

Wholesale Line Rental

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General of Telecommunications

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Summary

S1 In August 2002 Oftel required BT to provide a Wholesale Line Rental (WLR) product. WLR is intended to stimulate competition by allowing alternative suppliers to provide an integrated service comprising calls and access, renting the exchange line from BT, and sending customers a single bill.

S2 BT introduced a WLR product in September. Oftel believes that this basic product needs to be enhanced in order for it to be an effective mass-market product that is commercially attractive to service providers and to end users.

S3 Oftel is now setting out proposals on the nature of the enhancements required. These proposals reflect extensive discussions and work in industry groups set up by Oftel since June.

S4 WLR service providers should have the same opportunity to compete in the marketplace as BT. This means that BT's retail activities should not benefit from privileged access to select services and line features supplied by BT at the wholesale level if they are material to competition and BT has market power in these areas. These existing services and features should be made available to WLR providers. This will require developments to BT electronic 'gateway' through which orders are placed by the service providers

S5 BT also needs to develop and make available to service providers new features which will allow calls by WLR customers to be routed directly to the providers' service centres when they dial codes such as 151 and 154 for residential and business support. BT will also need to ensure that WLR providers have access to fault management and reporting facilities that BT provides to itself. To promote innovative tariffing, Oftel believes that WLR providers should also be able to choose to prevent their customers dialling Indirect Access (IA) codes.

S6 The transfer of customers to their new provider should be carried out as efficiently and as seamlessly as possible with the number of rejected orders kept to an absolute minimum. When the WLR calls are to be provided using Carrier Pre-Selection (CPS) routing, this should be activated by BT simultaneously with or in the shortest possible time after the line is transferred. Oftel recognises that for the enhanced product a short delay between the activation of WLR and the activation of CPS may be unavoidable initially to ensure early delivery of the enhanced product but should not exceed one day. Further work by the industry is required to reduce or eliminate this delay.

S7 Oftel has looked at the competitiveness of the ISDN market to assess whether this product should be incorporated into WLR. Oftel's view is that to address BT's dominance in the provision of ISDN, BT should be obliged to supply wholesale versions of ISDN on non-discriminatory terms and to provide 90 days' notice of price changes. Prices for the ISDN product should be at a level which will encourage competition into the retail markets.

S8 Some of the proposals that Oftel is making for the enhanced WLR product will require BT to develop its network and systems. Oftel has to decide how the costs of these developments should be met. Some of the developments required to BT's electronic gateway have already been reflected in the WLR line rental charge set in August by Oftel. Over £14M of development costs were allowed for in the line rental charge to be paid by the service providers to BT and represent £0.39 of the quarterly rental of £28.00. Oftel believes that, to provide certainty to the service providers and to incentivise BT to minimise the costs of developments, this line rental charge and the approach to allocation of gateway development costs, as set by Oftel in August, should remain in place.

S9 Other developments such as the introduction of optional barring of IA calls and routing calls to customer support require changes to BT's switches. These are required on competition grounds and to provide service providers with equivalence with BT. Oftel is therefore proposing that the set-up costs for these services should be recovered from both BT and WLR providers.

S10 The introduction of enhanced WLR is expected to increase competition between providers and change the way services are marketed. Experiences in other sectors, such as the energy market, and with other telecoms products indicate that there is a need to protect customers from misselling and from unauthorised transfers and to provide independent information. All WLR providers will be required to have a code of practice on sales and marketing, which Oftel will approve. Oftel will issue guidance on the key elements of that code. Oftel is also proposing that there should be a period of ten working days between the placing of a new order by the provider and the transfer of service by BT. During the ten days the losing and gaining providers will send letters to the customer advising them of the change to their service. In addition, Oftel is developing a Consumer Guide to the new product.

S11 Oftel will relax the controls on BT's retail prices once Oftel is satisfied that the enhanced WLR product has been introduced in a form that is fit-for-purpose and is being used actively by alternative providers. This relaxation will reflect the increase in competition WLR is bringing and provide BT with an incentive to introduce the enhanced WLR product swiftly and fully.

S12 To test whether the relaxation is appropriate Oftel will assess the enhanced product and processes. Oftel will consider whether the product allows a service provider to offer a similar range and quality of services to that offered by BT Retail. The processes should provide a means to ensure that customers can transfer service seamlessly and that WLR can be implemented in an efficient manner that minimises transaction costs. Oftel will also consider evidence about the impact of the product on the market.

S13 Oftel intends to publish a Statement in January 2003 with its conclusions from this consultation. BT and service providers will then be in a position to finalise their implementation project plans and report on them to industry groups.

Chapter 1

Introduction

1.1 Background

1.1.1 Oftel's 2001-2 review of the fixed telephony market concluded that BT has market power in the provision of access and calls. BT continues to have a large share of both the lines and calls markets, and makes very high returns on calls, well in excess of the level necessary to maintain a sustainable business. In August 2002 Oftel modified BT's licence to require it to provide a new 'Wholesale Line Rental' (WLR) product. The purpose of this product is to stimulate competition by enabling alternative suppliers to provide a single bill that covers both line rental and telephone calls.

1.1.2 In order to provide BT with an incentive to introduce WLR as quickly and fully as possible, Oftel indicated that it would relax the controls on BT's prices (from RPI-RPI to RPI-0%) when it is satisfied that a 'fit-for-purpose' WLR product has been made available by BT and is being actively used by competitors. A relaxation of price controls is appropriate if the market for these services becomes more competitive, as competition should itself put downward pressure on prices,

1.1.3 BT introduced a basic WLR product (WLR1) at the beginning of September 2002. BT branded this product as 'Wholesale Access'. It adopted similar functionality to the existing Calls and Access product though with cost-based prices set by Oftel. To operate as a mass-market and 'fit-for-purpose' product, Oftel recognised that the basic WLR will need to be developed further by BT.

1.1.4 Oftel identified in June some essential features of an enhanced WLR product (WLR2). These included a highly automated ordering process capable of handling significant volumes and seamless interworking with Carrier Pre-Selection (CPS) from a customer's perspective with minimal delay in transfer times.

1.1.5 Since June Oftel has been working intensively with the industry and consumer representatives to develop a detailed set of requirements for WLR2. This process has been carried out in working groups: Steering, Operations and Consumer Issues groups chaired by Oftel and a Process Group chaired by the industry.

1.2 Consultation document

1.2.1 This document sets out – in chapters 2 and 4 – proposals, based on the work of these groups, for a description of the WLR2 product and processes that Oftel would expect BT to implement. In addition, in chapter 3 Oftel sets out an analysis to explain why Oftel believes it is appropriate for ISDN to be included in the product specification for WLR2.

1.2.2 To assist BT to meet all reasonable demand for WLR in a timely manner, Oftel proposes to specify what order volume the BT's systems should be designed to handle. The results of Oftel's commissioned analysis of the potential WLR market, which indicates up to 2.8 million lines after two years, are set out in chapter 5. Chapter 5 also sets out proposals for how the system might be rationed between different SPs on those occasions when the system capacity is exceeded.

1.2.3 There will be costs associated with the developments BT has to make to its system to introduce WLR2. Chapter 7 sets out the options and recommendations for how those costs should be recovered.

1.2.4 The establishment of a fit-for-purpose WLR product will encourage competition and is likely to bring significant changes in the way services are marketed and delivered to consumers. Oftel believes that appropriate safeguards should be provided to protect consumers as well as the reputation of the industry itself. In chapter 6 Oftel sets out proposals for guidelines on sales and marketing codes of practices and a Consumer Guide. Oftel also makes proposals for a minimum time period between the WLR provider placing the order with BT and the implementation of the new service. This period is to allow the losing and gaining providers to write to the customer which will help prevent customers being switched without their knowledge or consent. Oftel also makes proposals for the content of those letters.

1.2.5 In chapter 8 Oftel invites comments on the form the assessment of whether BT has introduced a 'fit-for-purpose' product should take. Finally, in chapter 9 Oftel identifies key implementation milestones.

1.3 Consultation details

1.3.1 Responses to this consultation are invited by 13 December. Oftel will consider all submissions and set out its conclusions in January 2003.

Chapter 2

WLR2 product description

2.1 Introduction

2.1.1 BT Retail offers its customers a wide variety of different types of access line. In order to be able to compete effectively in the same market, an independent service provider (SP) must be able to offer the same range and quality of services.

2.1.2 This does not mean that WLR2 should simply provide SPs with the wholesale equivalent of the same set of products offered by BT Retail to its customers. What it does mean is that the wholesale inputs available to SPs under WLR must create an equivalent opportunity, not just to duplicate the services offered by BT Retail, but to bundle those inputs in different ways in order to create new products.

2.1.3 These wholesale inputs can be divided into two parts. Firstly, the set of basic line types to be provided under WLR2; secondly, the set of supplementary services that can be applied to each line type, in order to provide different retail services.

2.1.4 This chapter reviews the range of line types and supplementary services used by BT Retail, and then discusses which of these should be included in the WLR2 product. The principles adopted by Oftel in deciding whether a particular wholesale input should be provided are set out in general terms in the Access Guidelines (“Imposing access obligations under the new EU Directives”, Oftel, September 2002). In deciding whether a particular wholesale input should be included within the WLR2 product specification, Oftel proposes to apply the following more specific tests. These tests will be applied both to the existing sets of line types and line features, and to any new line types or features introduced by BT:

- Is the wholesale input necessary to allow an SP to compete fairly with BT Retail in the residential and business retail markets for telephone calls and access services?
- Does the wholesale input represent a basic capability of BT’s access network, so that BT is effectively the dominant? Or is this an add-on, which SPs can reasonably be expected to obtain elsewhere?
- Is BT likely to incur significant cost in making available this wholesale input, and if so, does the level of demand from SPs justify this cost?

Oftel invites comments on the tests to be used for assessing whether features and line types should be included in the WLR2 product and subsequently for new products.

2.2 Line types

2.2.1 The access line types supported by BT's network can be grouped into three categories: analogue lines, basic rate ISDN, and primary rate ISDN. In what follows Oftel summarises in more detail the different line types within each of these categories, and then discusses which of these should be included within WLR2.

Analogue lines

2.2.2 BT currently provides three different types of analogue line:

- Single analogue PSTN line. This is the most common type of exchange line, installed in most residential and many small business premises.
- Multiple single analogue PSTN lines. These are multiple individual lines installed on the same site at the same time. The lines are not linked together in any other way, and each line has its own directory number. The lines terminate either on a PBX or on an individual telephone.
- Multiple main plus auxiliary analogue PSTN lines. These are also multiple individual lines serving the same site, but in this case the auxiliary lines are configured so that they share the same directory number as the main line. This allows a business PBX with multiple access lines to be accessed via a single number.

Digital lines

2.2.3 Basic rate ISDN provides a means to deploy digital PSTN services over a standard exchange line. A single basic rate ISDN line supports two 64kbit/s B channels, plus a 16 kbit/s D channel for signalling. BT has deployed a number of variants of this technology:

- BT Highway. This is the entry-level form of ISDN offered by BT, providing analogue PSTN and basic rate ISDN services to the end-user over the same network connection. Two analogue PSTN lines are provided, each with their own number. Basic rate ISDN is also provided, also with its own number. There are two variants of this service, known as Home Highway and Business Highway. These differ primarily in the range of select services that is available. More details can be found in BT's Suppliers Information Note 275.
 - ISDN 2/2e. This is the standard form of basic rate ISDN offered by BT. Two variants have been deployed, commonly referred to as ISDN 2 and ISDN 2e. ISDN 2 uses the limited ETSI call control platform, implemented prior to the completion of the ETSI ISDN standards, whilst ISDN 2e uses the full ETSI call control platform. More details can be found in BT's Suppliers Information Notes 171, 261 and 312.
 - BT ISDNconnect. This is a low-speed data service providing a virtual permanent connection over the D-Channel to a host Value Added Service Supplier. The service allows bursts of data throughput up to a maximum rate
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of 2.4kbit/s (typically X25 or TCP/IP). It is intended for applications such as credit card validation. BT currently only offers ISDNconnect over the D channel of an ISDN2e or a Business Highway line. More details can be found in BT's Suppliers Information Note 225.

2.2.4 Primary rate ISDN provides a means to deploy digital PSTN services over a 2Mbit/s line. A single primary rate ISDN line supports thirty 64kbit/s B channels for voice and data calls, plus a 64 kbit/s D channel for signalling (30B+D). BT has deployed three variants of primary ISDN, supporting different signalling standards. These variants are ISDN 30 (DASS 2), ISDN 30 (I 421) and ISDN 30e (I 421). More details can be found in BT's Suppliers Information Notes 222, 232, 261 and 312.

2.2.5 Oftel believes that the inclusion of ISDN products within WLR is likely to be essential to achieving effective competition in the retail market. This issue is discussed further in Chapter 3.

Special line types

2.2.6 In addition to the basic line types discussed above, BT Retail offer a variety of special line types targeted at specific market segments. These are summarised below.

2.2.7 Private payphone lines, as specified in section 1.3 of the BT Retail price list, are included in the WLR1 product, and are charged at the standard tariff. Payphone lines provided to managed payphones and public call offices are excluded from WLR1. Oftel proposes that the approach adopted for WLR1 should remain for WLR2

2.2.8 NHS lines are a retail service provided to end-users in the health service, supporting a high level of fault management, equivalent to BT Total Care. SPs will have access to the same range of SLAs as BT Retail, including Total Care, and this will allow them to offer an equivalent service to NHS line.

2.2.9 Site or temporary lines are access lines provided on a temporary basis. A higher than normal line rental is charged, in order to ensure that BT recovers its costs associated with providing the line. Demand for these lines has been reduced by the arrival of mobile phones. They are currently excluded from the WLR1 product. Oftel proposes that this position should remain under WLR2. SPs wishing to include them would need to demonstrate that significant demand exists.

2.2.10 Out of area lines provide a means for a business moving premises, from one exchange coverage area to another, to keep their number. This essentially involves the provision of a leased line to the new premises, and so the line rental for out of area lines is much higher than for a standard line. Out of area lines are currently excluded from the WLR1 product. Oftel proposes that this position should

remain under WLR2. SPs wishing to include them would need to demonstrate that significant demand exists.

2.2.11 Low loss exchange lines are exchange lines which provide the customer with a higher signal strength. This is achieved by providing amplifiers at the serving exchange. Low loss exchange lines are currently excluded from the WLR1 product. Oftel proposes that this position should remain under WLR2. SPs wishing to include them would need to demonstrate that significant demand exists.

2.2.12 Non-served premises are sites which do not have specific postal addresses and/or are not for normal business or dwelling purposes. They tend to be sited in a street or footway or at a roadside and are normally unmanned. Examples include OLOs' payphone sites, roadside locations, and traffic control system sites. Lines to non-served premises are currently excluded from the WLR1 product. Oftel proposes that this position should remain under WLR2. SPs wishing to include them would need to demonstrate that significant demand exists.

2.2.13 Ships-in-dock is a service that provides exchange lines to ships in dock, charged at standard levels, but on temporary terms and conditions. The ships-in-dock service is currently excluded from the WLR1 product. Oftel proposes that this position should remain under WLR2. SPs wishing to include it would need to demonstrate that significant demand exists.

2.2.14 FeatureNet is a family of Virtual Private Network (VPN) services offered by BT Retail. The service is based on standard access lines. The value added VPN services are provided by a dedicated set of switches, known as Advanced Services Units (based on Nortel DMS100 switches). It should be possible for an OLO to provide a similar service to FeatureNet, using standard access lines to link customers to their own VPN platform. Oftel does not therefore propose to include FeatureNet within the WLR2 product.

2.2.15 FeatureLine is a Centrex service, providing similar functionality to that offered by FeatureNet, but directly from BT's local exchanges. This means that only BT is in a position to provide FeatureLine services. There is therefore a stronger case for including FeatureLine within WLR than for including FeatureNet. An SP wishing to include FeatureLine within WLR1 would need to demonstrate that significant demand exists. Oftel proposes that this position should remain under WLR2.

Oftel invites comments on the proposals on Special Line Types.

2.3 Select and other services

Introduction

2.3.1 A wide range of select and other services is available on BT lines. In this section we discuss how each of these should be handled in the context of WLR2. There are essentially 5 different ways in which a given supplementary service can be handled:

- The service might be included within WLR2, and covered by the basic line rental. No additional charge from BT to the WLR service provider would be made for this service.
- The service might be included within WLR2, but not covered by the basic line rental. BT would make an additional charge to the WLR service provider for this service, either on a per-line basis or on a per-user basis.
- The service might be excluded from WLR2, but be compatible with it. An SP would be able to use WLR2 to take over the line, without affecting the status of the supplementary service. In this situation the customer might continue to pay another party for the service.
- The service might be incompatible with WLR2, but with WLR2 taking priority. In such cases the other service would be stripped off a WLR line before the line is taken over by an SP.
- The service might be incompatible with WLR2, and take priority over it. A WLR2 order for a line providing such a service would be rejected.

Select services and digital select services

2.3.2 A particularly well-known group of services are the Select Services, provided to allow end-users to manage their calls. Capabilities provided to the end-user include the ability to identify who is making a particular call, prevent unwanted calls, and ensure that calls that are wanted get through.

2.3.3 The standard set of Select Services applies to analogue lines. There is a distinct set of Digital Select Services that apply to ISDN lines, providing an enhanced set of capabilities.

2.3.4 The Select Services and Digital Select Services have high profiles in both the residential and business markets. They form the basis of much of BT Retail's product differentiation, especially between residential and business variants of the same line type (eg between Home Highway and Business Highway). Of tel is therefore of the view that an SP attempting to compete with BT Retail must have available the full range of Select Services and Digital Select Services.

2.3.5 Most of the Select Services and Digital Select Services can only be provided by BT, due to the degree of dependence on BT's access network. Of tel proposes these services should therefore be included within the WLR2 product.

2.3.6 The only Select Services and Digital Select Services that it might be reasonable to exclude from WLR2 are those that can be provided by an SP independently of BT as a call termination service. For example, although Oftel is of the view that a core set of voice messaging services should be included within WLR2, this does not necessarily have to include the full range of voice messaging services provided by BT Retail. This is because an SP can use the Call Mapping service provided by BT (see paras 2.3.22) in conjunction with their own voice messaging platform in order to provide their own range of voice messaging services.

2.3.7 The Select Services and Digital Select Services provided by BT are listed at Annex A in Tables A1 and A2. In each case, the tables show whether Oftel expects the service to be included within WLR, and whether the service is expected to be chargeable.

Oftel invites comments on the proposals on Select Services set out in the table contained in Annex A.

Other end-user services

2.3.8 In addition to the core set of Select Services and Digital Select Services described above, BT offers a number of related services over PSTN lines. The status of those services of which Oftel is aware is summarised below.

2.3.9 There are a number of PSTN lines on which BT Retail provides rented Customer Premises Equipment (CPE). This can range from single line telephones to PBXs rented to business customers. They may include some legacy hard-wired apparatus including magneto bell telephones. Under the existing Calls and Access product, the presence of rented CPE on a line would result in an order for Calls and Access being rejected. BT has proposed that such lines could be transferred to an SP, and that BT Retail will continue to rent the CPE to the end-user, but via a separate retail contract. Oftel is of the view that this is an appropriate solution for WLR2 where the CPE has significant value, as in the case of a rented PBX. However, where the CPE is a residential telephone, Oftel proposes that BT should bill the SP for the rental of the handset, so that the end-user does not have a continued billing relationship with BT Retail.

2.3.10 Direct Dialling In (DDI) is a service which allows individual extensions on a PBX to be directly contacted via their own number. DDI can be supported by multiple analogue lines, as well as by basic and primary rate ISDN. Oftel is of the view that the DDI service is essential in order to allow SPs to compete in the business market, and proposes that it should be included within the WLR2 product.

2.3.11 Number Portability allows an end-user transferring between SPs, whether using BT's network or not, to retain their number. The provision of number portability is a regulatory requirement and so remains part of WLR2.

2.3.12 SPs have requested that BT Retail might be able to use a 'golden numbers' service as a means to attract new customers, by allowing end-users to select a favoured number from a list of available numbers. Oftel proposes that, if BT Retail provides this service to its customers, SPs should in principle be able to do the same to ensure that they are not at a competitive disadvantage.

2.3.13 BT Direct Connect allows for the immediate automatic routing of calls to a pre-programmed telephone number as soon as the handset is lifted. This service is currently excluded from the WLR1 product. Oftel proposes that this position should remain under WLR2. SPs wishing to include it would need to demonstrate that significant demand exists

2.3.14 Network Call Performance provides detailed information on all calls made on analogue and digital lines, including the volume of calls receiving the engaged tone, the number of calls going unanswered and the time taken to answer successful calls. Oftel has been informed that the data for this service is not collected by BTs local exchanges, but by the CPE on a business site. Oftel therefore does not expect this service to be included within WLR2.

2.3.15 BT provides a charge advice service, under which customers are contacted on completion of each call, and provided with a voice announcement indication of the call cost. It would clearly be inappropriate for BT to advise end-users on the call charges being made by a WLR SP, and Oftel does not expect this service to be included within WLR2.

2.3.16 BT offers a temporary transfer and call interception service. This is used to for example handle malicious calls. Oftel proposes that this does not need to be included within the WLR product, since an SP wishing to provide a similar service should be in a position to use the standard call diversion facility, with their own call interception service.

2.3.17 Night-busying provides an end-user with the ability to set chosen exchange lines so that incoming calls receive a 'busy' tone. This service is currently excluded from the WLR1 product. Oftel proposes that this position should remain under WLR2. SPs wishing to include it would need to demonstrate that significant demand exists

2.3.18 BT Retail offers end-users a bypass number facility. This will be included within WLR, bundled where appropriate with other select services.

Oftel invites comments on the proposals for end-user services set out in paras 2.3.8-2.3.18.

2.3.19 The BT Retail price list includes several legacy services (eg Remote Call Forwarding, Call Transfer). It is believed that the functions provided by these are now provided by more modern Select Services such as Smart Divert, and Oftel does not currently expect that these should be included within WLR2.

Comments are invited on whether there are any legacy services for which significant demand does exist, and which should therefore be included within WLR2.

Network services

2.3.21 Oftel proposes that BT Wholesale should offer a variety of services as part of the WLR2 product in order to allow SPs to manage their network, and their customer base. These are summarised below. Oftel's proposals for the recovery of the costs of these facilities are set out in section 7.3

2.3.22 **BT call mapping** enables third party service providers to offer a Voice Messaging service to BT fixed single line end-users with network features equivalent to those of the BT Call Minder service. This includes a special Proceed Indication, and control of ringing duration prior to diversion. For more detail, see BT Suppliers Information Note 287.

2.3.23 **Outgoing call barring** is a service that prevents outgoing calls from a specified line. This prevents end-users who have not paid their bills increasing their level of debt, but is not as extreme as disconnecting them.

2.3.24 **Indirect Access (IA) call barring** is a service that will allow SPs to prevent end-users making IA calls (including the use of the 1280 CPS over-ride code). Oftel believes that the requirement to provide indirect access services should be applied only to operators that have Significant Market Power in the relevant market. In the national markets for access and calls, this is BT. Oftel's view is therefore that service providers using the WLR service should not be obliged to allow their retail customers to choose to route their calls via an alternative IA operator.

2.3.25 Oftel views optional IA Call Barring as an essential element of the additional competitive offering that WLR2 should provide. Oftel is aware that some service providers would prefer not to allow their customers to have a choice to route calls via alternative operators. They argue that they need to guarantee that they will receive the customer's call income if they are going to be able to offer innovative tariffs, such as lower fixed elements being subsidised by higher price variable elements.

2.3.26 Nevertheless Oftel believes it is important that customers who will not to have the ability to make IA calls should be made aware of this when they choose a new SP. Oftel is proposing that when a WLR SP sends a welcome letter to the customer during the switchover period the SP must make clear if IA is not to be

provided. In addition, Oftel's Consumer Guide to WLR2 will make clear that the availability of IA is an issue that a prospective WLR customer should consider. These proposals are discussed further in chapter 6.

2.3.27 The calls affected will be all calls that are made to "Type B" IA codes on a list maintained by Oftel. Calls made to any number on this list will result in a generic recorded announcement provided by BT. IA Call-barring will be optional: SPs will be able to determine on a per-line basis whether this capability is enabled. There will also need to be an option for SPs to add IA call-barring to, or remove it from, a line that is already subject to WLR.

2.3.28 '**Route 15X to service provider**' is a service which diverts customer service calls to the relevant department of the SP. BT Retail has well-recognised numbers for residential customer service (150), business customer service (152), residential fault reporting (151) and business fault reporting (154). Under WLR, BT will translate these numbers to an appropriate number provided by the SP, and route calls accordingly. Oftel believes this is an important customer service facility given the potential impact on WLR SPs' ability to offer a customer experience that is competitive with BT. Oftel therefore believes that this service should be made available to SPs by BT.

2.3.29 '**Route to credit control**' is a service which allows SPs to manage end-users who have not paid their bills. A line on which this service is activated will continue to receive incoming calls. It would also be possible to continue making calls to an allowed set of numbers (112, 999, 1471, 0800, 0500, 0808, 15x). However, calls to all other number (including CPS calls) would be routed to the credit control department of the SP. Oftel believes this is an important customer service and debt management facility which BT should provide in order to provide equivalence with the facility provided to BT Retail.

2.3.30 The implementation of Optional IA Barring, route 15x calls to SP and route to credit control will require alterations to BT's network. BT's initial estimates suggest these will cost around £3M in total to set up. Chapter 7 considers how these set-up costs should be recovered.

Oftel invites comments on the range of services listed in paras 2.3.21 to 2.3.30.

Service incompatibilities

2.3.31 There are a number of services which Oftel does not expect to be provided as part of WLR2, but which are provided over the same line. In such cases it is necessary to understand whether these services are compatible with the WLR product, and if not, how this incompatibility is handled.

2.3.32 One important category of services are those which are provided over the same copper loop used by analogue PSTN telephony, but in a different frequency

band. Obvious examples are BT's Wholesale DSL service, and the Redcare alarm monitoring service. Of tel proposes that analogue WLR2 should be able to co-exist with these services. Of tel is aware that ISDN2 is incompatible with DSL as implemented by BT

2.3.33 ISDNconnect is in a somewhat similar position, in that it utilises spare capacity in the signalling channel of a basic rate ISDN line. Of tel proposes that if ISDNconnect is not included within the WLR2 product, then BT must ensure that the two services are compatible.

2.3.34 There will be some BT lines which have been taken over by an OLO under the terms of Local Loop Unbundling. Such lines clearly cannot be made available under WLR. Of tel notes however that trials of line-sharing are currently underway, and this is intended to allow an OLO to take over only the high frequency portion of a copper loop. If these trials result in a line-sharing variant of the LLU product being made available, then Of tel proposes it should be compatible with WLR2.

2.3.35 BT Chargecard allows end-users to make direct-dialled calls from any BT phone, using an account number and PIN number. The call is then charged to the users's own directory number. Use of BT Chargecard is likely to be incompatible with WLR, and Of tel believes this service should be automatically stripped off any line transferred to WLR.

2.3.36 BT Ring Me Free allows end-users to pay for selected incoming calls, End-users are allocated a 12-digit code, which they can provide to their friends and relatives. The person placing a call dials a 5 digit access code, followed by the personal code, and the call is then routed to the correct destination. Use of BT Ring Me Free is likely to be incompatible with WLR, and Of tel believes this service should be automatically stripped off any line transferred to WLR2.

2.3.37 BT Retail provides a variety of other retail bundles which combine an access line with appropriate call handling services. Examples include the Surfetime internet access product, and the NetChat VOIP service. End-users transferring to a WLR SP cannot continue to receive these retail services, and Of tel proposes that they will automatically be stripped off any line transferred to WLR2.

Of tel invites comments on the proposals on service incompatibilities set out in paras 2.2.31 to 2.2.37.

2.3.38 BT Retail does provide some retail packages which are designed to meet social objectives in relation to vulnerable parts of the community. Examples include the Low User Scheme, In Contact, the Chronically Sick and Disabled Scheme, and the Schools for Internet service. Because of the nature of the end-users for these services, Of tel believes it may be inappropriate for these lines to be transferred from BT to a WLR SP without a positive confirmation from the end-user that they wish cease to the social telephony product. One method of ensuring this would be to specify that a WLR order submitted by the SP for a line on which

these services are provided be rejected, but with a reject code which specifies precisely what service is causing the rejection. The WLR SP would then be able to go back to the end-user, and ask them to cease the service with BT, in order to allow the transfer to go ahead. Oftel's view is that this approach should be adopted initially but be subject to review in the light of experience

Oftel invites views on whether customers using BT social telephony products should have an increased form of protection during transfer and, if so, on the form that protection should take.

2.3.39 The meter pulse facility uses auxiliary equipment in the BT exchange to transmit a series of pulses at a rate related to the pence per minute retail charge rate. The pulses can be detected by suitable CPE. It is possible that the charge could be misleading if a WLR SP used this service, since the pulse rate relates to the BT Retail tariff.

Oftel invites comments on whether there is a need for WLR2 to include the meter pulse facility.

2.4 WLR and directory enquiries

Liberalisation of the directory enquiries market

2.4.1 In September 2001, Oftel published a Statement (*Access codes for directory enquiry services*¹) setting out Oftel's decision to introduce competition into the market for directory enquiries calls, by allocating a new range of short access codes starting with 118 to DQ service providers. In this Statement, Oftel concluded that a model of service-based competition, with all operators and service providers on an equal footing would provide the best deal for consumers in terms of price, quality and choice of service.

2.4.2 In this statement, Oftel also made it clear that it expected "the industry to come to equitable arrangements that will allow access to *all DQ services on all networks*" (emphasis added). Oftel also made it clear that this expectation applied to both fixed and mobile networks.

2.4.3 Consumers will be able to dial these new numbers from December 2002. There will be a parallel running period between the new 118 numbers and the existing DQ numbers such as 192 and 153 until August 2003, after which time the existing numbers will no longer connect to the legacy DQ services.

¹ www.oftel.gov.uk/publications/numbering/denq0901.htm.

Carrier pre-selection and directory enquiries

2.4.4 In October 2002, Oftel published a Statement (*Directory Enquiries and Carrier Pre-selection*²) in which Oftel concluded that the new 118 DQ numbers should be part of the CPS 'all calls' option. (The existing DQ numbers such as 192 are not included in the CPS 'all calls' option, as Oftel considered that the remaining lifetime of these numbers was too short to make any change worthwhile.)

2.4.5 However, concerns were expressed by DQ service providers during the consultation process that CPS operators might restrict the range of 118 DQ services available to CPS 'all calls' customers, and hence limit the benefits of 118 DQ service competition. On the other hand, CPS operators stated in their joint response to Oftel's consultation that they believed that there were strong commercial incentives on CPS operators to carry a range of DQ 118 services.

2.4.6 Oftel recognised the concerns of DQ service providers, and undertook to review its decision to include 118 DQ calls in the CPS 'all calls' option 12 months after it is implemented. In this review, Oftel would assess whether there had been any significant negative impacts on 118 DQ competition (for example because CPS operators do not offer access to a range of DQ services other than their own, or impose excessive retail prices for doing so) and take remedial action at that stage if necessary.

2.4.7 In its October 2001 Statement on DQ and CPS, Oftel explained that it did not plan to require all 118XXX codes onto CPS networks at this time. Oftel also noted the existence of the '1280' over-ride code (by means of which a customer can over-ride CPS routing and force any given call onto the BT network) as a possible means by which consumers could access specific 118 numbers not available on their CPS network if they had a particular need to do so.

WLR and 118 DQ services

2.4.8 As explained in paragraph 2.3.24 one of the facilities in the WLR product may be the barring of indirect access calls for WLR customers, which would include barring of the '1280' CPS over-ride code.

