



Review of Jersey Telecom's wholesale (carrier services) business

A REPORT PREPARED FOR THE JCRA

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REDACTED VERSION

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Review of Jersey Telecom's wholesale (carrier services) business

| Exec | cutive Summary | 1 |
|------|---|----|
| 1 | Introduction | 5 |
| 1.1 | Background to this review | 5 |
| 1.2 | Focus of this review | 5 |
| 1.3 | Approach taken | 6 |
| 1.4 | Structure of this report | 6 |
| 2 | The importance of wholesale markets | 9 |
| 2.1 | The need for wholesale service provisioning | 9 |
| 2.2 | Key principles of wholesale service provisioning | 9 |
| 3 | Situation in Jersey | 13 |
| 3.1 | Overview of the telecommunications market in Jersey | 13 |
| 3.2 | How does the wholesale market currently operate? | 17 |
| 3.3 | Main concerns raised by operators | |
| 4 | Key themes identified | 27 |
| 4.1 | Match between retail and wholesale services | 28 |
| 4.2 | Efficiency and incentive structure | 34 |
| 4.3 | Quality of service delivery | 37 |
| 4.4 | Appropriateness of current pricing | 46 |
| 4.5 | Regulatory capacity | 51 |
| 5 | Summary findings and recommendations | 55 |
| 5.1 | Summary findings | 55 |
| 5.2 | Recommendations | 58 |

Review of Jersey Telecom's wholesale (carrier services) business

| Figure 1. JT's bitstream provisioning times for Sure and Newtel (Jan – May 2012)44 |
|--|
| Figure 2. JT's broadband provisioning times for orders from JT Retail (Jan – May 2012) 45 |
| Table 1. Main telecommunications services providers in Jersey 14 |
| Table 2. JT's share in selected retail telecommunications markets15 |
| Table 3. JCRA's wholesale fixed market review SMP findings (2010) 18 |
| Table 4. Mapping of SMP remedies and JT Licence Conditions18 |
| Table 5. JT's wholesale private circuit offerings21 |
| Table 6. Main concerns raised during stakeholder interviews 24 |
| Table 7. Mapping of key themes to remit of the review27 |
| Table 8. Overview of current matching between on-island retail and wholesale fixed services29 |
| Table 9. Comparison of framework for competition across selected small island states 30 |
| Table 10. Provisioning times – Wholesale Private Circuits39 |
| Table 11. Target repair – Wholesale Private Circuits40 |
| Table 12. Selected compensations contained in JT's wholesale SLAs42 |
| Table 13. Outages Duration in Excess of the Target Time to RepairGuernsey43 |
| Table 14. Comparison of selected wholesale DSL and backhaul charges in Jersey and Guernsey (total monthly costs, £s)48 |
| Table 15. Comparison of selected wholesale private circuit charges in Jersey, Guernsey, KCOM and Malta (total monthly costs, £s)48 |

Executive Summary

The Jersey Competition Regulatory Authority (JCRA) has commissioned Frontier Economics to conduct a review of Jersey Telecom (Jersey) (JT)'s wholesale (carrier service) business.

This review aims to build on the findings of a previous review, taking into account any recent developments in the market and regulatory framework. It is focused on particular aspects of JT's wholesale carrier service business, including the structure and positioning of JT's Carrier Service unit, JT's current wholesale services portfolio, and the incentive structure in place for JT to deliver high quality and timely services to OLOs.

Our review has taken account of a wide range of information sources, in particular a series of stakeholder meetings and follow-up correspondence, deskbased research and a review of the available precedent regarding approaches taken in similar jurisdictions.

This report constitutes the core deliverable of this assignment, setting out our draft findings from our review and any proposed remedies. The current draft version is aimed to facilitate our discussion with the JCRA on our main findings.

Main findings

Our review to date suggests that the structure and incentive model of JT is not delivering the range of depth of wholesale services (including, for the avoidance of doubt, the customer experience of these services, rather than just actual service offerings) which would be of value to OLOs. For example:

- We consider that the non-price aspects of JT's private circuit and bitstream service are broadly in line with those seen elsewhere, but do not, in all aspects represent best practice and that there is room for improvements on provisioning times, repair times and compensation schemes.
- Whilst our interviews did not provide a single, conclusive picture of the market, they did suggest that the working relationship between JT and OLOs is not always productive. The OLOs find JT difficult to deal with and any meetings (such as those relating to Gigabit Island) are considered to have become ineffective and less frequently attended by OLOs.
- In general, JT is perceived to take a legalistic approach, rather than treating OLOs as customers. JT in contrast says that it puts considerable effort into consulting OLOs and finds it difficult to obtain clear statements of their requirements.

• Our review has also highlighted that the pricing of existing wholesale services should be considered further. Our analysis (which was based on high-level information only) indicates that there is insufficient margin between retail and wholesale rates for some services, especially private circuits, in order to allow OLOs to compete with JT on a retail level.

We believe there could be two routes to remedying the current situation.

- 1. Requiring JT to change its structure and incentive models so that the carrier services team takes responsibility for the end-to-end delivery of wholesale services and is incentivised to do so.
- 2. The JCRA adopts a more hands-on regulatory approach going forward by applying more strict targets on JT.

We do not consider the first option to be feasible in the context of Jersey and even so, it would require a significant amount of resources and time to implement.

As such, we recommend that the JCRA adopts the second option by reviewing the specific aspects of the regulatory framework. In particular, it should focus on:

- ensuring a swift introduction of the additional wholesale services considered under the Channel Island Wholesale Access Project;
- tightening the current provisioning times, repair times and compensation scheme governing the current wholesale services;
- ^D attending and running the regular meetings with JT and OLOs;
- reviewing the effective retail margin on existing wholesale products (in particular private leased circuits) to ensure that these allow OLOs to compete with JT; and
- reviewing its current framework of assessing promotions and discounts offered by JT on a retail level.

Together, we believe this set of measures would benefit the market and could be introduced with limited delay. But, fundamental changes which do not require continued regulatory oversight will only be achieved with changes in the broader regulatory arrangements. For example, although not constituting a barrier to developing a wholesale market in itself, the continuing ownership of JT by the States may give JT power and influence that, for example, C&W does not have in Guernsey, and the past relatively limited powers and resources of the JCRA have limited its ability to respond to some individual issues.

Executive Summary

For example, these issues are exemplified by JT's plans for the Gigabit Island project, which appears to have been developed without sufficient effective consultation with the OLOs and without giving the OLOs an opportunity to participate in the project.

At the same time, the Gigabit Island project provides the JRCA with an opportunity to revise the regulatory framework in the sector. For example, the JCRA should consider the merits of the new optical access system being shared through physical unbundling. Physical unbundling together with fixed number portability would maximise the scope for competition and freedom of operation by the OLOs and so reduce many regulatory problems.

1 Introduction

The Jersey Competition Regulatory Authority (JCRA) has commissioned Frontier Economics to conduct a review of Jersey Telecom (JT)'s wholesale (carrier service) business.¹ This report constitutes the core deliverable of this assignment, setting out our draft findings from our review and any proposed remedies.

1.1 Background to this review

The current review has been triggered by a range of developments. These include:

- ^a a previous review, conducted in 2009, identified several recommendations, some of which have now been implemented;²
- remaining dissatisfaction by market players with the functioning of the wholesale market and the performance of JT's wholesale service; and
- ^D JT's planned deployment of a fibre-to-the-home network (i.e. its Gigabit Island Project), which will impact on the future provisioning of wholesale services for all market players.

1.2 Focus of this review

This review aims to build on the findings of the previous one, taking into account any recent developments in the market and regulatory framework.

The remit of this review is focused on particular aspects of JT's wholesale business. In particular:

- the structure and positioning of JT's wholesale business and its relationship to the retail business unit;
- JT's current wholesale services portfolio (including available documentation, ordering processes and provisioning); and
- The current incentives on JT Wholesale to deliver high quality and timely services (including any penalties for underperforming).

JT Wholesale offers a wide range of services, serving customers in other countries as well as within Jersey. As this review focuses on the wholesale market in Jersey only, our analysis focuses primarily on the 'Carrier Services' unit within

¹ JCRA, 'Invitation to Tender for the Review of Jersey Telecom's Wholesale Business', February 2012.

² Regulaid, 'Review of Jersey Telecom Ltd's regulatory accounts and access provisions', June 2009.

JT Wholesale (i.e., the staff that is in charge of handling JT's relationships with OLOs) and other units within JT that are involved in the provisioning of wholesale services in Jersey.

1.3 Approach taken

Our review has drawn on a range of information sources, in particular:

- Stakeholder meetings. Early on during the review, we have conducted a series of meetings with operators and the JCRA to understand the current situation and main concerns with the status quo.
- **Desk-based research**. The information gathered during the meetings was further facilitated by a review of the relevant documentation on JT's wholesale business, the relevant regulations and information provided by JT in response to our follow-up questions from our meeting.
- International benchmarking. Further to the Jersey-specific information we have collected and reviewed information on the provisioning of wholesale services in other jurisdictions. This has focused on jurisdictions similar to Jersey, in particular Guernsey, Malta and Kingston Communications in the UK.

This has allowed us to identify stakeholders' main areas of concern on the current functioning of the wholesale market in Jersey and any proposed solutions to remedy these concerns.

Throughout this process we have taken great care of developing workable solutions for the situation in Jersey by:

- focusing on the issues identified by the operators;
- reviewing common approaches adopted elsewhere; and
- taking into account the relative size of the market and the operators (including JT), the current regulatory framework governing the telecommunications sector in Jersey, and the recent history within the market.

1.4 Structure of this report

This report sets out our draft findings and recommendations arising from our review to date. The main aim of the report is to inform the upcoming consultation paper by the JCRA.

Introduction

Once the consultation period is concluded we will, if required, prepare an updated version of this report taking into account any comments received from stakeholders.

The remainder of this document is structured as follows.

- Section 2 briefly discusses the importance of wholesale markets in facilitating competition within the telecommunications sector.
- Section 3 sets out the current situation in Jersey, including both an overview of how the wholesale market currently operates and the main concerns raised by operators.
- Section 4 discusses the key themes identified during our review.
- Section 5 then summarises our main findings and sets out our recommendations to remedy the current issues identified.

2 The importance of wholesale markets

There is a common recognition that promoting the development of competition may lead to benefits to consumers and the wider economy. This also holds for Jersey, where one of the obligations of the JCRA is to ensure that consumers can access telecommunications services in the most efficient way, in particular by promoting the development of competition where it is deemed appropriate.

The JCRA has therefore licensed a number of other operators (Other Licensed Operators, OLOs) to provide telecommunications services alongside Jersey Telecom, the former monopolist provider. These include Cable & Wireless (owner of the main telecommunications operator in Guernsey), Airtel-Vodafone, Newtel and others.

2.1 The need for wholesale service provisioning

The ability of OLOs to compete with the incumbent operator in the provision of a full range of retail services depends on those OLOs having access to sufficient wholesale products from the incumbent that they are able to replicate, both economically and technically, its retail services. Indeed, this is particularly important in smaller jurisdictions such as Jersey, where it may be uneconomic for OLOs to attempt to duplicate the infrastructure of the incumbent. In circumstances such as these, the wholesale product offers of the incumbent (including the processes and procedures under which those products are made available) can drive the consequent structure of the retail market.

