

Consultation

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Section 1

Executive Summary

- 1.1 We are consulting on the implementation of an order to be made by the Secretary of State The Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order (the "Costs Order"). This Costs Order will require Ofcom to set fees payable by Copyright Owners to ISPs and to Ofcom if they intend to take advantage of a notification scheme in relation to online infringements of their copyright.
- 1.2 The notification scheme itself is to be set out in a code to be made by Ofcom, "the Code"). This is currently the subject of a separate consultation by Ofcom. The Code will give effect to provisions of the Digital Economy Act which are intended to reduce online copyright infringement. Specifically, the Code will impose obligations on Internet Service Providers (ISPs) to send notifications to their subscribers following receipt of copyright infringement reports (CIRs) from Copyright Owners. ISPs must also record the number of reports made against their subscribers and provide Copyright Owners on request with a Copyright Infringement List. This is an anonymised list which enables the Copyright Owner to see which of the reports it has made relate to subscribers who have received more than one notification. ISPs which are subject to these obligations are called "Qualifying ISPs".
- 1.3 The Costs Order will determine who should bear the costs incurred by ISPs in delivering their obligations, by Ofcom in developing the Code and overseeing the scheme, and by the appeals body which will consider subscriber appeals against reports of infringement. The Order will also set out the basis on which ISPs' costs should be shared among participating Copyright Owners and ISPs.
- 1.4 The overall framework to be defined by the Costs Order is simple: Copyright Owners should bear all of the costs incurred by Ofcom, the majority of costs incurred by the appeals body, and 75% of the costs efficiently and reasonably incurred by Qualifying ISPs in carrying out their obligations. Other than in relation to the costs of the appeals body, an individual Copyright Owner's share of the costs should be in proportion to the number of CIRs it proposes to send during a term of operation of the Code, called a notification period.
- 1.5 Under the Order, subscribers will have to pay a £20 fee to make an appeal against a report of infringement, which will be refunded in the event the appeal succeeds; the remaining costs of determining an appeal will be met by the Copyright Owner who submitted the CIR which has been appealed.
- 1.6 The implementation of these arrangements in the Costs Order requires a number of material issues to be resolved and we set out our proposals in relation to these in this consultation.
- 1.7 Firstly, we propose when the first notification period for the operation of the Code should begin. We do so after considering how long it will take for Qualifying ISPs to invest in systems to process CIRs and when they can be expected to start investment; and how long it will take Ofcom to establish the independent appeals body which will consider subscriber appeals against the infringement reports made against them.
- 1.8 We consider that the earliest date by which we can be sure there will be an established appeals body, and ISPs can be expected to be in a position to deliver

their obligations is February 2014, and therefore propose that the first notification period should start on the 1st of March 2014. In brief, we consider this appropriate because we do not believe Qualifying ISPs can be obliged or expected to start investment in systems until the Code is in force and the ISPs have committed funding from Copyright Owners. This will be in the first quarter of 2013; secondly, we believe it will take 9 months for the systems to be built. It will take a similar period to tender for the appeals body, and to establish appeals body processes and systems. Finally, we believe that we must make four months provision for the possibility that there will be further unanticipated delays in the various operational, technical and legislative processes required for CIR processing to begin. We further propose that the end date of the first period should be 31 March 2015.

- 1.9 Secondly, we must determine the costs which Ofcom has incurred to date in executing its functions under the Digital Economy Act, and those which it will incur over the period until the end of the first notification period. These costs cover the development and establishment of a Code overseeing the obligations, the establishment of an independent appeals body, enforcement of the Code and the provision of reports measuring the efficacy of the Code and levels of online infringement.
- 1.10 These costs must all be charged to Copyright Owners at the beginning of that first period. These costs are as follows (estimates for the period from Q3 2012):

Ofcom Costs					
2010/11 2011/12 2012/13 2013/14 2014/15					
£1.8m	£0.7m	£1.6m	£3.2m	£3.2m	

- 1.11 Much of this consultation is concerned with the basis for our estimates of the costs Qualifying ISPs will incur in complying with their obligations. We must estimate these costs in order to set a notification fee, which a Copyright Owner must pay a Qualifying ISP for each CIR the Copyright Owner proposes to send. The Fee will include a contribution to the fixed costs of establishing systems as well as an amount to cover the variable costs of processing CIRs.
- 1.12 The Costs Order will require that we set the notification fee with reference to those costs which *"would be reasonably and efficiently incurred by a notional qualifying internet service provider"*¹ (and not the actual costs which any individual ISP may incur). Ofcom commissioned BWCS Ltd to provide a report of the costs the notional Qualifying ISP might incur, drawing on information provided by five of the six ISPs which we expect to be Qualifying ISPs in the first notification period (BT, Virgin Media, TalkTalk, BSkyB, and O2 provided information, Everything Everywhere did not).
- 1.13 Based on the BWCS report, and information subsequently gathered by Ofcom, we propose to set the notification fee on the following basis:

¹ Article 2 of the Costs Order.

- All of the six Qualifying ISPs will be considered to face the same costs for the purposes of setting the notification fee
- The fixed costs of processing CIRs, including both capital and fixed operating costs, are £1.4m for each Qualifying ISP, of which 75% (£1.05m) will be charged to Copyright Owners through the notification fee
- The variable cost of processing CIRs, for each Qualifying ISP is £0.80 per CIR, of which 75% (£0.60) will be charged to Copyright Owners through the notification fee
- We will set two notification fees, one covering the four larger Qualifying ISPs (BT, Virgin, Talk Talk, and BSkyB) and the other for the two smaller Qualifying ISPs (O2 and Everything Everywhere). We consider that two different Fees are required in order to ensure that individual ISPs do not unfairly over or under-recover the fixed costs of processing CIRs
- 1.14 The Costs Order requires that each Copyright Owner pay a share of Ofcom costs set by reference to the number of CIRs it estimates it will send; each Copyright Owner's share of costs is equal to the share of CIRs it estimates it will send in a notification period as a proportion of the total number of CIRs all Copyright owners estimate they will send in that period
- 1.15 Similarly, the level of the notification fee which a Copyright Owner must pay a Qualifying ISP will be determined by the total number of CIRs all Copyright Owners estimate they will send during a notification period. This is because the total of notification fees must include a proportion of the fixed costs of processing CIRs: the more CIRs are to be sent, the lower the notification fee will be set, since the fixed costs will be spread over more CIRs.
- 1.16 In order to allow Copyright Owners to make estimates about the number of CIRs they will send which are informed by a good understanding of the likely costs they will bear, we propose to run an iterative process when setting these fees. Having determined the issues which are the subject of this consultation, we will publish fee tables, setting the charge which each CIR would incur, given different total volumes of CIRs. Copyright Owners will make a series of estimates, based on this information, until we are able to agree with each participating Copyright Owner the level of CIRs they propose to send, and the consequent charges they will incur.
- 1.17 On the basis of the proposals in this consultation for Ofcom costs, ISP costs and the notification period set out above, the fee tables for the two groups of ISPs are as follows:

	Large ISP Group Totals						
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each large ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)
70	16.3	4,200	511	5.6	9,719	14,429	17.0
80	18.6	4,200	583	4.9	9,719	14,502	15.0
90	20.9	4,200	656	4.5	9,719	14,575	13.4
100	23.3	4,200	729	4.1	9,719	14,648	12.1
125	29.1	4,200	912	3.4	9,719	14,830	9.8
150	34.9	4,200	1,094	2.9	9,719	15,013	8.3
175	40.7	4,200	1,276	2.6	9,719	15,195	7.2

Total and per-CIR Costs of Scheme to Copyright Owners

	Small ISP Group Totals						
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each small ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)
70	2.5	2,100	38	33.6	732	2,870	45.1
80	2.8	2,100	44	29.4	732	2,875	39.5
90	3.2	2,100	49	26.2	732	2,881	35.2
100	3.5	2,100	55	23.7	732	2,886	31.7
125	4.4	2,100	69	19.1	732	2,900	25.5
150	5.3	2,100	82	16.0	732	2,914	21.3
175	6.1	2,100	96	13.8	732	2,928	18.4

1.18 As set out in paragraphs 4.3-4.7, and in detail in Annex 6, the actual charges to Copyright Owners will be determined through an iterative process under which each participating Copyright Owner will submit, to Ofcom, estimates of the number of CIRs it wishes to send to each Qualifying ISP. Copyright Owners will be entitled to accept or reject the costs associated with their proposals in a series of tariff estimation rounds until an agreed level of activity is reached or until Ofcom makes a final determination that Copyright Owners have not accepted the fees for which they would be liable given their estimated level of CIRs. Under those circumstances,

Copyright Owners will, in effect, have elected not to take advantage of the provisions of the Initial Obligations Code, as they have not been able to make binding commitments to fund CIR processing

1.19 The consultation document below sets out the evidence and analysis on which we have based these proposals, and presents a series of specific questions through which we request comment and further relevant evidence on those proposals.

Section 2

Introduction

Purpose of this consultation

- 2.1 The Digital Economy Act 2010 (DEA) was passed by Parliament in April 2010.² It amended the Communications Act 2003 (CA 2003) to give Ofcom new responsibilities for implementing measures aimed at significantly reducing online copyright infringement.³
- 2.2 This consultation concerns how Ofcom proposes to carry out functions it is to be given in relation to the funding of these measures, including its own functions under the DEA amendments.
- 2.3 The measures in question form part of a multi-pronged approach aimed at enabling Copyright Owners to reduce online copyright infringement, through enforcement, educating consumers about copyright, and the encouraging industry to develop lawful alternatives.
- 2.4 The first measures to be introduced under the DEA amendments are the "Initial Obligations". These are obligations which will apply to Qualifying ISPs meeting a threshold set by Ofcom and which will require them to:
 - notify a subscriber of reports of copyright infringement ("CIRs") made by copyright owners and linked to the subscriber's internet access account;
 - provide to copyright owners on request anonymised lists of subscribers which have received multiple notifications of copyright infringement in accordance with a threshold set by Ofcom.
- 2.5 The detailed implementation of the Initial Obligations is to be set out in a code made by Ofcom ("the Code"). Ofcom consulted on its proposals for making the Code in May 2010⁴ and on 26 June 2012 published a draft notice of the proposed Code provisions and their effect under section 403 CA 2003. This consultation should be read in conjunction with these documents since they provide more information in relation to our proposals about the ISPs that will be subject to the Initial Obligations and how they should carry out these obligations.
- 2.6 The relevant legal framework for the proposals in this consultation derives principally from an order, which is to be made by the Secretary of State under a power in the DEA amendments. This power enables him to specify how the costs incurred by industry, Ofcom, and the appeals body should be shared among industry participants.⁵ On 26 June 2012, a draft of the order which the Secretary of State is proposing to make in exercise of the power The Online Infringement of Copyright (Initial Obligations) (Sharing of Costs)) Order ("the Costs Order") was laid before Parliament. If approved, it will give Ofcom the duty of setting fees which Copyright

²http://www.opsi.gov.uk/acts/acts2010/ukpga_20100024_en_1

³ The relevant amendments are found in sections 124A - 124N CA2003. Save where we cite a specific provision, we refer to these amendments generally as "the DEA amendments".

⁴ <u>http://stakeholders.ofcom.org.uk/consultations/infringement-notice/</u>

⁵ Section 124M CA 2003

Owners must pay to ISPs and to Ofcom in order to take advantage of the Initial Obligations. In this consultation, we are inviting views on how we propose to set these fees.

- 2.7 Unusually, we are carrying out this consultation in advance of the completion of the legislative steps which are required to bring Ofcom's duty into effect. The Costs Order is subject to the affirmative resolution procedure and so must be approved by both Houses before it can be made and come into force. Assuming that takes place, Ofcom's duty to set fees will not have effect until the Code, which will incorporate the provisions of the Costs Order, is made and comes into force.
- 2.8 It is anticipated that this will not be before the end of 2012. As noted above, there is currently an opportunity to make representations on the proposed provisions of the Code, which Ofcom has published in a section 403 notice contemporaneously with this consultation. Once that process is complete, the draft Code is to be notified to the European Commission under the Technical Standards Directive.⁶ Ofcom cannot make the Code until at least three months has passed after notification so that the Commission and Member States have an opportunity to review and comment upon the draft. Assuming no adverse comment, our current timetable envisages that the Code will be made and laid in Parliament at the beginning of December 2012 and will come into force 21 days later.
- 2.9 We consider that is appropriate to consult at this stage, rather than at the end of 2012 in order to facilitate the implementation of the Initial Obligations without further delay. As we explain in Sections 3 and 4, the setting of fees is critical to the implementation of the Initial Obligations, since it will determine the extent of the Initial Obligations, in terms of:
 - the volumes of CIRs Qualifying ISPs will have to process and the costs that will give rise to; and
 - how much it will cost copyright owners to send CIRs to those Qualifying ISPs.
- 2.10 In the event that the approval resolutions for the Costs Order are not passed, this consultation will be closed forthwith. Similarly, if the current draft of the Code is amended before it comes into force (in response to comments made in as a result of the section 403 notification or scrutiny under the Technical Standards Directive), we will review and, if appropriate, revise these consultation proposals. As set out in the timetable at paragraph 4.37 below, no final decisions following this consultation will be made until the Code is made.

Structure of this consultation

- 2.11 **Section 3** describes the overall structure of the cost-sharing scheme provided for in the Order the broad categories of costs, and the framework according to which they will be divided among industry participants. This section also identifies the key issues which are the subject of the consultation, and which are dealt with in detail in the following sections.
- 2.12 **Section 4** addresses the various implementation steps that must take place before notifications can be sent and outlines the proposed timetables for establishing costs, setting charges, payment of fees and for the first notifications being sent.

⁶Directive 98/34 EC OJL204 21.7.98 p37, as amended by Directive 98/48/EC OJL217 5.8.98 p18

- 2.13 **Section 5** discusses "Qualifying Costs" the costs which Ofcom has incurred, and will incur in setting up and overseeing the implementation of the Initial Obligations and in reporting on online copyright infringement, as required under the DEA amendments. The section sets out our proposals for the recovery from participating Copyright Owners of Qualifying Costs and how the costs the appeals body will incur in hearing a subscriber appeal are to be recovered once notifications start to be sent.
- 2.14 Sections 6 and 7 discuss "Relevant Costs" the costs which Qualifying ISPs will incur carrying out the Initial Obligations, as required under the DEA amendments. Section 6 looks at the capital costs ISPs are likely to incur in order to carry out the Initial Obligations efficiently; Section 7 considers the operating costs they are likely to face once notifications begin to be sent. Ofcom will set a tariff (or tariffs) which Copyright Owners must pay ISPs for each CIR that they send, based on its assessment of these costs.
- 2.15 **Section 8** sets out our proposals in relation to the overall level of fees that copyright owners may have to pay to send CIRs to ISPs subject to the Initial Obligations. It also outlines next steps arising from this consultation.

Section 3

Cost-Sharing Framework

Introduction

3.1 The arrangements for cost recovery in the Costs Order are complex, covering four types of cost, and with different arrangements for the recovery of each type from industry participants. This section outlines the framework in the Costs Order for the sharing and recovery of costs. We describe first the legal framework within which we will set fees under the Costs Order and the economic principles that we propose should inform our assessment. We then look at each of the categories of cost and how they are to be recovered from industry participants.

Legal Framework

- 3.2 The Costs Order sets out how Ofcom's costs, the costs of the appeals body, and those incurred by ISPs in carrying out their functions are to be shared between industry participants. The relevant provisions are outlined in paragraphs 3.13 onwards and considered in more detail in Sections 4 8 of this consultation.
- 3.3 It is a requirement of the Costs Order that the Schedule, which sets out Ofcom's powers to set fees for the recovery of costs, is incorporated into the Code.⁷ Accordingly, the requirements which the Code must meet under the DEA amendments are relevant to these provisions, notably the requirements in section 124E(2) CA 2003 that the provisions of the Code are objectively justifiable, do not discriminate unduly, are proportionate and transparent.⁸
- 3.4 In addition to the specific provisions of the Costs Order, Ofcom has a number of other general duties that are relevant to the fulfilment of its functions. These include its principal duty under section 3 CA 2003 in carrying out its functions, to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition. In carrying out this duty, it is required to have regard to certain matters, including:
 - regulatory principles of transparency, accountability, proportionality and consistency and any other principles which Ofcom considers represents best regulatory practice; and
 - the desirability of encouraging investment and innovation in relevant markets.
- 3.5 Ofcom's duty to set fees under the Costs Order will also be subject to its duty under section 4 CA 2003 to act in accordance with the six Community requirements. These include the requirement to carry out its functions in a manner which, so far as practicable, does not favour one form of electronic communications network or service.
- 3.6 In making these proposals, we have also had regard to the overall objective of the DEA, namely to reduce levels of online copyright infringement and have considered

⁷Article 3 of the Costs Order.

⁸ Section 124(2)(i) – (I) CA 2003.

how the implementation of the cost-sharing scheme might align individual and collective industry incentives with this objective.

Economic Principles

- 3.7 In the light of the legal framework set out above, we consider that we should have regard to considerations of practicability and proportionality in setting fees under the Costs Order: particularly complex approaches to implementing the Order may impose disproportionate costs on Ofcom or on Qualifying ISPs or Copyright Owners. In this context, we will also need to take account of the different types of industry participant: for example, the extent to which small-scale copyright owners can take advantage of the provisions of the DEA amendments may be constrained if participation is too complex.
- 3.8 The Costs Order specifically requires Ofcom, in setting the notification fee, to "promote efficiency":

"In setting the amount OFCOM shall have regard to the desirability of-

(a) promoting efficiency in the exercise of rights and the performance of obligations under the copyright infringement provisions...⁹

- 3.9 This potentially has two implications: firstly, that Ofcom should seek to secure *productive* efficiency in other words that Qualifying ISPs should have an incentive to minimise the cost of processing CIRs.
- 3.10 The provision also implies that Ofcom should seek to ensure *allocative* efficiency that as far as possible, the charge to Copyright Owners for processing a CIR should reflect the specific costs incurred in processing. This objective would ensure that CIRs are processed when the benefits of doing so exceed the costs. (Allocative efficiency is maximised when price equals incremental cost). In practice, the notification fee will need to reflect capital/fixed costs as well as incremental costs.
- 3.11 Ofcom is also required to seek to ensure that Qualifying ISPs recover 75% of their costs, although the phrasing of the relevant provision of the Costs Order clearly does not require that each Qualifying ISP should do so:

"In setting a notification fee, Ofcom shall have regard to the desirability of— ... (b) ensuring, as far as practicable, that the notification fees payable by all qualifying copyright owners in a notification period amount to 75% of the total costs incurred by all qualifying internet service providers calculated on the assumption that the total costs of each qualifying internet service provider are equal to OFCOM's estimate of relevant costs."¹⁰

3.12 This provision indicates that the notification fee should only cover the costs which the efficient ISP should incur; and secondly, that the requirement that 75% of Qualifying ISP costs are met by copyright owners should apply at the industry level, even if individual Qualifying ISPs are over or under-compensated as a result of the operation of the cost-recovery arrangements. This provision, and paragraph 1(6)(a) of the Schedule to the Costs Order quoted above are central to our proposed approach to the assessment of Qualifying ISP costs.