2.4.9 This will mean that (when the existing codes for directory enquiries such as 192 and 153 are withdrawn) a WLR customer will only be able to use those 118 DQ services to which its WLR supplier has chosen to provide access.

2.4.10 WLR service providers, as providers of electronic communications services, will be obliged under the terms of the draft General Conditions of Entitlement³, to make (at least) one DQ service available.

² www.oftel.gov.uk/publications/carrier/2002/dqcps1002.htm.

³ www.oftel.gov.uk/publications/licensing/2002/enti0502.htm.

2.4.11 The question arises as to whether WLR service providers should be expected to provide access to the full range of DQ 118 numbers (which in practice would mean those 118 numbers where the DQ SP wishes to have access to the WLR SP's customers). Ofcom believes that this should not be onerous to WLR SPs due to the ability to transit calls to 118 DQ numbers via a transit operator (ie direct interconnection with the terminating operator is not required) and the fact that WLR SPs will have retail pricing freedom (within reason) for these services. Ofcom notes that WLR service providers may choose to use CPS from alternative operators for call conveyance. If WLR SPs are expected to provide access to the full range of DQ 118 numbers, consideration needs to be given to whether this would restrict WLR SP's choice of CPS operators to only those that themselves provided access to the full range of DQ 118 numbers.

2.4.12 An alternative approach would be similar to that adopted for CPS. WLR service providers would be expected to provide access to a range of 118 DQ services other than their own (or their wholesale carrier's), but would not be expected to offer access to the entire range of 118 DQ services. In this scenario, the possible impact on competition in the DQ market would need to be considered, as customers of WLR service providers would not necessarily be able to benefit from a full choice of DQ services (if for example the WLR SP restricted the choice of DQ services available, or charged unreasonably high retail prices for access to these services).

Views are invited on the two options set out above for the treatment of 118 DQ calls in the WLR product, namely:

- a) should WLR service providers be expected to provide access to the full range of DQ 118 numbers; or**
 - b) should WLR service providers be expected only to provide access to a range of DQ 118 numbers other than their own (or their wholesale carrier's)?**
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Chapter 3

ISDN Products

3.1 Introduction

3.1.1 This chapter considers whether the specification of WLR2 should include wholesale versions of BT's ISDN products. The objective of WLR2 is to achieve effective competition in the retail markets for business and residential end-users. As discussed in chapters 2 and 4, in order to achieve this goal, WLR2 needs to allow alternative SPs an opportunity to compete fairly with BT Retail. BT's retail activities should not be able to benefit from privileged access to key services, processes or features supplied by BT at the wholesale level, if BT has market power in supplying these inputs and they are material to retail competition.

3.1.2 The first key questions in relation to ISDN products are therefore:

- Are these products significant in the retail markets for business and residential end-users?
- Is BT dominant in the supply of these products, and is that dominance likely to be enduring?

If the answer to both these questions is 'yes' then it is reasonable to conclude that wholesale versions of these products need to be available from BT in order to achieve the goals of WLR 2. Consistent with the approach taken by Oftel in Chapter 2, these wholesale versions would need to be functionally equivalent in all material respects with the products that are supplied to BT Retail.

3.1.3 The first two parts of this chapter consider these two questions in turn. The third part considers the options for the basis on which wholesale ISDN products might be supplied to SPs by BT.

3.2 The significance of ISDN products

3.2.1 ISDN lines are a means of delivering a variety of telecommunication services through a common means of access to a digital switched network. ISDN lines provide an end-to-end digital link, thus making accessible a fully digital, switched wideband network and the ability to offer voice, data, image and text services over the same network connection. Chapter 2 includes a discussion of the variety of individual products based on ISDN. These are divided into two broad groups: one based on ISDN 2 lines, and one based on ISDN 30.

3.2.2 ISDN products tend to be used by individuals and businesses with larger and more complex communications needs. ISDN 2 has historically been aimed at both

residential and small business end-users. ISDN 2 offers important additional functionality compared to a pair of analogue lines, notably:

- Higher data speeds for dial-up Internet (up to 128kbit/s in place of up to 56kbit/s) and faster connection.
- Multiple subscriber numbering.
- Direct dialling into PBXs.

3.2.3 Some of these functions are also available in principle over multiple analogue lines. However, the technological superiority of ISDN is reflected in a wider availability of customer premises equipment suited to ISDN, which constrains customers' ability to substitute analogue lines for ISDN. From its discussions with market participants, Oftel understands that ISDN 2 is sometimes supplied in bundles comprising up to 6 or 8 channels in total. This allows ISDN 2 to be the basis for meeting the voice and data needs for a wide variety of small businesses. In the residential market, the higher data speed is a key advantage of ISDN 2. This is particularly relevant in areas not currently served by DSL technology.

3.2.4 ISDN 30 products have historically been aimed solely at the business market, with larger and more complex telecommunications needs than can typically be met with ISDN 2. At one extreme, ISDN 30 products are available with as few as 8 channels, at the other they can be sold in multiples of 30 channels to meet the needs of a single, very large site. The point at which ISDN 30 starts to make commercial sense depends on the type of business (whether it is more or less telecommunication-intensive) but might typically be a site with 20 or so employees in finance or business services, or 100 employees in manufacturing. ISDN 30 is therefore predominantly relevant to larger business sites. These might be occupied by individual SMEs or by large businesses, or might comprise a site such as a business park, where there is a concentration of smaller businesses and the landlord has a co-ordinating role in installing capacity.

3.2.5 ISDN 30 offers similar functionality to ISDN 2 but on a more extended scale, and always in combination with PBX CPE. Direct dialling-in is a common feature as is multiple subscriber numbering, and the use of a variety of applications in addition to voice, including fax and data.

3.2.6 In Oftel's view, the importance and variety of the functions that can be supported by ISDN products strongly suggest that these are significant products in the retail market for business customers. Indeed, our analysis suggests that these are standard products for meeting the telecommunications needs of large numbers of SMEs and larger customers. ISDN2 products also play an important role in parts of the residential market, particularly for consumers with more complex needs and as a means of gaining faster access to the Internet where DSL is not available. The ability of SPs to compete within the business and residential markets will therefore be adversely affected unless suitable wholesale versions of these products are available.

3.2.7 This conclusion is supported by the evidence available on ISDN 2 and ISDN 30 as a share of the total access market. Oftel collects data on the number of access lines supplied by operators in each of the two ISDN groups, and on the number of analogue access lines. The latest available data are set out in the table below for the business and residential markets. The data in the table have been adjusted to allow for underreporting of ISDN30 provision by some operators (for details of the adjustment see paragraph 3.4.3 below).

Business Lines 000s	
2001/02Q4	All operators
Analogue lines	5823
ISDN 2 channels	1496
ISDN 30 channels	3049
Total	10368

Residential Lines 000s	
2001/02Q4	All operators
Analogue lines	24636
ISDN 2 channels	286
ISDN 30 channels	
Total	24922

3.2.8 ISDN 2 channels therefore account for around 14% of all access lines serving businesses, and ISDN 30 for around 30%. Within the residential market, ISDN 2 plays a small but significant role, while ISDN 30 is not relevant. Oftel considers that these shares again imply that ISDN products are certainly significant within the business market, and also likely to be significant within the residential market.

3.2.9 Oftel does not distinguish, in the data it collects, between calls made over ISDN lines and calls made over analogue lines. If the volume of calls over ISDN lines were significantly less than over analogue lines, this might imply that the products actually played a much lesser role within these markets than the access line data. However, Oftel does not consider that this is a likely scenario or probable conclusion. The evidence that exists in relation to the typical characteristics of ISDN 2 and ISDN 30 customers suggest that these will tend to be higher users of telecommunications at the aggregate level, with high call volumes.

3.2.10 Oftel's view is that ISDN 2 products and ISDN 30 products are both significant products in the retail business market. Oftel believes that the same is also true of ISDN 2 products in the residential market. This means that if SPs are not able to supply these products to end-users then they will be at a material

competitive disadvantage, and this will have an adverse effect on competition in these retail markets.

Oftel invites comments on its conclusions on the significance of ISDN products and the implications for competition.

3.3 Competition analysis

3.3.1 The next question that needs to be addressed is whether BT is dominant in supplying these products. If BT is not dominant, and sufficient alternative sources of supply exist to provide effective competition with BT, there is unlikely to be any justification for requiring BT to supply wholesale versions of these products. The analysis of dominance also needs to consider whether any existing dominance is enduring, or whether it is likely to be eroded quickly.

3.3.2 Dominance can only be assessed on the basis of a market definition. The obligation on BT to supply WLR 1, and the proposals for WLR 2, flow from the last review BT's retail price control. The results of this review were reported in "*Competition in the Provision of Fixed Telephony Services*" (July 2001), and subsequently updated with new information in "*Protecting consumers by promoting competition – Consultation on Oftel's review of the fixed telephony market*" (January 2002) and "*Protecting consumers by promoting competition: Oftel's conclusions*" (June 2002).

3.3.3 The Price Control Review defined separate markets for business and residential access and calls. ISDN access was included in almost all of the data alongside other types of access. Oftel concluded in this review that BT was dominant in all markets except for certain business international calls markets.

3.3.4 The conclusions of the Price Control Review imply that there is no need to consider further the question of whether BT is dominant in the supply of ISDN: BT is dominant, and the dominance has recently been confirmed. However, for the purposes of this document, Oftel considers that it would be appropriate to apply a more stringent test before deciding whether BT should have to supply a wholesale version of ISDN. This more stringent test assumes that ISDN access markets constitute separate access markets from analogue lines, and considers whether BT has dominance in the ISDN access markets alone.

3.3.5 Under the new EU regulations, Significant Market Power (SMP) is identified with the competition law concept of dominance. In principle this includes both the concepts of single firm and joint dominance. The former is the relevant concept in this case.

3.3.6 The main criteria that Oftel will consider when assessing dominance in market reviews are listed below. For a fuller discussion see *Oftel's market review guidelines: criteria for the assessment of significant market power* (August 2002).

A dominant position can derive from any combination of the criteria, which taken separately may not be sufficient to determine whether or not there is dominance.

3.3.7 The single dominance criteria listed in the European Commission Guidelines and in Oftel's Market Review Guidelines are:

- Market shares
- Overall size of the undertaking
- Control of infrastructure not easily duplicated
- Technological advantages or superiority
- Absence of or low countervailing buyer power
- Easy or privileged access to capital markets/financial resources
- Product/services diversification (e.g. bundled products or services)
- Economies of scale
- Economies of scope
- Vertical integration
- A highly developed distribution and sales network
- Absence of potential competition
- Barriers to expansion
- Ease of market entry

3.3.8 Oftel has also set out in its Market Review Guidelines a number of other criteria for use in assessing dominance, in addition to those in the European Commission's Guidelines:

- Excess pricing and profitability
- Active competition on non-price factors
- Barriers to switching
- Customers' ability to access & use information
- Benchmarking of the deal received by UK consumers against that received by consumers in similar economies;
- Consumer satisfaction with their service;
- Evidence of previous anti-competitive behaviour or collusion.

3.3.9 In the sections that follow, ISDN markets are reviewed against the most relevant of these criteria.

3.4 Market shares

3.4.1 According to case law a market share over 50% would lead to a presumption of dominance. However, there may still be concerns about dominance where an undertaking has less than 40%, according to the size of that undertaking's market share relative to its competitors. The persistence of a high market share over time is also an important factor. Where a firm has a higher share by value than by volume it may indicate that it can price above rivals due to market power.

3.4.2 Oftel collects data on analogue and ISDN access lines by operator. However, as already discussed, a problem with the data collected for Market Information is that some operators do not distinguish between analogue and ISDN lines. It is also possible that leased lines being used for ISDN30 may go unreported.

3.4.3 This means that in the Market Information figures BT's market share of ISDN30 will be overstated and its share of PSTN understated. Estimates from C&W suggest that about 78% of the lines it reports as PSTN lines are in fact ISDN30 lines. Oftel believes that approximately all other operators' lines are likely to be ISDN30 lines. Given this, BT's share of ISDN30 falls to around 60%, still well above the threshold for dominance. Even making the extreme assumption that all C&W and other operator's PSTN lines were ISDN30 channels would give BT about a 58% share of the latter. Oftel therefore believes that BT has a dominant share of both the ISDN2 and ISDN30 markets.

3.4.4 The adjusted data are shown in the table below:

Business Lines 000s	All operators	BT
2001/02Q4		
PSTN lines	5823	5753 = 98.8%
ISDN2 channels	1496	1487 = 99.4%
ISDN30 channels	3049	1820 = 59.7%
Total	10368	9059 = 87.4%

3.4.4 Oftel is seeking further data on the breakdown between other operators' analogue and ISDN lines over a reasonable time period for this review.

3.4.5 Oftel does not publish separate data on shares of call minutes from ISDN lines. Indeed, Oftel believes that these calls should be regarded as part of the same market as the equivalent call from an analogue line. BT's standard prices are the same, the network components used (beyond the concentrator) are the same and IA operators can offer calls over ISDN as well as analogue lines. Data on BT's share of calls (analogue and ISDN) were published in Oftel's June 2002 price control review statement. The following table is an updated version of table 2.3 of that document. In addition to the new data for 2001/02Q4, there are some differences in the earlier data. This is due to revisions to the cable operators' figures as a result of more accurate data becoming available since the publication of the statement.

Market shares (calls)

	% Market share July – Sept '99		% Market share July – Sept '00		% Market share July – Sept '01		% Market share Jan – Mar '02	
	volume	revenue	volume	revenue	volume	revenue	volume	revenue
Residential customers								
Local calls	78.2%	80.7%	74.1%	75.3%	77.4%	73.3%	79.0%	73.2%
National calls	79.5%	82.1%	78.2%	75.4%	65.3%	66.6%	65.4%	62.2%
International calls	63.5%	71.3%	55.7%	64.8%	47.1%	56.9%	45.4%	57.1%
Calls to mobiles	73.5%	75.4%	71.7%	70.8%	71.7%	69.2%	74.2%	66.6%
Business customers								
Local calls	64.5%	73.2%	60.3%	69.0%	55.7%	65.9%	52.5%	61.3%
National calls	55.3%	62.1%	46.6%	60.0%	42.1%	57.1%	41.0%	53.0%
International calls	25.7%	39.4%	21.8%	38.7%	23.2%	39.6%	18.4%	35.7%
Calls to mobiles	54.8%	56.1%	55.0%	56.7%	52.6%	50.6%	46.0%	48.7%

Source: OfTel Market Information. Market shares have been adjusted to allow for the fact that some operators do not provide separate data for business and residential customers. In addition, Worldcom's submitted national minutes and revenues have been apportioned among local calls, national calls and calls to mobile. BT market shares include Concert market shares for these purposes.

3.5 Countervailing power

3.5.1 The existence of customers with a strong negotiating position, which is exercised to produce a significant impact on competition, will tend to restrict the ability of providers to act independently of their customers.

3.5.2 Such countervailing power is more likely where a customer accounts for a large proportion of the producer's total output, is well-informed about alternative sources of supply, is able to switch to other suppliers readily at little cost to itself, and where it may even be able to begin producing the relevant product itself. This is perhaps most likely to be the case for large businesses whereas small and medium-sized businesses and residential customers are less likely to be able to exercise countervailing power.

3.5.3 The extent of countervailing power in ISDN markets therefore reflects the nature of the customer base for ISDN. As discussed above, this is likely to differ between ISDN2 and ISDN30. ISDN 2 products have historically been aimed at both the residential and small business markets. ISDN 30 is aimed at the business market – and predominantly at larger sites.

3.5.4 ISDN 30 is not, however, exclusively a large (ie 250+ employee), as opposed to small (up to 50 employees) and medium (50-249 employee) business

product. Indeed, at least in terms of customer numbers, SMEs are likely to be the main market for ISDN. This means that the extent of countervailing power is likely to be limited, though it is likely to be more significant in the ISDN30 market than the ISDN2 market.

Of tel invites comments on and evidence of firms' ability to exercise countervailing power in ISDN markets.

3.6 Entry barriers

3.6.1 The threat of potential entry may prevent incumbent firms from raising prices above competitive levels. However, if there are significant barriers to entry, this threat may be weak or absent. Incumbent operators may then be able to raise prices and make persistent excess profits without attracting additional competition that would reduce them again.

3.6.2 Sunk costs can be an important barrier to entry. These are costs which are needed to enter an industry but which cannot be recovered on exit – for example investment to set up a production plant or to build a network. A potential entrant will only incur the sunk costs of investment in an industry if it expects to cover these sunk costs as well as the avoidable costs of production from revenues earned. The incumbent on the other hand, has already made its sunk investments and so will stay in the market as long as it can cover its avoidable costs. The incumbent may then be able to exploit this asymmetry by signalling to the entrant that, if it were to enter the market, prices would be too low to cover sunk costs. Entry would then be deterred.

3.6.3 Sunk costs are particularly relevant to telecommunications because a very large investment is needed to create an efficient telecommunications network and it is likely that little of this could be recovered if the entrant later decided to leave the market. This is likely to be exacerbated by the significant economies of scale and density which characterise telecommunications access networks including ISDN. These mean that a large access network is likely to have lower costs than a smaller one, with the result that an entrant would need to take a large share of the market if it was to be able to compete. But in order to gain such a large market share, it is likely to have to price well below the incumbent, which would make it more difficult to recover sunk costs. Therefore barriers to entry by competing ISDN network operators are likely to be high. They are likely to be easier to overcome in the larger business segment and therefore less significant in the ISDN30 market than in the ISDN2 market.

3.6.4 In addition, it may be possible to enter the ISDN30 market by using a partial private circuit (PPC). Of tel believes that PPCs may be a viable alternative means of delivering ISDN 30 where a number of conditions are met, including:

- operators other than BT have significant network infrastructure, so that distances between the nearest point of connection to the network and the customer are not too great;
- the alternative operators can spread recovery of PPC connection costs over multiple years;
- customers offer at least a moderate level of demand; the minimum level of demand will depend on distance to customer, but is unlikely to be less than 10 or 15 channels.

3.6.5 These conditions suggest that, over time, PPCs may become a viable means of delivering ISDN 30 for some alternative providers serving some parts of the business customer base. It is not, however, clear that PPCs will provide a basis for achieving effective competition at the retail level across all relevant parts of the market. A PPC will also not be a viable option for service providers without their own networks. An ISDN WLR product would enable such service providers to enter at the retail level without having to incur large sunk costs and so should encourage entry. But it is important that the terms of availability of any WLR ISDN product should not undermine the use of PPCs to compete.

3.7 Excess pricing and profitability

3.7.1 The ability to price at a level that keeps profits persistently and significantly above the competitive level is an important indicator of market power. In a competitive market, individual firms should not be able persistently to raise prices above costs and sustain excess profits. However, it should be borne in mind that, in the short term, high profit rates can be explained by factors such as innovation and unexpected changes in demand. Conversely, low profits may be more an indicator of the inefficiency of the firm than of effective competition.

3.7.2 ISDN is a product that has historically been regarded as innovative, and this is a major reason why it has been subject to very little regulation. The product has been in existence for around 15 years. It may now be appropriate to consider whether BT's dominance in ISDN markets is enduring and, if so, to consider whether additional regulation should be imposed.

3.7.3 As part of the review, Oftel has asked BT for data on BT's costs of providing ISDN lines and a comparison with BT's prices. Competing operators have alleged that prices are well above costs.

3.7.4 BT has provided Oftel with data on the profitability of its ISDN access line business. The data suggest that the profitability of ISDN access has been increasing and that the average ROCE on ISDN access was of the order of 50%⁴ in 2000/01, well above BT's cost of capital

⁴ The full methods of attribution, accounting and valuation for this data have not been disclosed to Oftel.

3.7.5 Oftel also does not have recent data on the profitability of ISDN calls on an end-to-end basis, that is including the profits earned in BT Network as well as BT Retail. However, as noted above, ISDN calls were included in some of the profitability figures published in the price control review documents which relate to calls made from analogue and ISDN lines combined. The end-to-end profitability (on a fully-allocated cost basis) of ISDN calls is likely to have been comparable to that of calls made from analogue lines since standard prices are the same and the same network components are used. The profitability of ISDN calls on an AS basis (that is, including only the profits of BT Retail) on which Oftel has data is comparable to that of analogue calls on the same basis. As pointed out in Oftel's June 2002 price control review statement, BT's rates of profits on calls remain extremely high.

3.7.6 The profitability data are consistent with the view that BT has market power in ISDN access and calls markets.

3.8 Barriers to switching

3.8.1 Competition may be impeded if it is difficult for customers to change operators in response to price differences. A market is less likely to be effectively competitive, therefore, if there are significant barriers to customer switching.

3.8.2 It is possible to identify ISDN users amongst the businesses included in Oftel's regular surveys. However, the replies do not relate to switching of ISDN supplier per se. Oftel is gathering survey data on switching of ISDN supplier and will publish the results in the December statement concluding the ISDN market review.

3.8.3 Oftel's latest survey of business users found that 19 per cent of business ISDN users had switched supplier in the last year. This was significantly higher than the 6.8% of analogue line users. Similarly, some 22% of ISDN users had switched more than one year ago compared to 12% of analogue line users. A greater proportion of ISDN users also reported it was "very easy" to switch supplier (72.5% compared to 52.8%). Generally speaking the reasons for not switching given by ISDN users were very similar to those given by analogue line users. The most important were satisfaction with current supplier or hassle/inertia. Interestingly, 2.7% said that the reason they had not switched was because they had ISDN lines, suggesting that some operators perceive competition to be more limited for ISDN than for analogue line provision.

3.9 Customer Awareness

3.9.1 Customers must know of alternatives to their main supplier of telecommunications if competition is to be effective. Respondents to the Oftel surveys are asked to indicate their awareness of alternative telecommunications providers, particularly IA operators. Again it is possible to identify ISDN users from the survey replies but the questions do not relate specifically to awareness or use

of alternative ISDN providers. Of tel is carrying out a further survey to address this and the results will be published in the December statement on the ISDN review.

3.9.2 Amongst ISDN users, 96.1% of respondents were aware of indirect access operators, significantly higher than the 86.7% for analogue line users. Usage of IA was also slightly higher at 35.4% compared to 31.0%.

3.9.3 Of those who were aware of but not using IA, the main reason for this was happiness with current supplier for both ISDN and analogue line users. Interestingly, 7.9% of ISDN users referred to complicated billing or the need to pay two bills as the reason for not using IA compared to only 2.5% for analogue users. Poor quality of service was also much more important for ISDN users, 18.8% giving this as the reason compared to only 5.4% for analogue users, as was poor reputation (quoted by 14.1% of ISDN users as against 6.9% of analogue users). All these are issues which could be addressed by WLR bringing firms with established brands into the market. One respondent believed that IA was not feasible for ISDN lines and gave this as the reason for not switching.

3.10 Benchmarking

3.10.1 One source of evidence on whether prices in the UK are as low as they would be in competitive markets is by comparing them to prices for the equivalent services in overseas markets. If UK fixed telephony markets are competitive, one would expect UK consumers to be getting a deal which is as good as or better than that available to customers in similar economies overseas. For this reason, Of tel has undertaken a series of surveys to compare UK prices and trends with those in other comparable countries.

3.10.2 The results of the latest (June 2002) study show that:

- on average prices in the UK for business ISDN services are higher than elsewhere;
- prices in Sweden in particular are significantly cheaper than in the UK;
- prices for the small business baskets (using basic access services) are, however, more expensive in France; and
- the spread of prices between countries for business ISDN is larger than for residential ISDN.

The UK's position relative to other countries is slightly worse than that in the June 2001 study. UK prices have remained static while prices have fallen elsewhere.

3.10.3 Given that, to the extent that overseas markets are themselves not competitive, prices in other countries are also likely to be above cost, this is consistent with the view that the UK ISDN market is not competitive.

3.11 Consumer satisfaction

3.11.1 In general one would expect high levels of satisfaction if markets are competitive. Evidence of widespread dissatisfaction could therefore be a sign that markets are not effectively competitive, although high levels of satisfaction would not necessarily indicate the reverse. The fact that markets are regulated, with some services subject to price control and with BT required to publish quality of service statistics, together with the possibility that customers are unaware of what competitive prices and quality levels would be, needs to be borne in mind.

3.11.2 The following results are from Oftel's May/ August 2002 survey and show satisfaction with ISDN as a means of Internet access.

Business satisfaction with ...

1. overall Internet service (May / Aug 2002 data):

ISDN - 90%

analogue - 90%

Other - 89%

2. Speed of Internet service (May / Aug 2002 data):

ISDN - 81%

analogue - 69%

Other - 87%

3.11.3 This suggests that satisfaction with ISDN is high and, understandably, higher than with analogue lines for speed of access.

3.11.4 It is possible to identify satisfaction amongst ISDN users separately from analogue users, although the replies do not relate specifically to ISDN service. These suggest that satisfaction is relatively low amongst ISDN users (86.7% satisfied against 96.6% for analogue users). As with other survey questions, the lack of data on satisfaction with ISDN service is to be addressed by a new survey, the results of which will be published in the December statement on the ISDN review.

3.12 Conclusions of competition analysis

Oftel believes that BT is dominant in the provision of ISDN2 and ISDN30 lines. However, it is clearly more strongly dominant in ISDN2 than in ISDN30. BT's share of the latter market is already lower and entry is now possible using PPCs. Oftel believes that ISDN calls are part of the same market as calls from analogue lines and that BT remains dominant in the provision of local, national, IDD and operator assisted calls and calls to mobiles with the exception of those business IDD markets designated as competitive by Oftel.

3.13 Options for requirements on BT

3.13.1 Oftel believes that, given the significance of ISDN products in the retail markets for business and residential customers, and given BT's dominance in supplying these products, wholesale versions of these products need to be made available by BT if competition is to be effective at the retail level. These wholesale versions need to be functionally equivalent to the products supplied to BT Retail so that SPs are at no material disadvantage in competing with BT.

3.13.2 There are, however, various options for the nature of the requirements that could be set in relation to the supply of these products. Oftel believes that the key options are:

A: Put no formal requirement on BT as part of the specification for WLR 2, but rely on BT's willingness to supply wholesale products under its Calls & Access range.

3.13.3 This option would reflect the fact that BT has already made a wholesale version of ISDN 2 available as part of its Calls & Access product range, and that BT has indicated that it intends to make a wholesale version of ISDN 30 available under Calls & Access in 2003. Oftel understands that these products are, or will be, functionally equivalent with those supplied to BT Retail.

3.13.4 The key *advantage* of this option is that, in regulatory terms, it is the least intrusive. It would be consistent with giving weight to the argument that, if BT is planning to supply a product anyway, there should be no need to require its supply.

3.13.5 This option does, however, also have a number of *disadvantages*. In particular:

- There would be no security that BT would continue supplying wholesale versions of these products if it changed corporate policy.
- There would also be no protection for SPs in relation to the terms on which these products were supplied (including price, quality of service, and functional specification).
- There would be no restriction *ex ante* on BT discriminating in favour of supplying itself in preference to third parties (though general competition law can provide protection *ex post*).

3.13.6 Oftel considers that these disadvantages would be likely to act as a material disincentive to SPs investing in the resources required to bring these wholesale products to market. This could adversely affect the effectiveness of competition at the retail level.

3.13.7 Oftel also considers that this option is not consistent with the approach to incentive regulation that underlies WLR 2. Incentive regulation can only work effectively if there is sufficient clarity about the conditions that need to be met for

the incentive to be earned, and if there is certainty that these conditions will *continue* to be met afterwards. In Oftel's view, these requirements could not be satisfied by reliance on BT supplying wholesale versions of ISDN products on a purely voluntary basis. This would open up the possibility that Oftel might find that all conditions for the incentive had been met, relax the retail price control, only to find that wholesale versions of these products were subsequently withdrawn.

3.13.8 Oftel's view is that Option A is not an appropriate way forward.

Oftel invites views on its proposal not to proceed with Option A.

B: Require BT to make wholesale versions of either ISDN 2, or ISDN 30, or both, on the same basis as analogue lines, with cost-based prices.

3.13.9 This option would be most consistent with the treatment of analogue lines. In this context, it makes sense to consider ISDN 30 and ISDN 2 separately.

ISDN 30

3.13.10 In relation to ISDN 30, Oftel sees significant disadvantages in any early move to cost-based pricing by regulatory intervention:

- This is likely to undermine the incentives to use PPCs as an alternative means of providing ISDN 30. This is not likely to be in the long-term interests of consumers, given that alternative infrastructure provision via PPCs is likely to provide competition across a higher proportion of the value chain than a service-based model using WLR.
- It would be a significant extension of regulation, given that ISDN 30 has historically been subject to little regulation and has been regarded as an innovative product. A rapid move to require cost-based pricing could have adverse effects for perceptions of regulatory risk generally, and for innovative products in particular.
- BT's market share is already less than in ISDN 2 and other access products. A move to full cost-based price regulation therefore risks being disproportionate to the problem.

3.13.11 The main argument in favour of this approach in relation to ISDN 30 is that:

- It would bring significant short-term benefits to business end-users – though these could be outweighed if the incentives for future innovation were adversely affected.

ISDN 2

3.13.12 Oftel considers that the case for cost-based pricing of ISDN 2 is stronger, given a number of factors including:

- BT's high market share, and the lack of evidence of competition.
- PPCs do not offer a prospect of new entry.

3.13.13 However, Oftel considers that weight also needs to be given to some factors that are common to ISDN 2 and ISDN 30, notably:

- Cost-based pricing would be a significant extension of regulation. This could have implications for perceptions of risk in relation to other innovative, added-value products.
- This would be a major change in policy towards ISDN. It is arguable that such a change should be considered in a comprehensive market review, rather than through setting the specification for a new wholesale product.

3.13.14 The rental charge for analogue lines in WLR is cost based but does not provide a strong precedent for ISDN 2. This is, first, because of the absence of any element of innovation, and second because the retail residential analogue line rental is below cost.

3.13.15 Oftel's view is that option B would not be proportionate for ISDN 30. The case for ISDN 2 is more finely balanced, but Oftel's view is that it would not be appropriate to seek to move to cost-based pricing for ISDN 2 at this time.

Oftel invites comments on its conclusion that cost-based pricing for ISDN products would not be a proportionate response.

C: Require BT to make wholesale versions of either ISDN 2, or ISDN 30, or both, available within WLR 2 but with less onerous obligations than analogue lines.

3.13.16 Under this option, BT would be under a requirement to make wholesale versions of ISDN 2 and ISDN 30 available as part of the product specification for WLR 2, but the obligations would be less extensive than for analogue lines. WLR 2 would, in effect, comprise a 'family' of products, subject to levels of regulation that might vary.

3.13.17 The key regulatory obligations that might be set for BT could be:

- An obligation to supply wholesale versions of ISDN 2 and 30. The functional specification of these products needs to be equivalent in all material respects to what is supplied to BT Retail.
-

- Non-discrimination between supplying BT Retail and supplying third parties. This would require BT to ensure that there is no discrimination between the price charged to third parties and to BT's own Retail Systems Business, that there is no discrimination in the quality of service for activities such as installation and repairs, or in the handling of information about product enhancements and innovation.
- Price publication, on standard wholesale terms (90 days notice).

3.13.18 Oftel would not prescribe directly the price to be charged by BT for the wholesale products, but the non-discrimination condition would require BT to maintain an adequate margin between its retail prices and the wholesale charges.

3.13.19 The principal *advantages* of this approach are that:

- It will ensure that providing wholesale versions of ISDN products is an explicit requirement of BT as part of WLR 2, and that BT is required to continue providing these products after gaining the incentive.
- SPs will benefit from the existence of a regulatory framework for the products, including non-discrimination and price publication requirements.
- The downsides of option B, in terms of increased regulatory risk for innovative products, are largely or wholly avoided.