This competitive situation (where the incumbent has market power in the provision of many wholesale services) typically leads to regulators imposing ex ante obligations on the incumbent. Such obligations will have two objectives:

- to ensure the incumbent does not restrict the supply of wholesale services (for example, through setting prices above their competitive level); and
- to ensure the incumbent does not leverage its dominance from the wholesale market into retail markets, for example by offering to its own retail business, wholesale products with superior terms and conditions than those it offers to its retail competitors.

2.2 Key principles of wholesale service provisioning

Given the above, there are a series of well-established principles which should govern the provision of wholesale services by (regulated) incumbent operators. We describe these below. However, care needs to be taken that they are cost effective in a small state such as Jersey. This may involve setting priorities or recognising limitations in implementation and we further highlight some of these options below.

- **Replicability of retail services**. Wholesale services should allow OLOs to replicate the incumbent's retail services. In practice, this means that services should be technically and economically replicable and that:
 - if a new retail service is introduced which would require a new wholesale service, such a wholesale service should therefore also be introduced at least if positively requested by an OLO;
 - the vertically integrated incumbent should ensure it offers the same quality of service (including provisioning times and fault repair times) to OLOs as it does to its own retail business; and
 - changes made to the terms and conditions of the wholesale products should be communicated sufficiently in advance to ensure that OLOs are able to react to these changes.
- Non-discrimination. Incumbent operators are commonly obliged to provide regulated wholesale services on a non-discriminatory basis. This implies that any requests for wholesale services from OLOs need to be treated in the same way as requests from the incumbent's retail business unit. This applies throughout the ordering and provisioning of the service.
- Separation of wholesale business. To the extent it is practically feasible in smaller jurisdictions the wholesale business unit should be run as a separate business unit with its own dedicated staff. Furthermore the top management of the company should treat this unit as a worthwhile business that is encouraged to innovate and is supported and given freedom by the rest of the business in introducing new products. If this is done then the staff members' remuneration should be linked to the performance of the wholesale business unit, rather than the performance of the whole of the vertically integrated firm. Any such arrangement will need to reflect the volume of work in the wholesale business unit to avoid adding unnecessarily to the cost base of the sector.
- No sharing of confidential information. Thirdly, the vertically integrated incumbent should ensure that commercial information provided by OLOs to its wholesale business unit (for example, traffic forecasts) is not made available to its retail business.
- Adequate pricing signals. Wholesale pricing structures should seek to ensure an OLO has the same economic incentives as the access provider, for

The importance of wholesale markets

example by reflecting the profile of investment costs in regulated charges.³ It is important to note that the approach to price regulation may be different for those wholesale services that share the assets of the incumbent with other operators (i.e., call origination, bitstream and leased lines) with those that are essential for any-to-any connectivity (such as, call and SMS termination).

³ This final principle is not established fully in all regulated pricing. For example, an incumbent providing local loop services faces high initial capital costs then low running costs, whereas the common wholesale charge for a LLU service is an unchanging monthly line rental

3 Situation in Jersey

This section provides an overview of the current situation in Jersey. This is undertaken by providing a brief overview of the telecommunications sector, followed by an outline of how the wholesale market operates. We then set out the main concerns raised during the stakeholder meetings.

3.1 Overview of the telecommunications market in Jersey

The telecommunications market in Jersey is well established with overall service take-up levels close to or above 100%. For example, in 2009⁴ total mobile penetration levels stood at 119% and the fixed broadband penetration rate had reached 80%.⁵ These take-up levels are well in line with those observed elsewhere in Europe.

There are currently four main telecommunications services providers active in Jersey, offering a range of wholesale and retail services. This is summarised in **Table 1** below. It is worth noting that despite Sure and Newtel offering both retail and wholesale services over their own fixed (core) networks, JT remains the only provider of fixed access services as it owns the only island-wide fixed access network⁶ and there is currently no wholesale fixed voice product, such as Wholesale Line rental, that enables other operators to offer a full set of retail services without the customer having to maintain a relationship with JT.⁷ JT does however offer call origination services for carrier selection.

We understand that the latest, currently available data on the telecommunications market in Jersey is contained in the JCRA's 2009 Telecommunications Statistical Review.

⁵ JCRA Telecommunications Statistical Review (Revisited) 2009

⁶ We understand that the other operators are currently deploying alternative access network infrastructure. For example, Sure has recently deployed fibre connections to its main business customers and Newtel is in the process of deploying a fixed-wireless network.

⁷ There are currently no local loop unbundling or wholesale line rental options available in Jersey. As such, 'voice over broadband' solutions represent the only option for other operators to offer a full set of retail voice services without their customers purchasing the fixed access line product from JT. However, the JCRA and OUR are currently consulting on introduction of the latter services as part of their joint "Channel Island Wholesale Access Project".

Table 1. Main telecommunications services providers in Jersey

| | Jersey Telecom | Sure | Newtel | Airtel- Vodafone |
|--|-------------------|-------------------|-------------------|---------------------|
| Fixed retail services | | | | |
| Fixed line rental services | Yes | No | Yes ⁸ | Yes ⁹ |
| Voice services | Yes | Yes ¹⁰ | Yes ¹¹ | No |
| Private circuits | Yes | Yes | Yes | No |
| Mobile retail services | | | | |
| Sim cards and mobile connection services | Yes | Yes | Yes ¹² | Yes |
| Voice and messaging services | Yes | Yes | Yes | Yes |
| Data retail services | | | | |
| Broadband services (fixed & mobile) | Yes | Yes | Yes | Yes |
| Wholesale services | | | | |
| Local Loop Unbundling | No | No | No | No |
| Fixed Wholesale Line Rental | No | No | No | No |
| Fixed call termination services | Yes | Yes | Yes | Yes |
| Fixed call origination services | Yes | No | No | No |
| Wholesale broadband services (bitstream) | Yes | No | No | No |
| Wholesale private circuits | Yes | No | No | No |
| Mobile call termination services | Yes | Yes | No | Yes |
| Mobile call origination services | No | No | No | No |

Source: Frontier Economics based on JCRA Telecommunications Statistical Review (Revisited) 2009 and stakeholder interviews

⁸ Newtel is due to offer line rental, voice (and broadband) services via its fixed-wireless network.

- ⁹ Airtel-Vodafone is offering a 'Home Phone' product via its wireless network.
- ¹⁰ Via Carrier Select services
- ¹¹ Via voice over broadband/VoIP
- ¹² Newtel is offering fixed voice, broadband and mobile voice service bundles (with the mobile services being provided on a resell basis).

Situation in Jersey

3.1.1 Jersey Telecom

JT is the state-owned incumbent operator in Jersey offering voice and data services to both wholesale and retail customers over its fixed and mobile networks.

Despite introduction of competition in 2002, JT remains the dominant operator in most retail and wholesale markets. This is illustrated in the table below.

Table 2. JT's share in selected retail telecommunications markets

| Telecommunication service market | Market share (2009) | | | | |
|--|---------------------|--|--|--|--|
| Fixed voice retail market | | | | | |
| Fixed line rental services | 100% | | | | |
| Call services | 90% | | | | |
| Mobile voice retail market | | | | | |
| Sim cards and mobile connection services | 64% | | | | |
| Call minutes / SMS | 64% / 69% | | | | |
| Broadband retail market | | | | | |
| Broadband services | 80% | | | | |
| Retail private circuits market | | | | | |
| On-island services | >90% | | | | |
| Off-island services | >45% | | | | |

Source: JCRA Telecommunications Statistical Review (Revisited) 2009

JT forms part of Jersey Telecom Group, offering services in Jersey and Guernsey (i.e. JT Guernsey) as well as providing general communications solutions further afield (via its JT Global and 'ekit' business unit).

Gigabit Island project

JT is currently in the process of deploying a fibre-based access network across Jersey, using point to point network architecture (with dedicated fibres going back to six MDF sites). It hopes to achieve full coverage by the end of 2016 or earlier. The FTTH network will be capable of offering ultra-high speed broadband services of up to 1Gb per second. As part of this, JT plans to remove the existing copper when it installs the fibre. This will be done street by street irrespective of the orders for higher speed broadband. We understand that JT expects to make approximately £3m from the sale of the copper for scrap.

We understand that the overall project is expected to require capital expenditure of approximately £41.5 million, £19.0 million of which will be provided by the States of Jersey.¹³

JT has already started to offer fibre-based retail offerings in parts of Jersey. Where a customer is content to continue to receive the same service as now, he or she will be migrated seamlessly to fibre, without a change in the commercial terms of that customer's package. Where a customer wishes to upgrade to a faster service, he or she can subscribe to one of JT's new retail offers:

- a 1Gb service for $\pounds 59.99$ a month;
- a 100Mb service for £44.99 a month; or
- ^{**D**} the "JT Fibre Complete" bundle, offering double a customer's current broadband speed, mobile broadband and unlimited local landline calls, from $\pounds 29.70$ a month.

We understand that JT put forward proposed terms and conditions for fibrebased wholesale services before launching its retail service. The JCRA is now in the process of reviewing the fibre-based wholesale charges proposed by JT.

From the stakeholder meetings we understand that the OLOs are highly critical of JT's current plans. Their main criticisms are:

- JT has developed this plan without any meaningful consultation with the OLOs yet the plan has wide ranging implications for telecommunications in Jersey and OLOs should have an equal opportunity to benefit from any investment into telecommunications made by the States of Jersey;
- The business plan for total replacement of copper by fibre is highly questionable. Most countries and operators are introducing fibre through an overlay strategy targeting first those customers with greatest potential demand;
- Performance achieved will be highly dependent on the capacity of offisland links to the Internet core;
- To date the only new services planned are higher speed internet access. TV is not planned yet, but most operators who are investing in fibre access also deliver TV (triple play);
- JT is not discussing any innovative wholesale services such as fibre loop unbundling or a layer-2 bitstream services such as is being developed in

¹³ This will be based on redeemable preference shares worth \pounds 10million in 2012 and a \pounds 3m dividend reduction for each of the financial years 2013-16.

many other countries. OLOs need to be able to offer a competing voice service, which would be possible over either of these forms of access;

- JT plans to remove the old copper loop to sell as scrap metal, yet this has considerable potential value for OLOs and OLOs should be given the opportunity to lease it; and
- ^D JT seems to ignore the principles of the regulatory system while arguing on the basis of detailed wording. It seems to regard itself as having a privileged position by virtue of its ownership by the States.¹⁴

When confronted with the above, JT refuted these criticisms stating that it had put considerable effort into consulting OLOs and invited the JCRA to many of those meetings, but in in some cases OLOs did not attend these meetings. JT further finds it difficult to obtain clear statements of their requirements. For example, it had asked the OLOs to follow up any verbal requests by putting their requirements in writing but has only recently received a statement of requirements from Sure.

3.2 How does the wholesale market currently operate?

Below we provide an overview of JT's legal requirements for proving wholesale services, its wholesale service portfolio, followed by a description of how the provisioning of wholesale services currently works in Jersey.

