper⁵ state: "Mandatory structural separation is unnecessary because the putative benefits that it would produce are in fact non-existent. No malady exists for mandatory structural separation to cure. Mandatory structural separation, however, would clearly impose substantial costs on the ILECs [Incumbent Local exchange Carriers]. Because those costs are unnecessary to advance any public interest objective, they are also social costs - a waste of economic resources."

Lastly, a move to implement vertical structural separation may actually distract from the overall aim of such an initiative - regulator effort and incumbent management time may be more effectively spent addressing the perceived competitive barriers that structural separation is intended to resolve.

2.4 Market perspectives on structural separation

Advantages

From a market perspective, vertical structural separation (whether in accounting, operational or ownership form) is generally seen as being beneficial to competition, since an incumbent operator that is free to leverage a local-loop (near-) monopoly into a retail advantage does so to the detriment of competitors.

A consequence of this increased level of competition is that overall service levels tend to increase in related markets, and prices tend to decrease. These two factors can combine to produce an overall competitive advantage for economies that efficiently structurally separate the operations of incumbent operators.

[&]quot;Is Structural Separation of Incumbent Local Exchange Carriers Necessary for Competition?" Robert W. Crandall and J. Gregory



Disadvantages

There are also a number of potential disadvantages to structural separation.

Once an incumbent has undergone vertical structural separation then, initially at least, there is a risk of operational inefficiencies affecting service levels throughout the telecommunications market, due to the complexities inherent in splitting up work functions, processes and systems.

Particularly initially, the service provided to customers may be less efficient and less coordinated, at least until adequate support systems are in place and running efficiently.



3 Structural separation in the context of Jersey Telecom

In this section, we discuss the feasibility of structural separation in the case of Jersey Telecom. We focus particularly on the most extreme form of structural separation, that of separation of ownership, since this is the form of structural separation that is most relevant to the current discussions regarding the privatisation of Jersey Telecom. It should be noted that Jersey Telecom already has obligations to produce detailed separated accounts providing the regulator with the ability to identify potential uncompetitive cross subsidies between retail and wholesale services.

Our overall conclusion is that whilst various forms of structural separation could be implemented any form of structural separation is likely to incur significant costs and inefficiencies. Moreover there is significant uncertainty as to whether any of the potential benefits are significant enough to outweigh these costs and inefficiencies.

In the following sections, we discuss each of the alternative approaches to structural separation in turn.

Vertical structural separation

The most significant obstacle to implementing a vertical separation of Jersey Telecom will be the required organisational change and the cost of that change.



It is not clear what the overall benefits of such an approach would be, since JT is currently required to offer all services at wholesale level, and, thus far, there has been little market interest in such services.

It should be noted that vertical structural separation in terms of changed ownership of either wholesale or retail divisions has not yet happened, and several incumbent operators have gone to substantial lengths to avoid such an eventuality.

Horizontal structural separation

The main difficulty with a potential horizontal separation of Jersey Telecom into separate fixed and mobile lines of business is the degree to which the networks supporting these services are shared and/or co-located. The difficulty arises due to the need to either:

- · Implement a second distribution network to support either the fixed or the mobile business. It is expected that it would be both cheaper, and simpler, to migrate the existing mobile services to the new network, than it would be to migrate fixed services.
- Allow engineers from both fixed and mobile operators to access shared facilities, in terms of shared ducts and shared equipment rooms. There are clear commercial issues and risks inherent in allowing competing organisations access to network support elements.

It should be noted that such a structural separation of ownership would run counter to the wider trend for closer integration within the telecoms industry.

Hybrid vertical and horizontal structural separation

Alternatively, it may be possible to combine elements of both vertical and horizontal separation to enable, for instance, the separation of a retail mobile business from a combined fixed retail and wholesale business.



Such a separation would probably be easier to implement than either a full horizontal or vertical separation. However, the separated retail business would be heavily dependent on the regulator of the States of Jersey to set fair rates for wholesale capacity.

An additional benefit would be that the separated retail entity would be able to incrementally invest in proprietary facilities to lower its cost base as and when such opportunities arise.

Due to the costs inherent in duplicating systems to support a separated mobile business, if such an option was offered to potential investors in Jersey Telecom, then it may be that an overseas mobile group would purchase simply Jersey Telecom's mobile customers and base station locations and equipment, rebuilding a Jersey operation as an extension of existing overseas operations.

It should be noted that this type of structural separation has not yet been implemented anywhere, and runs contrary to wider industry trends towards fixed-mobile integration and/ or convergence

Geographic separation

Geographic separation is probably the easiest way to structurally separate Jersey Telecom. However, such a separation would result in the duplication in Guernsey of a number of functions that are currently located centrally in Jersey, including:

- BSCs
- switch equipment
- NMC
- call centres
- billing
- administrative and governance functions.

As discussed earlier, geographic structural separation at an 'international' level is widespread and commonplace, however, such transactions have generally concerned



'standalone' businesses, rather than businesses that are as integrated as Jersey Telecom's operations in Jersey and Guernsey.

In fact, JT management believe that their Guemsey operations would become unviable, if it were to be necessary to replicate switch and other equipment and personnel in Guernsey. C&W and Bharti both follow the same model: serving the Channel Islands as a combined

'International' separation

From an operational perspective, Jersey Telecom's shares in the international facilities landing in the Channel Islands could be separated and sold separately. However, commercially, this may not be a viable option:

- · It will be very hard to place a value on Jersey Telecom's share of international facilities, since the traffic flowing over these facilities is heavily influenced by Jersey Telecom's own business. Additionally, some of the contracts for operating these links are unattractive in that they do not allow for services to be upgraded without the agreement of all owners.
- · Jersey Telecom's retail business could potentially be unacceptably exposed to faults in international connectivity, unless Jersey Telecom purchases significant amounts of redundant capacity for backup purposes, which would to some extent offset the gains made by selling the international business.

Alternative approaches to dividing the business

Alternatively, it would be possible to structurally separate out the remaining lines of business:

· GSM on ships (Navitas) could be sold, if not as an Intellectual Property right (IPR), then the existing contracts could be sold to a competitor in the market. The service currently relies heavily on Jersey Telecom's interconnect agreements, but



any other mobile operator could provide this capability. Alternatively, the line of business could be operated as a separate entity, purchasing wholesale capacity from Jersey Telecom.

- · Bulk SMS could be sold by Jersey Telecom, but it is unlikely that there would be any value in such a move. Almost any existing mobile operator could operate a similar service, and there are no barriers to entry or IPRs that would prevent other operators entering this line of business.
- · Low cost roaming could potentially be sold as an IPR, if a buyer could be found, since there are considerable risks to the future cashflows of such a business, due to vulnerabilities to regulatory change or retaliatory actions by operators.



Annex A: International examples of vertical separation of retail and wholesale operations

A.1 United Kingdom - BT^e

In order to avoid full structural separation, BT announced an operational separation restructuring plan under which it would voluntarily separate parts of its wholesale division from its retail division. Ofcom initially opposed BT's proposal but later agreed to allow it to proceed.

Following discussions with Ofcom, BT agreed to adopt the following main changes in its wholesale business practices:

- · The establishment of a separate wholesale division (now known as BT Openreach).
- The establishment of proper procedures to effectively split the Access Services
 division and other divisions this includes the separate disclosure of results, separate
 headquarter team accommodation, separate operational support systems, code of
 practice specific guidance for Openreach, and no group element to pay plans.
- BT's wholesale services must be supplied on a non-discriminatory basis between BT and third-party competitors. BT also undertook to offer price stability between its ULL and IPStream services

⁶ Openreach (2005). A new era of regulation. 22 September 2005. Available at www.btplc.com.



- BT's planned 21st Century Network must be offered on an non-discriminatory basis to both BT retail and third-party competitors.
- A new internal compliance board known as the Equality of Access Board (EAB) was
 established. The EAB "monitors, reports and advises on BT's compliance with the
 Undertakings with a special focus on equivalence of input and the operation of
 Openreach).

Accordingly, BT created an Access Services division branded 'Openreach' which began operations on 1 January 2006 – over five years after its separation plans were first announced. BT's new organisational structure is shown below:

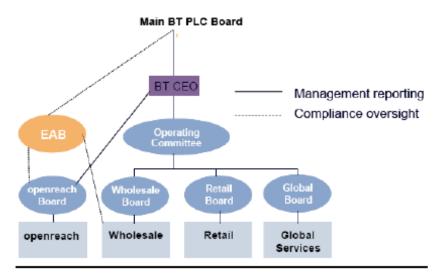


Exhibit A.1: BT's new organisational structure [Source: BT]

Under its agreement with Ofcom, Openreach is operated under a 'Chinese walls' policy, which

requires strict policies to be implemented, in particular:



- no one within BT, outside Openreach can influence Openreach Commercial Policy
- no one within BT, outside Openreach can have access to Openreach commercial information
- Openreach can not disclose its Customer Confidential Information to other BT businesses
- · no one employed by Openreach can at the same time work for another BT business.

However, BT's process of operational separation has encountered several problems over its first year of implementation.

- Less than a month after it had officially launched, BT Openreach faced a formal investigation by Ofcom, brought about by Opal Telecom (a part of Carphone Warehouse). According to the investigation, which was opened on 3 February: "Opal has claimed that the refusal by Openreach to extend the offer rate of £20 per customer line (offered for migration in bulk of customer lines to 'shared' loops, or 'shared bulk migration') to full MPF is discriminatory, in contravention of Openreach's obligations under its Significant Market Power Conditions, set following Ofcom's review of the wholesale local access market. Following failure to resolve the matter through commercial negotiation, Opal has referred the matter to Ofcom for resolution."
- There was concern that while access to Openreach might be fair and nondiscriminatory – overall levels of service may be poor due to the near-monopoly status of Openreach.
- On 26 October 2006, industry parties voiced concern about the independence of BT Openreach when it breached its Chinese walls policy in order to "borrow" up to 150 engineers from across the rest of the company. Although Ofcom agreement had been given to the request, there was a concern in the marketplace that following the completion of their work, the engineers will be taking competitively advantageous information with them when they return to their previous roles.⁷

http://www.timesonline.co.uk/article/0..5-2424020.00.html#cid=OTC-RSS&attr=Business



- In terms of a financial impact on BT, the creation of Openreach has cost BT GBP70 million – this was a important contributing factor to a 14% fall in BT's pre tax profits from GBP571 million to GBP489 million compared to the previous year.
- In its review of Openreach's performance⁸, Ofcom stated that although BT has got on with the job of implementing operational separation, "service performance across a range of wholesale products has at times been poor, and promised improvements have not always been fully delivered, or maintained". BT has attributed these problems to complexities involved in the setting up of new work practices and support systems, including difficulties with the new equivalence management system (EMP) IT system that is designed to ensure OpenReach operates on a non-discriminatory basis between BT Retail and other telecoms companies
- Ofcom has also noted that the requirement for Openreach and BT Wholesale to work independently of one another with "Chinese walls" between the divisions has also made the company less efficient in providing some services to customers.
- According to a recent Ofcom review, so far there is no evidence that the separation has increased the take-up of broadband in Britain.

Although BT had considered divesting its fixed line business:

- At the end of July 2001, a US-based consortium, "Earthlease", offered GBP8 billion to buy BT's local loops. Although this bid was endorsed by Oftel (because the consortium promised to invest GBP500 million annually for at least seven years to promote the deployment of broadband services), it was rejected by BT.
- Following this rejection, BT received a buyout proposal from West-Deutsche Landesbank (West LB) – West LB offered to buy BT's entire fixed line infrastructure for GBP18 billion. This bid was similarly rejected by BT.

[&]quot;Evaluating the impact of the Telecoms review — An interim report one year on", Ofcom, 18 October 2006 http://www.ofcom.org.uk/telecoms/btunderfakings/mpact1005/mpact1005.pdf.



From its actions, it appears that BT had surmised that these offers were not adequate to compensate the company for the value of its infrastructure assets within its vertically integrated operations and the costs associated with dismantling its integrated business.

A.2 Australia – Telstra

Discussions of the structural separation of Australian incumbent fixed line operator, Telstra, began at the end of 2002.

In January 2003, the government of Western Australia stated that "Vertical separation of natural monopoly infrastructure from service provision functions facilitates and, some claim, is essential for effective competition in service provision markets."

However, there was debate not only from Telstra, but within Australia's own government as to the suitability of structural separation plans. Certain government officials felt that "forced structural separation of Telstra would consign services in rural and regional Australia to the dark ages."

When structural separation was being discussed in 2003, Telstra had estimated that such a process would have an estimated one-off cost of the order of AUD2 billion (equivalent to GBP1 billion). This estimate was stated to include the development of certain duplicate operational support systems to enable structural separation costing, which would cost between AUD400–500 million. Telstra further estimated that the ongoing operating costs of such a process would be of the order of AUD80 million per annum. Consequently, it is clear that the dismantling of Telstra would have had a considerable potential impact on the value of shares held by investors.



Submission to House of Representatives Standing Committee on Communications, Information Technology and the Arts; "Inquiry Into the Structure of Telstra" (January 2003) Government of Western Australia. http://www.doir.wa.gov.au/businessandindustry/45899013CBA142C5A0D62FBB2DD6EAC1.asp

¹⁰ Comment by Sydney Senator Coonan http://www.abc.net.au/worldtoday/content/2005/s1319325.htm.

¹¹ Telstra Submission no. 59 to the Telstra Inquiry, Jan 2003

However, similar to BT, Telstra avoided structural separation by announcing a voluntary Operational Separation Plan in June 2006. Under this plan, with the cooperation of the Australian government, Telstra intends to separate its wholesale business from the rest of the group. The plan has the following key objectives 12:

- Telstra must provide separate retail, wholesale and key network business units. There
 must be the establishment of proper procedures to effectively split the divisions. This
 includes separate premises and staff incentive programs to ensure equivalence.
- Telstra's wholesale services must be supplied on a non-discriminatory basis, with equivalent standards of service, to both Telstra's retail business and Telstra's competitors.
- Sensitive wholesale customer information must be kept confidential and inaccessible to Telstra's retail business units.
- Improved service quality and information to Telstra's wholesale customers, including regular reviews, information on network deployment, a wholesale service improvement plan and reporting on access to Telstra's exchanges.
- Establishment of an internal Director of Equivalence within Telstra, who monitors, reports and advises on Telstra's performance against its operational separation obligations. This monitoring will be backed by an external audit of Telstra's compliance. Subsequently, an annual compliance report must be presented by Telstra to the government setting out details of its compliance.

If the Australian government were to force the structural separation of Telstra, a substantial obstacle would be that of compensating existing shareholders of Telstra. This issue is of particular complexity since Telstra's shares currently have a market value of approximately AUD3.80 a share, whilst investors paid approximately AUD7 a share at the time of Telstra's flotation.

DOITA (2005). Operational separation. http://www.doita.gov.au/communications for businessifunding programs and support /connect australia/operational separation.



A.3 Faroe Islands – Faroese Telecom

During 2004 the potential break-up of Faroese Telecom was discussed. New entrants argued that a network company should be established with separate ownership from the retail company. The regulator agreed to some extent but did not insist on separate ownership. Faroese Telecom argued that a separate wholesale unit would be adequate.

At the beginning of 2005 Faroese Telecom established two 100% owned subsidiaries FT Net and FT Communications Ltd.

FT Net gives all providers access to the network on equal terms, including FT Communications Ltd. FT Net's services include landline usage service, connection to broadband, leased lines, lease of dark fibre, lease of raw copper and co-hosting. At the end of 2005 extending broadband coverage from 93% to 98% of Faroese households was listed as one of the most important tasks for FT Net during 2006.

On the other hand FT Communications deals with all customer care, sales and communication for both private and business customers, the entire GSM area, all the central equipment for fixed landline service and broadband.

It is interesting to note that Faroese Telecom's marketshare has not changed considerably since the introduction of the new structure. Document published by the regulator show that it has maintained a 79% markeshare of access lines since the end of 2004 (before the introduction of the new structure). Similarly its marketshare of domestic traffic stood at 78.6% at the end of 2005 vs 78.4% at end 2004 and for broadband the figures are 68% and 67% respectively.

A.4 America, New York - Rochester Telephone

An older example of structural separation is that of Rochester Telecom in New York.

In February 1993, Rochester Telephone submitted a proposal with the New York State Public Service Commission (NYPSC), to open its Rochester, New York local exchange market to competition, in exchange for relief from regulatory rules. In 1994, Rochester



Telephone's "Open Market Plan" proposal was accepted, and Rochester Telephone voluntarily separated itself into a retail company (Frontier) and a wholesale company (Rochester Telephone). The wholesale company was to sell its services at non-discriminatory rates. In exchange for this separation, Frontier was permitted to sell retail services free of regulation, but faced open competition from new entrants.

However, the structural separation process encountered several problems:

- The NYPSC levied of more than USD1 million in fines against Frontier for missing its performance benchmarks in 1996 and 1997.
- The initially agreed wholesale discount rate of 5% were found to be insufficient. The NYPSC had to revise Rochester Telephone's wholesale discount rate to 13.5 percent in 1996, and then following further complaints by AT&T revised it to 17%.
- Rochester Telephone's customers such as AT&T suffered from slow handling of new subscriptions and fault repairs that had to be handed in by fax and were dealt with by Rochester on an individual basis. AT&T could not take a customer order or complaint and directly respond to it. Rather, AT&T had to ask Rochester first for spare capacity and dates and then call back its (prospective) customers.

The structural separation plans were approved on the premise that they would promote competition in the retail market. Although increased competition did occur – Time Warner Cable, AT&T, Teleport Communications and Citizens Telecom all entered the market – in 1999 the NYPSC stated that "competition ha[d] yet to develop to any noticeable extent".

This led certain industry commentators to conclude that that: "structural separation is not efficacious for developing competition in local telephony." 13

Robert W. Crandall and J. Gregory-Sidak (2002) "Is Structural Separation of Incumbert Local Exchange Carriers Necessary for Competition?.



A.5 United States, Pennsylvania - Verizon

In September 1999, the Public Utilities Commission (PUC) of the state of Pennsylvania directed Bell Atlantic-Pennsylvania (Verizon) to structurally separate its retail and wholesale businesses through a complete transfer of assets. The Commission had concluded that "structural separation is the most efficient tool to ensure local telephone competition where a large incumbent monopoly controls the market".

However, the order was subsequently modified (after a state court challenge by Verizon) to require accounting separation only. In March 2001, the PUC acknowledged that the structural separation it had originally supported would involve substantial costs and would require at least as much ongoing regulatory monitoring as the existing access arrangements.

As a result, the Commission offered Verizon a process of operational separation under which its wholesale and retail divisions must be separated under a principle of non-discriminatory access to its wholesale division's services. The Commission did however reserve the right to seek full structural separation if Verizon's anticompetitive behaviour did not improve.

A.6 Examples where vertical separation has been considered, but not yet implemented

Several other countries have discussed plans to operationally separate incumbent fixed line telecoms operators. A brief overview of each of these is given in the following subsections.

New Zealand - Telecom New Zealand

In August 2006, Telecom New Zealand announced plans to voluntarily separate its wholesale and retail businesses. Telecom New Zealand's plans are similar to the operational separation of BT's wholesale and retail divisions in that they are based on non-discrimination, restricted information flows between its wholesale and retail divisions, separate physical premises, and an independent Oversight Group that is responsible for monitoring and reporting Telecom New Zealand's compliance with its separation policies.



Perspectives on structural separation | A-10

Telecom New Zealand expects that transition to its new operating model will incur costs of the order of GBP70 million. This cost is equivalent to that estimated by BT, however, in the case of Telecom New Zealand, this incurred cost represents over 35% of its annual capex budget.

Ireland - eircom

In Ireland, where the incumbent operator, eircom, has been acquired by Babcock & Brown, structural separation of eircom is being considered. Babcock and Brown has developed a plan to split eircom into infrastructure and retail operations. Indeed, 94% of eircom shareholders voted to support a potential structural separation, under which eircom's employee share ownership trust would take control of the retail division of the business and the network infrastructure would be put into a Babcock fund.

This process is still on-going.

France - France Telecom

In France, debate concerning structural separation has occurred, however, the French regulator ARCEP has concluded that "accounting separation, combined with Chinese walls around the monopoly at the heart of the vertically integrated enterprise offers good assurance of protection against anti-competitive behaviour".14

Norway - Telenor

Separation plans of the fixed incumbent operator, Telenor, have been discussed by the Norwegian Parliament, however proposals for its separation were rejected in 1999.



¹⁴ www.oeod.org/dataoeod/49/15/2474529.pdf.

Annex B: Horizontal separation of fixed and mobile operations

Structural separation has thus far been discussed in the context of a retail-wholesale vertical separation which is generally. However, it can also be considered in terms of a horizontal separation of an operator's fixed and mobile operations.

In this context, two particular examples will be discussed: BT and eircom.

B.1 BT

BT originally established a mobile arm in 1985 (through a joint venture with Securicor), called 'Cellnet'. It subsequently acquired 100% ownership in 1999, and the mobile operation was renamed 'BT Cellnet'.

However in November 2001, BT Group demerged its mobile phone business as part of its plan to strengthen its financial position following over-expansion in the 1990s – it was a move designed to reduce BT's debt burden. BT Cellnet was subsequently renamed mmO2 (subsequently rebranded O2).

However, since divesting itself of the Cellnet mobile division, BT has explored alternative routes to secure revenues from mobile telephony markets, and has pursued the following initiatives:

· a series of MVNO deals, with mmO2, T-Mobile and most recently with Vodafone



· a fixed-mobile convergence product, called BT Fusion.

B.2 Eircom

Similarly, in Ireland, eircom demerged its mobile arm, eircell, which was purchased by Vodafone in 2001.

However, following the demerger of its mobile division, circom was believed to be undervalued and became the subject of a bidding war between two consortia: E-Island, and Valentia. The company was subsequently taken over in June 2001 by Valentia. It was delisted and became a private limited company. In March 2004, it was re-listed as circom Group ple.

However, as with BT, eircom quickly returned to participate in the mobile sector. In July 2005, eircom announced that it had agreed to purchase the third mobile operator in Ireland, Meteor Mobile Communications, for EUR420 million. The purchase was completed in November 2005, making it a wholly owned subsidiary of circom Group plc, giving circom an important presence in the Irish mobile market.

B.3 Fixed-mobile integration (FMI)/fixed-mobile convergence (FMC)

However, it should be noted that the wider trend within both fixed and mobile industries is towards a higher level of integration between fixed and mobile services, not a separation.

The convergence of fixed and mobile services is a key strategy of both fixed and mobile operators across the world.

The trend for FMC has been increasing, and generally takes place as one of the following four approaches:



Approach to FMC	Description	Business opportunities/challenges
Converged billing	Fixed and mobile services are billed by a single provider e.g. corporate mobile and fixed telephony on a single bill	Convenience of a single bill for customer
Converged tariffs	Geozoning to provide fixed tariffs at fixed locations on existing mobile devices	Single device convenience with low- cost home-loffice-zone calling, but technically difficult to implement with risk of revenue leakage
Converged devices	Terminals allow the usage of fixed and mobile services through a single device – e.g. BT Fusion, DoCoMo Passage Duple, LivePhone, BeautifulPhone	Single-device convenience for customer with low-cost home-/office- zone calling, enhancing in-building network coverage and opportunity to reduce broadband churn
Converged services	Exploit the capabilities of existing network capabilities (including capacity, routeing) and could use existing or new devices	Single device convenience for the customer, but potential wasteful utilisation of the network to route calls or non-optimum technology (mobile broadband from home)

Exhibit B.2: Approaches to fixed-mobile convergence [Source: Analysys]

Both revenue and cost drivers have been cited as reasons for closer integration of fixed and mobile operations. Revenue drivers include:

- An integrated fixed and mobile offer can be used to differentiate broadband services, especially in corporate and SME markets.
- Opportunity to enhance overall mobile EBITDA through improved ARPU, loyalty and market share.

Whilst cost drivers include:

- A wider range of content can be negotiated at better prices when an operator is negotiating content for both broadband and 3G mobile services together.
- A combined distribution channel can be created in a more cost effective manner, including cross-selling opportunities.



- Enhanced indoor mobile coverage and mobile phone functionality for FMC subscribers, allowing better service at lower cost.
- Cost efficiencies can be achieved through a common IT, billing or CRM platform and core network can be shared between both the fixed and mobile businesses.

As shown in Exhibit B.2, FMI has enabled the launch of new ARPU-enhancing services which are expected to improve customer loyalty:

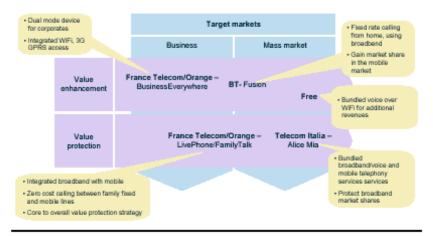


Exhibit B.3: FMI developments in Europe [Source: Analysys]

As shown in Exhibit B.3, mobile-only operators have been focusing on value enhancement with fixed-line replacement in the mass market and value protection in the business market:



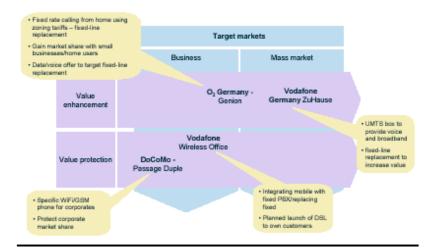


Exhibit B.4: FMC developments [Source: Analysys]

The main counterexample to this industry trend is in Italy, where the Italian regulator is constraining Telecom Italia's ability to offer FMC services, due to a perceived inability of Telecom Italia's competitors to offer similar services.



Annex C: Geographic separation

The only example of geographic separation of an incumbent operator is that of AT&T. The Regional Bell Operating Companies (RBOCs) are the result of a U.S. Department of Justice antitrust suit against the American Telephone & Telegraph Company (AT&T). The original RBOCs include:

- Ameritech
- · Bell Atlantic
- BellSouth
- NYNEX
- Pacific Telesis
- Southwestern Bell
- US West.

Whilst the regulator ordered the break-up of AT&T primarily to increase competition in long distance and international markets, AT&T agreed to the creation of the RBOCs in return for the opportunity to enter the Internet industry.

With ownership separate from AT&T, the RBOCs no longer had an incentive to favour AT&T over its long distance competitors, such as MCI and Sprint.