3.13.20 The principal *disadvantage* of this approach is, first, that wholesale and retail prices may remain significantly above cost. As discussed above, this is a concern particularly in relation to ISDN 2, where the potential for new entry is less. Second, past experience suggests that in general it is difficult for regulators to ensure that retail margins remain adequate.

3.13.21 On balance, Oftel considers that option C is the most proportionate approach to setting requirements for the product specification for WLR 2.

3.13.22 Oftel recognises, however, that under option C there remain some significant potential regulatory issues in relation to ISDN:

- There is first a risk that BT may set retail and wholesale prices at a level that does not allow for effective retail competition, as the retail margins available to third parties may be too thin, even taking into account both calls and access. This issue arises in relation to both ISDN 2 and ISDN 30.
- Second, there remains an issue about whether Oftel should require the pricing for ISDN 2 to move closer to being cost-based.

3.13.23 Oftel considers that, if Option C is adopted, the most appropriate way of dealing with both these points is to monitor BT's behaviour closely during 2003 and the early life of WLR 2. Oftel will in particular be looking for any evidence that

the retail margins available for these products are insufficient to support effective competition at the retail level. Oftel expects to take both these points into account in its 2004 review of retail markets.

Oftel invites comments on the conclusion that option C offers the most appropriate approach but that there should be close monitoring of BT's behaviour ahead of the 2004 market review.

Chapter 4

WLR process issues

4.1 Introduction

4.1.1 This chapter discusses the process issues arising out of the introduction of WLR2. These issues affect a number of areas, but the greatest impact and complexity is in the area of service interfaces, provisioning, and ordering. This will be considered first. Other areas affected, such as Faults and Repairs, Billing and Debt Management, Security and Fraud, etc, are considered later in the chapter.

4.1.2 The objective that Oftel has sought to pursue in this area, as in others, is to ensure that WLR creates the basis for fully effective competition in the retail markets for residential and business customers. This means that the regulatory framework should allow SPs the opportunity to compete fairly with BT Retail. BT's retail activities should not be able to benefit from privileged access to key services, processes or features supplied by BT at the wholesale level, if BT has market power in supplying these inputs and they are material to retail competition.

4.1.3 If we apply this principle consistently, an SP should have the same opportunity to compete in the marketplace as BT Retail. SPs should be able to offer end-users a customer experience that is fully competitive with BT Retail's. This does not mean that service should be the same across all competitors: service diversity is indeed to be encouraged. But differences between BT Retail and SPs, and among SPs, should reflect normal commercial factors – different branding and positioning in the market, differences in the quality of management, and so on – not the leverage of market power from areas where one operator has dominance.

4.1.4 An example of end-users' experience is what happens when a customer changes address. A BT Retail (BTR) end user who changes address can have all its services and features (except CPS) transferred seamlessly to the new location. A similar treatment is required if an end user transfers to another service provider (SP), or changes address with a SP. Similarly the time and complexity (number of interactions) taken to complete a transaction for an end user with a SP should be the same as an equivalent transaction for a BTR end user

4.2 Background: variety of service offerings, providers, and interfaces

4.2.1 At premises serviced (or serviceable) by BTR, end users today have a number of options available for the provision of analogue or digital lines, basic voice calls and associated supplementary services:

(a) line rental and supplementary services can be provided by BTR directly, or indirectly by an SP on Calls & Access (C&A) or (since 1 September 2002) on Wholesale Line Rental Phase1 (WLR1);

(b) voice calls can be provided by BTR directly, or indirectly by an SP on C&A or on WLR1;

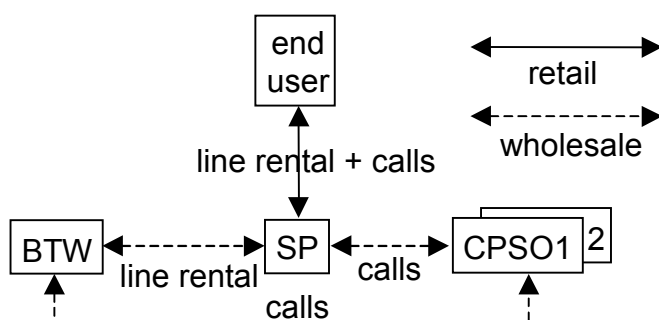
(c) whether provided by BTR or a SP, the end user can selectively route some voice calls through an Indirect Access (IA) operator or through a Carrier Pre-Selection (CPS) operator (CPSO).

4.2.3 Depending on the option, the end user may have a retail billing relationship with one or more of BTR, a SP, one or more IA Operators, or one or two CPSOs. In parallel, wholesale billing relationships may exist between BT Wholesale (BTW) and an SP or CPSOs.

4.2.4 For provisioning, an SP orders or changes lines and services on C&A and WLR1 via BT's web-based Service Provider Gateway (SPG). And where the end user requests CPS, the CPSO orders or changes the required CPS configuration via BT's CPS Gateway which is an FTP (file transfer protocol) interface.

4.3 Combining WLR1 and CPS

Diagram 4.1

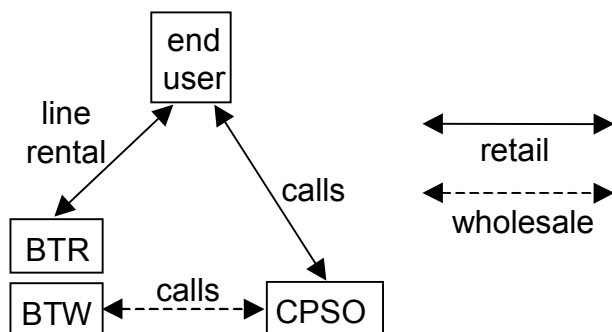


4.3.1 WLR combines access and calls into a service offering where the end user is able to have a 'single bill' retail relationship with one SP providing the line rental, voice calls, and supplementary services, and where the services provided by BTW to the SP are charged on a wholesale basis. For the routing of the calls, the SP retains the option of using BT but in most cases is expected to use one or more CPSOs with whom it has a wholesale relationship. See Diagram 1.

4.3.2 Of tel's June 2002 Statement on the Retail Market identified as a principal objective of WLR2 the seamless inter-working with CPS from customer's perspective and minimal delay between the transfer of the line and CPS routing.

Current provision by BT of WLR1

Diagram 4.2



4.3.3 Diagram 2 sets out a typical situation under WLR1 where an end user has its line rental with BTR and routes its calls via a CPSO. Today, in order to migrate to the combined WLR1 and CPS structure in Diagram 1, a two-stage process is required. In summary, this is as follows (see the time-line Diagram B.1 Annex B):

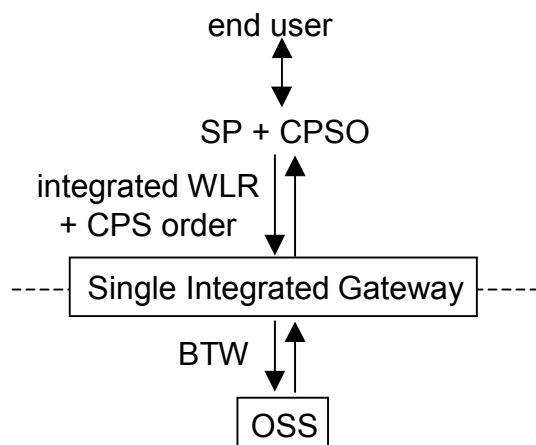
- (a) the SP submits a 'Transfer' order to BT on the SPG; following a consumer protection period, most of the end user's configuration (line(s), services, care level, numbers, number information) is transferred from BT, but the CPS configuration is ceased;
- (b) the CPSO then submits a 'Setup' order to BT on the CPS Gateway; following another consumer protection period (but with the generation of letters from the losing and gaining operators suppressed), the end user's CPS call options (international calls, national calls, all calls) are configured.

4.3.4 This process is sequential and takes a minimum of 18 days to complete (eight days for WLR1 and ten for CPS). Oftel believes that this would not be fit for purpose for WLR2:

- (a) if the CPS configuration is to be identical before and after the WLR transfer, it must be possible for the CPS configuration to be transferred seamlessly without first ceasing and then setting it up again;
- (b) even if the CPS configuration is to change after the WLR transfer, it must be possible for the new CPS configuration to be activated as near simultaneously as possible as the WLR transfer activation.

Optimum: single integrated WLR and CPS process and gateway

Diagram 4.3



4.3.5 The optimum solution is to combine WLR and CPS ordering on a single gateway in an integrated process. See Diagram 3. The principal benefits of such a structure would be:

- (a) all end user service requirements (line(s), services, CPS options, care level, numbers, number information) are submitted together in a single order over a single interface, where all options can be flexibly selected or not, and any errors or failures can be treated consistently over the whole order;
- (b) a single consumer protection period can apply during which all the relevant providers can formally confirm the proposed transaction with the end user;
- (c) a universal service gateway which all providers can implement and maintain and which caters not just for BTR to SP and SP to BTR transfers but also SP to SP transfers.

4.3.5 The following concerns arise with this optimum solution:

- (a) The two BT gateways, the SPG and the CPS Gateway, use different formats and protocols as a result of their separate development and evolution, and do not interface with each other (although they both interface with the underlying BT operational support systems, OSS);
- (b) OfTel has reviewed the system constraints with BT and is satisfied that a requirement to merge the two gateways into one would be a major project requiring very significant time (much more than a year) and costs;

(c) similar concerns over system development time and costs apply to the other providers interfacing with BT over these two gateways; many SPs until now have had an interest and systems interface with only one gateway, and face lengthy timescales and major upgrade costs to develop a new single gateway systems interface;

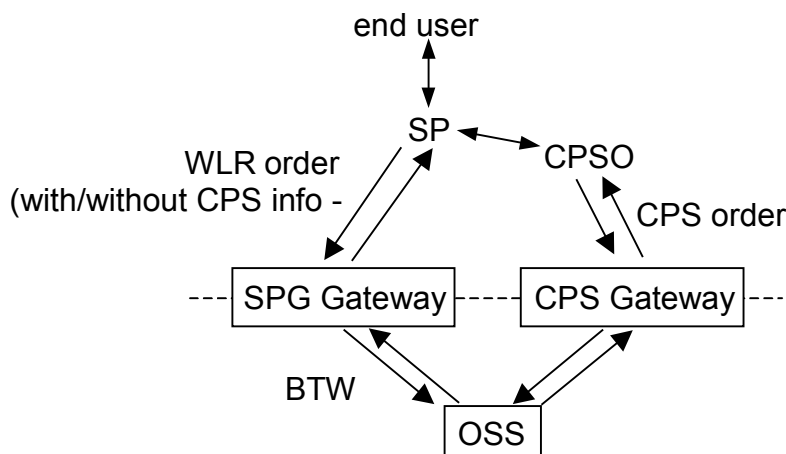
(d) some CPSOs, who have only recently completed significant system developments on the CPS Gateway, will continue after the introduction of WLR2 to operate as independent CPSOs (as opposed to partners with SPs offering combined WLR and CPS) and must be able to continue using the existing CPS Gateway transparently to any changes being made to it.

4.3.6 Oftel believes that these timescales and costs, combined with today's arrangements being not fit for purpose, make the optimum solution unrealistic for implementation as part of WLR2. An alternative approach is required which may be sub optimum but still fit for purpose and offers greater security of being available sooner.

4.3.7 However, Oftel believes that the implementation of the optimum solution should formally remain a longer-term plan and remains committed to working with the Industry to ensure that this plan is delivered.

Proposed WLR2 requirement: separate but closely aligned WLR and CPS processes and gateways

Diagram 4.4



4.3.8 OfTel believes that the approach pictured in Diagram 4 represents the best interests of end users, service providers, and competition in offering a timely first implementation of WLR2. The main features are the following:

- (a) the two BT gateways, the SPG and the CPS Gateway, remain separate and essentially retain the same functionality as today: the SPG handles orders for lines, services, care levels, numbers, and number information; the CPS gateway handles orders for CPS call options (where required);
- (b) however, enhancements are required to the gateways so that the two processes are more streamlined and faster and provide formal linkages between WLR and CPS orders relating to the same SP, and appear as a single process to the end user;
- (c) these enhancements should aim to minimise development timescales, costs, and disruption to existing gateway users, but at the same time ensure the end product is fit for purpose.

4.3.9 OfTel believes that these features of this solution translate to the following specific high level requirements:

- (a) a set of CPS orders is needed which can be processed quickly on the CPS Gateway and with consumer protection measures disabled because these measures have been initiated as part of the WLR order;
 - (b) in addition, these CPS orders must be formally linkable to WLR transactions on the SPG or to a WLR account;
 - (c) where a WLR order on the SPG and a CPS order on the CPS Gateway are part of the same overall process of providing an end user's services, there should be as near **simultaneous WLR and CPS activation** as possible;
 - (d) in addition, it is undesirable for the WLR order to complete successfully and for the CPS order to then be delayed or fail due to incompatibilities or other errors caused by the absence of a single integrated gateway, so it is desirable to protect against this by some form of **CPS pre-validation**;
 - (e) where an overall WLR transfer involves maintaining the identical CPS configuration on the line(s), there should be **seamless transfer of CPS**, ie no interruption to the CPS configuration;
 - (f) to increase speed and efficiency and reduce operational costs, there should be minimal recourse to manual intervention in order processing, ie process elements should be simple and error or exception handling should be as automated as possible.
-

Oftel invites views on i) the proposal that simultaneous delivery of WLR and CPS would be acceptable for a fit-for-purpose product and ii) the high-level requirements identified above.

4.3.10 A number of other requirements and issues arise from a more detailed examination of these high level requirements and the associated processes. These are now considered individually in the following sections.

4.4 Validation of end user identity (the 'postcode problem')

4.4.1 Oftel's June 2002 Statement identified a highly automated system with little manual intervention, except where a manual method is more cost effective, as an essential requirement of a fit-for-purpose product. As part of this automation, it is essential that the end user, whose service is about to be changed or transferred to another SP by submitting an order electronically to the SPG or CPS Gateway, be correctly identified so that systems and processes can operate without manual intervention.

4.4.3 The preferred means for identification of the end user is the network Calling Line Identification, CLI, (or primary network CLI where there is more than one). However, if for some reason (for example error in keying) the CLI in an order is incorrect, then without a second data element to validate the identity of the intended end user the wrong end user risks appearing to be 'slammed', ie having an attempt made to have its service changed or transferred without its knowledge or approval.

4.4.4 For this reason, it is essential that a second data element be used for validation of the end user's identity. This data element also needs to be one which is present on all SPs' systems, to account for service transfers which in future will happen not just from BT to SP or SP back to BT but also SP to SP.

4.4.5 The existing CPS ordering processes have recently started using the BT billing postcode as this second validation data item. A number of problems have resulted when attempting to match the actual BT billing postcode (as recorded on BT's databases) and the postcodes submitted by CPS operators. This causes order failures and significant manual intervention. The problems in CPS are still being analysed and resolved. Similar issues have been faced with DSL. The installation postcode was used as the second validation data item. Although there were also initial problems with this, these have since reduced sufficiently for the process to fulfil its purpose and work effectively.

4.4.6 With the expected high future order volumes for WLR and CPS, it is essential that a robust solution is found. The postcode as it appears in the Royal Mail's most up-to-date Postcode Address File (PAF) data has the benefits of being a universally recognised entity. However, postcodes do change and need to be kept up to date. Some SP databases may contain incomplete or erroneous

postcodes and may require cleansing. Also, when asked to provide its postcode, a residential or business end user may understand differently the distinction between billing and installation postcode and may give the wrong one.

4.4.7 There appear to be no easy alternatives to using the postcode. A possibility is to create a completely new data element just for this end user identification purpose, but this has major cost and implementation implications for SPs' systems and processes.

4.4.8 After review of this issue, Oftel proposes to retain the postcode as the preferred second data element but suggests the following solution to increase the robustness of the process, to be introduced for WLR2:

- a) all orders will continue to contain at least one postcode; this could be the BT installation postcode or the BT billing postcode or both;
- (b) when BTW checks the order, it will compare the submitted postcode(s) with both the BT billing postcode and the BT installation postcode on its database;
- (c) if either the BT billing postcode or the BT installation postcode matches the submitted postcode (and if the CLI also matches) then the order is accepted;
- (d) if neither the BT billing postcode nor the BT installation postcode matches the submitted postcode then the order is rejected;
- (e) the use of the BT billing postcode or the BT installation postcode (ie the postcodes as they appear in BT's databases) means that BT will be expected to take reasonable steps to keep its databases updated with the latest Royal Mail PAF data (this is particularly important for future SP-SP transfers, where the customer may not have received any bill from BT for some time).

Oftel invites views on the proposals that BT should base its validation of orders on one of either the billing or installation postcode (as they appear in BT's databases) combined with the CLI, and that BT should take reasonable steps to ensure that its postcode data is kept up-to-date.

4.5 Pre-ordering visibility of end user information and services

4.5.1 When a SP is in discussion with an end user about transferring its service, a number of practicality issues can arise regarding the knowledge of the end user's current service details. With the existing processes in C&A and WA on the SPG, the SP has to complete an initially blank order form and tick or specify all the services which the end user wants to transfer.

4.5.2 In most cases, the end user will simply want to transfer all the existing services as they are, but in some cases it may wish to cancel or add a service. This might depend for example on how much the new SP charges for a service. Equally, the SP needs to know what is being transferred in order to bill the end user correctly.

4.5.3 In practice, it is not unusual for the end user not to know whether it currently has Three-Way Calling, what its second Home Highway ISDN number is, etc. As a result, it is not unusual for a service transfer to take place and subsequently the end user notices something is missing or different. The SP then has to submit further orders to restore the service to its previous state.

4.5.4 Similarly, the end user's existing service may include rented equipment or special packages (eg BT Chargecard) which are not transferable. Even if the end user is aware of this, these are incompatibilities which cause a transfer order to fail and require subsequent manual intervention to resolve.

4.5.5 In rare cases, it is possible that the end user was not aware that the line is not able to be transferred (eg because it is a cable line), and a lot of resource can be spent before discovering that the transfer order fails for this reason.

4.5.6 Oftel has identified two approaches to improving this situation. One would be the availability of some sort of 'electronic account viewing' facility which would allow the SP, after it has obtained the relevant authorisation from the end user, to view the end user's account and service details. This could help with CLI and postcode validation, but particularly enable identical service transfers or transfers with some adjustments to be correct. It would also allow a more automated handling of incompatibilities.

4.5.7 A second approach which BTW is already introducing to the SPG is the introduction of the 'like for like' transfer. Its characteristics are:

- (a) the order which the SP submits only has to identify the end user, there is no requirement to tick or specify all the desired services in detail;
- (b) the default assumption is that the end user's account is transferred identically;
- (c) if the account includes individual services which are incompatible or not transferable, these are stripped automatically with no manual intervention and without causing an order failure;
- (d) the gateway submits to the SP a full detailed list of all the items that have been transferred, and of all the items that have been stripped.

4.5.8 Oftel believes that the 'like for like' transfer order resolves a lot of these issues. There may still be a case for an 'electronic account viewing' facility but the

extra development timescales and costs risks would not be justified for WLR2. Such a facility is perhaps best included for consideration in the future plans for an optimum single integrated WLR and CPS process and gateway.

OfTel invites views on the proposal that a like-for-like transfer set out above would meet the requirements of a fit-for-purpose product.

4.6 WLR order types

4.6.1 This section applies to all of the allowed types of analogue and digital lines.

4.6.2 As with the existing C&A and WLR1 products, four basic types of WLR order can be submitted by SPs over the SPG: New, Transfer, Change, Cease.

4.6.3 The WLR 'New' order is a request for a new account for one or more lines at the end user's premises. In addition to the physical lines, a range of attributes and services can also be ordered. One or more physical lines may already exist on the premises (but de-activated), so the SP is able to distinguish between::

(a) 'connection': where the physical line and termination are not present at the premises and therefore have to be brought into the premises and installed;

(b) 're-activation': where the physical line and termination are present at the premises but are de-activated and therefore only need to be re-activated.

4.6.4 The WLR 'Transfer' order is a request for an end user's existing account (comprising one or more lines and associated services) to be transferred from one SP (the losing SP) to another (the gaining SP). At a high level, there are two types of 'Transfer' order:

(a) 'like for like': only the end user identification is needed (not all the service details), the account is transferred identically (except for incompatibilities which are stripped off), and the gaining SP is given all the details of what has been transferred and stripped;

(b) 'normal': this is similar to the 'New' order in that all the desired line attributes and services required to be transferred have to be individually selected and specified, and overall this may or may not be identical to the set of attributes and services prior to the transfer; see paragraph below for details of the order.

4.6.5 The WLR 'Change' order is a request for any one or more attributes of an end user's existing account (comprising one or more lines and associated services) to be changed. At a high level, there are two types of 'Change' order:

(a) one where the basic line type (analogue, digital) remains unchanged, but where the number of lines and any one or more associated attributes and services can be changed; see paragraph below for details of the order;

(b) one where the line type is changing: it should be possible to change from any one line type to any other that is available, and the precise set of attributes and services available will then vary by line type.

4.6.6 In practice, some orders can be a mixture of two or more of 'New', 'Transfer', and 'Change'. For example, an end user transfers a single analogue line to a new SP, orders a new physical line, and changes some of the attributes or services, all at the same time. In this type of situation, the requirements are:

(a) it must be possible to request all the desired transactions in one order, rather than two or more sequential orders (note: this is already substantially the case in C&A and WLR1, for example 'Transfer' and 'Change' both allow lines to be added or removed, 'Transfer' allows services to be changed, etc);

(b) the actual execution of the order should be smooth and seamless.

4.6.7 The WLR 'Cease' order is a request for an end user's existing account (comprising one or more lines and associated services) to be cancelled. Only the end user identification is needed in the order. In practical terms, the line(s) are stripped of all attributes and services, the physical termination(s) are de-activated, and remain so until future re-activation and use by a BTR or other SP end user.

4.6.8 The WLR 'New', 'Transfer', and 'Change' orders all have in common the same categories of attributes and services that can be individually selected and specified in an order. Within a category, the details remain similar but may vary according to the type of line or the type of order. In broad terms, these categories are:

- (a) end user information (name, address, etc)
- (b) site location information (address, contact name, etc)
- (c) installation information (eg wiring, termination, CPE characteristics, etc)
- (d) account attributes: repair care level, pricing option (where applicable)
- (e) for each line:
 - (i) one or more telephone numbers
 - (ii) a range of select services and network features
- (f) for each applicable number:
 - (i) number information (directory assistance and phonebook entry, etc)
- (g) date: activation date (where order is executed electronically and remotely), or installation date (where order is executed physically on site)

4.6.9 The following characteristics and requirements should be highlighted for some of the elements in the previous paragraph:

(a) end user identification: for an existing account, this must include the CLI (or principal CLI where more than one) and the postcode;

(b) repair care level: it must be possible for any of the available care levels (eg Standard care, Prompt care, Total care) to be ordered on any account;

(c) telephone numbers:

(i) in a transfer, all existing telephone numbers must be transferred by default (unless the end user specifically requests new numbers);

(ii) where new telephone numbers are required (eg new line, Call Sign, extra DDI range, MSN, etc), numbers must be allocated in the same way as for BTR end users.

4.6.10 Consideration should be given to having another WLR order type 'Cancel' available for use by SPs on the SPG. The purpose of the 'Cancel' order would be the same as currently in CPS, ie to allow orders which have not yet been completed (eg a Transfer order) to be cancelled, for example because the end user has changed its mind. Such an electronic order would be more efficient than the more manual method currently used in C&A and WLR1, but there would need to be protection against the potentially improper use of the 'Cancel' order. In CPS, the 'Cancel' order exists in two forms. 'Cancel own' is used when a CPSO wishes to cancel a CPS set-up order that has not yet been completed (ie the customer has not yet been switched). 'Cancel other' is only available to BT, and is used by BT to cancel a CPS set-up order that has not yet been completed. Currently BT uses 'Cancel other' either if BT persuades the customer to remain with BT Retail before the switchover date, or if it appears to BT that the customer has been slammed. The appropriateness of BT using 'cancel other' in situations where BT has persuaded the customer to remain with BT Retail prior to switchover is being reviewed currently by the Industry in CPS.

Of tel invites views on whether:

- **the four types of order used in WLR1 and CPS , with enhancements as described above, should be taken forward into WLR2, with the possible addition of 'Cancel Own'?**
- **the addition of a 'Cancel Other' for use by all SPs in cases of slamming would be useful?**

4.7 CPS orders

4.71 For WLR2, with the proposal for a separate but linked WLR and CPS processes and gateways, the purpose of the CPS interface is to add, modify, and remove CPS to and from a WLR analogue or digital line. The functionality required over the CPS Gateway is exactly the same as that which exists today where CPS is added, modified, and removed to and from BT analogue or digital lines (or Calls and Access lines).

4.7.2 Therefore, Oftel believes that the same set of CPS order types (Setup, Remove, Reselect, Change, Renumber, Cease, Cancel) with same data elements and processes is required for WLR2 (with the provisos set out above in relation to on-going work on 'Cancel Other' orders). However, there are the following additional constraints:

(a) CPS orders need to be executed quickly (in the order of 24 hours or less);

(b) this is only achievable if consumer protection is disabled: this is allowed because the end user has its retail relationship with the WLR SP and not the CPSO (and since the CPS orders affect the CPSO the end user's retail relationship is not affected);

(c) it is essential that a CPSO operating independently (as opposed to linked contractually to a WLR SP) is **not** allowed to use CPS orders with consumer protection disabled, and so the CPS Gateway must be able to distinguish between equivalent orders received from an independent CPSO and a CPSO filling in an order from a WLR SP.

4.7.3 Oftel believes that WLR2 therefore requires an enhanced set of CPS order types:

(a) containing an extra data element which uniquely and securely links a CPS order with a WLR order or a WLR account;

(b) where consumer protection is disabled;

(c) whose processing is enhanced or prioritised to be executed quickly.

4.7.4 A corollary requirement is that any CPS order containing a CLI that belongs to a WLR account must be rejected by the Gateway unless the order contains that valid extra data element. This means that it is not possible for an end user to switch from a WLR SP directly back to an independent CPSO (via a CPS order on the CPS Gateway) without the WLR SP first transferring the end user's account (via a WLR order on the SPG). This is a consequence of working with two gateways.

Oftel invites views on its proposal that the fit-for-purpose WLR2 product should operate with the current set of CPS order types but with constraints identified in 4.7.2 and with the additional features identified in 4.7.3.

4.8 Combined WLR and CPS order scenarios

4.8.1 There are a number of different service provisioning scenarios involving WLR and CPS orders over the SPG and CPS Gateways, arising from:

- (a) whether new lines are to be connected or existing lines transferred or changed;
- (b) who the losing and gaining SPs are for the rental of the lines;
- (c) whether CPS existed previously or not on the lines, whether CPS is required or not subsequently on the lines, and whether the CPS configuration is to change or remain unchanged.

4.8.2 These scenarios are categorised and listed in detail in Annex B.

4.8.3 A time-line diagram helps to understand the timing and sequencing of transactions in a combined WLR + CPS scenario. For illustration, refer to Diagram B.2. This shows a scenario where the end user transfers from BT with CPS provided by CPSO1 to a WLR SP with CPS provided by a different CPSO2.

Oftel invites views on whether the list of scenarios identified in Annex B is complete.

4.9 WLR order validation

4.9.1 The validation of WLR orders must ensure that the overall WLR order handling is efficient and smooth. Oftel believes that validation should be:

- (a) as quick as possible;
- (b) as automated as possible, with minimal or no manual intervention required, particularly where there is an error in the order.

4.9.2 For illustration, refer to the time-line Diagram B.2 in Annex B.

4.9.3 Where an error in the order requires rejection, Oftel believes the rejection code must be sufficiently explicit for the cause of the rejection to be easily understood and for the order to be efficiently corrected and re-submitted. For example:

- (a) a CLI error should distinguish between 'Invalid Number (not available for WLR transfer)', 'Not the Main Number', etc;
 - (b) a Conflicting Service error should state explicitly what the incompatible service(s) are.
-

Oftel invites views on the high level requirements for validation and rejection codes.

4.10 CPS order pre-validation

4.10.1 For illustration, refer to the time-line Diagram B.2 in Annex B.

4.10.2 CPS orders must continue to be validated as in the existing CPS process, with the same general objective of maximising efficiency and automation within the overall WLR+CPS order handling process. Rejection codes should again be clear and explicit.

4.10.3 It is also very desirable to prevent a sequence where the WLR order is successfully activated only for the CPS order to then fail. The resulting delay in correcting and re-submitting the CPS order is disadvantageous to the WLR SP (although transparent to the end user). This problem would not occur in a single integrated gateway solution, but is part of the compromise of using two gateways.

4.10.4 A first approach to overcoming this problem is to pre-validate the CPS order. This involves submitting the relevant CPS information (ie the LOPID and CPS option(s) for the CPSO(s)) early with the WLR order and for this information to be validated at the same time as the WLR order so that the subsequent CPS order proceeds smoothly and without error.

4.10.5 A second approach is for the CPSO to take specific measures to avoid the most common causes of error in the CPS order, specifically:

(a) for the CLI and postcode, any problems will have been resolved as part of the WLR order and the CPS order should incorporate those resolutions;

(b) only two services are compatible for WLR but incompatible for CPS:

(i) Call Diversion (or any other product which includes it): if this is an end user requirement, the SP should either use a CPSO whose network supports LDLI (and hence Call Diversion), or the end user must accept that the WLR and CPS orders are submitted without Call Diversion;

(ii) Meter Pulse: no CPSO network supports this, so the end user must accept that the WLR and CPS orders are submitted without Meter Pulse.

4.10.6 Oftel's view is that the first approach of early CPS pre-validation is preferred in principle, and one which will be delivered as part of the future single integrated gateway solution. However, for the same reasons as for that solution, Oftel believes that the costs and timescales risks are excessive and make this approach unrealistic for WLR2.

4.10.7 Although the second approach places a further onus on SPs and CPSOs to avoid the known CPS order problems, these are very small in number and largely limited to Call Diversion (the demand for Meter Pulse is very low). While not ideal, Oftel believes that this approach is an acceptable pragmatic compromise.

Oftel invites views on proposals that for WLR2 CPS order pre-validation should be based on the CPSO taking specific measures to avoid the most common causes of error in the CPS order.

4.11 Consumer protection period duration

4.11.1 A key consumer protection measure is the setting of the length of the period between the placing of the order for WLR by the SP and implementation by BT. This “switchover” period has to be adequate to enable the losing and gaining providers to send letters to the new customers notifying them of the transfer and giving them adequate opportunity to consider and act on them appropriately.. Oftel makes proposals in section 6.2. The switchover period set would apply to all transfers

4.12 Simultaneous WLR and CPS activation

4.12.1 For illustration, refer to the time-line Diagram B.2 in Annex B, which shows the CPS order initiated and activated after the activation of the WLR order. Ideally, WLR and CPS activation should be simultaneous.

4.12.2 Oftel has explored with BT its systems features and constraints which affect the timing of the WLR and CPS orders and their activation. Oftel is satisfied that simultaneous activation would require changes to BT’s systems on a significant scale and would create risks of excessive development costs and timescales.

4.12.3 As a result, a compromise discussed and agreed in the WLR Operations Group is for the CPS order to follow the WLR order (as shown in Diagram B.2) but be completed and activated in the shortest time possible. Oftel believes that the gap period between the WLR activation and CPS activation is acceptable for WLR2 but must be no more than 1 day (made possible since consumer protection is disabled in the CPS order). This ‘gap period’ would not be apparent to the SP’s customer: from the transfer to the WLR, access and calls would be supplied by the WLR provider. However, the implementation should specifically aim to achieve better than 1 day.

