

Reporting Quality of Service Information to Consumers

A consultation on the regulatory options for acquiring and
publishing quality of service measures for telecommunication
services

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Reporting Quality of Service Information to Consumers

Executive Summary

S1 Well-informed consumers is one of Oftel's key objectives. This document discusses options for regulating the reporting of quality of service information for telecommunication services. Exploring these options will help Ofcom decide the most effective regulatory course in the future.

S2 Regulation requiring quality of service reporting must be proportionate and justifiable. To help determine what is proportionate, this document scopes the consumer detriment if comparable information no longer existed. It suggests that consumers would likely be disadvantaged and that certain consumer groups might be particularly disadvantaged. However determining the extent of consumer detriment is difficult, particularly as there is currently a low level of general awareness of this information.

S3 This document presents the costs and benefits to stakeholders should an information-reporting scheme no longer exist. Currently, the cost of providing comparable information is not particularly large when taken in the context of cost per consumer. However, it is not possible to establish the level of benefits of providing this information, nor what the benefits might be if consumer awareness was greater. In order to realise the potential benefits, consumer awareness would need to increase.

S4 Different regulatory options are presented listing the associated advantages and disadvantages with each. The financial burden for each option varies from effectively a nil compliance cost to a largely unknown cost based on the regulator setting consumer information requirements. It is suggested that the level of regulator involvement has a direct bearing on the completeness of consumer information that may be offered to consumers.

S5 Oftel is mindful of European Union requirements for the provision of this type of consumer information and also of how other European national regulators set their information requirements. There does not appear to be a standard level for consumer information reporting or publication in Europe. In the UK, it is proposed that there should be a periodic re-evaluation of the adopted regulation and of the specific information requirements (if any).

S6 Oftel believes that following comments from stakeholders, Ofcom will be in a better position to determine the most appropriate regulation for providing - or no longer providing - quality of service information to consumers.

Chapter 1

Introduction

1.1 Telecommunication products and services in the UK are constantly evolving. More providers are offering more products and services to both residential and business consumers than ever before. Changes in the market conditions and in the patterns of consumer behaviour require a periodic re-assessment of applicable regulation.

1.2 This consultation exercise should enable Ofcom - as the UK's new regulatory body - to decide what policy should apply in relation to reporting and publishing quality of service information. To assist in this decision, this consultation also provides a review of the ability of the current co-regulatory schemes to deliver an effective output. Further, it also explains the distinct choices for future regulatory action.

1.3 This consultation is an important part of Oftel's review of consumer information provision. By taking account of consumer research and by undergoing a public consultation exercise, Oftel is meeting its function under The Communications Act 2003, Part 1 "Functions for the protection of consumers". In conducting this consultation Oftel has also drawn on the principles outlined in its *Consumer Protection Policy Review* (CPPR) statement www.oftel.gov.uk/publications/about_oftel/2002/cppr1202.htm. The CPPR guidelines set out how Oftel reviews its consumer facing work.

1.4 This document has two main sections. First, the document analyses whether there is a justification for gathering and publishing quality of service (QoS) information by examining consumers' need for such measures (for both fixed line and mobile telephony). In order to help assess the consumer need, Oftel examines the level of consumer detriment and reviews the wider costs and benefits of the existing quality measurement schemes.

1.5 Secondly this paper sets out the regulatory options for the future including an overview of the possible advantages/drawbacks associated with each regulatory option. Whilst considering these options, Oftel has taken account of the history of both quality measurement schemes (the Comparable Performance Indicators, or CPIs), Oftel/Ofcom's obligations and stated commitments, and also European Union requirements.

1.6 This consultation is not intended to be prescriptive and does not attempt to put forward a suggested policy course. However it is hoped that the regulatory options listed in chapter 5 – along with the responses to this consultation, should assist Ofcom to take its own view on how an effective policy can be developed (should Ofcom wish to pursue policy change).

Why provide quality of service (QoS) information? – the justification for intervention

1.7 The purpose of publicly providing comparable QoS information is to assist consumers by enabling them to make better-informed purchasing decisions. Consumers should also benefit from increased competition as firms compete to offer better quality services.

1.8 Oftel's objective is to provide UK business and residential consumers with easily attainable, current, comparable, meaningful and clear information about telephony services. Achieving this objective should help to fulfil related aims of increasing consumer awareness, improving consumer understanding of service options, and providing consumers with a better understanding of what their service level expectations should be.

1.9 Oftel/Ofcom has a duty to provide specific QoS information to consumers under the Universal Service and Users' Rights Directive. The programmes in place to deliver this information to consumers operate in part to fulfil this obligation.

Why is Oftel reviewing its policy?

1.10 Oftel believes that the current schemes for delivering adequate, comparable and timely information to consumers – the CPIs – may not be effectively meeting consumer requirements. Evidence that CPIs could be more effective is provided in chapter 3.

1.11 With the proliferation of resellers through carrier pre-selection products and wholesale line rental products, the availability of reliable QoS information for telephony services may be particularly timely.

1.12 Due to the apparently imperfect QoS information currently on offer and the limited awareness of this information, consumers may not be properly benefiting from the CPIs and consequently consumer groups have indicated their preference to see improvements in this area of information provision.

1.13 Also, it is arguable that those operators participating in the CPI schemes do not appear to be maximising the benefits that these schemes could offer them. This is due to a variety of reasons, including the actual structure of the reporting and publishing mechanism. Moreover, participating companies may face certain disadvantages - including financial - compared with those companies who have not yet felt compelled to report and publish comparable QoS results.

1.14 The convergence of old and new communication services challenges the ability of the current CPI schemes to adapt. If the ongoing existence of such programmes is justifiable, any new approach should be flexible enough to discard information that is no longer useful to consumers and add information where it is warranted. Chapter 7 deals with expanding and contracting QoS measures and how best to publish results.

1.15 Oftel is committed to reviewing its projects and policies and more specifically to assessing the level of regulatory involvement used for individual projects. Oftel is interested in developing a thorough understanding of the effect of CPIs on relevant stakeholders and what would happen if there was no such policy. Oftel is also committed to assessing the effectiveness of its actions and identifying ways of improving its regulatory function.

Whom might this consultation affect?

1.16 The purpose of QoS measurement and publication is to equip UK consumers with accurate and reliable information which they can use when purchasing telephony services. As such, consumers of these services have a significant stake in the outcome of this consultation.

1.17 This consultation deals with providing QoS measurements to the end users of telephony services – for both business and residential consumers. As such, any company providing telephony services to UK consumers may be affected by the policy direction stemming from this consultation. Further, wholesale providers (those providing the infrastructure needed to deliver such services) may also be affected.

1.18 The CPI schemes may provide a benchmark for future quality measurement schemes of communication services. Likewise, the outcome of this review could provide a practical demonstration of how other measurement programmes may be designed. Decisions made today concerning the “who, what, when, where and how” could have a bearing on the regulatory decisions of tomorrow.

1.19 Any decision to change regulatory requirements will be made by Ofcom in its new capacity as the UK’s national regulatory authority for the communications sector.

Chapter 2

Assessing the effectiveness of the current policy

Voluntary Background

2.1 Oftel has been actively involved in the production and publication of QoS measurements for several years. Currently two separate co-regulatory groups produce this work; the Telecommunications Industry Forum provide information on fixed-line services and the 'Mobile CPI' group provide information on mobile services.

2.2 Both projects began in the 1990s with fixed-line publications available in 1995 and mobile publications in 1999. At their inception, Oftel decided that the best option was for the industry to provide this information on a voluntary basis.

2.3 The reasons behind this were that:

- there would be greater industry ownership, and greater consumer involvement;
- it would not require licence modifications to put into practice; and
- it would avoid the regulator setting inappropriate targets/measures.

Consumers' use of CPIs

2.4 The current CPI schemes have not maximised their effectiveness, one of the problems being a low level of consumer awareness. However, this does not necessarily equate to a low level of consumer demand. It is important to note that consumers' use of this information has steadily risen since the inception of CPIs.

2.5 Hits measured on the mobile CPI publication page reveal:

- less than 500 hits in October 1999 (the introductory month);
- 3195 in May 2000; and,
- 4082 in May 2003.

2.6 The fixed line CPI website averages 77,000 hits per month, approximately 22,000 more per month on average than three years previously. As many as 140,000 hits have been recorded in one month and this is directly related to increased public relations activity and advertising.

2.7 More than 150,000 copies of the Fixed-line residential leaflet *How well did your telephone company do?* are circulated to UK libraries every six months.

2.8 The fixed CPI scheme captures 83% of the total UK telephony call volume. The mobile CPI scheme captures over 95% of the total mobile telephony call volume. Therefore the majority of UK consumers are serviced by the current CPI schemes ie. by the operators participating in these schemes.

Justification for QoS measures

2.9 In the absence of sufficient information, consumers are limited in their ability to make economically efficient choices about the services on offer. Regulation may be required to ensure the provision of adequate information, but regulation enforcing a QoS reporting policy

must be justifiable. To help determine if there is a case for an interventionist policy, the following questions are considered in this paper:

- what effect would removal of the scheme have on operators' publication of QoS measures?
- what effect would this have on the information available to consumers?
- what effect would this have on quality and prices?

2.10 This paper attempts to scope the likely scale of any consumer detriment that might exist without a CPI-type policy. In order to consider the appropriate form of regulation, the likely costs and benefits to the relevant stakeholders of the current policy are outlined in chapter 3.

Economic theory

2.11 Consumers do not have complete information about the quality of services they are purchasing or are considering purchasing. Economic theory suggests that imperfect information for consumers (ie. incomplete, incomparable, dated, etc) will lead to a welfare loss as a result of less than optimal trade taking place. Therefore consumers will not be in a position to make informed choices regarding their purchases and may not find their optimum service provider.

2.12 Although commercial pressures may encourage operators to provide their own QoS information, there are a number of reasons why regulation may be justified. These include:

- the incentive for producers of low quality services to mimic quality signals published by producers of high quality services. These could easily be confusing/misleading to consumers;
- the inadequacy of alternative information such as complaints data as a proxy for quality of service and performance;
- the incentive to reduce quality without being observed by consumers; and,
- the possibility of an information externality such that social costs and benefits may be different from private costs and benefits.