⁹Paragraph 1(6) of the Schedule to the Costs Order.

¹⁰Paragraph 1(6) of the Schedule to the Costs Order.

Question 3.1: Do you have any comments on the principles set out above; if you consider there are other economic principles to which we should have regard in setting fees, please identify these?

Scope of the Cost-Sharing Framework

- 3.13 The Costs Order covers five types of entity paying and/or incurring costs:
 - Qualifying Copyright Owners: Copyright Owners who, having elected to take advantage of the Initial Obligations, have provided an estimate of the number of CIRs they anticipate sending to Qualifying ISPs in advance of the notification period. A Qualifying Copyright Owner is responsible for paying a proportion of the costs incurred under the Code and the DEA amendments by Ofcom, the appeals body and by Qualifying ISPs.
 - Qualifying ISPs: these are ISPs which are subject to the Initial Obligations according to criteria set out in the Code. A Qualifying ISP receives payment from Qualifying Copyright Owners covering a proportion of the costs it will incur in complying with its obligations under the Code.
 - Ofcom, which must recover the costs it incurs executing its functions under the DEA amendments from Qualifying Copyright Owners.
 - The appeals body, which must recover the costs it incurs in handling appeals under the Code from Qualifying Copyright Owners and Subscribers.
 - Subscribers, who must pay a fee to make an appeal (the fee is refunded if the appeal succeeds)
- 3.14 There are four types of cost to be recovered under the cost sharing framework:
 - Qualifying Costs: the costs Ofcom and the appeals body incur in carrying out their functions under the DEA provisions and the Code.
 - Initial Costs: Qualifying costs incurred prior to the beginning of the first notification period: for example, the costs of making the Code and establishing the appeals body.
 - Relevant Costs: the costs which Ofcom estimates a Qualifying ISP will reasonably and efficiently incur in carrying out the Initial Obligations in accordance with the Code.
 - Appeal Costs these are the costs that the appeals body will incur in processing and determining appeals brought by subscribers.
- 3.15 These costs will be recovered by the following fees:
 - Notification Fee: the payment a Qualifying Copyright Owner must make to a Qualifying ISP for processing a CIR under the Code.
 - Fees for Qualifying Costs: the payment Qualifying Copyright Owners must make in respect of the Qualifying Costs which Ofcom estimates will be incurred in a notification period.

- Fees for Initial Costs: the payment Qualifying Copyright Owners must make in respect of the Initial Costs incurred before the beginning of the first notification period
- Subscriber Fee: the fee that a subscriber must pay for each notice of appeal s/he submits to the appeals body.
- Case Fee: the charge through which the appeals body recovers the costs of processing and determining subscriber appeals from Qualifying Copyright Owners.
- 3.16 In the draft Code published on 26 June 2012 Ofcom set out criteria to determine which ISPs will be Qualifying ISPs for the first notification period. The ISPs which currently satisfy the proposed criteria are BT, TalkTalk Group, Virgin Media, BSkyB, Everything Everywhere and O2. The remainder of this consultation is therefore concerned exclusively with these six ISPs, although, as noted, we might need to revise our proposals in the event that the threshold criteria change as a result of responses to the draft Code.

Operation of the Cost-Sharing Scheme

- 3.17 The core duties of Qualifying ISPs under the Code are to:
 - process CIRs, which are made to them by Copyright Owners. This processing involves identifying the individual subscriber whose account is the subject of the CIR and, if the Code requires, notifying the subscriber of the report made;
 - provide a copyright infringement list (CIL) to Copyright Owners on request. This requires the Qualifying ISP to keep a record of the CIRs it receives and the notifications that it sends so that it is able to provide, in accordance with the Code, aggregated, anonymised information in the CIL of those subscribers whose accounts have been linked to multiple reports of copyright infringements.
- 3.18 The activities which Qualifying ISPs undertake under the Code, and the costs of those activities, are the subject of the discussion in Sections 6 and 7 below. What is important for the operation of the cost-sharing scheme is the planning process in which prospective levels of activity under the Code are established.
- 3.19 That planning process is triggered by the provision of estimates of the number of CIRs to be sent by a copyright owner to a Qualifying ISP in a notification period. A Copyright Owner must provide an estimate to each Qualifying ISP to which it proposes to send CIRs in order to take advantage of the scheme, and a Qualifying ISP is only obliged to process CIRs which it receives and which are covered by a prior estimate from the originating Copyright Owner.
- 3.20 With the exception of the first notification period, estimates must be provided two months in advance of the notification period, which will run for a year beginning on 1stApril.¹¹ The length of the first notification period is to be determined by Ofcom it will start on a date set by Ofcom and will end on either March 31 2015 or March 31 2016.¹² Likewise the time by which estimates for the first notification period must be

¹¹ See paragraph 2(2) of the Schedule to the draft Code and the definition of "notification period", article2 of the Costs Order.

¹² See definition of "first notification period", article 2the Costs Order.

provided is to be determined by Ofcom.¹³ We set out our proposals in relation to the time needed for the planning process for the first notification period, including its start and end dates, in Section 4. The estimates from each Copyright Owner to each Qualifying ISP are central to the determination of fees and sharing of costs among Copyright Owners and Qualifying ISPs. A Copyright Owner's share of both Relevant and Qualifying Costs is determined by the number of CIRs which they estimate they will send in a notification period;¹⁴ a Qualifying ISP's costs are driven by the volume of CIRs it is required to process in a notification period, and its income by the level of CIRs it is estimated it will receive in that period.

3.21 This process also means that the operation of the Initial Obligations scheme as a whole depends on Copyright Owners' free decision to participate – to provide estimates, and in consequence to commit to pay for the processing of those CIRs. The fact that the scheme depends on a voluntary commitment made by Copyright Owners prior to the start of each notification period has material implications for the approach taken to cost recovery under the Order. In general, it will tend to mean that sunk costs (such as set-up costs) should be recovered quickly in order to ensure that they are recovered with certainty. This issue is covered in more detail in relation both to Qualifying Costs (Section 5) and ISP capital costs (Section 6).

Treatment of Qualifying Costs and Initial Costs

- 3.22 As noted above, Qualifying Costs and Initial Costs are the costs incurred by Ofcom in making and enforcing the Code, and in executing its reporting duties under the DEA amendments.¹⁵ It also includes those appeals body costs which are not recovered through the case fee and subscriber fees (such as the costs of establishing the body).
- 3.23 It will not be a complex task either to determine what costs Ofcom has already incurred in setting up the scheme, or to project the costs likely to be incurred by Ofcom in overseeing the scheme. Our outline of the activities that we are undertaking in order to fulfil our duties under the DEA amendments and the costs that they give rise to are set out in Section 5. However, we must resolve an ambiguity around the costs incurred by the appeals body in making determinations, which would appear to be eligible to be recovered either through the Qualifying Costs mechanism or through Case and Subscriber Fees. This is discussed briefly in paragraphs 3.40 and 3.41and in more detail in Section 5.
- 3.24 In addition, we will need to determine whether to make provision for the costs of the report on Technical Obligations (under which Qualifying ISPs would be required to act against infringers), and which the Secretary of State can commission from Ofcom under Section 124G CA 2003.
- 3.25 We do propose to include provision for the Technical Measures report in our estimate of Qualifying Costs in for 2013/2014, as set out in paragraph 5.10-11 below, as we consider this is the earliest period during which Government might request we undertake the work, and we must have provided in advance for funding in order to be able to respond to such a request.

¹³ See paragraph 2(2) of the Schedule to the draft Code.

¹⁴ See paragraphs 3 and 5(3) of the Schedule to the Costs Order.

¹⁵ See the definitions of "qualifying costs" and "relevant copyright infringement provisions" in article 2 of the Costs Order.

3.26 In contrast, the calculation of the amounts to be charged to individual copyright owners in respect of Qualifying and Initial costs is less straightforward. Qualifying Costs are to be recovered from Copyright Owners in proportion to their share of the total estimated volume of CIRs in the relevant notification period. This is also the case for the recovery of Initial Costs, save that they are calculated on the basis of shares of the total volume of estimated CIRs for the first two notification periods. In principle, this should be a relatively simple allocation framework. However, it is made more complex for participating Copyright Owners because the share of Qualifying and Initial Costs for which an individual Copyright Owner will be liable will depend on the number of CIRs the individual Copyright Owner estimates it will send and on the number of CIRs other Copyright Owners estimate they will send. Hence, each Copyright Owner must make an estimate of CIRs without certainty as to what that will mean in terms of the share of the Qualifying Costs and Initial Costs that it must bear as a result. This is illustrated in Figure 1 below:

	CO A	CO B	All COs
CIR Estimate	1 m	9m	10m
% of all CIRs	10%	90%	100%
Initial and Qualifying Costs	£1m	£9m	£10m

Scenario 1

Scenario 2

	CO A	CO B	All COs
CIR Estimate	1 m	1m	2m
% of all CIRs	50%	50%	100%
Initial and Qualifying Costs	£5m	£5m	£10m

- 3.27 In these two scenarios, Copyright Owner A makes the same estimate of the number of CIRs it proposes to send during a notification period; but faces different levels of Qualifying Costs as a result of the choices made by other Copyright Owners.
- 3.28 There is a similar issue which arises because Qualifying ISP fixed costs (largely capital costs) are recovered in broadly the same way: by reference to each individual CO's CIR estimates and the total volume of CIRs estimated in the relevant notification period. The higher the total number of CIRs, the lower the notification fee will be for each individual CIR, as the fixed expenditure included in Relevant Costs will be shared across a larger number of notification fees.
- 3.29 In both cases, this means that an individual Copyright Owner will not initially be able decide how many CIRs it wishes to send at a known price per CIR: because the price is determined by the number of CIRs it estimates *and* the number that all other participating Copyright Owners has estimated.

- 3.30 In order to address these issues, Ofcom proposes to adopt an iterative approach to establishing Copyright Owner estimates of CIRs and hence the charges which each CIR will attract. This approach, which is intended to improve Copyright Owners' ability to determine their demand for CIRs in light of the likely costs of those CIRs by revealing information about the level of industry demand, is discussed in Section 4.
- 3.31 As regards payment, the Costs Order requires that fees based on Qualifying Costs should be charged to participating copyright owners in respect of each notification period.¹⁶ The actual payment schedule will be determined by Ofcom, but we anticipate that payment will take place at the start of, or during, the notification period. The Costs Order also includes specific provision for Initial Costs to be recovered over the first and second notification periods;¹⁷ this is discussed in detail in Section 5.

Treatment of Relevant Costs

- 3.32 Under the Costs Order, Relevant Costs are intended to be allocated
 - in a 75:25 split between Copyright Owners and Qualifying ISPs
 - to individual Copyright Owners and Qualifying ISPs on the basis of individual estimates of the volume of CIRs which are estimated to be sent or received (respectively) over the forthcoming notification period
- 3.33 As it is Qualifying ISPs which incur Relevant Costs, the only payment required is from Copyright Owners to Qualifying ISPs; the costs split arises because the payment is set so as to cover only a proportion of the costs an Qualifying ISP incurs. Ofcom must determine a notification fee which each Copyright Owner must pay each Qualifying ISP before the beginning of a notification period, for each CIR the Copyright Owner estimates it will send. The notification fee is set so as to yield the desired split of costs between Copyright Owner and Qualifying ISPs.
- 3.34 There are a number of differences between the approaches to Qualifying Costs and Relevant Costs. The most important of these is that Relevant Costs in the cost-sharing scheme are not intended to reflect the costs that any individual Qualifying ISPactually incurs, but rather the "*costs which would be reasonably and efficiently incurred by a notional qualifying internet service provider*"¹⁸. In other words, Ofcom is required to determine what it *should* cost an efficient ISP to deliver the obligations, and, through the cost-sharing scheme, ensure that individual ISPs are compensated only on that basis.
- 3.35 Ofcom commissioned an independent study from consultants BWCS Ltd intended to help it determine what the efficient costs should be; a version of the study, redacted to maintain the contributing ISPs' commercial confidentiality requirements, is included at Annex 7. Ofcom is required to set a notification fee so as to cover 75% of an efficient ISP's costs; we have used BWCS' analysis as the basis for our proposals for the costs that would be reasonably and efficiently incurred by a Qualifying ISP in carrying out the Initial Obligations.

¹⁶ See paragraph 3(1) of the Schedule to the Costs Order.

¹⁷ See paragraph 4 of the Schedule to the Costs Order.

¹⁸See article 2 of the Costs Order

- 3.36 In order to set notification fees to recover Relevant Costs we must determine four distinct questions:
 - Is there more than one relevant model of efficient costs for carrying out the Initial Obligations and hence more than one model of Relevant Costs on which to base a notification fee)?
 - For each model, what are the efficient capital and operating costs?
 - Over what period should the efficient capital costs of ISPs be recovered through the Fee one or more than one notification period?
 - Even if there is only one model of Relevant Costs, are there nonetheless different descriptions of Qualifying ISP for which different notification fees should be set?
- 3.37 Our proposals in response to each of these questions are set out in detail in Sections 6 and 7.
- 3.38 The assessment of the operating costs of carrying out the Initial Obligations, depends on certain *operational variables*, for example:
 - the ratio of CIRs to letters: not all CIRs will result in a notification being sent to a subscriber; those that do cost considerably more to process than those that do not, so this ratio is an important determinant of the average costs of processing a CIR;
 - the ratio of subscriber notifications (letters) to subscriber calls to the ISP's customer team: handling a call is very expensive compared to the cost of mailing a letter, so the greater the proportion of letters resulting in a call, the greater the total costs will be which arise from sending a letter.
- 3.39 The quantification of these operational variables is uncertain prior to the first notifications being sent; in Section 7 we set out our proposed estimates of these variables and how we propose to use these estimates to calculate the variable cost element of processing a CIR.

Treatment of Appeals Body Costs

- 3.40 The costs of establishing the appeals body are included within the Initial Costs; the costs the appeals body will incur during a notification period can be recovered through the Qualifying Costs fee; in addition, a copyright owner is required to pay the appeals body a case fee for each appeal relating to a CIR it submitted. Finally, the Order requires that subscribers pay a fee of £20 to give notice of an appeal, although this is refundable in the event the appeal is successful.
- 3.41 The level of appeals body costs to be recovered through the Qualifying Costs charges are those which remain after allowance has been made for income from the case fee and subscriber appeals fees. The level of the case fee will be determined by the appeals body, subject to Ofcom's approval, after the body has been established, and when we have a clear picture of the likely level of activity under the Code. Notwithstanding uncertainty about the costs and scale of activity of the appeals body, Ofcom must determine now whether there should be any provision for appeals body costs to be recovered through the Qualifying Costs charges. For the reasons set out in paragraphs 5.13-16, we propose that the all ongoing appeals body

costs should be recovered through the case fee and subscriber appeal fee, and none through the Qualifying Costs charges applied to Copyright Owners.

Section 4

Process and Timetable

Introduction

- 4.1 This section provides more detail on the processes through which the cost-sharing arrangements will be finalised, and how the operations under the scheme the reporting of CIRs and the sending of notification letters will get under way.
- 4.2 There are two aspects of these processes on which we raise specific questions in this section: the process through which Copyright Owner estimates of CIR volumes and the consequent levels of notification fees are finalised; and the timetable from the publication of this consultation to the commencement of scheme operations.

Establishing CIR Estimates and Costs

- 4.3 As we have explained in Section 3, in order to benefit from the provisions of the DEA, it is necessary for Copyright Owners to make estimates, prior to the beginning of a notification period, of the number of CIRs they will send to each Qualifying ISP during that notification period. Under the Code, these estimates will create a legally binding duty for the Copyright Owner to pay its share of Qualifying (and Initial) Costs to Ofcom, and to pay notification fees to Qualifying ISPs. Ofcom must determine the level of these fees.
- 4.4 The amount an individual Copyright Owner must pay to send a CIR is determined by the number of CIRs it estimates it will send to Qualifying ISPs in a notification period: Copyright Owners will face a per-CIR charge comprised of a share of Qualifying Costs and a notification fee for each CIR. Unfortunately, the level of this per-CIR charge depends in part on the total volume of CIR estimates across all Copyright Owners. Clearly, we cannot expect Copyright Owners to commit to estimates of CIR volumes unless they know what the cost of a CIR will be; but the cost of a CIR depends on the total number of estimated CIRs.
- 4.5 We propose to approach this circularity through an iterative process:
 - 1. At the conclusion of this consultation process, we will publish fee tables, illustrating the cost per CIR for a range of industry volumes
 - 2. Each Copyright Owner will be asked to submit proposed volumes of CIRs for each Qualifying ISP
 - 3. Of com will determine and publish the consequent fees and inform Copyright Owners of their individual liabilities
 - 4. Copyright Owners will accept the levels of cost and CIR volumes; or will reject them
- 4.6 If COs do not agree the tariffs proposed the tariff estimation process will be repeated (steps 2 4 will be repeated). We expect that the variation in fees and CIR prices will reduce in scale with each iteration as Copyright Owners gain more information on total industry demand. The process is designed to provide Copyright Owners with as much information as possible on the level of industry demand for CIRs, which is a key determinant of each Copyright Owner's costs. The process is also designed to

limit the complexity of the process by requiring a simple single decision from Copyright Owners in each round. Alternative approaches where Copyright Owners are asked to reveal their full demand curve (i.e. their demand for CIRs at a number of different price levels) would increase the complexity of the process and Ofcom's role in determining the tariff. Our proposed approach is intended to maximise the likelihood that CIRs are sent and processed, while allowing Copyright Owners to make estimates of CIRs with a reasonable degree of confidence as to the likely cost of those CIRs.

4.7 If the process involves more than one round industry demand will either converge to a lower tariff as Copyright Owners revise up their demand for CIRs or to a higher tariff as Copyright Owners revise down their demand for CIRs or drop out of the process. In the event that industry demand for CIRs reduces across multiple rounds (leading to successively higher prices) the process could fail. This would reflect a valuation of the benefits to Copyright Owners of sending CIRs which is below the costs of operating the scheme. Given it is a voluntary scheme for Copyright Owners, Ofcom may not be able to avoid this outcome. Annex 6 provides a more detailed account of the tariff-setting process.