4.12.4 Whatever its duration, the existence of the gap means that:

- (a) there is a brief period where CPS is not applied to the line during which calls are carried over the BT network and are therefore charged to the SP at the applicable BT Wholesale rate;
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(b) during that brief period where CPS is not applied, SPs require BT to have in place fraud prevention and monitoring measures (for calls which would otherwise have been the CPSO's responsibility).

4.12.5 Oftel recognises that the proposal does increase the complexity of the process for provisioning WLR plus CPS. There are likely to be significant operational benefits from a closer integration of the electronic gateways used to process WLR and CPS orders. There may be further benefits associated with a wider integration of the various electronic gateways used by BT, to include for example the e.Co-based fault management system being proposed for WLR, as well as the ordering systems used for other related products. These developments are unlikely to be practicable on the timescales associated with the WLR2 product launch, but Oftel believes it is important that they are accepted as longer-term objectives. Oftel has agreed to facilitate industry discussions on this issue, and an initial industry workshop is expected to be held in December.

Oftel invites confirmation that:

- **a gap of no more than one day between WLR and CPS activation is acceptable for WLR2 in order to achieve early implementation of WLR2 in a form that is seamless to the customer; and**
- **a longer-term objective for the industry should be to eliminate the delay through integration of the electronic gateways.**

4.13 Seamless transfer of existing CPS

4.13.1 One of the more frequent WLR transactions expected is one where an existing BTR end user with CPS transfers to a WLR SP while retaining exactly the same CPS configuration. The CPSO involved loses its retail relationship with the end user but continues to carry the end user's same calls via its new wholesale relationship with the SP.

4.13.2 Since the CPS configuration does not change, ideally this transaction would be carried out with no transaction on the CPS Gateway (and hence without incurring CPS transaction charges). One way of achieving this would be to submit a CPS 'retain' flag with the WLR order submitted on the SPG. The process and time-line is illustrated in Diagram B.3 in Annex B. One consequence of this mechanism is that there is no consumer protection with respect to the CPSO.

4.13.3 BT is researching the feasibility of such an implementation of seamless CPS transfer for WLR2. It has not yet identified a workable solution and will confirm its position formally as part of this consultation.

4.13.4 In case a workable solution is not found, a fallback option illustrated in Diagram B.4 (in Annex B) is proposed. This proposal has the following characteristics:

- (a) the process is inefficient from a CPS Gateway perspective, as two orders are required to first cease and then re-create the identical CPS configuration;
- (b) the resulting CPS transfer is not seamless, there is the same gap (of the order of 1 day) as described above for simultaneous WLR and CPS activation, with the same implications;
- (c) a new CPS Retain order is used which is identical to the new CPS Setup order for WLR (ie includes link to WLR, consumer protection disabled, fast processing) but incurs no transaction charge provided it is submitted within a specified time (eg within 25 days of the WLR order being activated).

Of tel invites views on Of tel’s proposal for the preferred and fallback solutions for seamless transfer of existing CPS.

4.14 New connection and change of address

4.14.1 A New Connection arises when an end user with a WLR SP requires BT to provision a new line at an existing address or a new address. The new line, and any additional services required, is ordered via a ‘New’ WLR order on the SPG. Some additional services, including CPS in particular, cannot be configured until the new telephone number is activated, which in turn only occurs on the day the new line is activated. As a result, a time gap between the activation of the line and the activation of these services (including CPS) is unavoidable.

4.14.2 Of tel believes that this time gap is acceptable for the ‘fit-for-purpose’ WLR2 product provided it is made as small as possible and is no more than 1 day (as with the time gap associated with simultaneous WLR and CPS activation). Again, Of tel will facilitate industry work to eliminate the gap for the longer term.

4.14.3 Similar considerations apply in the case of a Change of Address (ordered via a ‘Change’ order on the SPG) where the end user with a WLR SP is moving to a new address in a different exchange area and requires a new number. That new number is either a completely new number allocated from the pool of available numbers for that exchange area, or it might be a number associated with a line already installed (in use, or de-activated) at the new address. In both cases, the end user’s new number is not activated until the line is activated on the day of the move, with a resulting time gap before services including CPS can be activated.

4.14.4 Of tel again believes that this time gap is acceptable provided it is made as small as possible and is no more than 1 day.

4.14.5 In the case of a Change of Address where the new address is within the same exchange area as the old address, the following requirements apply:

- (a) the end user must be able to retain its telephone number(s);
- (b) all services, including CPS (subject to feasibility of seamless CPS transfer), should be transferred seamlessly to the line at the new address on the same day as the move.

4.14.6 On other matters relating to New Connection and Change of Address, the following requirements apply:

- (a) if an end user (eg a business) is moving to a new address in a different exchange area, it should be able to request an Out of Area line, for example in order to retain the same number(s);
- (b) the end user should have the same ability as a BTR end user to specify the parameters of a New Connection and Change of Address (location, date, selection of new number, special circumstances, etc) in one phone call;
- (c) see below for specific issue relating to appointments.

Of tel invites views on:

- **the proposal that a gap of up to one day between WLR and CPS activation for new connections and change of address is acceptable for WLR2;**
- **the requirements that should apply for a change of address in the same exchange area and for a new connection and change of address generally**

4.15 Changes required to SPG and CPS Gateways

4.15.1 This is a summary of points raised in previous sections so that all respondents can assess at a glance the implications (costs, timescales) to systems and processes for WLR2 implementation.

4.15.2 The changes required to the SPG are:

- (a) change to end user identification by matching the CLI with either the billing or the BT installation postcode;
 - (b) introduce the 'like for like' transfer (already due in December 2002);
 - (c) possible minor changes to the existing New, Transfer, Change, Cease orders;
 - (d) maybe introduce a new Cancel order;
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- (e) possible minor enhancements to WLR order validation;
- (f) make the consumer protection period the same as for CPS orders;
- (g) maybe introduce a new mechanism to achieve a genuine seamless transfer of CPS with no transactions on the CPS Gateway, applicable also to Change of Address situations.

4.15.3 The changes required to the CPS Gateway are:

- (a) change to end user identification by matching the CLI with either the BT billing postcode or the BT installation postcode;
- (b) introduce a new set of CPS order types with an explicit data link to WLR, consumer protection disabled, and fast processing (order of 1 day);
- (c) possible minor enhancements to CPS order validation;
- (d) make the consumer protection period the same as for WLR orders;
- (e) possible introduction of a new CPS Retain order (incurring no transaction charge) to provide a non-efficient fallback alternative to seamless CPS transfer;
- (f) possible introduction of a separate enhancements to allow seamless CPS transfer for a Change of Address.
- (g) ensure the consumer protection period remains the same as for WLR orders

4.16 End user appointments

4.16.1 It may be necessary for BT Retail engineers to visit end users in the following circumstances: fault repair, line maintenance or line change, new connection. There are two issues to consider: booking appointments, and engineers' activities at the end user's premises.

4.16.2 Regarding the booking of appointments, a BTR end user is currently able in real time in the same phone call to give a preferred date and time, be offered the choice between a number of free appointment slots which are closest to that preferred date and time, select one of those free slots, and have the appointment formally booked and confirmed.

4.16.3 In contrast, several phone calls are required today for an end user with a WLR SP to achieve the same outcome. The SP first obtains three possible dates from the end user, then talks with BTW to identify free slots close to those dates, then presents those slots to the end user for selection, and finally formally books and confirms with BTW.

4.16.4 BTW is currently developing functionality for wholesale appointment booking as part of its web based e.Co Broadband interface (used for ADSL). This is planned for launch in early 2003 and allows a SP to offer its end user effectively the same experience as a BTR end user (as above), with real time choice and appointment booking in one phone call. This functionality is highly desirable and BTW is proposing to make it available at costs and in timescales which Oftel believes are appropriate for WLR2 implementation.

4.16.5 Regarding the activities of BTR engineers at the end user's premises, these are the principles and requirements:

- (a) the BTR engineer acts as an agent for the end user's SP;
- (b) he acts to fulfil the purpose of the visit and ensure the end user is satisfied with the work done, but should not undertake work beyond the original purpose without the SP's authorisation;
- (c) he should not engage in any marketing or promotional activity on behalf of BTR or any other SP, or make any anti-competitive comments about the end user's SP or any other SP.

Oftel invites views on:

- **the proposal that BT should provide functionality which offers real time choice and appointment booking in one phone call for WLR 2;**
- **the proposed principles and requirements for BTR engineers**

4.17 Faults and repairs

4.17.1 In addition to the previous issue of appointments, there are two main issues on Faults and Repairs which currently make the experience of a BTR end user much better than that of an end user with a WLR SP:

- (a) submission and tracking of a fault report: a WLR SP has to first discuss the fault circumstances with the end user following scripts and guidelines, then report the details to BTW from which further calls to the end user arise to either advise on repair or make an appointment, subsequent tracking of the status of the fault continues to involve calls to the end user and BTW;
 - (b) the WLR SP has no access to a real-time on-line diagnostics test for analogue lines, only BTW can do this off-line following discussion with the SP.
-

4.17.2 In contrast, the BTR end user can in one phone call report the fault, wait briefly for a real-time diagnostics test to be carried out which will establish whether an appointment for a visit is required, and if so select and book that appointment. Subsequently, one call provides an update on the fault status.

4.17.3 For digital lines, a real-time on-line diagnostics test called RIFETS already exists and recent data from BTW shows that this significantly reduces the cost and increases the efficiency of operational resources.

4.17.4 BTW already has functionality for wholesale fault and repair management as part of its web based e.Co Repair interface (used for Private Circuits). This functionality is in the process of being adapted and tested for single analogue lines with current WLR SPs, and provides the following features:

- (a) report single and multiple faults directly into BTW systems;
- (b) trigger line tests and view line test results in real-time;
- (c) provide fault information in plain language and track status and progress;
- (d) electronic two-way messaging between BTW and the SP.

4.17.5 BTW also plans to subsequently extend the functionality to multiple analogue lines. This functionality is highly desirable and BTW is proposing to make it available at costs and in timescales which OfTel believes are appropriate for WLR2 implementation.

4.17.6 The following additional requirements apply to ensure that the handling of a WLR SP's end user's fault is at the same level as that of a BTR end user:

- (a) WLR SPs should have access to advance information on planned outages on the BT network, and on current network faults and estimated time to repair;
- (b) BT should have available at all times, including out of hours, sufficient support resource including engineers to cater for the repair care level requirements of an SP's end users including those on TotalCare (24x7).

OfTel invites views on the proposal that for WLR2 BT should provide the functionality identified in para 4.17.4 and meet the additional requirements set out in para 4.17.6.

4.18 Billing and debt management

4.18.1 The requirements for information exchange on Billing between BTW and WLR SPs follow from the SP's requirements in producing retail and wholesale bills for its end users and wholesale partners. The components of a bill are line rental, calls, additional services, and a number of irregular or one-off events such as the provisioning of a new line, changes to the service, site visits, etc. These latter events may attract transaction charges (to order the activity) as well as charges for the execution of the activity.

4.18.2 The main requirement in producing a bill is that it should ideally include all billable events occurring in the period of the bill and up to the date of the bill. In view of the strict billable quality data requirements (BABT or other certification of billing systems) and the technology limitations of some network equipment in delivering data on frequent billable events (principally calls), it is accepted that a small time gap can exist between the last billable event included in a bill and the date of the bill. However, this gap should be no more than a small number of days and be equivalent to that provided to BTR by BTW.

4.18.3 Different SPs will produce bills at different intervals (eg monthly, quarterly) and will spread the actual production of the bills over its end user base and its chosen billing interval. In addition, end users can request one-off bills at any time. To ensure the content of any bill is adequately up to date, the provision of information on billable events must therefore be sufficiently frequent:

(a) for line rental, additional services, and irregular or one-off events, the frequency should be no less than monthly and possibly greater;

(b) for calls, the provision of billable quality CDRs must be continuous (ie daily) (but incorporating the small time gap described above).

4.18.4 For wholesale bills, there should also be a calls (CDRs) bill produced on a less frequent basis (eg monthly) from which it must be possible to reconcile the daily CDRs. Other billable events must also be reconcilable with data from other operational systems (gateways, faults and repairs, etc).

4.18.5 The details of the frequency of data transfer, the data and file formats for the different types of billable events, how they are packaged (eg in one file or separately), and the medium for the transfer of data (eg FTP) are to be agreed by the Industry. The transfer of the data must be electronic, secure, and reproducible.

4.18.6 For debt management, the priority requirement for a SP is to be able to act quickly with respect to an end user who is continuing to incur call charges while having not paid overdue bills. A set of escalating restrictions must be able to be applied to the end user's line by submitting WLR 'Change' orders on the SPG:

(a) admin barring of certain types of outgoing call;

(b) barring of all outgoing calls, including CPS, except essential services (ie 999 and 100, but not allowing operator established or reverse charge calls);

(c) same as (b), but attempted calls are routed to the SP's credit control function;

(d) ultimately, terminating the service via a WLR 'Cease' order on the SPG.

4.18.7 The orders for all these restrictions must have highest priority on the SPG and be activated within a very small number of hours of being submitted. Likewise, orders to lift the restrictions when appropriate must also be executed with the same speed and priority.

OfTel invites views on the proposed requirements for billing and debt management set out in section 4.18.

4.19 Fraud and security

4.19.1 A potential fraud situation exists when an individual or group of individuals uses or attempts to use a service with the intention of not paying for it. The individual(s) may or may not be the end user. The most obvious evidence of fraud is making unusually frequent, long, expensive calls, and such call patterns can be monitored and detected.

4.19.2 It is the responsibility of the network carrying the calls to apply monitoring. Where WLR SPs offer CPS this should be done by the CPSOs, but where certain types of calls are carried over the BT network, or all calls are carried over the BT network for limited periods (eg between WLR and CPS activation), then the monitoring should be done by BTW.

4.19.3 For these situations, BTW should be able to offer two options to SPs:

(a) provide the raw CDR data so that a SP can carry out its own fraud analysis; the CDRs do not need to be of billable standard but must be completely up to date (including calls in progress), and must be supplied in a format and frequency to be agreed but no less than every 4 hours (subject to technology limitations); and

(b) carry out call monitoring and fraud analysis on behalf of the SP: unusual call patterns, known fraud risk numbers and countries, etc.

4.19.4 The required response to suspected fraud is to be able to apply and escalate the debt management measures described in the previous section, with the same high speed and priority. Prompt investigation of physical security of systems may also be required.

4.19.5 Security refers to establishing and maintaining the state of the physical network, line, and terminations such that (amongst other things) the risk of external fraud and abuse is minimised. It is reasonable to expect that, on transfer to the SPs, the line being should be in an acceptable state of security.

4.19.6 Where a situation of fraud or abuse actually occurs, the issue of responsibility and any compensation should be considered on a case by case basis. Circumstances will vary according to where the fraud or abuse occurred

(eg within the end user premises, in the access network, etc), whether procedures have been followed (eg accessible cabinets left unlocked), etc.

Oftel invites views on fraud and security requirements set out in 4.19.

4.20 Malicious calls

4.20.1 An SP should be able to ask for and obtain support from BTW in dealing with end users who are subject to nuisance or malicious calls. This could range from tracing the origination of the calls, monitoring incoming calls, to using specialist equipment to identify the responsible party. It should be possible to change an affected end user's telephone number(s) by submitting the relevant Change and Renumber orders on the SPG and CPS Gateways and for this to be executed as quickly and seamlessly as possible.

Oftel invites views on the requirements for handling of malicious calls.

Chapter 5

Capacity of BT's electronic gateway and forecasting

5.1 Introduction

5.1.1 Service Providers (SPs) will submit orders for Wholesale Line Rental via an electronic gateway. A variety of other transaction types are also expected to be handled by this gateway, as set out in chapter 4 of this document.

5.1.2 The cost of implementing the electronic gateway and associated systems will be a major element in the total set-up costs for the WLR product. Similarly, the operational costs for WLR are likely to be driven by the level of staffing required to maintain and operate the gateway. The size of these costs will be related to the volume of transactions.

5.1.3 Oftel therefore needs to specify what transaction volume the gateway must be designed to handle. This specification represents a trade-off between the cost of providing too much capacity, and the operational risk of providing too little. We need to address two issues:

- What is the optimum system capacity, taking into account this trade-off ?
- On those occasions when the system capacity is exceeded, how is it rationed between different SPs ?

5.2 System capacity

5.2.1 The primary driver for the system capacity is the number of orders expected to be submitted. The approach that has been taken in the past to estimating order volume is a 'bottom-up' approach: asking SPs to submit forecasts for the volume of orders which they expect to submit. BT then adds these together in order to produce a forecast for the total order volume.

5.2.2 However, this approach is flawed. Many SPs are targeting the same market, but there is a tendency for each individual SP to overestimate its market share. Adding together the individual SP forecasts in order to produce a total forecast results in a significant level of double-counting. This results in BT over-dimensioning its systems and the associated staff-effort.

5.2.3 When BT over-dimensions its systems BT incurs additional cost, particularly in relation to staff-effort, that may not be recovered through its standard charges. In the past these costs have been recovered from additional financial penalties applied to SPs who provide inaccurate forecasts. The outcome is a strong disincentive to SPs making ambitious up-front plans to enter the market without spending a significant period of time 'testing the water' first. Oftel wishes to avoid such a disincentive applying to WLR.

5.2.4 Oftel therefore proposes to set the total system capacity based on a 'top-down' approach: an analysis of the WLR market: estimating the total addressable market for WLR and the rate of take-up, not the market share of each SP.

5.2.5 Oftel has commissioned Schema, a well-established consultancy with a strong track record in telecommunications market analysis, to carry out the necessary study. Schema were asked to produce a monthly forecast for WLR order volumes covering the first two years after product launch. The detailed methodology underlying this forecast is set out in a report which has been published by Oftel (http://www.oftel.gov.uk/ind_groups/line_rental/wlrog.htm). In what follows we summarise the key conclusions.

5.2.6 The top-down forecast for the WLR market is based on a variety of input data, with particular emphasis on the following:

- Primary market research, based on interviews with a representative sample of 1,000 consumers. The aim was to determine the factors which lead consumers to switch telecoms supplier, and quantify the propensity of consumers to do so.
- Interviews with a substantial number (~15) of the SPs currently considering offering WLR. The aim was to understand the conditions under which SPs will enter the WLR market, and their estimates of the market size.
- Forecast and actual volumes of CPS orders. WLR and CPS are closely linked. SPs are unlikely to offer consumers an access line without an associated calls package. The existing CPS forecasts, and the actual experience to date, therefore provide a useful indication of the take-up of WLR.
- A comparison with the energy market. WLR is expected to trigger a level of retail competition similar to that which already exists in the energy industry. The number of consumers who have switched energy supplier therefore provides a useful sanity check on the WLR forecast.

5.2.7 Schema produced a number of forecasts for the take-up of WLR. The mid-range forecast, which is the one Oftel proposes to adopt, predicts that the total number of WLR orders in the first two years after launch will be 2.871 million. This can be split as follows:

- WLR orders for the residential market are expected to make up 2.328 million of this total, whilst WLR orders for the business market are expected to make up the remaining 0.543 million.
- New orders for WLR plus CPS are expected to make up 2.350 million of the total, whilst transfers of existing CPS subscribers to WLR plus CPS are expected to make up the remaining 0.521 million.

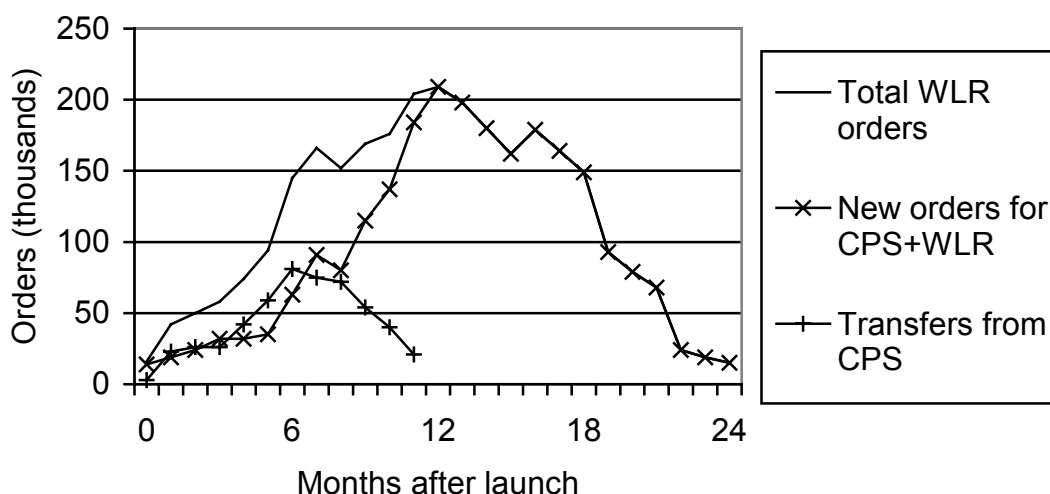
5.2.8 There is always a great deal of uncertainty associated with the forecast for any new product. In addition to the mid-range forecast described above, Schema

have produced an 'upside' forecast of 4.965 million WLR orders after 2 years, and a 'downside' forecast of 1.548 million orders. The upside forecast assumes that the propensity of consumers to switch is higher than derived from the primary market research, and tends towards the levels seen in the energy market. The downside forecast assumes that the propensity to switch is significantly lower than that seen in the primary market research.

5.2.9 All these forecasts are based on the assumption that the WLR product is fit for purpose. The three top-level requirements identified by Schema are that the product specification must allow SPs to offer an equivalent product to that offered by BT Retail, that the pricing must provide SPs with sufficient margin to cover their own costs, and that the processes associated with ordering in-life service management for WLR do not introduce a significant overhead. If these requirements are not met, then order volumes could be much lower than the current forecast. It is particularly important to note that the forecasts for the business market are highly dependent on the inclusion within WLR of a fit-for-purpose ISDN product.

5.2.10 In order to predict the monthly volume of orders, Schema have applied different S-shaped take-up curves to different market segments. WLR for business customers is expected to peak after 18 months, whilst WLR for residential customers is expected to peak after 24 months. Existing CPS customers are expected to be transferred to WLR plus CPS over the first 12 months. The resulting monthly order volumes are shown below.

Mid-range forecast for WLR orders



5.2.11 The order volumes are expected to peak approximately one year after launch, at which point an order volume of 209,000 per month is expected. It should however be emphasised that this estimate is subject to considerable uncertainty, since the precise rate of take-up for a new product is even less certain than the size of the addressable market. It should also be noted that the split between new orders for CPS+WLR and transfers from CPS will depend on the timing of the launch of WLR2. The current analysis assumes a launch date of July 2003. If the launch date is delayed, then the base of existing CPS customers at the time of launch will increase, and so the proportion of orders which are transfers from existing CPS would also be expected to increase.

5.2.12 The electronic gateway for WLR is expected to be based on the existing Calls and Access gateway. A number of enhancements will be required to provide additional functionality, but the key question we need to address here is whether the gateway capacity will also need to be upgraded, and if so, by how much. The gateway can currently handle 500,000 transactions per month.

5.2.13 It is important to emphasise that there is not a one-to-one relationship between the order volume estimated above and the transaction volume. There are two reasons for this. Firstly, although we expect orders for line transfers to dominate the total, there are a variety of other order types, used to change or cease existing lines. These are not counted in the total order volume derived by Schema, but will contribute to the total transaction volume. Oftel understands from BT that the percentage of change and cease orders is typically 20%, increasing the peak projected order volume from 209,000 to 261,000.

5.2.14 Secondly, each order submitted to the gateway will trigger multiple transactions between the gateway and BT's CSS (Customer Service System). The number of transactions will vary depending on the order type; it is typically 2 for an analogue line transfer, and 6 for an ISDN line transfer. We need to understand whether the main bottleneck is likely to be the number of transactions between the SPs and the gateway, or the number of transactions between the gateway and CSS. Oftel understands from BT that the primary limiting factor is the number of transactions between the SPs and the gateway, which must be less than 500,000 transactions per month.

5.2.15 Based on this analysis, Oftel concludes that there is roughly a factor of 2 headroom between the projected peak order volume and the capacity of the existing electronic gateway. It would therefore be difficult to justify major investment in increased gateway capacity, and Oftel therefore proposes not to require such investment.

Oftel invites views on the proposal that BT should not be required to increase the capacity of its existing gateway for WLR2.

5.2.16 The Schema forecast provides an initial picture of the market size and take-up rate for the WLR product. It will be necessary to review this on a regular basis, in the light of business outcomes, in order to ensure that BT can continue to use it as the basis for managing its staff. OfTel expects that such reviews will take place at three-monthly intervals, with the first review taking place three months after the product launch.

OfTel invites comments on these conclusions, and specifically on the following questions:

- **Are the forecasts provided by Schema for the WLR market size and the rate of take-up reasonable?**
- **Is the mechanism for reviewing these forecasts reasonable?**
- **Does the current gateway capacity provide sufficient headroom to provide an acceptable degree of operational risk?**
- **If the current level of operational risk is too high, then by how much should the gateway capacity be extended?**
- **To what extent is this dependent on the cost of doing so?**

5.3 Rationing

5.3.1 Whatever the gateway capacity, there is always a risk that it will be exceeded on a day-to-day basis. A process needs to be designed which rations the available capacity in a transparent and efficient manner.

5.3.2 A variety of rationing mechanisms have been proposed, but each has different drawbacks, for example:

- First-come, first-served. This is the simplest means of rationing the available capacity. The disadvantages are that it is not particularly transparent, and that it results in a high-level of operational risk.
- Capacity allocation pro-rata to a pre-defined quota. This is also a fairly simple rationing mechanism, but it is likely to be difficult to set the quota in a transparent manner.
- Capacity allocation based on operator forecasts. This is efficient and transparent, but has the disadvantage that there is an incentive to over-forecast, in order to book capacity. It is therefore necessary to apply some form of penalty to discourage over-forecasting.

5.3.3 OfTel is proposing two operational processes. The first process is designed to handle daily variations in order volume. The primary aim of this process is to prioritise orders, with high-priority orders being handled immediately, and low-priority orders being held until the following day where no capacity exists. This is likely to be an efficient means of handling short-term capacity problems. If however there is a longer period during which the order volume exceeds the gateway capacity, then it will be necessary to find some means of scaling back the order volume. This is the aim of the second process described below.

5.3.4 Both processes take as a primary input a three-month rolling forecast submitted by each service provider. The following points should be noted:

- The only purpose for which this forecast is provided is as an input to the rationing process. Where BT requires a forecast in order to dimension systems, or the associated staff-effort, BT should use the most recent version of the top-down forecast provided by Schema
- BT has suggested that once forecasts have been submitted for a given month, it should only be possible to change them by an agreed threshold. The forecast could be modified by $\pm 20\%$ between the first and second forecast submissions, and by $\pm 10\%$ between the second and third submissions. Oftel accepts that it is normal to apply such thresholds to forecasts, but also notes that the overall process is likely to be most efficient if SPs are encouraged to provide the most accurate information possible, unconstrained by such thresholds.

5.3.5 Each month BT will review the forecasts provided by the SPs, in order to establish whether the total volume of orders is expected to exceed capacity during the forecast period. If it does not, then no further action is necessary. However, if there is any month for which the forecast exceeds capacity, then it becomes necessary to scale back the individual forecasts. An important strength of this approach is that it provides advance warning of capacity constraints, allowing operators to adjust their marketing activity.

5.3.6 The simplest way to scale back the forecasts would be scale them all back by the same percentage. This would however result in a strong incentive to over-forecast in order to book capacity. It is therefore proposed that the capacity allocated to each operator should be proportional to a figure of merit, whose value reflects the historical accuracy of each operators forecast.

5.3.7 The equation to be used by the rationing process is:

$$C_i = A_i \times F_i \times C \quad / \quad \sum_i A_i \times F_i$$

Where

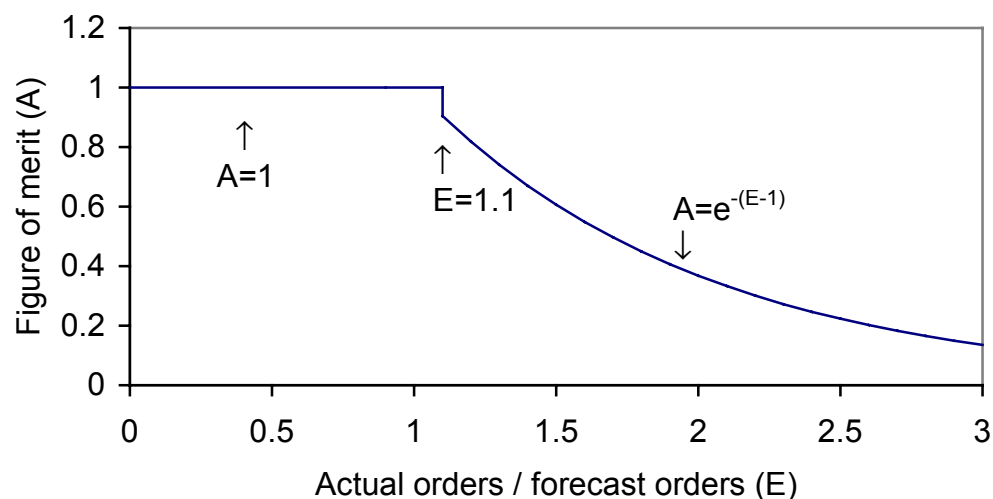
- F = The total volume of orders forecast by all operators in any given month
- F_i = The volume of orders forecast by operator i in any given month
- C = The total ordering-handling capacity of the gateway
- C_i = The capacity assigned to each operator after the rationing process
- A_i = The figure of merit for operator i.

5.3.8 Note that in the particular case where each operator has the same figure of merit, this equation reduces to $C_i = F_i \times C / F$. In this case each operator is allocated capacity pro rata to their forecast, as would be expected.

5.3.9 It is also necessary to establish the precise relationship between the figure of merit and the accuracy of each operator's forecast. In doing this, Oftel proposes the following underlying principles:

- No penalty should be applied to operators whose forecasts are accurate within $\pm 10\%$.
- No penalty should be applied to operators who under-forecast (ie they submit more orders than they have forecast). These operators are already being penalised because of the fact that their excess orders will receive low priority (see paragraph 5.3.12)
- A penalty should be applied to operators who consistently over-forecast. This is essential in order to remove the incentive to over-forecast in order to book capacity. The size of this penalty must be high enough to deter over-forecasting, but not punitive. For example, if an operator consistently over-forecasts by a factor of 2, then the figure of merit must be less than $1/2$, in order to ensure that the capacity allocated to that operator is less than if they had produced accurate forecasts. Oftel proposes to adopt a negative exponential with λ set to 1.

5.3.10 Based on these principles, Oftel proposed the following relationship between the forecast error (E) in any month and the figure of merit (A) used by the rationing process:



5.3.11 The rationing process described above ensures that within any given month the capacity assigned to each SP can be delivered by the gateway. It does not however protect against short-term problems caused by daily variations in order volume.

5.3.12 It is proposed that for WLR2 on a daily basis, orders received by BT are allocated to one of three queues:

- Priority 1: These are order types which required urgent action (eg Cease, Outgoing Call Barring). These are processed ahead of any other orders, irrespective of the capacity allocated to each operator. BT will need to reserve an appropriate level of gateway capacity in order to handle such orders.
- Priority 2: These are orders submitted by each service provider which are within the capacity which has been allocated to that service provider for that day. It should be possible to process all Priority 2 orders on the day that they are received, unless the volume of Priority 1 orders is unexpectedly high, or there is a systems failure. Any Priority 2 orders which fail to be processed on the same day will appear at the head of the Priority 2 queue the following day.
- Priority 3: These are orders submitted by each service provider which are additional to the capacity which has been allocated for that day. These will be processed on a best efforts basis. Any Priority 3 orders which fail to be processed on the same day will be treated as the first orders received on the following day. They will be allocated to the Priority 2 queue as long as the capacity allocated to each service provider is not exceeded. If the capacity allocated is exceeded, then any excess orders will be submitted to the Priority 3 queue.