Although AT&T's divestiture of the RBOCs is regarded as a success, it is only appropriate in situations where large operators have overwhelming dominance in large economies. Geographic separation within the same country has not been repeated since.



Proposed Sale of Jersey Telecom

Advice to the Minister for Economic Development under Article (4) of the Competition Regulatory Authority (Jersey) Law 2001

on

The structure of Jersey Telecom which best promotes competition in telecommunications and thereby economic growth as whole

10 January 2007

Contents

Executive Summary

1. Introduction

2. Policy objectives

- (i) Competition policy
 - to promote consumer welfare, efficiency and economic growth
 - to regulate as a proxy for competition
- (ii) Competition policy in telecommunications
 - to satisfy business and consumer demand
 - to focus on high quality services for the finance sector

3. Satisfaction of demand through competition

- (i) Facilities-based competition
- (ii) Access-based competition
- (iii) Resale competition
- (iv) Preferred type of competition for Jersey

4. Satisfaction of demand through regulation

5. Experience with development of competition

- (i) International experience
 - wireless competition
 - fixed-line competition
- (ii) Regulatory experience in Jersey

6. The problem: lack of sustainable competition

- (i) High capital costs and economies of scale
- (ii) Lack of equality of access
- (iii) Competition and incentives
- (iv) Regulatory tools in general
- (v) Regulatory tools not optimal
- (vi) Accounting separation
- (vii) Experience in Jersey

7. International responses to the problem

- (i) Operational separation
 - the UK
 - New Zealand
 - Australia
 - Italy
- (ii) Structural separation
 - possible structure
 - Europe
- (iii) Faroes version of structural separation

8. Benefits of structural separation

- (i) Removal of incentives to discriminate more competition and demand
- (ii) Less need for regulation
- (iii) Investment incentives
- (iv) Increased value to shareholder

9. Costs of structural separation

- (i) On-going loss of economies of scope
- (ii) Less synchronisation of demand and supply
- (iii) Loss of welfare-enhancing effects of price differentiation
- (iv) One-off transitional costs

10. OECD Recommendation

11. Conclusion

- (i) A unique opportunity
- (ii) Options

Appendix A Terms of reference

Appendix B An illustration of on-going problems with behavioural regulation

Executive Summary

Issue – structure JT so as to best promote competition

In the context of the proposed sale of JT, the JCRA has been asked to advise on what JT structure would best promote competition and economic growth (e.g., sold as an integrated company or with its wholesale network and retail service functions separated).

This paper focuses on promoting competition in the local loop of the fixed-line sector since competition in the wireless sector is developing on a sustainable basis under current regulatory rules. Further, the JCRA recognises that there are pan-Channel Islands issues which may need to be addressed in the future as far as the structure of competition in Jersey is concerned. However, the legislation does not allow such issues easily to be taken into account.

Types of competition

Fixed-line competition can be introduced and promoted in three main ways:

- facilities-based competition (i.e., competing networks);
- access-based competition (i.e., leasing lines from a dominant network operator, otherwise called local loop unbundling (LLU) or Bitstream access); and
- resale competition (i.e., where the retailer essentially resells the services of the incumbent with little value added).

The first two forms of competition are considered the most sustainable forms as the operator has, to varying degrees, control over network costs. Resale is the least effective form of competition because the operator is to a large extent dependent on the costs of the network operator upon whom it relies for service delivery.

The problem - lack of sustainable competition

In Jersey, the problem is that the small size of the economy combined with the economies of scale typical of network industries like telecommunications mitigate against the two most sustainable forms of competition. To date, no facilities- or access-based competition has emerged. Newtel, the sole fixed-line competitor to JT, is largely a reseller of JT's network services and provides minimal service differentiation (e.g., its bandwidth is the same as JT's).

In the future, Newtel plans to gain more control over network functions (and, therefore, the types of services it can deliver to customers) by investing in network facilities and obtaining Bitstream access to JT's new generation network (NGN) currently being rolled-out.

However, in the circumstances of Jersey's small economy and the industry economies of scale, international experience would strongly suggest that optimal competition is unlikely to emerge in the future under the current structure of JT, even with the current regulatory framework which can compensate to some degree but not totally for the problems inherent in vertical integration.

This is for a number of fundamental reasons:

- the economic self-interested incentives of an integrated company to favour its own downstream businesses when providing access given that providing access to third-parties is providing access to its competitors;
- the fiduciary duty to maximise corporate profits, where legal;

- industry-specific law (including accounting separation) is not optimal in countering incentives to discriminate; and
- general competition law is too broad a tool to compensate for the difficulties in regulating a vertically integrated dominant operator and to deal effectively with the intricacies and dynamics of telecommunications, particularly when it comes to introducing competition (as opposed to promoting existing levels of competition).

Accounting separation is an integral part of Jersey industry-specific law but it is not optimal because of the following problems (which consistently occur internationally where accounting separation has been adopted):

- the accounts are not separated enough to enable separate identification of costs attributable to specific services and to show any below-cost predatory pricing, price discrimination or cross-subsidisation;
- the accounts do not necessarily show full economic costs (being based on historic costs rather then current costs); and
- there are well known arguments over the level of access charges and the most appropriate costing methodology (e.g., historic-v-current, long run-v-short run, incremental-v-avoidable, etc.).

All of these problems lead to inevitable regulatory cost and delay in progress to more competitive markets. They are already a reality in Jersey, and are likely to continue to be.

Potential solutions

Revising the structure of JT may have a significant influence on how competition develops. Three particular solutions present themselves:

(i) Structural separation

The most clear-cut solution is to remove the incentive to discriminate. This can effectively be done through 'structural separation' (i.e., the complete ownership and management separation of the wholesale and retail arms so that there is no commonality of interest between the two).

Indeed, under structural separation, and the appropriate price regulation of the wholesale business, there will be incentives to supply network services to as many access-seekers as possible in the interests of maximising profits. In turn, this can lead to increased levels of competition in retail markets and all the benefits that competition brings in terms of lower prices, higher quality and more innovative services.

Furthermore, because of the effective removal of incentives to discriminate, significantly less regulation (and the resources to enforce it) would be required.

Of course, this requires the restructuring of the incumbent and the one-off costs from this need to be factored into the overall analysis. Any economies of scope from vertical integration may be reduced or lost. However, the existence and the extent of these economies should not be taken for granted. Further analysis is required. For example, there may be dis-economies of scope from a lack of management focus on core activities. Further, a company may stay vertically integrated to exploit its 'monopoly premium' and, as such, this should not be considered a legitimate 'economy of scope'.

Another disadvantage of structural separation is that there may be a loss of synchronisation between supply and demand (i.e., there is a loss of direct communication between the retailers who have first-hand knowledge of what customers want and the wholesaler who provides the underlying network needed to provide services demanded). However, should 'deep-level' competition (i.e., facilities- or access-based competition) develop as a result of structural separation, there is the potential for greater synchronisation between supply and demand as such competition results in greater control over the network and the ability to configure the network to meet the variety

of customer demands (for example, greater bandwidth, greater security and reliability, data streaming, data broadcast, always-on point-to-point data connectivity, video streaming, video-on-demand, pay TV, etc).

(ii) The Faroes version of structural separation

To the extent there is concern as to the speed with which competition will develop, there is a variation on structural separation which has been adopted by the Faroe Islands which deals with the incentives to discriminate by providing positions for representatives of retail competitors on the Board of the separated wholesale company.

It is proving successful in providing competitive outcomes at the retail level, in synchronising demand and supply, and in focusing management on their core activities (for example, the retail company has reduced costs and increased revenues). The Director of Telecommunications in the Faroes has expressed his willingness to meet States' Ministers to discuss the Faroes experience with their version of structural separation.

(iii) Operational separation

The third potential solution is operational separation (i.e., separation of the wholesale and retail operations but kept under the same corporate ownership). This option is increasingly being adopted in a number of countries in attempts to overcome the lack of effectiveness with accounting separation in dealing with the economic incentives of incumbents to discriminate.

However, as indicated by the UK experience, there are continuing problems with operational separation, largely because this option does not remove the incentive to discriminate. Furthermore, the option may not replace the burdens of accounting separation but add to them by imposing new regulations on the vertically integrated incumbent (e.g., regulations to establish Chinese walls and arms-length transactions). In a Jersey context, however, there would be likely to be less undertakings required.

Conclusions

Pulling together the various and at times complex issues and arguments outlined in the paper:

- the States objective in telecommunications is to meet demand (particularly the demands of the financial sector) for telecommunications services, wherever appropriate by competition;
- competition occurs in the dimensions of price and quality but the States have expressed a preference for quality services in view of the demands of the financial sector and its importance to the Jersey economy;
- resale competition typically results in price competition but it does not always provide for high quality services since it involves minimal investment in the necessary infrastructure (however, such competition may play an important role in facilitating market entry and the transition to more investment-based competition);
- if competition is to result in high quality services, it can only be provided by 'deep-level' investments in network infrastructure such as that afforded by facilities- and access-based competition;
- of the two, facilities-based competition is not economically feasible in Jersey given the small market size, high capital costs and economies of scale;
- access-based competition is the only potentially feasible form of competition in Jersey that will meet the demand for high quality services;
- however, on the basis of international experience and despite the best intentions of regulators, it appears
 that access-based competition is unlikely to develop on an effective, timely and sustainable basis while JT
 is structured as a vertically integrated supplier of network and retail services under the current regulatory

regime;

- the JCRA notes Newtel's plans to become an access-based competitor;
- if access-based competition is successful, it would be expected to deliver significant on-going benefits for the Jersey economy as a whole in both quality and price of services;
- there may be a one-off loss in States revenue from structurally separating JT rather than selling as a whole but the JCRA understands that there may be market interest in acquiring separated entities; and
- there are also likely to be on-going costs stemming from the loss of vertical efficiencies, reduced synchronisation of demand and supply, and loss of welfare-enhancing ability to price discriminate; but
- there is the likelihood of greater resale competition to keep downward pressure on retail prices.

(i) Unique opportunity

Ofcom has commented on the 'once-in-a-generation' opportunity to restructure BT for the benefit of future competition during its strategic review of telecommunications:

This is a once-in-a-generation opportunity to ensure that the fundamental network and regulatory structures are aligned to ensure opportunities for fair competition in future. [7]

The States of Jersey has, indeed, a greater opportunity than the UK to restructure appropriately JT because it is still in States ownership. Restructuring does not preclude the ultimate sale of JT but, once sold without restructuring, that opportunity is likely to be lost for future generations.

(ii) Options

The Economic Development Minister has requested the JCRA to advise him on the structure of JT that the JCRA believed would best serve the States policy of promoting competition in telecommunications and thereby economic growth as a whole.

The JCRA concludes from the information presented in this paper that the current regulation (in particular, accounting separation) is not optimal from the point of view of promoting effective and sustainable competition.

The JCRA does not conclusively recommend any particular option for the structuring of JT because it is aware that there are other policy objectives in addition to the promotion of competition (such as maximising returns to the shareholder) as well as the possible disadvantages outlined earlier to be put into the equation.

However, it has pointed out the benefits and costs of both operational and structural separation. The costs of structural separation include the productive efficiency losses from separating a vertically integrated enterprise. But the benefits could be significantly greater because, by allowing for more effective and sustainable competition to develop, allocative and dynamic efficiencies are spread throughout the economy, including essential high quality telecommunications services for the finance sector.

The JCRA particularly points to the version of structural separation adopted in the Faroes Islands which is proving successful in operation by largely removing the incentives for discrimination but does not have the downside of wholly losing economies of scope from vertical integration. As mentioned, the Director of Telecommunications in the Faroes has expressed his willingness to meet States' Ministers to discuss the Faroes experience.

In conclusion, it should be emphasised that the payoffs in terms of consumer welfare, efficiency and economic growth are likely to be far greater in small economies from getting JT structurally right in the interests of promoting competition. We conclude with Michal Gal:

Even small economies that enjoy some unusual comparative advantage must have the capacity to benefit from these hazards of fortune and to make them a basis for sustained economic development. Moreover, in small economies the importance of an appropriately structured and efficiently enforced competition policy may be greater than in large economies. [8]

Confidential

Proposed Sale of Jersey Telecom

Advice on the structure of Jersey Telecom which best promotes competition in telecommunications and thereby economic growth as a whole

1. INTRODUCTION

On 13 July 2006, the Minister for Treasury and Resources (the Treasurer) issued a Discussion Paper proposing the sale of Jersey Telecom (JT). As noted in the Paper, the Treasurer is legally obliged to maximise the value of the States shareholding in JT and exercise the States interest in the company solely on a commercial footing. [10]

Apart from providing an opportunity to maximise returns to the shareholder, the Treasurer and the Minister for Economic Development (the Economics Minister) both subsequently agreed that the proposed sale of JT would also provide a valuable and perhaps unique opportunity to achieve an industry structure which maximised the benefits to the Jersey economy through competition and economic growth.

Accordingly, on 2 October 2006, the Economics Minister requested the Jersey Competition Regulatory Authority (the JCRA) to advise him on the structure of JT that the JCRA believed would best serve the States policy of promoting competition in telecommunications and thereby economic growth as a whole. A copy of the full Terms of Reference may be found at Annex A.

2. POLICY OBJECTIVES

Given the competition focus of the Terms of Reference, the JCRA considers it appropriate to commence this paper with an outline of the objectives of competition policy in telecommunications and the nexus with economic growth. For, somewhat counter-intuitively, competition may not always be the best means of achieving its policy aims.

(i) Competition policy

To promote consumer welfare, efficiency and economic growth

The first point to note about competition policy is that competition is not an end in itself. Rather it is a means to other ends, in particular the ends of consumer welfare, efficiency and, ultimately, economic growth. As was noted during the passage through the States of the Competition (Jersey) Law 2005:

International experience demonstrates that the enactment and enforcement of competition law helps create and promote conditions for healthy competition and promote consumer welfare by increasing efficiency ... as well as several other effects and consequences including -

- (a) a reduction in prices for businesses and consumers alike because the forces of competition usually tend to reduce prices this will help to reduce inflation;
- (b) an increase in service levels for businesses and consumers alike because suppliers are stimulated to compete on the basis of the service offered;
- (c) an increase in innovation within an economy because of the stimulus of competition;

- (d) an increase in productive efficiency within the economy because only those goods and services for which there is a demand will be purchased (this eliminates inefficiency or wasteful production);
- (e) an increase in allocative efficiency within the economy because resources will be allocated to only those goods and services for which there is a demand. [11]

Given its focus on economic ends, competition policy has been recognised internationally as a key element of economic policy.

To regulate as a proxy for competition

The second point to note is that competition may not always be the most effective way of achieving the ultimate ends of consumer welfare, efficiency and economic growth. This may particularly be the case in small island economies like that of Jersey where small markets and economies of scale may combine to make monopolies the most efficient way of meeting demand. As Michal Gal has commented:

A critical feature of small economies is the concentrated nature of many of their markets, resulting from the presence of economies of scale and high entry barriers. Smallness has adverse implications for domestic market structure and performance. The size of some industries is sub-optimal to the extent that limited demand constrains the development of a critical mass of domestic productive activities necessary to achieve the lowest costs of production. But even when productive efficiency can be achieved, small economies cannot support more than a few competitors in most of their industries. Competition is often characterized by monopoly or oligopoly protected by high entry barriers. These market conditions have an adverse impact on prices and output levels of many goods and services, that may carry over to vertically inter-connected industries. [12]

Accordingly, in its broadest sense, competition policy not only seeks to promote competition but also accommodates situations where competition is not economically feasible by regulating as a proxy for competition in the interests of consumer welfare, efficiency and economic growth. The States of Jersey have recognised this and the recognition is implicit in the title and powers of the JCRA. [13]

Michal Gal also recognises that the size of a market necessarily affects the competition policy it should adopt. [14]

... finding the balance between productive efficiency and competitive conditions in small economies is challenging. In the presence of scale economies, a balance should be struck between firms large and integrated enough to enjoy these economies and firms numerous enough and with sufficient opportunity for effective rivalry.

These salient characteristics require small economies to devise appropriate endogenous policies that offset at least some of the adverse effects of their small size. Competition policy can either increase or reduce the disadvantages of small size. To reduce them, competition policy has to be designed to deal effectively with the unique obstacles to competition that are inherent in an economy, including those that stem from small size. Even small economies that enjoy some unusual comparative advantage must have the capacity to benefit from these hazards of fortune and to make them a basis for sustained economic development. Moreover, in small economies the importance of an appropriately structured and efficiently enforced competition policy may be greater than in large economies. [15] [emphasis added]

A good illustration of the points emphasised in the quotation above is the Jersey finance sector, its key role in Jersey's economic development and the importance of an appropriately structured competition policy in telecommunications for that sector. This paper now turns to a discussion of telecommunications policy in Jersey

and how it is particularly focused on ensuring that high quality telecommunications services are provided to the finance sector in the interests of promoting Jersey's economic development.

(ii) Competition policy in telecommunications

To satisfy business and consumer demand

The primary duty of the JCRA under the Telecommunications (Jersey) Law 2002 (the 'Law') is to ensure that demand for current and prospective telecommunications services is met so far as is reasonably practicable. [16] In seeking to meet this demand, the JCRA has a secondary duty to promote competition wherever appropriate: [17]

... the JCRA ... should have the duty to exercise [its] relevant functions in the manner best calculated to ensure the provision of ... telecommunication services for the Island. Subject to this primary duty, the JCRA should have a secondary duty to act in a manner best calculated to further the interests of customers, wherever possible by promoting competition between service providers. [18]

It also has another secondary duty to promote efficiency when seeking to meet demand. [19] In deciding whether demand is satisfied, either through competition or otherwise, the JCRA must have regard to whether the services are affordable, innovative, of high quality and reliable. [20]

A critical issue here is what sort of demand is sought to be met? Is it demand for affordable low prices services or demand for quality services? A reading of the extrinsic materials associated with the passage of the Law would indicate that there is a strong preference for quality services given the demands of the financial sector and its key role in the economic welfare of Jersey.

To focus on high quality services for the finance sector

It is clear from the following statement by the Treasurer that quality is to be preferred over price given that the economic interests of Jersey are to a large extent the economic interests of the finance sector:

As an international finance centre operating from an Island location, the provision of resilient and reliable telecommunications networks across which world-class services are available is fundamental to the continued success of Jersey. Business and residential consumers alike demand, and have come to expect, the availability of these services, and telecommunications companies in Jersey must invest heavily to ensure that they remain the provider of choice. [21] [emphasis added]

And further:

The continued need for investment in essential infrastructure to ensure the provision of all current and prospective demands for **high-quality services** to residential and business consumers is a key feature of the Telecommunications (Jersey) Law 2002. [22] [emphasis added]

Competition largely occurs in the dimensions of price and quality. A further critical issue is therefore what type of competition can satisfy demand for quality services (rather than just low-price services) or whether regulatory intervention is required to meet that demand?

3. SATISFACTION OF DEMAND THROUGH COMPETITION

States policy is that demand in telecommunications is to be met wherever appropriate by competition, and that the demand to be satisfied is for high quality services in view of the demands of the finance sector. This section

discusses how demand can be met through competition. If it cannot be met through competition, we discuss later how it may be met though regulation.

Discussed first in general terms are the forms of competition in telecommunications and whether they can deliver on quality services. In telecommunications, whether fixed-line telecommunications or wireless, competition typically occurs in three main ways:

- facilities-based competition (i.e., competing network infrastructure);
- access-based competition (i.e., leasing lines from an incumbent network operator and co-locating transmission and switching/router equipment in the incumbent's exchanges to transmit services over those lines); and
- resale competition (i.e., where the retailer essentially resells the services of the incumbent under another brand name with limited value added).

(i) Facilities-based competition

Facilities-based competition allows for complete control (either through ownership or long-term interconnection contracts) over the necessary network infrastructure and its associated costs. In particular, network ownership allows for the installation of the latest and most efficient technology and the supply of new services or increased bandwidth in response to shifts in demand. This is particularly important in telecommunications because of the range and complexity of service offerings and their dynamic nexus with technological progress.

(ii) Access-based competition

Access-based competition allows for varying degrees of control – but not complete control – over the underlying network depending on the type of access acquired. In general, local loop unbundling (LLU) offers greater control than Bitstream access because it essentially involves the leasing of un-configured local lines which are then configured to satisfy demand. With Bitstream access, the access provider still provides the underlying transmission service and the access-based competitor is constrained by the specifications of that basic service.

(iii) Resale competition

On the other hand, resellers do not have any meaningful degree of control over the quality and type of telecommunications services they re-supply. This is because they rely largely on retail margins being maintained above the wholesale rate at which services are acquired (i.e., they rely on arbitrage opportunities). Sometimes limited value is added to these basic wholesale services (such as billing and customer support) but because resellers have little control over the network and its associated costs, they are ultimately circumscribed in the competitive services they can offer in response to shifts in demand.

As a result, resale competition occurs largely in the dimension of price competition but it can play an important role in facilitating 'quality' market entry and the transition to the more effective and sustainable form of facilities-and access-based competition.

(iv) Preferred type of competition for Jersey telecommunications

We have noted that there is a strong preference in Jersey for competition which delivers high-quality services. However, only facilities- or access-based competition can satisfy demand for such services as it is only those two which allow for the necessary degree of control over service quality and innovation. As Ofcom has noted:

Our market research and consultation suggested that businesses and consumers want much more than

basic, reliable telecoms services at low prices: they also want choice, and rapid innovation and introduction of new services. Our assessment was that the most effective way of delivering this is through competition at the deepest level of infrastructure where competition will be effective and sustainable. [23]

In other words, the aim is not simply 'low-level' price competition but rather 'deep-level' quality competition which is effective and sustainable. To quote further from Ofcom:

... whilst downward pressure on pricing can be achieved by a combination of regulation and arbitrage-based services competition, we concluded that the choice, diversity, and innovation required by consumers in today's much more diverse and fast-moving market could not be achieved in this way. Innovation in particular cannot be imposed on a market as a regulatory requirement. Services-based competition does encourage innovation in relation to branding, billing, and packaging of services, but much of the innovation that consumers value in telecoms stems from the ability to combine both network and service capabilities. [24]

4. SATISFACTION OF DEMAND THROUGH REGULATION

Should competition not satisfy demand for high quality telecommunications services, the JCRA is required to regulate:

The Law provides that if demand for a certain service, in terms of quality or type, is not being met by licensed operators in the industry, the JCRA is legally required to take steps to deal with this issue. To do so, it has the powers to require licensed operators to make or contribute to investment in any infrastructure that is required for the purposes of ensuring that these current and prospective demands for telecommunications services are provided for. [25]

However, it is problematical whether the JCRA can require such investment. Regulators cannot create investment, nor are they well placed to micro-manage such investment. That is for the industry and the market. [26] In the words of Michal Gal:

Competition is also trusted because there is little basis for faith that regulators possess the knowledge and the motivation required to fine-tune business behaviour on behalf of consumers. [27]

As discussed later, it may be that a regulated monopolist at the network level is the most efficient way to meet demand, particularly if that demand is for high quality network services which require significant upfront investments that may be stranded if market entry fails. The reason that it may be the preferred option is the evidence of international experience that effective and sustainable competition is proving difficult to introduce at the network level. First discussed is international experience generally, followed by the experience in the UK and then Jersey.

5. EXPERIENCE WITH DEVELOPMENT OF COMPETITION

(i) International experience

Internationally, competition has tended to develop differently in the two broad telecommunications sectors: the wireless (including mobile telephony and wireless broadband access such as Wi-Max) and the fixed-line sectors.

Wireless competition

In wireless (particularly the mobile sector), competition is emerging on an effective and sustainable basis. [29] This is largely because wireless networks are not as capital intensive as fixed-line networks, thus making it economically feasible to roll-out competing vertically integrated networks on a sustainable basis.

Jersey is a good example in respect of mobile telecommunications where there is already one new competitive operator with a second about to enter the market. The new mobile entrant, Cable & Wireless Jersey operating under the brand name 'Sure', obtained a market share of approximately 9 per cent by 1 December 2006. It is a vertically integrated company providing mobile services over its own network (and JT's mobile network through an interconnection arrangement negotiated under the auspices of the JCRA).

The second entrant is Bharti trading as 'AirTel'. As for Cable & Wireless, Bharti intends to enter the market on a vertically integrated basis with its own mobile network but when current environmental problems over the placement of transmission masts are resolved.

As both Cable & Wireless and Bharti will have control over their own networks and associated costs, effective and sustainable competition appears most likely to emerge in the mobile sector under the current regulatory rules. Accordingly, the JCRA sees no apparent reason to change those rules to facilitate greater levels of competition in this sector.

In relation to broadband wireless access, the technology is still largely at a developmental stage internationally and it would be premature to intervene in this market, particularly given that the economics may be similar to that of the other wireless sector, mobile. In Jersey, broadband wireless access has not been introduced. [30]

As competition in the mobile sector is developing (or indeed, has developed) on an effective and sustainable basis and it is too premature to consider regulatory intervention in the broadband wireless sector, the rest of this paper focuses on promoting competition in the fixed-line sector of telecommunications. Discussed first is how the different forms of fixed-line competition have developed internationally. Then we discuss the situation in the UK and then in Jersey.

Fixed-line competition

In fixed-line telecommunications, a distinction should be made at the outset between core networks and the customer access network (otherwise known as the 'local loop' or the 'last mile' from the local exchange to the customer). [31]

Core networks have better economics than local loops (largely because of the amount of traffic they carry) and competition internationally has developed on a sustainable basis in this area. [32] However, Jersey's small economy and industry economies of scale have tended to preclude that form of competition locally. As core networks have not in themselves raise competition issues under the existing regulatory framework in Jersey, the rest of this paper focuses on the development of competition in the customer access network.

Turning to international experience with the development of competition in the customer access network, that experience tends to show that competition has not developed in the local loop on an effective and sustainable basis. This is the general outcome in both large and small economies.

With respect to facilities-based competition in the local loop, 'cherry-picking' in premium markets (typically CBD markets serving high value business customers) has occurred but ubiquitous network roll-out is rare.

The JCRA is aware of only two instances where facilities-based competition in the local loop has occurred on an

effective and sustainable basis: the US and Hong Kong. In both cases there are specific factors responsible. In the US, it is the existence of urban cable networks originally designed for pay TV which can now, with technological developments such as IP telephony, compete strongly with the networks of the incumbent telecommunications companies. In Hong Kong, it is the economies of density which have enabled multiple network roll-out.

