



# Review of the price control for wholesale on-island leased lines: Jersey

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## Consultation and Initial Notice

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## Executive summary

The JCRA published its Final Notice on the Business Connectivity Market Review (BCMR) in Jersey on 1 October 2014<sup>1</sup>. The BCMR concluded that JT continues to hold Significant Market Power (SMP) in the wholesale and retail markets for on-island leased lines in Jersey, but not in the wholesale and retail markets for off-island leased lines. The JCRA proposed a set of remedies to be imposed on JT to address the finding of SMP, and one of these was that a price control continues to be necessary in the wholesale market for on-island leased lines, as a necessary and proportionate remedy.

In the JCRA's view, the principle that prices charged to end-users should be related to the costs incurred in supply is reasonable and fair, both to operators and to customers. It is important also that the wholesale market functions in a way which facilitates competition within the retail market and encourages on-going investment and innovation by all operators in telecommunications infrastructure and services, so that high quality communications services are available to Jersey customers.

The ultimate goal of implementing a price control is to deliver to customers the outcomes, including prices, which replicate as much as possible those expected in an effectively competitive market. The implementation of a price control should encourage and protect efficient market entry and investment, and should ultimately benefit the end-user.

The supporting framework, in the form of obligations imposed on dominant operators, is as important as the price control itself in sustaining effective competition and ensuring the benefits are passed on to customers. Of particular importance are the requirements for access by other operators and market entrants, and non-discrimination between the wholesale provider's own retail business and competing purchasers of its wholesale services. Note that in its market review decision (CICRA 14/50) the JCRA has already set a framework to ensure there are no barriers to connectivity between the on-island and off-island leased line markets.

This consultation considers the advantages and disadvantages associated with different types of price control, and proposes that the JCRA should impose a retail minus price control, strengthened by supporting remedies.

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<sup>1</sup> Document No CICRA 14/50

In relation to how the proposed retail-minus control should be structured, the JCRA proposes the following:

- The control should be set on an ex ante basis;
- the control should apply to all wholesale leased lines;
- The control should be applied on a product-by-product basis;
- for each retail leased line product offering, a wholesale equivalent product must be offered at a price that complies with the proposed control;
- The control should be set at retail minus 20%;
- The control will not separately address differential pricing.

In considering the implementation of the price control, the JCRA proposes that the price control term should be aligned with the market review timescale. The JCRA considers that it is essential that the supporting remedies which are in place are used in order to ensure that the control works effectively. In particular, the JCRA highlights the need for effective implementation of remedies addressing non-discrimination, cost accounting and accounting separation, and transparency.

# **1. Introduction**

## **1.1 Background**

The JCRA published its Final Notice on the Business Connectivity Market Review (BCMR) in Jersey on 1 October 2014<sup>2</sup>. The BCMR concluded that JT continues to hold Significant Market Power (SMP) in the wholesale and retail markets for on-island leased lines in Jersey, but not in the wholesale and retail markets for off-island leased lines. The JCRA proposed a set of remedies to be imposed on JT to address the finding of SMP, and one of these was that a price control continues to be necessary in the wholesale market for on-island leased lines, as a necessary and proportionate remedy. The JCRA stated its intention to review the structure of the price control following the adoption of the Final Notice on the BCMR.

This review of the price control in the wholesale market for on-island leased lines considers the market in Jersey. The GCRA is undertaking a parallel review in Guernsey, and the consultations will proceed simultaneously.

In preparation for undertaking this review of the price control for wholesale on-island leased lines, the JCRA and GCRA issued data requests to operators who are subject to the price control – Sure in Guernsey and JT in Jersey. The data request collected information about the structure and operation of the current price control, and operators highlighted issues which should, in their view, be taken into account in the review.

Follow-up discussions were held with both operators. Information collected from responses and discussions has been fully considered and has informed the JCRA's analysis and proposals.

The JCRA would like to thank operators for their engagement with the process so far.

## **1.2 Current SMP regulation**

The background and detail of SMP regulation is set out in Annex 1. JT is currently subject to a price control in the wholesale market for on-island leased lines<sup>3</sup>. The Determination, which was deemed to come into effect in April 2012, set the maximum price which JT could charge for a wholesale leased line as the price of the equivalent retail service, minus 20%.

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<sup>2</sup> Document No CICRA 14/50

<sup>3</sup> Document No CICRA 12/46

## 2. Structure of the Consultation

The document is structured as follows:

- Section 3: sets out options for the basis of the control;
- Section 4: examines possible ways of structuring the control;
- Section 5: discusses issues around the implementation of the control.

Responses to this consultation document should be submitted in writing to:

JCRA  
2<sup>nd</sup> Floor Salisbury House  
1-9 Union Street  
St Helier  
Jersey  
JE2 3RF

or by email to [info@jcra.je](mailto:info@jcra.je).

The deadline for responses is **5.00pm on 16 April 2015**.

All comments should be clearly marked: ***“Review of the price control for wholesale on-island leased lines: Jersey”***. The JCRA’s normal practice is to publish responses to consultations on its website. It should be clearly marked if any part of a response is held to be commercially confidential.

## 3. Basis of the control

### 3.1 Objectives of the price control

The JCRA notes that the ultimate goal of implementing a price control is to produce prices which replicate as much as possible those expected in an effectively competitive market. The implementation of a price control should encourage and protect efficient market entry and investment, and should ultimately benefit the end-user.

For the operator, cost recovery is a central principle. Operators must be able to recover costs which have been efficiently incurred, and to receive an appropriate return on invested capital. The purchaser in the wholesale market for on-island leased lines is always an 'Other Licensed Operator' (OLO), and the price control should be set in such a way that pricing does not act as a barrier to an OLO's ability to enter and compete effectively in the market. However, the eventual beneficiary of the price control should be the end-user – the retail customer. The JCRA's assessment of possible approaches and methodologies has been undertaken with these principles at the forefront, in particular the interests of end-users.