5.3.13 There is an outstanding question as to how orders should be priorities within each queue. It might be possible to prioritise orders according to the figure of merit of each operator, and this would provide a further incentive to accurate forecasting. Oftel's current view, however, is that this would be over-punitive, and that orders received within each queue should be handled on a first-come first-served basis.

Oftel invites comments on these proposals, and specifically on the following questions:

- **Do these proposals represent an efficient and transparent mechanism for rationing the available capacity?**
 - **Should forecasts for a given month be permitted to change by an arbitrary amount when new forecasts are submitted, in order to maximise forecasting accuracy, or should such changes be subject to thresholds?**
 - **Is it reasonable to ration capacity by scaling back SPs forecasts in proportion to a figure of merit?**
 - **Does the proposed relationship between the figure of merit and the forecasting error provide a sufficient incentive to accurate forecasting, without being over-punitive ?**
 - **Does the proposed process for prioritising orders on a daily basis provide an effective means of handling short-term peaks in demand?**
-

Chapter 6

WLR consumer issues

6.1 Introduction

6.1.1 The establishment of a fit-for-purpose WLR2 product will encourage competition and is likely to bring significant changes in the way services are marketed and delivered to consumers. Oftel believes that careful consideration must be given to ensuring that appropriate safeguards are provided to protect consumers as well as the reputation of the industry itself.

6.1.2 Oftel established a Consumer Issues Task Group (CITG) in July 2002, comprising representatives from consumer groups and industry to consider the implications for consumers arising from WLR, and to consider measures aimed at the prevention of deceptive and/or misleading sales and marketing practices.

6.1.3 The CITG recognised that the development of consumer protection rules should have regard to the fact that the transfer process must balance the interests of the consumer with the need to ensure that the competitive process is not inappropriately constrained. The CITG's work focussed on four main areas where policy and processes need to be developed as part of the WLR transfer process:

- minimising the risk of customers having their service transferred without authorisation ("slamming");
- ensuring fair and appropriate sales and marketing activity;
- ensuring that customers are adequately informed about the competitive services;
- preventing inappropriate 'save' activity by the losing operator.

6.1.4 These are consistent with Oftel's strategic objectives, namely:

- effective competition – benefiting consumers;
- well informed consumers;
- adequately protected consumers;
- prevention of anti-competitive practice.

6.1.5 The Group also took account of the wider, statutory consumer protection measures and common law rights on contract formation that will apply to WLR sales. For example, under current UK legislation consumers have statutory "cooling-off periods" in respect of the marketing of goods and services specifically using "doorstep" or "distance" channels. For doorstep sales, a consumer can cancel a contract made in the course of a sales visit within seven calendar days

from the date following signature of the order form; for distance sales the period is seven working days (including Saturdays) measured from the date on which certain information is received by the customer.

6.1.6 This chapter proposes a number of additional consumer protection measures to be introduced in the areas identified by the Group, and invites comments from interested parties on the proposed approach. It looks at related experiences in the energy industry and from other telephony service, notably Carrier Pre-Selection (CPS).

6.2 Minimising the risk of unauthorised transfers

Assessing the risk

6.2.1 WLR2, with one bill from the new supplier, is expected to have many similarities to reselling in the energy sector, and is likely to result in similar sales and marketing practices being adopted in the telecoms sector, including the use of direct selling. This incorporates sales and marketing activity where there is consumer contact, and includes doorstep and telephone selling and street promotion. It is widely used throughout the energy markets, and has made a significant contribution to the dynamism of the energy supply sector.

6.2.2 The experience of the energy sector demonstrates that such practices can lead to abuse including transfer without authorisation (“slamming”). Examples of unscrupulous sales techniques in this market include forging of signatures, intimidating vulnerable people and falsely claiming that contracts have been agreed on the telephone (Stop Now Campaign, energywatch, 2002). Such behaviour causes significant confusion and distress, and has an adverse impact upon consumer confidence in switching suppliers. This has a negative effect on competition, and means that consumers may not be benefiting fully from competition.

6.2.3 There are about 900,000 transfers per month in the energy sector, with an average of about 550 complaints per month to energywatch. These reported complaints represent a small proportion of the total number of transfers, but energywatch has acknowledged that only some 10% of customers are aware of its existence. Ofgem takes the view that instances of mis-selling and erroneous transfers brings the whole industry into disrepute, causing significant consumer distress and inconvenience. A recent NOP research survey, conducted on behalf of energywatch, showed that consumers are being deterred from engaging in doorstep and telephone sales because of unscrupulous sales and marketing practices. The survey indicated that a majority of consumers (91%) that had been directly approached by an energy sales agent stated that they would not be interested in talking to another sales agent.

6.2.4 In the telecoms sector, the CPS transfer process provides the closest example to WLR arrangements. Here the primary anti-slamming measure is the sending of mandatory letters by the losing and gaining providers notifying the customer of the impending switch to CPS. These letters are sent during a 'switchover period' of 10 working days between the placing of the order (by the CPSO with BT) and the implementation of the order by BT. The switchover period is thus a vital component of the CPS anti-slamming measures. During this period the customer can contact either of the providers to cancel the switch.

6.2.5 This process has only recently been implemented. It replaces an earlier 'reply card'-based process for CPS that relied on customers signing and returning a confirmation card to BT to enable the CPS transfer to take place. It is difficult to draw definite conclusions from the limited data available at this stage. However, there would appear to be signs of increased industry concern about the CPS transfer process and a growing volume of consumer complaints about erroneous orders.

WLR proposals

6.2.6 Of tel believes that to prevent 'slamming' with WLR, it is essential that customers are made aware that the transfer is taking place, and have adequate opportunity to stop the process in the case of unauthorised transfers or where they wish to change their mind.

6.2.7 Furthermore, Of tel believes that the WLR proposals outlined in this section should apply equally to residential consumers and business users. While current statutory rights do not provide the same level of protection for business users as residential customers, Of tel considers that the interests and needs of the two sectors are similar, and warrant uniform protection. Notwithstanding, it is proposed that the need for consistency between these two sectors be subject to review at a later date in the light of subsequent experience of the CPS and WLR transfer process.

6.2.8 Of tel would welcome comments on the following proposals, including whether they should apply equally to residential consumers and business users at this stage.

- *'notification of transfer' letters*

6.2.9 Of tel proposes that consumers wishing to transfer between providers should receive a mandatory letter from both the gaining and losing provider. This approach, which is similar to that recently adopted for CPS, would be a significant consumer protection safeguard from the risks of slamming and/or misselling.

6.2.10 The letters should follow a standard layout, and include only the essential information about the transfer, such as the telephone number to be transferred and the proposed transfer date. The proposed letter format is set out in Annex C.

The letters should be broadly consistent, and be restricted to neutral/factual information only. There should be no marketing and save content. In addition, it is proposed that the envelope be clearly marked to provide an indication of its importance.

6.2.11 It may be that the use of prescribed text only will not always be appropriate, and Oftel would welcome views as to whether and when an element of flexibility should be allowed to suit individual circumstances. This may be the case, for instance, where customers are not transferring all their services to a new provider and retain a relationship with the losing provider. Additionally, the gaining provider may wish to provide certain introductory/welcome information as part of its transfer letter.

6.2.12 In all instances where Oftel is persuaded that variations from standard text may be justified, this will be strictly monitored by Oftel, and providers will be required to act in accordance with the rules relating to save and marketing content. In particular, Oftel would not wish to see the primary purpose and value of the letters being obscured nor unsatisfactory delays to the despatch of these letters.

6.2.13 The process must provide for the earliest possible despatch of letters, and both the losing and gaining provider will be expected to use all “reasonable endeavours” in despatching the customer notification letter once the order has been made. Oftel would expect that consumers should receive the transfer letters not more than five days after the order has been made.

Oftel invites comments on:

- **the proposal that mandatory letters informing customers of the details of the transfer be required of both the losing and the gaining provider;**
 - **the proposal that these letters always follow a standard format; and**
 - **the circumstances under which departures from standard text may be justified.**
-
- *WLR switchover period*

6.2.14 Oftel believes that the WLR process should provide for a standard switchover period which is applicable irrespective of the method of sales or marketing approach. This is particularly important given that statutory cooling-off periods vary according to whether doorstep or distance selling has been used, or whether there are exceptional circumstances (see paragraph 6.1.5.)

6.2.15 The switchover period should ensure that there is a sufficient period of time between the order being made and implemented for the transfer letter to be received, considered and acted upon by the consumer. The issues involved are not straightforward and, in particular, there must be an appropriate balance between the need to minimise opportunities for slamming against the need to ensure that the competitive process is not inappropriately constrained

6.2.16 Oftel has considered to the current switchover periods for Calls & Access (8 calendar days) and CPS (10 working days). The competing arguments for both periods are finely balanced. After careful consideration, Oftel is persuaded that the switchover period for WLR should be analogous to that of CPS (ie 10 working days, excluding Saturdays). In particular, Oftel notes that it appears common ground between providers that the earliest day that consumers will receive the letter will be the fourth or fifth after the order has been placed. Given this, in Oftel's view, the Calls & Access switchover period would appear to be only on the borders of acceptability for allowing time for customers to receive consider and act on the letter.

6.2.17 However, the objective must be to reduce the switchover period for both WLR and CPS at the earliest opportunity in the light of evidence emerging from CPS. It is therefore proposed that the switchover period be kept under review by the CPS Group, and reduced in the light of appropriate evidence; in particular, how quickly the anti-slamming letters are received by customers, and how quickly transfers are cancelled during the switchover period following requests by customers.

6.2.18 Oftel is also aware that the proposed switchover period will not accommodate all possible variants of the statutory cooling-off periods given that there will be different timescales according to the particular marketing or sales approach used. The switchover period, however, must not detract from consumers' statutory rights, and it is therefore proposed that providers should be required to ensure that orders do not mature until the statutory "cooling-off period" has been met except in cases where consumers have chosen to waive their statutory rights.

Oftel invites comments on:

- **the proposal that the switchover period should be analogous to that of CPS (ie currently 10 working days, excluding Saturdays); and**
- **the proposal that, additionally, providers should ensure that orders do not mature until the statutory "cooling-off period" has been met.**

- *transfer of customers using social telephony products*

6.2.19 BT provides some retail packages which are designed to meet social objectives in relation to vulnerable parts of the community. Examples include the Low User Scheme, In Contact, the Chronically Sick and Disabled Scheme, and the Schools for Internet service. In paragraph 2.3.38 Oftel invites views on whether customers using BT social telephony products should have an increased form of protection during transfer and, if so, on the form this protection should take.

6.3 Ensuring fair and appropriate sales and marketing activity

6.3.1 The example of the energy market following the introduction of competition shows that it is highly likely that full and effective use will be made of direct selling as a channel to market (on the doorstep, by telephone and in public places such as supermarkets). However, while such activity has made a significant contribution to the establishment of effective competition in the energy sector and is considered by Ofgem as an effective way of bringing the benefits of competition to consumers, there have been a number of instances of irresponsible sales and marketing activity. This has undermined consumer confidence in the transfer and switching process, and resulted in consequential damage to the industry as a whole.

6.3.2 In its consultation document, *Regulation of gas and electricity markets: a more vigorous approach*, published in June 2002, Ofgem stated that:

“Ofgem is aware of a range of incidents involving vulnerable customers. Ofgem has also received numerous reports of entirely unacceptable practices such as misleading customers as to the nature of sales material, misleading customers as to prices and intimidation of customers. Ofgem regards these practices as completely unacceptable.”

6.3.3 Oftel considers that the development of codes of practice would contribute to the objective of securing adequate consumer protection, ensuring certain safeguards from unethical, unfair or irresponsible sales and marketing activity. It is therefore proposed that all WLR providers should develop their own codes of practice, incorporating provisions which promote good practice and responsible sales and marketing for WLR, and which would facilitate consumer understanding about the service and behaviour of the providers.

6.3.4 Under the Communications Bill and the new authorisations regime, all providers will be required to have codes of practice which will have to be approved by Oftel/Ofcom. Oftel intends to issue guidance on key elements of the codes in respect of sales and marketing activity in order properly to assess providers' codes. Draft guidance has been developed with the CITG and is set out in Annex D. The key elements reflect the content of sales and marketing codes of practice that have been developed for both CPS and energy.

Oftel invites comments on the draft guidance.

6.4 Ensuring that customers are adequately informed about the competitive services

6.4.1 Customers will be informed about WLR by providers' own sales and marketing campaigns and media coverage. However experience of other telecoms products and from other sectors has shown that independent consumer guidance can provide an important aid to decision-making and consumer

protection. Oftel therefore proposes to develop a Consumer Guide which describes the WLR product and identifies issues which the consumers may wish to take into account when considering changing provider. Oftel has already published a similar Consumer Guide for CPS.

6.4.2 Oftel published a Consumer Guide in October 2002 for the purposes of WLR Phase 1 in consultation with representatives from consumer groups and industry. This is attached at Annex E. The Consumer Guide will be modified to reflect future enhancements under WLR 2, and comments are invited as to what changes will be required.

6.4.3 Oftel would also welcome views in relation to determining an appropriate publications strategy to ensure that there is good consumer awareness of the Guide and codes. There are a number of options available including publishing it on the Oftel website, ensuring wide circulation via independent sources and/or telephone companies and an extensive advertising campaign, targeting both local and national media. Oftel also considers that there are incentives for WLR providers to build consumer awareness of the Guide and codes, and believes that the potential of joint initiatives should be explored.

Oftel invites comments on:

- **what changes to the Consumer Guide will be necessary to reflect future enhancements under WLR2;**
- **the measures that should be taken in order to ensure good consumer awareness of the Consumer Guide and codes of practice.**

6.5 Preventing inappropriate 'save' activity by the losing provider

6.5.1 'Save' activity describes attempts by a provider, when a customer has indicated they wish to transfer service to another provider, to persuade that customer not to change providers, before the transfer takes place. Oftel has so far taken the view that it would be disproportionate to prohibit 'save' activity in relation to Calls & Access and CPS. This reflects the fact that properly conducted 'save' activity can help to inform consumers of the options available to them, and that well informed consumers are important for effective competition.

6.5.2 Since the removal of the reply card from the CPS ordering process at the end of July 2002, there has been increased industry concern about CPS 'save' activity and, in particular, the use of the CPS 'Cancel other' order type (which allows BT to cancel a CPSO's order for CPS on a particular line, prior to switchover) as part of any 'save' activity.

6.5.3 As a result of this increased industry concern about BT's use of 'save' activity and 'cancel other' orders during the CPS customer transfer process, Oftel circulated a discussion paper regarding this activity in early September 2002. In the light of responses received to this informal consultation, Oftel has now outlined

its policy in this area, and this is set out in Oftel's discussion paper: *CPS sales, 'save' and 'cancel other' activity: position paper*. Oftel's discussion paper is available on the Oftel website (www.oftel.gov.uk/ind_groups/op_policy/cpscomm/cpscancelother.htm).

6.5.4 Oftel has recommended that 'save' activity should not be banned, but that all losing providers should be able to make 'save' calls during the CPS transfer process. Oftel has, however, set out a number of rules applicable to 'save' activity in order to minimise misuse, including that BT should not use the 'cancel other' facility in connection with 'save' activity. Additionally it is proposed that the customer should be able to find out the name and telephone number of their new provider through BT Wholesale in the event that the customer does not know or cannot recall the name of the provider.

6.5.5 It is proposed that these measures should be reviewed after six months after implementation in order to assess their effectiveness.

6.5.6 It appears to Oftel that it is desirable to have a common set of rules that are applicable to both WLR and CPS, unless differences are justified. Oftel therefore expects that the same principles outlined in *CPS sales, 'save' and 'cancel other' activity: position paper* will apply in connection with WLR.

6.5.7 Oftel is aware, however, that the issue of save activity in relation to the migration of existing CPS customers to WLR is specific to WLR. In its market study for Oftel, Schema identified that such transfers are likely to form a significant proportion of all orders in the initial stages of take-up of WLR.

6.5.8 In Oftel's view, it would be inappropriate for BT to engage in save activity for the calls part of the telephone service during this migration, and Oftel expects that any BT 'save' activity be restricted only to the line rental element of the service. It is not reasonable that BT should be entitled to have a second opportunity to engage in 'save' activity during this particular switchover period for the calls element of the service. BT would, of course, be entitled to undertake normal sales and marketing activity once the transfer has been carried out. An alternative, more restrictive, approach would be to ban all 'save' activity by BT in relation to the migration of existing CPS customers.

Oftel invites views on whether:

- **there be a common set of rules that are applicable to both WLR and CPS in connection to save activity; and**
 - **BT 'save' activity should be restricted to the access element of the customer's service in the case of the transfer of existing CPS customers to WLR.**
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6.6 Enforcing the Measures

6.6.1 Oftel is committed to securing appropriate regulatory and enforcement powers in order to ensure that there are incentives upon providers to act responsibly, and follow best practice in their sales and marketing for WLR.

6.6.2 While it is necessary for there to be recourse to effective sanctions, Oftel considers that there are incentives upon all providers not to engage in irresponsible sales and marketing activity, and to adopt high standards in terms of service and behaviour. Indeed, providers who do otherwise risk damaging their reputation, resulting in significant deterioration in the value of their relationships with customers (existing and potential).

6.6.3 Under the new authorisations regime, Oftel/Ofcom will require WLR providers to have approved codes, incorporating a section on sales and marketing based on the guidance published by Oftel/Ofcom. Individuals will be able to complain to their providers under its code, and ultimately seek redress through the Ombudsman or other approved schemes. Serious breaches of codes by providers could be treated as breaches of the authorisation regime and be subject to the enforcement regime set out in the Communications Bill.

Competition Act powers

6.6.4 BT is not permitted to discriminate in favour of its own business, and there are a number of existing regulatory obligations which have been imposed upon BT to ensure that this does not happen.

Stop Now Orders (EC Directive) Regulations 2001 ('SNORs')

6.6.5 The regulations, introduced in 2001, allow the Office of Fair Trading, Trading Standards Departments, and qualified entities such as Oftel, to apply to the courts (High Court or County Court) for an Order to stop a trader from breaching certain EC directives where the breach harms the collective interests of the consumer. This regime is due to be extended when the Enterprise Bill comes into force next year to all consumer protection legislation relating to the economic interests of consumers. As a consequence, Trading Standards, the OFT and Oftel/Ofcom will have added powers to enforce a wide range of consumer protection legislation in respect of companies engaged in mis-selling or slamming.

6.6.6 The SNORs regime will sit alongside existing regulatory and enforcement activity, and should offer a new and potentially more effective enforcement tool to protect consumers from harmful business practice and rogue traders⁵. This (and proposals in the Enterprise Bill) have been a major development in consumer protection enforcement.

⁵ Key aim of the Government's 1999 White Paper *Modern Markets: Confident Consumers*.

Chapter 7

Wholesale line rental - cost recovery

7.1 Introduction

7.1.1 In *Protecting consumers by promoting competition: Oftel's conclusions*, published on 20 June 2002, Oftel set out its proposed starting charges for the wholesale line rental (WLR), connection and transfer products. Annex E to that document described how Oftel derived these charges from the determined rental charge for an unbundled local loop (LLU). The WLR and LLU products share major components, most obviously the subscriber line but there are also a large number of differences, with some costs being relevant to LLU but not to WLR and vice versa. Although the charges set in June reflect the costs of the basic WLR product, intending WLR service providers have since requested certain enhancements to the basic product. This will result in additional costs being incurred. This chapter is concerned with how these costs should be recovered. In addition, WLR service providers have argued that some costs included in the WLR line rental should be recovered from BT Retail customers as well as WLR service providers. This is also considered in this chapter.

7.1.2 The first part of this chapter is concerned with recovery of the costs of the service provider gateway. It deals only with the costs of providing the functionality needed for a fit-for-purpose product suitable for use by all service providers. The second part is concerned with recovery of the costs of providing additional functionality which some service providers have indicated they require but which might not be wanted by all. A third category of costs is not covered in this document. These are the recurring costs of occasional activities which are likely to be needed for a fully operational product. Some of these, such as product management, have already been allowed for in the charges for the basic product. Others, such as "add select service" or "change address" have not. These will need to be the subject of discussions with BT and WLR service providers.

7.2 Service provider gateway

7.2.1 In the price control review, BT argued that significant development of the "service provider gateway (SPG)", the interface between BT and customers for the "Calls and Access" and WLR products, will be necessary in order to support the latter product. Moreover it argued that, on causation grounds, these costs should be recovered through the transfer and connection charges. Oftel took the view that as the wholesale access product is essentially similar to the Calls and Access product, the additional product development and management costs incurred for WLR should be limited. Accordingly, Oftel did not allow for any further product development of the SPG from 2004/05 onwards as the product should be fully fit

for purpose by then. However, it accepted that the WLR will largely supplant Calls and Access and so allowed for the undepreciated component of past costs and ongoing support costs to be recovered in the WLR charge.

7.2.2 Oftel also took the view that the bulk of transfer costs should be recovered through the rental as even a relatively low transfer charge could deter switching. For this reason, the transfer charge reflects only the direct labour cost incurred. An amount equivalent, in net present value terms, to the total of other costs incurred when a customer is transferred to a service provider, including the costs of the service provider gateway, is however recovered through the rental.

7.2.3 In summary, in setting the charges for the WLR product, Oftel allowed for BT to recover the costs associated with the service provider gateway (SPG, the interface between BT and WLR service providers). BT proposed to recover these in the WLR transfer charge. Oftel allowed for an amount below that proposed by BT to be recovered, not through the transfer charge, but through an equivalent addition to the line rental. All the allowed costs are however borne by WLR service providers.

7.2.4 An alternative approach considered by Oftel would have been to treat the costs of the SPG in a similar way to the costs of the CPS gateway which were regarded as part of system set-up costs and recovered from BT retail customers as well as CPS operators. The main justification for requiring the costs of the SPG also implicitly to be borne by BT retail customers would have been that they will also benefit from the additional competition resulting from the WLR.

7.2.5 Oftel has considered how the costs of the WLR SPG should be recovered in the light of Oftel's six principles of cost recovery. The six principles of cost recovery are:

- **cost causation** – costs should be recovered from those whose actions cause the costs to be incurred at the margin;
- **cost minimisation** – the mechanism for cost recovery should ensure that there are strong incentives to minimise costs;
- **distribution of benefits** – costs should be recovered from the beneficiaries especially where there are externalities;
- **effective competition** – the mechanism for cost recovery should not undermine or weaken the pressures for effective competition;
- **reciprocity** – where services are provided reciprocally, charges should also be reciprocal; and
- **practicability** – the mechanism for cost recovery needs to be practicable and relatively easy to implement.

7.2.6 These principles have been widely applied by Oftel and, where appropriate, comparisons are also made with earlier occasions when they have been used, notably in the cases of number portability, carrier pre-selection (CPS) and LLU collocation.

7.2.7 When applying the principles, it is generally sound to start with *cost causation* on the grounds that economic efficiency is enhanced by requiring parties to pay for costs which they directly cause to be incurred. The other principles are then considered, to see the extent to which this starting point may require modification.

Categories of costs

7.2.8 A number of different categories of costs may be identified. In theory, these may include system set-up costs, per operator costs, per line costs and per call (minute) costs, though not all these may be relevant in any particular case. The six cost recovery principles can be applied separately to each category of costs.

Cost causation

7.2.9 The principle of cost causation can be given two possible interpretations in the case of system set-up costs. On the one hand, it is arguable that BT incurs the costs arising from system set-up only if WLR service providers demand the product. On this argument, it is these operators who cause the cost to be incurred and hence, under the cost causation principle, it is these operators who should bear the systems set-up costs.

7.2.10 However, in the case of CPS systems set-up costs, it was argued that the primary causal factor was a regulatory obligation following from BT's market power, rather than the demands of CPS operators. Oftel noted that both arguments had some validity and neither provided a compelling basis for attributing system set-up costs. On balance, Oftel concluded that the method of cost recovery should reflect current practice for apportioning the costs associated with other regulations imposed on SMP operators. This meant that all operators including BT should bear a proportion of the costs.

7.2.11 A similar argument could be taken to apply to the system set-up costs of the WLR. However, it is likely to be less clear cut in this case. The requirement to offer CPS resulted from an EU obligation. In the case of WLR, there is no such EU obligation, although BT has accepted a modification to its licence requiring it to make WLR available. The argument that the system set-up costs of the WLR are caused by a regulatory obligation flowing from BT's market power, whilst still having force, may not therefore be as persuasive as in the case of CPS.

7.2.12 There are strong arguments on cost causation grounds that per line costs (and per call costs, if any) should be recovered from WLR service providers. This would also be consistent with CPS, where there was broad agreement that per line costs should be met by CPS operators, largely on grounds of cost causation. At any rate, therefore, it is clear that the costs of the WLR SPG must be regarded as system set-up costs if recovery from BT Retail customers is to be justified on cost causation grounds.

7.2.13 However, it is not clear that it would be appropriate to regard the costs of the SPG as system set-up costs. The costs of the SPG may, for example, vary with the number of service providers for which it is dimensioned or, more likely, with the number of orders put through the system. In this case, it might be more appropriate to regard them, at least partly, as per-operator or per-line costs.

7.2.14 The conclusion that CPS gateway costs should be regarded as system-set-up costs reflected the view that BT should dimension the system to meet reasonable demand. Reasonable demand was initially estimated using forecasts provided by CPS operators. A similar argument could be applied to the costs of the WLR SPG. It might then be appropriate to regard the costs incurred by BT in dimensioning the SPG for an appropriate expected number of service providers as system set-up costs. However, unlike CPS, forecasts are not to be a factor influencing the dimensioning of the WLR system. The CPS case is therefore not necessarily strictly analogous.

7.2.15 In summary, for cost causation to justify recovery of part of the costs of the SPG from BT Retail customers, it must first be judged that these costs are system set-up costs. CPS sets a precedent for this, though not a precise one. It must then additionally be argued that the costs are caused by a regulatory obligation flowing from BT's market power. Again a precedent for this exists in the case of CPS though it is an imperfect one. On balance therefore, the cost causation principle does not point strongly either to recovery of the costs of the WLR SPG from WLR service providers alone or to recovery from BT Retail customers as well.

Distribution of benefits

7.2.16 As in the cases of number portability, carrier pre-selection and LLU collocation, there is a direct benefit to customers who choose to use the WLR service. There will also be a benefit to those customers who remain with BT arising from increased competition. In addition, as described in Annex E to *Protecting consumers by promoting competition: Oftel's conclusions*, the WLR line rental is set to cover long run incremental costs including the cost of capital plus an allowance for common costs consistent with that in the charges for BT Network standard services, so there should be no negative impact on direct access competitors. As with the other measures listed above, therefore, there is a case on distribution of benefits grounds for recovering the costs of the SPG, if they are regarded as system set-up costs, from all WLR and BT retail customers. Indeed it could be argued that customers of other direct access operators will also benefit indirectly from increased competition and so should bear a share of the costs. This argument was considered in the case of CPS and rejected on grounds of impracticality which also seems likely to be the case for the WLR SPG.

7.2.17 The distribution of benefits arguments are much weaker if the costs of the SPG are regarded as per operator or per line costs. The benefits to competition and hence to customers generally of an individual service provider or customer

taking the WLR service are unlikely to be significant. As with CPS, the spreading of systems set-up costs over all customers whilst per line and per operator costs are recovered from WLR service providers would reflect the greater share of the benefits enjoyed by customers using the service. The case on distribution grounds for recovering the costs of the WLR SPG from all customers including those of BT Retail therefore rests on them being regarded as systems set-up costs.

Cost minimisation

7.2.18 It is BT who is in a position to determine the costs of the SPG. However, by including a fixed allowance for recovery of SPG costs in the WLR rental, the risk of costs diverging from the allowed amounts has effectively been transferred to BT. BT then has good incentives to minimise the costs of the SPG as long as the charges determined in the price control review are not reset.

7.2.19 If the WLR charges are reopened, or to the extent that the costs of enhancements to the SPG not already allowed for are concerned, recovery of at least some of these costs from BT is required if BT is to have an incentive to minimise these costs. This could be achieved by spreading system set-up costs over all BT retail customers and WLR service providers. The alternative would be to regulate charges, perhaps by charge capping, which would also provide some incentive to minimise costs.

Effective competition

7.2.20 WLR service providers will be able to offer telephony services in direct competition to BT. This suggests that the recovery of the costs of the SPG should be competitively neutral between BT and WLR service providers. It might therefore be argued that competitive neutrality would be maintained if costs were recovered from customers remaining with BT as well as those using WLR service providers. As with CPS, the effective competition criterion tends to justify recovery of costs from all operators.

7.2.21 WLR service providers will of course be competing, not only with BT, but with other direct access operators using their own networks. In the CPS consultation, Oftel considered whether the principle of competitive neutrality should apply mainly to competition between BT and the CPS operator or more widely to competition between CPS and direct access operators. It decided that the former was the most appropriate approach and a similar conclusion seems appropriate in the WLR SPG case, that is, the relevant concern is to achieve competitive neutrality between WLR service providers and BT.

7.2.22 In the case of CPS, the size of system set-up costs made them a major issue (as these costs included not just the costs of modification of BT's operational support systems but also large costs for network modifications) but SPG costs are

much less significant in relation to the WLR line rental than CPS systems set-up costs were in relation to the costs of CPS as a whole.

7.2.23 The current £28.00 pq WLR residential line rental allows for £14.2m of SPG development costs and £3.8m of SPG support costs spread over, in effect, six years. This would be equivalent to £2.45 of the £7.48 of connection costs per assumed connection or transfer which were included in the line rental rather than the connection and transfer charges. The £7.48 translated into a £1.17 increase in the quarterly line rental. If no SPG costs had been included in the line rental, it would have been some £0.39 lower at £27.61, the other connection related costs contributing £0.78 of this. Indications from potential WLR service providers are that, at this level, the amount of SPG costs included in the rental is not material.

7.2.24 In addition, the WLR proposals must be seen as a package including all charging and non-charging aspects of the WLR as well as other aspects of the price control proposals. It should not be presumed that individual elements of the package could be changed without possibly offsetting changes elsewhere. This point was made frequently by Of tel in response to arguments from BT that additional costs should have been allowed in the charges.

Practicality

7.2.25 Clearly the simplest approach is not to reopen the charges set in the retail price control review. In the event that charges are reset, however, the easiest system to implement is one where all BT and WLR service providers bear the system set-up cost of the SPG as this may reduce the need to forecast WLR take-up. Other methods are likely to be more sensitive to forecasts of WLR usage. Whilst, if the charges are reset, the difficulties associated with recovering the system set-up costs of the SPG from WLR service providers may not be insurmountable, this principle then favours recovery over all BT retail customers and WLR service providers. This is consistent with the decision reached in the CPS case. Of tel also ruled out on practicability grounds a proposal for system set-up costs to be borne up-front by CPS operators. This was because it would create a disincentive to enter the market initially, an argument which also applies to the WLR SPG.

Reciprocity

7.2.26 Reciprocity is not a relevant principle in determining the recovery of the SPG costs as the service is not provided reciprocally.

