Comments on Investigation into Wholesale Broadband Pricing

1. EXECUTIVE SUMMARY

C&W Guernsey is grateful for the opportunity to comment on OUR 06/05 – "Investigation into Wholesale Broadband Pricing" (the **"Paper"**). In summary:

- C&W Guernsey does not accept any of the three approaches put forward by the OUR
- Approach 1 – the use of the Gordon's Growth Model for calculation of a terminal value is unprecedented to our knowledge in the telecommunications industry and entirely inappropriate
- Approach 2 – the requirement to forecast to 2016 is wholly unreasonable
- Approach 3 – broadband will underpin services offered over NGN. To disallow NGN costs specifically required for broadband is clearly unreasonable
- C&W Guernsey has proposed a new model that uses the same fundamental assumptions as OURs Approach 2 but models 5 forecast years, as used by other regulators such as Ofcom in the U.K., and includes some limited wholesale market share loss
- Any of the approaches as proposed by the OUR would result in a significant impact on both wholesale and retail revenue earned by C&W Guernsey
- Future investment in broadband and other fast developing technologies could be jeopardised, which could have particular significance in light of the tax issues that have recently been the subject of much public and States debate, with the emphasis on the need for growth in the economy
- The OUR approach has created regulatory uncertainty, which could also jeopardise future investment
- C&W Guernsey considers that the OUR approach is flawed as the original objective was to investigate margin squeeze, but instead a bottom up costing approach for wholesale pricing has been adopted

2. INTRODUCTION

C&W Guernsey considers that the OUR has put forward three different models for the calculation of prices which all contain different assumptions, timescales for evaluation of broadband prices and fundamentally differing approaches with no reasonable justification for the differences that have been adopted. C&W Guernsey does not consider that the consultation has been framed correctly in that it asks industry and consumers whether it would like to have lower prices or even lower prices. This is a fundamental error in the way that the consultation has been framed as it will lead respondents to comment on the basis of the outcome of each approach as opposed to the principles that should be followed.

C&W Guernsey also considers that this is the reason that Newtel has chosen to drop its retail prices prior to the announcement of the OUR's decision. This creates regulatory uncertainty for C&W Guernsey when it is trying to compete and demonstrates that the Paper sent potentially misleading signals to the market.

In the introduction to the Paper the OUR repeats the finding published in OUR 05/14R[1] that the C&W Guernsey wholesale price of the residential service is higher than the level in other jurisdictions that were used as benchmarks. It should be remembered that the audit was carried out and the report written before C&W Guernsey doubled the capacity provided on all Broadband Lite services in September 2005, without any increase in price. The table below shows the comparison with the benchmarks after the doubling of bandwidth:

Operator	Service	Monthly Wholesale Price
C&W Guernsey	Broadband Home 1000 Lite	£19.49 (now £17.49)
BT	IPStream Home 1000	£23.00
Manx Telecom	Broadband Wires Only 1 Mb/s	£23.00
Jersey Telecom	Residential Option 2, 1024/384Kbit/s	£26.99

The wholesale prices shown in the table clearly show that the C&W Guernsey wholesale price is NOT higher than the level in other, comparable, jurisdictions and is in fact much lower. On that basis we would question the need for an investigation into pricing in Guernsey and consider that the whole investigation is based on a materially incorrect factual assumption by the OUR.

It is also stated in the Paper that the margin between the wholesale price and the price of the retail service offered by C&W Guernsey appeared low in comparison with the benchmark jurisdictions, suggesting there was not sufficient margin for competing ISPs to cover costs. This view is at odds with the action taken by Newtel, as mentioned above, in reducing the price of its 1 Mbit retail service to £21.99 (from £25.99) on Monday 20 March 2006. Customers that pay for the Newtel service annually will only be charged the equivalent of £20.50 per month. While this is publicised as a promotion, in response to an enquiry Newtel has confirmed that it applies to any customers that sign up until the end of the year. This would not appear to be a rational step for an ISP to take if there were a margin squeeze.

Operator	Service	Monthly Retail Price
C&W Guernsey	Broadband Select 1000	£26.99
BT	Single 1000 (unlimited capacity)	£52.88 (inc VAT)
Manx Telecom	Manxnet Broadband 1000	£49.99 (inc VAT)
Jersey Telecom	Rapid – Option 2	£44.99

The above table shows that:

- When the difference between wholesale and retails prices are compared the margin in Guernsey is lower than in other jurisdictions; and
- The problem is not that the wholesale price is too high, but the retail price is too low.

