Review of C&W Guernsey's Wholesale Business

A report to The Office of Utility Regulation, Guernsey

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1. Executive summary

This report sets out the investigations, conclusions and recommendations of Regulaid from our review of the wholesale business of Cable and Wireless Guernsey (C&WG). The scope of our work was set by the Office of Utility Regulation (OUR) in its brief to consultants published on 12 October 2007. The OUR requested the assistance of consultants in examining allegations made by the other licensed operators (OLO) in Guernsey against C&WG. These allegations claimed that C&WG was discriminating against these operators in favour of its own retail customers.

In this report we summarise our terms of reference and approach to the project (section 2). In section 3 we describe in broad terms the changes that the liberalisation of the telecommunications market has unleashed in the relationships between incumbent operators and their competing operators, and propose a model of how these relationships develop and mature.

We held several meetings with the OLOs, and in section 4 we set out the issues arising from these meetings, the views of C&WG when we discussed the issues with its staff, and our own views on the issue. We also met several of the staff of C&WG; in section 5 we discuss the issues arising from these meetings, and summarise our views on them. In addition C&WG provided us with data on the delivery of leased lines and broadband services, and we analyse and comment on the data in section 6.

We also carried out a benchmarking of C&WG's wholesale leased line and bitstream contracts with five other operators, and we report our findings in section 7. We also interviewed the operators to understand the steps they had taken to minimise discrimination, and we describe the main findings in this section.

In section 8 we bring the analysis of sections 4 – 7 together and analyse the key issues. We set out our recommendations to resolve these issues, along with a summary rationale. In section 9 we propose five alternative options for the implementation of our recommendations by OUR, ranging from exhortation to the separation of C&WG's network and wholesale business from its retail business. In the Annex we give three examples of operators which have had to implement similar separations.

Our most important conclusions are:

- C&WG needs to alter its approach to its wholesale customers from a legalistic approach to a commercial approach;
- C&WG appears to be contravening Licence Condition 29.1. There are incidences where it supplied leased lines to its retail arm faster than to its wholesale customers;
- C&WG retail sales staff have access to information about wholesale orders. This is inconsistent with a position that the retail and wholesale functions are adequately separated, and C&WG risks contravening Licence Condition 33;
- a dedicated wholesale position in C&WG is needed to resolve many of the issues between the OLOs and C&WG;
- the OLOs and C&WG must improve their communications with each other substantially.

Our recommendations are as follows:

1. C&WG should overhaul its processes for the ordering and delivery of leased lines as a matter of urgency so that:

    - OLOs are informed of the RFS date at the same time as the order acknowledgement;
    - the targets should be for 100% of orders, with the exception of orders that require the installation of new fibre;
    - all circuits of 2 Mb and under should be delivered in 10 business days with the exception of orders that require the installation of new fibre;
    - circuits of over 2 Mb should be delivered in 15 business days, with the exception of orders that require the installation of new fibre.

2. C&WG should offer an expedite service to the OLOs and its own retail customers at a cost based charge.

3. C&WG should publish KPIs on its public website as follows:

    - actual time taken to give OLO a ready for service date (as measured as the period between order reception and confirmation of ready for service date) as a quarterly average as against target;
    - actual delivery times as a quarterly average (as measured as the period between order reception and ready for service) against target for wholesale and retail customers,
    - a graph showing the number of days taken to deliver for wholesale and retail customers;
    - percentage of wholesale and retail orders that are delivered after the target;
    - these figures should be shown separately for 2 Mb and under leased lines, for leased lines above 2 Mb, and for bitstream orders (and any other major wholesale products introduced by C&WG);
    - the data should distinguish between orders that require the construction of new routes and the other orders;
    - any orders which are only administrative or billing changes should be excluded.

4. OUR should require C&WG's auditor to certify annually that the information in the published KPIs is correct.

5. For each day beyond the target date for delivery or fault repairs for leased lines, bitstream service, or any other wholesale service, C&WG should pay twice the daily recurring fee to the OLO.

6. C&WG should revise its wholesale and retail contracts so that the penalties paid to wholesale customers are greater than for retail customers.

7. C&WG should initiate the payment of penalties.

8. OLOs must be able to replicate technically and commercially C&WG's retail offerings, including the "service wrap", from C&WG wholesale products or other services available to them. Hence C&WG must provide wholesale products required by OLOs to match its retail offerings, including the service wrap, unless the service is provided in a competitive market.

9. C&WG should revise its wholesale and retail contracts so that delivery timescales and other terms and conditions are comparable.

10. C&WG should offer its wholesale and retail customers upgrading a leased line the option of paying a one off cost based fee or of a new minimum contract term, and the OLOs should give their retail customers the same choice.

11. The process for "major interest" price changes should be abolished, and all changes in the wholesale prices should follow the "minor interest" process, with the notice period extended to 30 calendar days.

12. OUR should ensure that there is an adequate profit margin available to OLOs for on-island leased lines, and:

- wholesale leased lines should be available on two and three year contracts;
- a discount scheme should be available for two and three year wholesale contracts, although not necessarily at the same rate as the retail discounts in order to reflect the difference in retail and wholesale costs saved;
- OUR should apply a margin squeeze test to leased line prices, including term discounts, and ensure that an adequate profit margin is available.

13. C&WG and the OLOs should implement the commitment in the wholesale leased line agreement to meet every quarter, at least for the next 12 months.

14. OUR should discuss with C&WG and the OLOs the value of an Industry Forum, and if the idea is supported, call the first meeting.

15. OUR should not accept a complaint from C&WG or the OLOs about wholesale services unless the dispute process available to the operators has been exhausted or the issue has been discussed at the Industry Forum.

16. OUR should require C&WG to revise its dispute process.

17. C&WG should create a position for wholesale sales and relationships that does not have any other responsibilities. This position should report to the Director of Customer Operations.

18. C&WG should change its arrangements for paying staff bonuses, so that staff responsible for wholesale sales and relationships are rewarded on wholesale, not retail performance, and so that staff provisioning and

repairing network services are not encouraged to favour retail or wholesale customers.

19. C&WG should take immediate steps to prevent its retail staff from having access to wholesale orders, and to ensure that wholesale orders cannot be easily distinguished from retail orders in its provisioning processes.

20. C&WG should carry out regular compliance audits to ensure that its staff are not contravening its regulatory and contractual obligations, and are complying with its own policies and regulatory guidelines.

21. OUR should implement our recommendations by the methods set out in options 1 – 4.

22. OUR should review the position at the end of 2009 through discussions with the OLOs and C&WG, and by an examination of the KPIs. If it judges that significant improvements have not taken place, it should start to implement option 5 (separation).

2. Project brief and process

2.1 Background to the project

The telecommunications market in Guernsey has undergone radical changes in the last few years. In 2002 the incumbent operator, Guernsey Telecoms, was sold to Cable and Wireless, and the market was opened up to competition. The Office of Utility Regulation (OUR) was established to regulate the telecommunications, posts and electricity industries in Guernsey. Since then several new entrants have established themselves in the fixed telecommunications market, and two additional mobile licences have been issued.

These rapid changes have brought new challenges for the incumbent, now Cable and Wireless Guernsey (C&WG), especially in its relationships with the new operators. There have been a number of disputes between the operators, and some of these have been over the supply of wholesale leased lines by C&WG to new operators.

The wholesale leased line market provides some of the essential building blocks for effective retail competition in telecommunications. Wholesale leased line products enable new entrants to create their own transport network, and to provide high speed retail services to business customers, using the ubiquitous network of the incumbent operator. As Guernsey is heavily dependent on the financial sector for its economic success, and fast, high quality and low priced telecommunications services are critical to the retention and development of this and other business sectors, such as the Alderney gambling industry, which is hosted on Guernsey. As a result an effective wholesale leased line market is particularly important to the island's economy.

The OUR has paid close attention to the wholesale leased line market to ensure that it is working effectively. In particular:

- in January 2007 OUR launched a public consultation on the prices charged by Cable and Wireless for wholesale leased lines. Following public comments, OUR published its draft Decision in June 2007. In the meantime, C&WG had reduced its wholesale leased line prices by 30%.
- OUR published its Final Decision on 23 October, and decided not to require any further price changes. It resolved that the current retail minus price control on wholesale leased lines will be replaced in April 2008, and that the price controls on on-island retail leased lines will be removed. Off-island wholesale leased lines are to be regulated by a retail-minus formula after April 2008, and retail off-island leased lines will be included in the retail price controls due to be renewed at that date. In its comments, Wave had raised issues over levels of compensation for late delivery of wholesale leased lines, and the lack of a "fast track" service. The Final Decision stated that two other issues – that term discounts offered to retail leased line customers are not available to wholesale customers, and quality of service issues – would be addressed in the review of C&WG's wholesale business.
- also in October 2007 it determined a dispute between the incumbent operator, Cable and Wireless (Guernsey) (C&WG) and a new entrant, Wave Telecom, over the availability of a new 45 Mb leased line service. OUR found that

C&WG had contravened its licence conditions by refusing to supply the service.

2.2 Project brief

In October 2007 the OUR invited tenders from consultants to examine the non-pricing aspects of C&WG's wholesale leased lines business, and highlighted five particular areas of concern:

- provisioning lead times in the service level agreement;
- structure and positioning of the wholesale business and its relationship with C&WG's retail business;
- effective penalties;
- the introduction of an expedite provisioning process;
- publication of provisioning and delivery performance data.

The consultants were expected to interview the other licensed operators (OLOs), appropriate staff from C&WG, and to carry out international benchmarking of C&WG's wholesale leased line contract. The consultants would produce a report at the end of this work with their recommendations.

2.3 Project process

Regulaid was awarded the contract to carry out this project in December 2007. At the start of January 2008 we met staff from the operators and C&WG in Guernsey, and held discussions with a few business customers in order to understand the influences on their buying decisions. We carried out the benchmarking work during January 2008. The purpose of the benchmarking work was to compare the performance of C&WG in the supply of leased lines with that of other operators. In addition we examined the performance on bitstream supply, the other main wholesale product used by C&WG's retail competitors, to see whether the issues found with the supply of leased lines were also found in C&WG's performance in bitstream supply. We also discussed with the benchmarking operators the steps they had taken to avoid discrimination. We compared the terms and conditions in C&WG's leased line and bitstream contracts with their retail equivalents to see whether any discrimination can occur as a result of differences in the terms and conditions.

We held a workshop with OUR in early February to discuss the progress of the review and our initial findings following the operator meetings and the benchmarking work. This report is based on the conclusions from this workshop.

We would like to acknowledge the assistance given to us during the course of the project by the staff of C&WG, OUR and the OLOs in Guernsey, as well as the operators in the countries we used as the benchmarks.

3. Liberalisation, incumbents and wholesale relationships

3.1 Changing relationships

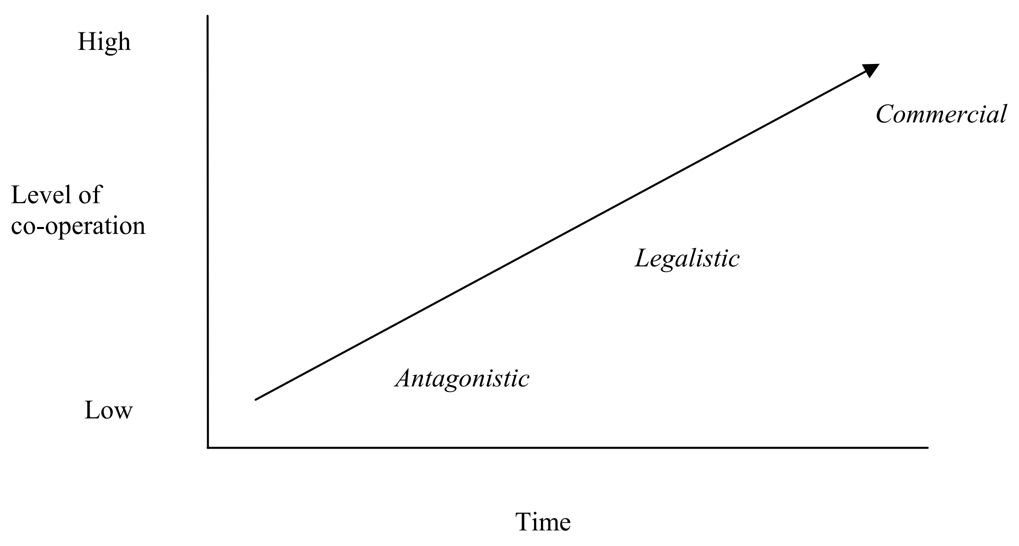
3.1.1 Wholesale and retail competition

The last ten to fifteen years have seen fundamental changes in the telecommunications industry. Many of these changes are in the technical capability of fixed and mobile networks, but the greatest changes have resulted from liberalisation. In the past a single, usually state owned, monopoly operator provided all telecommunications services available in a country, some more effectively than others. Liberalisation has brought new operators to compete with the incumbent operator for its retail customers, often forcing the incumbent operator to lower prices, develop new services, and to become more efficient and customer focused.

The new entrants have to use parts of the incumbent operator's network in order to provide services to their own customers. Interconnection allows customers of one network to call customers on another, and new entrants may need to take services or lease facilities – such as leased lines - from the incumbent when it is not feasible technically or economically to create their own. Hence new entrants may be a customer of the incumbent operator at the wholesale level and a competitor at the retail level.

Incumbent operators can take a range of attitudes to this complex relationship with new entrants. In Diagram 3.1 we characterise these attitudes into three main types or organisational culture.

Diagram 3.1: Alternative attitudes to new entrants



3.1.2 Antagonistic culture

As competition is introduced, the incumbent operator may fear that its retail revenues and profits are threatened by the new entrants, and will therefore use its power in the wholesale markets to damage its retail competitors. For example, it may:

- refuse to negotiate interconnection and other arrangements with the new entrants;
- delay the provision of facilities to the new operators;
- decide not to set up a separate department to deal with wholesale customers;
- set terms and conditions for the new entrants which are worse than those for its retail customers;
- charge high prices for interconnection and other facilities;
- use information provided by the new entrants for ordering wholesale services to benefit its retail arm.

Such an attitude may lead to a war of attrition with the NRA, which sees its plans for liberalising the telecommunications industry being torpedoed by the incumbent operator. The NRA may seek assistance from the highest levels of government to persuade the incumbent operator to change its attitude, or if it is still owned by the government, to replace its senior management.

3.1.3 Legalistic culture

Once competition has been established, the NRA develops a number of rules to ensure that the competitive environment is fair, and that the incumbent operator cannot use its dominance to disadvantage its competitors. The incumbent operator still sees its retail business as its core business, and may then take the attitude that it will comply with the letter of the NRA's rules and regulations, but no more. For example, it may:

- restrict the range of services provided to wholesale customers to the minimum required by the NRA;
- provide services "just in time", before the delivery deadlines set out in any service level agreements expire;
- minimise the resources allocated to servicing wholesale customers;
- make the wholesale department responsible to the legal or regulatory affairs department;
- develop different processes for dealing with wholesale and retail customers, resulting in a worse standard of service for wholesale customers;
- favour its own retail interests, provided it does not contravene the letter of regulations;
- not provide any active assistance to new operators;
- challenge any decisions taken by the national regulatory authority in the courts with the result that the implementation of the decision is delayed.