7.2.27 One intending WLR service provider has argued for "like-for-like cost recovery". Under a system of like-for-like cost recovery, BT would be required to pay for all WLR-related costs which it incurred while OLOs and resellers would also pay for any costs they incurred. This service provider argues that it would be inequitable for BT to be able to recover the costs of implementing the WLR product from WLR service providers whilst WLR service providers incur significant

costs in setting up their own systems, which they must bear themselves (an argument which, it notes, would also have applied to CPS). However it is not correct to argue that BT Retail has had to incur no equivalent cost in offering the same retail and wholesale call service - though it may be that the relevant systems have been in place for some time. Moreover, this proposal is inconsistent with the six cost recovery principles which Oftel uses when considering cost recovery issues, appearing instead to import a seventh overriding principle. It is inconsistent with the principle of cost causation because it is not correct to argue that BT causes costs simply because they arise on its systems. It also gives poor incentives for cost minimisation because it provides no incentive on WLR service providers to ask BT only to develop functionality that they actually need. There will be no incentive for WLR SPs to minimise the costs to BT of such things as IA barring, which has significant cost implications for BT, but not for SPs. It would also be inconsistent with the distribution of benefits criterion since BT customers would bear a disproportionate share of costs.

Conclusion on SPG cost recovery

7.2.28 In general, the starting point for any analysis of cost recovery is the principle of *cost causation*. Only if the other principles point strongly towards another method of cost recovery should cost causation not be followed.

7.2.29 There are two possible interpretations of the principle of *cost causation*. On one interpretation of cost causation (that the costs of the SPG are caused by a regulatory obligation flowing from BT's market power), this indicates that the SPG costs should be borne by BT retail customers as well as WLR service providers as long as they are regarded as system set-up costs. This would then be supported by the principles of distribution of benefits and, though weakly, effective competition. The other possible interpretation of the cost causation principle (that the costs are caused by the demands of WLR service providers) would suggest that the SPG set-up costs should be recovered from WLR service providers, as in the current charges. This reflects a judgement that, in the context of the price control proposals as a whole, this represented the best compromise between the principle of *cost causation* and those of *distribution of benefits* and *effective competition*.

7.2.30 In the case of the costs of the SPG an additional issue is that an allocation of costs is already implicit in the charges determined in the price control review. Changing this allocation, for example to reflect the first interpretation of cost causation described above, could be seen as reopening the entire price control package which BT has agreed to. It also needs to be borne in mind that, at current levels, the costs of the SPG are unlikely to be a material part of the line rental. However, this should not be thought of as setting a precedent for the way costs will be recovered in other cases in future.

7.2.31 There are therefore two main options for recovering the costs of the SPG:

(i) retain the existing charges. This avoids reopening the price control and so is clearly practical. It is also consistent with one interpretation of cost causation and gives good incentives for cost minimisation. Oftel believes that in the context of the price control proposals as a whole, this represents the best compromise between these principles and those of effective competition and distribution of benefits. It also gives service providers the certainty they need to implement their business plans. The existing charges should be thought of as covering everything necessary to provide a fully-functioning gateway which any service provider can use. Any further costs related to the development of enhancements which only some service providers may want and which are not already allowed for are considered in the next section;

(ii) Reset the WLR rental to spread SPG costs over all BT retail customers and those of WLR service providers. Whilst it could be argued that this would be consistent with the principles of effective competition and distribution of benefits, Oftel believes that it would not achieve the best compromise between the six principles, particularly given the small impact on the charge which would result. It would mean reopening the price control for an amount which appears not to be material. This would add to uncertainty for service providers, who would not then know what charges they might face for WLR. They could indeed be higher than the existing charges with consequent risk to business plans.

7.2.32 Oftel believes that the most appropriate way of recovering the costs of the SPG in the light of these considerations is through the existing WLR line rental charges. This is the most practical approach and avoids creating uncertainty and threats to service provider business cases.

7.3 Recovery of costs of IA barring and other additional services

7.3.1 Oftel stated in "*Protecting consumers by promoting competition: Oftel's conclusions*" that it intended to allow service providers taking the new wholesale line rental (WLR) product to bar their customers from selecting a competing operator to deliver their calls via indirect access (IA). There were two main reasons for this:

- service providers argued that they need the customer's call income if they are to offer innovative tariffs, such as lower fixed fees combined with higher call prices;
 - Oftel believes that the requirement to allow IA should be applied only to operators that have SMP in the relevant market. This principle would suggest that service providers using WLR should not be obliged to allow their retail customers to choose to route their calls via an alternative IA or CPS operator.
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7.3.2 It was also noted that, to enable service providers to bar their customers from using IA operators, alterations to BT's network might be required at some cost. Oftel therefore proposed to consult on whether service providers taking WLR should be able to bar access to indirect access (including CPS) operators' services on WLR lines. This consultation would include discussions on the relevant costs and who should bear them taking account of Oftel's six principles of cost recovery.

7.3.3 In addition, potential WLR service providers have requested that certain ancillary services be included in the WLR product specification. These are:

Calls to 15x - calls to 15x numbers would normally be routed to the sales or fault reporting department within BT. Under WLR these calls are to be routed to the Service Provider;

Route to credit control - incoming calls are permitted as usual, but if an end-user whose outgoing calls have been barred for non-payment attempts to make an outgoing call they are routed to the credit control department of the service provider; and

fault diagnosis and management for service providers.

7.3.4 The former two are switch-based services whilst the latter will require an enhancement to the SPG. Provision of these is also likely to entail additional costs and again issues of who should bear them are raised.

7.3.5 This chapter considers how the costs of implementing IA barring and of the provision of ancillary services for WLR service providers should be recovered, in the light of the same six cost recovery principles outlined above. Comparisons are also made with earlier occasions when they have been used where appropriate, notably in the cases of number portability, carrier pre-selection (CPS) and LLU collocation.

7.3.6 As noted above, when applying the principles, it is generally sound to start with *cost causation* on the grounds that economic efficiency is enhanced by requiring parties to pay for costs which they directly cause to be incurred. The other principles are then considered, to see the extent to which this starting point may require modification.

To what extent should WLR service providers bear the cost of IA barring and ancillary services?

7.3.7 The first issue to consider is the extent to which WLR service providers should bear the costs of IA barring and the ancillary services requested. These costs could be borne entirely by BT, entirely by WLR service providers, or shared between BT and WLR service providers.

Cost causation

7.3.8 As with the costs of the SPG, there are strong arguments on cost causation grounds that per line costs (and per call costs, if any) should be recovered from WLR service providers wishing to have IA calls barred or taking the ancillary service in question.

7.3.9 Again as with SPG costs, there are two alternative possible interpretations of the cost causation principle as regards the system set-up costs. It is arguable that BT incurs the system set-up costs arising from IA barring or from the provision of an ancillary service only if WLR service providers demand it. On this argument, it is these operators who cause the cost to be incurred and hence, under the cost causation principle, it is these operators who should bear the system set-up costs.

7.3.10 Alternatively, the argument that the primary causal factor is a regulatory obligation following from BT's market power could be taken to apply to the costs of IA barring and ancillary services. As noted above, this argument applies to CPS because the requirement to offer CPS resulted from an EU obligation. In the case of WLR, there is no such EU obligation, although BT has accepted a modification to its licence requiring it to make WLR available. However, it might also be arguable that IA barring is necessary for compliance with EU Directives which require that regulations intended to address market power, such as the requirement to offer IA, should only be applied to operators judged to have significant market power (SMP). WLR service providers are unlikely to have SMP.

7.3.11 In addition, Oftel believes that IA barring is necessary to make the WLR product work effectively. Oftel believes that this is also the case for fault diagnosis though it is less true of calls to 15x and route to credit control. Potential WLR service providers have argued that they must be able to provide a service equivalent to BT's and that the ancillary services described above are necessary to permit this. In the case of IA barring and fault diagnosis, Oftel believes that they are an intrinsic part of the WLR product to the extent that WLR service providers would not be able to compete effectively without them. Oftel believes that 15x and route to credit control both need to be part of the fit-for-purpose specification for WLR but that SPs will have much greater effective choice over whether or not to use them than IA barring and fault management. The argument that the system set-up costs of IA barring and ancillary services are caused by a regulatory obligation flowing from BT's market power still has force, though less so for calls to 15x and route to credit control than for IA barring and fault diagnosis.

7.3.12 In the case of number portability, per operator costs were classified as part of system set-up costs and treated as data management amendments. However, this primarily reflected the principle of reciprocity which is not relevant to CPS and WLR. Oftel considered that a similar treatment was inappropriate for CPS and regarded per operator costs as a separate category. Cost causation and other

relevant principles then pointed to these costs being recovered from CPS operators. The per operator costs of LLU collocation were also recovered from each operator.

7.3.13 Oftel therefore believes that the per operator costs associated with IA barring and ancillary services should be treated as a separate category of cost to be recovered from each WLR service provider as in the case of CPS.

Distribution of benefits

7.3.14 In the cases of number portability, carrier pre-selection and LLU collocation, there is a direct benefit to customers who choose to use the service. There will also be a benefit to those customers who remain with BT arising from increased competition. This has been used to argue that the cost of the service should be shared between the OLOs and BT.

7.3.15 In the case of IA barring, it is at first sight less clear that the individual retail customer benefits from not being able to use an IA operator. Indeed it might be argued that there might be some disbenefit from the apparent reduction in choice. However, this is more apparent than real, since customers' rights to remain as BT retail customers if they wish to use IA operators on BT's network will not be diminished, whilst if they choose to become a customer of a WLR service provider, they will benefit from the innovative tariff structures permitted by IA barring. Taken together, therefore, the main beneficiaries are likely to be WLR service providers and customers who will be able to benefit from the greater variety of tariff packages which IA barring will make possible. Since IA barring is likely to increase the number of service providers using WLR (and is arguably essential to make WLR attractive to potential service providers), then it should result in increased competition to BT at the retail level. As noted in paragraph 7.2.16, given that the WLR line rental has been set to recover long run incremental costs (LRIC) and make a contribution to common costs, there should be no negative impact on direct access competitors. As with the other measures listed above, therefore, there is a case on distribution of benefits grounds for recovering the system set-up costs of IA barring from all WLR and BT retail customers. Indeed it could be argued that customers of other direct access operators will also benefit indirectly from increased competition and so should bear a share of the costs. This argument was considered in the case of CPS and rejected on grounds of impracticality which also seems likely to be the case for IA barring.

7.3.16 In the case of ancillary services, it will again typically be the individual customer who is the main beneficiary. To the extent that the WLR product is rendered more effective as a means of competing with BT as a result of the availability of ancillary services, then there could also be benefits to BT customers. Oftel believes that fault diagnosis is essential. All service providers will want this facility and WLR will not work effectively without it. Therefore there is a strong case for regarding fault diagnosis as intrinsic to the WLR and hence to the competition benefits which flow from it. It is less clear that the wider benefits of

calls to 15x and route to credit control which may not in fact be an essential part of WLR are significant so that this argument is perhaps rather weaker in these instances.

7.3.17 The distribution of benefits arguments are much weaker in the case of per operator or per line costs. The benefits to competition and hence to customers generally of an individual service provider or customer taking WLR service are unlikely to be significant. As with CPS, the spreading of system set-up costs over all customers whilst per line and per operator costs are recovered from WLR service providers would reflect the greater share of the benefits enjoyed by customers using the service.

Cost minimisation

7.3.18 It is BT that is in a position to determine the costs of IA barring or of providing ancillary services. Recovery of at least some of these costs from BT is required if BT is to have an incentive to minimise these costs. This could be achieved by spreading system set-up costs over all BT retail customers and WLR service providers. The alternative would be to regulate charges, perhaps by charge capping, which would also provide some incentive to minimise costs.

7.3.19 In the case of CPS, the size of system set-up costs made them a major issue but, on the basis of current knowledge, this appears to be less likely for IA barring at least. Initial discussions suggest that most of the costs will fall into the category of per operator or per line costs. However, this is written in advance of actual cost data being provided by BT. It may be that there is more than one feasible technical approach to IA barring, for example. Care needs to be taken that the method of cost-recovery does not distort the choice of technical solution, for example, by inducing BT to choose an approach with higher overall costs but with relatively low system set-up costs.

Effective competition

7.3.20 WLR service providers will be able to offer telephony services in direct competition to BT. This suggests that the recovery of the costs of IA barring or ancillary services should be competitively neutral between BT and WLR service providers. It might therefore be argued that competitive neutrality would be maintained if costs were recovered from customers remaining with BT as well as those using WLR service providers. On the other hand, BT will continue to be required to make IA and CPS available to its retail customers. In theory, this could restrict its ability to compete by offering certain tariff structures. It might then argue that competitive neutrality would not best be served by also requiring it to bear the costs of IA barring for WLR service providers. The implications of the effective competition criterion are perhaps therefore less clear than in the case of CPS, where it was felt to justify recovery of costs from all operators.

7.3.21 In the cases of fault diagnosis, 15x routing and route to credit control, BT benefits from equivalent services provided to its customers. Intending WLR service providers have argued that they need them to form part of the WLR product. The effective competition criterion therefore points to recovery of the system set-up costs of these services from all WLR and BT Retail customers.

Practicality

7.3.22 The easiest system to implement is one where all BT and WLR service providers bear the system set-up cost of IA barring or ancillary services as this may reduce the need to forecast WLR take-up. However it may not entirely eliminate complexity. For example, calculation of the CPS pence-per-minute surcharge on all BT originated minutes (which was the means by which CPS system set-up costs were recovered from both BT and CPS operators) involved estimates of call minute volumes 5 years into the future. Other methods are, however, likely to be more sensitive to forecasts of WLR usage. Whilst the difficulties associated with recovering the system set-up costs of IA barring or ancillary services from WLR service providers may not be insurmountable, this principle favours recovery over all BT retail customers and WLR service providers. This is consistent with the decision reached in the CPS case. Oftel also ruled out on practicability grounds a proposal for system set-up costs to be borne up-front by CPS operators. This was because it would create a disincentive to enter the market initially, an argument which also applies to IA barring and ancillary services.

Reciprocity

7.3.23 Reciprocity is not a relevant principle in determining the recovery of IA barring costs or ancillary services. BT will be required to make IA barring and ancillary services available to WLR service providers but there is no equivalent service provided by the latter to BT. Oftel does not believe that arguments that costs should be recovered on a "like-for-like" basis are valid for the reasons set out in paragraph 7.2.27.

Conclusion

7.3.24 The starting point for any analysis of cost recovery is the principle of *cost causation*. Only if the other principles point strongly towards another method of cost recovery should cost causation not be followed. In this case, two possible interpretations of cost causation are possible. *Cost causation* could be taken to indicate that the system set-up costs of IA barring and ancillary services should be recovered from all BT and WLR service providers. This interpretation is most appropriate where the service is necessary for the effectiveness of the WLR product. Oftel believes that this is the case for IA barring and fault diagnosis. This

conclusion is supported by the principle of *effective competition*. The principles of *distribution of benefits* and *cost minimisation* would also indicate that at least some of the costs should be borne by BT. The principle of *practicality* tends to support the same conclusion whilst *reciprocity* is not relevant.

7.3.25 The other possible interpretation of the cost causation principle would suggest that IA barring and ancillary service system set-up costs should be recovered from WLR service providers. But for this actually to be adopted as the basis for cost recovery, it would have to be judged that the benefits gained from following the principle of cost causation outweighed the costs involved in having a weaker incentive for *cost minimisation* and not following the principles of *effective competition* and *distribution of benefits*, as well as being less easy to implement. It might then be necessary to employ an alternative, imperfect, way of encouraging cost minimisation through regulation, for example, by means of a cap on the charges for IA barring and ancillary services.

7.3.26 In the case of number portability, each operator bore its own system set-up costs, in the interests of cost minimisation, reciprocity and effective competition. Per line costs were charged by the donor operator to the recipient operator, largely on cost causation and distribution of benefits grounds. Per line costs were treated in the same way in CPS, and it is proposed also to do so for IA barring and ancillary services. However, the system set-up costs of CPS were treated differently to those for number portability. Reciprocity was a major factor in number portability, but neither CPS nor IA barring and WLR ancillary services are provided reciprocally.

7.3.27 Oftel believes that, on balance, the arguments favour recovery of system set-up costs from all BT retail customers and WLR service providers. It also notes that, unlike in other cases, notably CPS, system set-up costs are unlikely to be a significant part of the total costs and therefore the chosen method of recovery is less likely to be a major issue.

7.3.28 This argument is strongest for IA barring and fault diagnosis, which are intrinsic to the effectiveness of the WLR product. Given that, in practice, all services are likely to be enabled in one set of modifications, the system set-up costs of any individual service may not be distinguishable with accuracy. There are then strong arguments on grounds of practicality, especially given the lack of materiality, for the costs of all four services to be recovered alike.

7.3.29 Oftel believes that the per operator costs of IA barring and ancillary services should be treated as a separate category of costs to be recovered from WLR service providers (which is how per operator costs are recovered in CPS). Oftel believes that per line and per call costs (if any) should be recovered from WLR service providers.

Oftel invites views on whether:

- **IA barring and ancillary service system set-up costs should be recovered from all BT retail customers and WLR service providers?**
- **per operator costs be recovered from WLR service providers only (as is the case for per operator CPS costs)?**
- **per line costs (and per call costs if any) should be recovered from WLR service providers?**

How to split the cost of IA barring and ancillary services between WLR service providers?

7.3.30 An issue which arose in the LLU collocation case was how to allocate costs among service providers when these shared an area within a BT exchange. The main reason for this was the presence of fixed costs independent of the number of operators collocating. Given the small number of collocating operators at any given exchange, this meant that the average cost of collocation would decline significantly as the number of collocating operators increased. Oftel concluded that the principle of competitive neutrality in particular justified the use of an average charge even though this was not strictly compatible with *cost causation*. Whilst it is not clear that this issue will arise in the case of IA barring or ancillary services, it suggests that a charge based on average cost (across operators or customers, including BT and BT customers where relevant) would seem appropriate.

Chapter 8

Assessment criteria

8.1 Introduction

8.1.1 The regulatory basis on which BT is implementing Wholesale Line Rental² is novel, in that Oftel has not used its formal powers to require this. Instead, BT has been offered an incentive, in the form of the relaxation of retail price controls (see para 1.1.2)

8.1.2 Before implementing this incentive, Oftel will need to make a formal assessment of whether the WLR2 product as delivered by BT is fit for purpose. The simplest means of carrying out such an assessment would be to determine whether the product as implemented complies with an agreed specification. However, Oftel believes that this test would be too narrow in scope, and that a broader assessment of whether the WLR2 product is fit for purpose is required.

8.1.3 The ultimate test of the WLR2 product is whether it has the desired impact on the relevant retail markets, resulting in sustainable competition to BT from SPs. It will however be difficult to apply such a test until some time after the product launch. Oftel's June 2002 Statement on the Retail Market Review indicated that Oftel did not anticipate carrying out an assessment of the functionality of WLR2 until it has been available for three months. Oftel recognises that it will be difficult at this point to reach definitive conclusions about the impact on the retail market of WLR2.

8.1.4 Oftel therefore expects that its initial assessment of WLR2 will combine a broad assessment of whether WLR2 is fit for purpose, with a preliminary assessment of the market impact. Oftel's proposals under these two headings are set out in more detail below. Oftel also sets out below its current proposals for how the assessment process might be managed. Oftel invites comments on these proposals.

8.2 Fit-for-purpose assessment of WLR2

8.2.1 As already noted, the simplest means of assessing whether the WLR2 product is fit for purpose would be to determine whether WLR2 as implemented complies with the agreed specification. The agreed specification used in such a test would be that published in the Oftel Statement which will follow this Consultation Document, subject to any modifications which might subsequently be agreed.

8.2.2 Oftel believes that such a test will form part of the assessment of WLR2, but that this is not by itself sufficient. A broader assessment is required, and Oftel believes that the key areas which must be covered in such an assessment are the

product specification, the product implementation, and a preliminary assessment of its impact on the market. Oftel's proposals in these areas are summarised below.

Product specification

8.2.3 The first fit-for-purpose test proposed by Oftel is whether the WLR2 product specification allows an independent Service Provider to offer a similar range and quality of services to that offered by BT Retail in the relevant markets.

8.2.4 This test is relatively well defined. Chapter 2 of this document sets out a proposed Product Specification, the main elements of which are the line types and supplementary services to be included in the WLR2 product. Oftel expects that a final version of the Product Specification will be published in a Statement following this Consultation Document.

8.2.5 Oftel believes that the formal assessment of the WLR product would need to consider the following questions:

- Have all the line types and supplementary services set out in the Product Specification been delivered?
- If any of these have not been delivered, is this shortfall likely to have a material impact on the success of WLR2.
- Where BT Retail has introduced new services after the publication of the Product Specification, have these been included in the WLR2 product and, if not, could this affect the achievement of effective competition?

Oftel invites comments on these assessment criteria.

Product implementation

8.2.6 The second fit-for-purpose test proposed by Oftel is whether BT's implementation of the WLR2 product is fully effective, so that implementation issues do not constrain the take-up of WLR.

8.2.7 This means for example that:

- The process for customer acquisition must allow end-users to switch seamlessly between BT Retail and independent SPs.
- The processes for in-life customer care must allow an SP to offer a similar quality of service to that offered by BT Retail
- These processes must be implemented in an efficient manner, minimising transaction costs between BT Wholesale and independent SPs.

8.2.8 The business processes associated with the WLR product are set out in more detail in chapters 2 and 4 of this document. Note however that the fit-for-purpose assessment of these business processes is much more complex than the

fit-for-purpose assessment of the product specification. This is because an objective assessment is required not just of whether each process exists, but how effectively it has been implemented.

8.2.9 Oftel believes that in order to address this issue it would help to establish an agreed set of Key Performance Indicators, which can be used to measure the effectiveness of key business processes. Oftel would welcome comments on an appropriate set of KPIs, but would expect them to address issues such as:

- The volume of orders submitted, the percentage which flow through BTs systems without manual intervention, and the percentage which are rejected
- The average time between submission of an order and acceptance by BT, and the average time between acceptance of an order and the commencement of service.
- The percentage of lines which are subject to faults within a specified period
- The average time between submission of a fault report and BT running remote line diagnostics, the average time for BT to arrange a visit by an engineer, and the average time to clear a fault
- The percentage of lines which are subject to repeat faults
- The percentage of billable CDRs which are produced on-time, and the percentage which have to be repeated due to errors.

8.2.10 The basic test for each KPI would be to determine whether the performance of BT Wholesale in relation to independent SPs is similar to its performance in relation to BT Retail. For example, is the response time to faults reported by BT Retail the same as the response time to faults reported by an independent SP?

8.2.11 Oftel would expect its initial assessment of BT's performance to make use of KPI data gathered during the first three months of the operation of WLR. Oftel is however aware of some concerns that might exist over the quality of data gathered during this period:

- The effectiveness of most processes will depend on the performance of the SP as well as that of BT. For example, a high level of order rejects could be due to errors in the orders submitted by SPs. This is likely to be a particularly severe problem during the initial phase of operation
- Those processes which relate to in-life customer service (fault management, billing) are unlikely to be severely tested during the first few months, due to the small customer base.

8.2.12 In order to address these concerns, Oftel believes it may be worth supplementing the monitoring of KPIs with a more formal 'soak-test' of BT's systems. This would involve a dummy Service Provider being established by an independent third party, which would then submit statistically significant volumes of the full range of transaction requests. The aim would be to determine whether a reasonably efficient SP, submitting correctly formatted transactions, in high volume, is able to obtain a satisfactory level of service from BT.

8.2.13 This proposal is based on that adopted in the US, as part of the Section 271 process. This required incumbent operators to demonstrate the effective implementation of 'electronic bonding', a problem very similar to that created by the implementation of WLR in the UK.

8.2.14 Oftel believes that the quantitative evidence derived from KPIs and a soak test will be useful to a broader qualitative assessment of whether the product has been implemented in a way that allows SPs an effective opportunity to compete on a fair basis with BT Retail. The final judgement will need to take account of other qualitative inputs, including evidence on the commercial importance of implementation issues - both individually and in aggregate - for competition.

Oftel invites comments on these assessment criteria, in particular:

- **Is it appropriate to assess BT's implementation of WLR2 based on a set of measured KPIs?**
- **If so, what is the appropriate set of KPIs to use?**
- **Should observations of the actual performance be supplemented by a formal 'soak-test' of BT's systems?**

Business model

8.2.15 A particular concern is that the manner in which the WLR2 product is implemented might result in high costs including transaction costs, and that these will leave insufficient margin for SPs to offer sustainable competition to BT Retail. In order to assess which transaction costs are important, and understand what level they have to be in order not to have a material impact on competition, Oftel proposes to construct a top-down business model for a WLR SP. This will take as its inputs reasonable estimates for the costs likely to be incurred by an efficient SP. The model will be used to determine whether the cost base faced by a reasonably efficient SP provides sufficient operating margin to allow a reasonable return on capital employed. Oftel expects to use the outputs of this model in assessing the likely impact of WLR2 on competition over the longer term in these retail markets.

Oftel invites comments on the proposal to develop and use a business model.

8.3 Market impact of WLR

8.3.1 As already noted, Oftel believes that it would be desirable to include within the initial assessment of WLR2 a preliminary assessment of the impact of the product on the relevant retail markets.

8.3.2 It will however be difficult to draw any strong conclusions from the total market share gained by WLR SPs only 3 months after the product launch. The mid-range forecast produced by Schema (see chapter 5 for more details) suggests

that the total number of WLR orders submitted at this point will be 109,000. There is substantial uncertainty around this figure, with a downside estimate of only 47,000 orders, and an upside estimate of 177,000. In any case, none of these figures represent a significant impact on the total retail market.

8.3.3 It may be appropriate to look at the rate of growth of the WLR market, as illustrated by the number of orders being submitted per month. The Schema study suggests that by the third month after product launch the order volume should have grown to around 25,000 orders for new end-users of WLR plus CPS, plus a further 25,000 transfers from CPS only to WLR plus CPS. Oftel proposes to use these thresholds as indicators of whether the product is on track to have the desired impact.

8.3.4 Oftel would expect to see within these overall totals a significant level of orders associated with both the residential and business markets. If this were not the case, it would suggest that the product was not fit for purpose in both target markets. Oftel proposes to consider this issue as part of its assessment.

8.3.5 In addition Oftel will monitor the level of consumer awareness of the packages which are available. Oftel proposes to commission market research on a monthly basis during the period immediately before and after the product launch, in order to investigate whether there is a significant change in consumer awareness.

8.3.6 It is clear that any conclusions reached about the market impact of WLR2 three months after BT has met all the requirements for the WLR product will be tentative at best. Oftel believes that more time will be required before it is possible to make a more definitive assessment of the market impact of WLR2. Oftel expects the degree of success of WLR2 to be an important input into the next formal review of the retail market, to be carried out in 2004. Oftel will therefore keep under review the impact of WLR on the market, and the continued implementation of the product. It may conduct a formal review within one year of the product launch, including in particular in-life customer service issues (such as fault repair and change of address) that are unlikely to have been tested adequately at the three month stage. This review, and other evidence available to Oftel, will form important inputs to the next review of the retail market as a whole.

Oftel invites comments on the proposals for the assessment of the market impact of WLR2.

8.4 Timing of the assessment process

8.4.1 Oftel proposes to carry out its initial assessment of WLR2 three months after full product launch. It will however be necessary to define more precisely how this assessment is triggered. Oftel expects to be able to publish an indicative programme for WLR implementation in the Statement which will follow this Consultation Document, but there is clearly a possibility that this programme will

subsequently slip. It is also possible that there will be a phased delivery of different elements of the WLR package, making it difficult to identify one specific launch date.

8.4.2 Oftel therefore proposes that BT formally trigger the initial assessment, by informing Oftel when it believes it has met all the core requirements for the WLR2 product. Oftel would start its assessment three months after this date.

8.4.3 The assessment will require Oftel to carry out a significant level of data analysis. Oftel would expect to carry out this analysis and publish its conclusions within two months of starting its assessment. A further one month consultation period would be required before these could be further implemented.

8.4.4 The assessment by Oftel might result in one of four possible outcomes:

- The WLR2 product as implemented is fully satisfactory, with no further work required. The retail price control can immediately be relaxed
- The WLR2 product meets most of the core requirements, but there are some areas where further work is required. The work is sufficiently minor that it is reasonable to relax the retail price control immediately, on the basis that BT guarantees to carry out the outstanding work
- The WLR2 product meets most of the core requirements, but there are some areas where further work is required. The work is major enough that the retail price control should not be relaxed until it has been completed. On completion of this work, Oftel will assess whether this has been done to a satisfactory standard, but will not carry out a full reassessment of the WLR2 product.
- The WLR2 product does not meet the core requirements. A large amount of additional work is required, and a full reassessment of the WLR2 product will be required once this has been carried out.

8.4.5 Oftel believes that there needs to be an incentive for BT not to trigger the assessment early, in the hope that it might just pass the assessment criteria, and thereby obtain early relaxation of the retail price cap. Oftel is also concerned about the resource implications of frequent reassessments. Oftel therefore proposes that BT should not be able to trigger a new assessment within three months of a previous assessment failing

8.4.6 If no review has been triggered, or all assessments have failed, by the time Oftel begins the 2004 Market Review, the review would then have to consider whether the incentive regulation being applied by Oftel still seemed likely to be successful or whether alternative remedies to BT's dominance of the relevant retail markets should be considered.

8.5 Accounting information

8.5.1 Oftel believes that the principle of equivalence of opportunity between BT Retail and WLR SPs and the non-discrimination requirement should apply to the charges that SPs pay BT Wholesale for key WLR products and functions. BT will need to demonstrate in its Financial Statements for the Businesses and Activities that, for example, BT's Retail Systems Business pays BT's Network Business the same as the Network Business charges SPs in respect of an agreed list of Standard Services.

8.5.2 In discussions in the industry working group discussions since June, Service Providers have identified an initial list of services where equivalence and non-discrimination tests are appropriate:

- line rental (residential quality of service)
- line rental (business quality of service)
- customer moves and changes to line features
- termination and service restriction of customer lines

8.5.3 BT has indicated that, for these services, costs will be reflected in the future regulatory accounts for the WLR2 product. Oftel proposes to discuss with BT how such information will be provided. Oftel expects that other items may need to be added to this list in particular to ensure that appropriate non-discrimination requirements apply to other services that will be provided by BT Wholesale as set out in Chapters 2 and 4.

Oftel invites views on the services where BT should demonstrate its retail business faces the same charges as service providers.

Chapter 9

Implementation

9.1 Statement

9.1.1 The consultation on Oftel's proposals in this document ends on 13 December. Oftel will then review responses and draw up its conclusions on the implementation of WLR2. These will be set out in a Statement that is Oftel is aiming to publish early in New Year.

9.1.2 Oftel expects to include in the Statement an outline programme for the implementation of WLR, including indicative timescales. In producing this programme it will be necessary to consider the implementation issues faced by both BT and by WLR SPs.

9.2 Product and Process Issues

9.2.1 Oftel understands that the BT implementation process typically comprises the following top-level phases:

- Statement of requirements
- Product market analysis.
- Feasibility study.
- Solution design
- Development
- Price approval and product launch

9.2.2 Oftel assumes that the Statement of Requirements will be based on the contents of the Statement and that BT will have carried out its Product Market Analysis by the time it responds to this consultation, since this will have been a necessary input into BT's decision whether or not to proceed. Oftel understands that the detailed feasibility study for a new wholesale product might typically take between 5-10 weeks to carry out. The design, development and system integration might take a significant time, depending on the complexity of the product. The industry will not have a comprehensive view of this until BT has reported on its feasibility study.

9.2.3 There might be a variety of external constraints on the implementation timescales. For example, it is understood that the timing of software builds on BT's switch systems means that switch-based capabilities associated with WLR (IA barring, route to credit control, route to 15x) are unlikely to be implemented before October 2003.

9.2.4 It is also important to note that several outputs from BT's implementation process are effectively inputs to the implementation process of SPs. This inter-dependence clearly requires careful management. Examples include:

- SPs are likely to require at least indicative product pricing before they are able to approve any development work of their own. This product pricing is likely to be required substantially before BT's formal price approval.
- It will be necessary to agree detailed models for WLR business processes. This needs to be done early enough for all parties to make any necessary modifications to their internal systems and processes before product launch.
- It will be necessary to establish a detailed interface specification for the electronic gateway between SPs and BT. This needs to be done early enough for all parties to be able design and implement any changes to their OSS systems before product launch.