That being said, C&W Guernsey would not argue at this time for increasing the retail price, as customer expectation is that pricing will reduce, not increase. The relatively low retail price is the result of past regulatory actions. When C&W Guernsey launched broadband services in 2002, the OUR exerted significant pressure on the

[1] OUR 05/14R – "Audit of Broadband Services in Guernsey – Information Notice".

company to price the retail residential service very low. The C&W Guernsey wholesale broadband service, Broadband Lite, was introduced in mid-2003 and the pricing of both the wholesale and retail services was strongly influenced by the price level of retail broadband services already available in the market.

The OUR investigation into the wholesale price of broadband services has provided the opportunity to review pricing in the light of actual revenue and costs since launch. The OUR has focused on the wholesale price and failed to address the more fundamental question of retail pricing.

Previously, the OUR indicated to C&W Guernsey that it would only be adopting the Gordon's Growth Model to calculate the prices of broadband. C&W Guernsey met with the OUR and its consultants to discuss the use of this model (which seems to be unprecedented in its use for the regulation of telecommunications). The minutes of that meeting are attached at confidential Appendix 1. Subsequent to that meeting, the OUR has published the Paper that sets out three alternatives to the regulation of wholesale broadband pricing. Whereas the OUR was previously wedded to the principle of using the Gordon's Growth Model, it is now proposing that an alternative model can be used. Notwithstanding that C&W Guernsey is entirely against the use of the Gordon's Growth Model, this is extremely frustrating for the business and certainly fails to provide any regulatory certainty as to how prices will be set by the OUR. The OUR needs to provide a standard way of calculating prices for services provided by C&W Guernsey so that the business can choose to invest efficiently and with certainty. The current ad hoc approach adopted by the OUR risks jeopardising investment in the telecommunications sector as it fails to provide the certainty needed by businesses in order to decide whether to invest in new technology.

The approach of choosing the economic model that provides a price point that the OUR considers acceptable is unreasonable and will be damaging to the long-term infrastructure of the telecommunications industry in Guernsey. The OUR needs to adopt widely accepted principles of costing models that will be applied consistently, proportionately and reasonably in accordance with the statutory obligations of the OUR. A consistent approach will help to encourage investment as C&W Guernsey will be able to make investment decisions based on consistent principles where regulatory certainty assists this process of investment decision-making rather than hinders it.

C&W Guernsey wishes to continue to promote the expansion of the benefits of broadband to a wider customer base in the Bailiwick through the introduction of innovative broadband services at prices the customers can afford. The wholesale broadband market is clearly one element that contributes to achieving that objective and C&W Guernsey is keen to further develop the range of options that are available to Internet Service Providers. This is one element of the widening of broadband services available in the Bailiwick.

The other option is for each Internet Service Provider (ISP) to play a part by introducing new retail broadband services. C&W Guernsey is frustrated by the lack of investment and innovation that certain ISPs are prepared to bring to the market to differentiate their products. ISPs are currently only reselling the wholesale product without looking to differentiate and innovate at the retail level for the benefit of customers. An example of this differentiation and innovation is the Broadband Pay As You Go service, which was introduced by cwgsy, C&W Guernsey's ISP arm, in the autumn of 2005. This is based on the main wholesale offering and it is open to all ISPs to differentiate and innovate for the benefit of customers in this way.

C&W Guernsey originally introduced a price of £19.49 for the wholesale Broadband 500 Lite service (now doubled to 1000) under pressure from the OUR. We calculated a higher wholesale price, as we had also calculated a higher retail price than that permitted by the OUR. Following the delays caused by other ISPs to the introduction of double broadband in Q2/3 of 2005, C&W Guernsey voluntarily reduced the wholesale price by over 10% to £17.49 in the interest of introducing the service awaited by customers. This was also on the understanding that the wholesale price might be required to rise following the conclusion of the OUR investigation.

C&W Guernsey disagrees with the approaches that have been adopted by the OUR and considers that all of the economic models put forward in the Paper are fundamentally flawed and, due to the application of certain principles, unreasonable.

3. REGULATION OF BROADBAND WHOLESALE PRICES

C&W Guernsey notes that the OUR cites Licence Condition 31 as being the justification for the OUR regulating the wholesale broadband price. We are unclear as to why the OUR has chosen to regulate the wholesale broadband price on a cost plus basis. Under section 10 (2) (c) of the Telecommunications (Bailiwick of Guernsey) Law 2001 charges for interconnection or access have to be provided on a transparent and cost-orientated basis. However other services are priced on a different basis, such as leased lines, which are provided "on terms that are no less favourable than those on which the Licensee makes equivalent leased circuits available to its …own business divisions." In the case of wholesale leased lines they are provided on a retail minus basis.

C&W Guernsey believes that the OUR have still not made clear the reasoning for assessing wholesale broadband on a cost-plus basis.