In the JCRA's view, the principle that prices charged to end users should be related to the costs incurred in supply is reasonable and fair, both to operators and to customers. This is supported by JT's licence condition 33.3, which states that:

*"All published prices, discount schemes and special offers of, or introduced by, the Licensee for Telecommunication Services shall be transparent and non-discriminatory; all prices and discount schemes shall be cost-justified and all special offers shall be objectively justifiable".*

It is important also that the market functions in a way which facilitates competition within the retail market and encourages on-going investment by all operators in telecommunications infrastructure and services, so that high quality communications services are available to Jersey customers. This review examines options in terms of these desired outcomes.

### 3.2 Options

The JCRA has three broad options when considering the form of the price control in the wholesale market for on-island leased lines in Jersey. These are:

- Benchmarking
- Retail minus

- Cost-orientation

Each option has advantages and disadvantages, and these are discussed below.

### ***Benchmarking***

Benchmarking compares prices across a peer group of countries, with a view to establishing a “reasonable” price. While this approach appears to be superficially attractive, as it addresses the desirability of Jersey prices comparing well with those in other jurisdictions, it has serious practical and methodological disadvantages. It is difficult to establish (and agree) suitable comparators at all levels of the process. This includes, for example, identifying appropriate “peer group” countries; identifying product categories to compare; taking account of time (it is essentially a snapshot of pricing at a given point in time); and securing reliable data, as not all pricing data are publicly available and even where figures are available, they may not be directly comparable.

### ***Retail-minus***

A retail-minus price control sets the wholesale prices of products within the market by reference to the associated retail price, minus a margin that is considered sufficient for a similarly efficient operator to compete profitably in the downstream market. The establishment of a retail-minus control requires information and a judgment about the costs of providing a retail service, and the approach generally assumes that the retail costs should be those of an efficient operator – that is, not necessarily the costs of the actual operator.

The retail-minus approach has the benefit of ensuring that the OLO can provide service only if it is at least as efficient as the SMP operator in producing its retail offer and so the risk is minimised of encouraging market entry by an inefficient operator. The main disadvantage of this approach is that it does not directly address prices in the retail market, which could be an issue if the SMP operator is charging a retail price which is above marginal cost.<sup>4</sup> The imposition of a retail-minus control in the wholesale market can be seen to have an indirect rather than a direct impact on retail pricing.

However, by focusing on strengthening the competitive environment, a retail-minus control in the wholesale market can be seen to have an indirect impact on retail pricing.

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<sup>4</sup> A finding that no operator holds no SMP at the retail level carries with it the conclusion that no operator (or operators) has the ability to set its prices independently of its competitors in the retail market.



### **Cost orientation**

Cost orientation in regulatory price control is generally set by reference to efficiently incurred cost. Cost orientation is a key principle of the EU's regulatory framework, and has been imposed as a regulatory remedy on the foot of an SMP finding in many markets. The EU approach stresses that the implementation of a cost orientation obligation requires cost modelling, because it is possible that the SMP operator's costs are not efficiently incurred, and so the cost-oriented control cannot rely on the SMP operator's actual costs.

By linking price to the cost of providing the service, the principle of cost orientation seems to be a fair and reasonable way of ensuring that an SMP operator does not use its market power to price in a way which is detrimental to market entrants and ultimately end-users. However, there are two main disadvantages in the way in which cost orientation is used as a remedy. The first is to do with the time and resources required to build relevant cost models, and the extent to which they deliver the desired outcomes, and the second is to do with the impact cost orientation may have on investment by the SMP operator.

### **3.2 Analysis**

Of the three possible approaches discussed above, the JCRA would not wish to rely on **benchmarking** as a means of setting prices. The analysis of pricing which the JCRA carried out as part of the original Business Connectivity Market Review identified the unreliability of possible comparisons, in terms of being able to compare jurisdictions and types of product. Further, much of the information was provided on a confidential basis, and where respondents are unwilling to provide information on record, the data is anecdotal. Overall, the JCRA's regulatory approach must be evidence based. While the JCRA recognises that a general level of price comparability can be useful as a sense check, this basis for comparing prices is not likely to be sufficiently robust as a means of setting prices, and any attempted comparison has to be mitigated by contextual caveats.

In practice, different methods of establishing **cost-oriented** prices have been used in relation to a variety of regulated services. In the early post-liberalisation era, the most common method was a 'top-down' one based on Fully Allocated Costs (FAC) that was anchored to the SMP operator's statutory accounts. Concerns about the lack of efficiency incentives in the resultant regulated prices led to a shift to a 'bottom-up' approach of estimating via an appropriately specified cost model the Long-Run Incremental Cost (LRIC) of providing the regulated service.<sup>5</sup> Depending on

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<sup>5</sup> Hybrid models, encompassing both FAC and LRIC approaches have also been used by regulators to calculate some regulated prices.

the specification used, LRIC-based prices can include a contribution to the regulated firm's common costs though cost models have also been built to calculate 'pure' LRIC prices, which do not include any element of common costs.<sup>6</sup>

The JCRA notes that the time and resources required to develop cost models is a major disadvantage of this approach. A cost modelling exercise would start by examining the expected demand in terms of subscribers and traffic. It would then model the efficient network required to meet the expected demand, and assess the related costs using a theoretical network-engineering model, for the purpose of calculating the cost on the basis of an efficient network using the latest technology employed in large-scale networks. Actual costs incurred by operators in Jersey would also need to be factored in.

The JCRA understands that JT is in the same position as other SMP operators, and would not be able to readily produce data on the underlying cost of wholesale provision of on-island leased lines in a form which is amenable to cost modelling. This is not in any way surprising, as, in the absence of a regulatory requirement, an SMP operator would not be likely to collect data in this way, because it would have no operational need to do so. The JCRA would need to consider the costs of such a modelling exercise in relation to potential benefits, and would also need to consider the timeframe over which such an exercise could be undertaken. Experience from other jurisdictions suggests that it would be unlikely that a suitable output could be achieved in much less than 2 years, which means that even if cost orientation were chosen by the JCRA as the preferred regulatory price-setting option, it is not an option that could be put in place immediately.