3.2.1 Legal requirement for wholesale products

The following summarises the legal requirements for JT to offer wholesale products. The main requirements were introduced in 2008 and apply where the licensee has been found to have Significant Market Power (SMP) in a relevant market. Although the EU requirements do not apply in Jersey, the EU's lists of defined markets would be regarded by many as the relevant best practice as they would also apply in the UK, whose economy is similar to that of Jersey. The JCRA took account of this and after the necessary market studies published a Decision in April 2010 that JT had SMP in the following markets. This meant ex ante competition remedies could be used in these markets as stated in Part IV of the licence.¹⁵

¹⁴ For example, JT's approach contrasts strongly to the consultative approach taken by BT, under the supervision of Ofcom, in the development of its 21CN NGN replacement project, which it eventually discontinued.

¹⁵ JCRA, 'Response to the Consultation Paper 2009 – T3 ''Review of the Telecommunication Market in Jersey'' and Decision on the Holding of Significant Market Power in Various Telecommunications Markets', dated 19 April 2010.

The relevant wholesale fixed markets (using the JCRA's market numbers, which are different to those used by the EU) are set out in the table below.

| Table 3. JCRA's wholesale fixed market review SMP f | findings (2010) |
|---|-----------------|
|---|-----------------|

| Market | Description | SMP findings for JT |
|--------|--|---------------------|
| 2 | Call origination on the public telephone network provided at a fixed location. | Yes |
| 3 | Call termination on individual public telephone networks provided at a fixed location. | Yes |
| 5 | On-island wholesale leased lines | Yes |
| 6 | Off-island wholesale leased lines No | |
| 7 | Wholesale broadband services provided on fixed line network | Yes |

Source: JCRA

We understand that the EU Market 4 (i.e. relating to wholesale network access)¹⁶ was not considered and so JT has not been found to have SMP such that local loop unbundling could be required.

Where SMP has been found, the Licence grants the JCRA the power to impose the remedies, as set out in **Table 4**.

Table 4. Mapping of SMP remedies and JT Licence Conditions

| Remedy | JT's Licence Condition |
|---|------------------------------------|
| Equal access, meaning call by call carrier selection or pre-selection | Licence Condition 25 ¹⁷ |
| Publication of a Reference Interconnection Offer | Licence Condition 26 |
| Interconnection at any technically feasible point | Licence Condition 27 |
| Provision of leased circuits on terms less favourable to its own retail use of these circuits | Licence Condition 28 |
| Separation of accounts | Licence Condition 29 |
| Prohibition of cross subsidy | Licence Condition 30 |

¹⁷ This is in operation for off-island calls.

Situation in Jersey

¹⁶ "Wholesale (physical) network infrastructure access - including shared or fully unbundled access - at a fixed location"

| Prohibition of undue preference and unfair discrimination | Licence Condition 31 |
|--|----------------------|
| Prohibition of linked sales | Licence Condition 32 |
| Advanced notice of 21 days for new and changed retail services | Licence Condition 33 |
| Fair competition, which for example would exclude margin squeeze | Licence Condition 34 |



We consider it imperative that the JCRA should address market 4. JT's plans for Gigabit Island open up the opportunity for two major developments in wholesale services:

- Fibre loop unbundling under EU market 4; and
- Development of a layer 2 access service capable of carrying both voice and data to the termination equipment on the customer premises.

JT has stated that it would consider a request for fibre loop unbundling from OLOs, but that no such request has been made to date. Whilst JT may be willing to provide it on a voluntary and commercial basis, we consider that it is important that the JCRA should have available to it the full range of remedies that would come into play following a finding of SMP.

Recommendation:

The JCRA should undertake the necessary work to determine whether JT has SMP in EU market 4 and hence could be subject to requirements for local loop unbundling.

3.2.2 Current services offerings

JT's portfolio of regulated wholesale offers consists of call termination and origination (fixed only) services, bitstream DSL services and private circuits. Information on each service grouping is captured in a separate documentation, i.e. the call related wholesale services are covered in the reference interconnection offer (RIO) and there are separate Service Level Agreements (SLAs) for the wholesale DSL and wholesale private circuit services.

Call-related services

The RIO contains a range of wholesale related services, including:

• (in span and full span) interconnecting link services;

- fixed and mobile call termination services;
- fixed call origination (carrier selection) service;
- on/off-island call transit services; and
- special access services.¹⁸

All the networks in Jersey are directly interconnected with more than adequate capacity for call related services where demand is not growing. Thus there are few or no new orders. For this reason we do not consider these services in the rest of the non-pricing parts of this report.

Bitstream DSL services

The Wholesale DSL SLA sets out a range of Ethernet/bitstream products, varying in speed and contention ratio offered. These can be summarised as follows:

- Standard ADSL products. These products are characterised by a contention ratio of 50:1 and are available in eight different speeds ranging from 128/256 Kbp/s to 736/21.504 Kbp/s.¹⁹
- Superior ADSL products. This consists of a similar portfolio to the standard ADSL product range, with the main difference being a contention ratio of 20:1 being offered and these products being available with a bandwidth of up to 1.024/21.504Mbit/s
- **SDSL product.** In addition to its DSL offerings, JT also offers a SDSL wholesale product with a bandwidth of up to 2048/2048Kbp/s and a contention ratio of 10:1.
- **Backhaul services.** JT offers a 100Mbit/s and 1Gbit/s backhaul service (i.e. SP Broadband Interconnect), the latter service varying by distance. Note that that JT further offers Private Connect backhaul services, which are contained in its private circuit SLA.

Private leased circuits

JT currently offers a range of on-island and off-island wholesale private circuit services, varying in the bandwidth and connectivity offered. These are summarised in **Table 5**.

¹⁸ including emergency call access, directory number inclusion, operator assistance access, freephone terminating access, local rate terminating access and premium rate terminating access services

¹⁹ For each product, the first reported value refers to the upload speed and the second to the download speed (i.e. upload/download speed).

| Product | Megaline | Fibre Link | Fibre Channel | Private Connect main | Private Connect Remote |
|--------------------------------|---------------------|-------------------|--------------------|----------------------------|------------------------------|
| Bandwidth offered | 2 / 2-155 Mbit/s | 10 -100 Mbit/s | 1.25 – 4 Gbit/s | 10 / 100 / 155 Mbit/s | Various |
| Connectivity offered | | | | | |
| On-island (within exchange) | Yes | Yes | Yes | Yes | Yes |
| On-island (between exchanges) | Yes | Yes | Yes | No | No |
| Off-island (Jersey – Guernsey) | Yes | Yes | Yes | No | No |
| Off-island (Jersey – UK) | Yes | Yes | Yes | No | No |

Table 5. JT's wholesale private circuit offerings

Source: JT's Wholesale PC Agreement and SAL- Schedule 2 Specifications

3.2.3 Wholesale service provision

Wholesale services are managed by the Carrier Services Unit of the Wholesale Services Division. This unit acts as the account manager for the OLOs and works in parallel with the Retail Sales Division. Orders from OLOs are received either by the Carrier Services Manager or through the call centre and are input to the customer management and billing system. The Service Delivery Unit handles the provisioning of the orders.

The Carrier Services Manager has visibility of the progress of the orders. For simple orders, however, there is only one provisioning step, but for complex orders there are several steps and so the Carrier Services Manager can assess whether the order is proceeding satisfactorily or whether there is a risk of not meeting the SLA.

In cases where there is a major network incident that threatens provisioning times, the Carrier Services Manager will contact the OLOs affected and keep them updated. For minor issues the Wholesale Order Processing Team within the Service Delivery Unit will inform the OLO.

OLOs are able to request an early delivery of a wholesale service with the exception of Broadband Take Over because of the need to synchronise actions between JT and the OLOs and the risk of introducing a service outage for the subscriber.

OLOs are able to expedite five services per month. This limit also applies to JT Retail.

3.2.4 Outlook

There are two main developments likely to affect the provisioning of wholesale services in Jersey: (i) the on-going Wholesale Access Project, and (ii) the Gigabit Island project.

Wholesale Access Project

In response to the previous review, the JCRA and OUR in Guernsey have launched a joint project, referred to as "Channel Islands Wholesale Access Project" (CIWAP). The aim of this project is to facilitate competition in the fixed telephony markets across the Channel Islands by mandating further fixed wholesale products in both islands.

The regulators have recently concluded a public consultation phase, setting out the proposed set of additional wholesale products.²⁰ We understand that, based on the responses received to this consultation document, the JCRA and the OUR are considering further the introduction of:

- □ Wholesale Line Rental (WLR);
- Fixed Number Portability (FNP); and
- Joint bitstream and wholesale naked DSL product

Mandating these additional wholesale services (with the exception of FNP) would allow other operators to offer end-to-end voice and broadband services to their retail customers. We understand that the WLR service is currently planned for early 2013, with the bitstream, naked DSL product and fixed number portability to be launched at a later date.

Assessing the appropriate range of products does not form part of the scope of this review.

Gigabit Island

As discussed above, JT is currently in the process of deploying its FTTH network, with the aim to achieve full coverage by 2016.

Given the size of the overall market in Jersey it is unlikely that sufficient alternative fixed infrastructure will be deployed to constrain JT's wholesale pricing in the absence of regulation. To support the continuing development of competition for retail fixed line services in Jersey, it is important that JT also provides a wholesale broadband service that will enable efficient OLOs to compete in the downstream market. Without such wholesale services, JT will (given its position of market power in fixed line services) be able to establish quickly a dominant position in retail ultra-high speed broadband services and

20

CICRA, 'Channel Islands Wholesale Access Project - Consultation Document', November 2011

limit the potential emergence of competition. Further, the absence of effective wholesale products could allow JT to charge retail prices above the competitive level for fibre services.

3.3 Main concerns raised by operators

As part of the review we conducted meetings with most operators, including JT to facilitate our understanding of the current function of the market and any potential problems experienced by market players over recent years.²¹ The table below sets out the main concerns raised during these meetings.

²¹ As part of this review we conducted meetings and conference calls with Newtel, Sure, Airtel-Vodafone, JT Retail, JT Wholesale, Nitel, Itex, Foreshore and the JCRA.