2.13 See appendices B and C for further information on the economic theories associated with consumer information.

Why is QoS information not provided by other sources ie. industry or other non-regulatory bodies?

2.14 There are a number of factors which make it unlikely that the industry, an independent third party, or a self-regulatory scheme will provide adequate QoS information to consumers. These include:

- Financial - many industry players would lack the willingness or (ability) to participate.
- Nature of QoS information - lower performing companies would lack the incentive to provide meaningful QoS information.
- Regulatory - without the backing and input of the regulator, it is highly unlikely that meaningful and comprehensive information would be provided by operators (Ofcom experience has been that regulator input has been central in driving the CPI process forward).

These issues are discussed further in Chapter 3.

Potential use of comparable QoS information

2.15 Oftel's Customer and Markets Unit (CMU) has researched the extent of the potential interest in consumer information about relative quality performance. Survey data show that some 50% of UK residential fixed service users would be interested in using comparable performance information on quality issues. However the potential impact of the current CPIs is likely to be more limited because the proportion of consumers who say they would be interested in using the indicators is almost certainly larger than the number of people who would actually use the information in practice.

2.16 Of those interested, CMU has estimated that between 5% and 29% are actually likely to use CPIs (and who are open to the idea of switching operators). Those likely to use comparable information about quality are likely to be fairly heavy spenders, advanced users of telecommunication services, and have relatively high levels of awareness of different supplier choices available. It is not clear what the corresponding values for mobile users would be.

2.17 It is worth noting that this estimated impact of CPIs is probably only achievable with appropriate measures to raise awareness of the project's existence. As mentioned, consumer awareness of CPIs is currently relatively low, at some 14% of fixed residential users (9% for fixed business users), although this has increased from 10% since September 2000.

2.18 Business users might be expected to be more concerned about quality issues than residential users since problems with quality are more likely to be costly. SMEs are more likely to rate the offer of the best 'quality and reliability' as the most important aspect when considering a new supplier than getting the 'cheapest deal possible'. Six in ten (59%) said that quality and reliability would be the most important criteria to them, although fixed business users reported that over 50% of respondents found it difficult to compare quality of service of fixed suppliers.

2.19 The difference between the number of UK consumers who would apparently be interested in CPI and the number who are currently aware of its existence can be expressed as the opportunity gap. This may indicate the potential direct benefit of CPIs.

The extent of consumer detriment

2.20 In order to assess the need for regulating QoS, Oftel considers if such a policy will have a positive impact on consumers. In order to do so, Oftel investigates whether consumers are suffering as a result of being under-informed about the quality of operators' services. In addition, Oftel calculates the likely take-up of consumer information about quality performance.

2.21 The CPI policy was intended to address the absence of comparable information about the quality of telecommunication operators; information which Oftel has believed necessary for consumers to make informed choices and in so doing to stimulate competition.

2.22 Underlying this view is the assumption that consumers will suffer detriment as a result of making uninformed choices about their supplier of telecommunication services. This

detriment may derive from consumers purchasing services that do not meet their needs in terms of quality. This is a result of the services being higher or lower quality than consumers' perceptions given the price paid.

2.23 If consumers' expectations are not being satisfied by the quality of the services they are purchasing, Oftel might expect consumers to express dissatisfaction with their telecommunication operators/services. CPIs, if used by consumers, could help reduce this dissatisfaction if they help to make consumers' expectations more realistic and enable them to make informed choices about the quality of the services they purchase.

2.24 Oftel has a number of sources of evidence which might shed light on this issue. In particular, consumer research collects details of consumer perceptions about quality of service, in terms of the overall service offered by their supplier, specific quality issues such as faults and coverage, and across markets. In addition, Oftel can examine consumer perceptions about quality compared with actual quality performance as measured by CPIs.

2.25 However, although consumers may be able to improve their QoS by switching operators other elements of the service may not be attractive for them eg. price or costs of switching may offset any improvement in quality. So it is unlikely that all consumers will wish to be with the best quality operator; there will be price-quality trade-offs (and other functionality issues for particular consumers).

2.26 A comparison of actual or perceived quality with the maximum quality available in the market may help to scope the scale of the problem of inadequate information (should one exist). In addition, it is possible to use the CPI data in order to identify whether there are real QoS differences between operators and how these have changed over time. The analysis of CPI and survey data is presented in appendix A.

Assessing consumer detriment

2.27 Quality is one of a number of factors driving the decision to purchase particular services from particular suppliers. Often the main driver of this decision is price. As a result, when the issue of whether or not consumers could achieve higher quality of service provision is being considered, the important question is whether consumers could improve their quality of service provision for a given price (and other factors such as payment mechanism, geographic location etc.). Ideally the analysis would show whether consumers could improve their price-quality package by switching operators.

2.28 It is possible to use the CPI data in order to identify whether there are QoS differences between operators and how these have changed over time. This may be useful in that significant differences between operators could indicate that consumers who choose a lower performing network might suffer detriment. However this is difficult to interpret since consumers may have chosen the lower performing network because of the combination of price and quality. In other words a consumer's welfare may be maximised by choosing an operator that does not perform as well in terms of quality because it offers inferior quality but with a lower price.

2.29 For instance, small differences in call success rates on mobile networks may imply that any consumer detriment associated with the choice of a particular network is minimal. However it may also suggest that the policy has had some success by ensuring that operators conform to a standard quality level.

2.30 In terms of mobile CPIs, quality differences between the operators on a national scale are quite minimal. Arguably this suggests that this type of publication is not very beneficial. However this does not allow for the impact of publication on performance. For example, the fact that mobile operators have voluntarily published CPIs and used the results as part of their advertising suggests that operators themselves perceive some net benefit to their involvement, and as a result CPIs may well have had a positive impact on their performance.

Analysis

2.31 The above analysis appears to indicate that the benefits of production of CPIs are relatively limited. However a number of other factors which offset this conclusion should be considered.

2.32 Firstly interpreting the similarities in performance in terms of quality is not straightforward. For example, the limited gains to be achieved by switching operator may simply reflect the success of CPIs in providing an incentive to telecommunication companies to improve the quality of their performances. In this case, abolishing the initiative may lead to widening disparities in the QoS provided by operators. In turn, this may stimulate greater demand for CPIs at a time when there will be no mechanism to produce them.

2.33 A small percentage of active consumers (ie. switchers) can have a significant effect on competition in a market. Such an effect would have a beneficial impact for all telecommunication users. A small percentage of the telecommunications market can easily equate to millions of consumers.

2.34 Although many of the differences in performance in percentage terms may appear relatively small, this can amount to considerable costs for consumers, particularly business users. If the CPI scheme was not in place, operators might reduce their monitoring activities leading to a reduction in the quality of service, and higher costs to consumers in terms of lost/interrupted calls, faults, the time it takes to correct faults, and so on.

2.35 It is interesting to note that each mobile operator has improved its performance in every region of the UK since the CPI scheme began. Generally, most of the participating fixed-line operators have also improved as well.

2.36 The limited levels of awareness of CPIs and the relatively small likelihood of consumers using CPIs to inform switching may not reflect the success or otherwise of CPIs. The differences in the levels of satisfaction across operators may reflect high awareness of differences in the overall quality of service but an inability or unwillingness to switch supplier, for example as a result of consumer inertia or high switching costs.

2.37 It is not clear how we interpret perceived differences in quality which do not reflect the actual differences in quality as measured by CPIs. It is likely that dissatisfaction levels reflect consumer perceptions about the whole price-quality package, rather than quality in isolation eg. consumers will be concerned about the level of quality for a given price rather than absolute differences in quality.

2.38 In addition there may be other factors which are not reflected in this analysis but which may be important in assessing the net benefit of CPI regulation. These may be related to the possible positive effects of stimulating quality improvements, as noted above. For example

there may be positive effects in terms of the number of consumer complaints made to operators and to Oftel. Operators may also benefit by signalling to consumers that quality checks are in place, thereby enhancing their brand image.

Questions

Do you believe the current voluntary membership of both CPI schemes sufficiently captures the providers of these services?

Do you believe consumers may be able to make adequately informed decisions based on alternative information that is already available?

Chapter 3

Cost benefit analysis/problems with the current approach

3.1 There may be factors that are not reflected in the analysis of performance and satisfaction but which may be important in assessing the net benefit of CPI regulation. These may be related to the possible positive effects of stimulating operator quality improvements, as noted above. So it is useful to consider the costs and benefits of intervention in more detail. This not only has the benefit of identifying the wider costs and benefits of the policy to the relevant stakeholders, but will also be useful in terms of identifying appropriate options for possible changes to the policy.

3.2 The costs and benefits of a CPI policy relative to no regulatory intervention will partly depend on the response of operators to regulatory withdrawal. It is unclear if operators' activities in terms of assessing their qualitative performance would alter since they have an incentive to continue to monitor their own performance. However it seems highly likely that operators would save money in terms of publishing and auditing results. In addition they would probably not produce exactly the same indicators for cost reasons.

3.3 Although there may be some merit in signalling their quality to consumers, there is an incentive for operators to produce statistics which show they are the best performing operator. As a result, the statistics are not likely to be directly comparable and are much more likely to be confusing and/or misleading to consumers.

3.4 The following paragraphs consider the costs and benefits to the main stakeholders if the current CPI policy no longer existed (and by assumption where there is significantly less comparable information available to consumers).

3.5 The costs to consumers if a QoS reporting scheme did not exist might include:

- With no effective disciplinary device, operators may have less reason to compete on quality issues and a general lowering of quality standards may result.
- Uninformed consumers would no longer benefit from the possible competitive pressures placed on operators by informed consumers.
- Consumer confidence and satisfaction levels would likely drop since there would be no consistent way of comparing the qualitative performance of operators.
- Some consumer groups may be particularly disadvantaged if they rely on the best possible service provision (eg. elderly, disabled people).
- Consumers would likely be more limited in their ability to make an informed choice and may be misinformed by the publication of individual operator quality claims.
- Search (switching) costs would likely increase as consumers would probably have to search individual company or other sources for information (if they are able to identify service providers in the first instance).
- There would likely be an increase in the costs consumers face in terms of lodging complaints with operators and Oftel.