The second disadvantage of cost orientation as a remedy concerns its relationship with the encouragement of investment by the SMP operator. While cost orientation has been the preferred methodology recommended by the EU up till now, a pure cost orientation approach is not necessarily the choice for regulators considering the transition to a Next Generation environment. For example, in its Recommendation<sup>7</sup> on costing methodologies to promote the broadband<sup>8</sup> environment, the EU continues to maintain that BU-LRIC best meets objectives for "build or buy" signals, transparency and consistency, and ensures that the SMP operator can recover its efficiently-incurred costs. However, there is provision for a "certain degree of pricing flexibility" within the framework of ensuring that the retail price of the SMP operator

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<sup>6</sup> The main example here would be recent models used to calculate 'pure' LRIC prices for fixed and mobile call termination charges. In economic terms, the resultant prices would approximate to the marginal cost incurred by the SMP operator in providing call termination services.

<sup>7</sup> COMMISSION RECOMMENDATION of 11.9.2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment

<sup>8</sup> While this Recommendation addresses the broadband markets rather than the leased line market, the approach is relevant and illustrative when considering other markets.

and the price of the wholesale input cover the incremental downstream costs and a reasonable percentage of common costs<sup>9</sup>.

The EU approach is echoed by the view of the International Telecommunications Union (ITU), which notes that some regulators have become disenchanted with bottom-up costing models because they essentially rebuild the network from scratch each time the access price is reviewed and each time the models and their many assumptions are contested<sup>10</sup>.

The ITU also concurs with the EU's view that cost orientation may be less appropriate in a Next Generation environment. The ITU quotes Ofcom:

*"This (TSLRIC+) approach is suitable to current generation access networks as they are legacy networks with low demand side risk and substantial sunk costs that have already generated a return on the initial investment. ..This approach may be less appropriate for next generation access networks. So far, these networks are characterised by high uncertainty about consumer demand and willingness to pay, with limited clarity on the applications and services they will deliver. In this situation, investors in a free market would seek higher returns from their investment to compensate for the higher degree of risk."* [Ofcom, 2007, paras 5.2 and 5.3]

While current generation wholesale on-island leased lines may be amenable to a cost-oriented approach in that they can be considered as a legacy network, the JCRA wishes to ensure that investment in infrastructure in Jersey is encouraged to the maximum extent possible, and that its regulatory approach will support a timely transition to Next Generation access and services.

There are precedents in the European leased lines markets for using cost orientation or retail-minus price controls. At present, most (but not all) European regulators who are currently imposing price controls on leased line markets do so by imposing a cost orientation obligation. This reflects the legacy nature of the leased lines markets, and also reflects the strong emphasis on cost modelling in the larger European countries, where wholesale prices for most regulated services have been calculated following the development of detailed cost models. However, many regulators have previously used retail-minus in the leased line market, and in some cases are considering moving back to a retail-minus form of control in some markets, particularly in the transition to NGA.

The JCRA notes that the choice between cost orientation and retail-minus generally depends on the level of competition in the retail market. A **retail-minus** control is

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<sup>9</sup> Article 64 *ibid*.

<sup>10</sup> ITU, ICT Regulation Toolkit

often seen as appropriate where there are sufficient constraints on retail pricing i.e. where the SMP operator in the wholesale market is not able to sustain excessive retail prices.

In the BCMR, the JCRA found that JT held a position of SMP in the market for retail on-island leased lines in Jersey. This SMP designation was made due to the high market share still held by JT in the relevant market (70.3% at end-H1 2013) and a range of other factors, including its control of infrastructure not easily replicated, and economies of scale and scope.

In the BCMR, the JCRA concluded that, the finding of retail SMP notwithstanding, it was not necessary at this time to consider the imposition of direct retail level remedies on JT. The JCRA arrived at this conclusion both because of the lack of reliable, consistent and robust evidence of excessive retail pricing by JT in its provision of retail on-island leased lines, and more importantly because of the JCRA's decision to impose a strengthened suite of remedies at the wholesale level, including (but not limited to) a wholesale price control remedy. The JCRA also stated its intention to monitor retail on-island leased line pricing trends and signaled its readiness to act should any evidence emerge of excessive retail pricing on the part of the SMP operator. The JCRA notes that its approach is consistent with that of other European regulators, where any competition problems in the retail leased lines markets are generally judged to be best addressed by wholesale remedies, with a view to strengthening the ability of OLOs to compete against the SMP operator for the benefit of retail customers.

Arising from this, the JCRA takes the view that it would be appropriate to consider the imposition of a retail-minus control in the wholesale market for on-island leased lines. However, as discussed above, the JCRA also considers that a retail-minus control would, to be effective, need to be complemented by increased monitoring and compliance measures and by the strengthening of flanking obligations, particularly in the areas of non-discrimination and accounting separation. These complementary obligations need to be framed in a way which ensures that the price control is being fully complied with and which confirms that the control is not based on excessive pricing by the SMP operator.

### **3.3 Conclusion**

The JCRA has considered three options as mechanisms for setting price controls in the wholesale on-island market for leased lines in Jersey. The JCRA's aim is to find a mechanism which achieves the desired outcome of achieving retail prices which are similar to those which would prevail in a competitive market, and which are fair and reasonable, both for the customer and for the supplier. The JCRA wishes to achieve this in a way which is pragmatic, proportionate, and implementable in practice.

The JCRA's conclusion is that **benchmarking** is not sufficiently robust as a means of setting prices. While benchmarking can provide comparative examples which may be useful indicators of any anomalies between pricing in Jersey and pricing in other jurisdictions, the complexity of the products means that comparisons are not valid without a consideration of context.

In the JCRA's view, the principle that prices should be related to costs is reasonable and fair, both to operators and to customers. However, the JCRA's prime concern with **cost orientation** as a remedy (as opposed to a principle) is that the way in which it is generally implemented is likely to be a resource intensive remedy for both operators and the regulator, one which would take some time to implement, and one where the ultimate benefit for end users is not guaranteed – it is conceivable, for example, that retail (and wholesale) prices could increase arising from the use of cost modelling to set prices. In addition, the JCRA wants to encourage investment in Jersey's telecommunications infrastructure and services, and is aware that a remedy based on cost modelling may not support this. The JCRA notes that Ofcom came to a similar conclusion in its review of the business connectivity market, where it proposed that its objectives of ensuring that prices for wholesale connectivity should be broadly in line with cost of provision, and that BT should be encouraged to make efficiency improvements and continue to invest, were best met by introducing a charge control rather than a cost orientation obligation.