Question 4.1: Do you have any comments on the proposed process for establishing CIR estimates and costs; do you have evidence which would suggest that a different process should be adopted?

The First Notification Period: Start and End Dates

4.8 The period over which a notification period runs is defined as follows:

""first notification period" means the period beginning on a day determined by OFCOM in accordance with the Code and ending on 31st March 2015 or 31st March 2016 as determined by OFCOM;...

"notification period" means—

- (a) the first notification period; or
- (b) any subsequent period of twelve months beginning on 1st April;¹⁹
- 4.9 At the conclusion of the estimate and tariff-setting process outlined above, Ofcom, and all Qualifying ISPs and Copyright Owners will have a picture of costs and volume of activity during the prospective (first) notification period. Specifically
 - Each Qualifying ISP will know the number of CIRs each Qualifying Copyright Owner proposes to make to it, and of the notification fee income it will receive from each Copyright Owner
 - Each Copyright Owner will know how many CIRs it has estimated it will send to each Qualifying ISP; how much it must pay each Qualifying ISP in notification fees; and how much it must pay Ofcom to cover Initial and Qualifying costs

¹⁹Article 2ofthe Costs Order.

- 4.10 For the second and subsequent notification periods, this process will be completed two months before the beginning of the notification period in other words, in January for the notification period starting in April.
- 4.11 However, this is not an appropriate timetable for the first notification period for three reasons:
 - An appeals body must be established, and ready to determine appeals before any notifications are sent to subscribers.
 - Qualifying ISPs must have completed their preparatory investment in processing systems before they can actually process CIRs
 - Ofcom must have approved Copyright Owner detection processes as compliant with the Publicly Available Standard we are proposing to commission
- 4.12 For the reasons set out in paragraphs 4.16-31 below, each of these processes will take longer than two months, and the first two require that Copyright Owner estimates be finalised before they begin. We believe that the earliest date by which these processes can reasonably be expected to be complete is the end of October 2013. We further consider that we should provide a further four months of contingency to allow for delays in any of the processes which must be completed to achieve the October target including those above and the necessary Parliamentary approvals; and to provide for a period of technical trials for the end-to-end CIR processing systems (the integration of Copyright Owner and Qualifying ISP systems).
- 4.13 Ofcom must determine under the Costs Order when the first notification period should begin, and whether it should end on the 31st March 2015 or 31st March 2016.²⁰ On the basis of the evidence and considerations above, we propose that the first notification period should start on the 1st March 2014.
- 4.14 In the event that ISP and CO systems are completed on a timetable which would allow an earlier start date, and that other sources of delay do not arise, we would be open to revising the start date.
- 4.15 We consider that the period should end on the 31st March 2015, rather than 31 March 2016, as this will limit the period in relation to which Copyright Owners must make estimates (and hence financial commitments) to 13 months.

Timetable for establishing the appeals body

- 4.16 The DEA provides that 'there is a person who, under the code, has the function of determining subscriber appeals'.²¹ It also requires that for practical purposes the person is independent of copyright owners, Qualifying ISPs and Ofcom.²² It falls to Ofcom to establish such a body so that it is ready to process subscriber appeals as soon as the first notifications are sent to subscribers.
- 4.17 The timetable for establishing the appeals body involves two consecutive tasks. First, Ofcom must conduct a tender process to appoint a person to run the body.

²⁰ See definition of "first notification period" in article 2 of the Costs Order.

²¹ Section 124K(2)(b) DEA.

²² Section 124K(2)(b) DEA.

Second, that body must undertake preparatory work to ensure it is ready to process subscriber appeals at the beginning of the first notification period.

- 4.18 The tender process for the appeals body will take a minimum of five months. This is because the potential value of the tender and Ofcom's status as a public body require us to proceed through the OJEU procurement process, under which details of the tender must be published in the Official Journal of the European Union, and which provides for certain minimum notice periods as part of the tender process. At the end of the process we will be able to award the contract to provide the appeals body.
- 4.19 We can only begin the appeals body tender process once both the statement on this costs consultation, the final tariff and estimates have been published, and Copyright Owners have therefore given clear indications of their intended CIR volumes. We need firm commitments from stakeholders to understand the potential scale of subscriber appeals, to better inform the tender specification, and to minimise the risk that potential bidders may be put off by uncertainty as to the scale of appeals. We therefore propose to issue notice of the tender shortly after receiving firm commitments on CIR volumes in February 2013.
- 4.20 Once the tender process is complete and we have appointed the appeals body, we have allowed a further period for the successful bidder to set up the appeals body and undertake necessary preparatory work. This will include:
 - securing premises, hiring staff and developing internal systems and procedures (e.g. for processing appeals, communicating with Copyright Owners and Qualifying ISPs);
 - drafting guidance on its approach to subscriber appeals; and
 - developing a reporting framework to provide biannual reports to Ofcom summarising its findings.
- 4.21 In addition to these tasks, Ofcom must approve the procedural rules of the appeals body. We expect that this preparatory work will take no more than four months. Consequently, we expect that an appeals body will be ready and operational by November 2013.
- 4.22 Although this is a feasible timetable, it is challenging, and relies on the provision of a credible and satisfactory and appeals body proposal from an existing service provider. In the event that we are not able to appoint an external provider, Ofcom would need to establish a new body to undertake appeals. This would be likely to lead to delay in the overall timetable, as we consider the creation of a wholly new body by Ofcom would involve a longer timetable and in addition require a greater level of initial investment

Question 4.2: Do you have any comments on the proposed process or timetable for establishing the appeals body

Timetable for Qualifying ISP Capital Expenditure

4.23 In order to deliver their obligations under the DEA, Qualifying ISPs are likely to have to invest in systems to enable large-scale processing of CIRs. We believe that this requirement is likely to apply to all Qualifying ISPs, for the reasons set out below in

Section 6 where we discuss the findings of the BWCS study relating to Qualifying ISP capital investment. In the subsection below we consider the period over which this investment will take place. There are two questions: when Qualifying ISPs can be expected to start investment, and how long it should take before large-scale processing can begin?

- 4.24 Qualifying ISPs do not have any obligations under the DEA until the Code has actually come into force; it would be unreasonable to expect them to commit investment prior to that point. As set out in the timetable below, we expect the Code to come into force in January 2013. However, the Code's being in force does not necessarily mean that a Qualifying ISP will be required to act; Qualifying ISP obligations become concrete only if a Copyright Owner has made an estimate of the number of CIRs it will send to that Qualifying ISP over a prospective Notification Period.
- 4.25 Furthermore, it is only when such an estimate has been made under the Code that Copyright Owner estimates will give rise to a legally binding financial liability, so that Qualifying ISPs have a legal entitlement to receive payment for processing CIRs. As indicated in the timetable below, the process of finalising Copyright Owner estimates (and hence determining the payments due to Qualifying ISPs from Copyright Owners) takes place immediately after the Code comes into force. We therefore propose that the timetable should assume that Qualifying ISP capital investment starts after the estimates are finalised, in February 2013.
- 4.26 As part of the study conducted by BWCS, we asked ISPs how long it would take to establish the systems required for large scale processing of CIRs. There was a fairly consistent view expressed that this should take 6-12 months, with 9-12 months the most frequently provided estimate; in particular, the requirement to make changes to the core Customer Relationship Management (CRM) systems, which hold personal identity data, was identified as being complex and time-consuming. These are large-scale legacy systems, changes to which require careful handling, and typically involve significant planning and preparation with long forward planning schedules.
- 4.27 A number of ISPs responded to Ofcom's Code consultation on this issue, suggesting a wider range of periods notably, Sky suggested 4 months would be adequate; however, this was in the context of an assumption that the initial operation of the scheme would be prior to the establishment of wholly automated systems. We do not currently anticipate there will be a separate period of low volume activity; and therefore rely on the later, more detailed timetable information provided by ISPs to BWCS.
- 4.28 Although we agree it is reasonable that Qualifying ISP capital investment cannot reasonably be expected to start until Copyright Owner commitments have been made, it is equally reasonable that Qualifying ISPs should plan for investment to start immediately such commitments are made. ISP arguments about the difficulty in scheduling changes to CRM systems, and their long planning lead time, which were advanced to support the higher estimates of the period before processing should begin, may therefore hold less weight.
- 4.29 We propose that, for the first notification period, Qualifying ISPs should have 9 months to prepare for CIR processing from the point at which Copyright Owner estimates are finalised, and that this will allow the first notification period to start on March 1 2014.

4.30 It is possible that Qualifying ISPs and Copyright Holders could reach a voluntary agreement under which ISPs agree to start early investment in CIR processing systems. If they are able to do so, it might be possible to start the first notification period at an earlier date, although the establishment of the appeals body would also need to be completed more quickly than we currently expect. Evidence that such agreement has been reached would therefore be of particular interest in relation to the prospective timetable.

Question 4.3: Do you agree that Qualifying ISPs should have 9 months from the point at which estimates are finalised to prepare for the operation of the DEA scheme?

Question 4.4: In light of the evidence above, do you agree that the first notification period should start on March 1st 2014 and end on March 31 2015; do you have evidence which would suggest that different dates are feasible and preferable?

Timetable for Payment

4.31 The final timetable issue relates to the point at which Copyright Owners must pay Qualifying and Initial Costs to Ofcom and notification fees to Qualifying ISPs. (The appeals body will determine how case fee charges will be paid)

Payment of notification fees

- 4.32 The Costs Order provides that notification fees must be paid to the Qualifying ISPs on or before the first day of each notification period.²³ Notification fees for the first notification period must therefore be paid on or before the 1st March 2014.
- 4.33 This may mean that Qualifying ISPs will have to fund their capital investment up to the beginning of the notification period, as Copyright Owners cannot be obliged to make payment any earlier; however, it is also the case that the Qualifying ISPs will receive payment for CIR processing in advance, even though the costs of processing are incurred during the notification period, through to the end of March 2015.

Payment of Initial costs

4.34 The Costs Order provides that in respect of the Initial Costs, Ofcom must notify each qualifying Copyright Owner of the amount apportioned to it and the date by which such amount must be paid, at the start of the first and second Notification Periods²⁴. As the Initial Costs will have already been incurred at the time of billing, Ofcom will require their payment shortly after the start of the first and second notification periods.

Payment of Qualifying costs

4.35 The Costs Order makes similar provision for the payment for fees for Qualifying Costs as for the Initial Costs.²⁵ In general, where it is recovering its costs from stakeholders, Ofcom tries to reflect the timetable over which its costs are incurred;

²³ See paragraph 2(1) of the Schedule to the Costs Order.

²⁴ See paragraph 4(5) of the Schedule to the Costs Order.

²⁵Paragraph 3(2) of the Schedule to the Costs Order.

we therefore propose that the Qualifying Costs will be recovered through 4 payments, one at the beginning of each quarter of the notification period.

Question 4.5: Do you agree with the proposed industry payment schedules for fees in respect of Initial and Qualifying Costs.

Overall Process Timetable

4.36 This is the anticipated overall timetable for the process, reflecting the proposals we have set out above:

June 2012	Costs Order consultation opens
September 2012	Costs Order consultation closes
Dec 2012 to Jan 2013	Initial Obligations Code in force Costs Order statement of tariffs CIR volume estimation Cost sharing finalised and charges set
February 2013	ISP build starts
October 2013	ISP build ends
March 1 2014	Notification Period begins

4.37 It is critical to note that material risks remain in the implementation process, and furthermore that some of these dates are themselves subject to the outcome of this consultation. Ofcom will continue to monitor progress and adjust this timetable – if possible to make implementation quicker; if necessary to provide for unavoidable delays.

Section 5

Qualifying Costs and Initial Costs

Introduction

5.1 This section provides more detail on the arrangements through which Initial Costs and Qualifying Costs are to be recovered from Copyright Owners, and sets out our proposals in respect of the fees to be charged for Qualifying and Initial Costs during the first notification period.

Recovery of Qualifying Costs

5.2 Qualifying Costs are defined in the Costs Order as follows:

""qualifying costs" means the costs incurred by OFCOM or the appeals body in carrying out functions under the relevant copyright infringement provisions including costs incurred by OFCOM under those provisions in appointing the appeals body or in establishing a body corporate to be the appeals body but excluding costs incurred by the appeals body to the extent they are recoverable from fees payable to the appeals body;"²⁶.

""initial costs" means the qualifying costs incurred prior to the start of the first notification period including any such costs incurred prior to the making of the Code;"²⁷

- 5.3 Of com began to incur Initial Costs following Royal Assent to the Digital Economy Act, when Of com's obligation to make the Code came into force.
- 5.4 Initial Costs are (predominantly) a fixed, sunk cost, and the Costs Order makes special provision for their treatment. The Costs Order requires that Initial Costs are to be fully recovered in the charges to Qualifying Copyright Owners for the first notification period.
- 5.5 The fact that the full amount of Initial Costs are recovered in the first period may create an incentive for Copyright Owners to wait until the second notification period to join the scheme. In order to encourage participation by Copyright Owners from the outset (and thereby increase the likely effectiveness of the notification scheme) the Costs Order therefore requires that Initial Costs should be shared between all copyright owners which participate in the first or second notification period. Accordingly, the Initial Costs charge in the second notification period will be set so that Initial Costs are shared among all participating Copyright Owners across both notification periods, in proportion to the total volume of CIRs across the two periods.
- 5.6 A Copyright Owner which participates in both notification periods may therefore receive a rebate of Initial Costs in the second notification period if its proportionate share of CIRs volumes is lower across the two periods than its share of CIR volumes in the first notification period. The detailed consequences of this provision will be explained as part of the tariff-setting exercise for the second notification period.

²⁶Article 2 of the Costs Order

²⁷Article 2 of the Costs Order

5.7 In the event that there is an underspend or overspend relative to forecast Qualifying Costs in a notification period, Ofcom will reflect the surplus or deficit in calculating Qualifying Costs for the following notification period

The Initial Costs

5.8 The Initial Costs are Qualifying Costs incurred from Royal Assent of the DEA until the beginning of the First notification period (by Ofcom and by the appeals body). The full timetable for the establishment of the scheme is proposed in Section 4; on the basis of that timetable, Initial Costs will be incurred up to February 2014.

Initial Costs incurred by Ofcom

2010/11	2011/12	2012/13	2013/14 (to Feb)	Total
£1.8m	£0.7m	£1.6m	£3.1m	£7.1m

- 5.9 The activities funded by this expenditure are
 - The process of consulting upon and finalising the Code which gives effect to the Initial Obligations.
 - The process of consulting upon and finalising the arrangements for sharing of costs incurred in establishing and operating the DEA online copyright infringement scheme.
 - The development of a baseline of the levels of online copyright infringement in the UK, to ensure that the impact of the Initial Obligations can be accurately assessed.
 - The development of quality assurance standards for Qualifying ISPs' and copyright owners' evidence gathering and CIR processing systems.
 - The selection and appointment of an appeals body.
 - The establishment of the appeals body, including the development of appeals handling processes, and the publication of guidance (including£700k of spend by the appeals body)
 - Administration of the Code up to the beginning of the first notification period
 - These costs include a total provision of £2.3m for spend external to Ofcom, covering research for Ofcom's reporting duties, the report on ISP Costs, research in support of the Technical Measures report; and the setting up of the appeals body.
- 5.10 As noted in Section 3, Ofcom must determine whether its estimate of Qualifying Costs should provide for the drafting of a Technical Measures Report. The Secretary of State has the power under section 124G CA 2003 to direct Ofcom to prepare a report assessing whether technical obligations²⁸ should be imposed on

²⁸ Technical obligations are obligations for an ISP to take technical measures, such as bandwidth throttling, website blocking and internet access service suspension, against subscribers whose accounts are linked to CIRs – see section 124G(2) and (3) CA 2003.

Qualifying ISPs and what steps might be needed to prepare for those obligations. Furthermore, the Secretary of State must have obtained such a report and taken it into account before exercising the power to make an order under section 124H CA 2003 to impose technical obligations on Qualifying ISPs. Such an order can be made a year after the Code has come into force. Given this, and on the assumption that the Code will come into force by the end of 2012, it is feasible that the Secretary of State will request Ofcom to provide a report under 124G CA 2003 before the end of the first notification period.

5.11 In order to ensure that Ofcom is in a position to fulfil this obligation, we have included an allowance for the Technical Measures report in the estimate of 2013/14 Initial Costs.

The Qualifying Costs: Ofcom

- 5.12 Alongside the Initial Costs, Ofcom must recover the costs it estimates it will incur during the first notification period through the fees for Qualifying Costs. We estimate that we will incur total costs of £3.3m²⁹ during the first notification period, running from 1 March 2014 to 31 March 2015. This will fund:
 - Reviews of Qualifying ISPs' and Copyright Owners' evidence gathering processes and procedures
 - Monitoring of the appeals body's performance
 - Reviewing the Code (in particular, the threshold criterion for Qualifying ISPs)
 - Handling complaints, disputes and enforcement
 - Ongoing engagement with government and stakeholders in relation to the operation of the Code
 - Setting a tariff for the 2015-2016 notification period
 - Reporting on levels of online copyright infringement
 - Within these costs, there is a total provision of £1.3m for external spend, covering research for Ofcom's reporting duties, and for input to the setting of a notification fee for 2015/16)

Question 5.1: Do you have any comments on the activities which we anticipate carrying out under the DEA amendments which will give rise to Qualifying Costs in the First notification period?

The Qualifying Costs: Appeals Body Costs

5.13 The definition of Qualifying Costs includes costs incurred by the appeals body "*in carrying out functions under the relevant copyright infringement provisions… but*

²⁹This compares to estimates of £3-6m per year made when the DEA received Royal Assent

excluding costs incurred by the appeals body to the extent they are recoverable from fees payable to the appeals body under paragraphs 6 and 7;"³⁰

- 5.14 The costs recoverable by the appeals body under paragraphs 6 and 7 are the subscriber fee and the case fee, and the case fee is set so as to ensure that "the aggregate amount of case fees and subscriber fees it retains are sufficient to meet but do not exceed the costs that the appeals body may incur in making determinations in that period (including the costs of handling and processing the subscriber appeals)." ³¹
- 5.15 The function of the appeals body is defined in the DEA amendments as "*determining subscriber appeals*"³²; we consider this to mean virtually all of the legitimate activity and costs incurred by the appeals body under the Code will be in making such determinations. In practice, the only activities which we anticipate the body will undertake during a notification period which cannot be attributed to determining subscriber appeals are:
 - an obligation to publish a summary of its determinations every six months; and
 - an obligation to update its guidance on its processes every twelve months
- 5.16 We do not consider these activities will attract material costs, and therefore intend that the full costs of the appeals body during a notification period should be met through the case fee, after making allowance for income from the subscriber fee. There will be no appeals body costs recoverable as part of the Qualifying Costs process.