3.6 As noted above, these costs would be reduced if operators continued to produce comparable performance indicators. However the likelihood of enough operators continuing to produce directly comparable results - in order to properly inform consumers - is very small.

3.7 Costs to operators if a QoS reporting scheme did not exist:

- The incentive to improve service performance and to use the results in order to attract consumers would likely be lost – or at least reduced. Certainly some operators have exhibited significant improvements in their performance in recent years, although it is not clear how much of this can be attributed to the existence of CPIs.
- Operators would likely have less ability to signal to consumers that their quality of service is competitive. This may weaken operators' brand images and may have negative effects on their reputations. CPI results are used in advertising campaigns and continue to attract media attention.
- In the absence of any monitoring, operators would likely experience an increase in consumer complaints and possibly higher costs associated with responding to Oftel should formal complaints be made to the Consumer Representation Section (CRS), the Ofcom equivalent, or the Telecommunications Ombudsman or other dispute resolution schemes.
- Operators would no longer be able to easily see how their level of service compares with competitors and whether there are market-wide trends. As a result, the competitive pressure exerted by CPIs is removed.

3.8 Costs to Oftel if a QoS reporting scheme did not exist:

- Oftel might expect to see more complaints to CRS.
- There may be costs to Oftel's reputation.

3.9 Benefits to consumers if a QoS reporting scheme did not exist:

- Consumers' bills may be marginally lower if operators pass their compliance savings on to the consumer.

3.10 Benefits to operators if a QoS reporting scheme did not exist:

- Operators would save on the technical costs of compliance, including the costs of collecting the statistics, management processes and so on.

3.11 Oftel has created rough estimates of operators' costs of compliance. The table below outlines these costs as a number of ratios in order to give an idea of the scale of the costs and the size of the potential impact on consumers.

Figure 3.1 Annual costs per customer, revenue, and minutes handled

	Cost per customer (£)*	Cost per revenue (% of £)*	Cost per minute (£/kmins)*
Company A	0.006	.00014	.003
Company B	0.044	.00083	.021
Company C	0.440	.00278	.019
Company D	0.031	.00061	.102

Figures for fixed operators based on three estimated levels of current CPI costs (30,000, 120,000 and 175,000).

*Costs based on estimates provided by fixed and mobile operators, July 2003.

3.12 Benefits to Oftel if a QoS reporting scheme did not exist:

- Oftel would save on compliance costs associated with monitoring and enforcing the CPI policy, although the co-regulatory nature of the current policy suggests that this saving would not be substantial.

Conclusions in relation to advantages and disadvantages

3.13 To summarise:

- It is difficult to quantify benefits - particularly as it is difficult to predict what would happen in the absence of regulation.
- The current value of direct benefits to consumers will be relatively limited due to low general awareness, but it is likely that by increasing awareness the direct and indirect benefits to consumers would increase.
- In absolute terms operators do face a material cost by complying with the policy. However when this is put into the context of cost per consumer, the annual cost does not seem particularly high (apart from a couple of outliers). This means that the benefits per consumer (and the benefits to operators and Oftel associated with responding to complaints) may not need to be great to justify a requirement to produce CPIs.
- When the costs are considered in terms of cost per consumer who makes use of the indicators (based on awareness and willingness to use) the costs increase, and for some operators become more substantial. However this cost would reduce with a greater level of awareness.
- In order to maximise the benefits, it is clear that there is a need for greater awareness amongst consumers and consideration of the reasons why more consumers are not willing to use performance indicators to switch.
- Other benefits may not be influenced to the same degree by consumer awareness, but may still have a positive impact on consumers. These are benefits of improved performance as a result of operators being able to compare their own performance with other operators and acting on it.

Conclusion of analysis

3.14 The analysis of CPI data and surveys of consumer satisfaction (also see appendix A) do not show a severe problem concerning quality for consumers in telephony markets. However the interpretation is not straightforward. An apparent lack of a particular quality problem, ie. because consumers may not be significantly better off by switching to another operator in order to improve the quality of their service or because absolute levels of dissatisfaction are low, may justify a less intrusive regulatory policy. Alternatively the result may arise due to some measure of success of the CPI policy. This could be consistent with low levels of consumer awareness and usage if the CPI policy has had a disciplinary impact on operators.

3.15 Arguably there may be benefits from the CPI policy that are not captured by the analysis of dissatisfaction and detriment. An assessment of operators' compliance costs suggests that the cost per consumer of collecting and publishing the CPI data is relatively small. This cost ratio increases when considered in terms of the consumers who currently directly benefit from the data (ie. those who are aware of and may use the data).

3.16 Another benefit may be that the CPI scheme gives operators the impetus and self-discipline to create and run effective quality monitoring systems. Many of these systems are in operation in other parts of Europe.

Problems with the current regulatory approach

3.17 The intention of CPIs is to empower consumers by providing them with useful information that they can use to purchase or switch telephony services. As such, Oftel's current approach is to encourage:

- a good range of participants;
- a comprehensive coverage of company data;
- comparable and easy-to-use measurements;
- timely information; and,
- both customer satisfaction and company results (quantity/quality).

3.18 Despite Oftel encouragement, it is clear that the current CPI programmes are not meeting fully these criteria. There are inherent weaknesses in the current schemes, including low membership (particularly regarding the lack of indirect access operators), high cost (eg customer satisfaction questionnaires), incomplete information, and low consumer awareness. The mobile scheme suffers from comparability problems and publication difficulties.

Problems with the CPIs

3.19 Some operators lack the incentive to provide QoS information and the downturn in the market has almost certainly influenced Industry's willingness (and ability) to participate. Despite the advantages of participating, some companies do not appear to participate (or fully participate) if there is no immediate financial gain, and if there is no regulatory requirement in force. Companies that offer lower quality services are less likely to provide meaningful QoS information – and probably not in a comparable format. Yet these same operators may provide the services that consumers wish to avoid.

3.20 Evidence of industry's "lack of incentives" include:

- the absence of new participants despite repeated recruitment efforts;
- the withdrawal of participants;
- failure to improve internal processes and publications (both fixed and mobile);
- the (partial) withdrawal/absence of company data (both fixed and mobile);
- general operator inertia (both fixed and mobile); and,
- the failure to compare more services.

3.21 As a result, consumers receive partial information as some participants do not collect all of the data or have not changed their testing systems in order to extract comparable information. Some company information is not available at all and this may be due to non-participation or simply a refusal to publish results. This incomplete information obviously has an adverse effect on the benefits that can be derived from the CPI schemes.

Questions

Do you believe that the costs to operators of supplying comparable information clearly outweigh the benefits?

Do you believe that the inability to accurately quantify the benefits of providing comparable information puts in doubt the justification for a regulatory reporting requirement?

Do you believe that the co-regulatory groups have largely failed to deliver adequate information to consumers?

If so, do you believe they are capable of rectifying this situation without further regulatory involvement?

Chapter 4

Regulator Objectives/authority

Policy Objectives - the well-informed consumer

4.1 Currently, the CPI schemes help to deliver one of Oftel's four core high level objectives: the well-informed consumer. The main aim of CPI is to provide consumers with comparable QoS information they can easily and confidently use in order to make choices about their telecommunication services.

4.2 A secondary but linked objective is to increase the competition for the delivery of better telephony services.

4.3 Ofcom's mission is to further the interests of citizen-consumers through a regulatory regime which, where appropriate, encourages competition. In order to do this, Ofcom has indicated that it shall balance the promotion of choice and competition with the duty to foster plurality, inform citizenship, and protect viewers, listeners and customers.

Increasing competition

4.4 What is Oftel's rationale for providing better information to consumers?

- It allows consumers to make rational buying decisions between operators/service providers.
- Well-informed consumers are essential if competition is to be effective, which in turn protects consumers.
- Effective competition increases choice, forces operators and service providers to reduce costs, improves quality, and promotes innovation by providing new services.
- Effective competition is the best guarantee of consumer protection and increased quality of service.

4.5 Oftel operates with an understanding that in order to be well-informed, consumers need comprehensive, accessible and comparable information in order to make rational decisions. Valuable information can provide consumers with the impetus to switch service, and in so doing increase competition.

Well-informed consumers driving competition

4.6 The Office of Fair Trading identified insufficient consumer information as a potential cause of market failure and concluded that consumers need to be well informed if they are to get the full benefits of competition. It noted in its Research Paper of 11/08/97 that suppliers might not provide the optimum amount of information to consumers, nor in the best way.

4.7 The National Audit Office also identified the provision of effective information as imperative for consumers to benefit fully from competition. It noted in its report (HC 768) that "...there is a risk that suppliers' actions alone cannot be relied upon to generate sufficient market awareness to meet the needs of consumers. The risk is significant in the telecommunications market where many consumers are not fully aware of alternative ways of buying telecommunication services."

Oftel's consumer information strategy

4.8 In order to assess the requirement for consumer information, Oftel asks four questions regarding every consumer information initiative:

- Is there a low awareness?
- Is there consumer detriment?
- Is the issue important to consumers and/or to Oftel?
- Can the issue be improved by consumers being better informed?

Oftel's consumer protection policy

4.9 Oftel's definition of a consumer protection policy includes taking action to protect consumers irrespective of the level of competition in the marketplace. Oftel issued guidelines in June 2002 stating: "consumer protection policies include... consumer information initiatives eg quality of service information published on a comparable basis."

Co-regulation

4.10 Oftel seeks proportionate regulation. This means that regulation should be appropriate given the level of competition in the market and the need to protect consumers. Oftel will use a cost-benefit analysis for individual issues to ask why, and then what regulation should exist. This process applies irrespective of whether the level of regulation is expected to rise or fall.

4.11 The role of co-regulation is to make it easier to regulate at the minimum level necessary to achieve Oftel's objectives. Oftel can better achieve this over time by both enhancing its decision-making processes and improving the effectiveness of co-regulatory mechanisms.

4.12 Ofcom has stated that it will always seek the least intrusive regulatory mechanisms to achieve its policy objectives.

4.13 To help secure Oftel's objectives, a number of operators publish regular, comparable and audited performance indicators for business and residential customers (mobile operators provide general information). This has been achieved by persuasive means and Oftel has not yet exercised its legal powers to require operators to take part in the CPI schemes. Further, those operators involved are of a certain "class" given their longevity and market size in the UK. A list of participating operators is provided as appendix D.