In relation to access-based competition in the local loop, there are on-going problems with equality of access that make development of this form of competition difficult. As Ofcom, the UK telecommunications regulator, commented during its Strategic Review of Telecommunications conducted over 2004 and 2005:

... despite twenty years of regulatory intervention, competition in fixed line telecoms remains fragile... [There is] an unstable market structure in fixed telecoms, dominated by BT and with alternative providers that are, in the main, fragmented and of limited scale. [33]

The reasons are discussed in the next section but, combined with the lack of facilities-based competition, it would appear that the local loop remains a natural monopoly so far as effective and sustainable competition is concerned. [34]

Resale competition has emerged but, as discussed, this is not an optimal form of competition. Indeed, even this form of competition appears to be diminishing. This is an important point with much relevance to Jersey so it is worth quoting extensively from Ofcom on this point:

... the degree of competitive pressure exerted on BT by alternative carriers and service providers today may even diminish in the medium term if the regulatory status quo is maintained. Much of the competition that has emerged has done so because of the existence of high prices resulting from BT's historic monopoly position. Competitors have been able to enter the market and make returns by competing against those high prices. But as prices fall, the inherent advantages accruing to BT as a result of its scale and its ability to exploit its vertical integration will become increasingly important. This problem has been compounded by entry focusing on short-term arbitrage opportunities which result from the structure of pricing.... As prices fall and arbitrage opportunities diminish, entrants must develop the scale to compete with BT and the ability to overcome the inherent advantages of vertical integration. At the moment, neither of these conditions exist in the market, which we believe is one reason why so many of BT's competitors are currently experiencing very difficult trading conditions. [35]

There is an issue of whether wireless networks, particularly 3G and the new breed of broadband wireless networks such as Wi-Max, will increasingly become close substitutes for fixed-line local loops because of technological convergence. However, in the JCRA's opinion, wireless networks are not sufficiently close substitutes so as to constrain the pricing power of dominant fixed-line local loop network operators. Nor is it considered that they are likely to be in the near future given the current advantage of fixed-line networks in providing reliable and resilient broadband telecommunications services to customers who demand those types of high quality services (e.g., banks and other financial institutions).

(ii) Experience in Jersey

Jersey is no different to the international trend. Understandably, no facilities-based competition has developed in the provision of fixed-line services over the local loop given the small size of the market, high upfront capital costs and the resulting economies of scale.

A local independent licensee, Newtel, does own and operate a cable TV network which it acquired from Jersey Cable (a subsidiary of Channel TV). It currently supplies cable TV services to social housing estates over this network. However, it is not of a suitable grade for the delivery of modern digital telecommunications. Further, the costs of upgrading its network (involving upgrading all its nodes and reconfiguring its customer access lines) would far outweigh the economic returns from its limited location

and likely customer base. Accordingly, this cable network is unlikely to develop as an effective and sustainable source of competition to JT's network (nor its planned next generation network or NGN). [38]

Further, there is no access-based competition in the local loop. While the JCRA has the power to require JT to provide local loop access, a consultation in 2005 proved inconclusive as JT at the same time announced its intention to roll out a NGN which could affect the way that access may be achieved. Even so, there has been no market demand for such access (i.e., there has been no requests made to the JCRA for it to use its powers to order access). Presumably this is because access-based competition, while not involving the high upfront capital costs of rolling-out a network, still requires significant investments in transmission and routing equipment and backhaul links to its core network.

As discussed below, Newtel's current business is largely as a reseller of JT's Internet access services with plans to provide voice telephony over the Internet (VoIP) services. However, it does have plans to invest in network facilities and obtain access to JT's NGN so that it can gain more control over the type and quality of services it supplies, particularly in relation to VoIP which requires a high standard of quality to be competitive with the traditional voice telephony services provided by JT. [39]

However, even if access is achieved, international experience would strongly suggest that effective and sustainable competition is unlikely to emerge in the future under the current structure of JT and with the current regulatory rules. The reasons are central to this paper and are discussed at length in the next section.

The only current form of competition in Jersey is resale competition. Newtel's current business is largely as a reseller of JT's network services. In particular, it currently provides broadband access services (e.g., Internet access) using JT's network and retail broadband service as a base. It currently has around 4,500 broadband customers. However, because it relies on JT for service delivery, there is minimal service differentiation (e.g., its bandwidth is the same as JT's).

In addition, Newtel and Cable & Wireless currently provide legacy pre-select national and international voice telephony services. However, their customer numbers are relatively insignificant: Newtel's customer base has dwindled from several hundred down to about 120, of which 20 are business users, while Cable & Wireless has about [confidential] customers of which around [confidential] are business users. Moreover, as discussed, resale competition is not the most effective and sustainable form of competition because resellers have minimal control over their service quality and costs.

6. THE PROBLEM: LACK OF SUSTAINABLE COMPETITION

The strong conclusion from the preceding overview of international experience is that competition in the local loop has not developed on an effective and sustainable basis in most jurisdictions where liberalisation of telecommunications has been undertaken. The reasons for this are now discussed.

(i) High capital costs and economies of scale

In relation to facilities-based competition, international experience demonstrates that it is generally not economically feasible for local loop networks to be duplicated or overbuilt because of the high capital costs involved. Combined with economies of scale, these upfront costs constitute formidable barriers to entry. Indeed, they often prove insurmountable when the incumbent also:

- has a ubiquitous and operational network;
- is vertically integrated reaping economies of scope;
- has advantages of incumbency; and

• benefits from customer inertia and high switching costs.

When the small market size in Jersey is added to the list, it becomes clear that they may well constitute an absolute barrier to facilities-based competition in Jersey.

And if further reason is needed, the shift to NGNs and the necessary investments required will make it more difficult still:

The technology shift to IP-based networks requires new investment, to supply what are likely to be products with lower margin than was available in the legacy products and services. There is little appetite for new investment to compete with BT Group plc at the local access level, and in some areas even in backhaul from the Local Exchange to the core network. This is a challenge. [40]

Accordingly, the remainder of this paper will focus on access-based competition as a means of satisfying demand for high quality services in telecommunications.

(ii) Lack of equality of access

International experience also demonstrates that access-based competition is proving an elusive object. Put simply, for access-based competition to develop on an effective and sustainable basis, there must be equality of access (sometimes called 'equivalence') but regulation has failed fully to ensure such access. In the UK, for example, Ofcom has made the following comments on regulatory failure in that country:

We believe that UK telecoms regulation has yet to overcome the problems of enduring economic bottlenecks combined with lack of equality of access to these parts of the network. The problem of enduring economic bottlenecks is that the economies of scale and sunk costs of telecoms networks, especially for fixed access networks, are particularly hard for new entrants to overcome. Yet if new entrants do not build their own fixed access or backhaul networks, they are reliant instead on BT to provide wholesale access to its network. They then face the problem of inequality of access. Those who rely on BT to provide such access have experienced twenty years of:

- *slow product development;*
- *inferior quality wholesale products;*
- poor transactional processes; and
- a general lack of transparency.

While individually each issue might seem immaterial, cumulatively they make the reality of competing against a vertically-integrated player an economically unattractive proposition. [41]

In attempting to provide equality of access, jurisdictions around the world have resorted to increasingly complex and detailed regulatory rules which, in several respects, result in micro-management of the incumbent's commercial activities by the regulator. This is not optimal for any of the interested parties. In another example from the UK, Ofcom comments on this point:

This outcome [complex and detailed regulatory rules] is not optimal for citizens and consumers, for BT's competitors nor for BT itself. It is restrictive and costly to all parties, and at this stage of network and technology development it is potentially damaging to our long-term competitiveness as a nation. This will become an even more critical issue with the deployment of next generation technologies, where current rules of interconnection and many of the related wholesale products will no longer apply.

(iii) Competition and incentives

Economics is the science of incentives and it is no more true than in the area of competition economics. In economics, incentive is the pursuit of self-interest. As Adam Smith points out, self-interest is no bad thing because it is ultimately in the public interest, absent any market failure. Michal Gal comments:

The economic theory underlying competition laws is based on the belief that the market's invisible hand is, potentially at least, a far more powerful guardian of the social welfare than any other form of regulation. Competition draws competitors into the market to remove excess profit. It stimulates incumbents to greater productive and dynamic efficiency. It weeds out the inefficient by the objective test of market survival, and it assures the optimal allocation of resources in productive activities. [43]

In addition, there is an additional legal incentive created by fiduciary duty where public companies are involved:

- publicly-owned companies are under an obligation to its shareholders to maximise profits, provided that they do so by legal means; and
- it is a breach of fiduciary duty for a company's directors to knowingly manage a company in a way that reduces profits. [44]

Telecommunications is an almost unique industry in that, to achieve the necessary 'any-to-any connectivity', competing telecommunications network companies must reach agreement on the terms and conditions of interconnection to each other's networks. [45] However, to do deals with competitors is likely to raise issues under general competition law and, more self-interestedly, it may not be in a company's commercial interest to willingly reach agreement with its competitor because it may mean lost customers and lost profits.

Here lies the crux of the problem in telecommunications:

- there is a need for regulations requiring access to be granted on 'fair and reasonable' terms to overcome commercial incentives and override fiduciary obligations; but
- like leading a horse to water, incumbents will have a strong incentive to favour its own at the expense of new entrants when forcibly obliged to grant access against its own commercial interest.

In the words of Alfred Kahn, if one was the Almighty and in full possession of the facts, one may regulate to successfully overcome such incentives. [46] However, mortal regulation has simply not been up to the task. This has amply been demonstrated by the above discussion of international experience in respect of local loop access over fixed-line networks.

The particular reasons why regulation has been sub-optimal in developing access-based competition first needs a discussion of the broad range of regulatory tools available to regulators.

(iv) Regulatory tools in general

Of course, the ultimate regulatory tool is the market itself. However, as mentioned, there are clear incentives to inhibit the free working of the market for private gain. Adam Smith in an oft-quoted passage spoke about the tendency for competitors to agree amongst themselves in a conspiracy against the public:

People of the same trade seldom meet together, even for merriment and diversion, but the conversation

Similar tendencies are equally true with respect to the unilateral exercise of market power by, for example, leveraging it into downstream markets for private gain.

The States of Jersey have adopted a number of regulatory tools to promote competition in telecommunications where there is market failure or the potential to create market failure:

- the Competition (Jersey) Law 2005 which prohibits *ex post* anti-competitive arrangements, abuse of dominance (such as leveraging of market power, refusal to supply, price discrimination and predatory pricing) and anti-competitive acquisitions and mergers; and
- the Telecommunications (Jersey) Law 2002 which prohibits *ex ante* certain conduct (such as unfair cross-subsidisation, undue preference and unfair discrimination) and imposes certain obligations (such as requirements to provide network access, to separate accounts). [48]

These laws may be referred to as 'behavioural' rules in that they attempt to deal with market conduct. Another form of regulation which is discussed later as a possible option to behavioural regulation is structural regulation.

(v) Regulatory tools not optimal

The current regulatory framework in Jersey can compensate to some degree but not wholly for the issues inherent in vertical integration. First, in relation to the Competition (Jersey) Law 2005, this general competition law is not optimal for the following reasons:

- it is designed to promote and protect existing levels of competition in industries across-the-board but it cannot guarantee an introduction of competition into previously monopolistic markets such as telecommunications; and
- being *ex post* in nature, it deals with conduct after the event and may encourage a 'cheat and chase' mentality in interests of getting away with it or, if not, delay. [49]

In relation to the Telecommunications (Jersey) Law 2002, this industry-specific law is not optimal for the following reasons:

- in requiring access to be granted on 'fair and reasonable' terms, it has to deal with the incentives not to grant such access (as discussed above);
- the accounting separation provisions, which are an integral part of the Law, are not wholly sufficient to guarantee equality of access (for the reasons discussed below); and
- in general, industry-specific regulation is *ex ante* in nature which necessarily is heavy-handed despite the States policy of light-handed regulation. [50]

(vi) Accounting separation

Initially, most jurisdictions (including Jersey's) required incumbents to 'separate their accounts' so that any unfair cross-subsidisation or undue preference would become transparent and be dealt with swiftly by the regulator. Accounting separation has become an integral part of telecommunications law (including Jersey's). However, it has proven to be particularly problematical for the following main reasons:

• given the multiplicity of telecommunications services that can now be provided by one telecommunications

company (sometimes marketed as 'triple play' or 'quadruple play' packages), it is extremely difficult to properly allocate the joint or common costs (such as network rollout and maintenance costs, corporate overheads, etc) between the various services;

- it imposes substantial regulatory burdens on both the regulator and the regulated because the costs sought to be identified are 'economically efficient' costs (e.g., they include 'opportunity costs') which have little bearing on commercial decision-making and require the creation of a new set of accounts in addition to 'management accounts' (for company budgeting and strategic planning purposes) and 'statutory accounts' (e.g., for tax purposes) partly because of this, the JCRA temporarily waived last year the requirement for JT to update their accounts on a current cost basis; [51]
- the accounts are not sufficiently separated so as to enable separate identification of costs attributable to specific services and to show any below-cost predatory pricing, anti-competitive price discrimination or unfair cross-subsidisation;
- there are well known arguments over the level of access charges and the appropriate costing methodology (e.g., should it be historically based, current cost or forward looking; what should be the time frames, long run or short run; should it be incremental cost or avoidable cost; etc?); and
- in respect of enforcement, the incumbent has clear informational advantages over the regulator on the most relevant costs and levels of demand.

To give a flavour to the on-going and well-known problems associated with accounting separation in particular and behavioural rules in general, at Appendix B may be found extracts from a commentary on a judgment in Australia involving their application.

(vii) Regulatory experience in Jersey

There have been a large number of complaints received by the JCRA about alleged anti-competitive conduct by JT since the introduction of fixed-line competition in 2003 and mobile competition in September 2006. Confidentiality prevents the JCRA from divulging the particulars of these complaints but many can be traced back to JT's control of the ubiquitous local loop in Jersey and the market power that derives from it.

From the JCRA's experience with dealing with these complaints, the regulations have not always been optimal largely for the reasons discussed above. Further, dealing with these complaints is proving demanding of the JCRA's resources and, presumably, those of JT too. [52] For example, JT in its last Annual Report estimated that its costs of regulatory compliance were in excess of £1 million per annum.

7. INTERNATIONAL RESPONSES TO THE PROBLEM

Telecommunications laws initially designed to introduce competition were, as discussed, generally of the 'behavioural' type. However, as demonstrated by international experience, this form of regulation has not been fully successful in introducing access-based competition.

Apart from behavioural regulation, another form of regulation is structural regulation. This regulation attempts to restructure markets or market participants so as to make them more structurally competitive. It may initially be more interventionary than behavioural regulation but the underlying rationale is that restructuring is a one-off intervention designed to remove the incentives for anti-competitive behaviour and be less reliant on behavioural regulation and the high on-going costs it necessarily entails.

There are two broad forms of structural regulation – operational separation and structural separation – designed with the aim of making the telecommunications industry more structurally competitive. These are discussed in

general terms before turning to a discussion of how they have been adopted in a number of countries in an effort to make access-based competition more effective and sustainable.

(i) Operational separation

Operational separation involves the separation of the wholesale and retail operations of a dominant telecommunications company but the separated entities remain under the same corporate ownership. This option is increasingly being deployed in a number of countries in attempts to overcome the lack of effectiveness of behavioural regulation in dealing with the incentives of incumbents to discriminate in favour of their own.

The UK

One example is the UK where operational separation was adopted following the Strategic Review of Telecommunications conducted during 2004 and 2005 by Ofcom. A singular feature of operational separation as it has been adopted in the UK is that it is more regulatory intensive than the old behavioural regulation it replaced. For example, it involved:

- the drafting of more than 230 separate legally-binding undertakings with British Telecom (BT);
- the development by Ofcom of indicators to measure compliance with the undertakings and the publishing by Ofcom of regular updates on implementation of the undertakings;
- the drafting of new codes of practice and building of Chinese Walls within BT; and
- the creation of an Equality of Access Board (EAB) to monitor compliance with the undertakings.

The regulatory intensiveness of operational separation has been acknowledged by Ofcom:

In local access and other wholesale access products, efficient and sustainable competition is likely to require some continuing regulation to secure genuine equality of access, right through from product design to customer handover. Such regulation needs to be focused on a more limited range of wholesale products than to date – where there are real bottlenecks that are likely to endure. However, where it is focused, it also needs to be more intensive than hitherto. [53]

Furthermore, one year after been put in place, there are still problems in introducing effective and sustainable access-based competition:

... the actual implementation, particularly of equivalence, has raised a number of issues, for instance in the way in which equivalence was applied and the quality of the equivalence management platform used to deliver equivalence. In addition, during the implementation of the Undertakings over the last 12 months, service performance across a range of wholesale products has at times been poor, and promised improvements have not always been fully delivered, or maintained.

There is clearly a significant amount of work still to do both in terms of addressing outstanding issues as well as on the delivery of upcoming milestones. [54]

New Zealand

The New Zealand Government has recently introduced legislation to require Telecom New Zealand to operationally separate its retail and wholesale business activities in the interests of promoting competition and efficiency for the long term benefit of users:

In order to ensure that all the competitors in the telecommunications markets have equivalent access to Telecom's key network services, the majority recommend that Telecom create an operationally separate network access services unit with an independent oversight group. The majority are concerned that Telecom would still have the ability and incentives to favour its own retail units over its competitors if its network access services were not operationally separate from its other wholesale units and its retail units. In our opinion, it is difficult to guarantee a Chinese wall between entities that are not operationally separate. [55]

As the enabling legislation was only introduced in November 2006 and has yet to pass through Parliament, it is too early to judge the New Zealand version of operational separation.

Australia

In 2005 the Australian Government passed legislation for the operational separation of Telstra's retail and wholesale businesses to promote equivalence in the supply of network services. However, despite the Government's approval of Telstra's operational separation plan, implementation is still problematical and resource intensive:

... the implementation of operational separation is not yet complete. Telstra is now required to implement the strategies for service quality, information equivalence, information security and customer responsiveness, which relate to Telstra's wholesale services generally, and notional internal contracts, key performance indicators and the price equivalence framework, which relate to designated services. [56]

It is interesting to note that structural separation of Telstra had been originally recommended by a Committee of Inquiry as part of the telecommunications liberalisation process in Australia in the 1990's:

... the preferred response to this concern [the incentive of vertically integrated owners of essential facilities to inhibit competitors' access to the facility] is usually to ensure that natural monopoly elements are fully separated from potentially competitive elements through appropriate structural reforms. In this regard it is important to stress that mere "accounting separation" will not be sufficient to remove the incentives for misuse of control over access to an essential facility. Full separation of ownership or control is required. In fact, failure to make such separation despite deregulation and privatisation is seen as a major reason why infrastructure reform in the UK has been disappointing. [57]

However, that opportunity has been largely lost with the subsequent privatisation of Telstra. The Government's only practical option has been operational separation. There may be lessons for Jersey given the proposed sale of its incumbent telecommunications company, JT.

Italy

In June 2006, the President of the Italian communications regulator, AGCOM, announced that he was currently investigating the operational separation of Telecom Italia's network and commercial operations. [58]

(ii) Structural separation

The most clear-cut solution is to remove the incentive to discriminate. This can effectively be done through structural separation (i.e., the complete ownership and management separation of the wholesale and retail arms so that there is no commonality of interest between the two).

Possible structure

There are many ways to structure the separation of wholesale and retail operations but, as a working model for the purposes of analysis (i.e., a possible model but not necessarily a recommended model in the detail), the JCRA adopts the example of a wholesale arm (referred to as 'NetCo') which would own all local loop fixed network assets and infrastructure on the island of Jersey. [59]

In addition to the local loop, NetCo might also own and operate the core network as there is a strong economic case for keeping the two networks together:

Telecommunication networks are complex systems consisting of many components, which require close coordination in their design and operation, which plausibly can give rise to significant coordination economies if these networks are owned and operated as a single entity. [60]

In the example, the retail business (referred to as 'RetailCo') might initially be an asset-light entity focusing on sales, marketing and customer care of retail telecommunications services to business and residential users in Jersey. RetailCo could initially develop service requirements and specifications for NetCo but, in the interests of promoting 'deep-level' competition, it would not be precluded from developing its own network infrastructure (e.g., LLU co-located equipment). [61]

Under structural separation, and with the appropriate price regulation of the wholesale business, there would be incentives to supply network services to as many access-seekers as possible in the interests of maximising profits. In turn, this could lead to increased levels of competition in retail markets and the benefits that competition brings in terms of lower prices, higher quality and more innovative services.

The JCRA is not aware of any jurisdiction that has yet adopted pure structural separation. The option was actively considered by Ofcom but ultimately it accepted as a more proportionate measure operational separation undertakings that were offered by British Telecom (BT) in lieu of structural separation:

Ofcom believes that it would not be proportionate to break up BT at this time, because we think the package of undertakings that we have accepted is sufficient to address the problems that we identified in the market. Ofcom accepts that there are certain benefits to BT's vertical integration. It is important to note that Ofcom does not have the power to break up BT; Ofcom would have to refer the issue to the Competition Commission. If the issue was referred, the Competition Commission might or might not think that break-up was a suitable remedy. [62]

Europe

While the option of operational separation was ultimately accepted in the UK, the European Commission is currently actively inquiring into structural separation as an option in the context of its current review of EU electronic communications regulatory framework in view of the continuing problems it is experiencing with other measures in promoting competition:

I believe that the policy option of structural separation could answer many competition problems that Europe's telecom markets are still facing today. Perhaps we have to be as radical as regulators were in the US in the 1980s to make real progress? Of course, we will have to find our own European solutions, adapted to the needs of our continent. But "a European way of structural separation" is certainly a policy option that needs to be discussed intensively in the forthcoming months. [63]

(iii) Faroes version of structural separation

The Faroe Islands has a population of nearly 50,000. In June 2005, it implemented a version of structural separation in the light of continuing competition complaints from new entrants about gaining access to the fixed-line network and basic infrastructure of the incumbent, Føroya Tele.

The Faroese version does not separate the ultimate ownership of the wholesale and retail divisions as would occur under full structural separation but it effectively deals with the incentives to discriminate by providing positions for representatives of retail competitors on the Board of the wholesale network company and by making the wholesale and retail companies 'sister' companies rather than having them in a parent/subsidiary relationship. Both companies remain in government ownership. This form of structural separation is also proving successful in synchronising demand and supply.

In view of its potential relevance for Jersey, the Faroese version of structural separation is now described in more detail from information provided to the JCRA by the Faroe Islands national telecommunications agency, Fjarskiftis Eftirliti .

The process leading to adoption of structural separation was commenced with the establishment of a working group following complaints about access to Føroya Tele's network. The working group comprised representatives from the relevant Government policy department, the regulator, the incumbent Føroya Tele and the new entrants.

The group put forward three proposals: operational separation (by Føroya Tele), full structural separation (by the new entrants) and a version of full structural separation (by the regulator). The Government adopted the regulator's proposal in June 2005. It has the following key elements:

- Føroya Tele kept in government ownership (privatisation was being considered at the time but not proceeded with as it was recognised that if privatised, the opportunity would be lost to structurally separate Føroya Tele);
- Føroya Tele became the 'parent company' with two 'sister companies' at the same level (i.e., neither is a subsidiary of the other) created underneath it: FT Net as the network company and FT Samskifti as the retail services company;
- Føroya Tele, FT Net and FT Samskifti have separate boards, separate Chairmen and separate external audits; and
- the Chairman of FT Net is independent of Føroya Tele (i.e., he comes from outside the company group) and representatives from downstream competitors have positions on the Board of FT Net;

The Director of Fjarskiftis Eftirliti, J gvan Thomsen, has informed the JCRA that this form of structural separation 'works very well' in providing equal access to service providers. In addition he has informed the JCRA of the following benefits:

- there is a synchronisation of demand and supply of telecommunications services with having a representative on the Board of FT Net
- FT Samskifti has become more cost-focused and productively efficient by concentrating on its core activities of retail service provision and, as a result, its net revenue has increased;
- Kall the new entrant is doing better in terms of market share than before structural separation;
- there are fewer complaints about access (complaints are more to do with the complaints typically made under general competition law, e.g. bundling); and
- there is no need for resource intensive accounting separation.

J gvan Thomsen has also expressed his willingness to meet States Ministers to discuss the Faroes experience with their version of structural separation.

8. BENEFITS OF STRUCTURAL SEPARATION

The benefits of structural separation are now discussed in more detail.

(i) Removal of incentives to discriminate – more competition and demand

The primary advantage of structural separation is that it removes the incentive of a vertically integrated incumbent network provider to lessen competition in downstream retail markets by discriminating in favour of its own downstream operation when providing access to its essential network facilities.

Removing the incentive to discriminate through structural separation would be likely to encourage a profit-maximising monopoly network provider to supply as much of its network services as possible *provided* the access prices of the monopolist are regulated to allow for recovery of economic costs but no more. [64]

With access openly encouraged across-the-board, competition in the downstream market would, in principle, be enhanced as existing competitors compete on a more level playing field and potential competitors seek to enter the market in the knowledge that they will not be discriminated against. [65] Positive feedback loops could be created as the increased level of competition would be likely to enhance demand for network services and, in turn, expand the market.