4. GENERAL

As mentioned above, C&W Guernsey is disappointed that the OUR published the percentage reduction that would result from each of the proposed approaches. In our view the consultation should have concentrated on the principles of each approach. Publishing the percentage reduction, will enable respondents to the consultation to choose the approach that gives the outcome they favour, irrespective of the merits of each approach. It is also likely to be the reason Newtel has announced a reduction in retail prices, as mentioned in the Introduction.

C&W Guernsey has set out below its opinion in relation to each of the approaches that have been set out by the OUR in the Paper. Further, C&W Guernsey has set out (section 7.1) the approach that it considers is reasonable and the principles that it considers should be applied to each cost model that is used for the calculation of prices.

4.1 Discounted Cash Flow Approach

- C&W Guernsey recognises that the use of discounted cash flow (DCF) is a standard approach and appropriate for this specific circumstance.
- Key to the approach being proposed is the time period and terminal value. These are dealt with in detail elsewhere in this document.

4.2 Terminal Value

- Mixed messages appear to have been sent to the market regarding the recognition of a terminal value in product profitability analysis. To our knowledge the OUR has never insisted on a terminal value being included in a financial model before and in particular has specifically excluded its use in the current 3G Licence Tender Document.
- C&W Guernsey strongly disagrees with the introduction of the use of a terminal value part way through the life of an asset. This will fundamentally impact the way in which investment decisions are made. Both the States of Guernsey and the OUR should be concerned about this as it introduces instability and removes transparency from the 'regulatory contract' between the regulator and investors in and contributors to the economy of Guernsey. Skewing of efficient investment signals will damage Guernsey's ability to compete with other small and offshore economies.
- In relation to wholesale broadband services we are prepared to accept the use of a terminal value, in recognition that major new capital investment is being planned that will be implemented in the near future as well as the continued investment that is needed to facilitate the growth in customer numbers. Thus, there will be un-depreciated values for certain assets, which we would not seek to fully recover from within the forecast period that we are proposing.
- The Gordon Growth Model (OUR Approach 1) assumes that customers are an asset and therefore are factored into a terminal value, based on the expectations about the sustainability of the customer base and the service provided. GGM is used in the valuation of shares based on expected cash flows from recurring dividends, however its use is entirely unsuitable and unprecedented in the telecommunications industry. Again we discuss this further in section 6.2.

4.3 Proposed Decision

The DG proposes to assess the reasonableness of C&WG's pricing levels using a discounted cash flow approach, based on C&WG's average estimated cost of capital of 12% and allow C&WG to recover some of its fixed and common costs from ADSL services.

The proposal to use a discounted cash flow approach and to allow C&W Guernsey to recover a reasonable proportion of its fixed and common costs is supported. However, C&W Guernsey strongly disputes the period over which the OUR proposes to mandate that costs be recovered (Approach 2). The use of a terminal value modelled using an economic value ending in 2016 contradicts all empirical observation, business and academic thinking on the usable lifecycle and economic value of technology assets.

5. ISSUES CONSIDERED BY THE OUR

5.1 Scope

C&W Guernsey supports the scope adopted by the OUR as described in section 5.3.1 of OUR 06/05.

5.2 Time Period

We believe that the timeframe proposed by the OUR in Approaches 1 & 2 is unreasonable. Approach 1 requires assumptions that allow a forecast in perpetuity and Approach 2 uses assumptions to forecast a ten-year period. We fundamentally dispute that any operator intending to make technological changes such as those planned by C&W Guernsey can reasonably be expected to forecast what future services (and associated customer numbers) will be provided in the medium to long term.

As the OUR acknowledges *"…Beyond a certain time period, projections on an annual basis may not be sufficiently reliable…"* (the Paper, Page 6).

To highlight our concerns, we would point out that Approach 2 requires the fixing of broadband pricing until 2016. We do not consider it reasonable to assume this because of future market forces (which are unknown at this time). Also we do not believe that there is a well defined enough mechanism in place to encourage the OUR to re-open the analysis and it is highly unlikely that any analysis would result in an increase in the wholesale broadband price.

As acknowledged by Martin Duckworth (GOS Consulting) C&W Guernsey has been unable to recover the cost of its original broadband investment. The under-recovery is probably partly due to the financial impact of the difference between forecast and actual customer numbers in the different market segments and partly because the OUR put pressure on C&W Guernsey to introduce a lower wholesale broadband price when the service was launched than was required to give a reasonable return

We remain concerned that there is no certainty that we will have the opportunity to re-visit wholesale prices, should the assumption values that would have had to be used to span the 10 year forecast for Approach 2 be materially different from the actual data. Whilst we are unable to predict pricing approaches over the next 10 years, it is plainly unrealistic to assume no change.