Table 6. Main concerns raised during stakeholder interviews

| Торіс | Concerns raised | |
|--|--|-----|
| Current wholesale offerings & pricing | Lack of wholesale line rental product results in replicability issues v JT's 'JT Complete' bundled offer | vit |
| | Naked DSL & bitstream products required to allow for a more flexi retail product offering | ibl |
| | More differentiated wholesale private circuit products required to al replicating JT's retail private circuit offerings | lo۱ |
| | Concern that JT has launched fibre-based retail products without a equivalent wholesale products being available | an |
| | Anti-competitive retail broadband promotions (i.e. continuous roll-o of similar offers of no connection charges without sufficient gaps between them raising margin squeeze concerns) | |
| | Insufficient margin on wholesale prices (based on a retail minus basis) to allow OLOs to compete with JT | 9% |
| | Concerns about high retail price levels leading to high wholes charges set on a retail minus basis (compared to e.g. Guernsey) | sal |
| JT Wholesale's performance | JT does not treat OLOs as 'customers', but as 'competitors' - i.e. pro-active dialogue or service offerings and legalistic attitudes remained | |
| Wholesale ordering process | General attitude to deliver services just within SLA targets, some which may be overly generous (i.e. bitstream service provisioning of days, compared to 5 days in Guernsey) | |
| | Current SLA performance measures not suited for size of the mar as it does not sufficiently capture a drop in performance which may detrimental to OLOs | |
| Gigabit Island project | Limited consultation and engagement of OLOs during the plann phase despite wide ranging implications for the entire sector | nin |
| | Concerns on overall viability of the current FTTH network, given limi demand | ite |
| | Unclear about rationale for fully replacing the existing copper a selling at scrap value, as alternative options may have be commercially attractive and technical feasible (e.g. selling/rent copper access network to other operators) | ee |
| | Concerns that fibre roll-out has removed all incentives to sort copper-based wholesale offerings | οι |
| | No innovative wholesale services (e.g. fibre loop unbundling or layer bitstream services are currently discussed | r- |
| Relationship between JT Wholesale and JT | Perceived lack of functional separation between JT Retail and Wholesale (i.e. same call centres) raises concerns about potential discrimination | |
| Retail | Calls for stronger separation of JT Wholesale from the rest of JT (if full structural separation, a public network business or at le separating JT's FTTH network business). | |
| Regulatory capacity | Implementation of new regulation (in particular, mandating wholes access services) is taken too long | sal |
| | • Current penalty scheme does not act as a deterrent to JT (as it of | |

Situation in Jersey

| | allows handing out small penalties or revoke JT's licence) |
|-------|--|
| | JCRA is taking too long to investigate complaints from OLOs about JT's conduct |
| | JCRA should have taken a more active role in the fibre roll-out process |
| Other | Generally limited communication between OLOs and JT |
| | Need to review rules and process for JT providing information on new services being launched (i.e. licences condition 33), as the current process does not allow a full review prior to launch |

Source: Frontier Economics based on stakeholder interviews

4 Key themes identified

Below we discuss the key themes identified during our review. For this purposes we have grouped the areas identified by stakeholders and those set out in the RFP for this study. We then address each of them. We do this by first validating the concerns raised during the stakeholder interviews based on further deskbased research and a review of international precedence. Then, where we believe appropriate, based on this review, we present our recommendations for the further development of the wholesale market in Jersey.

Table 7. Mapping of key themes to remit of the review

| Scope defined in JCRA's RFP | Main themes identified |
|--|---|
| Review of JT's Wholesale Leased Circuit SLA provisioning lead-times | Quality of service delivery |
| Review of the structure and positioning of JT's 'wholesale' business and its inter- relationships with JT Retail | Efficiency and incentive structure Match between retail and wholesale services |
| Review of the scope for introducing effective penalties as incentives for failing to achieve agreed SLA targets | Quality of Service delivery & Regulatory capacity |
| Review of the potential for JT to publish on a regular basis its provisioning performance to retail customers and providing delivery performance data to wholesale customers on a semi-annual basis (KPIs) | Quality of Service delivery |
| Review of the incentives for JT Wholesale to ensure its performance is appropriately geared towards delivering high quality and timely wholesale services | Efficiency and incentive structure |

Source: Frontier Economics based on RFP

Our analysis of the key themes has resulted in a range of potential remedies to address the main issues identified as part of this review. In theory there are commonly a range of options available to address these issues. To ensure that our recommendations are feasible and targeted to the specifics of the market environment in Jersey, we have evaluated any potential options based on a range of criteria in order to identify the most suitable one in the context of Jersey. The evaluation criteria used included, amongst others:

applicability to the situation in Jersey and JT, in particular

- likely resource and time requirements to implement for JT and for the JCRA to monitor/assess compliance
- ^D international precedence, in particular from small island jurisdictions
- feasibility given the legal and regulatory framework.

The resulting recommendations are presented at the end of the relevant subsection. A summary overview of all recommendations is then presented in Section 5.

4.1 Match between retail and wholesale services

Regulatory best practice is that where there is SMP, an operator with SMP should be required to provide wholesale services such that any other operator can use those services together with its own facilities to replicate any retail service offered by the operator with SMP. This means that there needs to be a match between retail and wholesale services.²²

The way in which the retail and wholesale service match may vary. In some cases there may be a simple direct match, for example where there is both a retail and a wholesale leased line with similar characteristics. In other cases a single wholesale product such as local loop unbundling may provide the basis for retail competition with a range of different retail products including broadband and voice calls.

Any match requirement extends not only to the technical characteristics of the service but also to the quality of the service. This is further discussed in Section 4.3.

4.1.1 Existing retail and wholesale fixed services

Table 8 lists for each main retail service currently offered by JT, the relevant matching wholesale services and sets out whether that wholesale services is currently available in Jersey. For some retail services there are more than one possible wholesale service and alternatives are shown in separate rows. The market number is also shown using the JCRA's numbering, which is different to that of the EU.

²² The extent to which this principle can be followed depends on the legal basis for requiring wholesale services, which was discussed in Section 3.2.1

| JT Retail service | Matching wholesale service | JCRA Market # | Offered | Comment |
|---|--|------------------|----------|--|
| Outgoing and incoming call account | Wholesale Line Rental Call origination Call termination | 2,3,4 | Planned | Important to be made available to OLOs as soon as possible to allow replicability of JT's retail offerings. If delayed, local loop unbundling may supersede it. |
| | Local loop unbundling | | No plans | Should be considered but SMP has to be proven |
| Broadband internet access (2, 4, 8, 16 20 Mbit/s) | Bitstream | 7 | Yes | |
| | Naked bitstream | 7 | No plans | Should be considered |
| | Local loop unbundling | | No plans | Should be considered but SMP has to be proved |
| Megaline private circuit (2, 34, 45 or 155 Mbit/s) | Megaline (2, 34, 45 or 155 Mbit/s on island) | 5 | Yes | |
| Fibre link (2,10,100,or 1000 Mbit/s) | Fibre link (2,10,100,or 1000 Mbit/s) | 5 | Yes | Fibre link (2,10,100,or 1000 Mbit/s) |
| Fibre channel (1.25, 2, 4 Gbit/s) | Fibre channel (1.25, 2, 4 Gbit/s) | 5 | Yes | |

Table 8. Overview of current matching between on-island retail and wholesale fixed services

Source: Frontier analysis

The table above shows that there is currently not a complete match between JT's retail services and the wholesale services it offers. Further, compared to other small jurisdictions, the current framework for competition in the access network in Jersey appears less developed, as shown in **Table 9**.

| | Jersey & Guernsey | Gibraltar | Malta |
|-----------------------------------|--------------------------------------|--------------------------------------|--|
| Extent of duplicate local loop | Very small | Very small | >90% duplicate coverage by cable operator (Melita) |
| Local loop unbundling | Not offered or required by regulator | Available | Available |
| Sub-loop unbundling | Not offered or required by regulator | Available | Available |
| Wholesale Line Rental | Being planned under CIWAP | Not available | Available |
| Fixed number portability | Being planned under CIWAP | Available since 1 June 2011 | Available |
| Bitstream Internet access | Available | Not offered or required by regulator | Not offered or required by regulator |

Table 9. Comparison of framework for competition across selected small island states

Source: Frontier Economics

From **Table 8** it is notable that there is no wholesale service available in Jersey that would enable an OLO to offer a full telephony service (i.e., including line rental), and hence no possibility for an OLO to offer a combined voice and Internet service (dual play) with the subscriber needing only one account (i.e. that with the OLO). This situation has been aggravated by JT's introduction of JT Complete, which combines voice, Internet and mobile under a single account and so potentially enables JT to leverage market power from the fixed market into the mobile market.

As mentioned earlier, three new wholesale services (i.e., WLR, FNP; and a joint bitstream and wholesale naked DSL products) are planned under the CIWAP project, but according to SURE progress has slowed. None of these services are offered on Guernsey.

In our view WLR (or local loop unbundling) and fixed number portability are needed urgently.

JT does not offer naked ADSL but requires all its subscribers who want broadband also to take a traditional voice service. The attractiveness of such a service would depend very much on its pricing relative to the combination of telephony and broadband. This in turn relates to the treatment of exchange line rentals. To our knowledge there is no well-established method for apportioning

Key themes identified

costs of the exchange line between different services, therefore there is uncertainty about how the charges for naked bitstream should be set. Furthermore since JT does not offer retail naked ADSL, the basis for requiring naked bitstream at the wholesale level is somewhat weakened.

OLOs have also commented on JT's range of leased line products both at the retail and wholesale level. OLOs have expressed interest in a wider range of different end-end capacities and in Ethernet services with different mixes of guaranteed capacity and non-guaranteed capacity. JT stated that it has not been asked formally for such services but would be willing to consider their development.

Recommendation:

The JCRA should take steps to accelerate the introduction of WLR and fixed number portability as a matter of some urgency.

In the case of WLR, the only qualification is that if it is not made available by the time when it becomes clear that JT will complete the Gigabit Island programme successfully, then a layer-2 access service or fibre unbundling would be a preferable solution.

4.1.2 Process of introducing a new retail service and any underlying wholesale services

JT is required by Condition 33 of its Licence to publish information on new retail services 21 days before they are introduced and to give full details to the JCRA. There is an identical requirement in the licence of SURE in Guernsey.

In response to the previous report, JT has also agreed to give notice to the OLOs 30 days before the introduction of or changes to existing wholesale products.²³ The purpose of this is to allow time for objections to be made by OLOs and/or the JCRA over the nature or price of the service, as well as to allow OLOs to consider launching new retail offerings based on these wholesale services.

This requirement falls far short of the principle in Article 32 of the European Commission Recommendation of September 2010 on regulated access to Next Generation Access Networks (NGA), which recommends that national regulatory authorities should "oblige the SMP operator to make new wholesale broadband access products available in principle at least 6 months before the SMP operator or its retail

²³ We understand that this 30 day notice is represents an amended recommendation from the previous review. Originally a 60 day notice period was suggested, however, JT asked this to be changed to 30 days, which would be consistent with the approach in Guernsey.

subsidiary markets its own corresponding NGA retail services, unless there are other effective safeguards to guarantee non-discrimination."²⁴

Within JT, the Legal Department has produced the following information to explain the licence obligations to other staff: (i) a Condition 33 compliance process flow chart; and (ii) a guidance note on the product development process.

For each new offer, there are two issues to be checked:

- the availability of an equivalent wholesale service; and
- the relative pricing of the retail and wholesale services to ensure that there is no margin squeeze.

As part of our review, we have been shown examples of the documents produced for the following offerings: (i) retail fibre packages; (ii) retail fibre broadband end use products; (iii) fibre access service and replacement voice service; and (iv) wholesale fibre broadband end user products.

JT has attempted to produce clear and concise documents for these services. Whilst it has addressed costs in some of these documents, at times only limited explanation is provided on the underlying cost data and assumptions. There is further no clear statement by JT that its proposed pricing does not lead to margin squeeze and whether there is an equivalent wholesale service on offer (allowing OLOs to compete with the new services). Where possible, JT should produce a single document covering both the retail and equivalent wholesale service and explicitly addressing the issue of margin squeeze. To facilitate JCRA's review process, any calculations should be provided as Excel file which is clearly labelled and sourced.