9.2.5 Oftel envisages that BT and SPs will report on their project plans and implementation progress to the WLR industry Steering, Operations and Process Groups facilitated by Oftel and the industry.

Oftel invites comments on:

- **the appropriate milestones for inclusion in a top-level implementation programme; and**
- **a realistic timescale for achieving each milestone.**

9.3 Service level agreements (SLAs)

9.3.1 The industry will need to develop SLAs to help measure and manage performance of BT and the WLR providers. SLAs demonstrate the industry commitment to service quality and will set recognised performance levels for all parties to aim for and to measure achievement against. They will set a consistent expected level of performance that providers can reasonably expect from each other. Once established SLAs will help identify industry process problems and highlight areas for improvement.

9.3.2 Oftel believes that the initial set of SLAs should be completed before implementation of WLR2 subject to refinement after launch.

9.4 Consumer issues

9.4.1 Oftel intends to set out in the Statement its conclusions on the guidance for sales and marketing practice. Oftel would expect providers to follow the guidance in the codes of practice that they submit for approval to Oftel under the new authorisation regime from July 2003. Divergence from the guidance will need to be justified by the provider.

9.4.2 Oftel expects to include in the Statement its conclusions on the form of the mandatory letters from the losing and gaining providers . Oftel will then keep the letters under review as the product and processes are developed, and will discuss significant changes with stakeholders.

9.4.3 Oftel proposes to update the WLR1 Consumer Guide in order to reflect conclusions on the form of WLR2 which will be outlined in the Statement.

9.4.4 In addition, Oftel proposes to set out in the Statement its initial conclusions in respect of an appropriate publications strategy aimed at ensuring good consumer awareness of marketing and sales codes of practice and the Consumer Guide. It is envisaged that these details will be further developed with stakeholders in the run-up to the launch of WLR2.

Chapter 10

Consultation details

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

10.1.1 Oftel is publishing this consultation document so that interested parties may comment on the issues which it addresses. The closing date for submitting comments is **13 December 2002**. Oftel is setting a consultation period which is shorter than standard because of the length and extent of the discussions with stakeholders that have already taken place and because all parties wish to have the WLR2 product implemented as swiftly as possible.

10.1.2 Where possible, comments should be made in writing and sent by e-mail to peter.hammond@oftel.gov.uk. However, copies may also be posted or faxed to the address below. If any interested parties are unable to respond in one of these ways, they should discuss alternatives with the Oftel manager named below:

Alan Pridmore
Oftel
50 Ludgate Hill
London
EC4M 7JJ

tel: 020 7634 8910
fax: 020 7634 8943
e-mail: alan.pridmore@oftel.gov.uk

10.2 Further copies of this document

10.2.1 This document can be viewed in the *Publications* section of Oftel's website (www.oftel.gov.uk/publications), under classification *Responses to Oftel consultations*. Paper copies and more accessible formats such as large print, Braille, disc and audio cassette can be made available on request. Please contact Oftel's Research and Information Unit by phoning 020 7634 8761 or by sending an e-mail to infocent@oftel.gov.uk.

10.3 Publication of comments made by stakeholders

10.3.1 On this occasion, Oftel is not programming a formal period during which interested parties may comment on the responses made by others. Nevertheless, in the interests of transparency, comments will be published, except where respondents indicate that a response, or part of it, is confidential. Respondents are therefore asked to separate out any confidential material into a confidential annex which is clearly identified as containing confidential material. Oftel will take steps

to protect the confidentiality of all such material from the moment that it is received at Oftel's offices. However, in the interests of transparency, respondents should avoid applying confidential markings wherever possible.

10.3.2 Non confidential responses can be viewed on Oftel's website in the *Publications* section under *Responses to Oftel consultations*. Comments can also be viewed at Oftel's Research and Information Unit. Appointments must be made in advance by phoning 020 7634 8761 or sending an e-mail to infocent@oftel.gov.uk.

e-mail notifications

10.3.3 Oftel has a free e-mail based mailing list to help people stay informed about the work that Oftel is doing. Each time an Oftel document is published and placed on Oftel's website at www.oftel.gov.uk, subscribers to the list receive an e-mail alert. To register, please go to the *What's New* section of the website and access the electronic form

10.4 The consultation criteria

10.4.1 Oftel considers that this document meets the Cabinet Office code of practice on written consultation documents. The code is reproduced below for convenience. If you have any comments or complaints about this consultation **process** please contact the Oftel co-ordinator for the code of practice:

Robert Jex
Oftel
50 Ludgate Hill
London
EC4M 7JJ

tel: 020 7634 5350
fax: 020 7634 8940
e-mail: rob.jex@oftel.gov.uk

10.4.2 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.

10.4.3 It should be clear who is being consulted, about what questions, in what timescale and for what purpose.

10.4.4 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.

10.4.5 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.

10.4.6 Sufficient time should be allowed for considered responses from all groups with an interest. 12 weeks should be the standard minimum period for consultation. (Of tel has explained above why it consider the one month period of this consultation to be acceptable).

10.4.7 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.

10.4.8 Departments should monitor and evaluate consultations, designating a consultation co-ordinator who will ensure that all the lessons are disseminated.

Annex A

Select Services

Analogue Select Services

The table below summarises the Select Services which can be provided by BT over an analogue PSTN line. These are as listed in Section 2.4 of the BT Retail price list, supplemented by information from the BT Retail web site. Further information on the technical characteristics of these services can be found in BT's Suppliers Information Note 354.

The table summarises the proposed availability under WLR of each service, with both single and multiple analogue line types. The table distinguishes between those services which should be included in the core WLR package, and those for which an additional charge could be made by BT Wholesale. For purpose of comparison, the table also shows whether BT Retail charges its end-users for using the service.

It must be emphasised that this table represents Oftel's understanding of which Select Services apply to which line type, based on data provided by BT. Oftel would welcome comments on the accuracy of this table.

Table A1

Analogue Select Services	Proposed availability under WLR2		Chargeable	
	Single-line	Multi-line Aux	Under WLR2 to SPs	By BT Retail to end-users
Caller identification services				
Call sign	Y	N	Y	Y
Caller display	Y	Y	Y	Y
Withhold number per line	Y	Y	N	N
Bar use of withhold number	Y	Y	N	N
Call rejection services				
Anonymous call rejection	Y	Y	Y	Y
Choose to refuse	Y	Y	Y	Y
Call barring	Y	Y	Y	Y
Call barring + bypass no	Y	Y	Y	Y
Call management services				
Call waiting	Y	N	Y	Y
Call diversion	Y	Y	Y	Y
Call diversion + bypass no	Y	Y	Y	Y
Smart divert	Y	N	Y	Y
Smart divert PIN number change	Y	N	N	N
Smart divert + bypass number	Y	N	N	N
Caller redirect / CNI	Y	N	Y	Y
BT Answer 1571	N	N	N/A	N
Wholesale Messaging	Y	Y	Y	N/A
BT Call Minder	Y	N	Y	Y
BT Call Minder extensions	Y	N	Y	Y
Ring back	Y	N	Y	Y
Ring back inhibit	Y	N	N	N
Call return (1471)	Y	N	N	N
Call return extra	Y	N	Y	Y
Call return erasure (1475)	Y	N	N	N
Bar use of call return	Y	N	N	N
Other services				
Three-way calling	Y	N	Y	Y
Reminder call	Y	N	Y	Y
Reminder call pay per use	Y	N	Y	Y

Notes:

1. Call-sign provides an additional number for a line. When someone calls that number, the phone will have a different ringing tone.
2. Caller display displays the number of the person calling
3. Anonymous call rejection allows end-users to block calls from callers who have withheld their number.

4. Choose to Refuse provides the end-user with a selective incoming call barring service. It is possible either to bar further calls from the last number received, or to bar calls from a specified directory number.

5. Call barring allows an end-user to prevent calls being made to mobile, international, premium rate and national numbers without first entering a PIN number

6. Call waiting beeps to let an end-user who is on the phone know that someone else is trying to contact them

7. Call diversion allows an end-user to choose between three options – diverting all calls from a phone, diverting calls when the phone is engaged, or diverting calls which are not answered within 15 seconds

8. Smart Divert diverts incoming calls to a contact number specified by the end-user. The end-user can easily modify the contact number, and is provided with a security PIN number.

9. Caller redirect (also known as Cease Number Intercept or CNI) is provided for end-users who are moving home. It provides an announcement to incoming calls providing the new telephone number.

10. BT Answer 1571 is a free basic voice-messaging service. An unbranded version of BT Answer is expected to be provided as part of WLR, which will not refer to BT in the recorded announcement.

11. BT Call Minder answers calls and records messages if there is no reply or if the number is engaged. If a message has been recorded while the line is engaged, Call Minder rings back after 10 minutes and again after 30 minutes to relay the message.

12. BT Call Minder extensions provides the same functions as Call Minder, but with up to 8 extension mailboxes.

13. Ring Back will keep trying an engaged number for up to 45 minutes. When it is free, the end-user will automatically be connected.

14. Call return (1471) provides an announcement giving the time and date of the last call received, and the ability to return the call.

15. Call return extra provides an announcement giving the time and date of the last 5 calls, and the ability to return any one of them.

16. Call return erasure allows an end-user to erase details of the last call received.

17. Three-way calling sets up a three-person conference call.

18. Reminder call allows an end-user to set up an alarm call. There are two charging options, either a charge per use, or a monthly charge for unlimited use.

Digital Select Services

The table below summarises the Digital Select Services which can be provided by BT over a digital PSTN line. These are as listed in Section 1.24 and 1.26 of the BT Retail price list, supplemented by information from the BT Retail web site. Further information on the technical characteristics of these services can be found in BT's Suppliers Information Notes.

The table summarises the proposed availability under WLR of each service, all digital line types. The table distinguishes between those services which should be included in the core WLR2 package, and those for which an additional charge could be made by BT Wholesale. For purpose of comparison, the table also shows whether BT Retail charges its customers for using the service.

It must be emphasised that this table represents Of tel's understanding of which Digital Select Services apply to which line type. Of tel would welcome comments on the accuracy of this table.

Table A2

Digital Select Service	WLR2 availability						Chargeable	
	Highway	ISDN2	ISDN2e	ISDN30 (DASS)	ISDN30 (I421)	ISDN30e (I421)	WLR2	BT Retail
Caller identification services								
Calling Line Identity Presentation	Y	Y	Y	Y	Y	Y	Y	Y
Calling Line Identity Restriction	Y	Y	Y	Y	Y	Y	N	N
Connected Line Identity Presentation	Y	Y	Y	N	N	Y	Y	Y
Connected Line Identity Restriction	Y	Y	Y	Y	Y	Y	N	N
Presentation number	Y	N	Y	Y	Y	Y		
Call rejection services								
Permanent outgoing calls barred	Y	Y	Y	Y	Y	Y	Y	Y
Permanent incoming calls barred	Y	Y	Y	Y	Y	Y	Y	Y
Selective outgoing calls barred	Y	N	Y	Y	Y	Y	Y	Y
Call management services								
Administration set up call diversion	N	Y	N	Y	Y	N	Y	Y
Administration set up call forwarding	Y	N	Y	N	N	Y	Y	Y
Customer controlled call forwarding	Y	N	Y	N	N	Y	Y	Y
Call deflection	Y	N	Y	N	N	Y	Y	Y
Call waiting with call hold	Y	N	Y	N	N	N	Y	Y
Multiple subscriber numbering	Y	N	Y				Y	Y
Sub-addressing	Y	Y	Y	Y	Y	Y	Y	Y
Other services								
Three-way calling	N	Y	N	N	N	N	Y	Y

Notes:

1. Calling Line Identity Presentation displays the number of the person making a call.

2. Calling Line Identity Restriction withholds the number of the person making a call.

3. Connected Line Identity Presentation (COLP) allows an ISDN end-user to receive the Line Identity (telephone number) of the person you have called. This service is only available when the person called is also using BT Highway, ISDN 2e or ISDN 30e lines.

4. Connected Line Identity Restriction (COLR) restricts the access of incoming callers to an end-user's identity.
 5. Presentation Number allows an end-user to specify a telephone number for the Calling Line Identity (CLI) for outgoing calls, which may be different to the usual telephone number. The aim is to allow an internal extension (such as a helpdesk) to make external calls without having to withhold CLI.
 6. Selective outgoing call barring supports a range of options – it is possible to bar all calls (except 999, 15x and 0800); international and PRS calls; national, international and PRS calls; operator calls; international, operator and PRS calls.
 7. Administration set-up call diversion allows three options – diverting all calls from a phone, diverting calls when the phone is engaged, or diverting calls which are not answered.
 8. Administration set-up call forwarding is as for call diversion, but supports data calls as well as voice calls.
 9. Customer controlled call forwarding allows an end-user to forward their calls to another fixed or mobile number.
 10. Call Deflection allows an end-user to respond to an incoming voice or data call by deflecting it to another number without answering it.
 11. Multiple Subscriber Numbering allows an end-user to allocate up to eight more phone numbers to their digital sockets. This allows each ISDN phone, computer, fax machine or videoconferencing terminal to have its own unique number.
 12. Sub Addressing is a service unique to ISDN and Business Highway lines that enables an end-user to add up to 20 additional characters to a telephone number. This allows different databases to be assigned different identities so that incoming data calls connect to only the data they need.
 13. Three-way calling sets up a three-person conference call. The BT Retail price list states that new provision of three-way calling with ISDN2 has been temporarily suspended
-

Annex B

WLR and CPS time-line diagrams and order Scenarios

B.1 Introduction

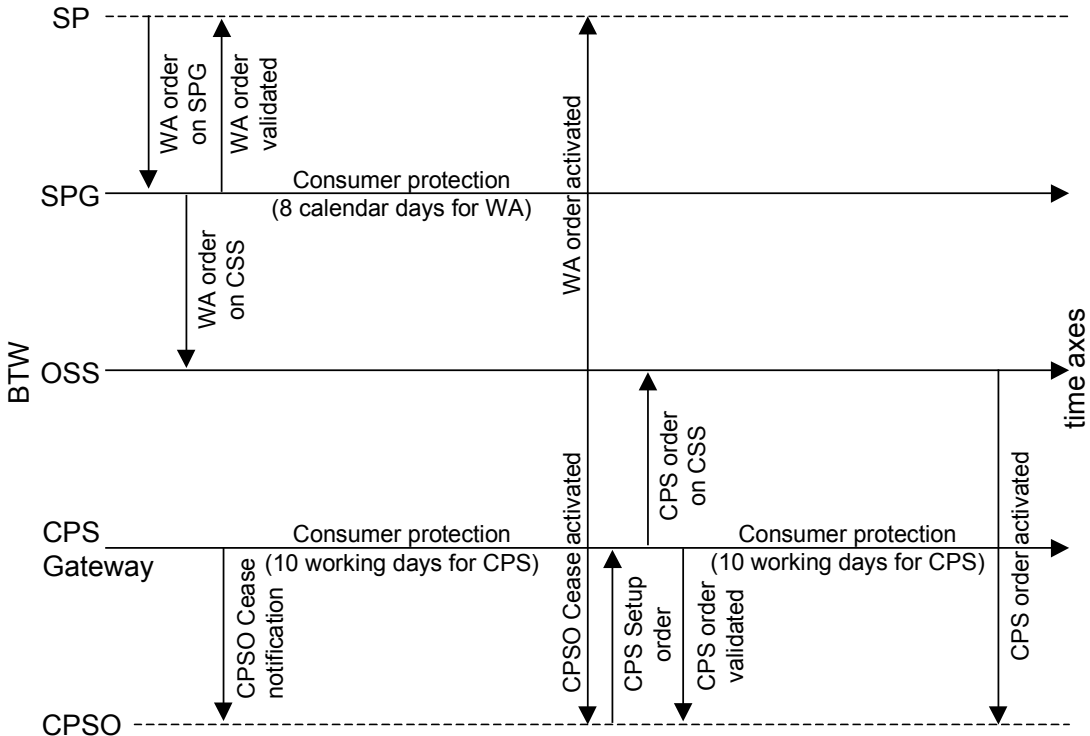
B.1.1 This section provides more detailed information to illustrate and support some of the WLR issues in Chapter 4.

B.1.2 A small number of time-line diagrams are given in Section B.2 to illustrate the timing and sequencing issues associated with combined WLR and CPS orders submitted over the two gateways.

B.1.3 The list of combined WLR and CPS order scenarios in Section B.3 is intended to be exhaustive and capture all the different categories of transactions in order to assess the overall implementation implications for the two gateway solution.

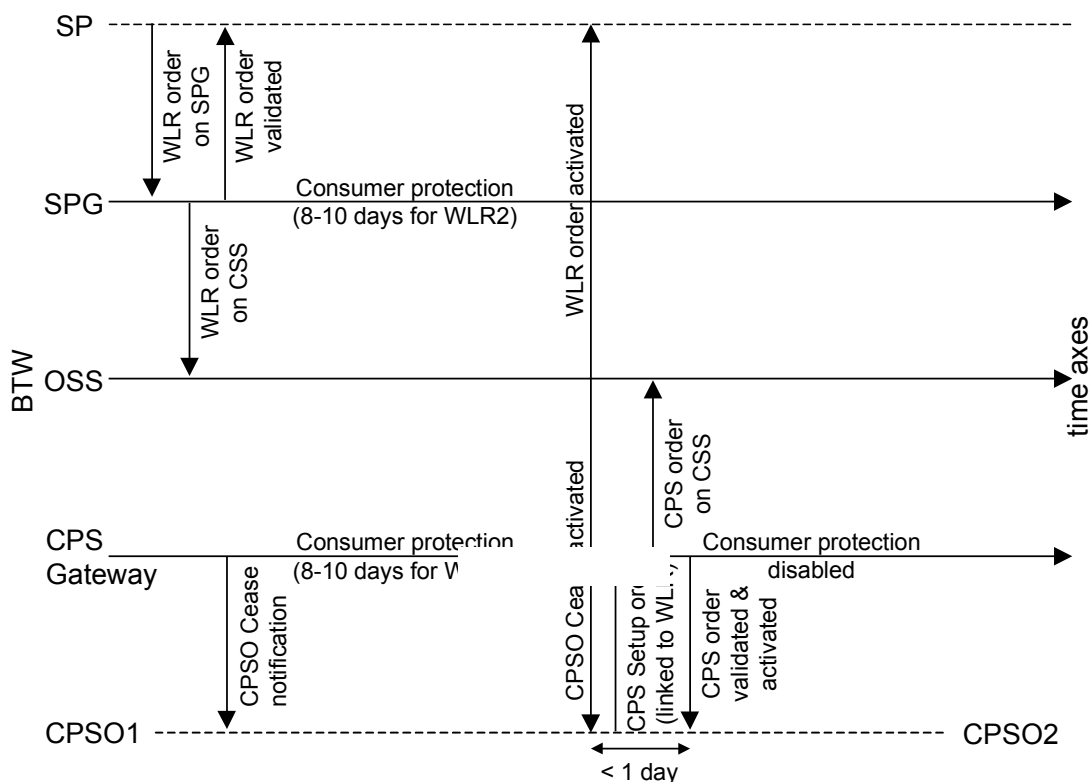
B.2 Time-line diagrams

Diagram B.1



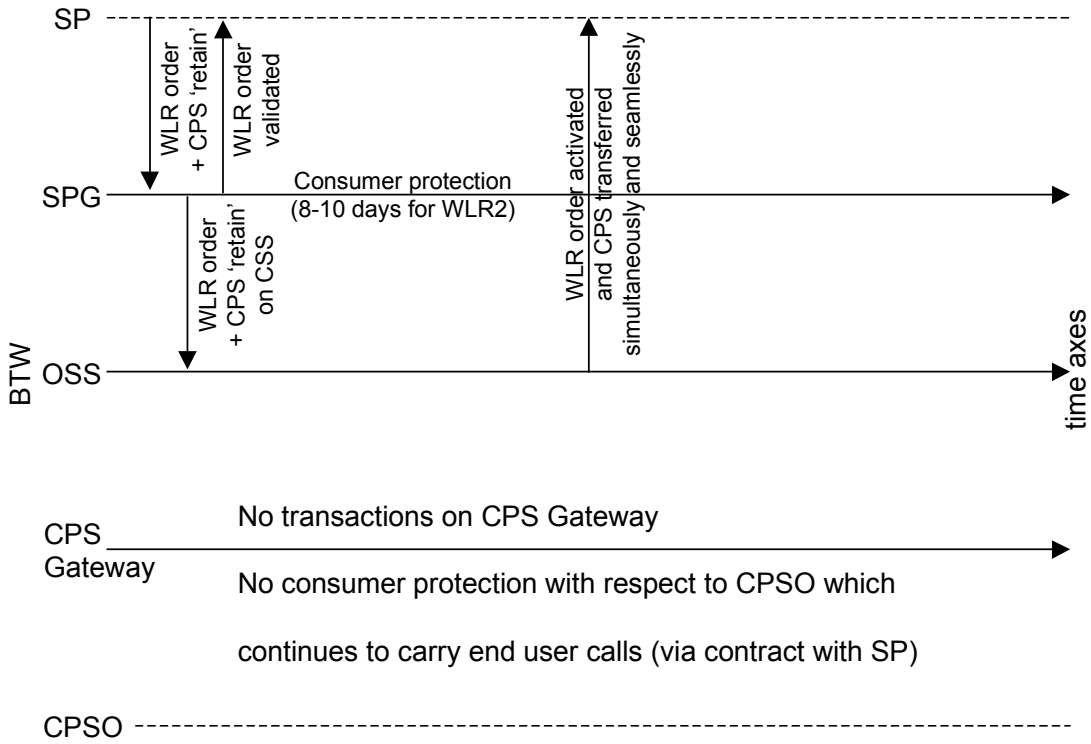
B.2.1 Diagram B.1 shows the situation today with provisioning WLR1 and CPS completely sequentially according to existing processes and with two periods of consumer protection.

Diagram B.2



B.2.2 Diagram B.2 shows just one of the many types of combined WLR and CPS order scenarios. This one is expected to occur frequently in the take-up of WLR2: an end user with BTR and using CPSO1 transfers to a WLR SP using CPSO2. This is Scenario 4 in Section B.3.1 below. The diagram shows how the new CPS setup order (link to WLR, consumer protection disabled, fast execution) must be executed as quickly as possible in order to minimise the gap between WLR activation and CPS activation.

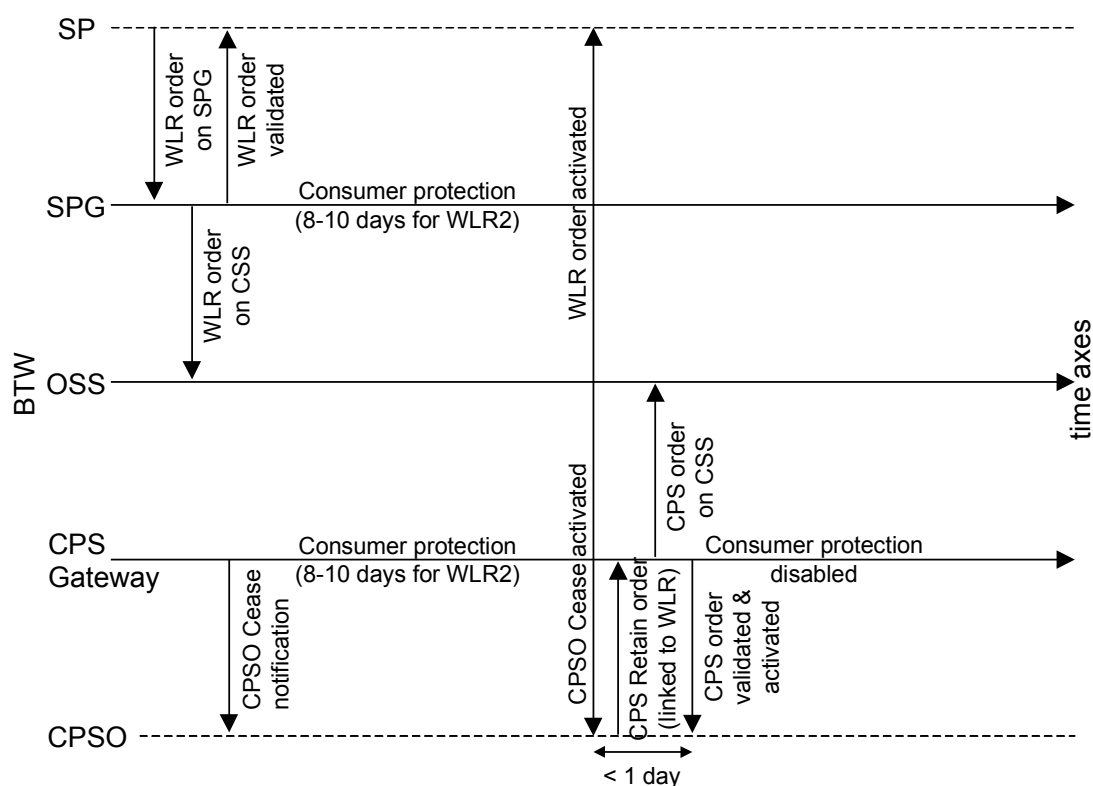
Diagram B.3



B.2.3 Diagram B.3 shows how seamless CPS transfer should ideally be implemented with genuine 'seamlessness' and no transactions on the CPS Gateway.

B.2.4 Diagram B.4 shows how 'seamless' CPS transfer may need to be implemented as a fallback, with the CPS configuration first being ceased and then re-created using a new CPS Retain order (which incurs no transaction charge). This would create a time gap between WLR activation and CPS activation.

Diagram B.4



B.3 List of combined WLR and CPS order scenarios

Notes relating to following tables

- (a) For 'seamless' CPS transfer, it is assumed that the CPS configuration is first ceased, then re-setup using the proposed new Retain order.
- (b) The new set of CPS orders (link to WLR, consumer protection disabled, fast execution) are prefixed with '#' (eg #Setup, #Retain), the existing normal set of CPS orders do not have a prefix (eg Cease).
- (c) The scenarios distinguish between case a) where transferable services are all transferred identically using the 'like for like' Transfer order, and case b) where each service to be transferred is individually specified using the 'normal' Transfer order.

Transfer orders**B.3.1 Transfers from BTR to WLR SP**

Scenario 1a: BTR+services+no CPS → SP1+same services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	none	'like for like'	none	
To	SP1	SP1	none	Transfer		

Scenario 1b: BTR+services+no CPS → SP1+different services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	none	'normal'	none	
To	SP1	SP1	none	Transfer		

Scenario 2a: BTR+services+no CPS → SP1+same services+CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	none	'like for like'		
To	SP1	SP1	CPSO1	Transfer	#setup CPSO1	

Scenario 2b: BTR+services+no CPS → SP1+different services+CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	none	'normal'		
To	SP1	SP1	CPSO1	Transfer	#setup CPSO1	

Scenario 3a: BTR+services+CPS → SP1+same services+same CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	CPSO1	'like for like'	cease CPSO1	
To	SP1	SP1	CPSO1	Transfer	#retain CPSO1	

Scenario 3b: BTR+services+CPS → SP1+different services+same CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	CPSO1	'normal'	cease CPSO1	
To	SP1	SP1	CPSO1	Transfer	#retain CPSO1	

Scenario 4a: BTR+services+CPS → SP1+same services+different CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	CPSO1	'like for like'	cease CPSO1	
To	SP1	SP1	CPSO2	Transfer	#setup CPSO2	

Scenario 4b: BTR+services+CPS → SP1+different services+different CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	BTR	BTR	CPSO1	'normal'	cease CPSO1	
To	SP1	SP1	CPSO2	Transfer	#setup CPSO2	

B.3.2 Transfers from WLR SP1 to WLR SP2

Scenario 5a: SP1+services+no CPS → SP2+same services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	'like for like'	none	
To	SP2	SP2	none	Transfer		

Scenario 5b: SP1+services+no CPS → SP2+different services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	'normal'	none	
To	SP2	SP2	none	Transfer		

Scenario 6a: SP1+services+no CPS → SP2+same services+CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	'like for like'		
To	SP2	SP2	CPSO1	Transfer	#setup CPSO1	

Scenario 6b: SP1+services+no CPS → SP2+different services+CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	'normal'		
To	SP2	SP2	CPSO1	Transfer	#setup CPSO1	

Scenario 7a: SP1+services+CPS → SP2+same services+same CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	'like for like'	cease CPSO1	
To	SP2	SP2	CPSO1	Transfer	#retain CPSO1	

Scenario 7b: SP1+services+CPS → SP2+different services+same CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	'normal'	cease CPSO1	
To	SP2	SP2	CPSO1	Transfer	#retain CPSO1	

Scenario 8a: SP1+services+CPS → SP2+same services+different CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	'like for like'	cease CPSO1	
To	SP2	SP2	CPSO2	Transfer	#setup CPSO2	

Scenario 8b: SP1+services+CPS → SP2+different services+different CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	'normal'	cease CPSO1	
To	SP2	SP2	CPSO2	Transfer	#setup CPSO2	

B.3.3 Transfers from WLR SP to BTR

It is assumed that CPS is removed and not re-provided on transfer back to BTR. If the end user requires CPS, it must transfer the line back to BTR first and then use the existing normal CPS order process with an available CPSO.

Scenario 9a: SP1+services+no CPS → BTR+same services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	'like for like'	none	
To	BTR	BTR	none	Transfer		

Scenario 9b: SP1+services+no CPS → BTR+different services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	'normal'	none	
To	BTR	BTR	none	Transfer		

Scenario 10a: SP1+services+CPS → BTR+same services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	'like for like'	cease CPSO1	
To	BTR	BTR	none	Transfer		

Scenario 10b: SP1+services+CPS → BTR+different services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	'normal'	cease CPSO1	
To	BTR	BTR	none	Transfer		

B.3.4 Transfers from WLR SP direct to CPSO

For example, consider the scenario where an end user with WLR SP1 and CPSO1 wants to switch its calls to an independent CPSO2 (with no links to a WLR SP).

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1		change to CPSO2	Not allowed
To	BTR	BTR	CPSO2			

Such a transfer in one transaction is not allowed. As the end user is contracted to the WLR SP1, all requests to change its CPS configuration must use the new set of CPS orders with the link to WLR. Any normal CPS order relating to that end user must be rejected by the CPS Gateway.

To achieve the desired end result, the end user must first transfer its line rental back to BTR (see Scenario 10 above), and then order CPS with CPSO2 using the existing normal CPS process.

Change orders (WLR SP remains unchanged)

B.3.5 Changes to line features and services

Scenario 11: SP+services (with or without CPS) → SP+different services (CPS unchanged)

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	as is	Change	none	
To	SP1	SP1	same			

B.3.6 Changes to CPS configuration

Scenario 12: SP+services+CPS → SP+same services+different CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	config1	none	#change, #remove, etc	
To	SP1	SP1	config2			

B.3.7 Special Changes

Scenario 13: SP+services+CPS → same but Change Telephone Number

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	as is	Change	#renumber	
To	SP1	SP1	same			

Scenario 14a: SP+services+CPS → same but Change of Address (same exchange area)

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	Change	cease CPSO1	
To	SP1	SP1	CPSO1		#retain CPSO1	

Scenario 14b: SP+services+CPS → same but Change of Address (different exchange area)

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	Change	cease CPSO1	
To	SP1	SP1	CPSO1		#setup CPSO1	

Other Changes with special characteristics include increasing or decreasing the number of lines which are similar to New and Cease scenarios (see below).