The problem of forecasting over a longer period is also acknowledged by Ofcom in its analysis of BT's IPStream services (Aug. 2004) which, in the OUR's broadband audit, is recognised as *'broadly comparable with the wholesale service offered by C&WG'*. Section 2.174 states that *'given the considerable difficulties associated with taking a very-long run approach with services which are still developing… Ofcom considers that it would be more reasonable to specify a time period that was related to the economic life of the underlying assets rather than the very long-run'*. They considered that it was reasonable to carry out DCF analysis over a five-year period. In relation to wholesale broadband Comreg appears to have broadly followed Ofcom's methodology. They too have used a five-year analysis period for a discounted cash flow (DCF) model, truncated with a terminal value on the basis that '*it is not possible to form judgements about future technologies and because it is more reasonable to specify a time period that is related to the economic life of the underlying assets rather than the very long run'*.

Given that both the OUR and C&W Guernsey agree that an appropriate useful life for assets acquired for wholesale broadband service provision is 5 years (Section 5.3.4 Page 10), we cannot understand why the OUR has chosen to use a significantly longer time period in its preferred approach (Approach 2). We believe this would critically affect investment incentives and therefore put competitiveness of Guernsey at risk. C&W Guernsey considers that any decision by the OUR to use a model that analyses this investment over a period that is greater than 5 years would be unreasonable and fails to take into account critical factors in relation to the nature and useful economic life of the investment that C&W Guernsey is making.

When C&W Guernsey (as Guernsey Telecoms) produced the original business case for the launch of broadband services it based its financial model on a ten year period to 2010, using previous experience with System X exchange equipment and anticipating that further significant capital expenditure would not be required during that time period. In practice that has not proved to be the case, and there will be significant capital expenditure during this coming financial year. Indeed, as has been noted above, the OUR's consultant acknowledged that C&W Guernsey has not been able to recover its original investment to date (Appendix 1 - confidential notes of meeting between OUR and C&W Guernsey 8 March 2006). This is not seen by C&W Guernsey as a failing to forecast appropriately, but rather that nobody could have known how the service would develop over a period of years. We consider that for our Next Generation Network broadband technology a similar situation currently exists. One of the potential NGN suppliers has stated that the useful life of NGN equipment is likely to be 3 to 5 years, thus we may find that further investment is needed earlier than 2011/12 as currently planned.

5.3 Next Generation Network (NGN) Costs

C&W Guernsey will make a significant investment in NGN over the next few years, which raises questions about the extent to which the wholesale broadband services should be allocated the appropriate cost. Similar questions are being raised by operators and regulators worldwide, as is demonstrated by the consultation document published by Ofcom on 7 March 2006[2]. Ofcom is proposing to set up a new industry body (NGN UK) and has published a work program to support the introduction of NGNs that continues into 2007.

On page 8 / 9 of the Paper the OUR implies that it is a failure of C&W Guernsey that the company is of the view that it is not possible to predict the services that are likely to be provided over the new network and hence have a clear basis on which to allocate costs. In our view this is disingenuous of the OUR given that in other jurisdictions,

[2] Ofcom: Next generation Networks: Developing the regulatory framework, 7 March 2006

such as the UK, it the regulator that is taking the lead in setting the new regulatory framework, in consultation with the industry. We are happy to work with the OUR to develop such a framework, but that will take some time and the outcome will not be available within the timeframe of the wholesale broadband consultation.

As is discussed below in section 6.4, the third approach put forward by the OUR for the calculation of wholesale broadband prices excludes all NGN costs. This is an extreme proposition and is clearly unreasonable as it currently stands. C&W Guernsey has made a case for the inclusion of a proportion of the NGN costs when previously providing information to the OUR, being those costs that in our view relate directly to the provision of broadband services. For example the MSANS will be provisioned with cards that are required specifically for broadband. We reiterate our position in section 6.4.

The statement made in the Paper on page 9 that *"…subject to extensions and maintenance to the network to cater for market growth, the current network supporting the wholesale provision of broadband services is able to support existing broadband services without the need for NGN investment"* implies that in the view of the OUR if C&W Guernsey froze the broadband network in its current state it would be able to continue to provide the broadband services wholesale customers require. This is not the case. For example, the original broadband network uses DSLAMS, which are now obsolete and no longer supported by the supplier. The Cisco RAS and Alcatel ATM equipment is also at end of life. For the OUR to imply that investment in broadband should stop when it is one of the fastest developing areas of telecommunications technology is fundamentally flawed. There is customer demand for new bandwidth hungry services, which C&W Guernsey will be in a position to satisfy once the HUGO capacity becomes available. Guernsey needs to be seen to have modern innovative services and capacity, but that will require C&W Guernsey to make investment decisions, which it will be reluctant to do if there is regulatory uncertainty.