By promoting competition, allocative and dynamic efficiencies are promoted for the ultimate benefit of the economy. While the enforcement of competition law can result in trade-offs between allocative and productive efficiencies, with structural separation there may well be a symmetry of interest: the Faroes example indicates that productive efficiencies can well increase in concert with allocative efficiencies as the separated entities concentrate on their core activities. [66]

(ii) Less need for regulation

With the removal of the incentive to discriminate, there is obviously less need for regulation designed to prevent such conduct. [67] The Organisation for Economic Co-operation and Development (OECD) has commented on the easing of the regulatory burden in the following way:

The regulation of an integrated firm must overcome the incentive of the incumbent to deny access. This form of regulation is therefore an **on-going battle** against the actions and information advantage of the incumbent as it seeks to use whatever means it has available to it to restrict access to its rivals. In contrast, by eliminating the incentive to deny access, vertical separation permits a lighter-handed form of regulation (such as price cap regulation, or regulation of baskets of prices), which allows greater discretion to the regulated firm, allowing it to use the information that it has more efficiently. [68] [emphasis added]

The 'on-going battle' occurs in respect of both *ex ante* regulation and *ex post* competition law enforcement. As the OECD has commented in respect of *ex ante* regulation:

An integrated firm, in contrast to a separated firm, benefits from any action which delays the provision of, raises the price or lowers the quality of access. An integrated firm will therefore use whatever regulatory, legal, political or economic mechanisms are in its power to delay, restrict the quality or raise the price of access. Furthermore, the integrated firm has strong incentives to innovate in this area, constantly developing new techniques for delaying access. Although the regulator can address these techniques as

they arise, it is likely to always be "catching up" with the incumbent firm. Regulation, despite its best efforts, is unlikely to be able to completely offset the advantage of the incumbent. [69] [emphasis added]

And as the OECD has commented in respect of *ex post* competition law enforcement:

In most countries the competition authority will also have a role to play in controlling the ability of the incumbent to restrict competition in the non-competitive activity. But, for the same reasons (the information advantage of the incumbent, the slowness and imperfection of competition law enforcement processes, the incentives on the incumbent to innovate in anticompetitive behaviour, the incentives of an incumbent to use legal processes to delay enforcement decisions and the competitive disadvantage of the new entrants in the face of delay and imperfect enforcement), antitrust enforcement is also unlikely to be able to completely offset the advantage of the incumbent relative to the new entrants. [70]

In addition, structural separation makes it relatively easier for the regulator to obtain reliable information about network costs as it reduces the opportunity to shift costs and profits around the enterprise through internal transfer pricing (as would occur with unfair cross-subsidisation, for example). In short, it is easier to regulate a separated monopolist than a vertically integrated one.

The OECD concludes on the regulatory issue:

In summary, effective regulation of an integrated firm increases the demands on the regulator and the regulatory regime, requires a tighter control on the behaviour of the integrated firm and is unlikely to be fully successful at offsetting the incentives of the incumbent to act anti-competitively. Vertical separation lightens the demands of the regulator, allows a lighter, more efficient control of the behaviour of the incumbent and is more successful at promoting competition overall. [71]

(iii) Investment incentives

Positive feedback loops can also create incentives for further network investment. For example, while a vertically integrated dominant network provider has an incentive to restrict capacity, an appropriately price-regulated and separated dominant network provider is likely to have an incentive to invest in additional network capacity to cater for any increased demand in downstream markets brought about by intensified retail competition.

(iv) Increased value to shareholder

The JCRA is aware that, should the proposed sale of JT proceed, there may only be interest in purchasing JT on an integrated basis and that that interest may only come from another telecommunications company. However, from a competition perspective, there would appear to be advantages in letting the market decide this issue, particularly since there are economic and commercial reasons why there may be market interest in bidding for separate entities.

Economically, vertical separation may, in some cases, enhance the value of the separated firms. In other words, there may be vertical dis-economies of scope. One possible source of a loss in efficiency from vertical integration is a loss of management focus, as the skills required to operate the two components may be distinctly different. For example, the JCRA is informed that in the Faroe Islands the retail operator has become more cost-focused and efficient by concentrating on its core activities of retail service provision and, as a result, its net revenues have increased since structural separation.

Commercially, the JCRA observes that there are specialist infrastructure investors and operators who, with regulatory oversight, are capable of operating NetCo on an efficient basis. For example, there is Babcock & Brown who have acquired Eircom in Ireland and have indicated that splitting Eircom's wholesale and retail arms was a likely option because of the higher earnings multiples from separating the businesses. [72] Two others are

Macquarie Bank of Australia and TPG-Newbridge of the US, both of whom have made separate bids for the infrastructure assets (i.e., not retail businesses) of PCCW, the incumbent telecom in Hong Kong.

These firms are driven by returns to investors and have the incentive to operate efficiently. Accordingly, they may view telecommunications infrastructure and its steady cash flows as an ideal addition to its many infrastructure trusts. [73] Although in a different industry, the JCRA understands that, following the separation of British Gas in the UK, the combined value of the separated businesses increased to more than double the value of the integrated business. [74] On the other hand, if the investment is highly geared it might also imply risky equity and a greater likelihood of financial distress. [75]

9. COSTS OF STRUCTURAL SEPARATION

(i) On-going loss of economies of scope

The primary disadvantage of structural separation is the potential loss of economies that derive from vertical integration (i.e., the economies of scope or the productive efficiencies that arise from providing wholesale and retail services together).

There are three main sources of these economies:

- greater availability of demand information allowing for more informed and efficient network investment decisions; and
- reduced transaction costs for the business entity; and [76]
- the consolidation of corporate head office, finance, legal, human resource and IT functions across several business activities. [77]

Economies of scope from vertical integration may be reduced or lost through structural separation. However, the existence and the extent of the economies that may be lost should not be taken for granted. Further analysis is required for, while wholesale and retail operations are co-specialised (i.e., neither can exist without the other), they are essentially distinct business activities. The network arm requires particular engineering and technical expertise which is quite distinct from the marketing and sales skills required for retailing. Further, there may be dis-economies of scope from a lack of management focus on core activities. As mentioned, the retail services business in the Faroes became more cost-focused and efficient by concentrating on its core activities following structural separation. Finally, a company may stay vertically integrated to exploit its 'monopoly premium' and, as such, this should not be considered a legitimate 'economy of scope'.

In addition, the advantages of vertical integration can be partially exploited through long-term contractual arrangements between the network provider and retailers. Where there are vertical contractual arrangements which can achieve the same efficiency benefits as integration, the loss of economies of scope may be small.

On the other hand, it is recognised that there are real costs involved in structurally separating a vertically integrated company reaping economies of scope from that integration. There may also be some business drawbacks in setting up two smaller organisations because, for example, they may be less attractive to some quality staff. On the other hand, these drawbacks can be alleviated if the acquirers are large companies offering greater career opportunities in Jersey and possibly elsewhere. Of course, actual corporate headquarter costs and other shared costs (e.g., IT systems) are not likely to comprise a major component of costs because of the essentially distinct nature of the two business activities (which, in any event, may be subsumed into the overheads of any larger acquiring organisation).

The fundamental issue, as in any cost benefit analysis, is whether the costs of losing economies of scope (which

may be limited for the reasons outlined above) outweigh the benefits of structural separation, particularly the wider benefits to the economy as a whole.

(ii) Less synchronisation of demand and supply

Another disadvantage is that there may be a loss of synchronisation between supply and demand (i.e., there is a loss of direct communication between the retailers who have first-hand knowledge of what customers want and the wholesale who provides the underlying network needed to provide services demanded).

However, should 'deep-level' competition (i.e., facilities- or access-based competition) develop as a result of structural separation, there is the potential for greater synchronisation between supply and demand as such competition would result in greater control over the network and the ability to configure the network to meet the variety of customer demands (for example, greater bandwidth, greater security and reliability, data streaming, data broadcast, always-on point-to-point data connectivity, video streaming, video-on-demand, pay TV, etc).

(iii) Loss of welfare-enhancing effects of price differentiation

Efficient pricing of access to networks may involve quite complex schemes, involving multi-part pricing, peak-load pricing, and differentiation between different classes of customers and demands. Structural separation may remove the ability to engage in welfare-enhancing price differentiation.

However, with any loss of the ability to differentiate, the regulator could allow a degree of discretion to the regulated firm to set its prices efficiently, perhaps through a cap on a basket of prices.

(iv) One-off transitional costs

In addition to the loss of any economies of scope, vertical separation may involve a substantial one-time cost associated with the break-up of the integrated firm. This cost is an important part of the cost-benefit trade-off associated with separation.

The JCRA's preliminary work done on the costs of restructuring JT estimate that the **one-off** costs could be in the vicinity of £ [confidential]. This figure is likely to be much less than the wider benefits to customers and the Jersey economy, particularly the financial services sector, from an increase in effective and sustained competition in the telecommunications sector. The costs of restructuring appear reasonable in relation to JT's estimated annual (i.e., **on-going**) regulatory compliance costs in excess of £ [confidential] (plus around £ [confidential] annually if it had been required to adopt current cost accounts) and incremental staff costs of £ [confidential]. They are also relatively small when one takes into account the overall annual revenue of the Jersey Telecom Group of £84.5 million in 2005. [79]

10. OECD RECOMMENDATION

In April 2001, the OECD adopted a recommendation urging member countries to consider separating the monopoly and the competitive parts of public utilities (including telecommunications), especially during the process of privatisation (the Recommendation on Structural Separation). [80]

The Recommendation was adopted after a substantial study and report by the OECD which explored the benefits and costs of structural separation (and which has been quoted from extensively in this paper). This report, entitled 'Restructuring Public Utilities for Competition', concluded that there should be a presumption in favour of separation:

An integrated firm has a strong incentive to discriminate against its downstream rivals. Behavioural regulation to overcome this incentive faces an uphill task and is unlikely to be fully effective. Experience shows that the level and quality of competition may be higher under a policy of vertical separation or operational unbundling. The benefits and costs to be balanced include the effects on competition, effects on

the quality and cost of regulation, the transition costs of structural modifications and the economic and public benefits that arise from vertical integration, based on the economic characteristics of the industry in the country under review. ... Given the benefits of separation in promoting competition and enhancing the quality of the regulation, there are grounds for a presumption in favour of separation. ... Such a presumption minimises the risk of inefficiently restricting competition in the competitive activity and enhances the incentives on advocates of integration to produce evidence of the economic efficiency benefits of integration. [81]

It should be noted at this point that some proponents of vertical integration look for support to a report written for the OECD Working Party on Telecommunications and Information Services Policy (TISP) which concludes that there is little evidence that the benefits of structural separation of the local loop convincingly exceed the costs.

[82] The report was written by an academic, a lawyer and an officer from the OECD Secretariat but it was only written for discussion and was not in any way endorsed by the TISP, members of the OECD or the Council of the OECD.

Moreover, the report for TISP focused on analysing a form of structural separation called 'LoopCo' which separates the local loop assets from core network assets. As mentioned in this paper, the JCRA is using the NetCo model for analysis where both local loop and core assets are combined into the one network company. As the authors of the TISP report themselves acknowledge, LoopCo is not mentioned in the OECD's report on Restructuring Public Utilities for Competition, nor has it been adopted by any member country. [83] Presumably this has been largely for the reason mentioned earlier in this report – there is a strong economic case for keeping different parts of the network together rather than splitting them up into separate entities.

The OECD's official position is set out in its report on Restructuring Public Utilities for Competition (which presumed in favour of separation) and its Recommendation on Structural Separation. Further, the OECD has recently reviewed member countries experience in implementing the Recommendation and concluded that the Recommendation is still important and relevant and should remain in place as it is. [84]

11. CONCLUSION

Pulling together the various and at times complex issues and arguments outlined in this paper:

- the States objective in telecommunications is to meet demand (particularly the demands of the financial sector) for telecommunications services, wherever appropriate by competition;
- competition occurs in the dimensions of price and quality but the States have expressed a preference for quality services in view of the demands of the financial sector and its importance to the Jersey economy;
- resale competition typically results in price competition but it does not always provide for high quality services since it involves minimal investment in the necessary infrastructure (however, such competition may play an important role in facilitating market entry and the transition to more investment-based competition);
- if competition is to result in high quality services, it can only be provided by 'deep-level' investments in network infrastructure such as that afforded by facilities- and access-based competition;
- of the two, facilities-based competition is not economically feasible in Jersey given the small market size, high capital costs and economies of scale;
- access-based competition is the only potentially feasible form of competition in Jersey that will meet the demand for high quality services;

- however, on the basis of international experience and despite the best intentions of regulators, it appears
 that access-based competition is unlikely to develop on an effective, timely and sustainable basis while JT
 is structured as a vertically integrated supplier of network and retail services;
- the JCRA notes Newtel's plans to become an access-based competitor;
- if access-based competition is successful, it would be expected to deliver significant on-going benefits for the Jersey economy as a whole in both price and quality of services;
- there may be a one-off loss in States revenue from structurally separating JT rather than selling as a whole but the JCRA understands that there may be market interest in acquiring separated entities; and
- there are also likely to be on-going costs stemming from the loss of vertical efficiencies, reduced synchronisation of demand and supply, and loss of the welfare-enhancing ability to price discriminate; but
- there is the likelihood of greater resale competition to keep downward pressure on retail prices.

(i) A unique opportunity

Ofcom has commented on the 'once-in-a-generation' opportunity to restructure BT for the benefit of future competition during its strategic review of telecommunications:

This is a once-in-a-generation opportunity to ensure that the fundamental network and regulatory structures are aligned to ensure opportunities for fair competition in future. [85]

The States of Jersey has a greater opportunity than the UK to restructure appropriately JT because it is still in States ownership. Restructuring does not preclude the ultimate sale of JT but, once sold without restructuring, that opportunity is likely to be lost for future generations.

(ii) Options

The Economics Minister has requested the JCRA to advise him on the structure of JT that the JCRA believed would best serve the States policy of promoting competition in telecommunications and thereby economic growth as a whole.

The JCRA concludes from the information presented in this paper that the current behavioural regulation (in particular, accounting separation) is not optimal from the point of view of promoting effective and sustainable competition.

The JCRA does not conclusively recommend any particular option for the structuring of JT because it is aware that there are other policy objectives in addition to the promotion of competition (such as maximising return to the shareholder) as well as the possible disadvantages outlined in this paper to be put into the equation.

However, it has pointed out the benefits and costs of both operational and structural separation. The costs of structural separation include the productive efficiency losses from separating a vertically integrated enterprise. But the benefits can potentially be significantly greater because, by allowing for more effective and sustainable competition to develop, allocative and dynamic efficiencies are spread throughout the economy, including essential high quality telecommunications services for the finance sector.

The JCRA particularly points to the version of structural separation adopted in the Faroes Islands which is proving successful in operation by largely removing the incentives for discrimination by the monopoly network provider but does not have the downside of wholly losing economies of scope from vertical integration. The

Director of Telecommunications in the Faroes has expressed his willingness to meet States Ministers to discuss the Faroes experience should Ministers wish to take this option further.

On the issue of whether the structurally separated network business should be kept in States ownership or privatised, the JCRA is neutral from a competition perspective for it is most likely that the structurally separated network business will remain a monopoly.

On the issue of whether the retail mobile and fixed-line operations of JT should be separated, the JCRA is of the view that there is no clear benefit in doing so, particularly in view of the previously mentioned trends in telecommunications to supply a multiplicity of services and market them increasingly together as an optional package.

Similarly, there does not appear to be any clear benefits in separating the network and retail mobile operations of JT since competition has developed in this market on a vertically integrated basis.

In conclusion, it should be emphasised that the payoffs in terms of consumer welfare, efficiency and economic growth are likely to be far greater in small economies from getting JT structurally right in the interests of promoting competition. To finish where one starts, we conclude with Michal Gal and her quotation presented at the beginning of this paper:

Even small economies that enjoy some unusual comparative advantage must have the capacity to benefit from these hazards of fortune and to make them a basis for sustained economic development. Moreover, in small economies the importance of an appropriately structured and efficiently enforced competition policy may be greater than in large economies. [86] [emphasis added]

Terms of Reference

for advice on

the structure of Jersey Telecom which best promotes competition in telecommunications and thereby economic growth as whole

It has been proposed that the States sell its shareholding in Jersey Telecom (JT). I have agreed with the Treasury and Resources Minister that I would examine how such a sale (assuming the States decides to proceed with it) could be structured in a way which would maximise the benefits to the Jersey economy.

I refer to the 2001 OECD Recommendation concerning Structural Separation in Regulated Industries, to the effect that, in the context of privatisation, a cost-benefit analysis of structural separation, as compared with other regulatory controls such as accounting separation, should be carried out. After a review of experience with implementing this Recommendation, the OECD only a few weeks ago confirmed that it is still important and relevant. While Jersey is not of course a member of the OECD, I believe that the proposed sale of JT provides the States with a valuable (and perhaps unique) opportunity to achieve an industry structure which maximises the benefits to the economy, in particular through competition and economic growth.

I therefore request the JCRA, under Article 6(4) of the Competition Regulatory Authority (Jersey) Law 2001, to advise me on the following issues:

- 1. The structure of JT that the JCRA believes best serves the States policy of promoting competition in telecommunications and thereby economic growth as a whole, including:
 - a) selling JT in its current form, i.e. a transfer of ownership in JT as a whole;
 - b) retaining JT under State ownership but structurally separating the network (wholesale) business from the fixed retail and mobile businesses;
 - c) retaining JT's network (wholesale) business and selling its fixed retail and mobile businesses (separately or together);
 - d) selling JT's network (wholesale) business to one purchaser, and its fixed retail and mobile businesses to a second purchaser;
 - e) selling JT's network (wholesale) business to one purchaser, its fixed retail business to a second purchaser, and its mobile business to a third purchaser.
- 2. The economic costs of each of the scenarios in 1(a) to 1(e) above, including:
 - i) on-going costs of regulation for both the JCRA and JT;
 - ii) one-off transitional costs of structural modifications; and
 - iii) the efficiency losses from structurally separating a vertically integrated business.

You will appreciate that I am not asking you to comment on the financial aspects of the proposed sale, on which the States is being separately advised. I am also not asking you to comment on whether the proposed sale may give rise to any issues under the Competition (Jersey) Law 2005: clearly you would only be able to advise on such issues once the identity of any potential purchaser(s) becomes known.

Senator Philip Ozouf Minister for Economic Development 2 October 2006

An illustration

of

on-going problems with behavioural regulation in telecommunications

To give a flavour to the on-going and well-known problems associated with behavioural regulation (including accounting separation) in telecommunications, quoted below are extracts from a commentary on a judgment of the Australian Competition Tribunal in which the incumbent (Telstra) lost an appeal against a decision by the Australian Competition and Consumer Commission (the ACCC) to reject its proposed charges for network access:

The other night I curled up in a comfy chair with some strong black coffee and last week's judgement by Goldberg J, Robin Davey and Professor David Round in the Australian Competition Tribunal on Telstra's appeal against the ACCC's rejection of its undertakings on what is called the line-sharing service (LSS).

But before I lost consciousness towards midnight, I couldn't help thinking: Boy oh boy, what a nightmare this all is. How many of the best legal minds in the nation are trying to force Telstra to behave like a happy wholesaler, when it all it wants to do is remain the ruling retailer?

Telstra said the cost of supplying LSS totals \$11.75, consisting of 77c network costs plus \$10.98 LSS specific costs. It generously proposed to charge only \$9. This was rejected by the ACCC and then again last week by the tribunal because it involved "levelising" the costs over too short a timeframe (the four years of the undertakings), and loading unreasonable costs on to LSS.

That's a gross simplification of the legal equivalent of the General Theory of Relativity. And the result is grossly inferior to the two alternatives: having a network owner that is nothing but a wholesaler and having infrastructure competition.

There will now be a similar process with unconditioned local loop (ULL).

In a few weeks Telstra will submit a proposal. There will then be eight weeks of public consultation. The ACCC will then reject Telstra's proposal. They will then troop along to Messrs Goldberg, Davey and Round at the tribunal. Sometime next year I will sit down with another cup of coffee and read the judgement. [87]

STRUCTURAL SEPARATION REPRESENTATIONS FROM JERSEY TELECOM

22ND DECEMBER 2006

CONTENTS

1	Introd	uction	
_		1.1 Background	
		1.2 Objectives: what are we trying to achieve?	
		1.3 Types of Separation	
		1.4 Framework for evaluation – Cost Benefit Analysis	
		1.5 Structure of this submission	
2	How s	hould the structural options be evaluated?	
		2.1 Theory behind structural separation and claimed public benefits	
		2.2 Criteria for Evaluation	
		2.3 Which structural options should be evaluated?	
3	Evalua	Evaluating Benefits and Costs of Structural separation	
		3.1 Effect on competition	
		3.2 Impact on cost of regulation (state and regulated entity)	
		3.3 Cost of Implementation	
		3.4 Efficiency	
	$\frac{3.4.1}{3.4.2}$	Ongoing efficiency (scale)	
	3.4.2	Ongoing Efficiency (scope)	
		3.5 Impact on innovation/ incentives to invest	
	3.5.1	Loss of option	
	3.5.2	Impact on ability to recruit scarce talent	
4	Concl	Conclusion	

Executive Summary

This paper outlines some of the key considerations that should be taken into account when considering the optimal structure of Jersey Telecom if the current and prospective demands for telecommunications services in Jersey are to be provided for – this being the primary duty of the Minister for Economic Development and the Jersey Competition Regulatory Authority ("JCRA") under the terms of the Telecommunications (Jersey) Law 2002.

Proponents of structural separation claim that it is necessary to avoid an alleged conflict of interest when a company is both a competitor and a supplier to the same organisations. Such proponents have also claimed that structural separation might reduce the cost of regulation in the long term by focusing regulatory scrutiny on the parts of the business most in need of it.

A decision to implement structural reform will have far-reaching and irreversible consequences and as such, any decision to engage in such reform should not be taken lightly but only after a careful analysis of the relative costs and benefits of the structural options under consideration.

A major disadvantage when evaluating some of the more radical structural options is the lack of empirical evidence of its effect. There are no known examples where network and retail elements of a telecommunications operator have been completely separated. Whilst there is some limited experience of a fixed incumbent operating without a mobile division, it has failed to provide any evidence that doing so is beneficial to competition.

Below, we outline Jersey Telecom's recommendations for the costs and benefits that must be taken into account when evaluating options for structural reform. In particular, we consider the following:

- The theory behind structural separation and claimed public benefits (Section 2.1);
- The criteria that should be used for evaluating the structural options (Section 2.2);
- The structural options that should be evaluated (Section 2.3); and
- Section 3 undertakes a qualitative evaluation of the benefits and costs of the structural options in terms of their effect on competition, the cost of regulation, the cost and time of implementation, efficiency, investment, effect on options for the future and the ability to attract scarce talent.

Overall, the benefits of structural separation are unknown given the lack of evidence, whilst the costs are both high and known with much greater clarity.

Consequently, we conclude that structural separation represents significant risk for no benefit whatsoever and that the most appropriate course of action would be to utilise regulatory tools such as accounting separation to manage conflicts, perceived or otherwise. It should be accepted that Jersey Telecom's current structure as a vertically integrated supplier is the most appropriate for Jersey and we note that competitors entering this market do so in the full knowledge of this structure. These new entrants are experienced, global players, and none have, to our knowledge, suggested that such a course of action would be appropriate or required. Whilst this would be true in any market, we argue that such risks would be particularly high in Jersey, given its small size.

1. Introduction

1.1 Background

A licence to operate a telecommunications network in Jersey was granted to Jersey Telecom Limited ("Jersey Telecom") on 1st January 2003 by the JCRA. Prior to this date the States of Jersey held the role of operator, regulator and owner of Jersey Telecom, the monopoly telecommunications provider. However, the States of Jersey endorsed a new approach to telecommunications in Jersey when it passed the Telecommunications (Jersey) Law 2002 ("the Law"). The effect of this Law was that the three roles of the States of Jersey were divided. The States of Jersey, through the Minister for Treasury and Resources, remained the shareholder; the regulatory role was divested to the newly formed JCRA and the operational activities were incorporated into JT Group Limited, under the direction of an independent Board.

The operation of the JCRA and the Minister for Economic Development in the telecommunications industry is

governed by the primary duty set out in Article 7(1) of the Law which requires each to "perform its functions under this Law in such manner as it considers is best calculated to ensure that (so far as reasonably practicable) such telecommunication services are provided, both within Jersey and between Jersey and the rest of the world, as satisfy all current and prospective demands for them, wherever arising".

In addition Article 7(2) states that they must also, in so far as is consistent with their primary duties:

- (a) "perform their functions under this Law in such manner as it considers is best calculated to protect and further the short-term and long-term interests of users within Jersey of telecommunication services and apparatus, and perform them, wherever it considers it appropriate, by promoting competition among persons engaged in commercial activities connected with telecommunications in Jersey";
- (b) perform its functions under this Law in such manner as it considers is best calculated to promote efficiency, economy, and effectiveness in commercial activities connected with telecommunications in Jersey;
- (c) perform its functions under this Law in such manner as it considers is best calculated to further the economic interests of Jersey;
- (d) perform its functions under this Law in such manner as it considers is beats calculated to impose a minimum of restriction on persons engaged in commercial activities connected with telecommunications in Jersey;
- (e) in performing its functions under this Law, have regard to the need to ensure that persons engaged in commercial activities connected with telecommunications in Jersey have sufficient financial and other resources to conduct those activities; and
- (f) in performing its functions under this Law, have regard to any special needs of persons who are disabled or have limited financial resources to conduct those activities."

It is important, for a moment, to reflect further on Article 7(2)(a), where both the offices of the JCRA and the Minister for Economic Development are to perform its duties "wherever it considers it appropriate" by promoting competition in the telecommunications industry.

This specific form of wording was approved by the States of Jersey in recognition of the fact that competition, in all its forms, was not necessarily the best way of ensuring that all current and prospective demands were provided for in a jurisdiction the size of Jersey. That is not to say that competition does not have a role to play; clearly it does. However, it is the form and degree of competition that is appropriate to Jersey's circumstances that must be balanced by the JCRA and the Minister for Economic Development in their deliberations on matters related to telecommunications.

The current discussion on the possible sale of Jersey Telecom has potentially major implications for Jersey's telecommunications market and it is on this basis that the Minister for Economic Development, Senator Philip Ozouf, wrote to the JCRA on 2nd October 2006, requesting advice regarding the costs and benefits of the different options the States of Jersey has for either maintaining or selling its stake in Jersey Telecom.

Of particular consideration and concern is the impact of structurally separating different parts of Jersey Telecom, either as part of a sales process, or as a means of maximising the benefits to the economy whilst Jersey Telecom remains in state ownership.

The Minister has requested advice on a number of structural options, namely;

- selling Jersey Telecom in its current form, i.e. a transfer of ownership in Jersey Telecom as a whole;
- retaining Jersey Telecom under State ownership but structurally separating the network wholesale) business from the fixed retail and mobile businesses:
- retaining Jersey Telecom's network (wholesale) business and selling its fixed retail and mobile businesses (separately or together);
- selling Jersey Telecom's network (wholesale) business to one purchaser, and its fixed retail and mobile businesses to a second purchaser; and

• selling Jersey Telecom's network (wholesale) business to one purchaser, its fixed retail business to a second purchaser, and its mobile business to a third purchaser.

Jersey Telecom is an important stakeholder in this process and has valuable insights into the pros and cons of various structural options. In view of this, it is surprising not one single question or request for information has been submitted by the JCRA, notwithstanding that its deliberations must by now be close to completion. In the absence of any involved discussion on the matter, which this subject clearly requires, this paper sets out our views as to the analysis that we believe is required in order to understand the costs and benefits of each of the above options, as well as our opinion as to which of these options is most desirable from an economic development and competition perspective.