4.14 The current frameworks of the CPI co-regulatory groups (fixed and mobile) allows for considerable influence by industry and consumer groups on the nature of the measurements, the type of audit, the quality of publications and most other aspects of the schemes.

The Regulatory Framework

4.15 The Director, and subsequently Ofcom, has wide powers to require Communications Providers to provide quality of service information.

4.16 The Director (Ofcom) has a general power under s 26 of the Communications Act 2003 to require the publication of "information and advice about matters in relation to which" he has functions, in a manner as he considers appropriate.

4.17 More specifically, General Condition 21.1 states that a Communications Provider shall, on the direction of the Director, publish comparable, adequate and up to date information for End-Users on the quality of its services.

4.18 In addition, Universal Service Condition 8 and condition 6 requires BT and Kingston respectively, to publish information on, among other things, their provision of telephony services on request. They must publish that information, in accordance with the quality of service parameters, definitions and measurement methods referred to in Annex III to the Universal Service Directive and any other additional standards and/or requirements set by the Director.

Questions

Do you agree that in order for consumers to make rational, well-informed decisions, they require comprehensive, accessible and comparable information?

Do you believe a co-regulatory structure is capable of providing the information needed to protect consumers?

Chapter 5

Regulatory Options

5.1 Establishing the correct policy direction will first require a determination of the following questions:

- Is there a sufficient consumer requirement for this type of QoS information given the level of competition in the market?
- If so, is regulatory intervention necessary in order to provide this information effectively?
- If yes, what is the minimum regulatory intervention needed to satisfy consumer requirements?
- If there is a requirement for this type of information why is not being met by other sources i.e. actions of suppliers, operators, other market players?

5.2 If Ofcom decides that an interventionist policy is appropriate, it may also wish to consider these four requirements:

- 1) there must be a bona fide requirement for this information, which is evidence-based;
- 2) the cost of supplying this information must be proportionate and justifiable;
- 3) the information provided must be recent, comparable, complete, and easily accessible to consumers; and,
- 4) the information provided must satisfy the regulator's duties and stated objectives.

5.3 The following four options provide basic but distinct starting points from which Ofcom can decide a policy route. Each option offers expected advantages and disadvantages. The actual mechanics of how each option may be achieved or how each may operate is not discussed as this would involve a high degree of detail and also would presume regulatory control and prescription. By its nature any co-regulatory option would allow participants some flexibility in determining a QoS reporting system.

Option 1 No regulatory requirement

Abandon all policies relating to the reporting of QoS information for consumers - including the CPI schemes

5.4 The previous section provided evidence for continuing or even re-developing and expanding the quality of service schemes currently in place. If this argument is not robust enough to justify the provision of regulator-endorsed QoS information, then the first option is a withdrawal of regulatory intervention.

5.5 This option would need to take account of an assessment not only of the costs faced by stakeholders in the current situation but also the likely disadvantages that would be faced in the future if no such policy were to exist. Further, it is important to note that the current drawbacks of the current CPI schemes do not necessarily justify a total regulatory withdrawal. Any problem associated with the delivery of CPIs may not equate to a substantive support for withdrawal of CPIs *ie it may be that the intention is sound but the delivery mechanism is flawed.*

5.6 As noted, there may be particular groups who are disadvantaged by the loss of this type of QoS information. For instance, businesses may suffer substantial financial loss if they do not use their optimum telephony supplier. Disabled people who rely on telephony services may suffer a particularly acute detriment if they do not have maximum confidence in their

supplier's service quality. Consumers who live in certain regions in the UK may also be further disadvantaged if they are not using the best operator for that region.

5.7 Effectively this option would place a requirement to provide QoS only on those operators designated as having universal service obligations under the European Directive on Universal Service and Users' Rights. As designated universal service providers, BT and Kingston are obliged to produce CPI (and other related) information for Oftel/Ofcom and for consumers. See Oftel's "A statement and Notification issued by the Director General of Telecommunications on the implementation of the Universal Service Directive" for more information (www.oftel.gov.uk/publications).

5.8 This approach would likely eliminate the provision of meaningful comparable information. It may also act as an incentive for some service providers to produce information that is not properly comparable. The search cost for consumers could also rise, as they would likely need to piece together different sources of QoS information in order to gain a partial understanding of the QoS on offer. Perhaps even more likely is the possibility that consumers would not be able to rank service providers' performances accurately.

5.9 However, there are also likely benefits to this policy. Obviously for non-designated operators, the cost of supplying this information would be eliminated. And given the current low level of consumer awareness, it follows that only a limited proportion of consumers would be worse off following a withdrawal of this information.

Financial burden

5.10 As the designated universal service providers, this approach would place a cost on BT and Kingston only. This cost would be based on the reporting of standards similar to ETSI guidelines. All other operators – including mobile operators - would be exempt from reporting QoS information under current market circumstances.

Option 1 advantages/justification	Disadvantages/arguments against
<ul style="list-style-type: none"> • Overall consumer satisfaction with fixed line and mobile telephony has been quite high for some time. • Consumers consistently rank the price of communication services as their top information concern/requirement. • It is difficult to provide useful and comparable information as communication services converge and at the same time become bespoke. • The cost of providing this information is a financial burden on companies. • Oftel/Ofcom has not been directed by EU legislation to collect any QoS information from non-SMP operators. • Prices could fall if the costs of regulatory compliance are passed on to consumers. • Regulator costs would be reduced. • Awareness of and willingness to use CPIs is currently limited. 	<ul style="list-style-type: none"> • Remaining information would almost certainly not be comparable. • Remaining information would probably not be easily accessible. • Consumers would find it more difficult to make well-informed decisions. • Consumers would be disempowered. • Consumer may be misled by individual operator claims. • Particular consumer groups may suffer. • A possible decrease in operator quality may follow (due to less competitive pressure and less discipline). • The potential for providing better information in future is lost. • Operators lose some of their ability to compare services. • Operators lose some of their ability to signal their level of service relative to other operators to consumers (and associated advertising opportunities). • The operator cost per customer is very small. • Oftel requires this information from BT and Kingston regardless. • New operators (including WLR) would not have a similar chance to compare their level of service with competitors. • More consumers now use CPIs on a monthly basis than ever before.

Option 2 Maintain current CPI schemes

Continue with voluntary memberships and current co-regulatory groups

5.11 If it can be established that there is a need to provide QoS information of a type not dissimilar to CPIs, Ofcom may wish to determine whether regulatory intervention is necessary in order for its ongoing provision. Historically, there has been a degree of regulatory intervention, but this has been limited - as evidenced by the voluntary membership of the CPI groups and by stakeholder decision-making capabilities within the groups ie. Industry has made some decisions.

5.12 As discussed, the current schemes have existed for several years and have had varying degrees of success. Research conducted on behalf of Oftel in September 2000 suggested that the fixed CPI information was useful to most consumers. Further, the type of publication provided by that group was tested and approved by a majority of consumers. And given the increasing use of CPIs by business and residential consumers, there may be an argument that the current CPI policy is correct.

5.13 However, a decision to maintain the CPI schemes - to continue with the status quo – would first need to examine the impact of the drawbacks of the existing schemes as outlined in section 3. Further, there would need to be a willingness to tackle the current state of affairs with regard to operators withdrawing from the scheme and others not willing to join the scheme.

Financial burden

5.14 An approximate cost of providing CPIs was provided in section 3. However, this cost varies between operators and is dependent on the construction of internal reporting mechanisms, the number of audit days required, the size of market share, etc. Mobile costs vary to a lesser degree as each operator performs similar testing and is audited in a uniform manner.

5.15 If the co-regulatory structure remained, there should be the opportunity to cut costs. Such savings may be established by changing audit procedures, decreasing the number of measurements (for fixed CPI), condensing customer satisfaction questionnaires (for fixed CPI), and reducing employee commitments. Mobile operators might cut their compliance costs by adopting an independent testing facility.

Option 2 Advantages/justification	Disadvantages/arguments against
<ul style="list-style-type: none"> • Most of the larger companies currently participate. • Through regulatory persuasion, operators have been convinced to stay with the CPI scheme. • A proportion of consumers has indicated they would be interested in information of this sort. • Existing operators would not need to alter their monitoring or reporting systems. • CPIs have been largely adopted in other parts of Europe and they formed the basis from which ETSI established its European standard. 	<ul style="list-style-type: none"> • The consumer need for this type of information has not been made clearly enough (at least not for all sectors). • Success may depend on the likely take up of this information by consumers. • Other QoS information may become available to consumers. • Improvements in performance over time may have resulted from the disciplinary effect imposed by CPIs or may be due to other factors. • It is not clear if additional operators would participate, including IA and WLR operators. • Consumers would likely receive no comparable information about certain companies - including new operators. • There is the potential for participants to withdraw or partially withdraw from CPI because it is "voluntary" (this has already happened). • If this happened, consumers would receive ever-decreasing amounts of information. • Operators would be able to give no notice if their intention to publish were to change. • The cost to remaining participants may well increase if there are operator withdrawals. • It has not been possible to persuade Industry to extend measurements, so it is likely that consumers would not be able to readily compare new services. • There would likely be continuing frustration with the ability to drive the process forward/make decisions/deal with recalcitrant operators.

Option 3 Maintain co-regulatory framework, but put in place minimal regulatory requirements

Mandatory participation in a co-regulatory scheme and set sanctions for non-compliance

5.16 This option involves isolating the particular problems found in the previous option/the current schemes. It suggests the use of appropriate regulatory tools in order to fix existing problems.

5.17 This option would introduce mandatory participation in a QoS reporting scheme for major providers of telephony services. Smaller operators would not be required to be

involved. In order to establish who would be obliged to participate and who would be exempt from participation, Ofcom may wish to adopt threshold requirements.

5.18 Further, this option could introduce enforceable sanctions for non-compliance. Ultimately, fines could be applied if an operator failed to meet regulator requirements.

5.19 However different issues effect the fixed and mobile CPI schemes. The regulator has a duty (amongst others) to ensure that any interventionist policy is fair and proportionate for all types of service providers. As this option involves increasing regulatory intervention for business and residential service providers, care must be taken before intervening across market sectors.