In the view of C&W Guernsey, broadband is critical to the provision of telecommunications services in the future. If Guernsey is to maintain a world-class infrastructure necessary to attract business and services investment, it must have a broadband platform capable of efficient provision of converged communications services. That is, broadband will be the key service underpinning all future services. It is the technology that will enable high-speed data transfer over the copper network. Broadband is the technology that will enable customers to benefit from IP products and services, many of which have yet to be designed, but others such as VOIP are already available to a limited extent. On that basis the regulatory framework should allow the recovery of proportionate NGN costs to be born by broadband services, with other services attracting the incremental and marginal cost of their provision. Further the return on the investment should be calculated over the timeframe that the network infrastructure provides benefit. Given that the useful life of broadband equipment has been agreed by the OUR and C&W Guernsey to be five years, it should be assumed that the NGN equipment will be replaced in around 2011/12 and any financial modelling should be restricted to that timeframe.

The OUR further states on page 9 of the Paper that the C&W Guernsey forecast of a compound annual growth of 14% in the end-customer base to 2010 is not consistent with a mature business. However when one considers the C&W Guernsey view that broadband is the key service underpinning many future services, compound growth at that rate should be expected. We do not agree with the OUR's view that this growth rate supports the view that a longer time period than 5 years may be appropriate when considering the return on investment. What it does imply is that replacement infrastructure will require additional investment above and beyond like for like to accommodate the high penetration rate. It is the useful life of the equipment that is fundamental and should set the timeframe of the model, and not the maturity of the service.

5.4 Input Assumptions

- Period 2000/01 to 2005/06

  Having worked closely with the OUR during the costing process C&W Guernsey concurs with the logic employed for the treatment of historic data.

- Period 2006/07 to 2009/10

  C&W Guernsey agrees that during this period it is possible to estimate with a 'reasonable level of accuracy', whilst still recognising that an inherent degree of uncertainty exists regarding NGN services.

- Period 2010/11 to 2015/16

  C&W Guernsey is of the view that forecasting across this period would be highly unreliable. It considers that there is validity in using assumptions for period 2010/11 only as this is just one period beyond that formally costed. The risk of assumption weaknesses is likely to be limited and modelling for this accounting period ties in with our view that a five-year period from implementation of our NGN is reasonable.

  The OUR has not justified the extending of the period to 2016, i.e. covering three cycles of significant investment in the broadband network. Despite having met with the OUR on 15 March 2006 and discussed this particular issue, C&W Guernsey still does not understand the OUR rationale given the increased limitations of forecasting over such a long time period.

  Our view appears to differ from that of the OUR in relation to the percentage of wholesale market share that we expect to command. The confidential spreadsheet submitted with this consultation response provides justification of our assumptions on market share.

6. APPROACHES TO THE ASSESSMENT OF C&W GUERNSEY'S WHOLESALE CHARGES

6.1 General

C&W Guernsey rejects each of the three approaches put forward by the OUR on the basis that they are unreasonable and lack consistency in approach with the principles that have previously been adopted by the OUR and that are currently proposed to be used by the OUR for other types of services provided by telecommunications operators. The detailed argument is given below.

The charge of £19.49 per month had been in place until September 2005 and had reluctantly been agreed with the OUR at the time of the launch of the wholesale service in mid-2003. C&W Guernsey considered at the time that this wholesale broadband price was lower than that required to earn a reasonable return. However, in order to facilitate the introduction of double broadband in September 2005, C&W Guernsey offered to reduce the price to £17.49, but that was not based on any specific cost calculations. The offer was made subject to a final decision by the OUR and at the time based on a preliminary analysis, C&W Guernsey considered that wholesale prices would be required to increase again above £17.49 in the light of the OUR investigation.

Without prejudice to any further views C&W Guernsey may wish to express, we comment below on the three approaches put forward by the OUR

One consistent factor in each of the approaches proposed by the OUR is the assumption that the wholesale broadband price set in 2006 will remain in place until the end of the timeframe of the financial model, in the case of Approach 2 to 2016. In a market where prices are expected to reduce, and where prices are not usually expected to increase, this is an entirely unreasonable assumption. Any reduction in the wholesale price over the period would reduce the rate of return earned by C&W Guernsey.