1.2 Objectives: what are we trying to achieve?

As with all significant regulatory decisions, the first question to be asked must be "What is the problem that we are trying to address? [88],". In this specific instance structural separation has been mentioned by the Minister for Economic Development in the context of the sale of the Company and the JCRA has been asked to prepare a response to them considering the implications to the business and the economy of implementing such. What is not clear, however, is what problem they think structural separation is the answer to.

The question of structurally separating an integrated company is not one to be decided lightly. The structure of the Company has been considered by the Board previously. Specifically, it was considered in depth when the wholesale product portfolio was being developed, as was reflected in Jersey Telecom's comments contained within its Impact Statement.

In the Impact Statement we stated, [89] "Jersey Telecom considers that the most effective means of liberalising the telecommunications market in Jersey is through encouraging competition in the service market. Through adopting this approach, Jersey Telecom believes that the JCRA can achieve its core aims of providing the consumer with a choice of service provider, maintain the high level of quality that the consumer currently enjoys, stimulate new product and application development and continue to drive down the overall price of telecommunications". However, subsequent to that submission, the JCRA stated that they believed infrastructure based competition would be most appropriate for the Island.

On this basis, the JCRA has supported infrastructure roll-out by the new entrants as it believes that such a roll-out offers the greatest benefits by each operator controlling its own portfolio and service quality, thereby allowing them to compete on a completely equal basis.

The question of whether structurally separating the dominant operator, is well recognised throughout the industry and it is generally agreed that such action should only be considered as a last resort option; there are many regulatory remedies that can be utilised in lieu of such an extreme measure, such as accounting separation and

forms of operational separation that are already in place within Jersey Telecom [90]. If there is a problem, and it should be noted that no-one has yet identified one, then the first step would be to consider dealing with it utilising light touch approaches.

The JCRA first raised the question of whether structural separation would lead to inefficiencies, in its paper "Consultation paper on Accounting Separation and Costing Methodologies" [91]. In this paper it considered what structural separation was and how it would impact a small market such as Jersey. They stated that:

"In a small market such as Jersey, the imposition of structural separation could result in significant inefficiencies with central functions having to be duplicated, and extra resources having to be used to manage intra-operator billing".

This view is consistent with analysis carried out by other bodies that considered whether it was a cost effective regulatory strategy. In the paper "Preparing the next steps in regulation of electronic communications" by Analysys, they consider that structural separation is:

"...a drastic regulatory intervention that does not sit comfortably within the Regulatory Framework's provisions and principles" and they go on to state that it could be considered by a member state only in "exceptional"

circumstances" as it is a "disruptive measure that can reduce the efficiencies of integration".

1.3 Types of Separation

There has been a lot of recent debate regarding different types of separation for incumbent telecoms operators and what degree of separation, if any, is optimal in ensuring that there is an appropriate level of competition in the sector, recognising that unnecessary separation can damage economic development and consumer surplus as a result of creating unnecessary costs and barriers to innovation and product development.

Jersey Telecom is implacably opposed to structural separation being enforced upon the business, as there has been no failure in the manner in which the business is regulated or operates in the market. We are however, happy to discuss what the various structural options mean for the States of Jersey. We believe that an open debate is essential to ensure that any final decision is appropriately informed and has considered the views of all relevant stakeholders. Such open debate will ensure that the key objective of this process is met, namely, that the future structure of Jersey Telecom is the one that is optimal for the States of Jersey.

In forming our views, we have had regard to, among other papers, the 2003 Organisation for Economic Cooperation and Development ("OECD") paper titled, "The benefits and costs of structural separation of the local loop [92],". The focus of this paper is mainly on a particular structural model, namely, the separation of the local loop from the rest of the business. As such, not all of its conclusions are directly relevant in the current context. Because of this, we focus more on the analytical framework presented in the paper, which is relevant regardless of the structural model being considered.

The OECD paper notes that the outcome of market opening has been unambiguously positive with improvements in quality, falling prices and a wealth of new services. However, the paper goes on to say that problems faced by new entrants in obtaining access to incumbent network facilities have led to calls for structural remedies on incumbents (in particular, the separation of the local loop from other services). Such problems include "price squeeze", "foot dragging" and raising rivals' costs, among other things.

The theory behind structural separation as the OECD, the European Commission and others have noted, is to resolve a perceived inherent conflict of interest involved when the incumbent acts both as a supplier and as a competitor. It is argued that structural separation can, *inter alia*, align the incentives of the main wholesale operator with those of a non-integrated carrier by forcing it to deal with any retail operator on exactly the same terms. Jersey Telecom, however, already has a variety of options available to Other Licensed Operators ("OLO's") enabling them to compete on the same terms as itself. A range of wholesale products is available encompassing leased lines, xDSL and International Simple Voice Reseller options. In addition, a Reference Interconnect Offer ("RIO") has been made to OLO's which enables them to take products and compete on equal terms. This RIO was issued following extensive consultation by the JCRA regarding the framework and product offerings. To date there have been no requests supported by the JCRA for additional products, or changes to existing products to be made, by any of the OLO's, to either the RIO or wholesale offerings, that are not already being met, which is indicative, broadly, of satisfaction with the offerings.

1.4 Framework for evaluation – Cost Benefit Analysis

The most valuable contribution of the OECD paper in the current context was its strong advocacy of careful cost benefit analysis to inform decision making on structural options and the range of costs and benefits that might be considered.

In its analysis, the OECD appeared to be most concerned about the possibility that structural separation might:

- Delay or impede network upgrades, including the extension of fibre closer to the customer;
- Introduce significant problems in coordinating investment between wholesale and retail; and
- Threaten the various efficiencies enjoyed by an integrated firm, including economies of scale and scope.

Meanwhile, the OECD concludes that there is inadequate evidence to generate confidence that separation would

enhance competition to the degree necessary to justify the cost. Consequently, the OECD concluded that against such an assessment, the more sensible option would appear to be to persevere with making improvements to the current regulatory approach, backed by sanctions to deal with anti-competitive behaviour.

Jersey Telecom agrees broadly with the above and notes once again that the current legislation gives the JCRA more than sufficient powers to address any activities that it deems are anti-competitive. Together with the extensive powers conferred upon the JCRA under the Law, the Competition (Jersey) Law 2005 is also available to assist where necessary. The development of legislation in this area has been consistent with liberalisation of the market and the mechanism to challenge any actions deemed anti-competitive is already in place.

1.5 Structure of this submission

The remainder of this paper deals with the specific factors that should be taken into account when considering if there is any need for any form of separation.

2. How should the structural options be evaluated?

As stated in section 1.2 above, it is imperative that from the outset all parties must be clear regarding what problem they are seeking to remedy. It is not sufficient to regard structural separation as the answer to an undefined problem, simply because "it seems to be a good idea". In this particular case, there does not appear to be any failing of the regulatory regime currently being adopted and as such whilst it is compelling to discuss the issues surrounding the implication of physical separation of a business, it should be done so in the context of addressing an issue.

In this section we outline our recommendations for:

- Our understanding of the basis for considering structural separation in theory;
- The criteria that we recommend the JCRA should take into account when evaluating the options for separation; and
- The structural options that we recommend the JCRA evaluates (our suggestions are broadly consistent with those set out in the Minister's letter but we propose one additional option as well as a minor simplification to the list).

One *spurious* reason sometimes offered for structural separation is that "they are separate businesses and can be run separately". The fact that businesses *could* be run separately is not sufficient justification for why they *should*. The benefits of running the businesses separately should be clearly seen to outweigh the one-off and ongoing costs of separation.

An example is a fixed-mobile business. Evidently, fixed and mobile businesses can be – and are – provided separately or together. But this fact alone is insufficient evidence for saying that they **should** be provided separately.

By contrast, a *valid* argument for structural separation might be that separation would increase competition or lower the costs of regulation (and that such benefits can be demonstrated to outweigh the costs). Unfortunately whilst this argument is consistently posed there is no evidence to suggest that this is in fact the case. It is more likely that the costs involved with structural separation would raise the regulatory costs and consequently prices to the consumer in the long term. One of the key benefits of the business being fully integrated is that savings can be made due to core infrastructure being apportioned over both fixed and mobile products. Should the business be forced to separate structurally, the cost of duplication of key activities/parts of the business would be significant.

In addition, the buying power of each business part would be reduced even further than it is now, which would have a significant impact to the competitiveness of the business and would directly affect the roll-out of key services due to the practice of vendors giving preferential treatment to those with high capital and spend. As has already been mentioned, the buying power of Jersey Telecom is significantly lower than that of the new entrants in the market. Should structural separation occur, then the business could be left in a position whereby for a period of time it holds market share, but lacks buying power to operate and compete effectively. In this case, the overall costs to the business would rise and ultimately the cost to the consumer would have to be raised to cover it.

2.1 Theory behind structural separation and claimed public benefits

The conjecture that structural separation would increase competition is based on an inherent conflict of interest that is seen to arise when a telecoms' operator is both a competitor with and a supplier to other operators. Such conflicts of interest have allegedly involved discrimination, price squeeze, "quality squeeze", "foot dragging" and so on.

There are a number of claimed benefits of structurally separating an incumbent vertically integrated operator, although it is worth noting that there is very little agreement, even among proponents of structural separation, as to whether all of these benefits will be realised, or the extent to which they will be realised. The claimed benefits include:

- Potentially aligning the incentives of the incumbent with those of a non-integrated carrier, thereby guaranteeing non-discriminatory access and enhancing competition;
- Potentially, allowing regulators to focus on the parts of the business most in need of regulation, wholesale pricing and access, reducing the need for regulation in potentially competitive areas;
- Potentially promoting innovation in terms of service delivery;
- Potentially eliminating conflicts between retail and wholesale arms [93];
- Potentially allowing greater effectiveness than behavioural remedies that run counter to an incumbent's incentives; and
- Potentially improving information and eliminating cross-subsidisation.

2.2 Criteria for Evaluation

Having briefly set out the theoretical benefits of separation, we consider here the criteria that we recommend the JCRA take into account when evaluating the structural options for Jersey Telecom. There are seven criteria that we recommend the JCRA use for evaluation. These are as follows.

Table 1

Criterion	Notes	
1. Impact on competition.	Will the proposed structural option improve	
	competition or worsen it? How much?	
2. Cost of regulation (state and regulated	What will be the effect of the proposed	
entity).	structural option on the cost of regulation for	
	the state and for the regulated entities? What is	
	the magnitude of the effect (if any)?	
3. Cost/time of implementation.	What will the proposed option cost and how	
	long would it take?	
4. Efficiency (scale and scope).	What is the effect of the proposed option on	
	economies of scale and scope? What is the	
	magnitude of the effect (if any)?	
5. Impact on investment and innovation.	Will the proposed option affect incentives to	
	invest and innovate? If so, how much?	
6. Loss of option.	Will the proposed option restrict options for	
	further behavioural and/or structural options in	
	the future? If so, how important is this?	
7. Impact on ability to attract scarce talent.	Will the proposed option affect the ability of the	
	entities' ability to attract scarce talent? If so,	
	how much?	

2.3 Which structural options should be evaluated?

The Minister's letter set out five options for considerations, as follows:

- 1. selling Jersey Telecom in its current form, i.e. a transfer of ownership in Jersey Telecom as a whole;
- 2. retaining Jersey Telecom under State ownership but structurally separating the network wholesale) business from the fixed retail and mobile businesses;
- 3. retaining Jersey Telecom's network (wholesale) business and selling its fixed retail and mobile businesses (separately or together);
- 4. selling Jersey Telecom's network (wholesale) business to one purchaser, and its fixed retail and mobile

- businesses to a second purchaser;
- 5. selling Jersey Telecom's network (wholesale) business to one purchaser, its fixed retail business to a second purchaser, and its mobile business to a third purchaser.

We have two comments on these options. First, we would recommend that the list should include the separation of core and access network functions as this model has been the subject of much discussion in a number of countries (for example, the UK, Australia, New Zealand and Italy). Second, we believe that the JCRA can simplify its analysis by considering the effects of each of the structural options in isolation rather than attempting to analyse all the possible permutations.

For these reasons, we recommend that the JCRA analyses the following options:

- 1. Retaining Jersey Telecom in its current form;
- 2. Separation of retail and network;
- 3. Separation of fixed and mobile; and
- 4. Separation of core and access.

3. Evaluating Benefits and Costs of Structural separation

The structural options should then be evaluated against the criteria. This is not an easy task as the costs and benefits must as far as possible be quantified. It is beyond the scope of this submission to attempt to quantify the costs and benefits. Instead, in this section, we consider some of the qualitative costs and benefits that we suggest the JCRA takes into account when evaluating the separation options against the criteria discussed above.

3.1 Effect on competition

To determine whether structural separation would improve competition, it is necessary to proceed through two steps as follows:

- First, it is necessary to diagnose the problem correctly; and
- Second, the correct solution must be found.

With regard to the first, those favouring structural separation have argued that the disappointing progress of competition in some markets (particularly local loop unbundling) is the result of anti-competitive conduct by a powerful vertically integrated incumbent. Of course, the current discussion is broader than Local Loop Unbundling ("LLU") but it is useful to consider how the arguments have been applied and evaluated in relation to LLU, because this is the context in which most discussion has taken place.

There is no doubt that in many countries, LLU has been disappointing. However, such disappointment is not universal. In France for example, LLU is well recognised to have been a success story. Furthermore, the disappointment with the progress of LLU cannot be used as evidence for the allegedly harmful effects of vertical integration as there are many other areas – voice, for example – in which competition has been established successfully despite the presence of a vertically integrated incumbent. In most liberalised markets, competition in fixed voice services depends on a mixture of new infrastructure build, carrier pre-selection and wholesale line rental. The latter two are supplied by the vertically integrated operators to their competitors and have in most cases been very successful in introducing competition. Of course, the fact that it has been successful in some countries and not in others demonstrates conclusively that it is not the vertical structure of the market that determines the success of competition but other factors (for example, the quality of regulation and market specific factors).

We should also remember that LLU is only one of many possible technical solutions to establishing competition in broadband. In some countries, a regulated "bitstream access" product has been successfully deployed as an alternative to LLU as a platform for broadband competition in a vertically integrated market. In the UK, for example, while LLU has been slow to take off, broadband competition is considered to be remarkably successful with the incumbent enjoying one of the lowest retail market shares in the world (this being a measurement of

success in the UK market). In Jersey, penetration levels for broadband access currently sit at 51.5% [94]. It is interesting to note that since June 2006 Jersey Telecom's broadband competitor has matched, if not exceeded subscriber take-up in this area.

The important point is that in markets with vertically integrated incumbents, competition has both succeeded **and** failed. As stated above, this demonstrates that the success or failure of competition is not the result of the vertical structure of the incumbent but of other factors. The OECD concurs with this view, stating that ineffective regulation, the difficulty of obtaining the scale to justify the capital expenditure necessary to compete in the local loop and limiting the funding for new entrant competitors all provide equally plausible explanations of the slow progress of competition. Summarising, it states, "the extent to which the source of the problem is anti-competitive conduct is not clear".

The question of funding is a key point particularly when considering the initial funding of the new entrants. In Jersey we have already seen significant capital being invested in order to provide infrastructure to the new entrants thereby enabling them to compete independently of the Jersey Telecom network. C&W reported a market share of 7% of mobile market share within 6 weeks of launching, providing powerful evidence that in the Jersey market the bottleneck described as being the reason for structural separation will not necessarily be experienced. Indeed, even though the new entrants are focusing predominantly on mobile, with the advent of wireless broadband solutions these new entrants require only minimal access to the network and this is provided through current interconnection arrangements.

Furthermore, with new services being provided over varying platforms, such as VoIP, competition takes place at a different level in the network and is not as dependant on the traditional platforms and physical infrastructure as it was previously.

Even if it had been conclusively demonstrated that anti-competitive conduct was the primary cause of the difficulty in developing competition, it would remain to establish that structural separation is the correct remedy. In this regard, it is worth noting that the theoretical benefits of structural separation are at best are unproven. There is very little (if any) evidence on which to base a view on the benefits of structural separation.

In Table 2 below, we provide a brief summary and evaluation of the likely performance of the four structural options on competition.

Table 2.

Evaluation of the four options effect on competition

Selling Jersey Telecom in its current	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
form			
Positive. Greater confidence in Jersey Telecom being independent of government and regulation may increase the propensity of new entrants to invest.	Inconclusive. No evidence that separating retail and network functions will improve competition.	Neutral/inconclusive. Limited vertical relationships between fixed and mobile and therefore limited scope for vertical leverage. Vertical relationships may increase as fixed/mobile convergence (FMC) gathers pace but lack of fixed network facilities have not prevented European mobile operators from developing FMC	Inconclusive. No evidence that separating core and access functions will improve competition.
		products.	

3.2 Impact on cost of regulation (state and regulated entity)

A benefit often attributed to structural separation is its ability to reduce the costs of regulation to the state and the regulated entity. The basis for this argument is that the progress of service competition would allow the regulator to withdraw from regulation in downstream markets (such as residential voice). This is not necessarily the case. As has been experienced in other markets, new entrants will always complain to a regulator about alleged anticompetitive behaviour as it assists their campaign to slow down and tie up the incumbent in investigations and regulatory responses, all of which have an associated cost. In Jersey there have been several instances where investigations have been carried out on the basis of an unsubstantiated complaint by a new entrant. One such example is the ongoing xDSL investigation regarding margin squeeze that was commenced in October 2003. This investigation was commenced as a result of a complaint by a new entrant, however not only has the scope of the investigation changed three times, but it has cost Jersey Telecom a significant amount of time, resource and money and yet still remains unconcluded, It is imperative that the JCRA utilises its powers provided under the Law to ascertain within a reasonable period of time whether an alleged abuse is prevalent or not.

This power provided under the Law is contained within Article 9(2) the Law provides that "the Authority shall consider any representation made to it (other than one that is, in the opinion of the Authority, frivolous or trivial, or more appropriately dealt with by another person)....".

Using the terms of this Article appropriately, as opposed to giving great weight to each and every complaint from new entrants to the telecommunications market about the alleged abuse of Jersey Telecom's dominance, would likely to have a far greater impact on reducing costs of regulation than the consideration of structural separation as an answer to all regulatory issues.

A difficulty with the argument that structural separation reduces the cost of regulation is that it requires another premise – that structural separation would improve competition – to hold true. However, as should be clear from Section 4.1 above, it is far from clear that it would.

A further issue is that – even as the most ardent advocates of structural separation admit – structural separation does not remove the problem that the regulation of network facilities (which account for most of the costs of

regulation) is designed to address.

Moreover, as we have already mentioned, structural separation may even increase the costs of regulation. As the OECD notes, "there are concerns over whether there will be adequate investment in network infrastructure when providers are denied the revenues and consequent incentives that flow from vertical integration. This problem is acute in the telecommunications industry, where technological change is rapid and where investment demands are pressing." To address these problems, regulators would need to design an incentive framework to ensure the network operator receives due reward from making welfare enhancing investments. The result is likely to be complex, opaque, unwieldy and costly.

Table 3.

Evaluation of the four options on the cost of regulation (on Jersey Telecom and the States of Jersey)

Selling Jersey Telecom in its current form	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
Neutral. There is no evidence that ownership of the regulated entity affects the cost of regulation.	Inconclusive, possibly adverse. There is no evidence that separation of retail and network will change the cost of regulation. Partly depends on whether the desired effect on competition (see above) is realised. Cost of regulation may increase to provide the right incentives to invest in network upgrades.	Neutral/inconclusive. Limited vertical relationships between fixed and mobile and therefore limited scope for changing the cost of regulation. Vertical relationships may increase as fixed/mobile convergence (FMC) gathers pace but lack of fixed network facilities have not prevented European mobile operators from developing FMC products.	Inconclusive. Possibly adverse. There is no evidence that separation of access and core will change the cost of regulation. Partly depends on whether the desired effect on competition (see above) is realised. Cost of regulation may increase to provide the right incentives to invest in network upgrades.

3.3 Cost of Implementation

As with any regulatory remedy of this significance, rather than pre-determining that a particular course of action is necessary or required, a cost benefit analysis and Regulatory Impact Assessment should be carried out in order to determine the likely cost and impact of any action.

In the JCRA's case a cost benefit analysis would also be required in order to ensure compliance with their duties under Article 7 of the Telecommunications Law. This Article specifies that the JCRA's primary duty is to "perform its functions under this Law in such manner as it considers is best calculated to ensure that (so far as reasonably practicable) such telecommunication services are provided, both within Jersey and between Jersey and the rest of the world, as satisfy all current and prospective demands for them, wherever arising".

They would need to consider this Article in the context of whether Structural Separation was the best way in which to provide such telecommunications services. In addition, the Article goes on to discuss the secondary duties that they have, including, among other things, "...protecting the long term and short term interests of users..." and being mindful of the need to "...promote efficiency, economy and effectiveness in commercial activities...". In doing so it would be insufficient to simply state that they believe it would help competition if the business were separated, for example without providing any evidence of where this has successfully been the case.

There must be clear benefits seen with such a regulatory act and this is why a full and detailed cost benefit analysis has to be completed. It should be noted that there is little hard evidence to show that structural separation has been a success anywhere. The imposition of a highly burdensome and significant obligation such as structural separation cannot be regarded as reasonable, proportionate or consistent with the JCRA's duties under Article 7, in the absence of proper analysis by the JCRA of the expected benefits against the expected costs. Comparisons in other jurisdictions suggest that this would not be beneficial move.

In this section, we consider, in qualitative terms, the likely costs of implementing structural reform. A cost impact is likely to be seen both in terms of one-off costs of implementation and ongoing costs of operation.

With regard to the ongoing costs of operation, Pociask [95] identified a range of costs, which he categorised into "Increased Transactions" and "Duplicate Staff", as follows:

Increased TransactionsDuplicate StaffMore vendorsHuman resourcesMore contractsLabour relationsMore purchasing agentsLegal

More purchasing agents

More purchase orders

More spot purchases

Legal

Regulatory

Vehicle maintenance

More invoicesBuilding maintenanceMore supplier paymentsAdministrative servicesMore billingMaterial transport/storageMore regulationsFinance and corporate

More customer calls Security, information systems

In total, Pociask estimated that a separated wholesale operator in Florida would need to raise its wholesale prices by over 45% to make a modest rate of return and if costs were passed through to consumers, end user prices would increase by at least 11%.

We expect that all of these cost impacts would be experienced in the Jersey market following any structural reform of Jersey Telecom. Furthermore, the relative impact of such cost increases in Jersey would almost certainly amount to much more than in Florida owing to the scale of Jersey Telecom and the consequently greater effects of duplicating such functions.

The OECD considered a range of possible costs and other disadvantages of structural separation including impact on broadband deployment, loss of scope, high implementation costs and loss of bundling advantages. Its overall assessment was that:

"The benefits and costs identified above cannot be quantified and evaluated to provide a clear conclusion as to whether benefits exceed costs. This inconclusiveness raises serious doubts as to whether there is sufficient evidence for the structural separation of incumbent carriers to be confidently supported. The costs of structural separation in divestment costs, .lost innovation and inefficiency might make this approach far less desirable than non-structural regulatory safeguards. Even though behavioural regulatory constraints would place some restrictions on incumbents' activities, they would largely avoid imposing regulatory limitations on the design and implementation of new services."

The costs identified by Pociask above, principally concern recurring costs on a separated entity. These are considered in greater detail in Section 3.4 on efficiency below. Structural reform would also have very substantial one-off costs. Because of the limited experience of structural remedies imposed by regulators in the communications industry, very little data exist that allow an informed judgement of the likely cost in Jersey. A

study in Australia, [96] however indicated that the one-off implementation costs might cost "hundreds of millions of [Australian] dollars", whilst it indicates the quantum's involved, it is difficult to know exactly how robust this estimate is for Telstra but it is difficult to find any other data that would allow us to make a more informed estimate.

How might such an estimate translate to Jersey Telecom? The critical question here is how the implementation costs would scale between a larger operator (Telstra) and a smaller one (Jersey Telecom). To what extent should we expect such costs to scale with size? It is instructive to consider what activities would be necessary to implement structural separation. A (non-exhaustive) list of the areas in which structural reform would create one-off costs might be as follows:

Costs directly affecting Jersey Telecom:

- Find a(nother) buyer for the separate entities, if the States decides to dispose of its interest;
- Separate operational support systems (OSS) and other IT systems;
- Conduct financial, legal and commercial due diligence;
- Implement separate billing systems;
- Novate employment contracts;
- Novate customer contracts:
- Relocate staff and IT systems to separate buildings;
- Establish ownership of assets where there is no unambiguous dividing line between them (an example of such would be shared infrastructure or network facilities); and
- Once that is all completed the whole manner of how the business operates would need to be considered.

Cost Directly affecting third parties:

- Technical, legal, financial and commercial due diligence;
- Advisors and brokers' fees in preparing for the sale (these costs would apply even if Jersey Telecom were sold as a whole, but would be multiplied if it were sold in two or more parts); and
- Advisors' fees into the choice of the correct demarcation between the businesses to be separated.

Some of these cost categories, particularly the first three will be largely invariant with respect to size. Other costs, such as legal costs in relation to contract novation will also be invariant with respect to size (although it is reasonable to expect the implementation of new contracts to scale with numbers of employees and customers).

Proportionately, it is therefore reasonable to expect that the cost of implementing structural separation would be much greater for Jersey Telecom than for Telstra.

Table 4.

Evaluation of the four options on regarding cost of implementation

Selling Jersey Telecom in its current form	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
High. Significant restructures this would have a high cost.	Very high.	Very high.	Very high.

3.4 Efficiency

As outlined above, structural reform would have substantial one-off and ongoing costs. In evaluating the impact of structural options on efficiency, it may be helpful to divide the costs into their various categories, which might include (but are not necessarily limited to):

- Effect on economies of scale; and
- Effect on economies of scope.

An organisation is said to have "economies of scale" if its average cost (cost per unit of output) diminish with the organisation's size. Costs that are fixed, or approximately fixed, are one of the strongest sources of economies of scale. Buildings, central compliance functions (such as legal, regulatory and financial) and IT systems are all examples of functions that comprise a significant element of fixed costs. Jointly, they comprise a high proportion of total cost. The cost-benefit analysis would need to quantify the impact of structural reform on such costs.