This attitude is more difficult to counteract because the incumbent operator is complying with the NRA's rules, but it is hindering the development of a fully competitive market. As a result the NRA may have to undertake a fundamental review of its telecommunications strategy, which leads to the conclusion that a competitive market has not developed as a result of the behaviour of the incumbent operator, and that more substantial change, such as the separation of the incumbent's organisation, is necessary in order to break a legalistic culture and introduce a commercial culture. The shock of such a threat may be sufficient to change the legalistic culture of the incumbent operator.

Another spur to cultural change can occur when the OLOs become so distrustful of the incumbent operator that one or more decide to build their own alternative infrastructure, and the incumbent operator realises that it may lose a significant part of its wholesale business to alternative suppliers.

3.1.4 Commercial culture

In a commercial culture, the incumbent operator recognises that its wholesale customers are important to it, and that it needs to compete for their custom. It also realises that competition is beneficial to it because it brings lower prices, better marketing and innovative services, thereby expanding the retail market for all operators. For example, it may:

- establish a wholesale department that is well resourced and proactive;
- ensure that there is proper separation between wholesale and retail; departments, for example segmented information systems, minimising social contact between wholesale and retail staff;
- reward wholesale staff on the performance of wholesale business only;
- actively seek out and prevent discrimination between wholesale and retail customers, and be prepared to demonstrate this by the publication of performance statistics;
- go “the last mile” in order to provide excellent customer service to OLOs;
- provide a range of wholesale services and a delivery performance that is over and above those required by regulation;
- ensure that delivery and repair of facilities is done as soon as possible, rather than “just in time”.

Once a commercial culture has been established in the parts of the incumbent operator that service wholesale customers, including network provisioning and operation, the number of complaints about discrimination should subside. The incumbent operator has made any discriminatory activities unacceptable, is providing a good service to its wholesale customers, and has good relationships with them, enabling any problems to be resolved without recourse to the NRA.

3.2 Implications

The movement from an antagonistic culture to a legalistic culture in an incumbent operator may take some years. It happens as a result of the NRA imposing increasing regulation on the incumbent operator, which the incumbent may resist or accept. The other operators may play a minor role in influencing the incumbent operator directly, usually preferring to work through the NRA, often using its disputes process to air complaints. The resulting decisions should change the relevant practices of the incumbent operator, but it will resist going beyond the stated regulatory requirements.

The move from a legalistic culture to a commercial culture requires a greater will from the incumbent operator, and it is difficult for the NRA to institute cultural change in the operator if senior management resist. However the change in attitude can come about if senior management recognise the commercial opportunities for wholesale customers. The change may start when a new entrant builds a competing network infrastructure, and the incumbent loses significant amounts of wholesale traffic to the new entrant. Perhaps the only role the NRA can play is to threaten a worse outcome if cultural change does not take place, for example some form of company break up. In the Annex to this report, we set out the background to recent separations implemented in Australia, New Zealand and the United Kingdom, along with an overview of their operation. In all these cases functional separation has been required in order to overcome problems of discrimination between the incumbent operator's wholesale and retail customers.

The other operators have to play a greater part, for example developing good commercial relationships through regular dialogue, including the resolution of problems directly between the operators rather than going directly to the NRA.

3.3 The "Jersey factor"

In applying the broad picture sketched out in the paragraphs above to Guernsey, we have to recognise what we have come to call the "Jersey factor". This term summarises the complex relationships between the operators in Guernsey because they are also competing against each other on Jersey. In particular, on Guernsey C&WG is the incumbent operator, while Wave Telecom (a subsidiary of Jersey Telecom) is a new entrant; on Jersey the position is reversed. Often the same people are involved in both jurisdictions, having to play the role of incumbent one day, and new entrant the next. These roles are significantly different, with the incumbent role being a dominant role, and the new entrant role more subservient. This may lead to a "revenge" culture, where one operator may use its dominance on one island to return indignities suffered on the other island. During our meetings we noted a poor level of communications and trust between C&WG and the OLOs, and we think this is made worse by the ambivalence in personal relationships because of the Jersey factor. To our knowledge this is a very unusual situation, but will require considerable effort from all involved to recognise and overcome this special factor in developing fully commercial relationships.

The regulatory regimes on the two islands are different, and we met an argument that regulatory change on one island should be dependent on similar progress on the other island taking place at the same time. We reject this argument because:

- the two islands are independent jurisdictions, and it is not a practical proposal to link the two regulatory regimes;
- any efforts to change the regulatory regime in one island should be focussed on that island, not on the other.

We therefore think that the perceived strengths or weaknesses of the regulatory regime in Jersey should not be used as arguments for delaying improvements in the regulatory regime in Guernsey, such as we propose in this report.

4. The issues raised by the OLOs

4.1 Process

During our meeting with the OLOs, they raised a large number of complaints about C&WG's alleged discriminatory practices. We then discussed most of these with the staff in C&WG, who explained the C&WG position. We were not able to raise some of the issues directly with C&WG because either the operator or customer concerned wished to remain confidential. In a number of cases we felt that the issue could have been best resolved through direct discussions between C&WG and the concerned operator, either because there were misunderstandings on both sides, or because a simple solution would soon become obvious. With other complaints, we felt that the complaint and the responses raised significant issues that we needed to address further.

We summarise the main issues raised by the OLOs below, along with the response of C&WG and our views on the issue.

4.2 Wholesale product issues

4.2.1 International half circuits

An operator requested an international wholesale circuit from C&WG so that it could provide connectivity into London. While C&WG can provide a half circuit from Guernsey to the half way point between Guernsey and London, C&W International is responsible for providing the remaining link. The operator asked C&WG to provide the other half circuit, and C&WG pointed out that this was not under its control and referred the operator to C&W International, whose response was that it did not deal with small companies. In the end the operator took a service from an alternative provider of connectivity to London. C&WG is, however able to provide full connectivity for its retail customers across the half circuits into London.

Regulaid views: C&WG's position is legally correct as it has no control over the other end of the link. However it should have been aware that its dominance in the provision of off-island leased lines and its relationship with Cable and Wireless International allows it to overcome obstacles that another competing operator cannot. It therefore had the incentive and opportunity to disadvantage a competitor. Hence C&WG's response, if properly thought through, should have been different if it had regarded the other operator as a customer.

Moreover if C&WG was acting commercially, it would have assisted the operator in its contact with C&W International. As it was, C&WG lost the business altogether. This issue illustrates that C&WG displays a legalistic approach to liberalisation, not a commercial culture (see section 3.1).

4.2.2 IP connectivity

An operator used a retail IP connectivity service provided by C&WG, and believed that it should be provided as a wholesale service. The operator had not requested this service directly to C&WG, but when we asked C&WG, it responded that it should not be a wholesale product as the retail service was a value added service provided over broadband connectivity, which any OLO could replicate.

Regulaid views: Our benchmarking did not reveal any examples where IP connectivity was a regulated service. However the restricted supply of off-island capacity on Guernsey makes the market in Guernsey rather different. We believe that this issue raises wider questions about which wholesale services should be mandated by OUR, and what process should be used, and we make some proposals in our recommendations (see section 8.4).

4.2.3 DDOS protection

An operator believed that C&WG should provide DDOS (dedicated denial of service) protection as a wholesale service because it provides this to its retail customers. C&WG responded that as this was available as a commercial service from third party suppliers, and was not a service embedded in the network, it should not be required to supply this as a wholesale service.

Regulaid views: we accept the C&WG position. We cannot see that, based on the information provided by the operators, C&WG can add any value to a third party supplier, and so there would be little point in its supplying the service as a commercial proposition.

4.2.4 Minimum term for leased line upgrades

An operator was concerned that when a customer wants to upgrade the speed of a leased line, C&WG restarts the contract, thus requiring a new minimum term of 12 months. It believed that no new minimum term should be imposed. C&WG pointed out that the same terms applied to retail customers as to wholesale customers.

Regulaid view: We think that C&WG's position can be justified on cost grounds. However this does have the effect of locking the customer into the existing supplier (whether the OLO or C&WG), for an extended period of time, and this reduces the opportunities for competition overall. We therefore recommend that the customer should have the choice of having a new minimum term, or of paying a one-off fee to recover the costs of the upgrade without a new minimum term (see section 8.4).

4.3 Provisioning issues

4.3.1 Delivery timescales

An operator criticised the timescales for the delivery of leased lines with speeds above 2 Mb as being too long. In its wholesale agreement for leased lines, C&WG has a target of delivering 95% of these circuits within 60 business days (12 weeks) of the order being placed, and penalties are payable if this deadline is missed.

C&WG explained that in order to provide these high speed lines, it may need to install new fibre routes. In many cases a road closure will be required, and it takes time for permission for road closures to be granted. In some cases new equipment has to be ordered and purchased. C&WG felt that this was rarely an issue because high speed circuits are usually ordered well in advance, and it may be possible to expedite delivery in individual cases.

Regulaid views: Our benchmarking work shows that C&WG's performance targets for leased line delivery are long in comparison to other operators, and hence the OLO's criticism is valid (see section 7.2.1), and we make appropriate recommendations (section 8.2).

4.3.2 Fast track service for delivery of leased lines

An operator proposed that C&WG should provide a service whereby the delivery of leased lines could be speeded up significantly when a customer needed it. It would be prepared to pay a premium for such a service. When we discussed this with C&WG, the staff thought that the idea was worthy of further consideration.

Regulaid views: Our discussions with customers suggested that there are occasional times when a fast track service will be very valuable to them. Our discussions with the OLOs confirmed that some leased line orders are expedited, especially when staff in the OLO who used to work for C&WG used their personal contacts in C&WG. However such an informal system becomes (or is seen as) discriminatory as C&WG's retail staff will have better contacts than the OLOs, and hence the process for expediting orders must be put on a more formal footing.

During the benchmarking exercise we found one example (Belgacom) where the NRA has required the introduction of a fast track provisioning service as a result of its market analysis process.

We therefore propose that C&WG should introduce such a service, and should be able to recover any additional costs of such as service (see section 8.2). We also think that this is an example of an issue which is of mutual benefit to C&WG, the other operators and the customer, and would be resolved if relationships between the operators were on a sounder commercial basis.

4.4 Fault repair issues

4.4.1 Line fault repairs

An operator provides equipment to its customers so that calls can be routed through its network. If the line has to be repaired, the C&WG engineer will deal with the fault, but will not plug in the other operator's equipment. As a result, the calls are routed through C&WG's network. C&WG responded that their engineers should not interfere with the equipment provided by other operators.

Regulaid views: We agree with the C&WG position because of the liability issues if the OLO's equipment then malfunctions, and this is the practice in most countries. In our benchmarking work we became aware of a similar complaint in the Netherlands, where OPTA, the NRA, ruled that while repairing access lines leased to a new entrant under the wholesale line rental service, the incumbent operator should reinstate equipment provided by the OLO if the OLO wants this to happen. The incumbent operator appealed against this decision, but OPTA's position was confirmed by the court of appeal.

We therefore consider that the OLOs and C&WG should discuss the issue and develop a working arrangements that either allow C&WG engineers to reinstate the equipment, or for the operator to be informed when a repair on a line with its equipment has taken place.

4.5 Discrimination issues

4.5.1 Fault monitoring

An operator understood that C&WG provided some of its retail customers with pro-active fault monitoring on its leased lines. As this would give C&WG a competitive edge, it believed that this should be available as a wholesale service. C&WG stated that it does not provide such a service.

Regulaid views: When we raised this issue with some major customers, they were not aware of this offering. Hence we can find no evidence to support this allegation. However we noted in our benchmarking work that two operators (KPN and eircom) provide this facility. In eircom's case, it is part of a premium repair service, and we suggest that the operators should discuss the commercial potential of such a service on Guernsey.

4.5.2 ISDN upgrades

From time to time an operator requests C&WG to upgrade its customers' lines to ISDN. C&WG carries out this work out of hours, and charges the operator an additional fee for out of hours work. C&WG responded that all retail and wholesale customers are asked whether they want the work carried out during working hours or outside working hours. As the work takes a minimum of 30 minutes, customers prefer not to lose their telecommunications service for this length of time, and so require it to be done outside business hours. They are then charged accordingly.

Regulaid views: We found no evidence that C&WG's practice varies between wholesale and retail customers.

4.5.3 Delivery timescales

An operator showed us correspondence with a customer which wanted rapid delivery of a leased line. C&WG had given the operator a delivery timescale of 30 days, but this was too long for the customer.. The operator then suggested that the customer should contact C&WG direct with the request as a retail customer. C&WG then provided the line in five days. Unfortunately we were not able to discuss this case with C&WG as the customer's agreement to the discussion was not forthcoming.

Regulaid view: this is a clear example of discrimination which led to a commercial advantage for C&WG. This appears to be a contravention of Licence Condition 29.1, which forbids undue preference or discrimination against any OLO. Our analysis in sections 6.2 and 6.3 shows that this case is an example of a wider pattern of later delivery for wholesale customers and earlier delivery for retail customers. .

4.5.4 Contract differences

An operator pointed out to C&WG that in its standard contract for retail leased lines the termination clause requires 30 days notice if the customer wishes to discontinue the service, while the contract for wholesale customers has a period of three months.

C&WG then agreed to amend the wholesale contract to bring it into line with the retail contract.

Regulaid view: direct communications between the operators has produced a positive result. We also carried out further benchmarking of C&WG's retail and wholesale contracts (section 7), and make some proposals to bring the penalties for poor performance more closely into line with each other (section 8.3).

4.6 Information issues

4.6.1 Informing wholesale customers about price changes

An operator alleged that the process used by C&WG to inform its wholesale customers about price changes was "haphazard", and as a result it had limited confidence that it was informed about all price changes, and it found that some of its retail customers knew about changes in retail prices before it did.

C&WG's process for informing retail and wholesale customers about price changes of regulated services has been agreed by the OUR, and depends on whether the price change is a "major interest" price change (which affects a large number of customers) or a "minor interest" price change (which affects only a few customers). For minor interest changes, C&WG must give 21 days notice of the price change by informing its customers by email and by publishing the change on its website. For major interest changes, C&WG must carry out the same steps, but in addition publish a notice in La Gazette Officielle. There are no regulatory requirements for the publication of unregulated prices.

We understand that the States of Guernsey have discussed the future of La Gazette Officielle, and that it may be discontinued. As a result, a broader review of how customers are informed of price changes will become necessary.

Regulaid view: it is likely that the classification of services into two categories is the cause of the confusion, and we suggest that all wholesale price changes should be subject to a single process. However we think that C&WG should be required to give the OLOs a longer notice than retail customers receive, so that the OLOs can make any necessary adjustments to their retail offerings, and inform their own retail customers. We include a proposal in our recommendations (section 8.5).

4.6.2 Informing customers of faults

An operator was concerned that after a fault had occurred in the operator's network, C&WG contacted its customers to tell them that they would have problems making calls to an interconnected network. While the operator was not named in the communication, it felt that the customers would soon realise which operator it was, and that this would generate negative publicity. C&WG felt that it had acted properly.