A second assumption that is common to all three approaches is that C&W Guernsey retains 100% of the wholesale broadband market for the period modelled. While it is acknowledged that the company has 100% at present, there are strong indications that at least one other operator is planning to introduce a competing broadband service. Planning applications have been made in Alderney for the erection of antenna on sixteen sites and it has been stated that these are to be used for a competing broadband service. It has also been suggested that Alderney may be used as a test bed prior to the introduction of the competing broadband service in Guernsey. Whether or not these plans come to fruition, it is highly probable that wireless technology will be introduced by a service provider in competition with C&W Guernsey before 2010, and certainly before 2016. The reality of wireless alternatives to broadband can be seen in Cyprus or the Caribbean where non-incumbent operators are rolling out WiMAX offerings across jurisdictions of similar size to Guernsey. C&W Guernsey may also use wireless technology to provide service in specific circumstances, but would not roll out a full wireless network as it would be competing with its own investment in the current broadband network.

Further, the assumption is made under each approach that local loop unbundling (LLU) will not be introduced. Without prejudice to the views C&W Guernsey may express in response to the OUR's preparation for a proposed consultation on LLU and our submission in response to that consultation, it is clearly unreasonable to expect that there will not be competition at the wholesale level for broadband (either through alternative fixed networks or the use of wireless, which might be WIMAX or 3G) by 2010 (or 2016 under Approach 2 or in perpetuity under GGM). Hence even if the

OUR will not require LLU, it is highly unlikely that C&W Guernsey will retain 100% of the wholesale market over the timeframe under consideration.

6.2 Approach 1

We have commented extensively to the OUR on the proposed use of the Gordon Growth Model (GGM) in the calculation of a terminal value and the argument here.

- The GGM is used for the valuation of shares or as part of cost of capital assessments but various experts we have consulted are not aware of its use in the telecommunications industry – neither the OUR nor its consultants has provided an example of where it has been used in the telecommunications industry before – hence its use would be unreasonable in this circumstance
- GGM uses the terminal value of customers as opposed to the terminal value of assets, a highly unusual process and completely inappropriate given the uncertain future of broadband development. While C&W Guernsey has complete control over the assets it employs, customers are at liberty, within the terms of any contract they have with C&W Guernsey, to change to a competing supplier, or switch to a different service, leave the Bailiwick or take any other action that results in them no longer being an ‘asset’ associated with the C&W Guernsey broadband service.
- When broadband prices were originally set in 2002 the financial model used discounted cash flow with no terminal value. It is entirely unreasonable to introduce the use of a terminal value, however based, part way through the lifecycle of an asset. The fact that the OUR has taken that step in this instance gives regulatory uncertainty for future pricing of other services. This should be of concern to all in the regulated industries in the Bailiwick and will have significant impact on the investment decisions made by C&W Guernsey unless this issue can be resolved
- C&W Guernsey does not expect to have 100% of the wholesale broadband market at the end of the timeframe
- Assuming the service continues in perpetuity implies LLU, or its equivalent in the NGN environment, will never be introduced in Guernsey
- The GGM uses a terminal value calculated in perpetuity, assuming no change in wholesale broadband price. We have commented above on the weakness of this assumption
- If this approach was to be adopted future investment by C&W Guernsey in broadband and other services would be seriously jeopardised
- C&W Guernsey considers that any use of the Gordon’s Growth Model is unreasonable

6.3 Approach 2

Under this approach a discounted cash flow model is used to 2016 with a terminal value based on the value of the assets employed. On page 13 of the Paper it states *“A key assumption therefore is that C&WG’s position in the wholesale broadband business is unlikely to alter significantly up to 2015/16.”*

- The C&W Guernsey comments regarding its likely share of the wholesale broadband market are of particular relevance here. It is clearly unreasonable to assume that the company will retain 100% of the wholesale broadband market for the reasons given above

- Modelling to 2016 implies that an investor should be willing to wait until 16 years after investment started in the service (2000) before earning a 12% return on that investment. That is unreasonable and contradicts: "…*payback periods also feature in assessment criteria, particularly in technologies with particularly short life cycles.*" (page 14)
- A terminal value based on the value of the assets is a more common methodology, however the same comment on the introduction of a terminal value part way through a service lifecycle made in response to Approach 1, applies equally here. Of major concern is the regulatory uncertainty that results from an inconsistent approach e.g. 7-year business plan with no terminal value required in the 3G application process, but will a terminal value be required in a few years time?
- The OUR has modelled to 2016, thus assuming no change in wholesale broadband price as per our comments above
- It is assumed that C&W Guernsey retains 100% share of the wholesale broadband market. This and the previous point do not appear compatible. In the view of C&W Guernsey if the wholesale broadband price is held at the 2006 rate for the next 10 years, it is even more likely that ISPs will find alternative ways to offer broadband services to end customers, and we will lose a significant proportion of the wholesale broadband market
- C&W Guernsey has discussed the approaches put forward by the OUR with various industry experts and all agree that a ten year forecasting timeframe is exceptionally long in the telecommunications industry, and that five years would be more appropriate
- If this approach was to be adopted future investment by C&W Guernsey in broadband and other services would be seriously jeopardised

It is of great concern that this is the OUR's preferred approach. Arguably it may be possible to justify this approach in an academic environment, however in the commercial world it is entirely unreasonable and unacceptable. If the wholesale broadband price is held at the 2006 level C&W Guernsey will lose market share because ISPs will use alternative means of broadband provision, such as WIMAX, and hence wholesale revenue will be reduced. If the wholesale price reduces over the timeframe C&W Guernsey may retain greater market share, but will not earn the revenue forecasted in the model unless the total broadband market grows at a faster rate than that predicted. Either way C&W Guernsey will not make the return of 12% over the timeframe of the model used in Approach 2.