Financial burden

5.20 The financial burden of a CPI scheme with mandatory participation would mostly affect two groups – operators who would now be required to provide QoS information and existing CPI members who do not report customer satisfaction figures. In addition, there may be an indirect and small increase in prices for consumers if operators pass their costs of compliance on to consumers.

5.21 About half of existing members may see an increase in their costs if they are directed to provide customer satisfaction figures (soft measures). This requires a process for conducting questionnaires and having them audited. However, those who currently produce these soft measures may have their costs fall – as the opportunities to streamline processes are realised, and the running costs are divided between a greater number of participants. All operators would be better able to predict their reporting expenditure.

5.22 New members would face a variety of costs – including internal processes for extracting their data from their quality monitoring systems and then auditing this data. This can be a time-consuming process and so there may be start-up costs to consider. However, those operators who have reported CPIs have already borne similar start-up costs.

Option 3 Advantages/justification	Disadvantages/arguments against
<ul style="list-style-type: none"> • More operators would participate and greater comparable information would be available to consumers. • The vast majority of telephony service provision would be captured. • Consumers would be better informed and could make informed choices when purchasing telephony services. • Consumers' search and switching costs would be lower. • Competitive gains may materialise through increased competition. • Operators would likely be better able to budget and justify their resources internally. • Operators would be better able to signal to consumers their service level – and their service level relative to other operators. • The costs of compliance may decrease for some existing participants as the costs are shared amongst more operators. • Ofcom could gain the ability to demand advancements in the reporting scheme so long as they pass justification/proportionality tests. • The structure, purpose and responsibilities of the reporting scheme(s) would be clearer. • Less time would be involved trying to increase membership. • The level of consumer awareness would likely increase as more firms participate and compete. 	<ul style="list-style-type: none"> • The consumer need for this type of information has not been established for all sectors. • Other QoS information may become available to consumers. • Improvements in performance over time may have resulted from the disciplinary effect imposed by CPIs or may be due to other factors. • Establishing a larger co-regulatory group may introduce operational difficulties and publication challenges. • Establishing effective (larger) groups and capturing information may take a long time. • This approach would represent a new cost to some operators. • Those operators offering a cheaper service may be at a disadvantage.

Option 4 Direct regulation

The regulator sets the reporting criteria and method and sets sanctions for non-compliance

5.23 The shortcomings of the current reporting schemes and the seeming inability of the current co-regulatory format to fix problems may indicate the need for a more direct regulatory approach. This option involves the regulator setting all reporting requirements and setting sanctions for non-compliance. This option does not provide an opportunity for ongoing influence by operators and less opportunity for consumer group input.

5.24 However, the advantage of such a scheme is that with possible fines for non-compliance, all participants would be more likely to provide a complete set of information in the manner specified and on time.

Financial burden

5.25 Ofcom would need to determine the measurements and the format in which the QoS information is provided to consumers. This may include the introduction of an independent testing facility, independent auditor, and an independent publication provider.

Option 4 Advantages/benefits	Disadvantages/arguments
<ul style="list-style-type: none"> • Ofcom would determine what measures are provided in which format and how often. • Consumers may get more complete information. • A clearer relationship would be formed between industry and regulator. • There may be a reduction in time commitment by industry and consumer groups. 	<ul style="list-style-type: none"> • This policy would seem to be contrary to the stated goal of more self-regulation. • This policy would demand more regulator resources. • Operator compliance costs may increase. • Consumer representation may be partially lost. • There would be a risk of Ofcom setting inappropriate measures/targets.

Other policy options

5.26 In addition to those options listed above, Oftel examined other possibilities for regulating the reporting of QoS information.

Use complaints data gathered by Consumer Representation section

5.27 Oftel could rely on the general complaints data about telephone operators and service-related issues it gathers through its Consumer Representation Section (CRS). This data is available on Oftel's website (www.oftel.gov.uk/consumer). Consumers can use this data to compare complaint rates per company and per 1000 customers and also to find out the most common types of complaint. Relying solely on this data would have an obvious advantage in that it would not cost the industry anything (at least up-front) and it would be simple to provide as it is already in place.

5.28 The disadvantages would be:

- The information is anecdotal and not audited;
- Complaints may not reflect actual performance, for the same reasons that dissatisfaction levels do not reflect performance;
- There might not be an improvement in terms of awareness (use would be limited to Oftel's website ie. internet users);
- The data does not provide specific service measurements or customer satisfaction levels.
- CRS data in its current form may be of limited use to consumers trying to compare particular communication services; and,
- Oftel/Ofcom would incur some cost in terms of publishing relevant categories etc.

Voluntary participation for mobile operators

5.29 There is a good argument that if option 3 is adopted there is no need to introduce mandatory participation for mobile CPI operators, as it is not necessary. All of the main networks currently participate, and the network 3 has indicated its intention to join. Therefore the mobile group does not suffer from the same lack of participation as the fixed CPI and no operator has withdrawn from the process.

5.30 However, the pace of improving the testing procedure and of adding new measures has been slow. Further, operators have blocked the publication of results and the process for acquiring comparable data and getting it published has often been ineffective. It may be in the interest of those operators with poorer results to deliberately block their results from publication.

5.31 Also, it is arguable that regulation of QoS issues should be consistent, irrespective of technology, and without mandatory participation there would be nothing to stop similar problems arising in the mobile scheme – such as operator withdrawal or new participants not joining.

Do not collect performance indicators for larger corporate consumers

5.32 The argument can be made that there is less need to collect performance indicators for larger corporate consumers as there is evidence that they have other mechanisms for being informed about and controlling quality of service. If this is the case, mandatory regulation of those telephony providers who focus on larger corporate clients may not be justifiable.

5.33 Many larger corporate clients are serviced through service level agreements with their telephony (and communications) provider. Therefore, many service levels are guaranteed or there is a compensation agreement already in place should the level of service not meet the agreed standards.

Questions

*Do you believe there is a different regulatory option that is not captured in this document?
If so, what might another viable option entail?*

Do you believe that there should only be a requirement to supply QoS information by those designated as universal service providers (ie. BT, Kingston)?

Do you generally agree with the advantages and disadvantages listed against each option?

Do you believe that all providers of communication services should be required to provide comparable QoS information for consumers?

Chapter 6

Information comparisons

6.1 It may be worthwhile comparing QoS reporting in other European countries and also in other markets. This can help establish a comparison of the level of intervention and/or availability of consumer information elsewhere.

European comparisons

6.2 Many National Regulatory Authorities (NRAs) in Europe set QoS performance targets for fixed line operators. A majority of SMP operators have set performance targets and four countries have performance targets set for non-SMP operators. France, Italy, the Netherlands, and Greece set performance targets for SMP and non-SMP operators.

6.3 Ireland, Finland, Sweden, and the UK are the only countries in the survey that do not set QoS standards for any designation of fixed line operator.

6.4 SMP/Universal Service operators from all countries in the survey (except for Finland) measure QoS standards pursuant to either of the ETSI standards (ETR 138, EG 201).

6.5 Each country exercises a degree of flexibility as to which QoS parameter is measured, when a QoS measurement should be enforced, and when a sanction for non-compliance is triggered. However, Europe has generally followed the lead that the UK has taken in reporting QoS information.

6.6 Ireland and the UK provide the most information to consumers with other countries providing basic and summary reports (either through the NRA or SMP operator). About half of the countries do not publish QoS information.

6.7 The Better Business Bureau in North America provides consumers with business reliability reports (via telephone or internet) which give companies a satisfaction rating based on their marketplace performance. This takes into account complaints performance, law enforcement actions taken, advertising violations, etc.

Marketplace comparisons

6.8 Ofwat's WaterVoice publishes complaints on its website (ofwat.gov.uk) and through its annual report. Complaints are documented on water quality, pressure, supply, sewerage, billing, and charges. There is a retrospective 5-year comparison.

6.9 One of WaterVoice's stated aims is to be a credible and effective one-stop shop for all customers, with strong powers to obtain and publish information and to resolve complaints.

6.10 The Drinking Water Inspectorate publishes findings of its studies on water quality – per company – on its website at dwi.gov.uk. 26 water companies are compared on such things as bacterial counts.

6.11 Energywatch provides comparable information on electricity and gas suppliers and ranks them as 'best' and 'worst'. This information includes company performance on

accounting and billing, transfers, and selling practices. It is available on their website at energywatch.co.uk.

6.12 The London Underground publishes reliability reports comparing the different tube lines. There is also comparable information available for the punctuality and reliability of train networks.

Chapter 7

Expansion, publication, and when to stop

When to regulate

7.1 CPIs provide UK business and residential consumers with information on telephony services for fixed-line and mobile telephony only. Oftel is not aware of any other sources of comparable and readily available information about the quality of telephone or other communication services. However, clearly there are other communication services on offer and inevitably more will be offered in the future. As such, it may be necessary to have a mechanism for determining which services should be measured for quality and which services should be free from regulatory involvement.

7.2 Any future measurement and subsequent publication of service quality information will likely be tested against the consumer need for such information. Testing this “consumer need” may include determining:

- consumer demand for a specific type/and or area of information;
- whether a particular societal group will gain by the provision of information;
- if there is a consumer detriment being suffered because of a lack of free and easily attainable information – and the degree of this detriment; and,
- if there are likely to be future consumer benefits by providing this information (ie. through increased competition in the delivery of these services).

7.3 If regulatory intervention is necessary in order for adequate consumer information to exist, Ofcom might decide to employ a proportionality test before and during such regulatory involvement. Results of such a test would give a clear indication that consumers (continue to) benefit from comparable quality information and that the cost of providing this information would be justified by the likely benefits.

7.4 Ofcom may wish to monitor consumers’ need for service quality information. If so, existing information could be scrutinised not only for its value (cost verses benefit) but also for its effectiveness in meeting consumers’ needs. For instance Ofcom could ensure that consumers’ awareness of this information is adequate, that the information is fresh and comparable, and that the publication is of sufficient quality. Although monitoring would be an ongoing exercise, research for monitoring the level of consumer need and illuminating the cost/benefit balance would probably need to be undertaken at least once a year.