With the introduction of a major new service such as Gigabit Island, JT held a meeting with the other operators to outline its plans. However, the OLOs commented that this still did not give them adequate opportunity to input into critical aspects of the project from the point of view of wholesale customers. The OLOs told us that they asked questions but had to wait a long time for answers and the process gave them no opportunity to develop their own equivalent retail services so as to be able to launch them at the same time as JT's service. This situation gives JT a substantial first mover advantage. This is generally a difficult area for a regulatory authority and there is normally always a first mover advantage. In particular, the regulator is faced with a dilemma:

 If the notice period is increased too much then it may delay the bringing of services to market.

²⁴

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:251:0035:0048:EN:PDF
If the requirement is not met then the regulator cannot easily require services to be withdrawn because of the problems that this would cause to the end customer.

JT, in contrast, states that it has consulted the OLOs extensively but not received clear responses.

The current system has the problem that JT meets its obligation by publishing the information, but there is no check on the quality of the information. If the information is insufficient or not clear enough or the proposed actions are unacceptable there is no mechanism to stop the clock while the issues are resolved. This means that there is no urgency to answer questions raised by the OLOs. Furthermore the JCRA may not always have the resources available to make a full assessment of the service itself in a short timescale. The JCRA is also in a weak position in that the licence condition does not require the JCRA to grant approval, thus if the JCRA does not take positive action to suspend a change then JT can go ahead.

Recommendation:

We recommend the JCRA revises the current notification and review process for new (regulated) retail services. Wherever possible it should require JT to provide a single document covering both retail and equivalent wholesale issues including an analysis of potential margin squeeze. The process should also include a 'stop the clock' option for the JCRA in case the information provided is not sufficient to evaluate the proposed offering. The process should provide an opportunity for OLOs to comment on the changes since this dialogue will draw attention to issues that might be overlooked by JCRA staff. JT should further not be allowed to launch these services prior to receiving approval by the JCRA.

Further details on our proposed process are set out in Section 5.

4.1.3 Introduction of new wholesale services

So long as JT's wholesale business forms part of JT Group and JT's wholesale business incentives are set by JT's main board, we would not expect JT voluntarily to introduce new wholesale services that would substantially increase the ability of OLOs to offer competing retail services, i.e., to offer higher rungs in the ladder of investment. JT's unwillingness to offer the additional wholesale services (such as, WLR, local loop unbundling and fixed number portability) on a voluntary basis is an example. No other incumbents have offered these services voluntarily. Within this structure we consider it to be unreasonable to expect JT to make significant innovations through the introduction of new wholesale services. To do so could be seen as a failure in the duties to the shareholders. Thus new services would be introduced only where there is a regulatory requirement.

We note that JT claims that it is willing to consider requests for new wholesale services that go beyond what other incumbents might offer willingly. However, due to the breakdown in the dialogue between the OLOs and JT we are not able to evaluate the full extent of this willingness.

What one does see, though, is that when the regulatory obligations have been established the staff in incumbents can learn to treat OLOs to a large extent, although not wholly, as customers within the boundaries of the regulatory obligation.

If the Carrier Services Manager wanted to introduce a new wholesale service in response to a request from an OLO, he would have to undertake the following steps:

- discuss the requirement with the OLO, if necessary, involving the Design and Innovation team;
- prepare a specification outlining the service needed and in simple cases the cost justification for introducing the service;
- submit the paper to the Director of the Wholesale Services Division for agreement;
- in complex cases the service will undergo a costing exercise before approval;
- prepare documentation for the OLOs and the LC33 notification to be issued to all OLOs at least 30 days before introduction of the service; and
- consider any feedback received during the 30 days notification.

After approval, the service would have to be added into the work management and billing systems and the service procedure documentation would be prepared.

4.2 Efficiency and incentive structure

Structural separation is a remedy designed to create strong incentives for the effective provision of wholesale services. Below we review the potential of structural separation and then consider incentives under the current structure.

4.2.1 Structural separation

The concept of structural separation is designed to create a situation where a wholesale service will serve other operators in the same way that it serves its own related retail service.

Structural separation contains a family of different possible separation lines, including:

- Access from core; and
- Network operation from retail service provision.

The effectiveness of separation depends on the extent to which the separated entities can operate as independent business centres. This normally applies only within a framework set by or agreed by the regulator. Structural separation is normally introduced only after a clear regulatory position has been established. For example, BT's separation of Openreach took place after Ofcom had established requirements that local loop unbundling would take place. We know of no cases where an incumbent has voluntarily decided to introduce separation or to offer wholesale services that significantly increase the opportunities for competitors. For example wholesale services such as call origination, carrier preselection, Wholesale Line Rental, and local loop unbundling have always been introduced as a result of regulation or regulatory pressure and not as entrepreneurial initiatives.

Two of the objectives of structural separation are:

- To ensure that information about wholesale orders does not leak to the incumbent's retail team and be used to offer price or service improvements to prevent a subscriber from leaving. This is analogous to winback in number portability.
- To make the incumbent's retail division follow the same ordering procedures as the OLO and so help to eliminate discrimination in service provision.

In our discussions with the OLOs we have not heard accusations that JT is abusing information about wholesale orders, nor have we found a major problem in the provisioning of wholesale services. Given this, and taking into account the costs of separation, we not see any great attraction in attempting to impose structural separation for non-pricing reasons.

A third objective is to address margin squeeze by isolating the wholesale business. However, as long as the wholesale business remains within the same group, payments between the retail and wholesale parts of the group remain transfer payments within the same shareholder ownership. The Gigabit Island project does, however, provide an opportunity to review the situation and to consider transferring the new fibre access system into separate ownership, such as joint ownership by all the operators. This is superficially highly attractive but in practice the views of the operators about the commercial prospects of the Gigabit Island project are so diverse that such a move may not be practical. We therefore do not include this as a recommendation arising from our review.

4.2.2 Current structure and wholesale service provisioning

JT remains a fully integrated company with no clear separation of its wholesale and retail operations. This structure is clearly a reflection of the overall size of the market, the overall company and the wholesale segment in particular.²⁵ However, it may lead to potential concerns on non-discrimination of wholesale services provisioning.

There are two main areas to consider in the context of wholesale service provisioning: (i) the ordering and provisioning process (including fault repairs) of wholesale services; and (ii) the design of new wholesale products.

Ordering and provisioning process

As discussed in Section 3.2.3, orders from OLOs are received either by the Carrier Services Manager or through the Wholesale Order Processing Team in the call centre and are entered into the customer management and billing system. The Service Delivery Unit handles the provisioning of the orders.

Although most stakeholders have stated a preference for a clearer functional separation of JT's wholesale and retail operations, we have not seen any prima facia evidence of JT discriminating significantly in the processing of bitstream orders. Whilst the results discussed in Section 4.3.6 show some differences in provisioning times, any conduct has remained within the terms of the SLA.

New product design

New wholesale services are designed by the 'Design and Innovation' team within the Operations division. The team acts upon requests from JT's retail business or its wholesale business. Any requests from OLOs for new wholesale services would be channelled through the Carrier Service unit within JT's wholesale business. We understand that so far there have been only a few requests received from OLOs for new wholesale services. This is in line with the feedback received from selected stakeholders who were frustrated by JT's legalistic response to any

²⁵ For example, the Contact Centre within the Operations Division, which handles the ordering and support calls for all customers, has a dedicated team for wholesale customers. However, we understand that the relevant call agents are currently trained to handle both retail and wholesale related calls, due to the limited amount of wholesale services related calls to date.

previous requests for new services and considered the lack of self-motivated wholesale product innovation as a sign of missing commercial attitude within JT's wholesale business.

As discussed in Section 4.1.3, we would not expect JT, under its current integrated business structure, to voluntarily launch any new wholesale services that would increase the ability for OLOs to compete on the retail level.

4.2.3 Current staff incentives

The staff in JT's Carrier Service unit work under an incentive scheme with bonuses determined by a combination of their personal and the company's performance.

Overall we understand that the maximum bonus achievable for the Carrier Services Manager is approximately 10% and that 6% of this figure is based on personal performance. His personal targets relate to target cost savings, identifying new revenue streams and supporting wholesale customers.

The staff in the Carrier Services section that deal with OLOs work as account managers. They interact with the OLOs and with the rest of JT. They may input some orders into the order management system (Cerillion) but also orders may be input by the call centre. Carrier Services are aware of all orders.

We have considered the possibility of a major increase in the incentive element to improve the wholesale service. However the carrier services part of the wholesale services division is not an inherently entrepreneurial area and we are not persuaded that changes to the incentive structure would be fair or appropriate.

4.3 Quality of service delivery

Overall J'T's routine delivery of wholesale services does not appear to be a major problem and compares reasonably with other incumbent operators.

In this section we consider five issues: (i) the quality of the documentation provided by JT describing the wholesale services offered; (ii) the relationship with the OLOs; (iii) the SLA performance targets offered; (iv) the compensation scheme; and (v) the actual performance achieved.

4.3.1 Quality of wholesale documentation

JT's current wholesale service portfolio is set out in three main documents: (i) the RIO, (ii) the Wholesale DSL SLA; and (iii) the Wholesale Leased Circuit SLA.

We have looked at the quality of this documentation and consider that the overall quality is high. JT has attempted to present information in a clear and simple

form. Further, there have been no complaints from the OLOs about documentation.

4.3.2 Relationship with OLOs

From our stakeholder interviews it is evident that the relationship between JT and the OLOs is poor. For example, several OLOs stated that JT did not treat them as a customer, with incumbent operators elsewhere (including C&WG and BT) being more cooperative than JT. Reference was made to a 'legalistic' approach resulting in delays rather than product innovation. JT further is considered to not consult OLOs sufficiently on their future demand and JT's wholesale service plans seem to be driven solely by the needs of JT Retail. Given this, OLOs stated they have started to invest in alternative infrastructure to reduce, where possible, their dependency on JT's wholesale services.

JT, in contrast, states that it has arranged meetings with the OLOs and the JCRA as well as holding one-to-one discussions with OLOs so that confidential plans can be discussed, but it has so far experienced great difficulty in obtaining a clear indication of the requirements of the OLOs.

We have tried to understand the underlying drivers of the above issues, and have discussed this in some depth with the parties concerned. We have been told that relationships have deteriorated about 18 months ago when JT's responses to requests seemed to become slower and their staff seemed to become more tense in their relationships with the OLOs. This slowing down by JT is partly related to the relevant teams in JT being under significant pressure due to the overall reduction in staff within JT, its recent migration to an NGN core network, the on-going Gigabit Island project for the access network, and the replacement of its Cerillion customer management system by the new Comverse one.

An example of the OLO's concerns is that simple questions take several days to answer. JT says that this is because of the need to obtain information from areas in JT that are bottlenecks and this slows down the whole process.

Because of the conflicting stories, we think that senior staff in the JCRA need to tackle the issues around a table with JT and the main OLOs and establish clearly what is and what is not required, setting timescales for responses where necessary.

Recommendation:

We recommend senior staff in the JCRA to attend and run meetings between the operators to resolve the issues of what new wholesale services are required and to accelerate the CIWAP project. The JCRA's presence will be a moderating influence and they should be able to find ways to improve the cooperation between the operators.