An organisation is said to have "economies of scope" if it can produce two or more products at a lower cost than would be possible by comparable organisations producing the products separately. In telecoms, operators enjoy substantial economies of scope particularly in network operations, IT systems and research and development. The cost-benefit analysis would need to quantify the impact of structural reform on such costs.

3.4.1 Ongoing efficiency (scale)

Separating Jersey Telecom would by definition, create two or more organisations of a smaller scale. To analyse the impact on cost, it is important to consider whether structural separation would result the loss of economies of scale.

As a small operator in a global market, Jersey Telecom already enjoys fewer economies of scale than most incumbent operators. Another way of putting this that there are some cost categories for which the cost per unit of output is much higher for Jersey Telecom than for larger operators. Examples of such costs are:

- Human resources:
- Regulatory compliance;
- Buildings;
- OSS:
- Operating separate boards;
- Audit;
- Legal;
- IT systems; and
- Billing

All of these functions are subject to strong economies of scale. This means that for a small operator, such as Jersey Telecom, such costs would comprise a relatively higher proportion of revenues than for a large operator (BT for example). Regardless of the size of the organisation, there will always be a minimum amount of cost necessary to perform each of the functions above. For example, a certain minimum number of staff is necessary to provide a suitable human resource or a regulatory compliance function. Also, the cost of buildings typically increases less than proportionately with the square metres of space. Furthermore, IT and billing systems have development costs associated with them, which are both high and fixed.

For a number of the cost categories above, a two-way split of Jersey Telecom would double costs, whilst a three way split would treble them.

This would lead to substantial cost increases, which ultimately would have to be borne by the consumer.

3.4.2 Ongoing Efficiency (scope)

Structural separation should be analysed in terms of its impact on economies of scope. Areas in which economies of scope could be affected are as follows:

- R&D synergies for new product development;
- Network synergies (e.g. duct and trench sharing between transmission and access networks, transmission network sharing between fixed and mobile); and
- OSS and other systems.

Developing new products (especially the new wave of converged fixed, mobile, voice and Internet services) requires significant coordination between retail functions (to understand customer requirements and demand) and network functions, which are responsible for the developing and implementing the technology necessary to support new services. Loss of coordination between the functions could result in an increase in costs of developing new services (or prevent them being developed at all).

Traditionally, new companies do not spend a significant amount of resource on research and development and

therefore the quantity of new products on offer would undoubtedly be restricted with focus being placed in far fewer areas. The quality and quantity of products on offer by Jersey Telecom is currently high with extensive portfolios for each area of the business, it is likely that this would be lost.

Another area in which a separation between fixed and mobile or core and access could erode scope economies is in the area of network economics. Today, a substantial proportion of networks are shared. Core, access and mobile networks share common facilities such as duct and trench with substantial cost savings. In reality, these scope economies would not be lost immediately following separation. After establishing ownership of shared network facilities (itself no easy task), different functions would lease facilities between each other. Although the transactions costs in doing so would themselves involve a loss of scope economies, leasing infrastructure would help mitigate the loss of economies of scope in the short term. A potentially greater concern would be the longer term risk that as networks grow and evolve, they would not do so in a cost minimising manner.

Table 5.

Evaluation of the four options on efficiency

Selling Jersey Telecom in its current	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
form			
Positive. Stronger focus	Negative. Separation of	Negative. Separation of	Negative. Core and
on profit might create	network and retail	fixed and mobile would	access would result in a
greater incentives to	would result in a	result in a dilution of	dilution of economies
improve efficiency.	dilution of economies	economies of scale and	of scale and scope.
	of scale and scope.	scope.	

3.5 Impact on innovation/incentives to invest

The cost benefit analysis should consider how structural separation would affect incentives and ability to invest and innovate. Commentators frequently refer to the possibility of a "coordination problem", referring to the coordination between vertically related but structurally separate business units. As the OECD puts it:

"The problems of co-ordinating investment between the wholesale and retail parties could be considerable. The effect might be, in the worst case, to delay or even impede network upgrading, including the extension of fibre closer to the customer."

A coordination problem can occur in the communications industry when, for example, a retail function wishes to supply a new product, such as higher bandwidth, more functionality, superior reliability etc. Even where it does not involve new infrastructure build, product development in the communications industry is a highly technology intensive process and the necessary technical capability resides with the network functions rather than retail functions.

It is important to note that network **and** retail functions are necessary to develop new products. Network functions cannot, on their own, have sufficient information to determine customer demand for new types of products and how much they are willing to pay.

A separation between (for example), network and retail would necessarily prevent or network and retail functions operating as one unit, which would restrict the flow of information necessary to ensure that the network function is fully responsive to the needs of the retail function. This is sometimes (in the UK) referred to as the "Railtrack problem", referring to the problems experienced in the UK following the structurally separated rail and train operating functions.

Unlike current generation voice and data networks which are built around long-established global standards, next generation network technology is rapidly evolving and has few standardised technologies. Furthermore, demand-side preferences for new types of services are still unknown. For these reasons, there is now a greater need than

ever to coordinate network and retail functions to ensure that the inevitably risky investment decisions are the right ones from the point of view of the end-user.

Investment coordination problems would not only be seen with a separation of network and retail. Similar problems are likely to seen in a separation between core and access and between fixed and mobile.

With regard to a separation between core and access, it is well understood that substantial investment is required to deliver the higher bandwidth required to support converged and multimedia services increasingly demanded by customers. An access network operator may be more risk averse than an integrated operator if it lacks direct access to information on customer demand or indeed the expertise to deploy new products.

For similar reasons, a separation between fixed and mobile would threaten the development of converged fixed-mobile products. It is worth nothing that BT sold its mobile assets to address its cripplingly high debt but has ever since been desperate to get back into the mobile market in order to maximise the opportunities for FMC.

Table 6.

Evaluation of the four options on the innovation/incentives to invest

Selling Jersey Telecom in its current form	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
Positive. Stronger focus on profit and access to capital markets may create greater incentives to invest and innovate.	Negative. Separation of retail and network would result in difficulty in coordinating product needs and investment plans resulting in a slower rate of convergence between voice, data, internet and multimedia services.	Negative. Separation of fixed and mobile would result in difficulty in coordinating product needs and investment plans, resulting in a slower rate of fixed-mobile convergence and innovative bundles involving fixed and mobile services.	Negative. Separation of core and access would result in difficulty in coordinating product needs and investment plans, resulting in a slower rate of investment in access network required to deliver higher bandwidth services.

3.5.1 Loss of option

As the OECD noted, any separation between core and access would require a definition of the scope or border that would be considered the local loop and related access elements of the incumbent's network to be separated. They highlighted "particularly intractable problems at a technical level, given the growing complexity of modern systems and the presence of intelligence in different network layers".

Most importantly, the vertical layers in modern communications services are increasingly interdependent with service design features being embedded in the software and technology in the network. The implication of this, as the OECD noted is that:

"Drawing a line between services and infrastructure may also be complicated by the increasing technological sophistication in telecommunications. It may be difficult to excise particular services that are effectively embedded in the infrastructure and which could readily be characterised either as retail or wholesale activities."

It should be clear from the above that if a decision were made to separate Jersey Telecom into two or more businesses, there is no unambiguously "right" place to draw the line. There is no clear dividing line, for example, between core and access, network and retail or even fixed and mobile. Furthermore, deciding where to draw the line would entail a judgement about the future development of technology and in particular, would involve taking a risk that technological developments may proceed in a way that renders the chosen dividing line inappropriate.

Separating core and access networks, for example, using the current location of the main distribution frame (MDF) could prove a very expensive mistake if the boundary changes over time as projected. The intended result of a separation of core and access would be for alternative carriers to interconnect at the point at which the networks are separated. But, as is widely recognised, the boundary between core and access will have to change over time as incumbents replace copper with fibre in the loop in order to provide higher speed services.

The boundary between fixed and mobile is also likely to change over time. New technologies such as Wimax that promise to allow high-speed connectivity over relatively wide areas is expected to enable fixed network operators to provide mobile services. Another technology that could blur the distinction between fixed and mobile is the use of Wifi phones such as those provided by Rabbit Point. Technologies such as Unlicensed Mobile Access (UMA) are also on the horizon and could further blur the distinction between fixed and mobile services.

For these reasons, a dividing line that may appear logical at the time (if one can be found at all) could easily cease to be logical as technology changes over time, whilst any structural separation would most likely be irreversible.

Table 7.

Evaluation of the four options on the loss of option for the future

Selling Jersey Telecom in its current form	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
Neutral. Selling Jersey Telecom in its current form would retain the ability to consider various structural options in the future.	Negative. Separation of retail and network would be difficult or impossible to reverse if the effects were not as intended, if the boundary between retail and network were defined incorrectly or if, due to technological evolution, the logical boundary changed over time.	Negative. Separation of fixed and mobile would be difficult or impossible to reverse if the effects were not as intended, if the boundary between fixed and mobile were defined incorrectly or if, due to technological evolution, the logical boundary changed over time. New wireless technologies on the horizon are likely to affect the boundary in due course.	Negative. Separation of core and access would be difficult or impossible to reverse if the effects were not as intended, if the boundary between core and access were defined incorrectly or if, due to technological evolution, the logical boundary changed over time. The introduction of fibre in the loop will affect the boundary between core and access.

3.5.2 Impact on ability to recruit scarce talent

Finally, it is worth nothing that breaking Jersey Telecom into two or possibly more structural entities would create very small entities, which could impact its ability to attract scarce talent.

Jersey Telecom already experiences difficulties of appropriate staffing due to the limited market available with telecommunications/engineering experience and knowledge. On several occasions Jersey Telecom has struggled to meet in-house projects as well as demands caused by regulatory intervention. One such example is the Mobile Number Portability project, which demanded constant input from key technical and IT staff over a period of several months. This intervention caused in-house projects to be affected, some of which had been planned for months, or even years (particularly those impacting the core network). There is only a handful of staff in the business that possesses the technical ability, together with the level of experience required. This fact is re-iterated

by the figures provided in the latest Census [97], which illustrate that only 7% of the total economically active working age adult's fall within the engineering bracket.

Table 8. Evaluation of the four options on the ability to attract scarce talent

Selling Jersey Telecom in its current form	Separation of retail and network	Separation of fixed and mobile	Separation of core and access
Neutral.	Negative, separating into two or more smaller entities could reduce the perception of the entities as "prestige employers", increasing the difficulty of recruiting scarce talent.	Negative, separating into two or more smaller entities could reduce the perception of the entities as "prestige employers", increasing the difficulty of recruiting scarce talent.	Negative, separating into two or more smaller entities could reduce the perception of the entities as "prestige employers", increasing the difficulty of recruiting scarce talent.

4. Conclusion

In conclusion therefore, there appears to be little evidence to support a case for the structural separation of Jersey Telecom. However, proposals that suggest such a move would have merit would need to be fully assessed by means of a cost benefit analysis and Regulatory Impact Assessment, in order to establish the costs of such and the impact to the economy.

Within such an assessment, the complexities raised by separation should be discussed. The benefits remain unclear and certainly seem to not exceed the associated costs, costs that seem to be very large, even at this initial review stage.

In addition, where the line should be drawn across a fully integrated company is also unclear and the developments in technology are constantly changing the logical boundaries between functions such as between fixed and mobile, retail and network and core and access.

Furthermore, structural separation should only be introduced in the specific instance where the regulatory measures, which were introduced to govern any dominance issues in the market, are failing. This does not appear to be the case in the Jersey market. Regulatory measures such as separated accounting practices, price capping, transparent pricing, etc have all been imposed by the JCRA without any further consideration as to whether they are meeting the needs of the market and the regulator. As stated earlier, two sets of accounts have been submitted to the JCRA and not one question has been raised by them over in this regard. Until such time as it has been established that these regulatory practices are failing or ineffective, then extreme measures such as structural separation should not be adopted. It should be remembered that the competitors made their business cases on the basis that effective regulation exists in this market. They made their case knowing Jersey Telecom's structure and determined that they would be able to effectively compete with us.

The JCRA should also be mindful that in accordance with the Telecommunications Law they have the power to review the market at any time and intervene where they feel that any abuse of a dominant position is taking place. It would seem, at this time, to be a more pragmatic approach to complete a review of the regulatory measures that have already been introduced by the JCRA in order to ascertain whether they have been successful in their current form or whether amendments need to be made to ensure their objectives are achieved.

Annex 3: States Economic Adviser's Recommendation

A3.1 Economic Adviser's report on the structure of the proposed sale of Jersey Telecom

Background: The attached paper has been prepared by the Economic Adviser to assist Ministers in reaching a decision on the proposed structure of the privatisation of Jersey Telecom.

It considers the various reports and comments that have been made on the proposed sale of Jersey Telecom including those by Professor Florio, Citigroup/Analysys, JCRA, David Parker and JT.

The report intends to distil all the information to give the Council of Ministers the best possible understanding of the economic implications of the proposed sale.

Recommendation: On the basis of the information available it would be a high risk strategy for the Council of Ministers to impose structural separation on JT before privatisation. On that basis, the right approach would be to follow the recommendation of the Treasury and Resources Minister and proceed to privatise JT through a 100% sale.

Economic Adviser

Date: 1 February 2007

Economic Adviser's report on the structure of the proposed sale of Jersey Telecom

Summary

The following sections of this paper analyse in more detail the broad range of research that has been undertaken looking specifically at the privatisation of JT and that which looks more generally at the issues of privatisation and structural separation. This summary pulls together the key points made elsewhere in the paper and at the same time relates them to the options facing the Council of Ministers in terms of the privatisation of Jersey Telecom.

Privatisation consistent with economic objectives

There is a broad body of research that shows privatisation in general and of Telecoms in particular can help deliver efficiency improvements, particularly if backed by the right regulatory structure. With the new competition law in place and JCRA as the regulator the privatisation of Jersey Telecom is therefore consistent with the States economic objectives. The States should however, keep the competition law under periodic review to ensure that the JCRA has the necessary powers to enforce the optimum competitive outcome.

100% sale v structural separation

There are two main options open to the Council of Ministers in terms of the manner in which JT is privatised. The Treasury plans to proceed with a 100% sale, while the JCRA has suggested that JT should be structurally separated before sale and sold as two separate companies.

100% sale

Citigroup provide a clear strategy for how they are going to achieve the objectives set them by the Treasury of achieving the optimum valuation, the best possible basis for the long term growth and development of Jersey Telecom/the telecommunications industry and the maintenance/ enhancement of the competitive environment and quality of telecommunications services. They do not support a break-up of the company as it could destroy value and recommend a 100% sale.

However, their objectives do not include consideration of maximising the economic benefits from the sale. It was with this question in mind the Minister for Economic Development asked JCRA to give their advice on what structure of JT would best serve the States policy for promoting competition and economic growth. This leads to the question as to whether structurally separating JT might lead to wider (ongoing) economic benefits (which exceed the on-going costs) to the extent that it might be worth jeopardising some initial value from the sale (a one-off cost)?

Structural separation

A decision to structurally separate a company must involve an in-depth consideration of the potential costs and benefits. The theoretical arguments are well rehearsed and centre on whether the benefits of additional competition and any reduction in regulation will outweigh the loss of efficiencies and cost of separation.

The JCRA argue that the benefits outweigh the costs but at the same time are unable to provide specific evidence that this will be the case in Jersey. This reflects the nature of such a calculation which is hard to do in any economy and probably more so in a small one like Jersey. However, there is a significant risk to pursuing such an approach without any evidence as to the scale of the benefits and costs.

JCRA's analysis provides little indication of exactly how JT should be structurally separated. Is it at the retail and wholesale level or some other separation? If it is at the retail level then how much additional competition is likely to be generated given that there will still be an incumbent monopoly of the infrastructure?

The competition benefits will be greater if it takes place at a deeper level (incorporating some elements of the

network) but the JCRA argue that it is for these elements that the economies of scale mean that only one supplier will emerge. This would suggest that structural separation will only deliver increased competition in the retail sector and such competition at the billing/consumer interaction level is not the same as competition at a deeper level in the telecommunications network. The benefits of such limited competition are also likely to be smaller.

There is a significant risk that with potential limitations on the benefits from competition that the costs of structural separation will outweigh the benefits.

On the information provided by the JCRA, the example of the Faroes seems of little direct relevance to Jersey given the different nature and size of the economy and their telecoms industry.

Future investment in the infrastructure is vital for the continued success of the Jersey finance industry and the economy in general. There is little reason to think that structural separation would make that investment more likely and there are risks that it could undermine certain types of investment. Ensuring the right level of future investment in telecommunications will be a key challenge for the regulator under either scenario.

To summarise, there is little if any real evidence to suggest that the benefits from structurally separating Jersey Telecom would outweigh the costs. There is some uncertainty as to the scale of the key potential benefits – additional competition and reduced regulation – while the costs are clearer in terms of loss of efficiencies and costs of the break-up.

There are the additional risks that structural separation would also reduce some of the value of the sale. This in itself would not be a problem if this loss of value could be recovered elsewhere through other economic benefits. However, as already outlined above there is significant risk that this would not be the case.

On the basis of the evidence available the right way forward is to privatise JT in its current form through a 100% sale.

Jersey's economic objectives

Jersey's economic policy is focused on delivering sustainable economic growth in a low inflation environment. In an Island economy with a fixed amount of land and labour at its disposals this means policy is primarily focused on boosting productivity and efficiency across the economy.

Given the importance of the finance industry to the Island economy and it's very high productivity per head an important part of meeting these economic objectives is to ensure that the finance industry is able to enhance its competitiveness and develop and diversify. A state of the art telecommunications network is clearly critical to creating these conditions and that means that telecommunications providers in the Island must invest significant amounts of capital in updating the network at key points in the future as new technology is developed and rolled out.

The States Economic Growth Plan makes it clear that the government role in economic policy should be focused on correcting market failure. There is little reason to think that state ownership of Jersey Telecom is correcting a market failure. The objectives of privatisation in most countries have been to:

- 1. Raise revenue for the state
- 2. Increase economic efficiency
- 3. Reduce the role of government in the economy
- 4. Promote share ownership
- 5. Introduce competition
- 6. Subject state owned enterprises (SOEs) to market discipline.

It is clear that five of these six objectives are consistent with Jersey's economic objectives, with the promotion of

share ownership the exception.

The case for privatisation

The purpose of this paper is to focus on the economic implications of the proposed sale of Jersey Telecom, it is not a paper on the economic arguments for or against privatisation. However, the Telecoms Scrutiny Sub Panel recently invited Professor Florio from the University of Milan to give a presentation in the Island on the divesture of British Telecom and Telecom Italia. His research questioned whether privatisation had any impact on efficiency.

It is important to make three key points for clarification at this stage. Firstly, his analysis is of two examples from large countries which even Professor Florio admitted did not bear much comparison with Jersey. Secondly, that his research is highly regarded but is based on a number of assumptions which could be open to debate, for example in the area of estimating consumer benefits. Thirdly, his work is only two pieces of research from a vast array of research from across the world on privatisation in general and in telecoms in particular.

On this latter point Megginson and Jetter in 2001 compiled a comprehensive survey of all the empirical studies on privatization in the 1980s and 1990s. Their survey has wide coverage across many countries and different privatisations and their work concludes:

- Research now supports the notion that privately owned firms are more efficient and more profitable than otherwise comparable SOEs
- Privatisation works in the sense that divested firms almost always become more efficient, more profitable, increase their capital investment spending and become financially healthier.

Particular mention is made of studies from across the globe on the telecommunications industry. They conclude that privatisation and deregulation/liberalisation of telecommunications is associated with significant improvements such as operating efficiency, and improvements in quality and price of telecom services.

Another survey of the literature by Bortolotti et al, examines the financial and operating performance of 31 national telecommunications companies in 25 countries that were fully or partially privatised through public share offering between October 1981 and November 1998. Using pre-versus post privatisation comparisons they find that profitability, output, operating efficiency and capital investment spending increase significantly after privatisation. They also conclude that the financial and operating performance of telecommunications companies improves significantly after privatisation, but that a sizable fraction of the observed improvement results from regulatory changes – alone or in combination with ownership changes – rather than privatisation alone.

David Parker, adviser to the Scrutiny Sub Panel looking at the privatisation of JT has written a report for them on "The privatisation and liberalisation of Telecommunications systems in small countries". The report looks at the experience in Estonia, Latvia, Cyprus and Slovenia (countries with populations of between 800,000 and 2.2m). He concludes that technological change in telecommunications is rapid and the case for having a national telecommunications monopoly supplier has disappeared. He also covers a number of other issues highlighting some common themes in the approach of these countries.

The Council of Ministers should therefore be clear that empirical research supports the case for privatisation and that Professor Florio's work should be put in context. The fact that efficiency gains are one of the key improvements post privatisation is an important prize for an economy like Jersey pursuing economic growth through productivity improvements.

Privatisation coupled with the right regulatory and competitive environment delivers the most benefits and it will be important that the States keeps competition law under periodic review to ensure that the JCRA has the necessary powers to enforce the optimum competitive outcome.

The structure of privatisation

Given that most economic evidence tends to point in the direction of privatisation of telecommunications provider as being in line with the economic objectives of the Island, the real question is whether one form of structure of a privatised JT might bring more economic benefits than another?

The Treasury's proposal

The Treasury's four key principles governing the sale of Jersey Telecom are:

- ensure that the rights of Jersey Telecom's employees are safeguarded
- provide for the achievement of the best possible basis for the long term growth and development of Jersey Telecom and the wider telecommunications industry on the Island
- enable the optimum valuation to be achieved for reinvestment on behalf of taxpayers
- provide the basis for an outcome that will contribute to the maintenance and enhancement of the competitive environment and quality of telecommunications services to the benefit of both today's and tomorrow's Islanders

On the basis of these objectives Citigroup were appointed to assess the optimal strategic alternatives for the sale of JT and recommend a way forward. Their conclusion was that:

"the current status quo is a non-viable (and potentially value destructive) long-term option against a backdrop of accelerating liberalisation of the Jersey telecoms market and the states financial objectives"

In terms of the structure of the sale they conclude that:

"a break-up solution (although attractive from a purely competitive standpoint) would not provide clear benefits to the market overall against limited economies of scale in the Jersey telecom market and would prove risky from a valuation perspective"

Their views on the structure are based on concerns that a break-up would involve significant costs (including legal) and inefficiencies due to common facilities, systems and employees. In value terms the 'sum of the parts' would be unlikely to exceed the value of the consolidated group.

From a risk portfolio management perspective Citigroup also highlight that Jersey Telecom is too large an asset for the States to remain fully exposed to and that there is a need to diversify investments into a variety of asset classes.

Citigroup recommend on the basis of these arguments that Jersey Telecom represents an attractive candidate for investors and that a 100% sale should be pursued. They point out that this will allow the States to organise a sale to meet their stated objectives and be able to retain the ability to preserve world-class telecom infrastructure vital to the Jersey economy in general and the finance industry in particular.

Given that the Treasury proposes to adopt these proposals as the best way forward to proceed with the sale, the appropriate question to consider is whether an alternative approach could deliver wider economic benefits without imposing additional (and of similar scale) costs. This then translates into a more specific question as to whether the main alternative to such an approach – structural separation would deliver such net economic benefits.

Structural separation: the benefits and costs

The OECD (2001) point out that introducing competition in different parts of public utility industries is not just a matter of removing barriers to entry. There is a need to ensure that new firms have access to any key inputs or services that can only be obtained from the incumbent monopoly firm. In telecommunications this means ensuring that retail competitors are able to have equal access to the network. The incumbent firm may not willingly provide these inputs, especially where doing so means the potential loss of a profitable line of business. The incumbent firm can resist such competition by refusing to supply essential inputs, supplying them at (an often hard to

distinguish) lower quality or at a higher price.

The basic problem is that when the owner of essential inputs such as the telecommunications network also competes in the downstream market it typically has both the ability and incentive to restrict competition in that down stream activity.

The ability to restrict competition comes through being able to restrict access through raising the price, lowering quality or the timeliness of services relative to that it provides to its own downstream arm. The incentive arises when it would lead to a reduction in profits for its down stream arm or when the monopoly aspect of the business is more tightly regulated than the downstream activity.

The OECD point out that regulators can and do try to prevent such behaviour but the task is difficult. The regulated firm has many tools at its disposal and its is very difficult for the regulator to be able to limit the anti-competitive behaviour as much as competition would.

There are a number of different forms of structural separation (where the monopoly is separated into parts with separate ownership) but given that horizontal separation between fixed and mobile is not common in telecommunications and is not advocated by any of the parties looking at the case of JT (including JCRA), this analysis looks solely at vertical separation. Vertical separation is where the incentive to discriminate is removed by separating the non competitive element of the monopoly (e.g. the telecoms infrastructure) from the competitive element (e.g. retail). The incentive to discriminate is removed because the separate companies have different ownership.

The costs and benefits of vertical separation

In choosing between structural separation and vertical integration with regulation the OECD explains the choice as being about balancing several factors.

- 1. **Separation limits the need for regulation that is difficult, costly and only partially effective**. This is because it reduces the incentive of the provider of the non-competitive activity to restrict competition in the competitive activity. Regulation is difficult and costly because efficient pricing can involve complex pricing structures that the regulated firm will have better information about than the regulator.
- 2. **Separation improves information and eliminates cross-subsidisation**. It is easier to obtain reliable cost information about the regulated business and is therefore easier to regulate. Vertical separation by definition separates the two businesses and therefore also prevents cross-subsidisation from occurring.
- 3. **Separation forces loss of economies**. Integration can bring cost economies through the availability of information, reduce transaction costs and improve investment in specific assets relating to the two businesses. Often referred to as the loss of economies of scope which are similar to economies of scale but where average costs fall as a result of increasing the range of products e.g. through joint marketing, distribution. These costs are likely to be ongoing costs when the two businesses are separated. In some cases though, vertical separation may enhance the value of the separated firms for example, where it allows better management focus.
- 4. **Separation may involve substantial one-off costs associated with the break-up of the integrated firm**. Separating businesses is not costless and the OECD suggest this cost is an important part of the cost-benefit trade-off associated with separation.

On the basis of this analysis the OECD Council adopted an OECD recommendation in 2001 urging member countries to seriously consider stronger forms of separation when in the process of liberalisation and regulatory reform. In detail their recommendation was that:

"When faced with a situation in which a regulated firm is or may in the future be operating simultaneously in a non-competitive activity and a potentially competitive complementary activity, Member countries should carefully balance the benefits and costs of structural measures against the

benefits and costs of behavioural measures."