New orders

Scenario 15: new connection → SP+services+no CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From				New	none	
To	SP1	SP1	none			

Scenario 16: new connection → SP+services+CPS

	line	services	CPS	SPG	CPS Gateway	Notes
From				New	#setup CPSO1	
To	SP1	SP1	CPSO1			

Cease orders

Scenario 17: SP+services+no CPS → disactivated line reverts to BT

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	none	Cease	none	
To	(BT)	—	—			

Scenario 18: SP+services+CPS → disactivated line reverts to BT

	line	services	CPS	SPG	CPS Gateway	Notes
From	SP1	SP1	CPSO1	Cease	cease CPSO1	
To	(BT)	—	—			

Annex C

Letters from the losing and gaining providers during switchover period

'Notification of transfer' letter – losing provider

Dear

We have been informed that you wish to transfer your telephone service using your existing telephone line.

Your order is being processed in accordance with the agreement you have made with your new telephone company, and the switchover of your service is due to take place on xx xxxxxxxx 2002.

If you have any questions about the transfer, or do not wish to proceed, please contact (gaining provider) before the switchover date above. If you believe that there has been a mistake about the transfer, or do not have contact details for your new telephone company, please contact us on (telephone number) (Monday to Saturday 8:00 a.m. to 8:00 p.m.).

[The transfer only applies to your standard telephone services and should not affect any other telephone services that you may have (such as broadband services, mobile telephone services and internet services)].

The closure of your existing telephone account will automatically result in the removal of any discount options and additional services you have been receiving from us. You should contact your new telephone company to discuss your ongoing requirements. You should not contact (losing provider) to discuss any aspect of your new service.

I am sorry to hear that you have decided to give up your (losing provider) service but would like to take this opportunity to thank you for your custom. Should you at any time decide to come back to us we will arrange for service to be transferred. All you need to do is simply call us on the number detailed above.

Yours sincerely

Customer Service Advisor

'Notification of transfer' letter – gaining provider

Dear

We are pleased that you have indicated that you would like to transfer your telephone service from (losing provider) to (gaining provider) [using your existing telephone line]. Thank you for giving us this opportunity to provide you with our service.

Your order is being processed in accordance with the agreement you have made with (gaining provider), and the switchover of your service is due to take place on xx xxxxxxxx 2002.

If you have any questions about the transfer, or do not wish to proceed, please contact us before the switchover date above on (telephone number) (Monday to Saturday 8:00 a.m. to 8:00 p.m.).

[The transfer only applies to your standard telephone services and should not affect any other telephone services that you may have (such as broadband services, mobile telephone services and internet services).]

The closure of your existing telephone account will automatically result in the removal of any discount options or additional services you have been receiving from your previous telephone company. We would be pleased to discuss any ongoing requirements that you may have and look forward to hearing from you.

[Please note that Indirect Access facilities (which enables telephone users to select various companies to carry some or all of their calls either by selecting these companies in advance or by dialling a prefix in front of the telephone number) are not available as part of our telephone services package.] – to be inserted if IA call barring exists.

[Please find enclosed some introductory information about your new telephone service.] – to be inserted if introductory material goes out with this first letter.

Once again, I would like to welcome you to (gaining provider).

Yours sincerely

Customer Service Advisor

Annex D

Sales and marketing code of practice

Key elements to be included within Sales and marketing code of practice

1. Introduction and Overview

1.1 Key objectives to be outlined:

- good practice and responsible selling in the marketing of fixed line telephone services, and to help customers understand the service and behaviour to be expected;
- a clear framework within which responsible companies should be working, providing reassurance to customers and consumer representatives as to what constitutes good practice in the marketing of fixed line telephone services.

1.2 Focus to be sales and marketing of fixed line telephone services to both business and residential customers, dealing primarily with issues arising before, during and at and at the point of, sale, with particular emphasis on the avoidance of mis-selling and misrepresentation, and ensuring customer understanding of the services offered.

1.3 Sales and marketing staff, and agents, to be made aware of the Code and its contents, and to observe them.

1.4 Customers and advice agencies to be made aware of the Code and its contents.

1.5 Company accountability to be visible.

2. Status of Code

2.1 The Code is voluntary until forthcoming legislation makes it compulsory.

2.2 To ensure that companies provide consumers with standards of protection over and above those provided by the law (see table below). Compliance with this code does not guarantee compliance with any legal requirement.

2.3 Non-compliance with this Code does not affect the validity of any contract between the company and the consumer, unless otherwise provided by law.

3. Sales, marketing, advertising and promotion

3.1 Customer approaches may occur in a wide range of ways eg by TV, radio or press advertising, promotions in shops or shopping centres, post, fax, electronic mail, telephone or in person. Whatever the way that sales, marketing activities are conducted, companies must act responsibly.

3.2 Customers' wishes to be respected where they have registered with any relevant preference service, including the Mailing Preference Service, the Telephone Preference Service, the Fax Preference Service and the e-mail preference service.

3.3 Advertising and promotion should comply with the British Codes of Advertising and Sales Promotion. In particular, advertising and promotional literature must not contain misleading information or denigration - they must be accurate and fair.

4. Recruitment and sales training

4.1 Appropriate procedures to be set up for the selection of staff involved with direct contact with customers for the purposes of marketing activities.

4.2 Companies to be responsible for ensuring that sub-contractors (third party agencies) also set up equivalent selection procedures.

4.3 Whilst operating within current employment legislation, recruitment of sales staff to have regard to:

- behaviour and appearance, recognising that the sales person may be seen as the 'public face' of the industry;
- security – references must be checked and persons with convictions for criminal offences excluded;
- evidence of mis-selling or lack of integrity in any previous selling employment.

4.4 The following requirements related to sales staff should be observed:

- the applicant must be 18 years old or above;
 - the applicant must provide proof of NI number, proof of address and two references;
 - referees cannot be related to the applicant;
 - business referees must not both be from the same company;
 - if a sales person transfers to another company, a copy of his or her records will be retained for a minimum period of three years;
 - the identification badges of staff leaving the company should be returned.
-

4.5 Companies must satisfy themselves that they have taken reasonable steps to ensure that every such person is trained so as to have a sufficient understanding that any relevant advice given by such person is not misleading. Topics covered should include:

- arrangements for competition in the supply of telecommunications in the UK;
- the different telephone options provided by the company and how these differ from other competitive telecoms products (which may or may not be offered by the company); for example, Carrier-Pre Selection, Calls & Access and Indirect Access;
- the process for ordering the telephone service;
- the relevant principles of consumer protection law;
- the prices charged by the employing company and its other terms and conditions of service and, in particular, methods of payment, duration of contract and any termination fees;
- the nature, and cost, of any additional services on offer.
- the process for cancelling the contract both during the cooling-off period and at any time following commencement of the service; and
- the existence of the Sales and Marketing Code of Practice and the benefits provided.

4.6 Responsibility for code compliance by representatives, and any sales agency acting on their behalf, to lie with company. The company should identify the title of the person accountable for ensuring that the company and its agents observe the Code, and the title of the person responsible for handling complaints relevant to the Code.

4.7 Remuneration systems must not be such as to engage salespeople to encourage in misleading or exploitative sales practices. The company should be kept informed of incentive schemes used by any agencies it employs for marketing.

5. Customer contact

5.1 Discretion to be used when visiting consumers' homes, particularly during the hours of darkness. No face to face contact or telephone calls to be made outside the hours of 08.00 to 20.00, unless at the customer's request. Telephone calls should not be made outside the hours of 08.00 to 21.00 hours.

5.2 Representatives involved in face-to-face sales and marketing to be issued with identity badges that clearly display the name of the company they represent and a unique identification number for that representative. The identity badge will also display the representative's name, a photograph of the representative and an expiry date for validity of the card.

5.3 All representatives to immediately identify themselves, the company they represent and the purpose of the call and the expected call duration. If visiting or meeting in person, they should draw the customers' attention to their identity card.

5.4. Reasonable steps to be taken to keep informed of local authority initiatives, password schemes etc, such as the Local Distraction Burglary Initiative.

5.5 All representatives to be courteous, use appropriate language and offer clear and straightforward explanations. It is essential that they do not misrepresent the services being offered nor those of other companies. All information should be factual and accurate.

5.6 Representatives must not persist in contact with any person who indicates that the contact is inconvenient, unwelcome, inappropriate or too long and will, at the customer's request, discontinue the discussion and, if making a doorstep call, leave the premises immediately.

5.7 Companies should not abuse the trust of vulnerable customers eg those who are elderly or whose first language is not English, or who have special needs. Companies should have a policy regarding such customers, which would include the requirement that their representatives do not pursue sales presentations to customers whom they believe may be vulnerable. Where there is sheltered housing, contact must be made with the warden or other person in authority before making any approach to the customer.

5.8 No marketing or sales activity to be conducted that is directed to those who are under the legal age for entering into contracts.

5.9 Sales and marketing campaign records to be maintained for four, including the date and the approximate time of the contact with the customer. They should be such as to allow subsequent identification of the salesperson(s) involved and to assist in dealing with any complaint or query.

6. Entering into a contract - information, order forms and contracts

6.1 It is essential that steps are taken to ensure that the person entering into a contract is authorised to enter into the contract for the fixed line telephone services/bills at the premises.

6.2 Order forms and Contract forms to be designed such that the nature of the document is clear to the customer [and contains a statement of the nature of the document immediately adjacent to the where the customer signs the document so the statement cannot easily be obscured or concealed⁶]. Customers should sign over the word "contract".

⁶ this is in order to minimise cases where order forms are misrepresented as confirmations of the sales person's visit. This is likely to be an offence under the Trades Descriptions Acts.

6.3 Where a face-to-face approach to the customer takes place the customer should be given the information set out in this paragraph, preferably in writing, in a clear and comprehensible manner:

- a summary of the Code that contains essential information including the identity of the company, its address, telephone, fax and e-mail contact details – in writing;
- a description of the telephone service [sufficient to enable the customer to understand the option that the customer has chosen, and how it works];
- information about the major elements of the service, including the cost of any standing charges, the payment terms, line rental, key call types and, for “vulnerable” consumers, details of “protected or special support” arrangements. Full written information about tariffs should be made available on request - in writing;
- the arrangements for provision of the service, including the order process and, as accurately as possible, the likely date of provision. Where there may be significant delay in the likely date of provision, the customer should be informed;
- the existence of a right of cancellation and the process for exercising it – in writing;
- the period for which the charges remain valid; and
- the minimum period of contract, and minimum contract charges, if any.

6.4 If a customer signs an order form following face to face contact, or enters into a written contract, the customer must be given a copy of the order form or contract, as well as the following details **in writing** either at the same time or within 5 working days, unless previously supplied in writing prior to contract:

- information about any after-sales services or guarantees; and
- arrangements for the termination of the contract.

6.5 In the case of orders placed by distance selling means, there must be compliance with Distance Selling Regulations. These are set out in the table below.

6.6 In the case of internet orders, a well sign-posted hyperlink to this information which is easily visible to the web site visitor must be prominently displayed, and the information must be capable of being easily downloaded and printed.

6.7 Customers should be permitted to cancel orders and terminate contracts by telephone or in writing, or by fax or e-mail.

6.8 The company must send a confirming letter to the customer by first class mail within five working days of a contract being agreed.

6.9 The company must ensure that the orders they submit do not mature until the statutory cooling-off period has been met.

7. Consumer Protection and other Legal Requirements

7.1 There must be compliance with all applicable legislation (see table below).

8. Audit of contracts

8.1 Procedures should be developed to minimise the risk of errors or mis-selling when taking of orders/making contracts during face-to-face or telephone selling. If customers enter into contracts these must be understood and intended by the customer.

8.2. In all cases, the customer must be contacted following the sale. This contact should seek confirmation that they understand that they have entered into an agreement, are happy to proceed with the agreement and are content with the way in which the sales and marketing activities were conducted

8.3 The customer should be advised in the letter about the importance of the audit process. Audit contact should be made by a person not involved with the company's marketing.

8.4 If it is found that the contract was not understood or intended, and the customer wishes to cancel, company must terminate the contract without charge or other penalty to the customer. Companies will keep under review the procedures by which contracts are agreed, and will take appropriate steps to prevent recurrence of any problem identified from the audit process.

9. Customer complaints procedure

9.1 Companies must have an internal procedure for handling customer complaints which must include those relating to their sales and marketing activities. Companies must ensure that all their staff and representatives who deal directly with customers are made aware of this procedure, and they should inform customers of the existence of their complaints procedure on first contact.

9.2 The complaints procedure will set out how customers may complain about the companies sales and marketing activity and what further steps are available if they believe their complaint has not been dealt with satisfactorily.

9.3 A customer with such a complaint should, in the first instance, be advised to direct it to the company concerned. If the complaint is not able to be resolved to the customer's satisfaction, the company will advise the customer to contact the appropriate agency (in the first instance, Of tel's Consumer Representation Section in England or the regional Advisory Committees on Telecoms (ACTs) in Northern Ireland, Wales and Scotland). Customers may also be able to obtain advice from their local Trading Standards Department or Citizens' Advice Bureau.

9.4 In addition, customers should also be made aware of any dispute resolution arrangements as recognised by Oftel, such as the Telecoms Ombudsman, which will have the power to award compensation to the customer.

9.5 The company should liaise regularly with Oftel and the relevant consumer groups to monitor the number and nature of complaints under its Code.

10. Distributing the Code: Creating awareness

10.1 The Code should be available to customers on request, free of charge and in a range of formats.

10.2 The Head Office of the CABx (NACAB) plus other head offices of relevant major advice agencies should normally be sent copies of the Code and any subsequent update. Companies with restricted operations such as operating only in specific regions should circulate copies to advice agencies, as appropriate.

Legislation of particular relevance to Sales and Marketing of telephony products

Particular attention is drawn to the following regulations, in addition to all other appropriate consumer protection law and advertising Codes of Practice

	Title	Comment
1.	The Unfair Terms in Consumer Contracts Regulations 1999 SI 1999 No 2083	<ul style="list-style-type: none"> introduces controls over unfair standard terms in contracts with consumers requires written contracts with consumers to be in plain, intelligible language
2.	the Consumer Protection (Cancellation of Contracts Concluded away from Business Premises) Regulations 1987 SI 1987 No 2117	<ul style="list-style-type: none"> requires that written notice of cancellation rights (min 7 days) in prescribed form is given to consumers entering into contracts at their homes or in other places (eg shopping precincts)
3.	The Consumer Protection (Distance Selling) Regulations 2000 SI 2000 No 2334	<ul style="list-style-type: none"> requires extensive information to consumers before and after consumers enter into contracts using channels of marketing such as direct response press or TV adverts, telemarketing, mail order, etc requires cancellation rights (min 7 working days) to be given to consumers, starting from the date of delivery of prescribed information provides that making demands for payment for services not ordered by consumer is a criminal offence
4.	Telecommunications (Open Network Provision)(Voice Telephony) Regulations 1998 SI 1998 No. 1580	<p>Extensive requirements for system-less resellers and operators of systems licensed by DTI to</p> <ul style="list-style-type: none"> offer written contracts to consumers complying with the regulations; to publish their terms and conditions and tariffs by placing copies in every major office for public inspection during prescribed hours
5.	Misleading Advertising Regulations	
6.	Consumer Protection Act 1987 (Part III)	

March 2002

Annex E

Promoting competition in telephone services

New 'Line and Calls' services: a consumer guide

Telephone companies can now provide new 'Line and Calls' services using existing BT lines into customers' homes. This leaflet explains how the 'Line and Calls' services work and how they could benefit you.

Widening choice

With 'Line and Calls' services, customers can get their bill for line rental from the same company that they choose to carry their calls. For some time, you have been able to choose different companies to carry some or all of your telephone calls, while keeping your BT line. You do this by selecting these companies in advance or by dialling a prefix before the telephone number. But if you use these services, you get two bills - one from BT for your line rental and one from your chosen company for your calls.

In parts of the country, you can also choose cable television companies to supply your telephone line and calls.

All these options will continue to be available. The new 'Line and Calls' services will bring extra choice and encourage more competition.

'Line and Calls' only applies to standard 'landline' telephone services. Other telecoms services are unlikely to be affected (such as broadband, mobile and Internet services).

'Line and Calls' services – your questions answered

How can I benefit from these new services?

Different phone companies are likely to offer a choice of packages. Prices will vary for line rental and calls, and for additional services. By shopping around and comparing prices, you may be able to get a deal that is better for you. For some tips, see "What to look for when you shop around" below..

What happens to my telephone line if I take up a new 'Line and Calls' service?

If you choose a 'Line and Calls' service, your telephone line and number will not change, but your contact about your service will be with your new telephone company. It will send you your phone bill, and if you have problems making a call,

or wish to report a fault, its customer service section should be able to solve the problem.

All telephone companies will provide:

- free emergency calls to '999' and '112';
- access to operator assistance;
- directories and directory enquiry services.

If you have more than one telephone line, you can choose different packages and different telephone companies for each line. However, all extensions on the same line will be on the same package.

My phone line is with a cable company – can I get the new services?

Yes, but there may be an extra cost on start-up. You need a BT line into your home to get the new services. If you used to have a BT line, it may be possible to reactivate your old line at low cost. The cost will be higher if a new line has to be installed.

Do I need to get a new phone or any special equipment?

You can use 'Line and Calls' services with any approved phone equipment, whether bought, rented or leased. This includes, for example, telephones, fax machines or extra loud bells.

If my alarm system is connected to my phone line – will it still work?

Usually there is no problem about alarm systems, but you should make sure by checking with the new phone company.

Will I still be able to get additional services on my phone line?

Popular additional services include last caller's number, voice messaging, call forwarding, selective call barring, and finding out the amount spent on calls since the last bill.

With 'Line and Calls', companies are likely to offer most or all of the additional services currently available; and there may well be some new ones. Make sure you can get the additional services you want by checking with the company you are considering before you sign up.

Will I still be able to choose other companies to carry my calls?

Yes, you will still be able to choose other companies to carry all or some of your calls by dialling extra digits in front of the number. You can get information on these services from our separate guide, CPS Consumer Guide.

Will special arrangements for disabled customers still be available?

All telephone companies must provide the following to eligible customers:

- for people with sight problems: free directory enquiries (with onward connection on request), and contracts and bills in large print or in a form they prefer;
- for people with hearing problems: a text relay service that costs the same as an equivalent voice service, with short codes for textphone users to call emergency services, operator assistance and directory enquiries;
- for people dependent on the phone: a priority fault repair service and a protected service scheme (where someone you have chosen deals with your bills) – both at no extra charge.

How can I get this new service?

To get this new service you need to make an agreement (written or spoken) with your chosen new company. The new company and the company you are leaving will then write to you to confirm the transfer. You only need reply to these letters if you decide not to go ahead with the transfer. It is a good idea to keep all the paperwork safe for future reference.

There is always a “cooling-off” period when you have the right to change your mind about the transfer. If you do change your mind, you should contact your new telephone company straight away. If there has been a mistake about ordering the transfer, or you do not have contact details for your new telephone company, you should contact your current telephone company. If you need more help, contact Of tel’s Consumer Representation Section (see **Contacting Of tel**, below).

How do I complain if I have a problem with my telephone service?

To complain after you have transferred to your new telephone company, you should first contact your new telephone company. If you are not happy with its response, contact Of tel or the appropriate national Advisory Committee on Telecommunications (for Scotland, Wales or Northern Ireland). See the contact details below.

Can I change my phone company again?

Yes.

What to look for when you shop around

When deciding whether to change telephone companies, it makes sense to compare the different prices and services available.

- Compare the likely cost of any alternative telephone service with what you are now paying for your line rental and calls. Take account of how you currently use your phone:
 - How often do you make calls?
 - When do you tend to make your calls?
 - Where to?All these things affect how much you pay.
 - Check the prices:
 - How much do different call types cost?
 - Will there be discounts?
 - Are there different prices for different times and days of the week?
 - How will call charges be worked out; for example by each second, each minute or part-minute?
 - Are there minimum call charges for each call?
 - The packages on offer may differ substantially. As in the mobile phone market, these are likely to get more varied and some may be complicated. For example, some may allow unlimited national or local calls at certain times of day in return for a monthly fixed fee. Others may offer a low rental but high call charges – these could suit people who make few calls.
 - If you normally make few calls, you should also consider alternative low-cost schemes such as BT's 'Light User Scheme' or 'In Contact' before deciding which is the best deal for you. You will not be able to use these special BT schemes if you change to a new 'Line and Calls' service.
 - If you are considering signing up for a package incorporating telephone and another service, for example gas, electricity, or a supermarket loyalty scheme, then compare your combined current payment for all the separate services with the cost of the package that is being offered.
 - Read the small print in the contract. Check:
 - What sort of contract is it?
 - If it is fixed-term, how long will it last?
 - In particular, what are the arrangements for ending the contract?
 - Are there any penalties for ending it before the end of its minimum period?
 - Be sure to choose a company that sends bills as often as you want (perhaps quarterly or monthly), and with a payment method that suits you (such as monthly direct debit).
 - Check whether there is any initial fee for being connected to the new service.
-

- Check what will happen if you have difficulty paying the bill, and whether there are any fees for disconnection or reconnection.
- Ask which additional phone services or benefits you will gain or lose by changing companies.
- Find out when and how you can contact your customer services department.

Where to get more information

We cannot recommend companies, but we can give you more information and advice about telephone services in the UK. As the market develops we may also be able to offer more information to help you decide on the best company and package for you.

Several other leaflets and factsheets may give you further helpful information. These include:

Your rights and choices as a telephone customer

CPS Consumer Guide

The best deal for consumers: a guide to Ofcom and its work

Getting the best deal from your mobile phone service

How to access the Internet at home

Contacting Ofcom

Our address

Ofcom
50 Ludgate Hill
London
EC4M 7JJ

Our website

www.ofcom.gov.uk

Research and Information Unit

phone: 020 7634 8761

fax: 020 7634 8946

e-mail: info@ofcom.gov.uk

If you have a complaint – in England, Scotland and Wales

Consumer Representation Section

lo-call rate number: 0845 714 5000

phone: 020 7634 8888

fax: 020 7634 8845

textphone: 020 7634 5370

e-mail: advice@ofcom.gov.uk

- **in Northern Ireland**
NIACT Secretariat
22 Great Victoria Street
Belfast BT2 7QA

lo-call rate number: 0845 714 5000
fax: 028 9024 7024
e-mail: niact@acts.org.uk

The Advisory Committees on Telecommunications (ACTs), which give advice to Ofcom, were established by the Telecommunications Act 1984. They aim to ensure that the regulator and the companies supply telecoms networks, services and equipment; and take account of all users' needs.

The other ACTS

Please note these committees cannot give advice or help with complaints.

CCE, DIEL and CfB

CCE – Communications for England represents the interests of consumers in England.

DIEL – The Advisory Committee on Telecommunications for Disabled and Elderly represents the interests of disabled and elderly people.

CfB – Communications for Businesses represents the interests of small businesses.

ACT Secretariat

50 Ludgate Hill
London EC4M 7JJ

phone: 020 7634 8773
fax: 020 7634 8924
textphone: 020 7634 8769
e-mail ACT Secretariat: actsec@acts.org.uk
e-mail CCE: cce@acts.org.uk
e-mail DIEL: diel@acts.org.uk
e-mail CfB: cfb@acts.org.uk

Scottish Advisory Committee on Telecommunications (SACOT) – represents the interests of consumers in Scotland

Secretary to SACOT
28 Thistle Street
Edinburgh
EH2 1EN

phone: 0131 226 7275
fax: 0131 226 4181
e-mail: sacot@acts.org.uk

Welsh Advisory Committee on Telecommunications (WACT) – represents the interest of consumers in Wales.

Secretary to WACT
4 The Science Park
Aberystwyth
Ceredigion
SY23 3AH

phone: 01970 636 413
fax: 1970 636 414
e-mail: wact@acts.org.uk

This explanatory leaflet was produced in October 2002 by OfTel with representatives from consumer groups and telephone companies.

Annex F

List of questions

No	Para.	Question
1	2.1.4	Oftel invites comments on the tests to be used for assessing whether features and line types should be included in the WLR2 product and subsequently for new products
2	2.2.15	Oftel invites comments on the proposals on Special Line Types
3	2.3.7	Oftel invites comments on the proposals on Select Services set out in the table contained in Annex A.
4	2.3.18	Oftel invites comments on the proposals for end-user services set out in paras 2.3.8-2.3.18.
5	2.3.19	Oftel invites comments on whether there are any legacy services for which significant demand does exist, and which should therefore be included within WLR2.
6	2.3.30	Oftel invites comments on the range of services listed in paras 2.3.21 to 2.3.30
7	2.2.37	Oftel invites comments on the proposals on service incompatibilities set out in paras 2.2.31 to 2.2.37
8	2.3.38	Oftel invites views on whether customers using BT social telephony products should have an increased form of protection during transfer and if so on the form that protection should take.
9	2.3.39	Oftel invites comments on whether there is a need for WLR2 to include the meter pulse facility.
10	2.4.12	<p>Comments are invited on the two options set out above for the treatment of 118 DQ calls in the WLR product, namely:</p> <p>a) should WLR service providers be expected to provide access to the full range of DQ 118 numbers; or</p> <p>b) should WLR service providers be expected only to provide access to a range of DQ 118 numbers other than their own (or their wholesale carrier's)?</p>
11	3.2.10	Oftel invites comments on its conclusions on the significance of ISDN products and the implications for competition.
12	3.5.4	Oftel invites comments on, and evidence of, firms' ability to exercise countervailing power in ISDN markets.
13	3.13.8	Oftel invites views on its proposal not to proceed with Option A.
14	3.13.15	Oftel invites comments on its conclusion that cost-based pricing for ISDN products would not be a proportionate response
15	3.13.23	Oftel invites comments on the conclusion that option C offers the most appropriate approach but that there close monitoring of BT's behaviour ahead of the 2004 market review.
16	4.3.9	Oftel invites views on i) the proposal that simultaneous delivery of WLR and CPS would be acceptable for a fit-for-purpose product and ii) the high-level requirements identified above.

17	4.4.8	Oftel invites views on the proposals that BT should base its validation of orders on one of either the billing or installation postcode (as they appear in BT's databases) combined with the CLI and that BT should take steps to ensure that its postcode data is kept up-to-date
18	4.5.8	Oftel invites views on the proposal that a like-for-like transfer set out above would meet the requirements of a fit-for-purpose product.
19	4.6.10	Oftel invites views on whether: - the four types of order used in WLR1 and CPS, with enhancements as described above, should be taken forward into WLR2, with the possible addition of 'Cancel Own'? - the addition of a 'Cancel Other' for use by all SPs in cases of slamming would be useful?
20	4.7.4	Oftel invites views on its proposal that the fit-for-purpose WLR2 product should operate with the current set of CPS order types but with constraints identified in 4.7.2 and with the additional features identified in 4.7.3.
21	4.8.3	Oftel invites views on whether the list of WLR and CPS scenarios identified in Annex B is complete.
22	4.9.3	Oftel invites views on the high level requirements for validation and rejection codes
23	4.10.7	Oftel invites views on proposals that for WLR2 CPS order pre-validation should be based on the CPSO taking specific measures to avoid the most common causes of error in the CPS order.
24	4.12.5	Oftel invites confirmation that: - a gap of no more than one day between WLR and CPS activation is acceptable for WLR2 in order to achieve early implementation of WLR2 in a form that is seamless to the customer; and - a longer-term objective for the industry should be to eliminate the delay through integration of the electronic gateways
25	4.13.4	Oftel invites views on Of tel's proposal for the preferred and fallback solutions for seamless transfer of existing CPS
26	4.14.6	Oftel invites views on: - the proposal that a gap of up to one day between WLR and CPS activation for new connections and change of address is acceptable for WLR2; - the requirements that should apply for a change of address in the same exchange area and for a new connection and change of address generally
27	4.16.6	Oftel invites views on: - the proposal that BT should provide functionality which offers real time choice and appointment booking in one phone call for WLR 2; - the proposed principles and requirements for BTR engineers
28	4.17.6	Oftel invites views on the proposal that for WLR2 BT should provide the functionality identified in para 4.17.4 and meet the additional requirements set out in para 4.17.6
29	4.18.7	Oftel invites views on the proposed requirements for billing and debt management set out in section 4.18
30	4.19.6	Oftel invites views on fraud and security requirements set out in section 4.19.
31	4.20.1	Oftel invites views on the requirements for handling of malicious calls under WLR2
32	5.2.15	Oftel invites views on the proposal that BT should not be required to increase the capacity of its existing gateway for WLR2

33	5.2.16	<p>Oftel invites comments on these conclusions, and specifically on the following questions:</p> <ul style="list-style-type: none"> - Are the forecasts provided by Schema for the WLR market size and the rate of take-up reasonable? - Is the mechanism for reviewing these forecasts reasonable? - Does the current gateway capacity provide sufficient headroom to provide an acceptable degree of operational risk? - If the current level of operational risk is too high, then by how much should the gateway capacity be extended? - To what extent is this dependent on the cost of doing so?
34	5.3.13	<p>Oftel invites comments on these proposals, and specifically on the following questions:</p> <ul style="list-style-type: none"> - Do these proposals represent an efficient and transparent mechanism for rationing the available capacity? - Should forecasts for a given month be permitted to change by an arbitrary amount when new forecasts are submitted, in order to maximise forecasting accuracy, or should such changes be subject to thresholds? - Is it reasonable to ration capacity by scaling back SPs forecasts in proportion to a figure of merit? - Does the proposed relationship between the figure of merit and the forecasting error provide a sufficient incentive to accurate forecasting, without being over-punitive? - Does the proposed process for prioritising orders on a daily basis provide an effective means of handling short-term peaks in demand?
35	6.2.13	<p>Oftel invites comments on:</p> <ul style="list-style-type: none"> - the proposal that mandatory letters informing customers of the details of the transfer be required of both the losing and the gaining provider - the proposal that these letters always follow a standard format - the circumstances under which departures from standard text may be justified
36	6.2.18	<p>Oftel invites comments on the proposals that:</p> <ul style="list-style-type: none"> - the switchover period should be analogous to that of CPS (ie currently 10 working days, excluding Saturdays); and - additionally, providers should ensure that orders do not mature until the statutory "cooling-off period" has been met.
37	6.3.4	<p>Oftel invites comments on the draft guidance on sales and marketing for providers' codes of practice.</p>
38	6.4.3	<p>Oftel invites comments on:</p> <ul style="list-style-type: none"> - what changes to the Consumer Guide will be necessary to reflect future enhancements under WLR2 - the measures that should be taken in order to ensure good consumer awareness of the Consumer Guide and codes of practice.
39	6.5.8	<p>Oftel invites views on whether:</p> <ul style="list-style-type: none"> - there be a common set of rules that are applicable to both WLR and CPS in connection to save activity; - BT 'save' activity should be restricted to the access element of the customer's service in the case of the transfer of existing CPS customers to WLR

40	7.3.29	Oftel invites views on whether: - IA barring and ancillary service system set-up costs should be recovered from all BT retail customers and WLR service providers? - per operator costs be recovered from WLR service providers only as in CPS? - per line costs (and per call costs if any) should be recovered from WLR service providers?
41	8.2.5	Oftel invites comments on the product assessment criteria.
42	8.2.14	Oftel invites comments on the process assessment criteria, in particular: - Is it appropriate to assess BTs implementation of WLR2 based on a set of measured KPIs ? - If so, what is the appropriate set of KPIs to use ? -Should observations of the actual performance be supplemented by a formal 'soak-test' of BTs systems ?
43	8.2.15	Oftel invites comments on the proposal to develop and use a business model
44	8.3.6	Oftel invites comments on the proposals for the assessment of the market impact of WLR2
45	8.5.3	Oftel invites comments on the proposed approach to consumer issues in the Statement and during the WLR2 implementation period
46	9.2.5	Oftel invites comments on: - the appropriate milestones for inclusion in a top-level implementation programme - a realistic timescale for achieving each milestone