Regulaid view: We agree with C&WG, but suggest that the operators should agree a wording to be used in the case of failure on either network.

5. Issues raised as a result of our meetings with C&WG

5.1 Process

We held meetings with several staff in C&WG, including staff in the regulatory, retail, wholesale, network planning, product design and provisioning departments, and senior management. We raised a large number of issues concerning the policies, operations, systems and processes related to the provision of wholesale and retail services. C&WG was able to resolve some of these issues satisfactorily. In this section we address the remaining serious issues.

5.2 Wholesale product issues

5.2.1 Replicability of retail leased line products

We were required by our terms of reference to review whether OLOs could replicate the leased line offerings made by C&WG to its retail customers from the wholesale leased line product range. C&WG assured us that all the leased lines available to retail customers were available to wholesale customers. We compared the two product ranges, and found this to be correct. None of the OLOs raised this as an issue, with the exception of international half circuits (section 4.2.1).

Regulaid view: we believe that C&WG's current retail leased line product range can be replicated by the OLOs.

5.2.2 Term discounts

At present C&WG offer a reduction of 5% to retail customers taking a two year leased line contract, and 10% for a three year contract. No term discounts are available to wholesale customers because wholesale contracts are only for one year. This issue was discussed in the Frontier Economics report[1], which noted that while these discounts could be justified by cost savings (for example, retail staff do not have to sell the service or renew the contract), they could place the OLOs at a disadvantage.

In its Decision on leased line prices[2], the OUR decided to change the method of controlling wholesale leased lines from one based on a retail minus formula to one based on cost or a wholesale price cap, and that this would be implemented from April 2008. The Decision left the issue of term discounts to this report.
C&WG assured us that the term discounts were based on cost, reflecting the retail costs saved in having longer term contracts. There are two issues to be considered:

- are there cost savings in having a longer term for wholesale contracts?
- do the discounts give C&WG an unfair financial advantage?

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[1] Frontier Economics. A review of wholesale leased line pricing in the Bailiwick of Guernsey. January 2007

[2] Office of Utility Regulation**.** Reviewing C&W Guernsey's Wholesale Leased Line Prices: Final Decision. 07/17. October 2007

If an OLO takes a leased line for a term contract rather than for one year, it clearly saves retail costs, in the same way that C&WG does. In addition C&WG will avoid some wholesale costs:

- receiving and validating the new order;
- changing details on its provisioning and billing records.

We assume that C&WG will not need to invoke a cessation process or to make any physical changes on the renewal of a leased line contract. While these changes will involve lower costs than for a retail sale, they still represent a cost saving.

In order to answer the second question, we carried out an analysis of the margins available to OLOs for all leased line products where C&WG offers a two and three year discount. We calculated the total amounts paid by a retail customer for one, two and three year contracts, and compared this to the amount an OLO would pay for the same periods. The OLO will have to recover its retail costs, offer a lower price, and make a profit on the difference between the two prices.

Our analysis showed that for the majority of products the margin between the retail and wholesale prices for one year was usually 36%, for two year 35% and for three years 33%. We believe that these differences give OLOs adequate margins for profits.

There were three exceptions to this pattern, which we show in Table 5.1.

Table 5.1: Margins available on selected 2 Mb leased line products (£ per year)

Product	Retail customer	Wholesale customer	Margin available to wholesale
One year			
On island same exchange	1,620	1,288	20%
On island different exchange	2,916	2,318	21%
Off island circuit over cable 7/8	17,000	16,544	3%
Two year			
On island same exchange	3,159	2,576	18%
On island different exchange	5,686	4,636	18%
Off island circuit over cable 7/8	33,510	33,088	1%
Three year			
On island same exchange	4,617	3,864	16%
On island different exchange	8,350	6,954	17%
Off island circuit over cable 7/8	48,810	49,632	-2%

The margins available on the off island circuit over the 7/8 cable are clearly inadequate, but operators have the option of using the HUGO cable, where margins are in line with the other products. The margins available on the on island products are 18% over two years and 16% and 17% over three years. We note from the Frontier Report that in four of the countries used for the Frontier benchmark used a retail minus method of price control, as shown below.

Table 5.2: Retail minus price controls on leased lines

Country	Retail minus discount
Cyprus	-20%
Ireland	-8%
Portugal	-26%
Singapore	-30%

Source: Frontier Economics. A review of wholesale leased line pricing in the Bailiwick of Guernsey. January 2007 Annex 1

With the exception of Ireland, the discounts used are over 20%, and this is in line with retail minus controls used by other countries in other services (for example, bitstream).

Regulaid view: based on these figures, we believe that the use of two and three year discounts for on island 2 Mb services do not leave OLOs a sufficient profit margin. OUR has recently announced a revised price control, which includes leased lines that come into effect April 2008, and we make three recommendations in section 8.6 to correct the margin squeeze occurring in the on-island term discounts.

5.3 Systems issues

5.3.1 Different systems

When we started our work, one of our major concerns was that C&WG may be following the practice of some other incumbent operators of running different provisioning and ordering systems for retail and wholesale staff, leading to different timescales and quality of service and thus a major source of discrimination. We were assured that in fact for the ordering, provisioning and repair of leased lines and bitstream services orders from both retail and wholesale customers were processed through the same systems. It was therefore difficult to distinguish between orders for wholesale and retail staff, and that in practice discrimination did not take place.

However we noted that the product codes used by C&WG distinguish between wholesale and retail customer by the use of the prefix "W". We suggest that it should stop as it enables provisioning staff to discriminate between retail and wholesale customers, if they so wished.

Regulaid view: We note that the same systems were used for retail and wholesale staff and this avoids a source of discrimination. However we think that the use of separate product codes for identical wholesale and retail products should be stopped.

5.3.2 Access to systems

Another major concern was that staff responsible for retail customers could have access to orders from wholesale customers through the ordering and provisioning system. This opens up the possibility that they could use this information to gain advantages in competing for the OLOs' customers, for example by identifying who the customers are, what services they are using, or the start dates (and hence end dates) of their contracts.

Indeed C&WG accepted that staff from the retail sales department could access information about wholesale orders, and this was demonstrated to us. We were assured that this information was never misused. Our benchmarking work shows that this is not an acceptable practice in other operators, and that security checks, such as password protection, are implemented to prevent this occurrence. As Case Study 5.3 below shows, control of information availability to prevent inappropriate use and ensure that OLOs have the same access to appropriate information as an incumbent's own retail arm, is an issue that incumbent operators have to take seriously if they are to avoid substantial fines.

Regulaid view: It is unacceptable that C&WG's retail staff have access to information about wholesale orders, and C&WG risks contravening Licence Condition 33 (which prevents the misuse of data which would place other operators at a disadvantage). As C&WG is aware of the issue, it should have taken steps to prevent access some time ago, and this should be done as a matter of priority. We make this one of our recommendations (section 8.9).

5.4 Structure of wholesale

5.4.1 Staff resources for wholesale

At present there is one member of staff responsible for carrier services, and his responsibilities also include a provisioning team. As a result C&WG has no one position which is solely responsible for wholesale customers.

Regulaid view: We believe that as a result of our investigations this is a major issue. While we have no doubt that this arrangement results in an efficient use of staff, we believe that it may be one of the main causes of the problems found between C&WG and the OLOs. It results in a lack of resources for the building of good relationships with wholesale customers, for identifying opportunities for increasing wholesale sales, or for providing services above the minimum required by regulatory or contract requirements – all issues that we discuss in detail in section 4. A position dedicated to wholesale will be an important step in moving C&WG to a commercial culture with respect to its wholesale customers. It will also save resources expended in other parts of C&WG on resolving the arguments and disputes generated by poor relationships with the OLOs.

This position should only be concerned with Guernsey wholesale relationships as this will avoid the additional complexity in relationships caused by the "Jersey factor" (see section 3.3).

We do recognise that C&WG is a small organisation with a relatively low level of wholesale sales, but note that all of our benchmark operators, two of whom are of a similar size to C&WG, have dedicated wholesale staff positions. We make an appropriate recommendation in section 8.8.

5.4.2 Reporting lines for the wholesale staff

At present the position responsible for carrier services reports to the Director of Customer Operations, and this clearly makes sense for the provisioning responsibilities.

The options would be to have this post reporting to the commercial department or to the legal and regulatory department. We believe that it would be inappropriate for wholesale to report to the commercial department, which is dominated by retail sales. Not only would the opportunities for the leakage of information about wholesale customers be greatly increased, but the wholesale staff would be beset by the conflicting day to day interests of the retail and wholesale functions.

If the function reports to the legal and regulatory department, the legalistic approach to wholesale customers would be reinforced. In terms of the evolution described in section 3, we believe that this would be a retrograde step. It would not result in a more flexible or customer friendly approach than before.

We were struck by the results of our benchmarking work, which demonstrated that in three out of four of our benchmarking countries, the wholesale department is part of the network department. The exception is Jersey, where wholesale is part of the Corporate Affairs Department, which reports to the Director of Finance. As wholesale departments consist of only a few staff, a standalone department is not feasible, and there are close links between wholesale and provisioning staff.

Regulaid view: We believe that the position responsible for carrier services should continue to report the Director of Customer Operations.

5.4.3 Reward systems

In order to reduce the temptation to discriminate between wholesale and retail customers, incumbent operators have had to review their reward structures, and in particular whether their wholesale and provisioning staff are rewarded according to the performance of the retail business. If they are, they would be acting rationally if they favoured the retail customers over wholesale customers, because retail customers provide a larger source of revenues than wholesale customers.

In C&WG all staff receive a bonus based on the total revenues of the company and on the results of a customer satisfaction survey. In addition retail sales staff have a target related bonus. At present C&WG has about 3% of its revenues from wholesale customers. While the survey may include wholesale customers, they are heavily outweighed by the number of retail customers. Hence the existing reward system encourages staff to favour retail customers.

Our benchmarking shows that practice does vary between operators. In one, half of the bonus is based on overall company performance (eircom), and in two is based solely on the performance of the group in which the wholesale department is located (Faroe Islands and KPN). In Jersey the only staff to receive bonuses are retail sales staff.

Regulaid view: The present reward system in C&WG is biased towards retail customers, and encourages discriminatory behaviour by staff. C&WG should overhaul its reward system for wholesale and customer operations staff, making the bonuses dependent only on their own performance.

5.5 *Information*

5.5.1 Meetings between OLOs and C&WG

In the C&WG leased line agreement there is a commitment for C&WG and the OLO to meet quarterly (clause 2.1.2 of Schedule 2). The agenda should include:

- action points from last meeting;
- service performance report;
- trends;
- consequences of performance last quarter;
- handled escalations including preventative and scheduled;
- major changes;
- agreement on action points for next meeting; and
- date of next meeting.

There is a similar clause in the wholesale high speed internet agreement (clause 2.1.2 of Schedule 4).

We understand from the OLOs and C&WG that these meetings do not take place, mainly because the OLOs never request them.

Regulaid view: We believe that the lack of these regular formal meetings is one cause of the distrust that we found between C&WG and the OLOs. Without them, the opportunities to resolve issues directly and to develop better communication channels are lost. We address this further in our recommendations (section 8.7).

5.5.2 Publication of key performance indicators

In the wholesale leased line agreement, C&WG is also committed to providing service reports each quarter (clause 2.1.1 of Schedule 2). They should cover:

- ordering and provisioning performance for each leased line ordered
- cancelled circuits
- faults during the period and a statistical analysis
- scheduled maintenance
- emergency maintenance

A similar report is required under clause 2.1.1 of Schedule 4 of the wholesale high speed internet agreement.

We understand from the OLOs and C&WG that these reports are not distributed, nor requested by the OLOs.

Regulaid view: We note from our benchmarking work that some operators are required to produce key performance indicators showing the provisioning and fault repair performance, separated by retail and wholesale customers. We believe that this is important to provide transparency of performance, and allows OLOs to see whether or not discrimination is taking place. We think that the production and publication of such statistics on C&WG's website is desirable, and make suitable recommendations (section 8.2).

Case study 5.3: The Use of Information Products

Ordering systems and databases should be well protected against unauthorised use. But sometimes access to information from these systems is necessary for doing business in an efficient way. In the Netherlands there has been a non-discrimination case about the use of and access to this kind of information.

In December 2002 Dutch NRA OPTA, found out that the retail ADSL department of KPN had access to the following information:

- A general database containing information that was useful for the ADSL ordering and provision process
- Access to four KPN systems that included infrastructure information

The kind of information that was used by the ADSL organisation was information on the exact data needed for MDF Access ordering, for example the exact combination of postal code, house number and phone number. With the database they would be able to check if this information was correct before ordering, or correct it after an order was rejected.

KPN was fined 340.000 EUR (later reduced to 240.000 EUR by the court*) because there were no equivalent facilities for the competitors of KPN (MDF Access service takers) available, that could be used to get access to the same information. OLOs were only given the possibility to call a helpdesk to solve their ordering problems during the period of discrimination.

KPN solved this problem by introducing MDF Information Products. With these products OLOs – but also KPN internally – could demand certain information via website or XML B2B connection (for high volumes) directly from the KPN systems and installed bases, without accessing other – not needed - information.

In KPN's Wholesale Broadband Access offer the use of information products is included. The offer contains the following information products that use the underlying MDF Info Products.

1. Postal code validation: Checks if address is covered by network;
2. Local Loop Length: Checks if and with what speed a connection can be delivered on the address;
3. Order Data Validation: Checks the input for the order against information in the systems of KPN for all obligatory info for the order. (Service ID, Line Type, Phone number etc.);
4. Infrastructure check: Checks what infrastructure is available on an address (ADSL, VDSL or Fiber).

For more information on the different info products for MDF Access see: http://www.kpn-wholesale.com/nl/1671-MDF_Info_Products.html

* LJN: BB4250, College van Beroep voor het bedrijfsleven , AWB 05/579; http://zoeken.rechtspraak.nl/resultpage.aspx?snelzoeken=true&searchtype=ljn&ljn=BB4250&u_ljn=BB4250

6. Performance analysis and issues

6.1 Delivery of leased lines

C&WG provided us with data on the time taken to deliver leased lines to wholesale and retail customers for the period January – December 2007. We have split the data into 2 Mb lines and above 2 Mb leased lines, reflecting C&WG's different target delivery dates, which are shown below. All our analysis is based on the time taken to deliver the leased line, including testing, from the date when the order was received by C&WG.

Table 6.1: C&WG delivery targets (business days)

Type of line	Retail	Wholesale
Analogue leased lines	20	95% within 20
Digital 2 Mb and under	30	95% within 20
45 and 155 Mb	Project based	95% within 60
Ethernet	60	98% within 60

We note that the targets for retail and wholesale are different, with wholesale based on a percentage, and the delivery timescales for retail 2 Mb leased lines being greater than for wholesale leased lines.

6.2 2 Mb leased lines

6.2.1 Delivery against target

In Table 6.2 we show the percentage of leased lines that have been delivered after the target dates by quarter and for the whole of 2007. We have shown targets for both 20 and 30 days for the retail performance in order to make comparison with wholesale easier.