The **retail minus** approach strengthens the competitive environment by allowing market entrants to compete efficiently. Market entrants have made some inroads into the retail leased lines market in Jersey, entrants (OLOs) can price as competitively as they choose, and business end-users can take advantage of this choice through appropriately structured competitive procurement processes. In addition, the JCRA is confident that a correctly calibrated retail-minus control, augmented by a suite of flanking measures, can ensure that the SMP operator is not in a position to sustain excessive pricing in the regulated market. For all of these reasons, the JCRA proposes that a retail-minus approach is the most appropriate and proportionate means of meeting its objectives.

The JCRA's overall strategy is to put in place mechanisms which will allow OLOs to compete effectively in the market, because effective competition will best deliver benefits for end users, and for wholesale on-island leased lines, that is business and public sector customers. The BCMR put in place high level remedies in line with this objective, and the JCRA takes the view that, as well as further specifying the price control, there is merit in using supporting remedies<sup>11</sup> to strengthen the proposed retail-minus price control. There is precedence for such an approach in most European countries.

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<sup>11</sup> Further detail on supporting remedies is set out in section 5

For example, a robust non-discrimination obligation can ensure that market entrants can technically and economically replicate the SMP operator's retail offer. The obligation not to discriminate between OLOs and between OLOs and its own downstream operation was imposed on JT following the BCMR, and the JCRA intends to ensure that this measure is complied with in a transparent manner. The JCRA's view is that the implementation of a non-discrimination obligation ensures that other operators are able to compete effectively in the market, and that this is ultimately of benefit to end-users.

The JCRA also considers that measures should be introduced which strengthen compliance with the price control. Until now, the price control in Jersey has been in the form of a retail-minus control on wholesale leased lines, which was imposed at a high level without detail on how it was to be applied. Although JT has been required to ensure that its offering remains within the terms of the price control, it has not been required to provide transparency as to how this has been achieved. Any OLO concerns have been raised ex post – that is, after any perceived anti-competitive behaviour has already occurred. The JCRA proposes to implement an effective ex ante regime, where a set of rules are placed on JT which apply to all current and future activity in the market for wholesale on-island leased lines. This will include measures which will monitor compliance, including the submission of regular compliance statements by the SMP operator to the JCRA.

Finally, the JCRA will ensure that appropriate accounting separation information is supplied to it in relation to the provision of wholesale on-island leased lines by the SMP operator. Currently, this information is not available at a sufficiently granular level for the JCRA to have a full view of costs and profitability within the relevant market. The preparation of more targeted accounting separation in this area will shed more light on the cost incurred by JT and the profit it earns on the supply of wholesale on-island leased lines and this information will enable the JCRA to monitor the situation more effectively and, if necessary, to signal if additional regulatory measures are necessary to deal, for example, with excessive profitability.

The JCRA considers that the imposition of a more stringent and focused price control in the market for wholesale on-island leased lines, coupled with clear supporting obligations on non-discrimination, monitoring, compliance and accounting separation will ensure that the competitive environment is strengthened to the ultimate benefit of end-users.

**Proposal: a retail-minus price control will be imposed, strengthened by the implementation of supporting remedies.**

**Q1: do you agree with the JCRA's proposal to implement a retail-minus price control, strengthened by supporting remedies? If not, what alternatives do you suggest?**

## 4. Structure of the control

### 4.1 Options for structuring the control

The JCRA proposes that the price control on JT on the provision of wholesale on-island leased lines in Jersey is a retail-minus control. There are a number of options in how such a control could be structured. These are as follows:

- Should the control be applied ex ante or ex post?
- Should it apply to all wholesale on-island leased lines or a sub-set of them?
- Should the control be applied on a product-by-product basis or to a set of products?
- Matching wholesale and retail products;
- How to treat discounts/temporary promotions;
- What form should the control take?
- At what level should the value of the minus be set?
- Should the control be set in a way that would eliminate differential pricing?

#### ***Should the control be applied ex ante or ex post?***

The first issue to address is whether the control is set on an ex ante or ex post basis. An ex ante control sets in advance the margin that should exist between retail and wholesale provision of leased line services. An ex post approach would instead involve the JCRA checking whether or not a sufficient margin existed between the price of retail and wholesale leased lines in response to a complaint.

In general, an ex post approach would be geared towards examinations of possible abuses of dominance which have already occurred, while an ex ante approach would be set with the aim of preventing an abuse of dominance from taking place. At present, although the price control in Jersey is theoretically set as an ex ante control, its operation in practice is as an ex post control, in that compliance is assessed on the basis of a complaint of specific practices. The conclusions reached in the BCMR indicate that the use of an ex ante approach is appropriate, and the JCRA proposes to implement fully an ex ante approach, with the use of supporting remedies as discussed in the section below.

***Q2: do you agree that the control should be set ex ante? If not, why not?***



***Should the control apply to all wholesale leased lines?***

The JCRA defined a market for wholesale on-island leased lines which included all capacities of leased lines. However, a retail-minus control in the wholesale on-island leased lines market could be set either on all capacities of wholesale circuits or on a sub-set of them. This could mean that some capacities of wholesale leased lines would potentially be made exempt from the proposed price control.

Placing some capacities outside the control might be justified on the grounds that there is little or no demand for the capacities in question, or that there is some difference in the conditions of competition which, although not sufficient to warrant the definition of a separate market, may indicate that a different regulatory approach is justified. This may, for example, be proposed for very high capacity lines. Set against this, however, is the desirability – both from the point of view of operators and for market development generally – to transition end-users from lower capacity to higher capacity leased lines. This could mean that capacities for which demand is currently low could be in greater demand over the short-to-medium term and so competing operators using wholesale inputs would need access to these capacities at regulated rates as they currently do for other capacity leased lines.