4.3.3 Service levels offered – provisioning times

Leased lines

Table 10 sets out the provisioning times for leased lines and private circuits currently offered by JT.²⁶

Table 10. Provisioning times – Wholesale Private Circuits

| Service | Provisioning times | | |
|---------------------------|--|--|--|
| Megaline private circuits | | | |
| Up to 2 Mbit/s | 95% within 10 working days if there is suitable existing line plant else 15 working days | | |
| Above 2 Mbit/s | 95% within 15 working days if there is suitable existing line plant else 30 working days | | |
| Fibre Channel/Fibre link | | | |
| Up to 2 Gbit/s on-island | 95% within 15 working days if there is suitable existing line plant else 30 working days | | |
| 2 & 4 Gbit/s | within 90 working days | | |
| | | | |

Source: JT's SLA

For comparison, in Guernsey, Sure offers:

- □ Up to and including 2 Mbit/s: 100% within 10 business days
- □ Above 2 Mbit/s: 100% within 15 business days

Go Malta offers a delivery time of 20 working days, and Gibraltar Telecom offers 10 business days.

Based on the above we consider that the references to 95% of all orders are too legalistic and in any case are un-testable statistically for the small number of lines in question. We further consider the provisioning times in excess of 20 days to be excessive.

²⁶ From Wholesale PC Agreement and SLA - Issue 3.4 Schedule 5 Service Levels (100308).pdf

Recommendation:

The provisioning times for private circuits should be revised. In particular:

- A provisioning time should be quoted for all lines (instead of the current 95% target).
- Any provisioning times where no line plant is currently available should be reduced to a maximum of 20 working days.

Bitstream

For bitstream, JT offers a provisioning time of up to 10 working days²⁷. This is the same as offered by Sure in Guernsey. We consider that the JCRA under the CIWAP project should explore a reduction to 5 working days, with a corresponding improvement in retail times.

Recommendation:

The provisioning times for bitstream should be reduced to 5 working days, with a corresponding improvement in retail times.

4.3.4 Service levels offered – repair times

Leased lines

Within its SLA, JT defines three types of faults, each attracting a separate target repair time (see table below).

Table 11. Target repair – Wholesale Private Circuits

| Service | Target repair times |
|--|---|
| Priority 1: Service affecting fault | 8 Working Hours with update every 2 Working Hours |
| Priority 2: Service interrupting fault | 12 Working Hours with update every 4 Working Hours |
| Priority 3: Early indication of likely fault | 24 Working Hours with update every 8 Working Hours |

²⁷ From Wholesale DSL Agreement and SLA issue v3.1 Schedule 5 Service Levels 1 Feb 11.pdf

Source: JT's SLA

For comparison, Sure offers a target time to repair of 6 working hours²⁸. In Malta GO offers fault repair within 8 working days for national leased lines, which seems exceptionally long.

JT has informed us that it already offers additional, faster response services, including a fast 24/7 two hour response repair option that can either be added to the monthly subscription or paid for only when used. According to JT, details of this service have been provided to the OLOs by email and the service is already in use.

Recommendation:

JT should add the higher speed repair options for wholesale leased lines to the main SLA documentation.

Bitstream

For bitstream services, JT offers two different repair levels:

- Superior service: 2 working days
- Standard service: 3 working days

In contrast, in Guernsey, Sure offers a repair time of 8 working hours²⁹

Again, JT has informed us that it already offers additional, faster response services similar to those available for wholesale leased lines (see above). According to JT, details on these services have been provided to OLOs by email and the service is currently in use.

Recommendation:

JT should add the higher speed repair options for bitstream services to the main SLA documentation.

²⁸ From p43 of C&WG - Wholesale Leased Circuits Service Agreements.docx

²⁹ From p12 of C&WG - WHSI Schedule 4 - Service Level Agreement 060709.doc

4.3.5 Compensation scheme

JT offers various levels of compensation in its service level agreements. The table below sets out a few examples.

| Item | Time | Credit of monthly charge |
|-------------------------|----------------------------------|---|
| Leased lines | 8 - 10 Working Hours | 20% |
| Response time | 10 - 12 Working Hours | 25% |
| | 12 - 14 Working Hours | 30% |
| | >14 Working Hours | 50% |
| Leased lines | 9 - 15 Working Hours | 20% |
| Priority 1 fault repair | 16 - 24 Working Hours | 25% |
| | 24 - 32 Working Hours | 30% |
| | >32 Working Hours | 50% |
| Bitstream provisioning | Late provisioning | £5 |
| Bitstream | 1-29 Working days after RFS30 | 50% monthly charge |
| Fault repair | After 30 Working days | Additional 50% of the monthly rental charge |

Table 12. Selected compensations contained in JT's wholesale SLAs

Source: JT's SLA for DSL and Private Leased Circuits

The compensation is not given automatically by JT but has to be claimed by OLOs. This is contrary to an earlier commitment we believe JT made³¹. Despite the existence of this compensation scheme, OLOs have stated that they commonly do not claim compensation as the time and resource efforts required normally outweigh any payments received.

Generally JT offers compensation much earlier that Sure in Guernsey whose fault repair compensation is given below:

³⁰ We assume this means planned Ready For Service date

³¹ JT, 'Final Report on Jersey Telecom's Implementation of the Regulaid Recommendations', dated 30 November 2010.

| Business Days Delay | From January 11 |
|---------------------------|---|
| 1-5 | 25% of monthly fee |
| 6-9 | 50% of monthly fee |
| 10-29 | 100% of monthly fee |
| For every further 30 days | An additional 100% of the monthly rental charge |

Table 13. Outages Duration in Excess of the Target Time to Repair - Guernsey

Source: C&WG- Wholesale Leased Circuits Service Level Agreements

JT's late fault repair compensation is also better than that of Go in Malta and Gibraltar Telecom who both offer the equivalent of the daily charges.

JT's levels of compensation broadly relate to prices charged for the services and do not include an adequate compensation for the commercial harm that can be caused by late provisioning or faults. Nor do the levels of compensation create a very strong incentive for JT to rectify the problems quickly. We consider the compensation levels should increase more rapidly as the duration of the delay increases towards a level of say five times the monthly fee after a month's delay. However, having said this, the current compensation levels are good compared to small island operators elsewhere.

Recommendation:

We recommend that the compensation levels should increase to several times the monthly fee for a month's delay.

4.3.6 Performance achieved

Current provisioning levels for JT's wholesale services are limited. For example, Sure has ordered some 554 xDSL bitstream services and 15 new leased lines from JT since the start of 2012. Further, Newtel primarily procures bitstream products and Airtel only takes leased line products from JT.

Both Airtel and Sure have stated that JT delivers satisfactorily but normally only just within the time limits set out in the SLA. At the technical level, OLOs say that good cooperation is normally established as the technicians like to solve problems in the most effective way. We have obtained copies of JT's work items from its billing system for the period from 2 January to 4 May 2012 and attempted to compare provisioning times for OLOs with provisioning times for retail customers. We have not looked at leased lines as the volumes currently sold are too small and the services too diverse to make a meaningful comparison.

Figure 1 shows the provisioning times for bitstream for Sure and Newtel. The vertical axis shows the number of occurrences of provisioning in the number of days indicated on the horizontal axis. The number of days in the graph refers to calendar days and so, the 10 working day SLA target equates to 14 calendar days in the below.



Figure 1. JT's bitstream provisioning times for Sure and Newtel (Jan – May 2012)

Source: Frontier Economics based on data provided by JT

JT has confirmed that the above analysis appears correct and it has commented that the high number of occurrences for Sure around 13 calendar days is due to takeovers that are scheduled to be carried out around working day 10 in order to minimise the probability of outages for the customer. We understand that more than 50% of Sure's orders are currently takeovers and this proportion is likely to increase as broadband penetration increases.

JT has informed us that fulfilment of takeovers around day 10 was a mutual agreement; however this view was not shared by Sure. Instead, Sure stated that it has sought to reach agreement with JT on the following timescales:

- Service transfer: 5 days
- New broadband service on an existing exchange line: 10 days
- New broadband service on a new voice line: 15 days

Further, Sure stressed that it needs a firm and reliable date for takeovers as this would allow it to liaise with its retail customers. Sure also claimed that in Guernsey it delivers takeovers in 5 working days, although its published offer is 10 working days.

Figure 2 shows the provisioning times for JT Retail for adding broadband to existing lines.

Figure 2. JT's broadband provisioning times for orders from JT Retail (Jan – May 2012)



Source: Frontier Economics based on data provided by JT

The above comparison shows that broadband related orders from JT Retail tend to be completed more quickly than those from OLOs. However, it also shows that very few orders from OLOs take longer than stated in the SLA.

Given this, we consider our recommendation that bitstream order times should be reduced to 5 working days to be sufficient to both improve the service for end

customers and reduce any scope for discrimination to an acceptable level. We consider this to be the most suitable way to address this issue. JT's own retail provisioning times indicate that it should have little problem in meeting this target.

4.3.7 Dispute process

The leased line and wholesale DSL framework documents contain a dispute resolution procedure.³² As far as we are aware this has never been used. Newtel told us that it did not consider the procedure worth bothering with. Sure said that complaining was a waste of time.

4.4 Appropriateness of current pricing

The focus of this review is on non-price aspects of JT's wholesale service offerings. However, during our stakeholder interviews several references were made to the pricing of wholesale services constraining OLOs ability to compete with JT. Thus, in the below we briefly review the main issues raised during the meetings, namely that (i) the absolute level of prices in Jersey are high and (ii) the available retail margin is insufficient to compete.

4.4.1 Current level of wholesale charges

Stakeholders were of the view that wholesale charges for private circuits and bitstream services in Jersey were generally high, especially when compared to those in Guernsey.³³

We understand that regulated wholesale charges for private circuits and bitstream service in Jersey are currently set on a 'retail minus' basis (rather than in reference to underlying cost of providing them). This is common where limited costing data is available and/or in the context of growing demand of these services (as in Jersey). However, this may result in high wholesale charges (relative to a cost based approach), especially where retail prices are also considered to be high compared to elsewhere, are not cost-based or the assumed retail margin is small, as in case of private circuits in Jersey (see below).

To this end, we have undertaken a high-level comparison of selected JT wholesale charges to those in selected other small island jurisdictions (i.e., Guernsey and Malta) and KCOM in the UK. Whereas wholesale DSL and backhaul service charges compare favourably the picture for wholesale private leased circuits is more mixed. (see tables below). For example:

³² From section 22 of Wholesale PC Agreement and SLA - Issue 3.4 Legal Framework (150306).pdf and Wholesale DSL Agreement and SLA issue v3.1 Legal Framework 1 Feb 11.pdf

³³ In line with the feedback received from the stakeholder meetings, we focus our price-related review on wholesale private circuit and bitstream products.

- Wholesale DSL services. Due to prevailing differences in the current wholesale DSL service offerings in Jersey and Guernsey, only a limited price comparison is possible between these two jurisdictions.³⁴ The average monthly cost of a 9-16 Mbit/s wholesale ADSL service in Jersey exceed those currently available in Guernsey (see **Table 14**).³⁵
- Wholesale backhaul services. The 100 Mbit/s and 1Gbit/s (3000) SP Broadband Interconnect services available in Jersey are cheaper than the most comparable offers in Guernsey (see Table 14).
- Wholesale private circuits. Whereas lower bandwidth on-island private circuit services are more expensive in Jersey, the reverse is the case for most higher bandwidth fibre products. The cost of JT's wholesale private circuit services to the UK exceed those offered by C&WG, with pan-island services costs being more mixed. (see **Table 15**).