Question 5.2: Do you agree with our proposed approach to the costs incurred by the appeals body during a notification period?

Total Initial and Qualifying Costs

5.17 We propose that the total costs to be recovered through the Initial and Qualifying Costs for the first notification period will be as follows

	Initia	Qualifyin	g Costs		
2010/11	2011/12	2012/13	2013/14	2013/14	2014/15
£1.8m	£0.7m	£1.6m	£3.1m	£0.1m	£3.2m

³⁰Article2 of the Costs Order.

³¹Paragraph 5(3) of the Schedule to the Costs Order.

³² Section 124K(2)(b) CA 2003.

Section 6

Relevant Costs: Qualifying ISP Capital Expenditure and Fixed Operating Costs

Introduction

- 6.1 The Costs Order requires that Ofcom set a notification fee, which Copyright Owners must pay for each CIR they estimate they will send to a Qualifying ISP. The notification fee must be based on Ofcom's estimate of Relevant Costs that is those costs which a Qualifying ISP will reasonably and efficiently incur in carrying out the Initial Obligations in accordance with the Code.
- 6.2 As noted in Section 3, Ofcom commissioned BWCS Ltd. to report on the likely levels of costs which Qualifying ISPs might incur in executing their functions under the Initial Obligations Code. A version of the report, redacted so as to preserve commercial confidentiality, is appended at Annex 7. This section, and the following one covering variable costs, should be considered in conjunction with the BWCS report, particularly Chapters 4 and 5.
- 6.3 The report examines the capital investment, fixed operating costs and variable costs which Qualifying ISPs may incur in processing large volumes of CIRs in carrying out the Initial Obligations and assesses the extent to which these are reasonably and efficiently incurred.
- 6.4 Drawing on the conclusions of the BWCS report, we set out in the rest of this Section our proposals as regards estimating the capital expenditure and fixed operating costs which should be treated as Relevant Costs for the purpose of setting a notification fee. Variable costs are considered below in Section 7.
- 6.5 The data provided to BWCS reflected current prices at the time of the study in Q3 2010. However, Qualifying ISPs will be incurring Relevant Costs over the period from Q1 2013 to Q2 2015. We have therefore adjusted the cost information to reflect our best estimate of inflation. Our inflation estimates are discussed below, and in Section 7 covering variable costs.

The provisions of the Order

6.6 Under the Order, Ofcom must determine Relevant Costs, defined as:

"...costs which would be reasonably and efficiently incurred by a notional qualifying internet service provider in carrying out its obligations under the relevant copyright infringement provisions."³³

6.7 Paragraph 1(4) of the Schedule provides an illustrative list of activities which may give rise to Relevant Costs. These include: IP address matching; generating and sending a notification to a subscriber; retaining records of CIRs; compiling CILs; and handling enquiries from subscribers. In addition, certain cost categories are

³³Article 2 of the Costs Order.

expressly excluded from Relevant Costs, including the opportunity cost of compliance with the Initial Obligations.³⁴

6.8 We must set a notification fee based on our estimate of Relevant Costs, having regard to the desirability of:

"(a) promoting efficiency in the exercise of rights and the performance of obligations under the copyright infringement provisions; and

(b) ensuring, as far as practicable, that the notification fees payable by all qualifying copyright owners in a notification period amount to 75% of the total costs incurred by all qualifying internet service providers calculated on the assumption that the total costs of each qualifying internet service provider are equal to OFCOM's estimate of relevant costs."³⁵

- 6.9 Finally, the Costs Order provides that Ofcom may set a different notification fee for different descriptions of Qualifying ISP.³⁶
- 6.10 In the light of these provisions, when considering the fixed costs that Qualifying ISPs may incur in carrying out the Initial Obligations, we have assessed:
 - whether a single model of costs applies to all Qualifying ISPs, and hence there is a single model of Relevant Costs on which to base a notification fee;
 - the period over which capital expenditure should be recovered through the notification fee;
 - for each model of costs, the fixed costs which should be treated as Relevant Costs within the meaning of the Costs Order; and
 - even if there is only one model of costs for Qualifying ISPs (as currently defined in the Code), whether there are different descriptions of Qualifying ISP within that group for which different notification fees should be set.

Determining the Relevant Costs: the costs model

- 6.11 For a single model of costs to apply, we consider that the Qualifying ISPs should have to make similar types of infrastructure investment in order to carry out the Initial Obligations and that their operational approach to executing the obligations should be broadly the same. If these considerations hold for all the Qualifying ISPs, a single model of costs for an efficient operator would be applicable: in other words, that the same model of Relevant Costs should apply to each of them.
- 6.12 In the first notification period, we expect there to be six Qualifying ISPs which will meet the qualification threshold which we are proposing to set in the Code. Of these, five contributed to the BWCS review. Each of these ISPs currently satisfies the qualification threshold of providing more than 400,000 broadband-enabled lines; however, there is significant variation in size, with the largest providing almost ten times as many lines as the smallest.

³⁴Paragraph 1(5) of the Schedule to the Costs Order.

³⁵Paragraph 1(6) of the Schedule to the Costs Order.

³⁶Paragraph 1(2) of the Schedule to the Costs Order.

- 6.13 The estimates of costs provided to BWCS by ISPs were requested to cover a wide range of potential volumes of CIRs to be processed from 10,000 to 200,000 per month with a base case assumption of 100,000 CIRs per month for each ISP. This was based on provisional indications from Copyright Owners of the number of CIRs they would like to send, although as the discussion took place in the absence of information about the level of costs Copyright Owners might face, the numbers provided were only indicative.
- 6.14 One Qualifying ISP, Everything Everywhere, did not provide information to the BWCS study, and, furthermore, has outsourced the operation of its access network to BT. However, we do not consider that this means Everything Everywhere should be considered as having a different model of efficiency for the purposes of assessing Relevant Costs. First, it can be expected to face the same operating costs required for CIR processing: the sending of letters, handling of subscriber contacts etc. There is no reason to expect that these activities would be subject to significant scale economies as a result of their being outsourced; this is supported by the fact that the Qualifying ISPs who did provide information to the BWCS study did not anticipate significant scale economies across the very broad range of activity described above.
- 6.15 Second, in relation to capital investment, we consider that EE will face broadly the same costs as the other Qualifying ISPs. We understand from EE that the outsourcing of their network remains in progress and that BT proposes to make wholly separate investment in CIR processing systems and infrastructure to enable Everything Everywhere to discharge its DEA obligations. These two reasons support the hypothesis that Everything Everywhere should face the same Relevant Costs as the other five Qualifying ISPs; and hence that a single model of Relevant Costs should apply to all six of the Qualifying ISPs for the first notification period.
- 6.16 In summary, it is clear from the information provided to BWCS that, while the five Qualifying ISPs have specified the fixed investment they propose to make in slightly different terms, their basic operational approach will be the same: to build fully automated databases/systems which will take electronic receipt of CIRs, to match them to subscribers, and send notifications as appropriate, and to ensure that the CIR data is linked to the core customer database and hence available to the customer service team for call-handling.
- 6.17 Furthermore, each of the Qualifying ISPs indicated that their approach to delivering their obligations under the DEA amendments would be the same across a broad spread of levels of activity the same capital expenditure and fixed operating expenditure would be required to process as few as 10,000 CIRs per month and as many as 200,000. This also tends to suggest that the differences in scale between the Qualifying ISPs are not sufficient to require different operational models for the Initial Obligations.
- 6.18 This is a contrast to the position which would hold for a small ISP below the qualification threshold proposed in the Code, and processing perhaps hundreds of CIRs monthly, for which investment in automatic CIR processing systems might be inappropriate, and which would fulfil DEA obligations (if they applied) in part though manual or ad hoc processes. For example, a small-scale ISP who provided input to BWCS indicated they would match CIRs to subscribers though a manual search of their IP allocation database.
- 6.19 The large ISPs who responded to BWCS suggested that the same investment would be required to support lower levels of activity than the base case: for example, investment in systems to provide customer infringement lists; or in systems to allow

customer service representatives to access subscribers' CIR records. ISPs also indicated to BWCS that fixed costs would remain broadly the same for processing CIRs at volumes higher than 200,000 CIRs/month. Based on the evidence provided to BWCS, we conclude that, for monthly volumes of CIRs between 10,000 and 200,000 per month a single model of Relevant Costs should apply to all Qualifying ISPs.

Determining the Relevant Costs: Low volumes of CIRs

- 6.20 The model of Relevant Costs, which is discussed above, was estimated for CIR volumes between 10,000 and 200,000 monthly with a base case of 100,000. Ofcom's continuing discussion with Copyright Owners about the likely levels of demand for CIRs now suggests that it is possible that monthly CIRs volumes at the smallest of the Qualifying ISPs may be below 10,000 per month, possibly as low as 2,500 per month.
- 6.21 We have therefore considered whether Relevant Costs might be different in the event that estimated CIR levels are significantly below 10,000 per month.
- 6.22 The five large ISPs who provided information to BWCS (i.e. excluding Everything Everywhere) indicated that investment in automation would be necessary even at levels of activity significantly below the low case of 10,000 CIRs per month, given the need to develop and maintain a customer CIR database, and develop systems to enable agents to access the data to handle customer calls.
- 6.23 BWCS did ask ISPs to consider whether it would be possible to undertake manual processing, unsupported by the levels of capital expenditure proposed for the automated systems. Although the BWCS report indicates that some ISPs did provide estimates of the costs of manual processing at levels of activity around 5,000 CIRs per month, the robustness of this data is questionable. BT, for example, said that although manual processing would be feasible, it would not be able to support the full range of DEA obligations under those circumstances. In particular, it did not believe it would be possible to support the provision of Copyright Owners with Copyright Infringement Lists; and that it would be impractical to provide their subscribers with access to the full lists of CIRs made against them (e.g. including those which did not result in a letter). One of the respondents which provided preautomation costs estimates proposed to communicate exclusively by text message, which would not satisfy the requirements of the Code; another, which provided an estimate for just over 1000 CIRs per month provided a cost per CIR which was inconsistent with its estimate of the cost to the business per annum. We therefore consider that these estimates do not provide a sufficiently reliable basis for establishing the costs of manually processing around 2,500 CIRs per month, and meeting the full range of ISP obligations under the Code, even at these low volumes of CIRs.
- 6.24 In summary, we do not have clear evidence on the likely cost model for a Qualifying ISP of processing smaller numbers of CIRs than the low case of 10,000 CIRs per month. It may be the case that ISPs with volumes below 10,000 CIRs per month would choose a different model of costs with less fixed costs and more variable costs. However, some of the evidence submitted to BWCS suggests that they may be unable to implement an entirely manual solution.
- 6.25 Estimating a model of relevant costs for CIR levels below 10,000 CIRs per month would require Ofcom to undertake a similar process to that taken to date. This process might find that an alternative approach, with lower fixed costs, might be more

efficient for individual Qualifying ISPs in year 1 of the scheme. However, Ofcom considers it likely that the scheme will run over a number of years over which it is likely that investing in fully automated systems will be more efficient for these ISPs. Furthermore, we consider that Copyright Owners are likely to wish to fund capital expenditure at ISPs to secure low processing costs and notification fees over more than one year of operation of the scheme even if a manual or partially manual scheme were to be cheaper in a single year.

- 6.26 The tariff process will allow Copyright Owners to decide whether to fund this capital expenditure for small Qualifying ISPs through the tariff process. If no CIR estimates are submitted for small Qualifying ISPs in year 1 they will not be required to participate in the scheme in that year.
- 6.27 We therefore propose that the single model of ISP costs should apply even if the level of CIR processing at a Qualifying ISP is as low as 2,500 CIRs per month. This is the lowest level of CIRs we anticipate a Qualifying ISP is likely to receive in the first notification period, following more recent discussion with Copyright Owners about potential demand for CIRs

Question 6.1: Do you agree that all initially Qualifying ISPs will face the same model of efficient costs in carrying out the Initial Obligations and hence should be treated as having the same model of Relevant Costs for the purpose of setting a notification fee? If not, please provide your reasons for that view.

Question 6.2: Do you agree that we should apply the full automated cost model to all Qualifying ISPs for the full range of monthly activity from 2,500 to 200,000 CIRs per month? Do you have evidence that an alternative approach to costs should be adopted for any levels of CIR activity; and any evidence about what costs should be for those levels?

Notification Fees: Period for recovery of capital expenditure

- 6.28 In assessing the fixed cost element of Relevant Costs for the first notification period, we will need to determine what proportion of the efficient ISP's set-up and capital expenditure should be recovered during that first notification period. For the purposes of their report, we asked BWCS to assume that capital expenditure would be recovered over a single period; however, this is an issue in relation to which Ofcom must exercise discretion.
- 6.29 To reflect the broad principle that the fees should reflect the underlying costs, we would ideally recover the capital costs over the full term of use of the capital assets their economic life. The investment in software development and integration has a potential economic life of several years and the hardware of at least 18 months, which would imply a recovery period of greater than one year.
- 6.30 However, at the point at which we are setting the fee, we will only have certainty that the scheme will operate for a single period, covered by the Copyright Owner estimates of CIR volumes. CO participation in the scheme in any subsequent notification period will remain subject to a voluntary commitment made shortly before the beginning of that later period.
- 6.31 This means that, whatever the potential economic life of the capital assets, when we set the fee we will only have certainty that they will be in use for a single notification period. In order to ensure that we meet the requirement that the notification fee should cover 75% of the Relevant Costs, and mitigate the risk that there may not be

any opportunity to recover capital expenditure in periods after the first, we therefore propose the notification fee for the first notification period should include 75% of ISP capital expenditure. ISPs will therefore recover their share of capital expenditure in the first notification period.

6.32 There is a risk that this incentivises gaming by Copyright Owners – encouraging them to wait until the second notification period to join the scheme. (It is for this reason that Costs Order provides for the Initial Costs – the set-up costs incurred by Ofcom and by the appeals body - to be recovered in the first period, and then reallocated across participating Copyright Owners in the second period if there is one. The Order does not allow this flexibility in relation to the notification fee.) Although this is a risk, we do not consider that it outweighs the requirement that 75% of ISP capital costs should be recoverable through the Notification Fee, and the possibility that this may not take place if costs are recovered over more than one year.

Question 6.3: Do you agree that the Relevant Costs for the first notification period should include 100% of ISP relevant capital expenditure?

Determining the Relevant Costs: Capital Expenditure

- 6.33 In this part of Section 6, we set out our proposal for the amount of capital expenditure and fixed operating expenditure to be included in the Relevant Costs. It is based upon, and should be considered alongside the BWCS Report, in particular Chapter 4, sections 4.1 to 4.7, and Chapter 5, section 5.3.
- 6.34 To set the capital and operating elements of the Relevant Costs Ofcom must
 - consider the costs which Qualifying ISPs proposed to us they would incur
 - exclude those costs which we do not consider to fall under the definition of Relevant Costs in the Order
 - make a determination as to what we consider "would be reasonably and efficiently incurred by a notional qualifying internet service provider in carrying out its obligations"
- 6.35 The initial estimates of capital expenditure provided to BWCS were as follows:

ISP	First Estimate of Capital Expenditure (£m)
ISP1	1.04
ISP2	1.07
ISP3	1.28
ISP4	1.85
ISP5	3.14

- 6.36 The estimates of capital expenditure provided by ISPs covered six broad areas, set out below:
 - development of systems to receive and process CIRs
 - development of systems to manage the infringement list and allow COs to interrogate it
 - developing Customer Relationship Management (CRM) systems and processes to inform customer service representatives in discussion with subscribers
 - developing websites to allow subscribers to see what information is held about them
 - the hardware, initial software licences and testing necessary to enable the above
 - development and delivery of training necessary to enable the above.
 - slippage of other projects
- 6.37 We agree with BWCS that all of these can be considered "*reasonably and efficiently incurred*"³⁷ and hence Relevant Costs, aside from one item. We consider "slippage of other projects" to be a cost "*of economic opportunities lost as a result of compliance with* [the initial obligations]"³⁸ and as such it must be excluded from our assessment of Relevant Costs, by virtue of paragraph 1(5)(c) of the Schedule to the Costs Order.
- 6.38 Secondly, one ISP suggested the systems they proposed to develop for IP address recording and matching systems to serve DEA obligations would also be used in servicing that ISP's obligations in responding to requests made to it under the Regulation of Investigatory Powers Act (and in relation to the Data Retention Directive). They proposed that 95% of the costs of this shared-use system should be allocated to DEA obligations, on the grounds that 95% of the IP address matching would be for the DEA a total of £1.7m.
- 6.39 The other ISPs indicated they did not believe it would be feasible or appropriate to operate shared systems for DEA obligations and for Data Retention Directive/RIPA requests. Furthermore, the capital expenditure proposed by the ISP which did wish to operate shared systems was markedly higher than the capital expenditure proposed by those which did not indicating that the development of shared infrastructure may be less efficient than a separate DEA system.
- 6.40 To test this further, we have considered what effect a different approach to cost allocation between DEA and Data Retention Directive/RIPA functions might have on the ISP's estimate of capital expenditure, compared to that of other ISPs: as BWCS point out, it is far from certain that the volume of IP matching requests is the correct basis for allocation there may be more CIRs, but RIPA requests may have different requirements in terms of timeliness, and of the complexity of data analysis and security required. As the IP matching database is asserted to be an essential investment for the fulfilment of both DRD and DEA obligations, we adopted BWCS suggestion of splitting the costs of the shared infrastructure equally, with 50%

³⁷ See article 2 of the Costs Order

³⁸ See paragraph 1(5)(c) of the Schedule to the Costs Order

ISP	Revised Estimate of Capital Expenditure (£m)
ISP1	1.04
ISP2	1.07
ISP3	1.28
ISP4	1.85
ISP5	1.33

assigned to the DEA as a Relevant Cost. The modified estimates of capital expenditure are as follows:

6.41 While this adjustment results in a material reduction in the capital investment proposed by the "shared DRD/DEA infrastructure" ISP, it is still the second highest of all the estimates provided. Accordingly, we consider that the development of shared infrastructure would not represent the most efficient model for fulfilment of the initial obligations.

Determining the Relevant Costs: Total Fixed Costs

- 6.42 Alongside capital expenditure, ISPs provided BWCS with projections for their fixed operating costs operating costs to be incurred independently of the total volume of CIRs to be processed. Details of the fixed operating costs are set out in section 4.5 and appendix 6.4 of the BWCS report. None of these costs items are considered ineligible as Relevant Costs.
- 6.43 Including both capital and fixed operating costs, ISP total fixed cost estimates are:

ISP	Total Fixed Costs (£)
ISP1	1.09
ISP2	1.32
ISP3	1.66
ISP4	1.73
ISP5	2.02

6.44 BWCS suggest that the lowest of these fails to account for legitimate Relevant Costs such as system quality assurance checks (an annual requirement under the Code) and general management, and that they do not consider it a reasonable estimate. We concur. The lowest reasonable estimate of fixed costs from the ISPs surveyed is therefore £1.32m. Similarly, we concur with BWCS that this lowest reasonable cost of £1.32m is the best estimate of the fixed costs for the notional efficient ISP.