The benefits and costs to be balanced are those outlined above.

The following sections summarise the key findings from the various reports that have looked at the issues surrounding the privatisation of JT.

JCRA

Being aware of the OECD's findings outlined above, the Minister for Economic Development asked for advice from the JCRA on what structure of JT the JCRA believes would best serve the States policy for promoting competition in telecommunications and thereby economic growth as a whole. In particular, to look at the economic costs of the various scenarios open to the states in terms of ongoing costs of regulation, one-off transitional costs and efficiency losses. The JCRA concludes from the information in their paper that:

"the current regulation (in particular, accounting separation) is not optimal from the point of view of promoting effective and sustainable competition."

However, they go on to explain that the JCRA does not:

"conclusively recommend any particular option for the restructuring of JT because it is aware that there are other policy objectives in addition to the promotion of competition (such as maximising returns to the shareholder) as well as the possible disadvantages outlined earlier to be put into the equation."

Mention is made of the example of the Faroe Islands. However, on the information provided by the JCRA, the example of the Faroes seems of little direct relevance to Jersey. Their Island economy is smaller in terms of population, the telecoms company is significantly smaller in terms of turnover, it does not have a large financial services industry and the structurally separated telecoms companies remain in public ownership. There is also little indication as to what 'problem' the approach in the Faroes was seen to be addressing. It is therefore difficult to see how their experience is relevant for Jersey.

To make a strong economic case for structural separation the JCRA would need to meet the OECD recommendations of conducting a proper cost benefit analysis of the two main options of structural separation or behavioural regulation. However, they have not done so. Rather than being a criticism of JCRA this is actually a reflection of the reality of the situation. It is very hard to calculate all the information required for such an analysis. This is true in the larger economies and is probably even more the case in small economies like Jersey.

Jersey Telecom

Jersey Telecom, perhaps not surprisingly as the incumbent firm, have some reservations about whether the benefits of structural separation will outweigh the costs. They have some important points to add to the debate:

- The JCRA in making their recommendation have not discussed the issue of structural separation with JT. This may reflect concern from the regulator's perspective about approaching the incumbent firm. However, it does mean that JCRA are unable to make a proper assessment of the impact of structural separation on JT and the wider telecoms market in Jersey.
- There is no guarantee that the costs of regulation will be reduced and in certain circumstances may increase.
- JT make a comprehensive list of the potential ongoing costs which range from increased transactions costs such as more contracts, purchase orders, invoices, billing etc to duplicate staff in areas such as human resources, finance and transport/storage.
- There is also a long list of the one-off costs to Jersey Telecom which include separating operational support systems and IT system, additional due diligence, separate billing systems, replace

employment/customer contracts and relocate staff.

• A key consideration is the impact on innovation/incentives to invest. JT point out that separation between network and retail would restrict the flow of information necessary to ensure that the network is fully responsive to the needs of the retail function. JT point out that next generation network technology is rapidly evolving with few standardised technologies and that there will be a greater need than ever for coordinate network and retail functions.

These comments identify what are commonly agreed as the key costs of structural separation and make it clear that in Jersey these costs are significant.

Analysys

Analysys have been appointed as expert advisers on telecoms privatisation to the Treasury as part of the Citigroup consortium. In their paper they provide a thorough discussion of all the arguments for and against structural separation and from the various angles of the regulators, the incumbent and the market. They also held detailed discussions with the management of JT.

Analysys point out that from a regulatory angle 'complete structural separation is rarely justified'. They arrive at this conclusion after consideration of the views of the UK regulator Ofcom, the US Federal Communications Commission (FCC), the OECD and the New Zealand Ministry for Economic Development (MED).

An OECD 2003 paper from the Working Party on Telecommunications and Information Services Policies from 2003 is also quoted by Analysys. While it is not OECD policy like the document considered above it draws some firm conclusions:

"that the structural separation approach of the local loop is risky with benefits that seem limited, uncertain, indeed, conjectural, and with potentially significant costs including potentially adverse effects on network development. Certainly there is little evidence that benefits would be convincingly in excess of costs.

Against such an assessment of structural separation proposals, it would seem sensible to persevere with improvements to the current regulatory approach, backed by sanctions to deal with anti-competitive discrimination."

Previous work undertaken by Analysys for the EU suggests that structural separation should be considered as a remedy of last resort for national regulatory authorities in regulation, due to the inherent complexities of such a transformation.

References

Analysys; Perspectives on structural separation; 22 December 2006

Bortolotti, D'Souza, Fantini, Megginson; *Sources of performance improvement in privatised firms: a clinical study of the global telecommunications industry*, April 2001.

Citigroup; Assessment of Optimal Strategic Alternative, 1 December 2006

Florio, Massimo: *Efficiency and welfare effects of the divesture of British telecom and Telecom Italia*; public presentation at Pomme D'Or in Jersey, December 12 2006.

JCRA; Proposed sale of Jersey Telecom: Advice to Minister for Economic Development under article 6(4) of the Competition Regulatory Authority (Jersey) law 2001; 10 January 2007

Jersey Telecom: Structural separation representations from Jersey Telecom; 22 December 2006

Megginson and Netter; From State to Market: A survey of empirical studies on privatisation, Journal of Economic Literature, June 2001

OECD; Restructuring Public Utilities for Competition, OECD 2001

OECD; Working Party on Telecommunications and Information Services Policies: the benefits and costs of structural separation of the local loop, November 3 2003.

Parker, David; *Privatisation and liberalisation of telecommunications systems in small countries*, December 2006.

A4.1 Establishment of a Stabilisation Fund and Policy for Strategic Reserve

[Approved by the States on 5 December 2006 by a majority of 40 votes in favour and 4 against]

STATES OF JERSEY



ESTABLISHMENT OF A STABILISATION FUND AND POLICY FOR STRATEGIC RESERVE

Lodged au Greffe on 24th October 2006 by the Minister for Treasury and Resources

STATES GREFFE

PROPOSITION

THE STATES are asked to decide whether they are of opinion

to refer to their Act dated 20th April 2005 in which they approved the Economic Growth Plan and agreed, *inter alia*, that proposals for a counter-cyclical Stabilisation Fund should be brought forward, and to their Act dated 27th June 2006 in which they approved, in principle, the States Strategic Plan and agreed, *inter alia*, the establishment of a Stabilisation Fund and the need for a new policy for the Strategic Reserve; and

- 1. to agree, in accordance with Article 3(3) of the Public Finances (Jersey) Law 2005, that a special fund, to be known as the Stabilisation Fund, be established, with
 - (a) the purpose of the Fund being to make fiscal policy more countercyclical and create in the Island a more stable economic environment with low inflation;
 - (b) the Minister for Treasury and Resources to be responsible for proposing to the States the transfers between the Consolidated Fund and the Stabilisation Fund having regard to the advice of a new independent Fiscal Policy Panel appointed by the States on the recommendation of the Minister and following advice from the States Economic Adviser; and
 - (c) the fund to be set up with the transfer of the £32 million surplus funds currently available from the Dwelling House Loans Fund.
- 2. to agree that the Strategic Reserve Fund, established in accordance with the provisions of Article 4 of the Public Finances (Jersey) Law 2005, should be a permanent reserve, where the capital value is only to be used in exceptional circumstances to insulate the Island's economy from severe structural decline such as the sudden collapse of a major Island industry or from major natural disaster.

MINISTER FOR TREASURY AND RESOURCES

REPORT

A new fiscal framework for Jersey

Summary

This paper develops a new fiscal framework for Jersey as required by the Economic Growth Plan and following the States' decision to create a Stabilisation Fund earlier this year during the Strategic Plan debate.

The objectives in setting up this new framework are to –

- Contain inflation.
- Maximise the economic potential of the Island.
- Create an effective macroeconomic policy framework that can improve economic stability in a small island in a currency union.
- Put in place a transparent and credible framework that is both pragmatic and clear to all.
- Make fiscal policy overall more countercyclical and manage the revenue streams from the financial services industry in a manner that enhances economic performance.
- Make provision for review of the framework as experience is gained in its operation in order that it can be strengthened and improved.

The paper illustrates that to date States economic policy has not operated in such a manner and puts forward the following key recommendations to focus policy on meeting these objectives:

Strategic Reserve

- 1. The Strategic Reserve should be clearly put to one side and the capital value only used in exceptional circumstances to insulate the Island from severe structural decline (such as the sudden collapse of a major Island industry) or major natural disaster.
- 2. Over the medium and long-term continue to grow the Strategic Reserve (as a proportion of government spending and GDP) through reinvesting the return on the reserve and where possible paying in part or all of fiscal surpluses from the Consolidated Fund.
- 3. A suitable long-term aspiration is to grow the Strategic Reserve by another £100-£120 million, to a minimum level of around £600 million, so that it equates to about 20% of GDP.

Stabilisation Fund

- 4. The purpose of the Stabilisation Fund will be to make fiscal policy more countercyclical and create in the Island a more stable economic environment with low inflation.
- 5. The final decisions on what proposals are to be taken to the States for taxation and spending and withdrawals from/or payments into the Stabilisation Fund would continue to lie with the Treasury and Resources Minister. The Fiscal Policy Panel's report and advice would though be made public to ensure a transparent and credible process.
- 6. Establish an independent panel of leading economists to form the Fiscal Policy Panel and for them to publish an annual report in early September each year covering their views on economic conditions and

- the States' finances. The report would comment on the need for running surpluses/deficits and whether funds could be withdrawn from/paid into the Stabilisation Fund.
- 7. The Treasury and Resources Minister would have the option of asking for an additional report/update at any point in the year should he/she feel that economic conditions have changed significantly to potentially merit a different approach.
- 8. Panel members will be appointed by the States on the recommendation of the Minister and following advice from the States Economic Adviser. They will be appointed on a fixed 3 year basis with the contract being open for renewal by the States on the recommendation of the Minister for Treasury and Resources and following further advice from the States Economic Adviser.
- 9. A suitable target level (guideline rather than a cap) for the Fund would be 15-20% of total States net expenditure, equivalent in today's money of £75-£100 million. This would mean a further £40-£70 million will be needed on top of the £32 million transfer from the Dwelling House Loans Fund to meet this target level in coming years.
- 10. Once the framework has been established and is in operation its effectiveness should be reviewed by the Economic Adviser (seeking input from Fiscal Policy Panel members and the Treasury and Resources Minister). It is important that as experience is gained in the operation of the framework then where possible it is strengthened and improved. Developing the right macroeconomic policy framework for Jersey will be a process of evolution but implementing these recommendations will be a big step forward for the Island.

A new fiscal framework for Jersey

Introduction

The States Economic Growth Plan (EGP) sets out the importance that macroeconomic stability has in creating the conditions for economic growth and low inflation.

A critical part of the Economic Growth Plan is to provide a new macroeconomic framework for Jersey that represents a clear break with the past. If sustainable economic growth is to be achieved with low inflation then the States of Jersey must ensure that fiscal policy - the one macroeconomic tool available - is focused on delivering the stability required. A transparent and credible framework is required to support stability and control inflation.

This paper builds on this recommendation in the EGP and sets out the details for such a framework.

The need for stability

One key requirement for economic growth is the need to provide a stable economy for businesses and consumers to make decisions in, and this involves getting the macroeconomic policy framework right. A volatile economic cycle of boom and bust imposes costs on the economy which is likely to undermine efficiency and economic growth in the medium and long-term.

While it may be tempting in the short-term to allow the economy to grow rapidly there are real risks to doing so in the long-term, especially if there is limited (or no) spare capacity in the economy. A sustainable growth policy will focus on consistent growth close to trend (only allowing above trend growth when there is significant spare capacity in the economy) and ensuring that attention is paid to improving the supply-side of the economy and not just the demand-side.

The danger of not pursuing such a policy is clearly that excessive growth will lead to accelerating inflation and that the only way for the economy to adjust is through a recession. Inflation is therefore bad for economic growth and a sustainable economic growth plan must also include maintaining low and stable inflation.

Many years of experience across different economies have shown that one of the main consequences of high inflation has been greater instability in economic conditions. Periods when demand has been growing more rapidly than output and inflation has risen have been followed by periods when demand and output (and employment) have fallen sharply (the boom and bust cycle). These falls were probably greater than would have been the case had demand and output grown at a steadier and more balanced pace.

In the Jersey sense (and in fact for any economy in a currency union) this implies an important role for fiscal policy in providing stabilisation and controlling inflation. There may be some questions about the efficacy of fiscal policy but when you have no control over interest rates it is the best and in fact only real alternative.

Why a new framework?

With the Island now focused on delivering sustainable economic growth, a prerequisite is that inflation must be kept on target. A new framework is needed to achieve this goal as the current one has failed to keep inflation on target over the economic cycle. In Jersey, the emphasis is on fiscal policy for two key reasons –

- In a currency union where interest rates are set relative to conditions in the U.K., fiscal policy is the only macroeconomic tool the Island has at its disposable. This means it must take into account the impact of interest rates on the economy and set fiscal policy relative to the economic conditions in Jersey.
- The specific nature of the Jersey economy which is dominated by the performance of the finance industry and the revenue it generates. This can mean that when the finance industry is performing

strongly, the higher taxation receipts this delivers can simply feed back into demand in the economy (through higher government expenditure) and create inflationary pressure. The impact is similar to spending windfall gains.

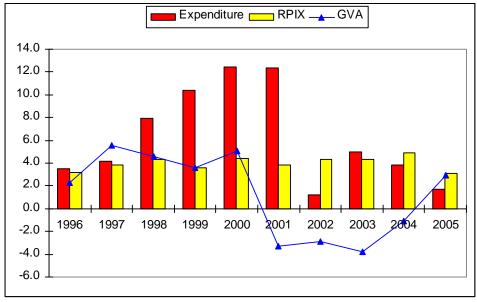
Putting a new framework in place is necessary but not sufficient. Further consideration needs to be given as to how the automatic stabilisers (where tax and expenditure naturally adjust to be counter cyclical) work in the Jersey economy and whether they could be strengthened. Also, how best to use discretionary fiscal policy to help smooth out cyclical variations in the economy. Work by the U.K. Treasury as part of the 5 EMU tests has shown that expenditure taxes can be one of the most effective discretionary tools because of their direct impact on consumption and the fact that in the U.K. legislation is such that VAT and excise duties can be changed at any point in the year.

In Jersey any consideration of fiscal policy must also take into account policy for the Strategic Reserve (SR). There would be little point in running fiscal surpluses if at the same time there were significant draw downs from the SR or vice versa. The other key components of fiscal policy in Jersey are the new Stabilisation Fund (SF) and the balance between States' taxation revenue and expenditure.

Past experience

The chart below shows that in recent times there has been little evidence of a counter cyclical approach being adopted by the States. In fact the opposite holds. When the economy was growing strongly in the late 1990s and inflation was above target the States allowed expenditure to increase strongly. This meant that when the economy slowed in the early 2000s expenditure also slowed and provided further pro-cyclical impact.

Chart 1: Trends in growth, inflation and government spending % change in States expenditure, RPIX, real GVA



Source: States of Jersey Statistics Unit, Treasury and Resources

It is important to remember that balancing the books in Jersey does not necessarily equate to the government not adding to demand in the economy. For example in 1998, the economy was growing strongly and inflation was above target. This was at a time when the States withdrew £17 million from the SR, States spending grew by 8% but revenue actually grew by 11% allowing the States to run a small surplus of £13 million. The correct approach should have been to contain expenditure growth at a significantly lower rate allowing revenues to be put aside for harder times (which were only 3 years away) and at the same timing helping to contain inflation and sustain economic growth.

The new framework must be designed in such a way that it is able to prevent a repeat of the situation in the late

1990s and early 2000s and ensure that fiscal policy (including the SR) is implemented in a counter cyclical manner.

As already mentioned fiscal policy in Jersey terms should include the approach applied to both the SF and the SR. These are considered in turn below.

The Strategic Reserve

The Strategic Reserve was set up by the States in 1986 to provide the Island with some level of insulation from external shocks. The Public Finances (Jersey) Law 2005 reiterates that the reserve cannot be used for any purpose other than one specifically recommended by the Treasury and Resources Minister and approved by the States.

The SR has not always been used in the way it was originally intended and at different times has funded capital projects when the Island was in recession but has also been used to fund tax cuts and/or expenditure increases at times when the economy was growing strongly. At other times it has been used for investment in economic development. Over the course of the 1994-2000 period transfers totalling £57 million were made from the SR to the capital and tourism investment funds. As already pointed out, this was during a period of sustained economic growth and above target inflation.

What is the Strategic Reserve?

In order to make sensible decisions about the use of the Strategic Reserve it is important to consider in a little more detail exactly what – economically – it is.

Fundamentally the Strategic Reserve represents consumption foregone in previous years by the residents of the Island. Adding to the Strategic Reserve *reduces* current consumption in the Island and *increases* the potential for consumption in the future. Spending the Strategic Reserve *increases* current consumption, but removes the potential for increased consumption in the future.

It is similar to the opposite of borrowing – which has the effect of *increasing* current consumption but requires future taxpayers to pay interest on the loan, and to repay the capital, thus *reducing* future consumption. However, the Strategic Reserve differs from borrowing in the following ways –

- It reverses the intergenerational payment pattern. Those who have paid for it may well not be around to benefit from the future benefits.
- Strategic Reserve financing is generally *cheaper* than borrowing by the difference between interest paid on debt and interest/return earned on assets [but can still have the same negative consequences such as increasing inflationary pressure and crowding out private sector activity as outlined below].

The Strategic Reserve and borrowing also have a number of similar traits –

- Spending the SR and borrowing will both increase inflationary pressure in the economy.
- Both can be used to finance counter-cyclical spending.
- Both can be used to smooth the impact of external shocks.
- Both can be used to finance direct current consumption, or real economic investments.
- Both can lead to a larger public sector than would otherwise have been the case and 'crowd out' activity in the private sector.

The international experience

Both Guernsey and the Isle of Man have Strategic Reserves. The Isle of Man has been making substantial contributions to its Strategic Reserve in recent years. It currently has a stated policy of planning for annual budget surpluses of at least 5% of net spending, though there appear to be no explicit policies on the use of the Strategic Reserve.

Guernsey has a Contingency Reserve Fund of £176 million, the purpose of which "is to provide protection against major emergencies including economic downturns having a severe adverse effect on the Island". More recently it has decided to spend at least half of its reserve in meeting the initial impact of their move to 0/10, which could seriously undermine its capability to meet its purpose.

Apart from our competitor offshore finance centres the other countries identified as possessing Strategic Reserves are mainly those which benefit from significant oil revenues. Norway is often cited as the best example of a country which has used its windfall oil revenues wisely. It created the State Petroleum Fund (SPF) in 1990 into which oil revenues are transferred. The stated purpose of the SPF is to "serve as a tool for coping with the financial challenges from the ageing population and the expected decline in oil revenues by transferring wealth to future generations". Drawdowns from the SPF are governed by long-term sustainability considerations and are approved by Parliament in the annual budget. Financial assets in the fund are expected to reach 120% of GDP 2010.

Another interesting example is Kiribati (a small island in the South Pacific with a population of 100,000). It possesses a sizeable stock of financial assets which are called the Revenue Equalization Reserve Fund (RERF) which was established in 1956 and into which were paid phosphate mining royalties. Although phosphate mining finished in 1979 a tradition of sound fiscal management has allowed Kiribati to increase the financial assets in the fund and by 2000 the fund was worth 800% (eight times) of GDP.

The Kiribati government now faces one of the most volatile revenue bases in the world as it is largely dependent on fishing licence fees and donor grants. As a result since 2000 there have been significant drawdowns from the RERF and as a result the advice of the IMF was sought on a sustainable fiscal framework. The conclusions included a rule that seeks to preserve the real per capita value of the RERF (and therefore permits the use of the real per capita return to smooth Kiribati's extreme revenue volatility) and a smoothing mechanism that requires the budget to build up savings by running surpluses in good times and enabling fiscal policy to offset the bad times.

Problems to avoid

The above analysis of what the SR is, past experience with the reserve and the experience of other countries spells out lessons for its future operation. There are a number of pitfalls to avoid –

- Using the reserve to boost spending at times when the economy is performing strongly (and is close to/above full capacity).
- An unclear framework which allows continual calls for the use of the reserve which waste time and distract attention from other issues.
- Using the reserve but never making repayments.
- Trying to use the SR to meet structural (ongoing) expenditure.
- Funding inappropriate government intervention.
- Inadequate provision for future generations that could face a different life in Jersey.

The Strategic Reserve in Jersey

In 2005 the SR amounted to £456 million which equated to 97% of total States expenditure (the highest it has been since 1998) or about 13% of GVA (14% of GNI and 16% of GDP). The Strategic Plan in 1998 set a broad target of one year's tax receipts but until now payments into it have largely been at the discretion of the Finance and Economics Committee (now the Treasury and Resources Minister) and to some extent by the residual of each years' spending and taxation decisions.

If the SR is to meet its objectives of insulating the Island from a major external shock or downturn then it is important to consider exactly what such an external shock could be. There are two potential causes of such a major external shock: a major natural disaster and severe structural economic decline. Given that the SR is consumption forgone by Jersey residents in the past, care should be taken as to when and how it is used. However, it would be hard to argue that circumstances of natural disaster or severe structural decline would not be an appropriate use of such revenues. If the SR is to really be effective in insulating against such shocks then how large should it be?

Natural disasters

Work done by the IMF shows that natural disasters are becoming much more common. There are two reasons for this: an increased concentration of population in high risk areas and an increase in the frequency and intensity of extreme weather. Small island economies are seen as particularly vulnerable but this largely reflects the incidence of hurricanes in the Caribbean. Developing countries are also much more prone to natural disasters.

Studies have shown that natural disasters tend to be associated with an immediate contraction in economic output, a worsening of external balances, deterioration in public finances and an increase in poverty. From 1970-2002 there were 6,480 incidents of natural disaster. For 2,036 of those there are estimates of cumulative damage which range from 1-132% of GDP but with an average of 21%.

Although there is no reason to think that Jersey will ever face a natural disaster and that even if it did to what extent GDP would fall, if the SR is to really provide some re-assurance and insulation against any such disaster whether it be from weather or bird-flu, then a figure of 20% of GDP would offer some guidance. There are a number of caveats around such a figure (not least that the States may not have to offset the total fall in GDP) but there is always going to be a great deal of uncertainty around trying to determine what funds might be required should a natural disaster hit the Island.

For Jersey to build up its SR to around 20% of GDP would require additional funds in the region of £100-£120 million.

Severe structural decline

A major shock that could emanate in the Island is if one or more of its key industries were no longer competitive and that as a result there was going to be a significant reduction in States revenue, public services and the standard of living. It must be recognised that the SR could only help smooth the transition from the period of structural strength to weakness and is unlikely to be able to alleviate the problem permanently (it would be unsustainable for a fund of a fixed value to meet ongoing commitments from anything other than the real return).

It is important to recognise that the SR would not be used to meet any revenue shortfall brought about by a cyclical downturn (that is the role of the SF). Also that it would not simply be used to meet any form of structural decline – it would have to be significant in nature to the extent that it will manifest itself in a significant fall in States revenue/employment/living standards in the Island.

What would severe structural decline look like? The easy example to consider is what would happen if the financial services industry became uncompetitive for what ever reason and it left the Island? A rough estimate is that it would lead to an initial loss of between £100-£200 million in government tax revenue (depending on whether that was before or after introduction of 0/10). This is before the impact on the wider economy of the loss in financial services is considered, which would be significant and could amount to another £100-150 million loss in tax revenue (and excludes any second round effects from the development of new or existing businesses outside finance). For the Island to have to deal with that and to try to smooth the process out, £450 million is

clearly only a few years worth of insulation against the loss of tax.

What level?

The analysis above shows that at nearly 100% of government expenditure the current level of the SR is significant but there is a great deal of uncertainty as to whether it is sufficient to insulate the Island from structural decline and natural disasters, particularly if both were to occur close to each other, or indeed one was to precipitate the other. Jersey is not alone in having a fund of this nature and a number of countries have built up funds of far greater value (relative to the size of the economy) while there are many others that have squandered such funds (with little to show for it).

But what does this mean for policy for the SR in Jersey? The pragmatic and prudent approach should be to build up the SR further where returns on the fund allow and where economic conditions allow further payments into the fund. This will reduce (but not remove) the probability that the SR is too small to meet its aims. The overarching aim is to continue to build the fund as a proportion of annual expenditure and GDP. The opportunity to make withdrawals such as those made in the second half of the 1990s should be removed.

Until the SF meets its required level (or at times when it needs replenishing) there may be a tension between making payments into the SR and/or SF. To some extent the Treasury and Resources Minister will have to decide which has the political priority. However, where surpluses are the result of cyclical improvement and have been planned to meet payments into the SF then this could take priority. Where surpluses are above those needed to replenish the SF then there would be scope to pay into the SR. The FPP (as discussed below) should also be able to provide guidance as to when is the right time to contribute to the SF.

Policy for the Strategic Reserve in Jersey

It is recommended that the guiding principles for the SR under the new fiscal framework are -

- 1. The overall aim of the SR is to provide the Island with some insulation from an external shock such as severe structural decline (such as the collapse of a major Island industry) or a major natural disaster.
- 2. The aim in the medium and long-term should be to continue to grow the SR (as a proportion of government expenditure) through re-investing the return in the reserve and paying in part or all of surpluses from the Consolidated Fund when the economy is performing strongly.
- 3. A suitable long-term aspiration is to grow the SR by another £100-£120 million, to a minimum level of around £600 million, to equate to about 20% of GDP.

It is possible that the States may decide to sell assets currently outside the SR e.g. privatisation and add the revenue received to the SR. In some cases the income stream from the assets e.g. past dividends may have funded States expenditure. The Treasury and Resources Minister could use this as an opportunity to curtail expenditure (e.g. invest the income stream back in the SR). Where the Minister deems that it is not appropriate to do this then it should be possible to transfer the return (preferably in real terms) into the Consolidated Fund (CF). This is the only payment possible (outside conditions being met to use the SR) from the SR to CF. It could be monitored on a strict basis e.g. a privatisation receipts = £10 million, return on SR=5%, either £500k (nominal) or £300k (real approx) can be transferred from the SR to CF to meet expenditure commitments.

Stabilisation Fund

The SF was alluded to in the EGP and is in the process of being set up with an initial payment of £32 million from the Dwelling House Loan Fund (DHLF). This Report and Proposition, presented alongside this year's Budget, will set the rules and principles governing its use. It is worth considering whether there are things to learn from the use of such funds elsewhere.