³⁴ We understand that C&WG currently only offers a single 'up to 16Mbit/s' wholesale DSL product, with an actual average speed of approximately 11Mbit/s across all connections (source: JCRA and C&WG). In order to allow for a 'like-for-like' comparison we have compared the average monthly charges for that service with the charges for the most comparable wholesale DSL product offered by JT – i.e. the 'Standard – Option 4' product.

³⁵ We note that the majority of JT's wholesale DSL connections are currently on 2Mbit/s, 4Mbit/s and 8Mbit/s ('Standard' DSL) wholesale service offerings. However, we understand that there are no equivalent wholesale offerings currently available in Guernsey which would allow a like-for-like comparison for these services.

Table 14. Comparison of selected wholesale DSL and backhaul charges in Jerseyand Guernsey (total monthly costs, fs)

| ersey | Guernsey | | | |
|---|---------------------|--|--|--|
| | | | | |
| 22.28 ³⁶ | £ 16.00 | | | |
| | | | | |
| Wholesale on-island backhaul services ³⁷ | | | | |
| 1,834 | £ 2,495 | | | |
| 3,034 | £ 3,260 | | | |
| | 22.28 ³⁶ | | | |

Source: Frontier analysis based on information provided by JT's and C&WG

Table 15. Comparison of selected wholesale private circuit charges in Jersey,Guernsey, KCOM and Malta (total monthly costs, £s)

| JT product | Jersey | Guernsey | KCOM ³⁸ | Malta |
|--|--------|----------|--------------------|-------|
| Wholesale on-island private circuit services ³⁹ | | | | |
| Megaline 2 Mbit/s | £321 | £107 | n/a | £486 |
| Megaline 45 Mbit/s | £2,950 | £1,303 | n/a | n/a |
| Fibre Channel 1Gbit/s | £782 | £1,909 | n/a | n/a |
| Fibre Channel 2Gbit/s | £1,205 | £2,121 | n/a | n/a |
| Fibre Channel | £1,806 | £2,357 | n/a | n/a |

³⁶ Based on JT's 'Standard – Option 4' service, with any non-reoccurring (i.e. connection) charges being amortised over a 36 months period.

³⁷ Comparison of JT's 'SP Broadband Interconnect <3000' and 'SP Broadband Interconnect 3000' services with C&WG's 'SP 100M' and 'SP 1000M' services in the same exchange area. Any non-reoccurring (i.e. connection) charges are amortised over a 36 months period.

³⁸ Where relevant, we assume a 3 year contract period for the annual rental.

³⁹ Where relevant, JT's 'under 300m' services offerings are used and C&WG's 'same exchange area'. But, the general conclusions also hold for a comparison of 'over 300m' services to 'different exchange area' services.

| 4Gbit/s | | | | |
|--|---|--------|--------|-----|
| Fibre Link 10/16 | £291 | £172 | £466 | n/a |
| Fibre Link 100 | £653 | £642 | £703 | n/a |
| Fibre Link 1000 | £782 | £1,909 | £1,326 | n/a |
| Wholesale off-islan | Wholesale off-island private circuit services ⁴⁰ | | | |
| Megaline 2 Mbit/s (Guernsey – Jersey, Cable 4) | £1,085 | £696 | n/a | n/a |
| Megaline 2 Mbit/s (Guernsey, Jersey – UK, Cable 7/8) | £1,227 | £1,379 | n/a | n/a |
| Megaline 45 Mbit/s (Guernsey – Jersey, CIEG) | £2,585 | £3,945 | n/a | n/a |
| Fibre 10 Mbit/s (CI to UK, HUGO) | £1,085 | £683 | n/a | n/a |
| Fibre 100 Mbit/s (CI to UK, HUGO) | £4,031 | £4,004 | n/a | n/a |

Source: Frontier analysis based on information in JT's and other operators' SLAs

4.4.2 Implied retail margins

A 'retail minus' approach aims to ensure, amongst others, that there is a sufficient margin for OLOs to compete with JT on a retail level. Wholesale DSL service charges in Jersey are currently set on a 'retail minus 40%' basis and those for onisland wholesale private circuits are determined on a 'retail minus 9%' basis. We understand that these values are based on costing information from JT.

During our meetings, OLOs have raised concern that the 9% retail margin is insufficient to compete with JT. For example, particular reference was made to the current wholesale charges for a 2Mbit/s private circuit not allowing OLOs to replicate JT's ISDN 30 retail offering.

We have not been able to verify whether the 9% retail margin is consistent with the latest draft accounting separation data from JT (as there is no separate retail leased line business segment defined in JT's separated regulatory accounts). However, based on its draft separated regulatory accounts, JT's on-island

⁴⁰ Non-reoccurring charges are amortised over a 36 months period. The main findings still hold if amortising over a 60 months period.

wholesale leased lines business segment appears to be earning a return well in excess of its cost of capital **[REDACTED]**. This seems to suggest that there is significant scope to increase the current margin between retail and wholesale charges (as the current charges appear to be above the cost of delivering these services). Further, the current retail minus value is smaller than in many other European jurisdictions where wholesale leased line services are still regulated on a 'retail minus' basis (i.e., Spain, Portugal and Hungary). In those countries, a retail margin of 15% to 28% is applied.⁴¹ We further understand that the current retail margin for (on-island) leased line services in Guernsey is approximately 22%.⁴²

Recommendation:

We recommend that the JCRA reviews the current charging principle for wholesale private circuits to ensure that the current 9% retail minus value is in line with the latest accounting separation data prepared by JT. As part of this exercise, the JCRA may further wish to request financial information from OLOs to better understand the required returns on these services.

Going forward, the JCRA should also review the merits of moving to a cost based pricing approach (rather than the current retail minus approach), in particular, once robust accounting separation information becomes available.⁴³

Treatment of promotions and discounts

A further factor which may reduce the actual retail margin available to OLOs (and thus their ability to compete with JT on retail level) is the level of discounts and promotions offered by JT on its retail products. For example, any discount on its connections charges or monthly DSL charges offered to its retail customers, will lower the margin available to OLOs below the implied by the 'retail minus' pricing approach when seeking to match the JT's offer.

During our meetings, stakeholders have raised concerns about JT's promotions and discount offerings. For example, reference was made to JT running similar promotions on connections charges for new broadband services with very little gaps between them. As OLOs were still facing the \pounds 45 connection charge from JT Wholesale, they were unable to replicate JT's promotion. There were further concerns about JT's recent Home Media Trail, under which a small group of existing 2Mbit/s DSL retail customers were offered a 'free' upgrade to an

⁴¹ For example, in Spain, (Ethernet) leased lines charges are set based on a 'retail minus 15%' regime, in Portugal a value of 'retail minus 26%' was applied to leased lines service until recently and Hungary a value of 28% applies to monthly fees for leased line services over 128 kbps.

⁴² Cable & Wireless Guernsey, 'Channel Island Wholesale Access Project - C&W's response to CICRA's Consultation Document (Published version)' dated 20 January 2012.

⁴³ We understand that the JCRA is currently already in the process of reviewing JT's NGA cost model which will be used to inform JT's fibre-based wholesale prices.

8Mbit/s service for a period of two months after which the customers could either revert back to their original deal or remain on the higher speed package and pay the standard retail price. This resulted in replicability concerns as OLOs were not offered a similar opportunity by JT Wholesale and the DSL SLA contains a minimum contract period of 12 months. We understand that despite these concerns, the JCRA decided to allow JT to proceed with this deal as it felt that the concerns were not sufficiently well-developed.

We understand that there are currently no specific rules or regulation on the treatment of discounts and promotions for JT's regulated services. But, under Licence Condition 33.3, JT is obliged to ensure that all its prices, discounts and promotions are transparent, non-discriminatory and cost-justified. Further, all special offers need to be objectively justifiable and Licence Condition 31 requires JT not to give undue preference or discriminate between any parties.

We understand that once the final accounting separation information becomes available, the JCRA is further intending to undertake margin squeeze tests for any promotions proposals by JT.

Recommendation:

We recommend for the JCRA to review its current framework of assessing promotions and discounts offered on regulated retail services (or those relying on regulated wholesale products). In particular, JT should be required to provide the relevant costing data in support of the cost-justification requirement to JCRA as well as an explanation on why the relevant promotion or discount is objectively justifiable. Only once the JCRA has confirmed that both criteria are met based on the information provided, should JT be able to publicly launch its promotion/discount.

Further, the JCRA should consider introducing minimum time gaps between similar promotions.⁴⁴

4.5 Regulatory capacity

During the stakeholder interviews all market players were appreciative of the efforts made by the JCRA over recent years to facilitate the functioning of wholesale market. However, there was a concern that it was unable to remedy all

For example, URCA in The Bahamas requires a minimum of 120 day in between similar promotions. [URCA, 'Regulation of retail prices for SMP Operators – Rules (ECS 15/2010)', dated 22 April 2010.]

the issues identified within the previous review and those raised by OLOs since then.

- Implementation of new regulation. Stakeholders were disappointed by the overall time required to develop and implement new regulation. In particular reference was made to the introduction of wholesale access services. Although appreciative of the need to engage all interested parties via public consultations and the benefits of a coordinated approach across the Channel Islands, there is a rising frustration that new wholesale access services are yet to be mandated.
- **Processing of complaints.** OLOs further expressed concern about the time required by the JCRA to review any complaints they made about JT's conduct. This has resulted in several complaints still being under investigation. OLOs would urge JCRA to expedite the review process and, in particular, update them more frequently on the status of its review.
- Limitations of penalty regime. There was a general sense of frustration about the limited options currently available to JCRA to fine JT for any misconduct. (i.e., the JCRA could only impose a very low financial penalty which was not sufficient to act as a deterrent or revoke JT's licence). This had further reduced OLO's incentives to log formal complaints about JT's conduct.
- JCRA's role in the FTTH network roll-out. OLOs were hoping for the JCRA to take a more active role in the fibre roll out process. Rather than being a process led by JT, OLOs suggested the JCRA should have ensured they had the ability to engage in the entire process (including the decision to replace the existing copper and the design of fibre-based wholesale products).

Further to the concerns above, stakeholders recognised the limited resources and financial and operational data on JT available to the JCRA playing a part in the above. Most parties further welcomed the upcoming legislation allowing JCRA to fine licensees up to 10% of their turnover. They further welcomed the upcoming accounting separation information becoming available.

Finally, we consider there to be strong merits in adopting a common approach to wholesale regulation across the Channel Islands. As such, JCRA should continue its joint approach with the OUR/CICRA and, where possible, agree common wholesale service provisioning requirements (in particular, common provisioning times, repair options and compensation levels) across the two jurisdictions.

Recommendation:

Both, the new fining regime and the availability of accounting separation data are expected to strengthen the regulatory capacity within the sector.