Table 6.2: C&WG delivery performance against target

	Jan - Mar 07	Apr - Jun 07	Jul - Sept 07	Oct - Dec 07	2007
Wholesale					
% missed target of 20 days	57%	20%	44%	0%	25%
Retail					
% missed target of 20 days	41%	11%	8%	0%	22%
% missed target of 30 days	24%	11%	8%	0%	15%
Total wholesale and retail lines installed	24	29	29	19	101

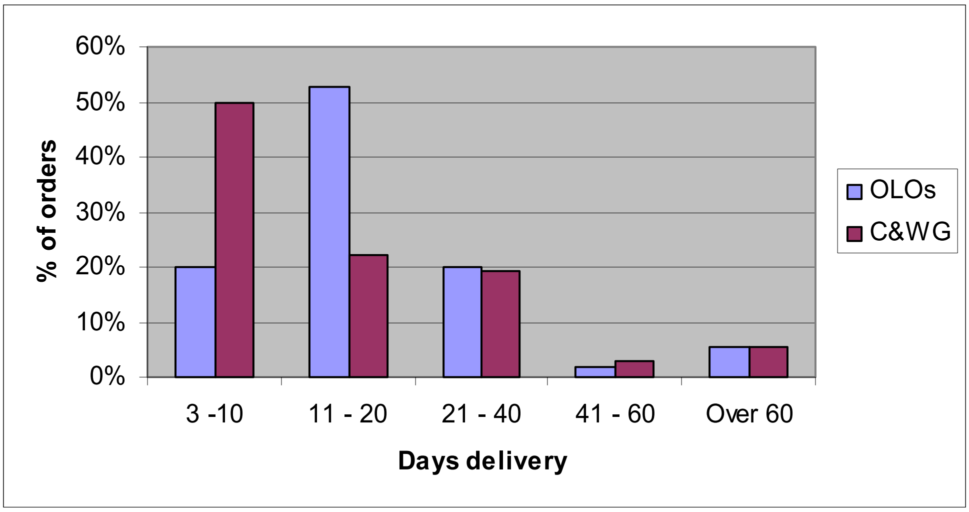
Regulaid view: we have some observations on this performance:

- with the exception of the last quarter, C&WG's performance is well below its targets;
- performance for retail customers is better than for wholesale customers, and this is particularly marked in the third quarter;
- C&WG's performance did improve in the last quarter, but this may simply be the result of the lower number of lines installed.

6.2.2 Time taken to deliver

The actual time taken to install lines is also important, and in Graph 6.3 we show the time period taken to install retail and wholesale leased lines. We have excluded from the analysis delivery dates of two days and under as we understand that these represent changes in billing and other administrative details rather than new deliveries.

Graph 6.3: Time taken to install leased lines (business days)



As the graph shows, about half of C&WG's retail leased lines are installed within ten days of the order being received, whereas about half of the wholesale leased lines are installed later (11 to 20 days).

Regulaid view: We discussed our analysis (as shown in sections 6.2 and 6.3) with C&WG, and they stated that in May 2007 one of the OLOs had asked them not to provide circuits in advance of the ready for service date (which is usually the target date in Table 6.1), unless by prior arrangement. As a result C&WG delivered wholesale circuits close or on the target date, and this explains why wholesale circuits are delivered later than retail circuits. It mentioned that it would be willing to review this policy. The analysis above demonstrates that C&WG can provide a faster delivery service if required.

We asked the OLO to confirm this position, and they stated that this was not a correct interpretation of the request. They wished to ensure that they were aware of the date that the circuit would be installed in order to overcome the problems experienced when they were not being informed when a circuit was handed over.

We examined the delivery data to see whether the request of May 2007 had resulted in any changes in the pattern of leased line delivery during 2007. Although we are dealing with small numbers, the data shows that:

- the delivery patterns for the particular OLO are similar before and after May 2007, with the majority of lines being delivered within 11 – 20 days;

- in the periods before and after May 2007 C&WG's retail customers received faster deliveries than the OLOs, with about half being delivered in 10 days or less;
- the other OLOs received the same delivery pattern of "just in time" delivery as the operator making the request, with the majority being delivered in 11 – 20 days.

We asked the OLOs about C&WG's delivery timescales, and they stated that:

- often the timescale for the delivery of leased lines by C&WG is the limiting factor in supplying service to the customer, especially if the OLOs themselves supply part of the leased line on their own networks;
- OLOs want a significant reduction in C&WG's delivery targets so that they can give a better service to the customers, and start billing customers sooner;
- customers increasingly require leased lines with faster speeds than 2 Mb, and the 60 days delivery timescale for these circuits is particularly problematic;
- OLOs would therefore value deliveries that are sooner than the ready for service dates given by C&WG as this enables them to give a better service to the customer.

These views run counter to C&WG's interpretation of the request, and the OLOs are clearly dissatisfied with the current performance of C&WG.

We find it difficult to accept C&WG's stated reason for the pattern of delivery, and think that there is clear evidence here of discrimination in favour of C&WG's own retail arm. This would be a contravention of Licence Condition 29.1, which forbids unfair discrimination against an OLO.

6.2.3 Delivery timescales and exceptions

We are aware that in some circumstances long lead times for leased lines can be justified, for example when a new fibre route has to be installed, or when the customer has requested a long time scale, as can happen when it is to a building under construction. We have therefore analysed the data, removing both the very short time periods (2 days and under, which are administrative changes) and delivery timescales over 50 days. We show the results below by quarter.

Table 6.4: Average delivery times (business days)

	Jan - Mar 07	Apr - Jun 07	Jul - Sept 07	Oct - Dec 07	2007
Wholesale					
Number of lines installed	7	20	16	17	60
Average all lines	51.00	16.85	21.00	13.94	21.11
Average excluding 2 days and under	51.00	19.65	23.86	14.63	22.95
Average excluding 2 days and under and 50 days and over	23.00	19.65	15.17	14.63	17.02
Retail					
Number of lines installed	17	9	13	2	41
Average all lines	18.29	20.00	17.08	8.50	13.89
Average excluding 2 days and under	19.44	25.57	20.00	8.50	20.19
Average excluding 2 days and under and 50 days and over	19.44	11.50	12.80	8.50	14.39
Difference					
Average all lines	2.79	0.84	1.23	1.64	1.52
Average excluding 2 days and under	2.62	0.77	1.19	1.72	1.14
Average excluding 2 days and under and 50 days and over	1.18	1.71	1.18	1.72	1.18

In the last three lines we show the difference between the wholesale and retail averages – ratios above 1.0 show that wholesale performance is worse than retail, and ratios of below 1.0 show that they are better. Apart from in the second quarter, wholesale performance is worse than retail performance, especially in the first and third quarters. If we remove the exceptions, wholesale customers had a worse delivery performance than retail customers by 18% in 2007.

We were supplied with data by some of the OLOs for the delivery of leased lines by C&WG, and this data supports our assessment of the C&WG data.

Regulaid view: our analysis of C&WG's data demonstrates that wholesale customers receive a much poorer delivery performance than C&WG's retail customers. We have not been provided with a convincing justification for this performance.

6.3 Leased lines above 2 Mb

6.3.1 Delivery against target

The delivery targets for C&WG's retail and wholesale customers are similar at 60 days (see Table 6.1). In the table below we show the percentage of orders that missed these delivery timescales.

Table 6.5: C&WG delivery performance against target

	Jan - Mar 07	Apr -Jun 07	Jul - Sept 07	Oct - Dec 07	2007
Wholesale	0%	14%	40%	0%	23%
Retail	0%	6%	25%	0%	11%
Total lines installed	9	24	25	6	64

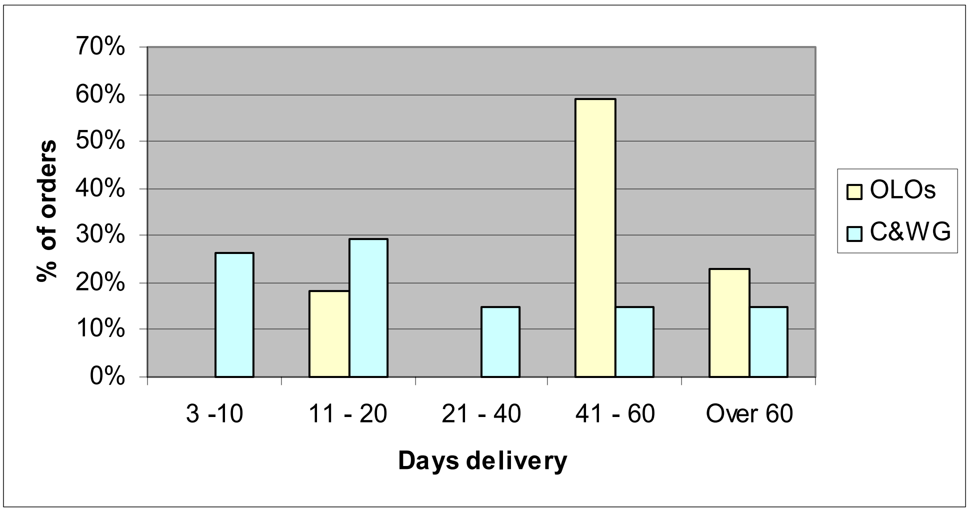
In the first and last quarters C&WG met all its delivery targets, perhaps reflecting the low number of orders, and failed substantially in the third quarter. In the second and third quarters a greater proportion of wholesale orders missed their targets than retail customers.

Regulaid view: the performance for the first and last quarters was satisfactory, but the picture for the second and third quarters repeats the performance we found for 2 Mb lines of missed targets and much worse performance for wholesale customers.

6.3.2 Time taken to deliver

In Graph 6.6 we show the time taken to deliver leased lines above 2 Mb during 2007.

Graph 6.6: Time taken to install leased lines (business days)



As the graph shows, almost 60% of retail leased lines are delivered within 20 days, but the majority of wholesale leased lines are delivered within 40 to 60 days.

Regulaid view: The performance for leased lines over 2 Mb is similar to that for 2 Mb lines, with longer delivery target for wholesale customers.

6.3.3 Delivery timescales and exceptions

In Table 6.7 we repeat the analysis we carried out in section 6.1.3 for the higher speed leased lines, showing the average time taken to deliver lines, and the averages with the exceptionally short and long delivery times excluded.

Table 6.7: Average delivery times (business days)

	Jan - Mar 07	Apr - Jun 07	Jul - Sept 07	Oct - Dec 07	2007
Wholesale					
Number of lines installed	2	7	10	3	22
Average all lines	31.50	49.43	61.30	38.00	51.64
Average excluding 2 days and under	31.50	49.43	61.30	38.00	51.64
Average excluding 2 days and under and 50 days and over	31.50	43.00	61.30	38.00	49.90
Retail					
Number of lines installed	7	17	15	3	42
Average all lines	14.57	13.82	39.87	13.67	23.24
Average excluding 2 days and under	20.20	16.79	46.00	20.00	27.83
Average excluding 2 days and under and 50 days and over	20.20	11.15	42.92	20.00	24.27
Difference					
Average all lines	2.16	3.58	1.54	2.78	2.22
Average excluding 2 days and under	1.56	2.94	1.33	1.90	1.86
Average excluding 2 days and under and 50 days and over	1.56	3.86	1.43	1.90	2.06

As our analysis in the last three lines of Table 6.7 shows, delivery performance for wholesale customers is much worse than for retail. While the value of the analysis for each quarter is reduced because of the low number of lines installed in the first and last quarters, this picture is sufficiently consistent.

Regulaid view: the analysis of the higher speed leased lines confirms our conclusions about the 2 Mb leased lines.

6.4 Bitstream

6.4.1 Benchmarking bitstream

As explained in section 2.3, we benchmarked C&WG's performance on the provision of bitstream services, which is C&WG's wholesale equivalent of broadband services provided to residential and small business customers.

C&WG's delivery targets for wholesale and retail customers for bitstream and broadband services are shown below.

Table 6.8: C&WG delivery targets (business days)

Type of line	Retail	Wholesale
Broadband / bitstream	10 days	95% in 10 days

6.4.1 Delivery against target

C&WG met its delivery targets for its wholesale bitstream service during 2007, and missed its target for retail broadband services for 3% of orders. As Table 6.9 shows, wholesale customers received a better performance than retail customers.

Table 6.9: C&WG delivery performance against target

	Jan - Mar 07	Apr -Jun 07	Jul - Sept 07	Oct - Dec 07	2007
Number of lines	1693	1254	1365	1421	5733
Wholesale	2%	0%	0%	0%	1%
Retail	2%	2%	3%	3%	3%

Regulaid view: This performance is satisfactory, and contrasts with the poor performance for leased line delivery (see sections 6.2.1 and 6.3.1).

6.4.2 Time taken to deliver

In Graph 6.10 we show the delivery of bitstream and broadband services by the number of days after the order was received by C&WG that the service was delivered. C&WG advises us that deliveries of two days and under are probably changes in billing and other customer information. Ignoring these, the pattern of delivery is very similar for wholesale and retail customers.

Graph 6.10: Time taken to install bitstream and broadband services (business days)

Regulaid view: there is no evidence of discrimination in the supply of broadband services to wholesale and retail customers.

6.4.3 Delivery timescales and exceptions

As with the leased lines, we have calculated the average delivery times for all bitstream and broadband lines during 2007, along with the averages excluding the short timescales (which are changes in administrative details) and long timescales (which may represent requirements for new access lines or problems in accessing customer premises). We show this information below.

Table 6.11: Average delivery times (business days)

	Jan – Mar 07	Apr - Jun 07	Jul - Sept 07	Oct - Dec 07	2007
Wholesale					
Number of lines installed	299	198	225	359	1081
Average all lines	3.40	4.61	3.67	4.46	3.81
Average excluding 2 days and under	4.58	4.69	4.48	4.98	4.64
Average excluding 2 days and under and 50 days and over	4.41	4.69	4.48	4.98	4.64
Retail					
Number of lines installed	1394	1056	1140	1062	4652
Average all lines	3.52	3.16	3.66	4.47	3.87
Average excluding 2 days and under	4.92	5.14	5.16	5.45	5.27
Average excluding 2 days and under and 50 days and over	4.82	4.85	5.02	5.39	4.81
Difference					
Average all lines	0.97	1.46	1.00	1.00	0.98
Average excluding 2 days and under	0.93	0.91	0.87	0.91	0.88
Average excluding 2 days and under and 50 days and over	0.92	0.97	0.89	0.93	0.96

This table also shows that there is no discrimination between retail and wholesale customers. In the last three lines we calculate the ratio between the averages for retail and wholesale customers, and a number below 1.00 indicates that the average for wholesale customers is better than for retail. For all quarters except the second quarter, all the ratios are at 1.00 or below, indicating that wholesale customers received a better delivery average than retail customers.

Regulaid view: There is no evidence that C&WG practises discrimination between retail and wholesale customers for the delivery of bitstream and broadband services, and this is in contrast to the performance on leased lines.

7. Benchmarking

7.1 Process

As part of our remit, we carried out a benchmarking of C&WG's performance against five other incumbent operators. We compared its processes and targets for:

- ordering and delivery timescales;
- penalties for missing delivery timescales;
- provision of an expedite service;
- fault repair times;
- penalties for missing fault repair timescales;
- circuit availability and penalties for failures to meet this target.

for both the provision of leased lines and bitstream services. We also compared the contracts used by C&WG for its retail and wholesale leased lines and bitstream services, using the same measures, in order to see whether there was any discrimination between retail and wholesale customers in the contractual terms.