The JCRA's view is that there is insufficient justification for excluding particular types of line from the price control at this time, and that the direction of market development suggests that operators should be encouraged to support end-users who wish to move towards higher capacity connectivity.

<p><b>Q3: do you agree that the control should apply to all wholesale on-island leased lines? If not what alternatives do you suggest?</b></p>
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***Should the control be applied on a product-by-product basis or to a set of products?***

A product-by-product approach means that the SMP operator must ensure that every type of wholesale leased line offered for sale complies with the retail-minus formulation, while a portfolio approach means that compliance must be at the level of a group of products. The decision about whether to apply the control on a product-by-product basis or by using some form of grouping or portfolio approach balances the wish to give the SMP operator some pricing flexibility, for example, by setting an overall target at the level of the market, against the need to ensure that there is no scope for margin squeeze within a portfolio.

The JCRA has considered whether the costs associated with different types of wholesale and retail leased lines vary to the extent that a portfolio approach would be problematic. The JCRA has also considered the extent to which it would be

difficult for operators to demonstrate compliance if the level of the control was too highly aggregated.

The JCRA's view is that a product-by-product approach offers the highest degree of certainty regarding the implementation of the control.

**Q4: do you agree that the control should apply to each wholesale on-island leased line? If not, what alternatives do you suggest?**

#### ***Matching wholesale and retail products***

In the JCRA's view, every type of retail leased line that is offered for sale should have a wholesale equivalent which is priced in a way that complies with the market-level control. This is justified in terms of JT's obligation that it must not unduly discriminate between OLOs and between OLOs and its own downstream operation. Thus, if JT is offering a retail product, its wholesale operation is providing an input which must be made available to OLOs. The converse does not have to occur. For example, if an OLO buys a wholesale leased line to extend its own network, perhaps for mobile backhaul, then there is no direct retail equivalent. Ensuring that there is a wholesale variant for each and every retail offering will enable access-based competitors to replicate the SMP operator's retail leased line product offerings using appropriate wholesale inputs.

**Q5: do you agree that every retail on-island leased line product offered by JT must have a wholesale equivalent? If not, what alternatives do you suggest?**

#### ***How to treat discounts/temporary promotions***

In terms of setting the wholesale control, an issue arises as to whether or not any discounts or temporary promotions made available by JT at a retail level should also be made available at the wholesale level. So, for example, if retail customers are offered preferential terms for purchasing an extended term contract or can avail of time-limited retail promotions for particular types of leased lines, the issue is whether or not this should be mirrored at the wholesale level.

While it might seem to make intuitive sense to frame the control so that retail discounts and promotions are mirrored at the wholesale level, a question arises as to whether wholesale customers are likely to avail of or attribute the same value to the kind of discounts and promotions that are made available at the retail level. If they are not, and the control is framed in a way that obliges the SMP operator to mirror such retail discounts in its wholesale pricing, then there is a danger that wholesale customers might not enjoy the same level of retail-minus discounts in the prices they have to pay for wholesale leased lines (given that the SMP operator would be

entitled to include such discounts when demonstrating compliance with the control). As a result, the JCRA tends towards the view that retail discounts and promotions should not have to be made available at the wholesale level but it wishes to hear feedback from respondents, and in particular from purchasers of wholesale leased lines, before coming to a definitive decision on the matter.

**Q6: should all retail price discounts and temporary promotions be mirrored in wholesale level pricing? If not, what alternatives do you suggest?**

***What form should the control take?***

At a conceptual level, a retail-minus price control for a wholesale service involves setting the wholesale price by reference to the retail price, deducting those costs which an efficient wholesale SMP operator is able to avoid by supplying the service in question to another operator at the wholesale level as opposed to selling it directly to customers at the retail level. This means that efficient market entrants will be able to offer competitive products and services to their own retail customers.

As regards the specific way that the retail-minus amount should be expressed within the control, there are two broad options for doing this.

The first option is where the minus is set as an absolute fixed monetary value. In this instance, the retail-minus formula may be expressed in the following way:

$$p_w = p_r - c$$

where:

$p_w$  is the wholesale price;

$p_r$  is the retail price, and

$c$  is the retail-minus amount.

A price control set in this way has the advantage of preventing any decreases in the margins available to OLOs but it has the drawback of being less useful in promoting competition, in particular where retail prices are falling and volumes are rising. In addition, setting a market level control on an ex ante basis at an absolute fixed monetary value may not be implementable in practice.

An alternative option would be to set the control as a fixed percentage of the retail price. In this instance, the formula may be expressed thus:

$$p_w = p_r * (1 - c\%)$$

where:

$p_w$  is the wholesale price;

$p_r$  is the retail price, and

$c$  is the retail-minus amount (expressed as a percentage of the retail price,  $p_r$ ).

An advantage of this option is that it allows greater flexibility in pricing at the wholesale level, though in cases where retail prices are falling rapidly, the percentage discount count decline sharply in monetary terms to the degree that a margin squeeze occurs. However, in a mature market like leased lines, where contracts are not short term, prices are unlikely to be subject to extreme fluctuation, and so there is less risk of unintended margin squeeze. As a result, the JCRA's preliminary conclusion is that it should proceed with a control that sets the wholesale price as a fixed percentage of the retail price.

**Q7: do you agree that the control should be set as a fixed percentage? If not, why not?**

***At what level should the value of the minus be set?***

The margin between the retail and wholesale price should be reflective of the costs avoided by an efficient SMP operator in supplying services to another operator at the wholesale level as opposed to selling an equivalent retail service to an end-user. Sufficient margin (or 'economic space') should also be available to enable efficient access-based entrants who purchase appropriate wholesale inputs to compete with the SMP operator in the downstream retail market, with consequent benefit to retail customers.

In considering the appropriate value of the minus, the JCRA must ensure that it is not set too low, which would leave insufficient space for a market entrant to compete, and is not set too high, which could both reward inefficiencies in market entry, and fail to recognise JT's costs in providing a wholesale service. The JCRA has taken into account its experience of price regulation both in Jersey and in other jurisdictions, and has taken into account typical margins which currently prevail between retail and wholesale leased lines. The JCRA proposes that retail minus 20% offers a fair and reasonable margin in which OLOs can compete in the retail leased lines market.