- 6.45 This estimate was provided at Q3 2010, but the period for which we must estimate Relevant Costs will run from Q1 2013 until 2015, and the 2010 estimates must therefore be increased to reflect inflation. Applying the Services Producer Price Index from Q3 2010 to Q4 2011 (2.4%), and the Office for Budget Responsibility Consumer Price Index forecast for Q1 2012 to Q1 2014 (3.9%) brings the fixed costs for the notional efficient ISP to £1.4m
- 6.46 The total amount of fixed costs to be recovered through the notification fee will therefore be set at £1.05m (e.g. 75% of 1.4m) for each ISP which receives an estimate of CIRs.

Question 6.4: Do you agree with our assessment of the fixed costs which will be reasonably and efficiently incurred by a Qualifying ISP in carrying out the Initial Obligations? Do you have evidence to suggest amounts attributed to these costs may be incorrect?

Notification Fees: Unequal Recovery of Capital among ISPs

- 6.47 The fact that all of the Qualifying ISPs can be grouped together for the purposes of estimating Relevant Costs does not necessarily mean that we must set the same notification fee for all of them. The Costs Order allows Ofcom to set different fees for different descriptions of ISP and we consider that this allows us latitude to do so under that circumstance. Accordingly, the sub-section below considers whether more than one fee should be set.
- 6.48 The framework in the Order seeks to secure that the 75:25 division of costs between COs and ISPs should be achieved for all Qualifying ISPs collectively. In other words, the total amount recovered through the notification fee should, as far as possible, be equal to 75% of the total amount of relevant costs for all ISPs; leaving them to bear the remaining 25% (assuming they incur no more than the Relevant Costs).
- 6.49 However, this objective can be satisfied at an industry level, even if individual ISPs receive notification fee income higher or lower than 75% of their Relevant Costs. In particular, if we set a single notification fee to apply to all Qualifying ISPs, then each individual Qualifying ISP would recover the correct allowance for fixed Relevant Costs only if CIRs are equally distributed among Qualifying ISPs.
- 6.50 However, if each Qualifying ISP receives a different volume of CIRs, then the recovery of fixed Relevant Costs will be unequal, even though their costs are assumed to be similar. As noted in paragraph 6.12, there are significant differences in scale among the Qualifying ISPs in the first notification period; they can therefore be expected to receive significantly different volumes of CIRs. If CIRs are submitted to ISPs in proportion to their share of subscribers, larger ISPs will tend to be overcompensated for their relevant costs; smaller ISPs to be undercompensated.
- 6.51 The most recent data we hold on broadband subscriber numbers are set out in the table below; along with an indication of the proportion of relevant fixed costs³⁹ which each Qualifying ISP would recover if each received a share of CIRs equal to its share of subscribers:

³⁹ The tariff allows relevant variable costs to be recovered at 75% for all ISPs.

Qualifying ISP	Subscribers ⁴⁰ (Million)	% of Relevant Fixed Costs Recovered (If ISP share of CIRs = share of subscribers)
All QISPs	20	75%
ВТ	6.3	142%
Virgin	4.4	99%
TalkTalk	4.1	92%
BSkyB	3.9	88%
Everything Everywhere	0.7	16%
O2	0.6	14%

- 6.52 If each of the Qualifying ISPs receives a share of CIRs in such proportion, the largest might recover over 140% of its capital expenditure, and the smallest less than 20% even though the industry-wide figure is 75%. This is a source of concern among the smaller Qualifying ISPs, raised by them with Government and with Ofcom during the consultation over the Order.
- 6.53 The possibility that a Qualifying ISP may recover more or less than 75% of its Relevant Costs (as a consequence of the uneven distribution of CIRs) does not necessarily mean we must set more than one notification fee. Ifthis were the case, a distinct fee would always be required for each ISP, as in practice each can be expected to receive a different volume of CIRs. However, the Order only directs Ofcom to secure the 75:25 split of Relevant Costs at an aggregate level. In implementing the Order, and in particular in setting the notification fee, Ofcom will seek to ensure that there are participating Copyright Owners sending CIRs and hence paying fees to ISPs and Ofcom which reflect the provisions of the Order.
- 6.54 An approach under which we set a discrete notification fee for each ISP would make the scheme much more complex, would increase uncertainty and make conclusion of the tariff-setting process more difficult to achieve. Specifically, we consider that it would materially increase the risk that no agreed CIR volume and fee could be set for some or all ISPs, thereby undermining the effective implementation of the notification scheme.
- 6.55 Since Ofcom's costs are recovered pro rata across all the CIRs sent under the scheme, if an individual tariff for any ISP is not agreed within a multi-tariff scheme and hence results in a lower total estimate of CIRs the tariffs for all other ISPs must also change. The scope for a vicious circle arising, whereby the increased tariffs result in reduced CIR estimates for 1 or more ISPs by 1 or more Copyright Owners, requiring further adjustment to the tariff rates, is clear in this circumstance.

⁴⁰Source: Company reports for quarter ending 31 March 2012

- 6.56 The proportionality and practicality of such an approach is therefore open to doubt. These considerations would tend to suggest that we should set a single fee for all the Qualifying ISPs which face the same Relevant Costs for a given level of CIRs – in other words, for all of the initially Qualifying ISPs.
- 6.57 However, the differences in scale between smallest and largest Qualifying ISP are broad. As a result, and as the table above clearly indicates, if CIRs are received in proportion to subscriber numbers, setting a single fee could result in the largest Qualifying ISPs receiving total notification fee income greater than their Relevant Costs while the smallest receive income much lower than the intended 75% of their Relevant Costs. We do not believe that to be an intended consequence of the Costs Order, which plainly anticipates both that Qualifying ISPs should bear a proportion of the costs of carrying out the Initial Obligations and that their contribution should be significantly lower than that made by Qualifying Copyright Owners.
- 6.58 We also note the requirement in section 124E(1)(j) CA2003 that the provisions of the Code should not "discriminate unduly against particular persons or against a particular description of persons". Since the provisions requiring Ofcom to set a notification fee in the Costs Order are to be included in the draft Code, we consider that the obligations in section 124E(1)(j) CA 2003 are also relevant to how Ofcom sets the notification fee. Setting it in a way that results in such unequal distribution of CIR income between the Qualifying ISPs could be seen as unduly discriminatory.
- 6.59 We have therefore considered whether more than one notification fee should be set, by dividing the Qualifying ISPs into two or more groups, so as to reduce the risk of over or under-recovery of fixed Relevant Costs by the individual Qualifying ISPs. In doing so, we have paid particular attention to the risks of complexity created by having more than one fee.
- 6.60 Setting two notification fees creates a significant reduction in the risks of inequity between ISPs. With one Fee applying to CIRs to be sent to the larger four Qualifying ISPs and calculated to recover fixed Relevant Costs for four ISPs (£4.2 million); and a second one applying to CIRs to be sent to the two smaller Qualifying ISPs, and calculated to recover fixed Relevant Costs for two ISPs (£2.1 million). The recovery of fixed Relevant Costs, assuming ISPs receive a share of CIRs in line with their market share, would become more even:

Qualifying ISP	Subscribers ⁴¹ (Million)	% of Relevant Fixed Costs Recovered (If ISP share of CIRs = share of subscribers)
All QISPs	20	75%
		Fee 1
BT	6.3	101%
Virgin	4.4	71%
TalkTalk	4.1	66%
BSkyB	3.9	63%
		Fee 2
Everything Everywhere	0.7	81%
O2	0.6	69%

- 6.61 A two tariff system does not remove entirely differentials in the proportion of fixed costs that ISPs may recover (assuming that CIRs are received in proportion to the relative sizes of their subscriber bases). However, we consider that it is likely to achieve the best balance between that objective and a tariff-setting mechanism that is not unduly complex, so as to prejudice the effective implementation of the scheme. The additional variable that a third notification fee, applying to BT alone, would introduce, would in our view materially increase the risk of the problems set out at paragraph 6.54, which is not justified by the potential reduction in the cost recovery differentials between ISPs that it might achieve.
- 6.62 Accordingly, we propose to set two levels of notification fee: one for BT, Virgin, TalkTalk, and BSkyB; and a second for Everything Everywhere and O2. As we consider that the same model of Relevant Costs should apply to all of the Qualifying ISPs, variable costs will be the same for all Qualifying ISPs (as along as CIR estimates are within the 2,500-200,000 per month range indicated above); but the notification fee set will differ between the two groups by virtue of the different allocation of fixed costs between the different descriptions of ISP.
- 6.63 This has the consequence that the notification fee set for the smaller ISP group is likely to be higher, as the smaller Qualifying ISPs can expect to receive a lower number of CIRs over which the fixed Relevant Costs must be recovered.recovered.

Question 6.5: Do you agree the proposal that we set two notification fees, one for O2 and Everything Everywhere and the other for the larger Qualifying ISPs?

⁴¹Source: Company reports for quarter ending 31 March 2012

Section 7

Relevant Costs: Qualifying ISP Variable Costs

Introduction

- 7.1 The purpose of this section is to set out our proposals in relation to the variable costs of processing CIRs, based on the BWCS report. There are a number of significant issues on which we must exercise discretion, and we are seeking further input from stakeholders in relation to our proposals. The areas on which further evidence or comment is sought include key *operational ratios*: factors in the operation of the scheme which will have a significant impact on the unit costs of processing, but which remain uncertain before the scheme is actually operating.
- 7.2 This section should be read should be read in conjunction with the BWCS report, and in particular, Chapter 4 and Chapter 5. Chapter 4 sets out the activities that Qualifying ISPs expect to carry out in processing CIRs and the costs estimated by each Qualifying ISP. Chapter 5 attempts to standardise this solution and data.
- 7.3 The aspects of CIR processing which give rise to variable costs are sending letters out to subscribers, handling follow-up calls and complaints from subscribers and a quality checking process for subscriber identification. Call handling, in particular, is expensive and dominates both variable/ operational costs and the total costs of processing a CIR.
- 7.4 The operational ratios are a measure of the levels of cost-generating activity, such as sending a letter, associated with the processing of a single CIR. For example, the Code requires that after receiving a letter, individuals have a grace period during which they are expected to change their behaviour; CIRs received by a Qualifying ISP during that grace period do not lead to a letter, and consequently generate a lower cost of processing. The average cost of CIR processing will therefore depend on the proportion of CIRs leading to a letter. At the moment, these ratios can only be estimated as the whole process is entirely new hence stakeholder comment and evidence in this area to help us refine our estimates will be particularly valuable.
- 7.5 In making a determination of the Relevant Costs for the first notification period, Ofcom is therefore required to make two distinct sets of judgements: firstly, what costs are incurred when Qualifying ISPs take actions as part of CIR processing (such as actually sending a notification letter); and secondly, how often these actions take place as part of CIR processing (the operational ratios).
- 7.6 The section concludes with a table that sets out variable processing costs for a range of scenarios.

Developments since the BWCS study was carried out

7.7 When the BWCS study was carried out, Ofcom had published the first draft of the Code. Since then, the Code has been further refined. This brought a material change regarding operational activities, that all notifications sent to subscribers under the Code must now be by first class mail. Previously, Qualifying ISPs had the option of

sending first and second notifications to subscribers by email, or first or second class mail, and were required to use recorded delivery for the third communication.

7.8 In terms of the costs of writing to subscribers, this means the third communication no longer has special significance. The BWCS study identified the proportion of all communications that were third communications as an operational ratio. On the basis of the current draft of the Code, this no longer matters in terms of the cost of letters. However, it also means that the estimated costs of sending the first and second letters provided by Qualifying ISPs is too low, as it will have assumed second class post or email. In addition, since the study was completed, we have gathered some further data on the likely values of the operational variables. As discussed below, we have adopted those rather than the values suggested by BWCS in making the proposals in this consultation. Finally, we agree with BWCS that uncertainty over the operational variables means that the fee should be set by reference to an average of the cost data provided by Qualifying ISPs as opposed to the minimum as in the case of capital expenditure. However, we propose to use the median values rather than the mean for the reasons set out below.

Qualifying ISP activities which generate variable costs

- 7.9 The main activities identified by Qualifying ISPs that generate variable costs are as follows:
 - i) Sending a letter to a subscriber (following a certain level of infringement).
 - ii) Call handling. i.e. responding to calls from subscribers, following the receipt of one of the above letters. The cost of this depends on:
 - a) Duration of call
 - b) Labour costs.
 - iii) "Save" calls and the cost of a lost customer. A customer may be considering leaving the Qualifying ISP following receipt of a letter. Calls from such customers may be passed to a "save" team to attempt to persuade the customer to stay with the Qualifying ISP. Similarly, if a customer does decide to leave the Qualifying ISP, it could be argued that there would be a cost to the Qualifying ISP in terms of lost future revenue/ margin from the customer.
 - iv) Handling complaints. This covers the cost of handling a complaint from a subscriber who has received a notification.
 - v) Manual identification of the subscriber who is the subject of a CIR where the automated system has failed.
 - vi) Continuous monitoring of CIR processing quality.
- 7.10 There is no separate provision made for the cost of generating CILs, which we presume can be generated automatically at a negligible cost. Similarly, there is no provision for CIRs which are not processed by the ISP which receives them, on one of the grounds set out in the Code, and which do not therefore generate costs.

Inclusion and exclusion of proposed Qualifying ISPs' costs

7.11 It is part of Ofcom's role to determine which of the variable costs identified by ISPs should be treated as Relevant Costs within the meaning of the Costs Order for the purpose of setting the notification fee. Our provisional findings largely follow the findings of BWCS. The sending of letters, and the handling of customer calls are clearly allowable costs; we set out each other item of variable cost identified by the ISPs and our assessment of it below.

1. Disallow "save" calls

- 7.12 A degree of disruption to subscribers and the possibility of some of them churning away from an ISP is a possible consequence of the scheme. However, we believe that "save" activity -specific investment in efforts to retain such customers should be disallowed as a cost. The definition of Relevant Costs includes costs arising from certain types of customer contact, namely handling enquiries from and providing information requested by a subscriber about notifications received by that subscriber but this does not cover calls made for customer retention purposes.⁴²
- 7.13 The list of activities specified in the Costs Order as giving rise to Relevant Costs is not exhaustive. We have therefore considered whether costs associated with "save" activity fall within the overarching definition of "costs which would be reasonably and efficiently incurred... in carrying out [the Initial Obligations]". We propose that they do not. While such activity is understandable and may make good commercial sense, it is not an activity which facilitates the fulfilment of the Initial Obligations. Instead, it is at the discretion of each ISP as to whether to carry this out, in the same way as any other investment in marketing.
- 7.14 The sole ISP which proposed "save" calls as an admissible cost identified this as a discrete activity and cost independent of complaints handling. We have therefore been able to remove these costs from our calculation of variable costs which we propose to treat as Relevant Costs.

2. Disallow opportunity costs of lost customers

7.15 We also believe that we should disallow the opportunity cost of future potential revenues/ contribution from a subscriber being foregone because that subscriber leaves the ISP. The definition of Relevant Costs expressly excludes "costs of economic opportunities lost as a result of compliance with the [Initial Obligations]".⁴³ Even if it could be demonstrated that the loss of a customer was attributable to the receipt of a letter under the scheme, we consider that the lost revenues which resulted would fall squarely within this exclusion.

3. Allow a cost for complaint handling

7.16 The issuing of letters will inevitably lead to some degree of complaints, particularly where the subscriber believes they may have been incorrectly identified. Complaints handling is not an activity which is explicitly listed in the Costs Order as one that will give rise to Relevant Costs. However, it is sufficiently close to the provision of information to subscribers about notifications (which is listed), that we believe it is

⁴² See paragraph 1(4) of the Schedule to the Costs Order.

⁴³ Paragraph 1(5)(c) of the Schedule to the Costs Order.

appropriate to treat the costs of complaints handling as capable of constituting Relevant Costs which can be recovered by ISPs.

4. Disallow manual matching where an automatic match fails.

- 7.17 Where the initial automatic matching of the IP address of an infringer to a subscriber does not yield a result, one ISP proposed to attempt a manual match as a follow-up activity.
- 7.18 However, other ISPs were sceptical as to whether manual matching would be possible or whether it would have any better chance of success than an automatic matching process. Manual matching could generate a significant level of costs (£6 per manual search), but may nevertheless fail to yield significantly more identified subscribers.
- 7.19 Given the uncertainty around its effectiveness and the high cost, we do not consider that such costs would be reasonably or efficiently incurred. We therefore propose to disallow this cost.
- 7.20 It is important to note that we expect a material proportion of CIRs will fail to result in a match probably of the order of 10%, from discussion with ISPs. This should not be a significant concern for Copyright Owners as long as the cost per CIR is set to reflect this, through appropriate selection of the operational variables. Furthermore, investigation under our enforcement powers may be appropriate where a Qualifying ISP appears to be generating an excessive level of CIR matching failures.

5. Allow efficient variable costs of quality control

- 7.21 Under the draft Code, the procedures which an ISP implements to match accurately the IP address in a CIR to one of its subscribers are neither prescribed nor subject to prior approval by Ofcom. Nevertheless, we accept that efficient ISPs, with good systems, will incur some costs in carrying out regular quality control and audits. We therefore propose to allow for a small fixed cost to cover this activity.
- 7.22 In addition, we propose to include a cost for the continuous monitoring of the quality of CIRs, although only one ISP proposed that this should be a part of their operations

Question 7.1: Do you agree with the proposals for the ISP cost items to be counted as part of the Relevant Costs; do you have evidence to support alternative approaches?

What should each activity cost?

- 7.23 In order to determine the total Relevant Costs, Ofcom must make a judgement about variable costs, drawing on the information provided by ISPs and the analysis by BWCS. In relation to fixed costs, we propose that efficient, reasonably incurred costs should be set at the level of the estimate provided by the lowest, reasonable estimate provided by ISPs for the BWCS report. As explained in Section 6, this was not the lowest estimate provided since that failed to account for all likely fixed costs.
- 7.24 However, in relation to variable costs, we do not think that it would be appropriate to use the lowest cost estimate provided for each activity as the basis for determining the Relevant Costs. This is because those costs will depend to a very great extent

on the operational ratios, rather than on the unit cost of sending a letter or handling a customer call.