In the last part of the benchmarking exercise, we interviewed the operators to discuss the steps they had taken to avoid accusations of discrimination.

We show in Table 7.1 the operators we used for the benchmark, along with some key statistics to enable a comparison of their relative sizes.

Table 7.1: Benchmarking countries

Name of operator	Country	Population	No of incumbent fixed lines	No of employees in incumbent operator
C&WG	Guernsey	66,000	41,000	210
Belgacom	Belgium	10,456,000	5,156,000	18,000
Faroese Telecom	Faroe Islands	48,300	19,000	200
Jersey Telecom	Jersey	88,200	71,500	440
eircom	Ireland	4,209,000	2,222,000	7,000
KPN	Netherlands	16,371,000	4,662,000	18,000

As the number of jurisdictions of a similar size and stage of economic development as Guernsey are limited, we selected two operators of a similar size (Faroe Islands and Jersey), and three larger operators (Belgium, Ireland and the Netherlands), which are still small in comparison to other European countries. We had hoped to include Malta in the benchmark, but Maltacom was not willing to assist us. Belgacom was unwilling to give us an interview to discuss non-discrimination issues. As Faroese Telecom does not publish any targets for performance, we have not been able to include these in the leased line or bitstream benchmarks.

We recognise that it is impossible to choose countries for a benchmarking exercise that are exact replicas of the benchmarked country, but believe that the countries we selected give a guide to good international practice as a result of regular intervention by the NRA, and what is practicable in a small country.

7.2 Leased line benchmark

7.2.1 Ordering and delivery service

In Table 7.2 we show the commitments in the wholesale leased line contracts, firstly, for acknowledging receipt of the order from the OLO, and then for giving a date when the leased line will be delivered (ready for service date). All time periods are measured from when the order is received by the incumbent operator.

Table 7.2: Time periods for order acknowledgement and RFS date (business days)

Operator	Order acknowledgement	RFS date confirmation
C&WG wholesale	2	5
C&WG retail	2	5
Belgacom	2	2
eircom	2	13
Jersey Telecom	2	2
KPN	3	na

While C&WG's timescale for order acknowledgement is the same as for the other operators, the confirmation of the RFS date is slower than in Belgium and Jersey, and faster than in Ireland.

In the following table we show the targets for the delivery of leased lines, as measured from the date of order receipt.

Table 7.3: Leased line delivery targets (business days)

Operator	Circuits of less than 2 Mb	2 MB	Greater than 2 Mb
C&WG wholesale	95% in 20	95% in 20	95% in 60
C&WG retail	30	30	60
Belgacom	10	10	10
eircom	22	26	TBA
Jersey Telecom	95% in 10	95% in 10	95% in 15
KPN	20	25	25

This comparison reveals three important points:

- C&WG's delivery timescales for leased lines of 2 Mb and under are in line with eircom's and KPN's, but twice those of Belgacom and Jersey Telecom;
- as noted in section 6.1, retail targets for leased lines of 2 Mb and under are worse than for wholesale;
- the target delivery dates for leased lines over 2 Mb are badly out of line with the benchmarks, and at 60 days are at least double the next nearest operator (KPN).

Regulaid view: we believe that C&WG should review its leased line ordering and delivery processes, and make substantial changes in its processes in order to improve the ordering and delivery targets. C&WG should be able to achieve the following:

- OLOs should be informed of the RFS date at the same time as the order acknowledgement;
- the targets should be for 100% of orders, with the exception of orders that require the installation of new fibre;
- circuits of 2 Mb and under should be delivered in 10 business days;
- circuits of over 2 Mb should be delivered in 15 business days.

The long delivery timescales, especially for the high speed lines, was a source of criticism by the OLO (see section 4.3), and our analysis of delivery data (sections 6.2 and 6.3) showed that even these relaxed delivery targets were not being met during 2007. This area of poor performance clearly needs significant attention from C&WG senior management.

7.2.2 Penalties for missing delivery dates

In their service level agreements, the incumbent operators publish the penalties they will pay if the delivery timescales set out in Table 7.3 are missed. The penalties are shown in Table 7.4. As the structure of fees varies between the operators, we have chosen three periods of delay – 5, 10 and 20 days after the target date. With the exception of Jersey Telecom, where a fixed penalty is paid whatever the length of delay, the penalties are calculated on the basis of the monthly rental payment.

Table 7.4 Penalties for missed leased line deliveries (as % of monthly rental fees)

Days delay	**5**	**10**	**20**
C&WG wholesale	2%	2%	2%
C&WG retail	25%	50%	100%
Belgacom	25%	50%	100%
eircom	25%	50%	100%
Jersey Telecom	£50	£50	£50
KPN	0%	100%	100%

Three important points emerge from this table:

- C&WG's penalties for retail customers are substantially greater than for wholesale customers;
- C&WG's wholesale penalties are paltry in comparison to the benchmarks;
- C&WG's penalties are the same whatever the period of delay – with the exception of Jersey Telecom, the penalties paid by the other operators increase with the period of delay.

Regulaid view: The penalties in C&WG's wholesale contract give us considerable concern. Not only are they much lower than the benchmarks, but they give an incentive to C&WG to deliver retail leased lines more quickly than wholesale, and provide no incentive to the company to deliver the lines faster, once the delivery date has been missed. The structure and level of penalties for leased line delivery should be substantially revised, and we make appropriate recommendations (section 8.3).

7.2.3 Fault repairs

In Table 7.5 we show the time taken to repair a fault on a leased line. The targets usually differ between faults that prevent the service from operating (service affecting) and those which enable the service to continue functioning, albeit with a lower quality of service (non service affecting). The targets are the time periods after the fault has been logged by the incumbent operator, either following notification by the customer or OLO, or from an automatic alarm.

Table 7.5: Leased line fault repair targets (business hours)

Operator	Service affecting	Non service affecting
C&WG wholesale	6	24
C&WG retail	8	72
Belgacom	3	72
eircom	3	na
Jersey Telecom	8	24
KPN premium A	8	na
KPN premium B	2	na

C&WG's targets are in line with the benchmarks.

Regulaid view: the benchmarks above, and the lack of any complaints about the timescales for fault repairs, show that C&WG's performance in this area is acceptable.

7.2.4 Fault repair penalties

As with the leased line delivery penalties, the structure of penalties for missing the targets shown in Table 7.5 vary from operator to operator. We have therefore selected three time periods - 1, 5 and 10 hours delay after the target period to repair a service affecting fault, and shown the penalty to be paid as a fixed fee or as a percentage of the monthly rental.

Table 7.6: Penalties for delays in fault repairs (as % of monthly rental fees)

Hours after target	1	5	10
C&WG wholesale	0%	20%	50%
C&WG retail	10%	15%	20%
Belgacom	10%	20%	30%
eircom	250 euros	250 euros	250 euros
Jersey Telecom	20%	20%	25%
KPN	0%	100%	100%

In this case, C&WG's wholesale penalties are generally in line with the benchmarks, and are indeed better than the penalties paid to retail customers (except for the one hour delay).

Regulaid view: we have no concerns in this area, but have general recommendations on the wider issues of penalties in section 8.3.

7.3 Bitstream benchmark

7.3.1 Ordering and delivery service

In Table 7.7 we show the period between the receipt of the bitstream order by the incumbent operator, and the order acknowledgement being sent to the OLO.

Table 7.7: Time periods for order acknowledgement and RFS date (business days)

Operator	Order acknowledgement	RFS date confirmation
C&WG wholesale	2	none
C&WG retail	none	none
Belgacom	5	5
eircom	same day	none
Jersey Telecom	2	none
KPN	4	none

C&WG's time period for acknowledging the order is better than two of the benchmarking operators (Belgacom and KPN).

In the following table we show the time period between the receipt of the order and the delivery of the bitstream line.

Table 7.8: Bitstream delivery targets (business days)

Operator	Days after order input
C&WG wholesale	10
C&WG retail	10
Belgacom	10
eircom	10
Jersey Telecom	4
KPN	90% in 11 days

Again the bitstream delivery timescales are in line with the benchmarking countries, with the exception of Jersey Telecom which has a four day delivery target.

7.3.2 Penalties for missing delivery dates

The penalties paid by the incumbent operators for missing the bitstream delivery targets are even more varied than for leased lines, as shown below.

Table 7.9: Penalties for missed bitstream deliveries (as % of monthly rental fees)

Days delay	5	10	20
C&WG wholesale	2%	2%	2%
C&WG retail	x 5	x 10	max £100
Belgacom *	50 euros	100 euros	200 euros
eircom **	50% of connection charge	50%	100%
Jersey Telecom ***	£50	£50	£50
KPN ****	none	none	none

*except first 5% of orders to miss target

** not payable if 90% of orders are within target

*** business customers only

**** KPN bitstream services with high contention ratios are not regulated

As with the leased line penalties, C&WG's penalties are minimal (the value at the present bitstream prices range from £0.32 to £1), and the retail penalties are substantially greater. These range from £74.95 for 5 days delay in the delivery of the pay-as-you-go line, and the cap of £100 applies to the faster lines.

Regulaid view: we repeat our observations on the penalties for leased lines (section 7.2.2) about the discriminatory effects of the difference between wholesale and retail penalties, the lack of incentives to deliver once the delivery date has been missed, and the very low levels of penalties. All these comments apply equally to the bitstream penalties.

7.3.3 Fault repairs

In Table 7.10 we show the targets for repairs in bitstream lines, measured after the fault report has been logged by the incumbent operator. Both KPN and Belgacom offer a basic and an enhanced fault repair service (for the payment of a suitable fee).

Table 7.10: Bitstream fault repair targets (business hours)

Operator	Service affecting	Non service affecting
C&WG wholesale	12	36
C&WG retail	end of next working day	na
Belgacom basic	end of next working day	na
Belgacom improved	6	na
eircom	response in 4 hours	na
Jersey Telecom	15	none
KPN premium A	80% in 2 working days	na
	99% in 4 working days	na
KPN premium B	80% in 1 working days	na
	99% in 4 working days	na

As with the leased line fault repairs, C&WG's bitstream fault repair targets are in line with international practice. Although C&WG's retail and wholesale targets are expressed in different terms, we do not think that in practice the difference is significant.

Regulaid view: we have no concerns in this area.

7.3.4 Fault repair penalties

In the table below we show the penalties that the incumbent operator will pay if the targets in Table 7.10 are missed. We have used period of 1, 5 and 10 hours delay after the fault has been logged. As C&WG pays its retail customers one month's rental for every day that the broadband service is not available, this does not appear in the table below.

Table 7.11: Penalties for delays in fault repairs (as % of monthly rental fees)

Hours after target	1	5	10
C&WG wholesale	0%	5%	10%
C&WG retail *	0%	0%	0%
Belgacom **	150%	150%	200%
eircom	penalties relate to availability targets		
Jersey Telecom	50%	50%	70%
KPN	none	none	none

*one month rental for every full day without service

** improved SLA only

Again C&WG's penalties are much lower than the international benchmark (except KPN). The penalties available to C&WG's wholesale and retail customers are structured differently, and while the retail customers receive no compensation if the delay is less than a day, they receive a much greater compensation than wholesale customers if the delay is greater than one day.

Regulaid view: the level of penalties is too low, and the penalties are more favourable to retail customers than to wholesale customers.

7.4 Non discrimination practices

7.4.1 Structure of wholesale department

We asked about the department in which the staff responsible for sales to wholesale customers were placed. We show this information along with the number of staff responsible for wholesale sales and relationships, in Table 7.12.

Table 7.12: Wholesale departments

Operator	Structure of wholesale	No of wholesale staff
C&WG	Customer operations	0.5
Faroese Telecom	In separate network company	3
eircom	Network and wholesale	140
Jersey Telecom	Corporate Affairs	2
KPN	Wholesale and operations	na

At present C&WG's carrier services function reports to the Director of Customer Operations, and this is in line with the practice in three of the other operators. As we discuss in section 5.4.2, we believe that this makes good sense. We have commented on the need for a position which is dedicated solely to C&WG's wholesale activities in section 5.4.1.

We were interested to learn that Faroese Telecom, which is smaller than C&WG, had successfully separated its retail operations from its network and wholesale operations, creating two separate companies under the same ownership. We set out more detail of this in Case Study 7.12.

Regulaid view: the benchmark supports the views we expressed in section 5.4.2.

Case Study7.13: Separation in Faroese Telecom

In 2002 the Government of the Faroe Islands decided to privatise the incumbent operator, Føroya Tele, and it established a review group to recommend the best organisational structure. This group consisted of representatives from the government, Fjarskiftis Eftirlitið (the national regulatory authority), Føroya Tele, and the new entrants, who had been complaining that Føroya Tele had been discriminating against them in providing access to its fixed network. This group could not agree on a solution, and proposed three different ways forward. In 2005 the government adopted another solution, which was proposed by Føroya Tele, as follows:

- a network company (FT Net) to control the access and trunk networks for both fixed and mobile networks and to sell services to wholesale customers;
- a services company (FT Communications) to control services provided over the network and to sell services to retail customers;
- a holding company (Føroya Tele) providing common services.

The logic underlying this structure is that the network company provides the essential facilities (which other operators cannot duplicate), while the services company provides facilities which the other operators can replicate. Hence switches, mobile base station controllers and access to the internet is the responsibility of the services company; main distribution frames, DSLAMs, and base stations are the responsibility of the network company. There are about 70 staff in FT Net (with three persons responsible for wholesale) and about 130 in FT Communications.

Both companies are subsidiaries of Føroya Tele, and the three companies have separate boards and chairmen. Representatives of the wholesale customers have a seat on the network company's Board. FT Net now has formal contracts with FT Communications and Føroya Tele for provision of network services.

This form of separation is regarded as a success. It has simplified the business and provided more focus in both the network and the services companies. There are fewer complaints about discrimination, and these now concern only the services company, such as bundling issues. The main disadvantage was a loss of morale as previous colleagues became more suspicious of each other's new roles, but efforts are now being made to create a more corporate culture. No major costs were incurred, although the split did consume a good deal of staff time and energy.

7.4.2 Separation of retail and wholesale information

In addition to using organisational structure to reduce discrimination, operators can also ensure that retail and wholesale staff have minimal informal contact by placing them in different buildings. They can also structure their IT systems so that retail staff cannot access information about wholesale orders and provisioning. In Table 7.14 we show the practice in the benchmarking operators.

Table 7.14: Physical and IT systems separation

Operator	Are wholesale and retail staff in different buildings?	Does IT system prevent retail staff accessing wholesale orders?
C&WG	Yes	No
Faroese Telecom	No	Yes
eircom	Yes	Yes
Jersey Telecom	No	Yes
KPN	Yes	Yes

C&WG has its wholesale and retail staff in different buildings, and as the table shows, the other smaller operators (Faroese Telecom and Jersey Telecom) have not been able to implement this. C&WG does differ from the other operators, all of which prevent retail staff having access to wholesale orders by controls built into their IT systems.