**Q8: do you agree that retail minus 20% is an appropriate margin? If not, what alternatives do you suggest?**

***Should the control be set in a way that would eliminate differential pricing?***

In Jersey, JT's pricing of leased lines differs depending on whether or not the circuit to the customer's premises is less than or greater than 300m from the exchange.

The issue for the JCRA to consider is whether or not it should seek to use the formation of the revised price control on leased lines to limit or eliminate such differential pricing.

Having considered the matter carefully, the JCRA takes the view that it would not be appropriate to use the price control remedy as a means to eliminate differential pricing. The JCRA notes that other remedies are available, in particular the requirement that JT accepts a reasonable request for access, and the requirement that JT does not discriminate amongst OLOs and between OLOs and its own downstream operation, which would better address issues to do with differential pricing. JT is not prohibited from eliminating such pricing of its own accord. This would also be the case under the proposed new price control framework.

The JCRA notes that its approach emphasises its support for investment in infrastructure and for a transition to Next Generation access and services. The JCRA believes that technology developments are likely to result in differential pricing being phased out by operators over the medium term, because it is no longer related to the costs of providing the service. In light of this, the JCRA's preliminary view is that it will not deal further with the issue of differential pricing as part of this review.

**Q9: do you agree that it is not appropriate to use the price control mechanism to address differential pricing? If not, why not?**

#### **4.2 Summary of proposals on the structure of the control**

In relation to how the proposed retail-minus control should be structured, the JCRA proposes the following:

- The control should be set on an ex ante basis;
- The control should apply to all wholesale leased lines;
- The control should be applied on a product-by-product basis;
- For each retail leased line product offering, a wholesale equivalent product must be offered at a price that complies with the proposed control;
- The control should be set at retail minus 20%;
- The control will not separately address differential pricing.

In addition, the JCRA welcomes feedback from respondents on the question of whether or not discounts and other temporary promotions offered at the retail level should be mirrored in the prices offered for corresponding wholesale leased lines.

## 5. Implementation of the control

### 5.1 Time period over which control in place

The JCRA considers that the most appropriate approach is to link the control to the market review process. This would mean that decisions about the control would be taken consistently with decisions about market definition and market power. The JCRA considers that this approach is also appropriate in view of the fact that the rate of change in wholesale on-island leased lines products and services is limited – the control does not need the level of responsiveness which may be required in a market which is characterised by frequent product developments.

**Q10: do you agree that the term of the price control should be aligned with the market review cycle? If not, what alternatives do you suggest?**

### 5.2 Supporting remedies

The JCRA considers that it is essential that the supporting remedies which are in place are used in order to ensure that the control works effectively. The key remedies in this context are:

- Non-discrimination;
- Cost accounting/accounting separation;
- Transparency.

#### ***Non-discrimination***

JT is subject to a non-discrimination obligation in the wholesale market for on-island leased lines. This means that wholesale on-island leased lines must be made available to OLOs in a manner which does not discriminate between OLOs, and between OLOs and JT's own downstream retail operation. In terms of the price control, this would mean, for example, that any wholesale price terms which are available to JT's downstream operation should also be available to OLOs.

#### ***Cost accounting/accounting separation***

The BCMR defined a market in Jersey for wholesale on-island leased lines, and JT is obliged to provide cost accounting and separated accounting information which is sufficiently granular to demonstrate that JT is compliant with the full set of remedies imposed on the market. This means that JT will be required to provide this information at the level of the wholesale on-island market for leased lines.

In its market review, the JCRA carefully analysed the level of competition for retail leased lines in Jersey and concluded that JT had SMP in this market. The JCRA's assessment was that the implementation of measures in the wholesale on-island market for leased lines would best address competition problems in the retail market. The JCRA is concerned to ensure that the benefits of competition at the retail level are spread to all customers, and that the lack of facilities-based competition across all of the island does not mean that unreasonable profits are reaped from the provision of retail leased line services in the absence of direct retail obligations.

While the JCRA proposes that a pricing remedy based on cost modelling is not appropriate at this time, it does adhere to the principle that prices should be fairly related to costs, and notes that JT's licence also provides for this. The JCRA expects that accounting information provided as a regulatory obligation should indicate whether or not unreasonable profits are included in the retail price.

The JCRA notes that the BCMR imposed remedies on cost accounting and accounting separation. Previously, JT has been required to produce separated accounting information on markets where it has been found to have SMP, and JT will continue to be required to produce separated accounting information for wholesale on-island leased lines, which will provide more focused data on this market, including the operator's rate of return. While the JCRA accepts that separated accounting information is not in itself an indicator of cost orientation, it does provide a headline indication of any unreasonable profit in a market where the operator has been found with SMP.

### ***Transparency***

The JCRA has considered how it expects JT to fulfil its transparency obligations in order to ensure the effective functioning of the price control, and compliance with the control.

The JCRA's approach is that the onus should be on the operator to ensure that it is compliant with all of its obligations, and that it should be able to demonstrate this to the regulator. The *ex ante* approach means that the operator must ensure that it is compliant with the control *before* offering the product – it is not sufficient to adjust pricing after the event, when contracts have usually been awarded. The JCRA is also mindful that obligations should be proportionate, and should place as little burden as possible while meeting regulatory objectives.

The JCRA proposes that, in order to satisfy its transparency obligations, JT will be required to submit a regular statement formally confirming its compliance with the wholesale price control. This compliance statement will need to include the following supporting information:

- All retail leased line prices, by bandwidth (connection fees and annual rental);
- All wholesale leased line prices, by bandwidth (connection fees and annual rental);
- Number of retail leased lines sold, by bandwidth;
- Number of wholesale leased lines sold, by bandwidth;
- Revenue from retail leased lines, by bandwidth (connection fees and annual rental);
- Revenue from wholesale leased lines, by bandwidth (connection fees and annual rental);
- Details of any promotional offers made in relation to the provision of retail and/or wholesale leased lines.