- 7.25 Uncertainty over the operational ratios means that there will remain considerable scope for error in the level of variable costs which an efficient ISP may incur even given good estimates of the costs of the individual activities.
- 7.26 Accordingly, Ofcom agrees with BWCS that the adoption of the lowest unit cost for activities would leave ISPs bearing the majority of the risk arising from uncertainty about the operational variables ISP under-recovery would be more likely than ISP over-recovery. We agree with BWCS that an average is more appropriate for the unit cost estimates, although for both letters and call-handling we propose to adopt the median rather than the arithmetic mean to ensure the average is not distorted by any outlying estimates.

1. Cost of sending a letter

- 7.27 The results of the BWCS study regarding the costs of sending a letter are set out at section 4.7.1 of their report. The costs vary widely across ISPs ranging from 27p to 73p per letter. (One ISP did not provide a cost for a standard letter). The reason for this variation seems to be the degree of overhead recovery included. The lowest allows for just the cost of stationery and postage and no overhead. The highest allows for the cost of using a third party and the associated margin that they generate.
- 7.28 Given the uncertainty about the level of operational variables cited above, we propose to use the median cost per letter of 42p. The mean value, which BWCS suggested should be used, is distorted by the outlying price of 73p provided by one ISP.

ISP	ISP 1	ISP 2	ISP 3	ISP 4	Mean	Median
Cost of Letter (£)	0.27	0.35	0.48	0.73	0.46	0.42

- 7.29 However, we must revise the median cost to reflect changes made between the draft Code and the final version: specifically, the requirement that all letters be sent by first class post. As noted above, this means that the cost of a third notification will be the same as the others (as there is no longer a requirement that recorded delivery be used). It also means that the cost of a first/second notification must be increased from the estimates provided by ISPs, which assumed second class delivery, to reflect the additional cost of first class postage.
- 7.30 Bulk second class mail cost 25p in 2010; the change to first class, and the increase in Royal Mail prices to between 2010 and 2012 means that we must increase the unit cost by 19p per letter to 44p. With projected inflation, based on the CPI forecast of 3.9%, we estimate postage costs will be 46p during the first notification period.
- 7.31 The median cost of sending a letter, other than postage, is estimated as 17p in 2010. To allow for inflation we increase this estimate by the Services Producer Price Index from Q3 2010 to Q4 2011 (2.4%), and the Office for Budget Responsibility Consumer Price Index forecast for Q1 2012 to Q1 2014 (3.9%) yielding an estimate for 2014 of

18p. We therefore propose to use an estimate of 64p to determine Relevant Costs in for the first notification period.

2. Cost of call handling

- 7.32 The cost of handling a call depends on two factors:
 - i) The duration of the call
 - ii) The cost per minute or hour of the labour required to answer these calls.

(i) Duration of the call

- 7.33 The letters are of escalating importance and hence a call following a third letter may last longer than one following a first letter.
- 7.34 ISPs have assumed the same costs for all calls whether following the first, second or third letters. This may be no more than a simplification. Since we have no other reliable evidence to the contrary, we propose to accept this assumption.
- 7.35 The decision whether to use a UK or offshore call centres may make a difference to the cost of handling calls: typically, off-shore call centres have cheaper labour rates but longer call durations. Where problems are not effectively resolved, they may also lead to more follow-up calls from subscribers.
- 7.36 However, ISPs may also take into account factors such as their brand identity and the quality of customer service that they wish to offer, in choosing whether to go offshore or not. These points are commercial choices and we do not think that the extra costs resulting from acting upon these factors alone should be recoverable.
- 7.37 The choice of on-shore or off-shore call-centre service is a strategic one, rather than being exclusively one of efficiency: at the moment, there is no clear picture as to which is truly efficient. We do not propose to take account of the choice of call-centre location in assessing Relevant Costs.
- 7.38 Based on these considerations, we believe that it is reasonable to use the median estimated cost of call-handling provided by the ISPs of £6. As in relation to the costs of sending a notification, the mean cost of call-handling, which BWCS suggested we should apply is significantly higher at £8.20. However, the mean is arguably distorted by the outlying estimate of £15 provided by one ISP.

ISP	ISP 1	ISP 2	ISP 3	ISP 4	ISP 5	Mean	Median
Cost of Call (£)	5.00	5.00	6.00	10.00	15.00	8.20	6.00

7.39 To allow for inflation we increase this estimate of £6.00 by the Services Producer Price Index from Q3 2010 to Q4 2011 (2.4%), and the Office for Budget Responsibility Consumer Price Index forecast for Q1 2012 to Q1 2014 (3.9%) yielding an estimate for 2014 of £6.39p for the cost of handling a call.

3. Cost of complaints handling

7.40 Only one ISP provided an estimate of the costs associated with handling a complaint, potentially requiring multiple customer contacts, and/or possibly written communication as well as telephone calls - £34. In the absence of any other relevant data, we propose to accept this estimate as the efficient, reasonably incurred cost of complaints handling in relation to notifications under the Code. Allowing for inflation, as above, the figure we will use in setting the notification fee is £36.18.

4. Cost of monitoring quality

7.41 Only one ISP provided an estimate of the costs of monitoring its CIR processing activity, with a proposal to check 2% of processed CIRs to ensure they were accurate, at a unit cost of £11.80. As noted above in paragraphs7.21-22, we agree this is an appropriate activity, certainly for the first year of operation of the scheme. We therefore propose to allow a cost of £11.80 to check a CIR. Allowing for inflation, as above, the figure we will use in setting the notification fee is £12.56. We discuss in paragraph 7.66 below the appropriate proportion of CIRs to be checked for quality control purposes.

Summary of proposals on costs of ISP activities to be included in Relevant Costs

7.42 In summary, we propose that the variable element of the Relevant Costs, for the purposes of setting a the notification fee should be:

Relevant Cost Item	Proposed Value (£0.00)
Cost of sending a letter	0.64 per letter
Cost of checking CIR	12.56 per check
Cost of handling a call	6.39 per call
Cost of a handling a complaint	36.18 per complaint

Question 7.2: Do you agree our proposals in relation to the activities which give rise to variable Relevant Costs and the proposed values of those relevant cost items? Please provide reasons and evidence to support any different assessment of the variable cost element of Relevant Costs and/or alternative values?

The operational ratios

- 7.43 As explained in the introduction, the operational ratios give the frequency with which a cost-generating activity will take place relative to the number of CIRs which an ISP processes. The operational ratios define how much it should cost to process a CIR, given what we have established about the key cost-generating activities.
- 7.44 BWCS and ISPs have identified the following core operational ratios:
 - i) Letters per CIR

- ii) The number of calls per letter
- iii) The number of escalated complaints per letter
- 7.45 In fact, we might also expect that operational ratios differ between first, second and third letters, given their different implications: a third letter might be more likely to lead to a call, and might also result in a longer and hence more expensive call. (Alternatively, the first letter might be the most likely one to prompt a customer call). A more precise model would therefore need to include a larger set of operational variables
 - i) Letters per CIR
 - ii) Proportion of first, second, third and update letters
 - iii) Number of calls per first, second, third and update third letter
 - iv) Duration/cost of call relating to first; second, third and update letter
- 7.46 ISPs have assumed that call duration is constant across first, second and third letters. This is evident from their assumption that call-in costs do not vary with letter type. We accept this simplification in the absence of other data.
- 7.47 In its engagement with ISPs, BWCS requested estimates of the probability of third letters; and of the proportion of third letters resulting in a call in effect, assuming two categories: "other letters" being first and second letters and "third letters". In principle it may be appropriate to distinguish third letters from first and second notifications because they result in a subscriber becoming eligible for inclusion on a SIL and so might result in a higher call-in rate.
- 7.48 However, the DEA obligations are an entirely new activity: we do not have data about any call-in rates, let alone different rates for third letters; nor do we have data on which to estimate the proportion of letters which will be third letters. Thus, in order to set a fee for the first notification period, we propose to make simplifying assumptions: that there will be a single *letters per CIR* ratio; a single calls *per letter* ratio; and a single *complaints per letter* ratio. Finally, we will need to set an acceptable ratio for the number of CIRs processed to be subject to a review. In exercises to set fees for future notification periods we will have access to more detailed information about outcomes and will therefore be able to project costs with a more sophisticated model reflecting a longer list of operational variables.
- 7.49 The calculation of the variable cost of processing a CIR by reference to the Relevant Costs identified above and the operational ratios is set out in the following formula:

CIR = (Let × RLetCir) + (Chk × RChkCir) + (Call × RLetCir × RCallLet) + (Comp × RLetCir × RCompLet) CIR = Cost of processing a CIR Chk = Cost of reviewing CIR process RChkCir = Reviews per CIR Let = Cost of sending a letter RLetCir = Letters per CIR Call = Cost of customer contact RCallLet = Calls per Letter Comp = Cost of handling complaint RCompLet = Complaints per Letter

Choice of values for operational ratios

7.50 The variable cost per CIR is critically dependent on the operational ratios, as illustrated by the table below, which shows the Relevant Costs per CIR under different assumptions about the *letters per CIR* ratio and *calls per letter* ratios. The calls per letter ratios in the table are within the range of estimates provided by ISPs to BWCS. ISPs did not provide estimates of the *letters per CIR* ratio

Variable Cost per CIR under different operational ratios (£0.00)								
Calls per Letter \rightarrow	10%	20%	30%	50%				
Letters per CIR ↓								
20%	0.37	0.44	0.56	0.82				
30%	0.54	0.64	0.83	1.22				
40%	0.72	0.85	1.10	1.61				
50%	0.89	1.05	1.37	2.01				
60%	1.06	1.26	1.64	2.41				

- 7.51 Again, since this is a new process, there is no evidence from existing practice on which the operational ratios may be based (though in subsequent years the ratios will be based on evidence from the scheme)
- 7.52 In making its recommendations to Ofcom, BWCS used operational ratio assumptions as follows:
 - a common assumption of 40% for the Letters per CIR ratio

- the mean of ISP assumptions of for the Calls per Letter ratio (for BWCS, this was 48% for third notifications and 36% for first and second notifications)
- the sole ISP assumption of 2.5% for the Complaints per Letter ratio
- 7.53 In order to refine these estimates, we have looked at the notification scheme operating in France and notification trials in the US. Nonetheless, it has proven difficult to make robust estimates of any of these ratios, because important characteristics of the DEA obligations such as the one month grace period and the use of letters throughout are different even from similar schemes we have been able to identify. The information on which we base our proposed estimates is laid out below

(i) Letters per CIR ratio

- 7.54 During its first 9 months of sending notifications, France's Haute Autorité pour la diffusion des œuvreset la protection des droits sur internet (HADOPI) sent a notification in relation to 48% of the infringement reports it processed. This arose because around 10% of IP addresses could not be linked to a subscriber; the other 42% of infringement reports which did not result in a letter arose because the subscriber was within the permitted grace period, during which a second letter is not sent, on the grounds that the subscriber has not had time to change their behaviour. (The HADOPI grace period is 8 days for an infringement relating to a different piece of content, and 1 month where the second infringement relates to the same piece of content as the first)
- 7.55 We have received data from the MPA suggesting that in the operation of trial notice schemes in the US with shorter grace periods than is proposed for the UK (typically 3 weeks), around 55% of CIRs result in a notification.
- 7.56 Finally, data provided in confidence from the MPA about the frequency with which IP addresses are located, using the detection tools which are intended to generate CIRs in the UK, suggests that only 60% of CIRs produced within a week will include a unique IP address (e.g. around 40% will be repeats within a week). Only 50% of the IP addresses generated across a month were unique in the data sample.
- 7.57 The period for which a fixed line internet subscriber consumer typically retains the IP address allocated to them is unclear: ISPs have not been able to provide Ofcom with reliable estimates of this aspect of their network operations. However, informal discussion has suggested that it is at least probable that duplicate identification of an infringing IP address within a week may relate to a single subscriber, and would therefore not typically result in a notification. (Despite this, Copyright Owners have indicated that they propose to submit all the CIRs they generate). This suggests that 60% is the highest feasible value for the ratio.
- 7.58 However, the 48% ratio seen under the HADOPI scheme, established over a long period, represents the most robust data we have found and should provide the best basis for our estimate. Given that HADOPI applies a more restrictive grace period than is proposed for the UK (as above, 8 days or 1 month if the second CIR relates to the same content), we propose to set the notification fee using a *Letters per CIR* ratio of 45%.
- 7.59 None of these data provide a conclusive basis for estimating the Letters per CIR ratio; we welcome further information and analysis which would allow a more robust estimate to be made.

(ii) Calls per letter ratio

- 7.60 The estimates provided by ISPs of the proportion of letters resulting in a call vary widely from 10% to 85% for first and second notifications; and from 10% to 90% for third notifications. The highest figures in this range seem implausible; it is also relevant that one ISP indicated that the level of calls it experienced during an earlier voluntary notification scheme was just under 20%; but that the same ISP estimated a 24% ratio for first and second notifications and 40% for third notifications.
- 7.61 The experience of the HADOPI also suggests lower response rates: only around 7% of those receiving a first, email-only communication in the first 10 months contacted HADOPI, 5% via email, and 2% by letter; however, the response rate to a second communication, sent via email and letter was 15%. Furthermore, HADOPI reports that a significant proportion of contacts are merely seeking information about the alleged infringement, many details of which are not included in the communication (for example the name of the copyright asset in question). In the French scheme, communications are sent as from HADOPI, rather than the ISP.
- 7.62 We have been told that the experience of the MPA, and its partner ISPs in the US was of markedly lower levels of contact from subscribers following receipt of notifications in the low single figures; however, subscribers are directed to contact the MPA rather than their ISP if they have concerns, which may well reduce subscribers' willingness to make contact.
- 7.63 Finally, informal discussions with the operators of call-centres in the communications sector elicited a fairly wide set of estimates of response rates (although less broad than ISPs' own indications) from 10-25%, with the median around 15%.
- 7.64 Overall, these data present a somewhat inconsistent picture of the likely level of consumer response to ISP notification letters in the UK; however, we consider the levels of response to HADOPI second notifications, which are the first to be sent as a letter, are the best evidential proxy. To deliver an appropriate balance of the risks to ISPs of under-recovery and of Copyright Owners of overpaying for CIR processing we propose to adopt a *calls per letter* operational ratio of 15%.

(iii) Complaints per letter ratio

7.65 Only one ISP provided an estimate of the proportion of letters which would result in a high cost, escalated complaint: the estimate was 2.5% of letters. Given our expectation that 15% of subscribers will respond to a letter at all, this implies that around 1 in 6 call centre contacts results in an escalation/complaint. We do not have further direct evidence on this question, but discussion with telecoms call-centre operators suggests this is a significant over-estimate: in other contexts, it would be an unacceptable level of performance in customer handling. We consider that the intended application of this ratio is that 2.5% of call centre contacts should result in an escalation, implying that 0.4% of letters do so (2.5% x 15%). We therefore propose to use this estimate in determining the Relevant Costs.

(iv) Proportion of CIRs processed to be reviewing

7.66 Only one ISP proposed to undertake monitoring of CIR processing with a systematic check of a proportion of CIRs; as noted above, we anticipate that this will be part of ISP operations consistent with the PAS to be developed by Ofcom. However, the ISP proposed to check 2% of CIRs in this way. In order to deliver their obligations, ISPs will have made a significant capital investment in large-scale automated

processing systems: a requirement that one in fifty processing events should be checked for the whole first year of operations is indicative of a very low level of confidence in the systems developed, certainly when applied across the whole first year of operations. We consider that a level of systematic monitoring consistent with the PAS requirements and with the operation of an efficient ISP would be considerably lower. We therefore propose that the Relevant Costs should include an allowance for a check of 1 in 500 CIRs (0.2%), although we would anticipate that in practice the level is likely to be higher at the beginning of the first year of operations and then to decline.

7.67 In summary, we propose that the operational ratios assumed for the purposes of setting the notification fee should be:

Operational Ratio	Proposed Value
Proportion of CIRs producing a letter	45%
Proportion of CIRs to be checked	0.2%
Proportion of letters resulting in a call	15%
Proportion of letters resulting in a complaint	0.4%

Question 7.3: Do you with agree the proposed values for the operational ratios? Can you provide evidence to support alternative values?

Summary of proposals for variable costs

7.68 The cost elements and the operational variables set out above yield an estimated variable cost of CIR processing of £0.80. We propose to set the variable cost element of the Notification fee at £0.60 (75% of £0.80).

 $CIR = (Let \times RLetCir) + (Chk \times RChkCir) + (Call \times RLetCir \times RCallLet)$ $+ (Comp \times RLetCir \times RCompLet)$ CIR = Cost of processing a CIR Chk = Cost of reviewing CIR process RChkCir = Reviews per CIR Let = Cost of sending a letter RLetCir = Letters per CIR Call = Cost of customer contact RCallLet = Calls per Letter Comp = Cost of handling complaint RCompLet = Complaints per Letter $CIR = (0.64 \times 45\%) + (12.56 \times 0.2\%) + (6.39 \times 45\% \times 15\%)$ $+ (36.18 \times 45\% \times 0.4\%)$ CIR = £0.80

Section 8

Setting Fees

Introduction

8.1 This section draws together the analysis in the preceding three chapters to lay out the implications for Copyright Owners and ISPs

Summary of costs-sharing framework

- 8.2 The costs to be recovered are:
 - Initial Costs of £7.1m: assigned to each participating Copyright Owner in proportion to the Copyright Owner's share of the CIRs to be sent during the first and second notification periods
 - Qualifying Costs of £3.3m: assigned to each participating Copyright Owner in proportion to the Copyright Owner's share of the CIRs to be sent during the first notification period.
 - Fixed ISP Relevant Costs of £1.4m per Qualifying ISP: 75% of the £1.4m (i.e. £1.05m) to be included in the total notification fees to be recovered from participating Copyright Owners.
 - Variable ISP Relevant Costs of £0.80 per Qualifying ISP: 75% of £0.80(i.e. £0.60) be included in the per-CIR notification fees to be recovered from participating Copyright Owners.
- 8.3 There will be two notification fees, one covering BT, TalkTalk, Sky and Virgin Media; and the other covering O2 and Everything Everywhere. In order to generate estimates of the overall cost of the scheme and the level of Notification and Qualifying Costs Fees, we must make an assumption about the proportion of CIRs allocated to ISPs in each group. For the purposes of the tables below, we assume that ISPs receive CIRs broadly in proportion to their overall share of the broadband subscriber market. This would mean that 93% of CIRs go to the large ISP group; and 7% to the small ISP group. This split also means that 93% of Initial and Qualifying costs, £9.7m, are applied to CIRs which will be sent to the large ISP group.
- 8.4 Under these assumptions, the overall charges which Copyright Owners will pay for the CIRs which they estimate they will send are as follows:

	Large ISP Group Totals								
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each large ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)		
70	16.3	4,200	511	5.6	9,719	14,429	17.0		
80	18.6	4,200	583	4.9	9,719	14,502	15.0		
90	20.9	4,200	656	4.5	9,719	14,575	13.4		
100	23.3	4,200	729	4.1	9,719	14,648	12.1		
125	29.1	4,200	912	3.4	9,719	14,830	9.8		
150	34.9	4,200	1,094	2.9	9,719	15,013	8.3		
175	40.7	4,200	1,276	2.6	9,719	15,195	7.2		

Total and per-CIR Costs of Scheme to Copyright Owners

	Small ISP Group Totals								
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each small ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)		
70	2.5	2,100	38	33.6	732	2,870	45.1		
80	2.8	2,100	44	29.4	732	2,875	39.5		
90	3.2	2,100	49	26.2	732	2,881	35.2		
100	3.5	2,100	55	23.7	732	2,886	31.7		
125	4.4	2,100	69	19.1	732	2,900	25.5		
150	5.3	2,100	82	16.0	732	2,914	21.3		
175	6.1	2,100	96	13.8	732	2,928	18.4		

^{8.5} As set out in paragraph 4.4-7, and in detail in Annex 7, the actual charges to COs will be determined through an iterative process under which each participating Copyright Owner will submit estimates of the number of CIRs it wishes to send to each Qualifying ISP.