Clearly if C&W Guernsey is not able to make a reasonable return over the forecast period, i.e. to 2016, then this will impact its investment decisions over a very significant period of time. Telecommunications is a key industry to selling the benefits of Guernsey to businesses that are considering investing in the Bailiwick. Any stifling of investment in the industry must be counter to the objective of growing the economy, an objective that has gained increased significance in the light of the tax issues that have recently been the subject of much public and States debate.

6.4 Approach 3

Under Approach 3 the OUR has used a financial model for the period to 2010/11, which is supported by C&W Guernsey as being a reasonable period

The greatest concern to C&W Guernsey in Approach 3 is the exclusion of all NGN costs. As we have discussed in section 4.3, it is not just C&W Guernsey that is unable to present a comprehensive view of the future services likely to utilise the investment in NGN, but the telecommunications industry worldwide, as is illustrated by Ofcom's consideration of the issue in the UK. It would be wholly unreasonable for the OUR to exclude all NGN investment on that basis, and consequently penalise C&W Guernsey for being an early adopter of the technology and introducing its benefits to the Bailiwick ahead of many other jurisdictions.

We reiterate that broadband will underpin telecommunications services in the future. Broadband, through NGN technology will be the means of provision of high-speed data over copper. Broadband will be the means of transport into the IP commercial 'mix' of products and services, some of which have been designed, a very few have been implemented but the bulk of which are yet to be defined.

The planned investment in broadband i.e. the purchase of MSANs, a replacement for the Cisco RAS, Alcatel ATM equipment and the IP core (MPLS) (termed NGN in the model) is essential as **all** of the equipment that was installed in 2000/01 is at end of life and is obsolete. The MSANs will be equipped with *broadband* cards. These will be replaced by Combo cards at a later date – i.e. cards that enable the provision of a wider range of service – but the costs of those cards have not been included in the C&W Guernsey model. The cost of Core Control Servers (CCS) i.e. the soft-switch, cost of replacing line plant records and the provision of facilities that will enhance the customers experience, such as on-line provisioning, have also been excluded, again investment that is required for the provision of a wider range of services. That is, C&W Guernsey has only included the investment costs of those parts of NGN that are required explicitly for broadband, but could also have included a proportion of costs that are more difficult to attribute to specific services including broadband.

It would clearly be wrong to exclude the cost of investment in broadband equipment (as is proposed in Approach 3), which has been called NGN in the model, as the replacement of the current equipment is essential, not only to ensure continuity of broadband service but also to provide the technology that will underpin future overlay services, such as VOIP.

A terminal value based on the value of the assets is a more common methodology. However Approach 3 also has the same fundamental issue as the other two approaches, in that it introduces a terminal value part way through the service lifecycle and the same points apply as we have made earlier.

7. PROPOSED APPROACH

Proposed Decision

The DG will reduce C&WG's prices, backdated from September 2005, by 22% to ensure C&WG earns a return of 12% from the provision of wholesale broadband services.

7.1 Approach

For the reasons given in section 6, C&W Guernsey does not support any of the three approaches put forward by the OUR. The OUR proposed decision of a reduction in wholesale broadband price of 22% is based on an unreasonable approach and is not accepted by C&W Guernsey. The OUR states (page 16) that price changes can be reviewed should circumstances change. In reality once this current investigation has been concluded the resulting wholesale broadband price is highly unlikely to be increased in the future. It is more likely that it would be decrease, thus eroding the revenue earned by C&W Guernsey and resulting in the company not earning the 12% return allowed by the OUR.

We note that the OUR discounts Approach 1 stating on page 16 of the Paper: *"…Approach 1, which relies on assumptions of future cash flows and returns on investment based on a perpetuity model, is less likely to present the most robust outcome on which price changes can be proposed."* C&W Guernsey supports this view and believes the issues listed in section 5.2 give further evidence of the unsuitability of this approach. However, we wonder why the OUR has presented this approach as an option given that it is so fundamentally flawed.