We have expressed our concern about this serious issue in section 5.3.2 and we recommend that it is addressed as a matter of priority in section 8.9.

Regulaid view: the benchmark supports the views we expressed in section 5.3.2.

7.4.3 Staff transfers and rewards

In some large incumbent operators, restrictions are placed on the transfer of staff between wholesale and retail department in order to minimise the flow of information between these departments (see Annex). We asked the benchmarking operators whether they had similar restrictions, and as Table 7.15 shows they do not.

Some incumbent operators have also stopped basing their bonus payments to their network and wholesale staff (wholly or in part) on the performance of retail revenues or customer satisfaction, in order to remove another potential reason for discrimination. As the table below shows, only KPN rewards its wholesale and operations staff wholly on their own performance, while eircom bases 50% of its bonus on individual performance.

Table 7.15: Staff transfers and bonus systems

Operator	Restrictions on staff transfers?	Wholesale staff bonuses
C&WG	No	Overall company revenues and customer satisfaction
Faroese Telecom	No	No bonuses paid
eircom	No	50% on company EBITDA, 50% on individual performance
Jersey Telecom	No	No bonuses paid
KPN	No	Wholesale and operations departmental performance

7.4.4 Codes of practice and regulatory training

In order to ensure that staff are fully aware of the importance of avoiding activities which lead to discrimination between retail and wholesale customers, several incumbent operators have produced Codes of Practice for distribution to their staff, and have carried out training programmes which explain the principles of regulation and the need for even-handedness when dealing with retail and wholesale customers. As Table 7.16 shows, most of the benchmarking operators, including C&WG, carry out these practices. Faroese Telecom felt that its restructuring into two separate companies was sufficient to make staff aware of the issues.

Table 7.16: Codes of practice and regulatory training

Operator	Code of practice?	Regulatory training?
C&WG	Yes	Yes
Faroese Telecom	No	Yes
eircom	Yes	Yes
Jersey Telecom	No	Yes
KPN	Yes	Yes

Regulaid view: C&WG follows the best practice of other operators with its regulatory handbook and codes of practice. However the problems we have uncovered in this report demonstrate that C&WG needs to take a more active compliance audit, for example into whether the delivery of leased lines is discriminatory (section 6.2 and 6.3), whether the contractual commitments for regular meetings with OLOs are carried out (section 7.4.5), and whether the retail and wholesale leased line contracts contain different terms and conditions (sections 7.2.2, 7.2.4, 7.3.2 and 7.3.4). We make a recommendation on this matter in section 8.10.

7.4.5 Liaison with operators

We also asked about the exchange of information about performance between the incumbent operator and the OLOs. In Table 7.17 we show:

- whether the incumbent operator holds regular meetings with the OLOs;
- whether the incumbent operator regularly sends the OLOs its key performance indicators (KPIs);
- whether the incumbent operator publishes its KPIs on its website.

Table 7.17: Regular liaison with OLOs

Operator	Regular meetings held with OLOs?	KPIs sent regularly to OLOs?	Are KPIs published?
C&WG	On request	On request	No
Faroese Telecom	Yes	No	No
eircom	Yes	Yes	Yes
Jersey Telecom	On request	Yes	No
KPN	Yes	na	No

Faroese Telecom does not produce any KPIs because it has not set any performance standards for leased lines or bitstream delivery or fault repairs. It is the usual practice to hold regular meetings with OLOs, and to send them KPIs showing performance against target.

eircom is the only benchmarking company to publish its KPIs on its website. It provides two measures of leased line delivery performance:

- percentage of orders delivered by the target due date for standard and non-standard delivery dates;
- the average number of working days taken to deliver leased lines.

The data is shown for leased lines under 2 Mb and for 2 Mb and over, Separate tables show the performance for all customers and for OLOs. The data is shown for both 100% of orders and for the 95 percentile. The information is shown for calendar months, and is updated monthly. We show a recent example in Table 7.18

Jersey Telecom produces KPIs showing leased line provisioning times, service disconnection times, and fault repair times, with targets, actual performance and any reasons for non-performance, for both its wholesale customers and retail customers. It sends this information to the OLOs and to the NRA (the Jersey Competition Regulatory Authority), but it is not publicly available.

As mentioned in sections 5.5.1 and 5.5.2, C&WG has commitments in its wholesale contracts to hold regular meetings and to provide its OLOs with performance data, but this only happens on request.

Regulaid view: the benchmarking supports the comments we made at the end of sections 5.5.1 and 5.5.2.

Table 7.18: eircom's leased line KPIs

Notes:
1) Delivery lead time is shown both for all digital orders delivered in a period and for the 95th percentile. i.e. For
2) Sub 2mb deliveries include digital circuits with transmission speeds of less than 2mb
3) The statistics provided in section 1 relate to orders from all customer types including, small and medium
4) The statistics provided in section 2 relate to orders from other licensed operators only..
5) Orders for interconnect circuits are not included in the statistics.
6) All statistics are presented in number of working days

Delivery Statistics for The Leased Line Market

Oct-07

	100% of orders			95% of orders		
Section 1: Total Market	Standard	Non Standard	Total	Standard	Non Standard	Total
Overall delivery lead time for digital leased lines ordered by all customers	16	31	23	16	29	22
- Sub 2mb delivery lead times for all customers	15	29	22	15	27	20
- 2mb delivery lead times for all customers	26	44	35	26	44	35
	100% of orders			95% of orders		
Section 2: Wholesale Market	Standard	Non Standard	Total	Standard	Non Standard	Total
Delivery Lead Time for digital leased lines ordered by OLOs	13	34	23	13	34	23
- Sub 2mb delivery lead times for OLO orders	13	23	16	13	23	16
- 2mb delivery lead times for OLO orders	0	44	44	0	44	44

Source:
http://www.eircomwholesale.ie/dynamic/pdf/Delivery%20Statistics%20for%20the%20leased%20line%20market%20I67.pdf

8. Key issues and recommendations

8.1 Introduction

In this report we have considered a large number of issues that have been brought to our attention by the OUR, the OLOs, our discussions with C&WG, and the benchmarking exercise. We have analysed them, and given our views on the substance and importance of the issue.

In Table 8.1 we show our list of the sixteen key issues, having excluded those where we believe that C&WG's position is justified, or the benchmarking exercise reveals that C&WG's practices are in line with the other operators. We have put them into nine groups, and in the rest of this section we summarise our findings and make our recommendations, along with a rationale for our recommendations.

Table 8.1: The key issues

Group	Key issue	Paragraph reference
Leased line delivery processes	Delivery timescales for leased lines	4.3.1, 4.5.2, 6.2.1, 6.2.2, 6.2.3, 6.3.1, 6.3.2, 6.3.3, 7.2.1
	Expedite service for leased lines	4.3.2
	Publication of KPIs	5.5.2, 7.4.5
Penalties	Penalties for poor performance	7.2.2, 7.2.4, 7.3.2. 7.3.4
Mandated wholesale products	Definition of mandated wholesale services	4.2.2
	Minimum term for upgrades	4.2.4
Price changes	Information about price changes	4.6.1
Price discounts	Term discounts on leased lines	5.2.2
Relationships between C&WG and OLOs	Better liaison between C&WG and OLOs	4.3.3, 4.5.1, 4.6.2
	Regular meetings between C&WG and OLOs	5.5.1, 7.4.5
C&WG wholesale champion	Lack of commercial wholesale orientation	4.2.1
	Dedicated wholesale position	5.4.1
	Reporting lines for wholesale position	5.4.2, 7.4.1
	Bonuses for wholesale and operational staff	5.4.3. 7.4.3
Information systems	Access to wholesale orders information	5.3.2, 7.4.2
Regulatory compliance	Compliance audit	7.4.4

8.2 Leased line provisioning processes

During 2007 C&WG failed to meet its targets for leased line provisioning, and provided a much better delivery service to its retail customers than its wholesale customers. It has not been able to produce a convincing argument for this performance. The target timescales, especially for the higher speed services, are much longer than for the other benchmarking operators. However C&WG is quite capable of providing a good service. It meets its targets for the delivery of its other main wholesale product, the bitstream service; no discrimination occurs in bitstream provision, and its delivery target is in line with other operators. This contrast highlights the poor performance on leased lines.

In our view the processes and practices used by C&WG for the ordering and delivery of leased lines must be radically overhauled in order to provide much better delivery targets and timescales. This should include the provision of an expedite service, with the extra costs being met by a charge. Given the importance of leased lines to the health of competition in Guernsey and to the Guernsey economy, this is a matter of considerable urgency.

In order to demonstrate that discrimination no longer takes place and to ensure that its delivery performance is monitored, C&WG should be required to publish KPIs on its public website and to send these to the OUR. These KPIs should show the performance on delivery timescales for the main wholesale products, and compare the performance for wholesale customers against performance for retail customers. So that the OLOs and the OUR have confidence in the figures produced by C&WG, C&WG's auditor would certify that the information shown in the KPIs is correct.

Recommendations

Leased line delivery

1. C&WG should overhaul its processes for the ordering and delivery of leased lines as a matter of urgency so that:

- OLOs are informed of the RFS date at the same time as the order acknowledgement;
- the targets should be for 100% of orders, with the exception of orders that require the installation of new fibre;
- all circuits of 2 Mb and under should be delivered in 10 business days with the exception of orders that require the installation of new fibre;
- circuits of over 2 Mb should be delivered in 15 business days, with the exception of orders that require the installation of new fibre.

Rationale: the complaints from OLO (sections 4.3.1, 4.5.2 and 6.2.2), our own analysis (sections 6.2 and 6.3) and the benchmarking work (section 7.2.1) show that C&WG needs to improve its performance on leased line delivery substantially.

Expedite service

2. C&WG should offer an expedite service to the OLOs and its own retail customers at a cost based charge.

Rationale: there is a market demand for such a service (see section 4.3.2). We understand that from time to time orders are expedited on an informal basis, and think that this should be formalised in order to reduce accusations of discrimination.

Publication of KPIs

3. C&WG should publish KPIs on its public website as follows:

- actual time taken to give OLO a ready for service date (as measured as the period between order reception and confirmation of ready for service date) as a quarterly average as against target;

- actual delivery times (as measured as the period between order reception and ready for service) as a quarterly average against the target for wholesale and retail customers,
- a graph showing the number of days taken to deliver for wholesale and retail customers;
- percentage of wholesale and retail orders that are delivered after the target;
- these figures should be shown separately for 2 Mb and under leased lines, for leased lines above 2 Mb, and for bitstream orders (and any other major wholesale products introduced by C&WG);
- the data should distinguish between orders that require the construction of new routes and the other orders;
- any orders which are only administrative or billing changes should be excluded.

4. OUR should require C&WG's auditor to certify annually that the information in the published KPIs is correct.

Rationale: The publication of these KPIs will demonstrate whether discrimination is taking place between retail and wholesale customers, and will also ensure that C&WG itself monitors performance. An independent audit is necessary to ensure public confidence in the published figures.

8.3 Penalties for poor performance

Our benchmarking work has demonstrated that C&WG's penalties for late delivery and for delayed fault repairs differ between its retail and wholesale customers, and are generally much lower than the benchmarking operators. In Case Study 8.3 we summarise a consultation paper recently produced by Ofcom in the UK which proposes a substantial increase in the penalties to be paid by BT for poor performance.

In our meetings with the OLOs we found differing views on the value of penalties. Some OLOs felt that they would damage their relationships with C&WG if they claimed them, while other thought that they were an important spur to better performance. We think that they are important, not so much for the monetary value, as for the signal that meeting targets is important. One of our benchmarking operators commented that they feared more the enquiry from their Finance Department about the reason for the penalty than the sum involved! However we propose that the levels of penalties should be increased to a realistic level, between the penalties paid by the benchmarking operators and the recent Ofcom proposals. If these increased levels of penalties fail to bring about an improvement in C&WG's performance, OUR should consider increasing the penalties to the levels proposed by Ofcom.

We note that Ofcom has proposed that OLOs should be able to claim for damages over and above the penalties, such as caused by a loss of business (see Case Study 8.2). As this could have serious financial consequences for C&WG, and has an impact on the liability clauses in the wholesale and other agreements between the operators, we do not propose that this remedy should be introduced at this time. However, OUR could consider it further if C&WG's performance fails to improve.

As our analysis in sections 7.2.3, 7.2.4, 7.3.2 and 7.3.4 show, C&WG penalties for missing delivery and fault repair timescales are generally worse than for retail customers. We believe that they should be greater so that OLOs can recover the cost of having to liaise with their own customers and (depending on their own contracts) reimburse their customers for C&WG's failures.

We also think that the burden of claiming should be shifted from the OLO to C&WG so that this becomes an automatic process. C&WG should provide the OLO with a statement of penalties as part of its billing process.

Recommendations

Penalty levels

5. For each day beyond the target date for delivery or fault repairs for leased lines, bitstream service, or any other wholesale service, C&WG should pay twice the daily recurring fee to the OLO.

6. C&WG should revise its wholesale and retail contracts so that the penalties paid to wholesale customers are greater than for retail customers.

Responsibility for penalty payments

7. C&WG should initiate the payment of penalties.

Rationale: Penalty levels should be increased significantly to give C&WG an extra spur to achieving a better performance, and to compensate the OLOs for the costs of late delivery. The penalties paid to wholesale customers should be greater so that OLOs can recover their extra costs. In order to make the process of paying penalties smoother, C&WG should pay the penalty without the need for any claim from the OLO.

Case Study 8.2: Ofcom consultation on service level agreements

In December 2007 Ofcom, the UK's NRA, launched a public consultation on BT's service level agreements. The competing operators were concerned that the levels of penalties in BT's service level agreements for wholesale line rentals, local loop unbundling and Ethernet services provided insufficient incentives for BT to deliver and repair services on time. As a result, BT fails to meet its delivery and repair time targets. Attempts to negotiate a satisfactory solution direct with BT had failed, and so the competing operators had referred the dispute to Ofcom. Ofcom agreed with the competing operators, and proposed that:

- BT, not OLOs should initiate the process of paying compensation;
- penalties to be paid by BT should be based on a pre-estimate of OLO's loss due to late delivery or repair;
- for WLR, BT should pay one month's rental for each day of delay in delivery or fault repair;
- for LLU, BT should pay £8 for each day of delay in delivery or fault repair;
- for Ethernet services, BT should pay one month's rental for each day of delay in delivery and 15% of monthly rental for each hour of delay beyond the SLA time to repair;
- OLOs should be able to claim for any additional losses over and above these amounts;
- there should be no cap on the total penalties paid by BT.

The period of consultation finished at the end of January 2008, and Ofcom will publish its determination in due course.

8.4 Mandated wholesale products

There have been several specific problems over which wholesale products C&WG must provide as part of its wholesale service. While the principle used by C&WG, whether or not other operators can replicate the equivalent retail service from other sources, is in principle correct, we believe that it has to be adapted to the particular circumstances of Guernsey.

Some of the OLOs already have their own infrastructure, including one with a submarine cable to the UK, and may build their own on-island infrastructure. If another operator has this infrastructure, is C&WG relieved from its duty to provide a wholesale service that can be carried on this infrastructure because it can be purchased from another operator?