- 8.6 The consequent costs to each participating Copyright Owner will be determined on the basis of the core cost assumptions and operational variables; Copyright Owners will be entitled to accept or reject the costs associated with their proposals in a series of bidding rounds until an agreed level of activity is reached or until Ofcom determines that the process of estimation has failed.
- 8.7 As discussed in Section 7, it is possible that the relatively higher costs associated with smaller ISPs means that Copyright Owners elect to exclude them from the first year of operation of the scheme. In this case, the full amount of qualifying and initial costs would be associated with the large ISPs and the total per-CIR cost would be slightly lower, for a given level of total industry activity. This scenario is set out in the table below

	Large ISP Group Totals (Only 4 ISPs in scheme)						
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each small ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)
70	17.5	4,200	549	5.2	10,450	15,199	16.7
80	20.0	4,200	627	4.6	10,450	15,277	14.7
90	22.5	4,200	706	4.2	10,450	15,356	13.1
100	25.0	4,200	784	3.8	10,450	15,434	11.9
125	31.3	4,200	980	3.2	10,450	15,630	9.6
150	37.5	4,200	1,176	2.8	10,450	15,826	8.1
175	43.8	4,200	1,372	2.4	10,450	16,022	7.0

Section 9

Next Steps

Introduction

- 9.1 This section provides a summary of the actions and timetable following publication of this consultation
- 9.2 The period during which responses can be made on the issues which are the subject of this consultation closes on the 18th September 2012.
- 9.3 As noted above we have launched this consultation process before the Costs Order has come into force; however, as noted in paragraph 2.7, Ofcom's powers and duty to set tariffs rely upon the coming into force of the Initial Obligations Code. We propose to publish a statement of our conclusions from this consultation after that takes place, by January 2013; the statement will include tariff tables similar to those included in paragraphs 8.4 to 8.7 above.
- 9.4 We will then work with Copyright Owners through the process to establish agreed CIR estimates and finalise the levels of fees payable to Ofcom and to ISPs. Final estimates and tariffs will be published in January 2013, and we anticipate ISPs will start investment in CIR processing systems shortly afterwards.
- 9.5 We anticipate that CIR processing will begin in March 2014: as discussed above in Section 4 this provides for ISP systems build, establishment of the appeals body, and includes a contingency for delays in the operational or Parliamentary processes which must be completed before processing can begin. The timetable for these steps is therefore as follows:

June 2012	Costs Order consultation opens
September 2012	Costs Order consultation closes
December 2012 to Jan 2013	Initial Obligations Code in force Costs Order statement of tariffs CIR volume estimation Cost sharing finalised and charges set
February 2013	ISP build starts
October 2013	ISP build ends
March 1 2014	Notification Period begins

9.6 It is critical to note that material risks remain in the implementation process, and furthermore that some of these dates are themselves subject to the outcome of this consultation. Ofcom will continue to monitor progress and adjust this timetable – if possible to make implementation quicker; if necessary to provide for unavoidable delays.

Annex 1

Responding to this consultation

How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 18 September 2012**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <u>https://stakeholders.ofcom.org.uk/consultations/infringement-</u> <u>implementation/howtorespond/form</u>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses particularly those with supporting charts, tables or other data - please email <u>onlinecopyrightinfringement@ofcom.org.uk</u> attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.

Jeremy Olivier

Head of Internet Policy Ofcom Riverside House 2A Southwark Bridge Road London SE1 9HA

Fax: 020 7981 3061

- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex X. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please send an email with your request to <u>OnlineCopyrightinfringement@ofcom.org.uk</u>.

Confidentiality

- A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, <u>www.ofcom.org.uk</u>, ideally on receipt. If you think your response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.
- A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at <u>http://www.ofcom.org.uk/about/accoun/disclaimer/</u>

Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a statement in September 2010.
- A1.12 Please note that you can register to receive free mail updates alerting you to the publications of relevant Ofcom documents. For more details please see: <u>http://www.ofcom.org.uk/static/subscribe/select_list.htm</u>

Ofcom's consultation processes

- A1.13 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.14 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at <u>consult@ofcom.org.uk</u>. We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Graham Howell, Secretary to the

Graham Howell Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA

Tel: 020 7981 3601

Email graham.howell@ofcom.org.uk

Annex 2

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

- A2.3 We will be clear about who we are consulting, why, on what questions and for how long.
- A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.
- A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.
- A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.
- A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, <u>www.ofcom.org.uk</u>.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at <u>www.ofcom.org.uk/consult/</u>.
- A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your coversheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS						
Consultation title:						
To (Ofcom contact):						
Name of respondent:						
Representing (self or organisation/s):						
Address (if not received by email):						
CONFIDENTIALITY						
Please tick below what part of your response you consider is confidential, giving your reasons why						
Nothing Name/contact details/job title						
Whole response Organisation						
Part of the response If there is no separate annex, which parts?						
If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?						
DECLARATION						
I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.						
Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.						
ne Signed (if hard copy)						

Annex 4

Consultation questions

Question 3.1: Do you have any comments on the principles set out above; do you consider there are other economic principles to which we should have regard in setting fees

Question 4.1: Do you have any comments on the proposed process for establishing CIR estimates and costs; do you have evidence which would suggest that a different process should be adopted?

Question 4.2: Do you have any comments on the proposed process or timetable for establishing the appeals body

Question 4.3: Do you agree that Qualifying ISPs should have 9 months from the point at which estimates are finalised to prepare for the operation of the DEA scheme?

Question 4.4: In light of the evidence above, do you agree that the first notification period should start on March 1st 2014 and end on March 31 2015; do you have evidence which would suggest that a different date is feasible and preferable?

Question 4.5: Do you agree with the proposed industry payment schedules for fees in respect of Initial and Qualifying Costs

Question 5.1: Do you have any comments on the activities which we anticipate carrying out under the DEA amendments which will give rise to Qualifying Costs in the first notification period?

Question 5.2: Do you agree with our proposed approach to the costs incurred by the appeals body during a notification period?

Question 6.1: Do you agree that all initially Qualifying ISPs will face the same model of efficient costs in carrying out the Initial Obligations and hence should be treated as having the same Relevant Costs for the purpose of setting a Notification Fee? If not, please provide your reasons for that view.

Question 6.2: Do you agree that we should apply the full automated cost model to all Qualifying ISPs for the full range of monthly activity from 2,500 to 200,000 CIRs per month? Do you have evidence that an alternative approach to costs should be adopted for any levels of CIR activity; and any evidence about what costs should be for those levels?

Question 6.3: Do you agree that the Relevant Costs for the first notification period should include 100% of ISP relevant capital expenditure?

Question 6.4: Do you agree with our assessment of the fixed costs which will be reasonably and efficiently incurred by a Qualifying ISP in carrying out the Initial Obligations? Do you have evidence to suggest amounts attributed to these costs may be incorrect?

Question 6.5: Do you agree the proposal that we set two notification fees, one for O2 and Everything Everywhere and the other for the larger Qualifying ISPs?

Question 7.1: Do you agree with the proposals for the ISP cost items to be counted as part of the Relevant Costs; do you have evidence to support alternative approaches?

Question 7.2: Do you agree our proposals in relation to the activities which give rise to variable Relevant Costs and the proposed values of those relevant cost items? Please provide reasons and evidence to support any different assessment of the variable cost element of Relevant Costs and/or alternative values?

Question 7.3: Do you with agree the proposed values for the operational ratios? Can you provide evidence to support alternative values?

Annex 5

The Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order

This Statutory Instrument supersedes the draft of the same title which was laid before Parliament on 17th January 2011 and published on 20th January 2011. It is being issued free of charge to all known recipients of that Statutory Instrument.

Draft Order laid before Parliament under section 124M(5) of the Communications Act 2003, for approval by resolution of each House of Parliament.

DRAFT STATUTORY INSTRUMENTS

2012 No. 0000

ELECTRONIC COMMUNICATIONS

The Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012

Made - - - -

Coming into force in accordance with article 1

The Secretary of State makes the following Order in exercise of the powers conferred by sections 124M and 402(3) of the Communications Act 2003(a).

In accordance with section 124M(5) of that Act a draft of this instrument has been laid before Parliament and approved by resolution of each House of Parliament.

Citation and Commencement

1. This Order may be cited as the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012 and shall come into force on the day after the day on which it is made.

Interpretation

2. In this Order—

"the Act" means the Communications Act 2003;

"appeals body" means a person who, under the Code, has the function of determining subscriber appeals(b);

"Code" means the initial obligations code(c);

⁽a) 2003 c.21; sections 124A to 124N were inserted by the Digital Economy Act 2010 (c.24), sections 3 to 16.

⁽**b**) See definition in section 124N of the Communications Act 2003.

⁽c) See definition in section 124N of the Communications Act 2003.

"first notification period" means the period beginning on a day determined by OFCOM in accordance with the Code and ending on 31st March 2015 or 31st March 2016 as determined by OFCOM;

"initial costs" means the qualifying costs incurred prior to the start of the first notification period including any such costs incurred prior to the making of the Code;

"notification fee" means a fee set in accordance with paragraph 1 of the Schedule for each copyright infringement report(a) which a qualifying copyright owner estimates it will make to a qualifying internet service provider under the Code during the notification period;

"notification period" means-

- (a) the first notification period; or
- (b) any subsequent period of twelve months beginning on 1st April;

"qualifying copyright owner" means, in relation to a notification period, a copyright owner(b) who has-

- (a) made an estimate of the number of copyright infringement reports it will make to a qualifying internet service provider in that notification period; and
- (b) provided that estimate to the qualifying internet service provider and to OFCOM in accordance with the Code:

"qualifying costs" means the costs incurred by OFCOM or the appeals body in carrying out functions under the relevant copyright infringement provisions including costs incurred by OFCOM under those provisions in appointing the appeals body or in establishing a body corporate to be the appeals body but excluding costs incurred by the appeals body to the extent they are recoverable from fees payable to the appeals body under paragraphs 5 and 6 of the Schedule:

"qualifying internet service provider" means an internet service provider(c) to which the rights and obligations of the Code apply;

"relevant copyright infringement provisions" means the copyright infringement provisions(d) but not the provisions in sections 124H to 124M of the Act to the extent that they relate to technical obligations(e) or a technical obligations code(f);

"relevant costs" means costs which would be reasonably and efficiently incurred by a notional qualifying internet service provider in carrying out its obligations under the relevant copyright infringement provisions;

"subscriber fee" means the fee payable by a subscriber(\mathbf{g}) under paragraph 6(1) of the Schedule.

Provision to be made by the Code

3. The Secretary of State specifies that the Code must include the provisions set out in the Schedule.

Enforcement

4. OFCOM or the appeals body may recover as a civil debt any amount outstanding to them or it under any provision included in the Code by virtue of article 3.

⁽a) See definition in section 124A(3) of the Communications Act 2003.

⁽b) See definition in section 124N of the Communications Act 2003.

⁽c) See definition in section 124N of the Communications Act 2003.

⁽d) See definition in section 124N of the Communications Act 2003. (e) See definition in section 124G(2) of the Communications Act 2003.

⁽**f**) See definition in section 124N of the Communications Act 2003.

Name Parliamentary Under Secretary of State Department for Culture, Media and Sport

Date

SCHEDULE

PROVISIONS TO BE INCLUDED IN THE CODE

Notification fees

1.—(1) OFCOM must set a notification fee.

(2) OFCOM may set different notification fees for copyright infringement reports to be made to different descriptions of internet service providers.

(3) A notification fee set by OFCOM must be based on OFCOM's estimate of relevant costs.

(4) Relevant costs may include the costs of—

- (a) receiving a copyright infringement report;
- (b) matching the IP address(a) to a subscriber on receipt of a copyright infringement report;
- (c) generating and sending a notification of the copyright infringement report under section 124A(4) of the Act to that subscriber;
- (d) retaining records of copyright infringement reports and notifications sent to subscribers, for the purposes of section 124B of the Act or if required to do so by this Code;
- (e) managing information for the purposes set out in this Code;
- (f) compiling and providing copyright infringement lists(**b**) to copyright owners, pursuant to section 124B of the Act;
- (g) handling enquiries from and providing information requested by a subscriber about notifications received by that subscriber;
- (h) maintaining appropriate security and access controls for data processed for the purposes set out in this Code to meet the requirements of the Data Protection Act 1998(c); and
- (i) monitoring compliance with obligations under the relevant copyright infringement provisions.
- (5) Relevant costs must exclude—
 - (a) costs (or in Scotland, expenses) payable under a Court order;
 - (b) costs caused by the failure of a qualifying internet service provider to maintain accurate subscriber records; and
 - (c) costs of economic opportunities lost as a result of compliance with obligations under the relevant copyright infringement provisions.
- (6) In setting a notification fee OFCOM shall have regard to the desirability of-
 - (a) promoting efficiency in the exercise of rights and the performance of obligations under the relevant copyright infringement provisions; and
 - (b) ensuring, as far as practicable, that the notification fees payable by all qualifying copyright owners in a notification period amount to 75% of the total costs incurred by all qualifying internet service providers calculated on the assumption that the total costs of each qualifying internet service provider are equal to OFCOM's estimate of relevant costs.
- (7) OFCOM must publish a notification fee it sets as soon as practicable.

⁽a) See definition in section 124N of the Communications Act 2003.

⁽b) See definition in section 124B(2) of the Communications Act 2003.

⁽c) 1998 c.29.

(8) OFCOM may review a notification fee from time to time and, if it considers appropriate, reset it in accordance with sub-paragraphs (1) to (6).

(9) OFCOM must publish any revised notification fee as soon as practicable.

(10) A revised notification fee shall take effect from and in relation to the next notification period beginning after the date of publication.

Payment of notification fees

2.—(1) On or before the first day of each notification period a qualifying copyright owner must pay to a qualifying internet service provider the amount specified in sub-paragraph (2).

(2) The amount payable is equal to the notification fee set by OFCOM under paragraph 1 applicable to that qualifying internet service provider multiplied by the number of copyright infringement reports calculated in accordance with sub-paragraph (3).

(3) The number of copyright infringement reports is—

- (a) the number of copyright infringement reports which the qualifying copyright owner estimates it will make to the qualifying internet service provider under this Code during the notification period; less
- (b) the difference between the number of copyright infringement reports which that qualifying copyright owner estimated it would make to that qualifying internet service provider under this Code in the previous notification period and the number it actually made to that qualifying internet service provider in that period, if lower.

Qualifying costs

3.—(1) A qualifying copyright owner must pay to OFCOM a fee in respect of the qualifying costs estimated by OFCOM to be incurred in respect of each notification period.

(2) OFCOM must notify each qualifying copyright owner of the amount of the fee to be paid and the date for payment.

(3) OFCOM must set the fees with a view to securing that, on the basis of such estimates of the likely qualifying costs as it is practicable for OFCOM to make—

- (a) for each notification period, the aggregate amount of fees payable by qualifying copyright owners to OFCOM in respect of qualifying costs are sufficient to meet, but do not exceed, the total amount of the qualifying costs in the notification period;
- (b) the amount of the fee payable by each qualifying copyright owner in a notification period is determined by reference to the proportion that the total number of copyright infringement reports which the qualifying copyright owner estimates it will make under this Code during that period bears to the total number of copyright infringement reports estimated to be made by all qualifying copyright owners under this Code during that period.

(4) As soon as practicable after the end of each notification period, OFCOM must publish a statement in respect of that period showing—

- (a) the total amount of fees that have been received from qualifying copyright owners by OFCOM;
- (b) the total amount of fees that remain outstanding and are likely to be paid or recovered; and
- (c) the qualifying costs incurred in that period.

(5) Any deficit or surplus shown by the statement (after applying this sub-paragraph for all previous notification periods) shall be carried forward and taken into account in fixing the fees to be paid in respect of the qualifying costs OFCOM estimate will be incurred in relation to the following notification period.

Initial costs

4.—(1) A qualifying copyright owner liable to pay fees in respect of qualifying costs in either or both of the first two notification periods must pay to OFCOM a share of the initial costs.

(2) OFCOM must, so far as practicable, secure-

- (a) that, in the first notification period, the aggregate amounts payable to OFCOM by all qualifying copyright owners in that period in respect of the initial costs are sufficient to meet, but do not exceed, the initial costs;
- (b) that, in the second notification period, the aggregate amounts payable to OFCOM by all qualifying copyright owners in the first and second notification periods in respect of the initial costs are sufficient to meet, but do not exceed, the initial costs.

(3) As soon as practicable after the start of the second notification period, OFCOM must review the amounts they have charged to qualifying copyright owners in the first notification period in respect of the initial costs and may make refunds in respect of any overpayments, if they consider it appropriate, after taking account of the amounts they charge to qualifying copyright owners in the second notification period.

(4) In carrying out their functions under this paragraph, OFCOM must, so far as practicable, ensure that—

- (a) the amount payable by each qualifying copyright owner in the first notification period is determined by reference to the proportion that the total number of copyright infringement reports which the qualifying copyright owner estimates it will make under this Code during that period bears to the total number of copyright infringement reports estimated to be made under this Code by all qualifying copyright owners during that period;
- (b) the amount payable by each qualifying copyright owner in the second notification period is determined by reference to the proportion that the total number of copyright infringement reports which the qualifying copyright owner estimates it will make under this Code during the first and second notification periods bears to the total number of copyright infringement reports estimated to be made under this Code by all qualifying copyright owners during those periods.

(5) Before the start of each of the first and second notification periods OFCOM must notify each qualifying copyright owner of the amount payable and the date by which such amount must be paid.