7.5 The level of consumer awareness is bound to vary depending upon which service is being measured. However, any determination of what is a “reasonable” level of awareness should take account of information targeted at a particular consumer group. CPIs are currently published every six months and this may be of a sufficient frequency to keep the information fresh and consumers up to speed. Any information that is produced – both electronic and paper-based – should meet the basic requirements for ease of use, accessibility, and clear language. Where applicable, publications must take account of the Disability Discrimination Act and the Welsh Language Act.

7.6 Ofcom may also wish to recognise when consumers’ need for information on a particular service is no longer justified or when a particular measurement of a service is no longer warranted. In such an instance, and following a proportionality test, Ofcom may no longer require the measurement or publication of a (largely) obsolete measure.

7.7 Ofcom may decide to monitor developments in communication services and any corresponding consumer need for information about these services. As consumers adopt a particular technology or service and where there is an established consumer need, Ofcom may need to consider how best to measure and publish information.

Publishing Quality of Service Measurements

7.8 Currently the fixed line and mobile CPI results are published separately. This is due to differences in the organisation of the groups, the fact that the groups are at different stages of development, that they remain separate, and that each group tests different aspects of services.

7.9 A one-stop shop for consumer information can be beneficial to both the providers and the users of information. The benefits can include a reduced information search cost for consumers and more efficient delivery of information for providers. The National Consumer Council lists a “single source of information” as one of its requirements for a better consumer information scheme (NCC’s Trading Information, October 2002).

7.10 Due to the different service measurements – based on consumer need – and the amount of information that is made available for publication, it may be impractical to combine measurements into one publication (eg. booklet or leaflet). However, a shared website might be possible if properly designed and segmented. The logistics in creating such a website would, however, be formidable. Design, operating costs and ownership issues would require ongoing co-ordination and agreement. Also, a large and complicated website may in fact deter consumers from continuing their search.

7.11 Another approach to providing information is to create an online information house holding pertinent information about communication services. This may include information on:

- where to find price and quality information;
- how to find out which operators offer services in a particular region;
- how to find out about consumer rights and choices;
- what consumer code is followed by a particular operator;
- what do to if there is a problem or if a complaint needs to be made; and,
- how to access an impartial adjudicator.

7.12 Such a website could provide benefits. It could be seen by consumers to be trustworthy and impartial and could minimise consumers’ search efforts for information. It could also be easily marketed and this could increase the awareness of this information amongst consumers. However, the desired information may still be one or two clicks away and this may deter some from continuing their search for information.

When to stop reporting and publishing

7.13 The communications market is constantly changing. Not only are new services replacing the old, but also companies are constantly re-inventing themselves or being conceived. Consumers also change with the times and they look to purchase new services from new companies or compare these services with their current supplier(s). To undertake comparisons, consumers’ need for specific quality information will change.

7.14 If CPIs continue to be published, there will be a need to consider an appropriate time for:

- discarding a service measurement from a reporting scheme - *when a particular measure is no longer in demand by consumers or is no longer relevant for comparable measurement;*
- cancelling a reporting scheme - *when a service and/or measurement is no longer in demand by consumers and/or is no longer available in the market; and,*
- determining when a company's reporting is no longer required by this scheme - *when a company no longer trades or when its business strategy changes.*

7.15 Again, periodic consumer research into information requirements and consumer detriment should provide the justification for abandoning measures or schemes, or for altering an operator's mandatory participation status.

Questions

Do you agree with the criteria for testing consumer need and will this provide sufficient justification for either discarding or adding service measurements?

Do you believe there should be a single source of consumer information for all communication services?

Do you believe that one group or body should be responsible for collecting all communication services' QoS information?

What do you believe to be an adequate interval for providing QoS information (ie. Every six months)?

Chapter 8

Conclusions

8.1 It is not possible to measure exactly the level of consumer detriment that exists now or would exist if this type of reporting were to stop. Nor is it possible to find an accurate measure of the costs and benefits associated with the current schemes or of a future – improved – scheme.

8.2 Oftel has shown that from an economic standpoint there would seem to be some theoretical justification for a public policy to increase availability of and access to consumer information about the relative quality of telecommunication suppliers. In addition there is evidence that suggests that there may be some consumer detriment in the absence of CPIs and that the benefits of CPIs do not have to be great (on a per customer basis) to offset the costs to operators. However this alone may not provide a clear justification for mandating CPI participation for all operators.

8.3 Oftel's commitment to informing consumers comes under its remit to protect and empower consumers. CPIs are the main delivery mechanism for informing consumers about QoS. QoS is always identified as one of the top two most important factors that consumers need to make a decision on buying or switching telecommunications services.

8.4 The CPI scheme, despite its shortcomings, continues to grow in relevance for consumers. More consumers access this information and the awareness continues to increase - although it is still low. Consumer groups, including the National Consumer Council, the Telephone Helpline Association and the Advisory Committees on Telecommunications have been generally supportive of the CPI scheme.

8.5 If QoS reporting is to continue, Ofcom will need to determine if the current policy is capable of solving a range of problems. Ofcom will also need to be sure that the current policy is capable of allowing growth and change in the provision of QoS information across the whole communications spectrum.

Chapter 9

Consultation

How to make comments on the questions raised in this consultation document

1. Oftel is publishing this consultation document so that interested parties may comment on the issues it addresses. The closing date for submitting comments is **13 February 2004**.
2. Where possible, comments should be made in writing and sent by e-mail or by post to the address below. If any interested parties are unable to respond in one of these ways, they should discuss alternatives with the project manager named below:

Chris Smithers
Ofcom
2A Southwark Bridge Road
London
SE1 9HA
Tel: 020 7981 3858
E-mail: chris.smithers@ofcom.org.uk

Publication of comments made by stakeholders

3. On this occasion, Oftel/Ofcom is not programming a formal period during which interested parties may comment on the responses made by others. Ofcom aim to publish the outcome of this consultation and all responses to it. Unless you make a specific request to keep all or part of your response confidential (please give reasons), all submissions will be published as soon as practicable after Ofcom has received them.

The consultation criteria

4. Ofcom has designated Philip Rutnam, Partner Competition and Strategic Resources, as its consultation champion. If you have any concerns or comments about the consultation process in general or this consultation in particular, please contact:

Philip Rutnam
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
Tel: 020 7981 3585
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5. Oftel considers that this document meets the Cabinet Office code of practice on written consultation documents. The code is reproduced below for convenience.
- Timing of consultation should be built into the planning process for a policy (including legislation) or service from the start, so that it has the best prospect of improving the proposals concerned, and so that sufficient time is left for it at each stage.
 - It should be clear who is being consulted, about what questions, in what timescale and for what purpose.
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- A consultation document should be as simple and concise as possible. It should include a summary, in two main pages at most, of the main questions it seeks views on. It should make it as easy as possible for readers to respond, make contact or complain.
 - Documents should be made widely available, with the fullest use of electronic means (though not to the exclusion of others), and effectively drawn to the attention of all interested groups and individuals.
 - Sufficient time should be allowed for considered responses from all groups with an interest. 12 weeks should be the standard minimum period for consultation.
 - Responses should be carefully and open-mindedly analysed, and the results made widely available, with an account of the views expressed, and reasons for decisions finally taken.
 - Departments should monitor and evaluate consultations, designating a consultation co-ordinator who will ensure that all the lessons are disseminated.
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Appendix A

Extent to which consumers may suffer

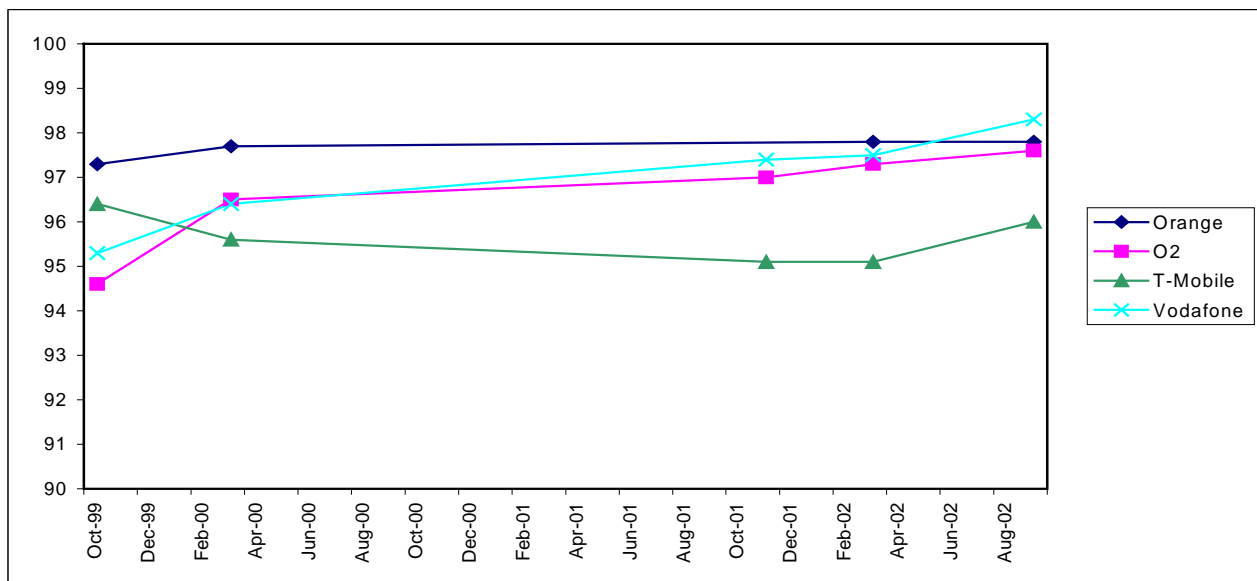
Mobile

A1 Actual performance of operators compared to levels of dissatisfaction, mobiles

Under the CPI programme, mobile operators produce information about their quality of service in terms of the proportion of successful calls made. This data does not distinguish between residential and business users. Using the data it seems that there are not substantial differences in relative performance indicated by a number of quality measures, between mobile operators, although one operator has consistently provided a lower quality service in terms of call success rates.

A2 Although these success rates are indicative, resulting from controlled tests (and therefore not completely representative of actual success rates) it appears that there are only minor differences in the call set up and completion success rates across operators on a national basis. On the whole each mobile operator has improved its performance since the CPI scheme began. This suggests that the gains available to consumers by switching from the worst to the best performing operator would be limited, although it is worth noting that relatively small differences could equate to quite substantial sums of money for high-spending mobile users, particularly business customers. CPIs have possibly had a positive impact on the performance of mobile operators.