We believe that this should not be the case, unless the market is competitive. This will require OUR, in the event of a dispute, to evaluate whether the relevant market is competitive. If it finds that C&WG is still dominant, it may require it to provide the service on a wholesale basis. Moreover, the terms and conditions of the wholesale service provided (the "service wrap") should be comparable to the retail service provided by C&WG.

In section 4.2.4 we considered whether a new minimum term was justified when customers upgraded the speed of their leased lines, and concluded that C&WG was justified in recovering the costs of checking the new quality of service on the line and of making administrative changes. However we felt that in the interests of greater competition, the customer should have the choice of either the new minimum period, or of paying the cost and of keeping the existing minimum period (if it has not already expired).

Recommendations

Wholesale product replicability

8. OLOs must be able to replicate technically and commercially C&WG's retail offerings, including "service wrap", from C&WG wholesale products or other services available to them. Hence C&WG must provide wholesale products required by OLOs to match its retail offerings, including the service wrap, unless the service is provided in a competitive market.

Rationale: OLOs and C&WG need clarity on what wholesale products must be provided by C&WG. As the dominant operator in wholesale markets, C&WG must provide all wholesale products needed to replicate its retail offerings. If these products are available in a competitive market, there is no need for such a remedy.

Terms and conditions

9. C&WG should revise its wholesale and retail contracts so that delivery timescales and other terms and conditions are comparable.

Rationale: the terms and conditions for retail and wholesale customers should be comparable to terms of product replicability.

Minimum periods for upgrades

10. C&WG should offer its wholesale and retail customers upgrading a leased line the option of paying a one off cost based fee or of a new minimum contract term, and the OLOs should give their retail customers the same choice.

Rationale: this recommendation will assist the development of competition in the leased line market.

8.5 Price changes

In section 4.6.1 we commented that the present system of informing customers of price changes, which was agreed between C&WG and OUR, caused confusion because of the distinction between "major interest" and "minor interest" price changes.

We suggest that this distinction should be removed, and that all wholesale price changes should follow the process for "minor interest" price changes. We cannot see that publication of wholesale price changes in La Gazette Officielle is effective in a world of electronic communications, and this duty places an additional cost on C&WG. C&WG would continue to inform the OLOs affected by the price change directly.

As we comment in section 4.6.1, we think that wholesale customers should receive a longer period of notice than retail customers, so that they can amend their own retail services as necessary, and inform their own customers of any price changes. For wholesale products, we think that a period of 30 calendar days notice is desirable. The period for retail price changes should remain at 21 days.

Recommendation

11. The process for "major interest" price changes should be abolished, and all changes in the wholesale prices should follow the "minor interest" process, with the notice period extended to 30 calendar days.

Rationale: this will simplify the process for customers, reduce the cost to C&WG, and give the OLOs sufficient time to change their own retail products and inform their customers of any price changes.

8.6 Term discounts

In section 5.2.2 we carried out an analysis of the discounts available to retail customers which take 2 and 3 year contracts for on-island leased lines, and concluded that the profit margin available to the OLOs was not sufficient. The OUR is due to change the price controls for the leased lines, and we suggest that the price controls should ensure that a sufficient profit margin is available to OLOs for these products.

Recommendation

12. OUR should ensure that there is an adequate profit margin available to OLOs for on-island leased lines, and:

- wholesale leased lines should be available on two and three year contracts;
- a discount scheme should be available for two and three year wholesale contracts, although not necessarily at the same rate as the retail discounts in order to reflect the difference in retail and wholesale costs saved;
- OUR should apply a margin squeeze test to leased line prices, including term discounts, and ensure that an adequate profit margin is available.

Rationale: these proposals will ensure that OLOs can make a reasonable return on 2 and 3 year wholesale leased lines, and hence improve the competitiveness of this market.

8.7 Liaison between C&WG and OLOs

During our discussions with C&WG and the OLOs, we were struck by the number of issues that could, and should, be resolved face to face between the operators without recourse to the OUR or its consultants. We have noted that the regular meetings that should be held between the operators fail to happen. C&WG fails to provide its data on performance, and the OLOs fail to request its provision. We observe in section 3.3 that the lack of communication may in part be due to the "Jersey factor", and that special efforts will needed by C&WG and the OLOs to overcome the poor relationships between the operators.

We think that these meetings should be reinstated as quickly as possible, and these will be easier to organise if C&WG has a dedicated wholesale position. However the OLOs themselves must put resources into making sure that these meetings are held and are a success. We suggest that the operators should commit themselves to a quarterly meeting for the next 12 months in order to establish a pattern for the meeting, and that thereafter they should only be postponed by agreement between both parties.

In a number of countries, an industry forum has been set up to ease communications between the incumbent operator and the OLOs on technical developments and related matters (see Case Study 8.3). In Guernsey we understand that such meetings have been held from time to time on specific subjects. A regular forum would enable operators to discuss and resolve common issues as they arise, and would provide another means of communication. C&WG's next generation network may be a suitable issue for starting the forum. International experience suggests that it should not be run by the OUR – and indeed that the OUR should not generally be present – as this will encourage "playing to the gallery", as one of our benchmarking operators put it. The forum could appoint an independent third party to act as secretary.

In order to give more force to our proposals, we think that the OUR should ensure that the dispute process set out in wholesale leased line agreement has been exhausted before it accepts a complaint from the OLOs or C&WG. We note that the dispute process in the agreement has some need of improvement:

- there is no process set out if one party does not agree to the appointment of an expert;
- there is no process set out if one party does not sign the expert's decision.

Both of these gaps allow one of the disputing parties to sabotage the process, and perhaps the OUR should have a formal role in these events.

In some cases the issue may be more appropriate for the proposed Industry Forum, and this could be an alternative avenue before the OUR accepts a dispute

Recommendations

Quarterly meetings

13. C&WG and the OLOs should implement the commitment in the wholesale leased line agreement to meet every quarter, at least for the next 12 months.

Industry forum

14. OUR should discuss with C&WG and the OLOs the value of an Industry Forum, and if the idea is supported, call the first meeting.

Dispute process

15. OUR should not accept a complaint from C&WG or the OLOs about wholesale services unless the dispute process available to the operators has been exhausted or the issue has been discussed at the Industry Forum.

16. OUR should require C&WG to revise its dispute process

Rationale: We think that many of the problems expressed to us can be resolved through face to face meetings, both as bi-lateral meetings and as meetings of all operators. Disputes should be resolved through the proper use of the dispute process, once this has been improved.

Case Study 8.3: FIST

The Forum for Interconnection and Special Access was set up in 1996 by the predecessor of OPTA, the NRA, so that the operators can discuss operational and technical issues. FIST consists of operators and (internet) service providers. FIST is a consultative body: every operator and service provider registered with OPTA can become a member. The main objective of FIST is to reach agreement in the telecommunications industry concerning matters of interconnection and special access. After having taken the initiative for setting up FIST, the NRA as a rule does not participate in the meetings. Only if an issue seems likely to evolve into a dispute, OPTA will take a more active role and may decide to participate in the discussions actively or as an observer.

FIST consists of one working group and various taskforces. The results of task forces are reported to the FIST working group 'Product Development and Implementation'. The main purpose of the study group is to develop services and is responsible for the actual implementation and commercial aspects of new services. The group also provides solutions for issues concerning existing services.

Decisions taken by the FIST study group do not have any judicial implications. Due to the fact that a large number of parties are represented in FIST however, in practice decisions are morally binding. Over 30 organisations are now represented in FIST, and decide on its agenda.

FIST has its own legal structure as a not-for-profit foundation. It has a plenary meeting once a year and a steering committee that meets three times a year on average. Working groups and task forces meet as often as necessary. FIST has hired a consultant to act as its secretary. The role includes the organisation of meetings, chasing follow up actions, and ensuring that agendas and papers are available before meetings.

8.8 Wholesale champion

We believe that one of the main causes of the issues discussed in this report is the lack of one position which is solely concerned with wholesale customers. However good a person is, if their responsibilities include other matters, they cannot dedicate all their time to resolving the problems described in this report, let alone having the energy to develop the wholesale business with a commercial orientation. As we describe in section 3.1.4, we think that incumbent operators have to develop a commercial culture towards OLOs, and our analysis in this report suggests that C&WG still has to make this move. We believe that the creation of a dedicated carrier services position is a necessary first step along this road. In addition, the rewards for network and wholesale staff should not be based on retail financial performance or retail customer satisfaction. As stated in sections 5.4.2 and 7.4.1, we think that the wholesale staff in C&WG should continue to report to the Director of Customer Operations, or some other network related position.

We also hope that such a position, whether full time or part time, will also result in more senior management attention being given to wholesale issues. We appreciate that senior management have recently taken on additional responsibilities for other jurisdictions, but we think that the significant changes needed in C&WG's wholesale business should be given high priority.

Recommendations

Wholesale position

17. C&WG should create a position for wholesale sales and relationships that does not have any other responsibilities. This position should report to the Director of Customer Operations.

18. C&WG should change its arrangements for paying staff bonuses, so that staff responsible for wholesale sales and relationships are rewarded on wholesale, not retail performance, and so that staff provisioning and repairing network services are not encouraged to favour retail or wholesale customers.

Rationale: This position should enable C&WG to focus on wholesale issues and to develop a commercial culture in dealing with OLOs. The rewards systems should not encourage staff involved in ordering, provisioning and repair processes for wholesale customers to favour retail customers.

8.9 Information systems

In section 5.3.2 we noted that it was possible for C&WG retail account managers to have access to wholesale orders, and that wholesale orders were easily distinguished from retail orders by their product codes. Our benchmarking work showed that these practices are not allowed in other operators as they permit discrimination. We suggest that C&WG must address these issues as a matter of urgency in order to remove the possibility of retail staff using information about wholesale orders to their advantage, and to reduce the opportunities for discrimination.

Recommendation

19. C&WG should take immediate steps to prevent its retail staff from having access to wholesale orders, and to ensure that wholesale orders cannot be easily distinguished from retail orders in its provisioning processes.

Rationale: these steps will reduce the opportunity for retail sales staff to use information about wholesale orders to their advantage, and for provisioning staff to discriminate between wholesale and retail orders.

8.10 Regulatory compliance

In section 7.4.4 we compared C&WG's performance in carrying out regulatory training and producing codes of practice, and these appear to be in line with best practice. However we think that the problems we have found in this report, which appear to result in contraventions of C&WG's licence conditions, demonstrate that insufficient resources go into checking whether staff comply with the regulatory requirements, licence conditions and other contractual conditions in their day to day work. If this work had been carried out, the discriminatory performance in the delivery of leased lines, the lack of regular meetings with OLOs and the discrepancies between retail and wholesale contracts would have been recognised and resolved internally. This activity should also ensure that staff are following the guidelines set out in the policies and handbooks produced by C&WG.

Recommendation

20. C&WG should carry out regular compliance audits to ensure that its staff are not contravening its regulatory and contractual obligations, and are complying with its own policies and regulatory guidelines.

Rationale: this step should ensure that contraventions of C&WG's obligations are identified at an early stage and are resolved internally, thus reducing the problems caused to OLOs and the need for intervention by OUR.

9. Implementation

9.1 OUR's options

We are aware that the implementation of many of our recommendations depends on the goodwill of C&WG and the OLOs. OUR can take a number of positions, each one requiring the use of differing levels of regulatory powers. We think that OUR has five options open to it to ensure implementation of our recommendations, each one with different advantages and disadvantages:

- exhortation
- set principles and process
- mandate revisions in standard wholesale offers
- request changes in C&WG
- require separation of network and wholesale activities in C&WG

We regard these options as cumulative, that is the second option includes the first, and so on. The option selected by OUR should be proportionate to the problem, and have the best chance of ensuring that the key issues discussed in this report are resolved.

9.1.1 Exhortation

In this option OUR would encourage C&WG and the OLOs to resolve the issues between themselves. The operators would hold regular meetings, as required by their contracts, and meet regularly in an industry forum (see recommendations 12 and 13).

Advantages: this option requires minimal regulation and minimal resources from OUR. It would allow the operators to discuss problems directly, and this may enable a resolution of the low level issues.

Disadvantages: it is unlikely to bring about the changes we think are necessary within C&WG. The meetings may achieve little without the steps proposed in the other options, and therefore fall into disuse.

9.1.2 Set principles and process

In addition to option 1, OUR would set out the principles that it would use to resolve disputes between C&WG and the OLOs on any dispute over the supply of wholesale services, and the processes that it would expect the operators to follow before bringing a dispute to the OUR.

We suggest that the principles would consist of our recommendations 1 – 11 covering leased line delivery, KPIs, penalties, wholesale products, price changes and term discounts. OUR would also require OLOs and C&WG to exhaust their dispute process (improved as necessary) before bringing any disputes to it for determination (our recommendations 14 and 15).

Advantages: The "rules of the game" would be much clearer to C&WG and the operators, and this should reduce the number of disputes between the operators. The revised dispute process should enable the operators to resolve more disputes directly without involving the OUR.

Disadvantages: this option does not ensure that our recommendations on changes within C&WG take place (recommendations 16 – 18). It relies on the OLOs bringing a dispute to OUR in order for the principles to be enforced in a particular case, and it may need several disputes before the principles are fully enforced.

9.1.3 Mandate revisions in standard wholesale offers

In addition to option 2, OUR would require C&WG to submit standard wholesale offers for wholesale leased lines and bitstream services to OUR for its approval. OUR would not give its approval unless the wholesale offers adhered to our recommendations 1 – 11. OUR would put these draft offers out to public consultation, thus permitting the OLOs to provide their views on the offers. In this way the principles set out in these recommendations would be implemented without recourse to a dispute process, and the resulting offers should have a measure of public acceptability. It would also permit OUR to correct any bias in the contracts towards C&WG resulting from its bargaining position, which is stronger that the OLOs

Advantages: this option ensures that the recommendations 1 – 11 are quickly implemented through the OUR's approval process, and that they can be enforced as contractual terms by the operators.

Disadvantages: this option does not ensure that the process of change takes place within C&WG.

9.1.4 Request changes in C&WG

In addition to option 3, OUR would propose directly to senior management in C&W that our recommendations 16 – 18 are implemented voluntarily in order to resolve some of the key issues discussed in this report.

Advantages: C&WG would then be able to respond voluntarily to the recommendations, thus ensuring that senior management is committed to make them work successfully.

Disadvantages: C&W or C&WG may decide not to implement the recommendations, or to implement them only partially.

9.1.5 Require separation of network and wholesale activities in C&WG

In addition to option 4, OUR would require C&WG to separate its network and wholesale activities from the rest of the company. We think that the model implemented by Faroese Telecom would be appropriate to C&WG (see Case Study 7.13). In this model the wholesale functions and the access and trunk networks for fixed and mobile networks would be placed into a network company, while a services company would control the services provided over these networks and be responsible for retail customers.

Advantages: this option should resolve the issues resulting from a lack of a wholesale champion and inappropriate access to information systems, and ensure that OLOs have confidence in C&WG as an even-handed supplier of wholesale services.

Disadvantages: this option would impose some costs on C&WG, and would take up senior management time and resources in order to design and implement the separation.