JT is also obliged to publish details of all its retail leased line offerings but the nature of the proposed price control means that the JCRA may require supporting accounting information about JT's revenues, costs and prices in the retail market.

The JCRA notes that the level of detail required in the compliance statement may be greater than is strictly needed to assess compliance. However, the JCRA considers that it is desirable to evaluate the implementation of the price control at a more granular level than that of the overall wholesale on-island leased lines market, and that a more detailed analysis will provide useful insight into the functioning of the control at this time, as well as into the operation of the market going forward to the next market review.

The JCRA proposes that this compliance statement will need to be furnished by JT on a quarterly basis and, hence, that it will also need to demonstrate compliance with the control every quarter. It is proposed that the first quarterly compliance statement will be submitted by JT in relation to Q3 2015 and that this statement will be submitted to the JCRA no later than Friday, 16<sup>th</sup> October 2015.

The JCRA reserve the right to audit the information provided by JT in its compliance statement and to request supplementary information, as it may deem necessary.

**Q11: do you agree with the JCRA's proposed use of supporting remedies? If not, why not?**



## ANNEX 1: Legal Background and licensing framework

### Legal background

The Telecommunications (Jersey) Law 2002<sup>12</sup> (*the Telecoms Law*) provides that the JCRA may include in telecommunications licences such conditions as the Authority considers necessary or desirable.

Part 3 of the Telecoms Law sets out the duties of the Minister and the Authority, and obliges them to protect and further the interests of telecommunications users within Jersey by, wherever appropriate, promoting competition<sup>13</sup>. Part 3 also sets out general objectives that the Authority should take into account, including the need to promote efficiency, economy and effectiveness, and to further the economic interests of Jersey.

The Telecoms Law<sup>14</sup> specifically provides that the JCRA may include in any licence conditions that are:

- intended to prevent or reduce anti-competitive behaviour<sup>15</sup>;
- relate to, or imposing requirements about, competition in relation to telecommunication services, telecommunication systems, apparatus and telecommunication equipment.<sup>16</sup>

### Licensing Framework

Part 2 of the Telecoms Law establishes the requirement for a telecoms operator to hold a licence, and Part 5 sets out the powers which the Authority has to grant a licence. There are four classes of telecommunications licence in Jersey. A Class III licence is specifically for applicants which have Significant Market Power (SMP). The

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<sup>12</sup> Telecommunications (Jersey) Law 2002, revised edition 06.288, 1 January 2013.

<sup>13</sup> Part 3, Article 7 (2) (a).

<sup>14</sup> The definition of dominance and abuse of dominance is not explicit in the Telecoms Law. However, the Competition (Jersey) Law 2005 sets out the States' approach to defining abuse of a dominant position and anti-competitive practice

<sup>15</sup> Part 5, Article 16 (1) (i).

<sup>16</sup> Part 5, Article 16 (2) (4) (a).

Class III licence includes a Part which addresses conditions applicable to dominant operators<sup>17</sup>.

The provisions which are applicable to dominant operators include (but are not limited to) measures addressing the availability and associated terms of Other Licensed Operator (OLO) access to networks and services<sup>18</sup>; the requirement not to show undue preference or to exercise unfair discrimination<sup>19</sup>; the requirement not to unfairly cross subsidise<sup>20</sup>, supported by accounting processes to demonstrate compliance; regulation of prices, and transparency around pricing and wholesale product offerings, including the publication of appropriate Reference Offers<sup>21</sup>.

In addition, the Class III licence includes conditions specific to the provision of leased circuits<sup>22</sup>, which apply where a licensee has been found to be in a dominant position. The conditions applicable to the supply of leased circuits refer to the retail and wholesale markets, and require that a dominant provider offers circuits on publicly advertised and non-discriminatory terms, and in compliance with quality standards and at prices determined by the JCRA.

The Class III licence also includes a Part which directly obliges the licensee not to engage in any practice which has the object or likely effect of preventing, restricting or distorting competition in the establishment, operation and maintenance of telecommunications networks and services<sup>23</sup>.

### **Price control**

In its “Determination in respect of wholesale leased lines: Final Notice”<sup>24</sup>, the JCRA determined that the maximum price to be charged by JT for a wholesale leased line should be the price of the equivalent retail service provided by JT, minus 20%. This determination was deemed to have come into effect in April 2012, and remains in place.

The JCRA notes that the form and implementation of the price control are addressed in Condition 33 of JT’s licence, as follows:

“33.1 Where the Licensee intends to introduce:

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<sup>17</sup> Part IV of the Class III licence.

<sup>18</sup> Condition 25, Class III licence.

<sup>19</sup> Condition 31, Class III licence.

<sup>20</sup> Condition 30, Class III licence.

<sup>21</sup> Condition 33, Class III licence.

<sup>22</sup> Condition 28, Class III licence.

<sup>23</sup> Condition 34, Class III licence.

<sup>24</sup> Document no CICRA 12/46

(a) new prices for any Telecommunication Services, or prices for new Telecommunication Services to be introduced by the Licensee;

(b) any discounts to published prices for Telecommunication Services within a relevant market in which the Licensee has been found to be dominant, or for any Subscribers to whom additional services or goods are provided by the Licensee or any of its Subsidiaries or Joint Venture; or

(c) special offers to all or any of its customers for particular categories of Telecommunication Services where those Telecommunication Services have been found to be within a relevant market in which the Licensee has been found to be dominant,

it shall publish the same at least twenty one (21) days prior to their coming into effect or otherwise as required by Telecommunications (Jersey) Law , and provide full details of the same to the JCRA.

33.2 The JCRA may determine the maximum level of charges the Licensee may apply for Telecommunication Services within a relevant market in which the Licensee has been found to be dominant. A determination may:

(a) provide for the overall limit to apply to such Telecommunications Services or categories of Telecommunication Services or any combination of Telecommunication Services;

(b) restrict increases in any such charges or to require reductions in them whether by reference to any formula or otherwise; or

(c) provide for different limits to apply in relation to different periods of time falling within the periods to which any determination applies.