In addition to these expected changes, we recommend the following measures:

- the JCRA to accelerate, where possible, its review of complaints received by OLOs including more regular communication with the claimant; and
- the JCRA/CICRA to complete the CIWAP project as soon as possible, to allow for further wholesale services to be implemented.

Further, the JCRA should continue its joint approach with the OUR/CICRA to streamline the wholesale regulation across the Channel Islands. Where possible, common wholesale service provisioning requirements (in particular, common provisioning times, repair options and compensation levels) should be agreed across the two jurisdictions.

5 Summary findings and recommendations

Our research has shown there to be a number of areas where the processes and performance governing the provisioning of wholesale services by JT to OLOs should be improved in order to more closely replicate the level of services provided by JT to its own retail business and to allow OLOs to compete with JT on a retail level.

Below we summarise our main findings. This is followed by a list of recommended changes.

5.1 Summary findings

Our review to date suggests that the structure and incentive model of JT is not delivering the range of depth of wholesale services (including, for the avoidance of doubt, the customer experience of these services, rather than just actual services) which would be of value to OLOs. For example:

- We consider that the non-price aspects of JT's private circuit and bitstream service are broadly in line with those seen elsewhere, but do not, in all aspects represent best practice and that there is room for improvements. We consider these to be best achieved in terms of enhancements in the offers, faster provisioning, faster fault repair options, and better compensation for longer delays in provisioning and fault repair. We have not found any prima facia evidence of JT breaching its licence conditions or discriminating significantly between OLOs and its own retail business, however the provisioning of retail broadband in the first part of this year does appear to be faster than that of wholesale broadband although the wholesale performance is within the SLA.
- Whilst our interviews did not provide a single, conclusive picture of the market, they did suggest that the working relationship between JT and OLOs is not always productive. The OLOs find it difficult to deal with and any meetings (such as those relating to Gigabit Island) are consider to have become ineffective and less frequently attended by OLOs.
- In general, JT is perceived to take a legalistic approach, rather than treating OLOs as customers. JT in contrast claims that it puts considerable effort into consulting OLOs and finds it difficult to obtain clear statements of their requirements.

• Our review has also highlighted that the pricing of existing wholesale services should be considered further. Our analysis (which was based on high-level information only) indicates that there is insufficient margin between retail and wholesale rates for some services, especially private circuits, in order to allow OLOs to compete with JT on a retail level.

We believe there could be two routes to remedying the current situation:

- Requiring JT to change its structure and incentive models so that the carrier services team takes responsibility for the end-to-end delivery of wholesale services and is incentivised to do so.
- The JCRA adopts a more hands-on regulatory approach going forward by applying more strict targets on JT.

Given the size of the overall market, JT itself and the current ownership structure, we do not consider the first option to be feasible in the context of Jersey. Even if deemed feasible, it would require a significant amount of resources and time to implement.

As such, we recommend that the JCRA adopts the second option by reviewing specific aspects of the regulatory framework governing the provision of wholesale services in Jersey. In particular, it should focus on:

- ensuring a swift introduction of the additional wholesale services considered under the CIWAP project (i.e., WLR, FNP and naked bitstream);
- tightening the current provisioning times, repair times and compensation scheme governing the current wholesale services;
- attending and running the regular meetings with JT and OLOs (including setting concrete action plans and time lines at the end of each);
- reviewing the effective retail margin on existing wholesale products (in particular for private leased circuits) to ensure that these allow OLOs to compete with JT; and
- reviewing its current framework of assessing promotions and discounts offered by JT on a retail level.

Together, we believe these measures would benefit the market and could be introduced with limited delay. But, fundamental changes which do not require continued regulatory oversight will only be achieved with changes in the broader regulatory settlement, market environment and business culture in each operator. For example:

- although public ownership is not in itself a barrier to developing a wholesale market, the continuing ownership of JT by the States may give JT power and influence that, for example, C&W does not have in Guernsey; and
- the past relatively limited powers and resources of the JCRA have limited its ability to respond to some individual issues. We note that initiatives are now in place to addressing this problem.

These issues are exemplified by JT's plans for the Gigabit Island project, which appears to have developed without sufficient effective consultation with the OLOs and without giving the OLOs an opportunity to participate in the project. Further, from our discussions with stakeholders it is clear they believe that the Gigabit Island project is undermining the development of wholesale services generally in the following ways:

- It is diverting the attention of top management in JT and also the JCRA away from improving the existing wholesale services;
- It has led to JT no longer investing in copper or introduce potentially new copper-based services, such as copper loop unbundling; and
- ^{**D**} It is creating a major uncertainty factor in the entire market.

Despite this, the Gigabit Island project provides the JRCA with an opportunity to revise the regulatory framework in the sector. For example, a potential competitive framework in markets such as Jersey is for the access system to be shared either by full separation into a separate company or by physical unbundling. Physical unbundling together with fixed number portability would maximise the scope for competition and freedom of operation by the OLOs and so reduce many regulatory problems. However, this may require the JCRA reviewing the relevant market (i.e. the EU Market 4) to motivate any requirements for physical unbundling.⁴⁵

We note that the JCRA has been pushing the operators to develop three wholesale products under the joint Jersey-Guernsey CIWAP project, namely: WLR, FNP, and naked bitstream.⁴⁶ But progress on this project has slowed.

⁴⁵ The regulatory situation with respect to the OLOs is made worse by the plans of JT to remove the copper loops, which would have given the OLOs an opportunity to compete with lower cost solutions based on unbundling after a finding of SMP has been made.

⁴⁶ We generally see the merits of a common set of wholesale products for both Jersey and Guernsey as it puts competition an equal footing in both jurisdictions where the two largest players are incumbents. This concept should, where possible, be extended to more detailed practical issues such as provisioning times, fault repair times and compensation.

Despite the significant benefits of these additional wholesale services, the JCRA should also consider the merits of introducing full loop unbundling, whether copper or fibre, going forward.⁴⁷

Finally, there are strong merits in adopting a common approach to wholesale regulation across the Channel Islands. As such, JCRA should continue its joint approach with the OUR/CICRA and, where possible, agree common wholesale service provisioning requirements (in particular, common provisioning times, repair options and compensation levels) across the two jurisdictions.

5.2 Recommendations

Our analysis of the key themes set out Section 4 has resulted in a range of recommendations. These are summarised below.

5.2.1 Recommendation - Notification and review process for new retail services

As part of Section 4.1.2 we recommend the introduction of a new process to notify and review JT's proposal for new (regulated) retail services.

We recommend that the process should be as followed:

- 1. JT submits a single document to the regulator describing the proposed retail service, the equivalent wholesale service or services, and its calculations that there is no margin squeeze. This action starts the 30-day clock because wholesale services are included;
- 2. JT may submit the same paper or a version with any confidential information redacted at the same time to the OLOs;
- 3. The JCRA decides within 2 days whether there is a need to call a meeting to discuss the proposed service. If the notification is of a minor change then there would normally be no need for a meeting.
- 4. If a meeting is required then the JCRA calls a meeting within 3 days with JT and the OLOs and the OLOs have opportunity to ask questions of JT in front of the JCRA and to express their opinions. If the JCRA judges that the JT has provided sufficient information and that there are appropriate equivalent wholesale services and no margin squeeze, then the proposal goes ahead;

⁴⁷ Despite the importance of having a wholesale access product, WLR is often considered to be complex and expensive to provide. It also does not give the OLO as much freedom as full loop unbundling. We further consider naked bitstream to be difficult to price given the interactions with line rental and the problem of apportioning line costs between voice and data. Given this, we are of the view that full loop unbundling should be considered by the JCRA going forward.

- 5. The clock counting against the 30-day notice period would stop from the point where the JCRA calls a meeting until the point where the JCRA considers that the proposal or modified proposal is acceptable, at which time the clock restarts
- 6. Fines could be introduced if JT introduces a service without following this procedure; however it would be better if the fines took the form of compensation (credits) to the OLOs rather than payments to the JCRA or treasury.

Ideally the 30 day notice period should be longer but given the current licence conditions of 21 day notice for retail services, it may not be realistic to consider increasing it.

5.2.2 Recommendation – Relationship between JT and OLO

We recommend that senior staff in the JCRA should attend and run meetings between the operators to resolve the issues of what new wholesale services are required and to accelerate the CIWAP project. The JCRA's presence will be a moderating influence and they should be able to find ways to improve the cooperation between the operators. Each meeting should be concluded by a set of agreed next steps, including timelines for each agreed task.

5.2.3 Recommendations – Provisioning of services

Provisioning times for private circuits

The provisioning times for wholesale private circuits, as set out in JT's Wholesale Private Circuit SLA should be amended as follows:

- A provisioning time should be quoted for all lines (instead of the current 95% target).
- Any provisioning times where no line plant is currently available should be reduced to a maximum of 20 working days.

Provisioning times for bitstream services

The provisioning times for bitstream should be reduced to 5 working days, with a corresponding improvement in retail times.

Repair times

JT should add the existing higher speed repair options for wholesale leased lines and bitstream services to its main SLA documentation.

Compensation

We recommend that the levels of compensation should increase to several times the monthly fee for a month's delay.

5.2.4 Recommendation – Pricing

Price setting

We recommend that the JCRA reviews the current charging principle for wholesale private circuits to ensure that the current 9% retail minus value is in line with the latest accounting separation data prepared by JT. As part of this exercise, the JCRA may further wish to request financial information from OLOs to better understand the required returns on these services.

Going forward, the JCRA should further review the merits of moving to a cost based pricing approach (rather than the current retail minus approach), in particular, once robust accounting separation information becomes available.⁴⁸

Treatment of discounts and promotions

We recommend for the JCRA to review its current framework of assessing promotions and discounts offered on regulated retail services (or those relying on regulated wholesale products). In particular, JT should be required to provide the relevant costing data in support of the cost-justification requirement to JCRA as well as an explanation on why the relevant promotion or discount is objectively justifiable. Only once the JCRA has confirmed that both criteria are met based on the information provided, should JT be able to publicly launch its promotion/discount.

Further, the JCRA should consider introducing minimum time differences between similar promotions.

5.2.5 Recommendation – Regulatory capacity

In addition to upcoming amendments to the fining regime and the use of accounting separation data to inform its regulatory decision going forward, we recommend the JCRA to consider the following measures:

- to undertake the necessary work to determine whether JT has SMP in EU Market 4 and hence could be subject to requirements for local loop unbundling;
- to accelerate, where possible, its review of complaints received by OLOs including more regular communication with the claimant; and

We understand that the JCRA is currently already in the process of reviewing JT's NGA cost model which will be used to inform JT's fibre-based wholesale prices.

to complete the CIWAP project as soon as possible, to allow for further wholesale services (in particular, WLR and fixed number portability) to be implemented.⁴⁹

The JCRA should continue its joint approach with the OUR/CICRA to streamline the wholesale regulation across the Channel Islands. Where possible, common wholesale service provisioning requirements (in particular, common provisioning times, repair options and compensation levels) should be agreed across the two jurisdictions

⁴⁹ In the case JT will complete the Gigabit Island programme successfully, and if by then JT has been found to have SMP in EU market 4, then fibre loop unbundling would be a better alternative to mandating WLR.

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June 2012 | Frontier Economics 63

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