9.2 Proportionality

These options are cumulative, and require increasing intervention by the OUR in the relationships between C&WG and the OLOs, and in the internal affairs of C&WG. Which level of intervention is proportionate to the problems identified in this report?

We believe that the following problems are particularly serious:

- poor and discriminatory performance on the delivery of leased lines (but not on bitstream services);
- failure to hold regular meetings and produce KPIs as required in wholesale leased line and bitstream agreements;
- lack of a wholesale champion;
- inappropriate access to wholesale orders.

Some remedial action is necessary, and in response the first two problems, OUR should require C&WG to submit revised reference offers (option 3), along with the proposals in options 1 and 2. While these options require C&WG and the OLOs to spend time and resources in ensuring that the meetings work satisfactorily and in revising the reference offers, we think that the level of expenditure will not be great.

We do not think that C&WG should be required at this stage to separate its network and retail activities, as this would impose a cost on C&WG. We think that C&WG should have an opportunity to work with option 4 (OUR requests changes). However C&WG may not implement the requested changes fully, with the result that the changes in internal behaviour do not take place, and the problems continue. We therefore propose that OUR should implement option 4. along with steps in options 1,2 and 3, and review the situation after a period of 18 months. If the situation, as measured by the complaints expressed by the OLOs and by the KPIs, has not improved significantly, OUR should take steps to implement option 5 (separation).

Recommendations

21. OUR should implement our recommendations by the methods set out in options 1 – 4.

22. OUR should review the position at the end of 2009 through discussions with the OLOs and C&WG, and by an examination of the KPIs. If it judges that significant improvements have not taken place, it should start to implement option 5 (separation).

Rationale: Options 1 – 4 are a proportionate response to the problems found in this report. If the problems continue despite the implementation of these options, a more fundamental change – separation of the network and wholesale activities from the retail activities in C&WG - will become necessary.

Annex: three case studies of the separation of incumbent operators[3]

Australia

Background

The requirement for Telstra, the incumbent fixed network operator, to implement separation was set out in the 1997 Telecommunications Act. Telstra was to produce an operational separation plan for approval by the relevant Minister so that it could supply wholesale services in a transparent and equivalent way. The Act requires Telstra to have specific wholesale and network services units which are separate from its retail units.

In 2005 the Minister published a Determination that required Telstra to produce the operational separation plan and a number of supporting strategies. Telstra then produced its operational separation plan, which was approved by the Minister in June 2006[4].

Structure

Telstra has set up two separated business units:

- a wholesale unit, which markets wholesale services, negotiates contracts, and manages service delivery to wholesale customers;
- a key network services business unit, which handles fault detection, handling and rectification, and service activation and provisioning.

The following steps have been implemented to provide separation of these businesses from each other and from the retail arms:

- staff in each business unit works principally for their unit (but this does not prevent staff secondments or transfers);
- the manager of the wholesale unit is of the same seniority as the managers of the retail units;
- the wholesale unit is located in physically separated premises from the retail units.

Telstra has drawn up notional contracts which set out the relationship between the network services unit and the wholesale and retail units. These documents set out procedures for forecasting, service provisioning, billing and disputes, along with service descriptions and quality of service measures (which are the same for wholesale and retail units).

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[3] This annex is taken from: Separating the incumbent telco: is breaking up hard to do? Sunrise Consultants Ltd. Full article available at http://www.sunriseconsultants.com/separatingincumbent.html

[4] The plan and the other documents described here are available at http://www.telstrawholesale.com/dobusiness/customer-commitment/operational-separation.htm

Compliance

A new post, the Director of Equivalence was established, and this person reports direct to Telstra's Board Audit Committee, and sits on the Operational Separation Executive Governance Committee, which reports to the Group Managing Directors of Telstra. The post is responsible for monitoring compliance with the operational separation plan, internal education on the plan, and overseeing resolution of significant performance issues and non-compliance with the plan.

The Operational Separation Executive Governance Committee was also established, consisting of Group Managing Directors from some of Telstra's business units (including Wholesale). This body provides operational oversight of the separation plan. In addition Telstra has set up a Compliance Review Group (which consists of general managers, and is responsible for monitoring compliance statistics and producing reports on compliance), and a Service Operational Quality Working Group (which reviews performance on the key performance indicators and the notional contracts).

Strategies

In 2006 Telstra also published five strategies which set out how it intended to achieve equivalence between its retail and wholesale customers. These strategies are:

- service quality strategy, designed to ensure that delivery and fault repairs for the "designated services" (call termination, call origination, transmission capacity and broadband access services) are equivalent. This strategy sets out the quality of service measures for service delivery and repair;
- pricing equivalence strategy, which sets out the tests used by Telstra to ensure that its pricing does not create a margin squeeze for its competitors;
- customer responsiveness strategy, which sets out the processes for resolving disputes between Telstra and its wholesale customers;
- information security strategy, which ensures that information about wholesale customers does not flow to retail units without the customer's approval, or to the network business unit except on a need to know basis or with the customer's approval;
- information equivalence strategy, which sets out how information about changes in Telstra's network will be made available to wholesale and retail customers equivalently.

Key performance indicators

Telstra now publishes two reports every three months:

- service levels report, which shows the variation for service activation and fault repairs for the designated services between the wholesale customers and Telstra's own retail units. If the variance is greater than 2%, an explanation has to be provided. A total of 23 performance indicators are used, and they include billing timeliness and complaints.
- price equivalence framework report, which summarises the margin squeeze tests undertaken by Telstra for any price change introduced for the designated services in the previous three months.

Telstra also publishes an annual report on its compliance with operational separation and the strategies outlined above. This publication includes a report by an external auditor, which examines the accuracy of the annual report, the data and internal testing procedures used by Telstra, and the internal compliance programme.

New Zealand

Background

In 2006 the Minister of Communications published the results of a "telecommunications stocktake" which showed that New Zealand was behind many comparable countries for the provision of broadband services. This resulted in a new Telecommunications Act in December 2006, which mandated the provision of wholesale broadband services and the separation of the incumbent operator, Telecom New Zealand (TNZ). The objective of separation was to facilitate non-discrimination and equality of access to wholesale telecommunications markets.

In April 2007 the Ministry published a consultation paper setting out its proposals for the separation of TNZ. This was followed by a Ministerial Determination, and in October 2007 TNZ produced a draft Undertaking[5] with its proposals for implementing the Determination. Most of these proposals are due to be implemented at the end of March 2008.

Structure

TNZ proposes the creation of two new units:

- Access Network Services (ANS), which will be responsible for fixed line local access services and for the provision and maintenance of the local access network and the regional backhaul network, but excludes switches, DSLAMs and fixed wireless networks. The ANS unit will provide access services to wholesale customers and to other units of TNZ, using the same processes for all (equivalence of input);
- Wholesale Unit, which is responsible for providing wholesale customers with services (except interconnection, transmission and the access services provided by the ANS unit). The Unit does not control any network, but will design and market services, sell and manage service provision, and procure services from other parts of TNZ. The Wholesale Unit is required to provide certain regulated wholesale services on an equivalence of input basis. The remaining wholesale services should be provided on the same functionality and delivery standards as the corresponding retail services (equivalence of output).

The following arrangements will apply to both these units:

- the units will have their own managers, who will report direct to TNZ's Chief Executive Officer;
- they will develop their own commercial policies, and the ANS will have its own corporate plan and technical strategy;
- both units must not discriminate between their customers;
- the units must not divulge commercial customer information;
- both units must have written agreements with other TNZ units with whom they do business;

[5] Available at http://www.med.govt.nz/templates/MultipageDocumentTOC____32173.aspx

- staff incentives must be linked to the performance of the individual units, although staff in the Wholesale Unit may receive a proportion of their incentives as TNZ shares;
- both units must have their own separate secure premises.

In addition the ANS will have its own branding.

Compliance

TNZ has agreed to establish an Independent Oversight Group (IOG), consisting of five members, of whom a majority are independent of TNZ. The IOG reports to the Board of TNZ, and is responsible for:

- establishing and reviewing key performance indicators and codes of practice for operational separation;
- investigating complaints about TNZ's undertakings;
- carrying out investigations in the implementation of TNZ's undertakings.

The IOG has a Support Office, funded by TNZ, to carry out these functions. TNZ has also undertaken to produce codes of practice for its staff

Key performance indicators

TNZ has undertaken to publish key performance indicators and an annual report into compliance with the undertakings. The annual report will be examined by an external auditor.

United Kingdom

Background

In January 2004 Ofcom, the national regulatory authority for the United Kingdom, started a strategic review of its telecommunications policy. This was formally completed in September 2005. Ofcom drew four major conclusions from its review:

- after twenty years, the UK's policy of promoting the construction of alternative telecommunications infrastructure has not been successful. BT still controls major parts of the network, especially the local access network, and in the future regulation should be focussed on these "enduring bottlenecks";
- competing companies using these bottlenecks must be given "equivalence of inputs", that is BT Retail and its competitors should use the same processes, including product planning, ordering and maintenance processes, have the same products, and be charged the same prices. This contrasts with the historic approach of "equivalence of output", whereby competitors receive the same prices and standards of service as BT's retail arm, but the processes involved are different, resulting in greater delays and complexity than experienced by BT's retail businesses,
- deregulation should be possible in retail markets if "equivalence of inputs" is achieved in wholesale markets;
- regulation should ensure that there are sufficient financial incentives available to encourage new network investment, especially in next generation networks.

The review focussed on whether changes were necessary in BT's structure in order to deliver equivalence of input. Despite the existence of a wholesale division in BT to service competitors, provisioning and maintenance was carried out by BT's network business, which was an integral part of the overall BT group of companies. Hence its success was closely identified with the success of BT's retail divisions.

In order to deal with this problem, Ofcom had the power to refer the structure of BT to the UK's Competition Commission, which can require structural changes, including splitting the company into separately owned structures, if it finds that BT is acting against the public interest. BT preferred to enter into a voluntary agreement with Ofcom, and the two negotiated a legally binding Undertaking.

Structure

A new business unit, Openreach, was created. It is responsible for the operation and management of BT's access and backhaul networks, and for the provision of the following services to BT's retail divisions and competing operators (called Communications Providers, or CP):

- narrowband line provision (wholesale line rental)
- broadband line provision (unbundled local loops and shared lines)
- private access and backhaul circuits
- wholesale extension services (Ethernet services)
- backhaul extension services (Ethernet services)
- number portability

BT Wholesale was reorganised at the same time, and it now has three divisions:

- Core Network Services, which provides bitstream, carrier pre-selection, and partial private circuits;
- Value-added Network Services, which provides broadband resale products, wholesale calls and leased lines;
- Unregulated and New Services, which develops and provides new products, principally those available from the next generation network being built by BT

Openreach is a separate division within BT, and it has its own Chief Executive Officer, who reports to directly to the CEO of BT. It produces its own financial accounts, which are shown separately in BT's published accounts. Its headquarters are in a different building from BT's headquarters, and has its own support functions (Human Resources, Information etc).

Openreach's objective is to deliver its services on an open and even handed basis to BT retail divisions and to CPs. It has its own logo and corporate identity, with different uniforms and van livery.

Openreach and BT Wholesale staff have a different incentive scheme from the rest of BT. It is based on the achievement of divisional financial, safety, and service related targets, along with measures to demonstrate that the equivalence criteria demanded by Ofcom are being met. Staff bonuses cannot be given in the form of BT shares.

Compliance

An Equality of Access Board has been established as a committee of the BT Board, consisting of five members, one from the BT Main Board, one appointed by BT, and three independent members. It reports both to BT and Ofcom, and publishes an Annual Report[6]. Its main activities are:

- validating the delivery of BT's Undertakings;
- monitoring on-going compliance with the Undertakings;
- monitoring key performance indicators;
- investigating complaints and breaches of the Undertakings;
- considering the views of CPs (it invites some to its meetings).

The Board's Annual Report 2007 summarises staff surveys carried out by BT to evaluate how well the equivalence principles are being put into practice. It reports a problem of "peripheral vision" in the call centres, where call centre staff may obtain access to information in Openreach, BT Wholesale or BT retail divisions and misuse it. BT obtains a monthly monitoring report on inappropriate access to systems, which triggers retraining or disciplinary action.

[6] See http://www.btplc.com/Thegroup/Theboard/Boardcommittees/EqualityofAccessBoard/Publications/EABAnnualReport2007.pd

BT has published separate codes of practice[7] for its Openreach staff, Wholesale staff and all other employees. These specify rules for:

- the availability and use of customer confidential information between Openreach and different parts of BT;
- information from Openreach about the network, product development, pricing, costs, sales volumes, market strategy has to be available to other parts of BT on the same basis on which it is made available to CPs;
- staff in other BT divisions must not influence Openreach's strategies or plans, other than using the same processes and channels that are available to CPs;
- staff in Openreach must not attempt to influence the strategies of other BT divisions unless using processes available to the CPs ;
- reporting suspected breaches of the code of practice.

A separate code of practice was drawn up for BT's Wholesale Division, using the same principles as set out above. BT provided training to its staff on the new code of practice, and made it clear that violations would be subject to disciplinary procedures, including dismissal.

Systems and processes

BT's systems and processes needed considerable re-engineering in order to achieve the separation of Openreach. BT identified about 70 management information systems that needed separation, either at the user access level, the data level, or at the hardware level. A fundamental requirement was the replacement of existing ordering, provisioning and repair systems so that CPs and other BT divisions used exactly the same systems. These systems included:

- address matching service (to minimise rejection of orders because of differences in customers' addresses);
- access to engineering appointment books, so that CPs could provide better information to their customers about engineering visits;
- line ordering service, so that BT retail divisions and CPs used the same system for ordering new lines and wholesale line rental;
- use of the same ordering processes by BT retail divisions and CPs for the migration of customers from one product to another.

The ordering, fault repair and contact services for most Openreach products are now available to CPs and BT retail on the same system (the Equivalence Management Platform). The BT operational support system is due to be separated by 2010, and to date rights of access has been reviewed and inappropriate users have been removed.

Key performance indicators

BT now publishes graphs showing its performance on

- delivery compared to the date given to the customer
- time taken to repair faults

[7] See http://www.btplc.com/Thegroup/Regulatoryinformation/Codeofpractice/BTPeople/BTpeople.htm

for both CPs and BT customers, updated monthly. The KPIs cover the following Openreach products:

- wholesale line rental
- local loop unbundling
- backhaul services
- wholesale extension services
- broadband bitstream and resale products[8]

Ofcom evaluation

In December 2007 Ofcom published its second review of the impact of its Strategic Review[9], and of the separation of BT described above. It concluded that since the Review, consumers have seen an improvement in the choice, prices and range of services available to them. CPs also reported an improvement in BT's performance, especially in account management and respect for confidentiality of information. However Ofcom feels that the quality of BT's service needs improving, and has proposed that the penalties payable by BT for not complying with its quality of service standards should be increased significantly.

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[8] See http://www.btplc.com/Thegroup/Regulatoryinformation/Ourundertakings/KeyPerformanceIndicators/KeyProductPerformanceIndicators/ipstream.htm

[9] Available at http://www.ofcom.org.uk/telecoms/btundertakings/tsr_statement/