Figure A1 Call Success rates of mobile operators (1999 – 2002)



A3 However, differences from the set of regional results are greater. The CPI data shows that East Anglia has the highest levels of successful calls whereas Wales has the lowest. The lower levels in Wales were driven by lower success rates on one particular mobile network. The regional results also indicate greater disparities in call success rates. So it appears that gains from switching mobile operators would be greater for consumers in certain parts of the UK.

A4 Despite the apparent similarities in the performance of operators, OfTel has estimated that some 2 million mobile users are dissatisfied with their overall telecommunication services. Moreover on some quality issues, levels of dissatisfaction vary widely by operator.

A5 Mobile operators produce information about their quality of service in terms of the proportion of successful calls made. Fixed operators produce a wider range of performance indicators, including satisfactory order completion, the level of faults and clearance rate of repairs, prompt complaint handling, and billing accuracy (in line with annex III of the USD).

Figure A2 Successfully completed mobile calls by operator

%	O2	Orange	Vodafone	T-mobile
	Sep '02	Sep '02	Sep '02	Sep '02
Completed successfully	97.6	97.8	98.3	96
Successful set ups	98.7	98.8	98.9	97.6
Successfully held	98.9	99	99.4	98.4

Based on CPI data

Figure A3 % dissatisfied with mobile service by operator, residential customers

	O2	Orange	Vodafone	T-mobile
	Sep '02	Sep '02	Sep '02	Sep '02
Overall service	8%	5%	6%	8%
Overall value for money	15%	12%	16%	21%
Geographic coverage	16%	13%	14%	23%
Ability to make call/not getting cut off	15%	10%	11%	16%

OfTel survey data, UK residential mobile customers, Nov 02

A6 As can be seen from figure A3 above, there are significant differences between operators with regard to residential customer service dissatisfaction.

A7 *Actual performance of mobile operators compared with levels of business dissatisfaction*
As indicated above, on a national level the CPIs indicate broadly similar levels of service across mobile networks, with the exception of one operator's customers who appear to be receiving slightly lower levels of service.

A8 On the whole business customers expressed higher levels of dissatisfaction with the service they receive than residential customers do, particularly with their ability to make calls successfully and geographic coverage, although this will partly reflect the different dates the surveys were undertaken.

A9 Figure A4 shows significant differences between operators with regard to business customer service dissatisfaction.

Figure A4 % business customers dissatisfied with mobile service by operator

	Average	O2	Orange	Vodafone	T-mobile
Overall service	9%	13%	8%	5%	5%
Geographic coverage	20%	27%	20%	16%	20%
Ability to make calls/not cut off (dropped calls)	32%	36%	24%	30%	34%
Network congestion	12%	11%	11%	12%	12%

Base: OfTel survey data, UK SMEs with mobiles, rolled data from Aug '01 and Nov '01 (Base: 1178, don't knows have been excluded)

A10 There appears to be some regional disparities in reported levels of dissatisfaction by businesses. In particular businesses in Scotland appear to be substantially less satisfied than average on all measures except geographic coverage. In addition businesses in the North appear to be more dissatisfied than average with the overall service they receive, Welsh businesses are not surprisingly more concerned about geographic coverage and businesses in London are considerably more dissatisfied with their ability to make successful calls than average.

Figure A5 % business customers dissatisfied with aspects of mobile service by region

Region	Overall service	Geographic coverage	Ability to make calls/not cut off (dropped calls)	Network congestion
National	9%	19%	26%	10%
Midlands/East Anglia	6%	22%	27%	12%
London	7%	17%	37%	10%
North	14%	19%	25%	10%
*NI	14%	28%	17%	7%
Scotland	15%	21%	31%	20%
South	6%	17%	23%	8%
Wales	9%	26%	13%	9%

* **small base so apply caution to results**

Base: OfTel survey data, UK SMEs with mobiles, rolled data from Nov'01 and Aug '02 (Base: 1984 'don't knows' have been excluded)

Fixed line

Figure A6 Fixed supplier CPIs

	BT	Kingston	NTL	Telewest
For 3 months ending	Dec '02	Dec '02	Dec '02	Dec '02
Order completion (% completed by agreed date)	97.6%	99.9%	92.6%	95.6%
Fault repairs (% cleared in target time)	70.4%	99.8%	*79.8%	-
Faults (reported faults per 100 lines)	3.6	3.4	2.9	4.6
Complaint handling (% resolved within 20 working days)	99.1%	100%	*97.2%	93.8%
Billing accuracy (complaints per 1000 bills)	1.3	0.4	*0.1	4.3

* incomplete data available

- data not available

A11 For fixed comparisons, the CPI data is not complete for some suppliers in some periods. However, generally it indicates that one operator stands out as the best performing supplier, other than in terms of levels of reported faults. There appears to be greater differences in performance across fixed operators than mobile operators. This suggests that there may be greater gains available to fixed consumers than mobile consumers by switching operators to better performing operators.

A12 There appear to be quite substantial variations across suppliers in terms of the level of faults repaired within specified targets, ranging from 70.4% to 99.8%.

A13 *Levels of satisfaction about the quality of service*

Despite the apparent similarities in the performance of operators, Oftel has estimated that some 2 million residential mobile users and 1 million home fixed telecommunications users are dissatisfied with their overall telecommunications services. Moreover on a range of quality measures, levels of dissatisfaction vary by operator.

A14 The results indicate that during November 2002 cable customers were less satisfied with their overall fixed line service than BT customers. Results were broadly similar for both types of supplier for reliability of service and value for money (the differences for this indicator are not statistically significant).

Figure A7 % dissatisfied with aspects of fixed line service (residential)

	BT	Cable
	Sep '02	Sep '02
Overall service	4%	7%
Overall value for money	20%	16%
Reliability	2%	3%

Oftel survey data, UK fixed line customers, Nov 02, base 2136

A15 It is worth noting that BT customers have become more satisfied with their overall service since November 2001, while cable customers are becoming increasingly dissatisfied with value for money. Satisfaction with the reliability of fixed line services has remained stable over time and broadly similar across suppliers.

A16 It is likely that consumer satisfaction with aspects of the service they receive reflects a number of factors, not just the performance of their operator. So it is not clear that satisfaction about some areas of performance directly reflect the quality of service. For example this would explain why a gradual fall in satisfaction with value for money amongst cable customers occurs at the same time that the proportion of successful order completions (within a given time span) increases.

A17 However we might expect levels of satisfaction to be influenced to some degree by QoS. It is consistently the second most important consideration when choosing a telephone service (behind price).

Figure A8 Performance of fixed operators compared with levels of residential dissatisfaction

	BT	Kingston	NTL	Telewest
For 3 months ending	Dec '02	Dec '02	Dec '02	Dec '02
Order completion (% by agreed date)	97.6%	99.9%	92.6%	95.6%
Fault repairs (% cleared in target time)	70.4%	99.8%	*79.8%	-
Faults (reported faults per 100 lines)	3.6	3.4	2.9	4.6
Complaint handling (% resolved within 20 working days)	99.1%	100%	*97.2%	93.8%
Billing accuracy (complaints per 1000 bills)	1.3	0.4	*0.1	4.3

* incomplete data available

- data not available

Figure A9 Actual performance of fixed operators compared with levels of business dissatisfaction

CPIs	BT	Kingston	NTL	Telewest
For 3 months ending	Dec '02	Dec '02	Dec '02	Dec '02
Order completion (% by agreed date)	94.7%	98.7%	86.6%	95.7%
Faults (reported faults per 100 lines)	2.3	1.8	1.3	1.2
Complaint handling (% resolved within 20 working days)	99.1%	100%	*97.2%	93.8%
Billing accuracy (complaints per 1000 bills)	1.3	0.4	*0.1	4.3

* incomplete data available

A18 For fixed business comparisons, the CPI data is not complete for some suppliers in some periods. As with the residential results there appears to be greater differences in performance across fixed operators than mobile operators, suggesting that there may be greater gains available to fixed business users by switching operator.

A19 Currently 88% of UK SMEs use BT for their fixed line services (70% use only BT), 12% use cable. During February 2003, 6% of businesses were dissatisfied with their overall fixed line service. Those businesses least satisfied with their overall fixed line services were medium sized businesses and higher spenders. There were no significant differences by supplier.

Figure A10 % business users dissatisfied with fixed service by supplier

	Average			BT			Cable (includes cable and wireless customers)		
	Feb '02	Aug '02	Feb '03	Feb '02	Aug '02	Feb '03	Feb '02	Aug '02	Feb '03
Overall service	5%	7%	6%	6%	6%	6%	5%	7%	5%
Reliability	5%	5%	4%	5%	5%	4%	2%	6%	8%
Value for money	22%	27%	20%	23%	27%	20%	21%	28%	20%

Base: OfTel survey data, UK SMEs with fixed lines, February '03 (Base: 820, don't knows have been excluded)

Conclusions, general

A 20 The following conclusions can be made from the above analysis:

- The actual gains available to consumers by switching telecommunication operator (as indicated by performance differences measured by CPIs) do not appear to be substantial, although gains may be more substantial if consumers are concerned with a particular issue. Moreover the relatively small differences may amount to considerable sums of money for consumers, particularly business-users.

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- The differences in satisfaction and performance may suggest that consumer expectations about quality of service are not being realised. This may provide a justification for a CPI policy, particularly since consumers appear to have problems with particular aspects of quality.
 - Low awareness of the performance indicators and the limited number of consumers that are likely to act on the CPI publications suggest that the overall impact of CPIs is currently limited. However it is worth noting that a small percentage of the telecommunications market which is prepared to switch can equate to millions of consumers.
 - If CPIs have a positive impact on operator performance, continuing regulatory involvement may be justified even if apparent consumer awareness of the initiative is limited. Withdrawal from the initiative may lead to widening disparities in the QoS provided by operators. It is also possible, somewhat perversely, that this would stimulate greater demand for CPIs than currently exists. In other words it may be that there is limited interest currently because many operators are broadly similar.