The international experience

During the 1990s U.S. States created budget stabilization funds to help provide countercyclical support. Today 46 States have such rainy day funds although many have failed to adopt either contribution or expenditure rules that would create significant balances in the funds. Such funds have some general properties –

- They are designed to accumulate revenues during periods of strong economic performance.
- They can improve a State's credit rating by demonstrating that a State has significant reserves to weather a moderate recession.
- They are designed to be counter cyclical but not to address a structural budget deficit.
- They sometimes have contribution rules.
- Withdrawals are often part of the political process and only sometimes based on specific rules.
- Suitable levels for such funds to be able to provide counter cyclical aid is estimated by some analysts to be in the region of 15-20% of state spending.

The experience from the U.S. is that States will not draw on such funds if the rules are too mechanical i.e. they will not draw down funds in year 1 if there is an immediate requirement to repay them in year 2.

The U.K. Treasury has identified the need for a more flexible fiscal regime if the U.K. entered EMU and while they are not in favour of a stabilisation fund as such they do recognise the need to strengthen automatic stabilisers and discretionary fiscal policy. Their fiscal rules are already based over the economic cycle and therefore allow the flexibility that the approach outlined below would give to Jersey.

The IMF's advice to Kiribati stated that the island needed to build up savings in good times to provide a buffer for fiscal policy in bad times so that the government can sustain its expenditures without having to resort to procyclical cuts. Such an approach would allow fiscal balances to expand and contract (breathe) around the long-run sustainable level. They recommend that the mechanism is simple and involves having a benchmark for actual revenue and where revenue exceeds that benchmark the additional revenue should be saved. In years of poor revenue collection the government could draw on the surpluses that it accumulated in earlier years to bring revenues back up to the benchmark.

What level for Jersey?

For the SF to be effective it will need to have sufficient funds to be able to offer some real insulation against an economic down turn. That is not to say that the SF will prevent an economic downturn, just that it would allow funds to be used to either maintain valuable expenditure programmes or reduce taxes that might partly offset some of the negative consequences of a downturn.

The real question is what is the most suitable level for the SF? The exact same question has been asked in the U.S. where States have their own 'Rainy Day' funds that are in place for this purpose. Research there has tended to point to a suitable level being in the region of 15-20% of annual government expenditure. Is this relevant for Jersey?

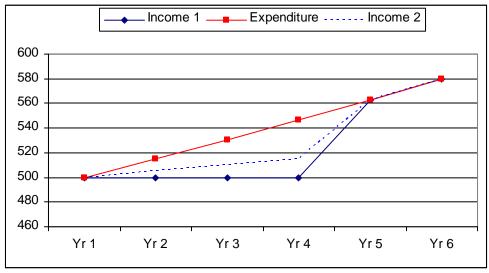
It is worth considering what the implications might be of an economic slowdown in Jersey for government income. In 2003 and 2004 States income grew by 1.8% and -0.2% respectively. It is therefore not beyond the realms of possibility that the States could experience for a number of years very weak or in fact no growth in income. Where this was attributable to a cyclical economic downturn there would a case for the States to use the SF to smooth out expenditure and prevent expenditure cuts or tax increases.

It would be useful to consider how this might impact on government finances in Jersey. Take the hypothetical example below looking at an initial scenario where Jersey balances the books in year 1 through to year 6 as

expenditure and income rise in line at 3% per year. Assume that the Island then faces an economic downturn which either keeps income flat in nominal terms (income 1) for 3 years or sees it grow at only 1% for 3 years (income 2) between year 1 and year 4. Assuming that expenditure growth is unchanged and that revenue returns to previously forecast levels in year 5 (see next paragraph) then a deficit opens up of between £60-£90 million or 12-18% of annual expenditure. This coincides with the recommendation in the U.S. that Rainy Day funds amount to between 15% and 20% of annual expenditure.

Chart 2: How a slowdown might impact on government finances

States income and expenditure, £m



Source: Economics Unit calculations

The example above could be considered in certain circumstances to be an under estimate of the deterioration in government finances because it assumes that expenditure grows at the same rate as that expected before the slowdown took hold. It may well be the case that expenditure actually rises at a faster rate during the slowdown e.g. outlays on benefits increase and that the SF would need to have more funds in place to meet these requirements. Similarly it assumes that in Year 5 States income recovers to the previously forecast level. It could well be that in reality income does not return to this level and there is larger deficit to address.

The recommendation is that the target level for the SF should be 15-20% of government expenditure (measured as total States net expenditure). The most appropriate level for the SF is somewhat uncertain and the 15-20% target level should be interpreted as a guideline. It is not a cap and should be seen more as the lower level for the amount of money in the SF and for it to have some real potency in the event of a cyclical economic slowdown. This would suggest that the SF should be built up to level of £75-£100 million.

Operation of the fund

If the target level for the SF is set at 15-20% of expenditure then what would determine whether money should be paid into or withdrawn from the SF? The overall guiding principle should be the prevailing economic conditions. When the economy is performing strongly money should be paid into the SF (and SR) and when the economy is performing more weakly then money should be withdrawn.

There are two ways in which this could happen. The first would be based on fixed rules that indicate when the economy is performing strongly and when it is performing weakly e.g. when States income falls/rises by a certain % or reaches a certain benchmark, employment falls/rises by a certain % or economic growth falls below/above certain rates. The second is that independent economic advisers assess the performance of the economy and advise whether economic conditions justify payments into or from the SF. This could be done through an annual report published at Budget time and which the Treasury Minister could draw on to make his budget decisions and those surrounding the SF.

The nature of the Jersey economy and the information available on it means that it is very hard to devise one or two rules that could be used to govern policy for the SF. While the quality and depth of statistical information is greater than in many small island economies, it is nowhere near as great as in most advanced economies and there is no detailed economic model for forecasting economic performance. It is therefore harder to determine the economic performance of the economy than it is in most advanced countries at any point in time. This suggests that it therefore requires a significant degree of experience and sound judgement to analyse the economic performance of the Jersey economy, its likely direction and the underlying state of government finances.

Experience across the globe has shown that bringing some independence into macroeconomic policy making can improve credibility and effectiveness. Given that in Jersey the only macroeconomic tool available is fiscal policy there is a fine line to tread in terms of bringing more independence into decision making. A balance is needed between giving more weight to independent economic advice (to act as a check on political objectives) but at the same time allowing elected politicians to take the decisions on taxation and spending.

It is for these reasons that it is recommended that the mechanism for determining the circumstances for making payments from and to the SF is through an objective assessment of the economic climate at the time. An independent panel of at least three economists – The Fiscal Policy Panel (FPP) - should be appointed by the States on the recommendation of the Treasury and Resources Minister and following advice from the States Economic Adviser to ensure an independent and transparent appointment process.

How the FPP would operate

The FPP would be commissioned to publish an annual report in early September each year which will set out advice and recommendations for the Treasury and Resources Minister. An Interim Report would be prepared by the end of July each year for the Treasury and Resources Minister which the Minister could use for making decisions concerning the annual Business Plan. The Minister would have the option of asking for an additional report/update at any point in the year should they feel that economic conditions have changed significantly to potentially merit a different approach.

The FPP will be made up of independent economists that the Economic Adviser and Treasury and Resources Minister feel can bring together the right mix of experience and skills. They could be current or ex-Monetary Policy Committee of the Bank of England members, public or private sector economists or academic economists. Panel members will be appointed by the States on the recommendation of the Minister and following advice from the States Economic Adviser. They will be appointed on a fixed 3 year basis with the contract being open for renewal by the States on the recommendation of the Minister for Treasury and Resources and following further advice from the States Economic Adviser.

The FPP's reports should cover such issues as –

- The strength of the Jersey economy.
- Position in the economic cycle.
- The outlook for the Jersey and world economies and financial markets.
- The appropriateness of the States financial position/forecasts given the above.
- A recommendation as to whether this translates into conditions which merit withdrawals
 from/payments into the SF or if conditions are broadly neutral and there is no need for payments.
 Where payments are needed the FPP will be expected to give some indication of the scale of
 payments.
- If withdrawals are to be made what would be the best way to mitigate the economic slowdown tax cuts v spending increases or indirect v direct tax cuts.

• When the SF may be at sufficient levels and therefore payments made into the SR.

The types of issues covered in the report would be trends in GVA, financial services profitability (and expectations), non-finance business conditions, employment/unemployment, inflation, interest rates and government revenue/expenditure. The Statistics Unit are already planning to expand the amount of information available by producing a quarterly retail sales release and an annual business enquiry.

The States Economic Adviser would not sit on the Panel but would act as Secretary to the Panel acting as its Jersey support – arranging/preparing for meetings, providing the information needed to write the report and arrive at a conclusion. The FPP could draw on any other sources of information that it sees fit and may require. The Economic Adviser would continue to work with the Head of Statistics to improve (where feasible) the amount of economic data available and to meet the data requirements of the FPP.

The current level of the SF

The current level of the stabilisation fund with the initial transfer from the housing loan fund is £32 million which equates to about 7% of 2006 expenditure. If the projected balance in the Consolidated Fund at the end of 2006 was transferred to the SF that would amount to another £43 million which would take the SF up to 15% of 2006 expenditure.

If the CF is transferred to the SF then this would require the States to run a tighter fiscal policy in subsequent years as the CF would be lacking the funds to balance the financial position over the 2007-2011 period. Without such a transfer the SF is insufficient to meet its intended purpose and payments into it would be required. When this is combined with the fact that the latest GVA data shows that the economy was performing strongly in 2005 with real economic growth of 3% (and inflation above target in 2006) it is clear that the current financial forecasts need to be adjusted to take into account payments into the SF, at least for 2006 and 2007.

Policy for the SF

Drawing this analysis together the key principles governing the SF should be –

- 1. The purpose of the Stabilisation Fund will be to make fiscal policy more countercyclical and create in the Island a more stable economic environment with low inflation.
- 2. The final decisions on what proposals are to be taken to the States for taxation and spending and withdrawals from/or payments into the Stabilisation Fund would continue to lie with the Treasury and Resources Minister. The Fiscal Policy Panel's report and advice would though be made public to ensure a transparent and credible process.
- 3. Establish an independent panel of leading economists to form the Fiscal Policy Panel and for them to publish an annual report in early September each year covering their views on economic conditions and the States' finances. The report would comment on the need for running surpluses/deficits and whether funds could be withdrawn from/paid into the Stabilisation Fund.
- 4. The Treasury and Resources Minister would have the option of asking for an additional report/update at any point in the year should he/she feel that economic conditions have changed significantly to potentially merit a different approach.
- 5. Panel members will be appointed by the States on the recommendation of the Minister and following advice from the States Economic Adviser. They will be appointed on a fixed 3 year basis with the contract being open for renewal by the States on the recommendation of the Minister for Treasury and Resources and following further advice from the States Economic Adviser.
- 6. A target level (guideline rather than a cap) of 15-20% of total States net expenditure, equivalent in today's money of £75-£100 million. This would mean a further £40-70 million will be needed on top of the £32 million transfer from the Dwelling House Loans Fund to meet this target level in coming years.

7. Once the framework has been established and in operation its effectiveness should be reviewed by the Economic Adviser (seeking input from Fiscal Policy Panel members and the Treasury and Resources Minister). It is important that as experience is gained in the operation of the framework then where possible it is strengthened and improved. Developing the right macroeconomic policy framework for Jersey will be a process of evolution but implementing these recommendations will be a big step forward for the Island.

The framework in practice

It is necessary to consider in a little more detail how the framework would operate in practice and in particular what the relationship would be between the SF, SR and the Consolidated Fund (CF).

In general terms the CF would operate like a current account being the day to day fund for operating the government's finances. The SF would be the savings account and payments would go to and from the CF under specific circumstances and based upon advice from the FPP. The SR would effectively be the long-term savings account (akin to a pension fund) and would accumulate any surplus from the CF and SF.

Financial and manpower implications

There are no manpower implications of this proposal and the intention is that the costs of the proposed Fiscal Policy Panel will be absorbed within the existing budgets of the Treasury and Resources and Chief Minister's departments.

- [1] A copy of Jersey Telecom's Annual Review is available on its website: www.jerseytelecom.com
 [2] Reference http://www.cw.com/jersey/media_centre/jsy_08122005.html
 [3] Reference http://www.bharti.com
 [4] Article 7(1) of the Telecommunications (Jersey) Law 2002
 [5] The other jurisdictions of interest being Cyprus (where privatisation is underway), the Faroe Islands, Greenland and Luxembourg.
 [6] Article 46(3) of the Telecommunications (Jersey) Law 2002
 [7] Strategic Review of Telecommunications, Phase 2 consultation document, Ofcom, 18 November 2004, para 1.57.
 [8] Competition Policy for Small Market Economies, Michal S. Gal, Harvard University Press, 2003, p5.
 [9] Discussion Paper Issued by the Minister for Treasury & Resources on the Proposed Sale of Jersey Telecom (the 'Privatisation Discussion Paper'), States of Jersey, 13 July 2006.
 [10] ibid., p11.
- [11] Competition Law, Progress Report of Industry Committee presented to the States, 3 September 2002, p1.
- [12] Competition Policy for Small Market Economies, Michal S. Gal, Harvard University Press, 2003, p 4.
- [13] A Competition Law for Jersey, Report of the Industry Committee presented to the States, 8 January 2002, para 7.
- [15] ibid., pp 4-5.
- [16] Telecommunications (Jersey) Law 2002, Article 7(1).
- [17] ibid., Article 7(2)(a).
- [18] *Incorporation of Jersey Post and Jersey Telecoms: Revised Approach*, Report of Policy and Resources Committee, lodged au Greffe, 6 June 2000, para 7.
- [19] Telecommunications (Jersey) Law 2002, Article 7(2)(b).
- [20] ibid., Article 7(3).

- [21] Privatisation Discussion Paper, op.cit., p5.
- [22] Privatisation Discussion Paper, op.cit., p8.
- [23] Strategic Review of Telecommunications, Final Statement, Ofcom, 22 September 2005, para 1.3.
- [24] ibid., para 3.11.
- [25] Privatisation Discussion Paper, op.cit., p8.
- This is not a flippant disregard of regulation in this area. Refer Alfred Kahn, one of the foremost figures on the process of deregulation in *Letting Go: Deregulating the Process of Deregulation Temptation of the Kleptocrats and the Political Economy of Regulatory Disingenuousness*, Alfred E. Kahn, MSU Public Utilities Papers, 1998, pp 92 and 102: 'The [regulator] has in effect declared: "We will determine not what your costs are or will be but what we think they ought to be. Why should we bother to let the messy and uncertain competitive process determine the outcome when we can determine at the very outset what those results would be and prescribe them now?"... if regulators are wise enough to be able to prescribe the results competition would produce, there is no need for competition.'
- [27] Competition Policy for Small Market Economies, op.cit., p13.
- [28] Described in economics as 'sunk' costs. High sunk costs create barriers to entry as, by their nature, sunk costs cannot be recouped in the event of failed entry (e.g., it is difficult to literally dig up sunk networks and resell them).
- For example, see conclusion of Ofcom in *Strategic Review of Telecommunications*, Final Statement, 22 September 2005, para 4.13: 'Mobile telecoms networks lack the enduring economic bottlenecks that we found to exist in fixed networks. Competition has been sustainable between a sufficient number of networks, each providing end-to-end services to customers, to constitute effective competition.'
- [30] Newtel, a local licensee currently providing fixed-line services, has Wi-Max licences for Jersey.
- [31] Core networks connect the hierarchy of exchanges in a network and connect to other networks locally, nationally and internationally. Depending on their status in the hierarchy, they can carry vast amounts of telecommunications traffic.
- [32] Ofcom has also come to this view in *Strategic Review of Telecommunications*, Phase 2 consultation document, Ofcom, 18 November 2004, p5: 'Understandably, fixed infrastructure competition has followed the margin in the system, with competition to BT focused on core and backbone networks.' Indeed, in the international sector, there is an over-supply of core networks.
- [33] Strategic Review of Telecommunications Phase 2 Proposals, News Release, Ofcom, 18 November 2004.
- [34] A natural monopoly occurs where, because of economies of scale deriving from large upfront investments, a single firm can supply an entire market more efficiently than two or more firms in competition with each other. The belief that telecommunications was no longer a natural monopoly due to technological developments fed most telecommunications liberalisation policies (see, for example, para 6 of *Draft Telecommunications (Jersey) Law 200-*, Statement of Industries Committee, lodged au Greffe, 3 July 2001). However, the local loop in particular is proving to be an intransigent natural monopoly.
- [35] Strategic Review of Telecommunications, Phase 2 consultation document, Ofcom, 18 November 2004, para 4.98.
- [36] Ofcom drew the same conclusion. Refer para 4.5 in its *Strategic Review of Telecommunications*, Final Statement, 22 September 2005. See also Lehr and Hubbard in *Economic Case for Voluntary Structural Separation*, William H Lehr and R Glenn Hubbard, paper prepared for 31st Annual Telecommunications Policy Research Conference, George Mason University, 15 September 2003, p6.
- [37] Newtel also provides direct off-island backhaul for SME's using its upgraded core fibre network which forms a ring around the CBD in St Helier. However, as discussed, this network is not directly relevant.
- There is a similar situation in the UK where cable networks did not develop as effective and sustainable competitors to BT's ubiquitous network. In the UK, this was primarily due to the fact that they never became the default distribution platform for pay TV and its geographic spread remains limited. Indeed, one cable operator, NTL has announced its intention to provide telecommunications services over BT's unbundled local loop. Refer *Strategic Review of Telecommunications*, Phase 2 consultation document, Ofcom, 18 November 2004, para 4.92.
- [39] Newtel has advised the JCRA that it would prefer Bitstream access over LLU as the latter may not be economical on JT's new NGN, which extends closer to buildings and thus requires more nodes and more equipment per capita.
- [40] Strategic Review of Telecommunications, Phase 2 consultation document, op.cit., p5.
- $\frac{[41]}{}$ ibid., paras 1.19 1.20.

- $\frac{[42]}{}$ ibid., paras 1.22 1.23.
- [43] Competition Policy for Small Market Economies, op.cit., p13.
- [44] Henry Ford was once sued for breach of fiduciary duty for granting his workers a pay rise.
- [45] 'Any-to-any connectivity' is the ability of a customer connected to one network to call a customer connected to another network. It is necessary because a customer will not normally connect to a particular network if customers of other networks cannot be reached.
- [46] Whom the Gods Would Destroy, or How Not to Deregulate, Alfred E. Kahn, First Distinguished Lecture, AEI-Brookings Joint Center, AEI Press, 2001, p2: "... "unregulation" has provided the occasion for pervasive demonstrations of the very propensities of regulation that are the principal reasons for its abandonment propensities to micromanage the process; to prescribe the results that, it is anticipated, the Almighty would have produced if He or She were in full possession of the facts; to handicap the competitive process to produce visible competitors; and, opportunistically, to produce visible price reductions'.
- [47] Wealth of Nations, Adam Smith.
- [48] Ex post regulation may be characterised as taking action after the event while ex ante regulation requires pre-approval before implementation. The latter is clearly more interventionist and is typically imposed to pro-actively introduce competition into previously monopolistic industries. When competition becomes established, it is generally wound-back with full reliance placed on ex post competition law.
- [49] The merger and acquisitions provision of the law are *ex ante* in that they require pre-merger notification, but these provisions are not directly relevant to this paper.
- [50] Competition Law, Progress Report of Industry Committee presented to the States 3 September 2002, p4.
- [51] JT confidentially estimated to the JCRA that the annual costs of performing current cost accounting is unlikely to be less than £ [confidential] per annum.
- [52] A confidential example is provided in confidential version of this paper.
- [53] Strategic Review of Telecommunications, Phase 2 consultation document, op.cit., p6.
- [54] Evaluating the impact of the Telecoms Review: an interim report one year on, Ofcom 18 October 2006, paras 1.5 and 1.7.
- [55] Telecommunications Amendment Bill, Report of the Finance and Expenditure Committee, 27 November 2006, p4.
- [56] Telstra's operational separation plan approved, Media Release 062/06, Minister for Communications, 23 June 2006.
- [57] National Competition Policy, Report of the Independent Committee of Inquiry (the 'Hilmer Report'), August 1993, p241.
- [58] Italy regulator favours separating Telecom Italia network, commercial ops, AFX (via Finanz Nachrichten) 9 June 2006.
- NetCo could be a legally incorporated entity operating under a separate brand. Apart from network assets and infrastructure ownership, it could also possibly control all relevant rights-of-way and easements, and the international gateway (and associated interconnection, transit and peering arrangements). NetCo could develop products in response to specifications from retail service providers (and supply these to other retail service providers on an equivalent basis, potentially with a lag for the innovator to harvest their innovation). It might have a large procurement function. All services provided to retail service providers could be clearly defined and tariffed. As a separate legal entity, NetCo would have self-standing finance, legal and human resource functions.
- [60] Economic Case for Voluntary Structural Separation, William H Lehr and R Glenn Hubbard, paper prepared for 31st Annual Telecommunications Policy Research Conference, George Mason University, 15 September 2003, p13.
- [61] RetailCo would maintain its own billing and customer service systems. It would also have its own separate IT systems as it is particularly important that there be no sharing of any commercially sensitive information or any process advantage. Like NetCo, it would operate as a separate legal entity and would have self-standing finance, legal and human resource functions. It would also maintain a small procurement function.
- [62] Strategic Review of Telecommunications, FAQs, Ofcom, 22 September 2005, para 8.
- [63] The 2006 Review of EU Telecom rules: Strengthening Competition and Completing the Internal Market, Speech by Viviane Reding, EU Information Society Commissioner, Brussels, Bibliothèque Solvay, 27 June 2006
- [64] Structural separation still requires regulation of prices but, as discussed later, regulation of such prices is generally less burdensome when incentives to discriminate have been removed. Regulation of network prices is still necessary because a

profit-maximising monopolist in an unregulated environment would find it more profitable to restrict supply of network services and increase prices.

- [65] This is an in-principle statement. As discussed later, small markets combined with economies of scale may limit the potential for competition to develop.
- [66] A point also noted in *Economic Case for Voluntary Structural Separation*, William H Lehr and R Glenn Hubbard, paper prepared for 31st Annual Telecommunications Policy Research Conference, George Mason University, 15 September 2003, p15.
- Structural separation is essentially concerned with the removal of incentives to *vertically* foreclose downstream competition in order to advance the competitive position of a downstream subsidiary (such as by leveraging upstream market power into downstream markets through such conduct as anti-competitive bundling, margin squeezing, cross-subsidisation and refusal to supply). Upstream and downstream products are generally complementary products (i.e., one is needed to supply the other). However, structural separation does not directly address incentives to *horizontally* foreclosure competition (i.e., conduct designed to damage competitors who supply substitute products in competition with your products). Therefore, the need for regulation will not completely go away as there still remains the potential for anti-competitive conduct at the horizontal level, particularly the potential for abuse of market power if the retail arm of the incumbent is in a dominant position.
- [68] Restructuring Public Utilities for Competition, OECD, 17 September 2001, p21.
- [69] ibid., p22.
- [70] ibid., p22.
- [71] ibid., p23.
- [72] B&B wouldn't rule out Telstra, Sydney Morning Herald, 28 July 2006.
- [73] MacBank tipped as Li's \$7b bidder, Sydney Morning Herald, 21 June 2006.
- [74] Restructuring Public Utilities for Competition, OECD, op.cit., p26.
- [75] New assets on the block: the leveraging of grids, docks, pipes and tarmacs, Agenda, Oxera, October 2006.
- After Ronald Coase who first suggested in his article *The Nature of the Firm*, Economica, 1937, that firms form in large part to overcome transactional costs incurred by making contracts with suppliers of different inputs.
- [77] The JCRA has had preliminary estimates done on a confidential basis of the costs associated with incremental staff from structural separation. The costs are estimated at £ [confidential] per annum.
- [78] For example, see on this point *Economic Case for Voluntary Structural Separation*, William H Lehr and R Glenn Hubbard, paper prepared for 31st Annual Telecommunications Policy Research Conference, George Mason University, 15 September 2003, p15.
- [79] Annual Review for 2005, Jersey Telecom Group, p18.
- $\frac{[80]}{Recommendation\ of\ the\ Council\ concerning\ Structural\ Separation\ in\ Regulated\ Industries,\ adopted\ by\ the\ Council\ at\ its\ 1003^{rd}\ session\ on\ 26\ April\ 2001,\ OECD,\ C(2001)78/FINAL,\ 6\ June\ 2003.$
- [81] Restructuring Public Utilities for Competition, op.cit., p27.
- [82] The Benefits and Costs of Structural Separation of the Local Loop, report for OECD Working Party on Telecommunications and Information Services Policy, DSTI/ICCP/TISP(2002)13/FINAL, 3 November 2003, p6.
- [83] op.cit., p9.
- [84] Report to the Council on Experiences on the Implementation of the Recommendation Concerning Structural Separation in Regulated Industries, OECD, C(2006)65, para 6.
- [85] Strategic Review of Telecommunications, Phase 2 consultation document, Ofcom, 18 November 2004, para 1.57.
- [86] Competition Policy for Small Market Economies, op.cit., p5.
- [87] Have mercy, break the telecom loop, Alan Kohler, Sydney Morning Herald, 7 June 2006.
- [88] This was also asked in the paper "Recommendations of the Council Concerning structural separation in regulated industries" 6 June 2003
- [89] Jersey Telecom's Impact Statement Section 4 para 6.23
- [90] It is interesting to note, however, that despite Jersey Telecom preparing and sending two full sets of 32 separated accounts each to the

JCRA, not one question has been raised by them regarding the content of such. On this basis, any finding by the JCRA that this form of regulatory intervention has failed, or is not sufficient, would be materially flawed.

- [91] June 2004
- [92] Working Party on Telecommunication and Information Services Policies, 3 November 2003
- $\underline{^{[93]}}$ This point is considered by Lehr and Hubbard (The Economic Case for Voluntary Structural Separation, 2003) as a reason for firms volunteering to separate
- [94] Overall residential services per household, wholesale and retail, for period ending November 2006
- [95] Stephen B. Pociask, "Structural Separation of BellSouth Telecommunications and its Effects on Florida Consumers", TeleNomic Research, 31 July 2001.
- [96] For example, see "Telstra split costs millions", The Courier-Mail 25 September 2002
- [97] Report on the 2001 Census, Jersey