The failure to present consistent methodologies calls into question the approach of the OUR. It is not appropriate or reasonable to simply put forward three different models that have limited similarities, and particularly to put forward approaches and thus proposed prices, such as Approach 1, that are clearly inappropriate.

Approach 3 uses the appropriate timeframe and is in line with the modelling used in other jurisdictions such as the UK and Ireland i.e. it recognises the actual asset life expected of the new technologies and covers the period of known capital expenditure. As is stated by the OUR on page 16 of the Paper, Approach 3 covers the period when cash flows are more certain than under Approaches 1 & 2 and *"…there is less risk that benefit attributed to C&WG's investment is not realised due to unforeseen events such as rapid uptake of services that reduce the need for C&WG's wholesale broadband service."* Hence the OUR is acknowledging that if the model is extended to 2016 there is a greater probability that C&W Guernsey will lose market share, although such loss has not been included in Approaches 1 & 2. C&W Guernsey would argue that there is increasing likelihood of market share loss before 2011 given the current planning applications for antenna sites in Alderney.

In February 2006, C&W Guernsey provided a model to the OUR[3], based on the pro forma model previously provided to C&W Guernsey by the OUR. The main assumptions used within C&W Guernsey's February submission were as follows:

- Model period from 2000/01 to 2010/11
- Covers 2 complete cycles of major capital investment including a justified portion of NGN costs, which is further explained elsewhere
- No terminal value
- Loss of wholesale broadband market share of 10% by 2011

[3] Letter dated 13 February 2006 and spreadsheet "OUR BB model (C&WG revision)".xls

In response to this submission the primary concern of the DG is stated to be that the approach proposed by C&W Guernsey takes account of the set-up costs of the NGN network investment, but only recognises cash flows generated by this investment in a relatively short period. We have already discussed in this paper and directly with the OUR the fact that C&W Guernsey expect to replace the NGN around 2011/12 i.e. five years after the initial investment. We reiterate that this view of the likely economic asset life of NGN assets, and their subsequent obsolescence, is widely supported across industry and by other regulatory authorities[4].

C&W Guernsey has therefore re-submitted a model together with this response that incorporates the principals outlined above i.e. a ten-year modelling period including a five-year forecasting period that matches the cost of broadband specific NGN investments against benefits. This model uses the assumptions made by the OUR in Approach 2 of the consultation as the basis, but over a shorter timeframe and it takes account of loss of market share. It should be noted that this is in line with the initial scope proposed by the OUR in that is uses the same timeframe and a terminal value, albeit based of asset value rather than using the Gordon’s Growth Model. Specifically, C&W Guernsey’s re-submitted model assumes:

- A 5-year forecast period, to match the economic life of the investment in NGN assets. Forecasts of asset investment within this period are those proposed by the OUR in Approach 2 of the consultation.
- *Inclusion* of a terminal value on assets, also as calculated by the OUR as at 2010/11 as per OUR Approach 2.
- Recognition of probable market share loss of 10% by 2010/11, for the reasons highlighted elsewhere in this response – see also confidential Appendix 2.
- *Inclusion* of broadband specific NGN asset costs, also as accepted by the OUR at 2010/11 in Approach 2.

Applying the methodology above results in a wholesale broadband rate of £17.29. We believe that this represents a very reasonable compromise while still making use of many underlying OUR modelling assumptions and methodologies.

7.2 Application of the New Wholesale Broadband Price

C&W Guernsey reduced the wholesale price of Broadband 500 Lite from £19.49 to £17.49 in order to facilitate the introduction of double bandwidth. In discussion with the OUR at that time, C&W Guernsey offered to pay a rebate to wholesale customers for any additional reduction in price that resulted from the investigation that the OUR stated it would conduct (although at the time C&W Guernsey actually expected the wholesale broadband price to increase).

In the light of that offer, C&W Guernsey is disappointed that the OUR proposes to direct the company to backdate any resulting price change, rather than allowing C&W Guernsey to publicise it as a commercial decision.

[4] See ECTEL’s comments in their review of costing principles for the Organisation of Eastern Caribbean States, ‘NGN Equipment: 5 year economic asset lives, 20%/year depreciation: This rapid rate of depreciation is appropriate and reasonable, because NGN equipment is subject to rapid technological progress (and obsolescence)’.

C&W Guernsey does not accept that the OUR has the right to backdate charges in the licence condition as no reference to retrospective directions is made. If the OUR proposes to continue with this approach, then C&W Guernsey may have to reconsider the offer that it made as a commercial and genuine offer to seek compromise. This must be presented as a positive move and a commercial solution proposed by C&W Guernsey as opposed to a direction by the OUR. The way that it is currently presented by the OUR is disingenuous.

CONFIDENTIAL APPENDIX 1:

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CONFIDENTIAL APPENDIX 2:
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