A21 Conclusions, mobiles

In terms of mobile CPIs, quality differences between the operators are not great. However, the performance of mobile operators is more variable on a regional basis. It also may be worth considering the impact of publication on performance. For example, the fact that mobile operators have voluntarily published CPIs and used the results as part of their advertising campaigns suggests that operators themselves perceive some net benefit to their involvement, and as a result CPIs may well have had a positive impact on their performance. It is interesting to note that each mobile operator has improved its performance in every region of the UK since the CPI scheme began.

A22 The data for business consumers is fairly limited but there appears to be substantial regional variations in the levels of dissatisfaction, with some regions showing particularly high levels of dissatisfaction for certain measures. For example businesses in London are considerably more dissatisfied with their ability to make successful calls than average. However business customers in Wales are as satisfied as average despite the lower levels of service reported in this region. Moreover one operator's lower levels of service do not appear to impact on business customers' satisfaction levels.

A23 Conclusions, fixed

There are greater disparities in performance for both business and residential users suggesting that there may be more benefits available to consumers by switching operator.

A24 Although the results are not directly comparable it seems that fixed users are generally less dissatisfied than mobile users.

Appendix B

Market failure: the economic theory of asymmetric information

B1 Information asymmetry occurs where one economic agent involved in a transaction possesses information or knowledge that the other economic agents involved do not. This is likely to influence the way economic agents make their trading decisions.

B2 Akerlof modelled the effect of asymmetric information in the used car sales market. In his model, sellers of used cars have more information about the quality of each car they offer for sale than do buyers. Buyers cannot differentiate between good and bad quality cars and so both types sell for the same price. Since buyers cannot observe the quality of each unit they purchase, only the distribution of quality, they will buy goods or services at a price that reflects the average quality of goods or services in the market (or some statistic used to proxy for average quality).

B3 As the market price reflects the expected value, or the average quality, of a car some will be over-priced and some under-priced. This may cause some sellers to withdraw from the market since the price may be lower than that required by the sellers of above-average quality cars for them to sell their goods.

B4 As a result there is an incentive for sellers with lower than average quality goods ('lemons' according to Akerlof's model) to offer their goods for sale. This causes the average quality of goods offered for sale at the market price to decline, as does the price that consumers are willing to pay. In the extreme case identified by Akerlof, the equilibrium may occur where no goods are traded, as consumers would not pay the price of an average car if they know that they will only be offered a lemon. In other words 'bad cars will drive out good'. Even if this extreme case does not apply, a general result is that there would be less trade and a more inefficient allocation than would occur if information were symmetrical, where all goods could be sold.

B5 To offset the problems of imperfect information it may be possible for traders to 'signal' or undertake some activity to indicate the higher quality of their good. Since the function of the signal is to enable consumers to distinguish between low and high quality goods, traders of low quality goods should not be able to mimic the signal. If a signal is credible buyers should appreciate that the signal reflects a higher quality product and so would be prepared to pay a higher price.

B6 An example of a credible signal is the provision of full warranties/guarantees, where the risk of poor quality goods being purchased is borne by the seller. This is likely to be an effective signal since it would be costly for the seller of an inferior product to take on the risk of product failure.

B7 Another example where an institution can counteract the effects of quality uncertainty is by developing a brandname. This may indicate quality and also give consumers a means of retaliation if the quality does not meet expectations; the consumer will curtail future purchases, particularly where repeat purchases are made.

B8 It is useful to consider the relevance of this analysis for telecommunications markets:

- In the absence of a requirement to provide information necessary to publish CPIs it is unlikely that operators would publish comparable quality-related information. This is

inferred from the attitudes of operators. In addition, as noted below, there is an incentive for operators to produce non-comparable information.

- There is not likely to be comparable quality of service information available or the information is so complex (difficult to compare) or inaccessible (buried on each operator's web-site) that it would prove too costly for individuals to investigate.
- Since service quality is variable but consumers do not have the information to distinguish between high and low quality operators, the consumer is forced to infer information about product quality from the pricing policies of suppliers.
- The implication of this would be that there would be a welfare loss due to the less than optimal level of trade that would result. In addition the absence of correct information and the high cost to consumers of obtaining information could cause low quality services to drive out high quality services. Although this may be an extreme scenario and the absence of CPIs may not completely drive out high quality operators, it may encourage operators to make cost savings by reducing their quality of service (since the market price would not be sufficient to induce operators to sell a high quality service). This may be a particular problem if reductions in the quality of their services are not directly observed.
- However the repeat purchase nature of telecommunication services enables consumers to exert some pressure on the behaviour of suppliers. Repeat purchases are likely to induce a firm to supply high quality when consumers learn about quality quickly and renew their purchase regularly, which is likely to apply to many telecommunication purchases (although annual contracts may not be consistent with this). In addition there may be an incentive for operators to develop signals to indicate the quality of their services, such as a guarantee of some minimum level of service or publication of some performance measures.
- In addition there may be alternative comparisons available to consumers which indicate relative quality. For example in mobile telecommunications, JD Power publishes a survey of customer satisfaction. Moreover Oftel collects complaints data about fixed and mobile operators which could be published in such a way as to enable consumers to make certain limited comparisons about quality of service. In addition consumers may learn about quality by way of word of mouth.

B9 The final two points may suggest that there is no need for additional government intervention to rectify the information market failure. However there are a number of reasons why regulation may be justified:

- There is an incentive for producers of low quality services to mimic signals produced by suppliers of high quality services. This may be confusing for consumers if the indicators/signals are difficult to compare.
 - Relying on word of mouth and CRS complaints data as methods of comparing the quality of operators may distort the choices consumers make. Complaints may not reflect actual performance of operators but perceived grievances and other factors, such as the personal characteristics of complainants.
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- There may be a moral hazard problem if there are opportunities for sellers to reduce their costs by changing their product quality without being observed. This may be a particular issue where operators are subject to price caps.
 - The attainment of a signal is not likely to be free yet total output is not likely to change. Hence there may be a cost to society.
 - There may be factors which reduce the likelihood that telecom operators will provide quality-based information. For example the nature of competition may impact on the availability of different types of information, possibly to the detriment of consumers. If competition is based around a focal point (eg headline price) then suppliers may compete to offer that attribute alone. As a result consumers may not have access to information about other attributes. In addition, if consumers have biases about how information is processed, suppliers may have an incentive to direct the focus of competition. Suppliers may want to shift attention away from quality as it may be easier for operators to stress price as a competitive characteristic.
 - Information about quality may be difficult to provide by suppliers because of complexity or credibility issues. They may not present information on quality unless they can do so cost effectively in such a way as to influence consumer behaviour and attract customers. If suppliers are unable to provide consumers with information that meets these criteria they may be more likely to rely on reputation methods for providing consumer information.
 - Informed consumers may exert a positive externality on uninformed consumers; by being more demanding they may drive a supplier's quality upwards. Whether consumers become informed will depend on the costs and benefits they face which will be influenced by the availability and complexity of information. A consumer will not consider the wider benefits to all consumers that arise from inducing suppliers to offer higher quality, only their private costs and benefits. If there is a large cost to collecting information and/or a large cost associated with switching suppliers, then consumers may be rational by being with a low quality operator. Costs to identify a high quality operator may not be worth the private gains in quality. As a result Oftel would not be able to conclude that there was consumer detriment on an individual level. Moreover this may lead to an incentive for all operators to be low quality operators. However, the societal benefits to providing credible signals may offset the costs of providing Oftel with an incentive to regulate (ie. the consumer information externality). Consequently there is an argument for increasing the number of informed consumers (beyond its privately optimal level) if the benefits to society outweigh the costs of doing so.
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Appendix C

The market impact of an informed consumer

C1 Oftel's objective is to help inform the UK consumer on QoS issues. Oftel is interested in how QoS information – in the hands of consumers – may alter the courses of telecommunication markets.

C2 Different products and markets, diverse consumer sets, variable amounts of information and varying degrees of accuracy with this information guarantees a plethora of possible outcomes. However, a common pattern does emerge if certain criteria are met: lower information search costs and a higher percentage of well-informed consumers combined with a minimum number of suppliers all tend to result in lower prices and higher levels of QoS.

C3 If comparable information is available, the consumer tends to use the most desirable seller in terms of their optimal price-quality combination. Sellers are forced to become efficient, as they must compete directly and openly with their competitors. However there are factors that may limit the extent to competition such as the existence of consumer search costs and switching costs.

C4 If a small search cost for information exists, this could lead to monopoly pricing or to stagnant levels of quality. If a consumer does not believe that multiple searches for information will result in a better deal (price or quality), they will not bother searching for a better deal. The equilibrium is found when a seller sets its price and/or quality whereby it is unprofitable for consumers to search for another provider (ie. shop around), and so each seller has an incentive to price slightly above a common price or set quality levels slightly below a common standard.

C5 Also, brand differentiation may lead to higher prices as consumers can focus solely on information on product characteristics (trying to find their perfect match) and ignore other types of information such as how other consumers rate the seller.

C6 It can also be argued that information about the existence of rival goods can result in greater substitutability between products, resulting in lower prices and/or higher quality. If consumers take information as proof that a product is unique and cannot be easily substituted, then higher prices and lower quality standards might ensue.

Positive/negative externalities

C7 It is arguable that as firms tend to compete more vigorously for informed consumers, the uninformed ones benefit through lower prices/higher QoS (ie. free riders). Therefore, the informed consumer has a positive effect for consumers as a whole.

C8 However, consumer tastes, preferences, loyalties and product differentiation may cause a consumer to not bother with a further price (or information) search because the perceived search costs are above the perceived gains. Again, this may affect informed and uninformed consumers alike.

C9 Conclusion

Oftel attempts to provide consumers with information on QoS that is easily found, easily understood and is free. By doing this, Oftel lowers the search costs for consumers and this in turn should help to eliminate the polarisation of informed and uninformed consumers.

C10 Generally, if consumers have lower search costs and are consequently better informed (as well as more of them being informed) about price and QoS issues they should enjoy the rewards of an increasingly competitive market.

Appendix D

List of companies participating in the CPI schemes

D1 The following is a list of companies participating in the fixed line and mobile CPI schemes (as of October 2003):

- Fixed line: British Telecom, Cable and Wireless, COLT, Energis, Kingston Communications, MCI, NTL, THUS, Your Communications.
 - Mobile: O2, Orange, T-Mobile, Vodafone.
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