33.3 All published prices, discount schemes and special offers of, or introduced by, the Licensee for Telecommunication Services shall be transparent and non-discriminatory; all prices and discount schemes shall be cost-justified and all special offers shall be objectively justifiable.

33.4 If the JCRA, after consulting the Licensee and such other persons as it may determine, is satisfied that any published price, discount scheme or special offer is in breach the Telecommunications (Jersey) Law or this Licence, the JCRA may, by issuing a direction, require the Licensee to bring the relevant prices, discount schemes or special offers into conformity with the Laws and/or the requirements of this Licence”.

## ANNEX 2: Glossary

**4G:** Fourth-generation mobile telecommunications technology, which enables the delivery of high-speed broadband services over mobile networks. The '4G' standard encompasses the Long Term Evolution (LTE) technology, which is the main 4G technology being deployed worldwide.

**Alternative Interface (AI):** new types of technologies used for delivering leased lines services, for example *Ethernet* (see below), which contrast with legacy *T1* technologies (see below).

**Asymmetric Digital Subscriber Line (ADSL):** a broadband technology that enables high-speed data transmission over legacy copper local access telephony networks, using a high data rate in one direction and a lower data rate in the other.

**Bandwidth:** The physical characteristic of a telecoms system that indicates the speed at which information can be transferred, which in digital systems is measured in bits per second (bps).

**Cloud computing:** the use of a network of remote servers connected via the internet that store, manage and process data that would otherwise be handled on a local server or computer.

**Dark fibre:** unused or 'unlit' optical fibre, i.e. fibre which has been deployed within a communication network but which is not connected to active electronic equipment used to facilitate data transmission.

**Direct internet access (DIA):** a dedicated connection to the internet provided directly from the customer's site over a permanent link (also known as *IP feed* – see below).

**Ethernet:** a technology used for data transmission. Originally deployed for use in a LAN (see below) environment, the technology has also increasingly been used to support WAN (see below) connectivity, with Ethernet being used in this instance as a leased line technology.

**Ex ante:** the application of regulation before an abuse of power has necessarily occurred. The reasoning behind its application is that finding that an operator has SMP means that the operator is likely to have the incentive and motivation to behave in a way which exploits its market power to the detriment of competitors and ultimately to consumers. *Ex ante* regulation can be contrasted with *ex post* regulation, which investigates an incident which has already happened.

**Ex post:** the use of regulation following a complaint or abuse of market position by an operator. In contrast to *ex ante* regulation (see above).

**Internet Protocol:** the communications protocol used for transmitting a data packet between a source and a destination on data networks, including the internet (also known as *Direct internet access* – see above).

**Internet Protocol (IP) feed:** a dedicated connection to the internet provided directly from the customer's site over a permanent link.

**Leased line:** A permanently connected communications link between two premises dedicated to a customer's exclusive use (see also *Private circuit* below).

**Local Area Network (LAN):** a network that connects a number of devices that are relatively close together, for example within the same office or building, which enables intercommunication amongst users and access to private voice, email, internet and intranet services and applications.

**Modified Greenfield approach:** a regulatory approach that works on the assumption that there is no *ex ante* (see above) regulation in the market in question, but takes account of the fact that upstream *ex ante* regulation is in place.

**Multi-protocol label switching (MPLS):** a mechanism for directing data within and across networks from one network node to the next, with data packets being given a specific forwarding label at the point at which they enter the network, thus enabling more efficient routing.

**Plesiochronous Digital Hierarchy (PDH):** a technical data transmission standard that enables transmission of data that generally runs at a similar rate to have a slight variation in actual data speed compared to the nominal rate. In recent years, PDH transmission has largely been replaced within telecoms networks by *SDH*, (see below).

**Private circuit:** an alternative term for a *Leased line* (see above).

**Retail Price Index (RPI):** a measure of inflation, published monthly by the Office for National Statistics in the UK.

**Small but Significant Non-transitory Increase in Price (SSNIP):** a theoretical price increase that forms part of the 'hypothetical monopolist' test used in market definition analysis. The price increase in question is usually considered to be in the range of 5 to 10 per cent.

**Synchronous Digital Hierarchy (SDH):** a technical data transmission standard for the transmission, which has largely replaced traditional PDH (see above) transmission.

SDH is an international standard that enables high-bandwidth synchronous data transmission.

**Time Division Multiplex (TDM):** a method of putting multiple data streams in a single signal by separating the signal into many segments, each having a very short duration. Each individual data stream is then reassembled at the receiving end based on the timing.

**Traditional Interface (TI):** legacy technologies used for delivering leased lines services, of which the main one would be *TDM* (see above).

**Virtual Private Network (VPN):** a private network where connectivity is extended by making use of the internet over which a virtual point-to-point connection is established, with various protocols being used to ensure data security over the public element of the network.

**Wave Division Multiplex (WDM):** a transmission technology that enables multiple wavelengths of light to share the same fibre optic pair.

**Wide Area Network (WAN):** a network connecting devices located in geographically dispersed locations, either in the same national area or across national boundaries.

### **ANNEX 3: Consultation questions**

Q1: do you agree with the JCRA's proposal to implement a retail-minus price control, strengthened by supporting remedies? If not, what alternatives do you suggest?

Q2: do you agree that the control should be set ex ante? If not, why not?

Q3: do you agree that the control should apply to all wholesale on-island leased lines? If not what alternatives do you suggest?

Q4: do you agree that the control should apply to each wholesale on-island leased line? If not, what alternatives do you suggest?

Q5: do you agree that every retail on-island leased line product offered by JT must have a wholesale equivalent? If not, what alternatives do you suggest?

Q6: should all retail price discounts and temporary promotions be mirrored in wholesale level pricing? If not, what alternatives do you suggest?

Q7: do you agree that the control should be set as a fixed percentage? If not, why not?

Q8: do you agree that retail minus 20% is an appropriate margin? If not, what alternatives do you suggest?

Q9: do you agree that it is not appropriate to use the price control mechanism to address differential pricing? If not, why not?

Q10: do you agree that the term of the price control should be aligned with the market review cycle? If not, what alternatives do you suggest?

Q11: do you agree with the JCRA's proposed use of supporting remedies? If not, why not?