Case fees

5.—(1) The appeals body must set a case fee to be charged for each determination of a subscriber appeal it may make.

(2) If the appeals body proposes to make a single determination in relation to two or more subscriber appeals within a notice of subscriber appeal sent to the appeals body, only one case fee may be charged in respect of that determination.

(3) The appeals body must set the case fee with a view to securing that, on the basis of such estimates as it is practicable for the appeals body to make, for each notification period the aggregate amount of case fees and subscriber fees it retains are sufficient to meet but do not exceed the costs that the appeals body may incur in making determinations in that period (including the costs of handling and processing the subscriber appeals).

(4) The amount of the case fee must be approved by OFCOM.

(5) The appeals body must charge the case fee to the relevant copyright owner.

(6) For the purposes of this paragraph the relevant copyright owner is the qualifying copyright owner that made the copyright infringement report which is the subject of the subscriber appeal or which led to the act or omission that is the subject of the subscriber appeal.

(7) The relevant copyright owner must pay the case fee within such period as the appeals body may determine from time to time.

(8) If there is more than one relevant copyright owner the appeals body must apportion the case fee equally between them.

(9) The appeals body may review the amount of the case fee from time to time in consultation with OFCOM.

(10) The appeals body must publish the amount of the case fee or any revised fee as soon as practicable.

Subscriber fees

6.—(1) A subscriber must pay a fee of $\pounds 20$ to the appeals body in respect of each notice of subscriber appeal which the subscriber sends to the appeals body.

(2) The appeals body must refund the subscriber fee to the subscriber if it determines every subscriber appeal raised in the notice of subscriber appeal in favour of the subscriber.

EXPLANATORY NOTE

(This note is not part of the Order)

This Order specifies provisions that must be included in the initial obligations code (the Code) made or approved by OFCOM about payment by copyright owners, internet service providers and subscribers of contributions towards costs incurred under some of the copyright infringement provisions in the Communications Act 2003, inserted by the Digital Economy Act 2010.

In Article 3 the Secretary of State specifies that the Code must include the provisions set out in the Schedule.

Article 4 provides that OFCOM and the person appointed to determine subscriber appeals (the appeals body) may recover as a civil debt any amount outstanding to them under provisions in the Code included by virtue of this Order.

Paragraph 1 of the Schedule deals with the amount of notification fees. OFCOM must set the amount payable by a qualifying copyright owner for copyright infringement reports made by it to a qualifying internet service provider under the Code. The paragraph sets out how OFCOM should calculate the amount.

Paragraph 2 deals with the payment of the notification fees.

Paragraph 3 deals with the qualifying costs incurred by OFCOM and the appeals body under the Code. It sets out how fees to cover the qualifying costs are to be apportioned amongst qualifying copyright owners.

Paragraph 4 makes provision about the payment by qualifying copyright owners of amounts to cover the costs incurred prior to the first notification period.

Paragraph 5 makes provision for the appeals body to charge a fee to the relevant copyright owner for each determination of a subscriber appeal.

Paragraph 6 provides that a subscriber must pay a fee of £20 in respect of each notice of subscriber appeal the subscriber sends to the appeals body. The fee will be refunded by the appeals body if it determines every subscriber appeal raised in the notice in favour of the subscriber.

This Order was notified in draft to the European Commission in accordance with Directive $98/34/EC(\mathbf{a})$, as amended by Directive $98/48/EC(\mathbf{b})$.

An Impact Assessment has been produced. A copy may be viewed on DMCS website www.culture.gov.uk. Copies have also been placed in the Libraries of both Houses of Parliament. The Impact Assessment and the Explanatory Memorandum have been published on the website www.legislation.gov.uk

⁽a) OJ No. L 204, 21.7.1998, p.37.

⁽**b**) OJ No. L 217, 5.8.1998, p18.

Annex 6

Tariff Process: Copyright Infringement Report Tariff

- A6.1 The Copyright Infringement Report (CIR) tariff is set to recover 'relevant costs' incurred by ISPs during the first notification period and qualifying costs (including initial costs) incurred by Ofcom during the first notification period from Copyright Owners (COs). The tariff includes both the notification fee payable directly to the ISP and a payment in respect of qualifying costs payable to Ofcom. The tariff will be on a pro-rata basis in proportion to the number of CIR reports forecasted by each CO.
- A6.2 In order for Ofcom to determine a tariff per CIR certainty is required for three variables:
 - Relevant costs;
 - Qualifying costs (including initial costs); and
 - CIR volumes.
- A6.3 Ofcom has estimated relevant costs and qualifying costs as discussed in the body of this report. Ofcom has also made broad estimates of industry level CIR volumes as this was required to reach an estimate of Relevant costs. However, this forecast is subject to a high degree of uncertainty, not least because the volume of CIRs will depend on the cost per CIR which was not known when the estimates were derived.
- A6.4 Because of this uncertainty over industry CIR volumes we propose an iterative process to determine the CIR tariff. This approach is intended to improve Copyright Owners ability to forecast their demand for CIRs by revealing information about the level of industry demand during the process. The process will allow Copyright Owners to re-estimate their forecast for any ISP should forecast industry volumes be different from Ofcom's initial estimate.

Tariff Process

A6.5 Figure 1 below illustrates the proposed steps in the tariff setting process.

Online Infringement of Copyright: Implementation of the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012

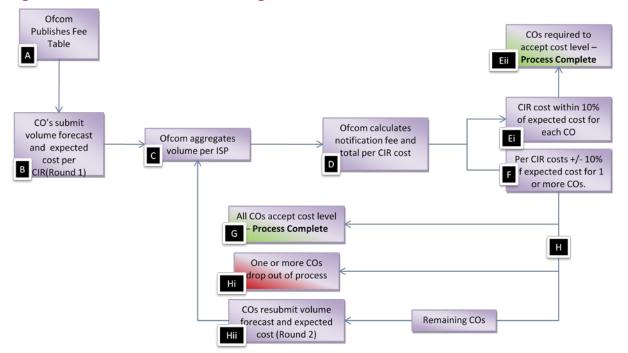


Figure 1: Illustration of Tariff Setting Process

- A6.6 In the text below we provide an explanation of the steps within the tariff process and the additional information that Ofcom will provide in order to help the Copyright Owners at their decision points.
- A6.7 The process will reveal a notification fee and total cost per CIR for large and small ISPs respectively. The processes will be undertaken concurrently as the tariffs are inter-dependent. As a result, Copyright Owners may not agree one tariff and not the other.

Round One

A. Publish fee table (industry level)

The process will begin with the publication of a fee table illustrating the notification fee and total cost per CIR for a range of industry volumes. This table will be published at the conclusion of this consultation process and is illustrated in **Figure 2** below.

	Large ISP Group Totals							
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each large ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)	
70	16.3	4,200	511	5.6	9,719	14,429	17.0	
80	18.6	4,200	583	4.9	9,719	14,502	15.0	
90	20.9	4,200	656	4.5	9,719	14,575	13.4	
100	23.3	4,200	729	4.1	9,719	14,648	12.1	
125	29.1	4,200	912	3.4	9,719	14,830	9.8	
150	34.9	4,200	1,094	2.9	9,719	15,013	8.3	
175	40.7	4,200	1,276	2.6	9,719	15,195	7.2	

Figure 2: Tariff Table Illustration (Large and Small ISP Groups)

		Small ISP Group Totals							
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each small ISP (000)	Total Fixed ISP Costs payable by CO (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee payable to ISP by CO (£ Per CIR)	Ofcom Costs payable by CO (£000)	Total Cost to COs (£000)	Total Price (£ Per CIR)		
70	2.5	2,100	38	33.6	732	2,870	45.1		
80	2.8	2,100	44	29.4	732	2,875	39.5		
90	3.2	2,100	49	26.2	732	2,881	35.2		
100	3.5	2,100	55	23.7	732	2,886	31.7		
125	4.4	2,100	69	19.1	732	2,900	25.5		
150	5.3	2,100	82	16.0	732	2,914	21.3		
175	6.1	2,100	96	13.8	732	2,928	18.4		

B. This table will allow Copyright Owners to forecast their demand for CIRs using assumptions about total industry volumes. The allocation of CIR volumes to each group of ISPs is made pro rata to subscriber numbers. Should Copyright Owners forecast no CIRs for the 'Small ISP Group' the total cost per CIR for the large tariff group would increase for each given level of CIR volumes.

Online Infringement of Copyright: Implementation of the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012

Copyright Owners are asked to submit a volume forecast for each ISP in the tariff group or groups in which they would like to participate⁴⁴. Large ISP Group includes BT, TTG, Virgin and Sky and Small ISP Group includes Everything Everywhere and O2. Alongside this volume forecast Copyright Owners are also required to submit an expected cost per CIR for each tariff group. The expected cost represents the cost level at which Copyright Owners would be prepared to commit the full volume forecast they submitted⁴⁵.

- C. Ofcom aggregates volume forecasts for each ISP. Ofcom will proceed to step D (calculation of fee) even if one or more ISP's volumes fall below the range considered in estimating the fixed costs of producing CIRs.⁴⁶ (The rationale for this is set out in section 6.) This could lead to very high per CIR costs for some ISPs who have very low volume forecasts. In this case, the tariff process will allow COs to choose to submit zero volumes for these ISPs.
- D. Ofcom calculates the notification fee and total cost per CIR for forecast industry volumes and informs Copyright Owners. Copyright Owners are also advised on the industry level volumes on which the notification fee and costs per CIR are based; an example of this is set out in the figure below. The shaded row represents the out-turn industry volumes and costs for the Large ISP Group.

	Large ISP Group Totals							
Total CIRs Per Month for all ISPs (000)	CIRs per Month for each large ISP (000)	Fixed ISP Costs (£000)	Total Variable ISP Costs payable by CO (£000)	Notification Fee (£ Per CIR)	Initial and Qualifying Costs (£000)	Total Cost to COs (£000)	Total Cost (£ Per CIR)	
70	16.3	4,200	511	5.6	9,719	14,429	17.0	
80	18.6	4,200	583	4.9	9,719	14,502	15.0	
90	20.9	4,200	656	4.5	9,719	14,575	13.4	
100	23.3	4,200	729	4.1	9,719	14,648	12.1	
125	29.1	4,200	912	3.4	9,719	14,830	9.8	
150	34.9	4,200	1,094	2.9	9,719	15,013	8.3	
175	40.7	4,200	1,276	2.6	9,719	15,195	7.2	

Figure 3: Tariff Table Illustration (Large and Small ISP Groups)

 ⁴⁴Copyright Owners can submit a zero [volume/budget] for one or more ISPs within a tariff group.
 ⁴⁵Copyright Owners should be willing to do this within a tolerance of 10%. See step F of tariff process.
 ⁴⁶ The second second

⁴⁶ Fixed costs were estimated based on volumes of 10,000 – 200,000 per ISP.

	Small ISP Group Totals							
Total CIRs Per Month for all ISPs	er Month each		Variable ISP Costs (£000)	Notification Fee (£ Per CIR)	Initial and Qualifying Costs (£000)	Total Cost to COs (£000)	Total Cost (£ Per CIR)	
70	2.5	2,100	38	33.6	732	2,870	45.1	
80	2.8	2,100	44	29.4	732	2,875	39.5	
90	3.2	2,100	49	26.2	732	2,881	35.2	
100	3.5	2,100	55	23.7	732	2,886	31.7	
125	4.4	2,100	69	19.1	732	2,900	25.5	
150	5.3	2,100	82	16.0	732	2,914	21.3	
175	6.1	2,100	96	13.8	732	2,928	18.4	

- E. If the costs per CIR for both groups are within 10% of expected cost for all Copyright Owners then they will be required to accept the volume forecasts they submitted in step B. The process is complete.
- F. If the cost per CIR for either group is outside 10% of the expected cost for any CO then proceed to step H or I. It is not possible for one tariff to be agreed and the other to proceed to the next round as the tariffs are interdependent⁴⁷.
- G. All Copyright Owners accept both industry tariffs and commit to volume forecasts submitted in step B.

Subsequent rounds

H. If we proceed to subsequent rounds Copyright Owners may either leave the process (li) or re-submit their volume forecasts (lii). If Copyright Owners choose to re-submit a forecast they may do so for either or both tariffs groups.

Repeat steps C-H

⁴⁷ This is because the qualifying costs are recovered pro rata across the two tariffs according to volumes of CIRs. If volumes for one tariff increase then, all being equal, the level of the other tariff will fall.

Online Infringement of Copyright: Implementation of the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012

Annex 7

BWCS Report into ISP Costs



Online Copyright Infringement Cost Study

MC/054

Prepared for Ofcom

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1 Executive Summary

1.1 Background

4

This report, produced by BWCS for Ofcom, examines the costs to Internet Service Providers (ISPs) of processing Content Infringement Requests (CIRs) from Content Owners (COs) under the arrangements set out in the Digital Economy Act 2010, and the associated Statutory Instrument, or SI (which was in draft form for the duration of the research in this report). A CIR contains the IP address of an alleged infringer, and ISPs must match this IP address to a subscriber, maintain a database of alleged infringers, send notification letters to them according to a prescribed regime, and provide the identities of alleged repeat infringers to the COs. They will also be expected to deal with telephone and other queries from customers about infringement.

Under the framework of the Digital Economy Act, Ofcom has a duty to set a processing price per CIR, payable by the COs, this being a share of the costs incurred by ISPs in processing the CIRs. Ofcom has the option to set different prices for CIR processing for different classes of ISPs, should it find that there are material structural differences between ISPs. Prices during an initial recovery period are expected to be set so as to allow ISPs to recover their share of capex and other upfront costs during that period.

The primary focus of the research undertaken by BWCS was to examine the costs of processing CIRs for five major fixed line ISPs in the UK, these being the ISPs who are expected to be required to comply with the scheme initially (other ISPs may be required to comply later). Through a structured questionnaire and a series of meetings with these ISPs from July to September 2010, BWCS gathered data from them concerning how they planned to implement systems and processes to meet their obligations, and the expected cost of doing so.

We did not find any structural differences between the ISPs which would justify Ofcom setting multiple prices for multiple groups of ISPs. Indeed, system and operational requirements of the ISPs were broadly similar, as was their approach to implementing IT systems to handle CIR processing.

1.2 Research and Analysis Method

Since the number of CIRs that will be sent for processing is unknown, we asked the ISPs to respond to three volume scenarios.

- The Base Case: 100,000 CIRs per ISP per month, which very loosely corresponds to a total market volume which is towards, but not at, the high end of forecasts
- The High Case: 200,000 CIRs per ISP per month, which is at the high end of market forecasts, but not the highest





• The Low Case: 10,000 CIRs per ISP per month, a considerable reduction from the base case, but expected to be still enough to require automated solutions.

We examined the ISPs' cost submissions and excluded costs which were not admissible under the draft SI. We then standardised the data from the ISPs using a common set of operational ratios. Some of these were provided to ISPs at the beginning of the project, and some were provided by the ISPs themselves.

The key operational ratio that was set at the outset was the Notification Ratio (NR), which was the percentage of CIRs that result in a notification being sent to a customer. Again, we cannot know in advance what this will be, but it was decided to give some guidance to ISPs and ask them to assume a 40% NR. This figure was based on an earlier report by NERA¹.

ISPs were asked to make their own assumptions about other important operational ratios (e.g. the percentage of notifications that led to a customer calling the ISP). We then standardised their data by using the average of their assumptions in this report, since we have not been able to source any independent evidence on the matter. However, Ofcom may wish to consider these key ratios in its consultation on the implementation of the Cost Order.

1.3 Findings

We divided costs into three categories:

- Capital expenditure and upfront costs (capex)
- Fixed operating expenditure (fixed opex), which does not vary much or at all with CIR volumes
- Variable operating expenditure (variable opex), which varies with CIR volumes.

We found that variable costs are a more important cost driver of total costs than the fixed cost elements, and that there was a significantly greater range in costs per CIR among variable cost estimates than among fixed cost estimates. In particular, the cost of handling call-ins (i.e. customers making telephone calls to the ISPs as a result of receiving a notification) is a major cost driver. The mean reported cost of handling a call-in is £8 per call. With estimated call-in rates (the proportion of letters which lead to a subscriber call) ranging from 48% for Third Notifications to 38% for Other Notifications, they represent a significant cost element per CIR.

We have not undertaken a detailed audit of the development work and costings provided by the ISPs. We have, however, accepted their explanations of the development work required, and the associated costings, for the following reasons:

¹ The Costs and Benefits to ISPs of Proposed Measures to Curb Illegal File Sharing, published in December 2009





- There is a high degree of consistency in the cost estimates provided by the ISPs, once certain discretionary variables are standardised.
- Some ISPs provided detailed technical explanations of the work involved, and there is sufficient similarity between these explanations to assure us that they are developing broadly similar systems to do the same job.
- BWCS's experience in costing similar IT projects leads us to believe that the cost drivers provided by the ISPs are reasonable.

The costs per CIR at different volume levels, together with the mean (MeanISP) are shown in the following graph and table.

Figure 1-1: Costs per CIR Based on Standard Assumptions

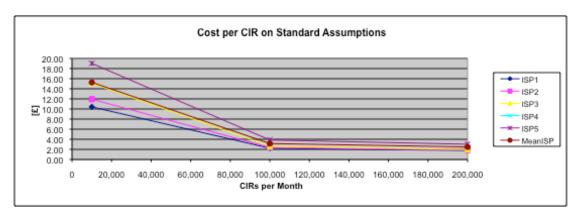


Table 1-1: Costs per CIR Based on Standard Assumptions

	CIRs/Month	10,000	100,000	200,000
[≻]	ISP1	£10.43	£2.24	£1.79
[≻]	ISP2	£11.94	£2.39	£1.85
[≻]	ISP3	£15.12	£2.65	£1.96
[≻]	ISP4	£19.26	£4.09	£3.25
[≻]	ISP5		£4.31	
MeanISP	MeanISP	£14.19	£3.14	£2.21

The composition of CIR processing costs for the Base Case, using standardised assumptions for operational ratios and assuming a 12 month initial recovery period, is shown in the following graph and table.

Figure 1-2: Cost/CIR Breakdown for Base Case with Standard Assumptions



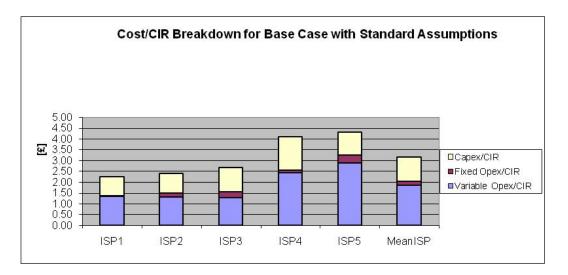


Table 1-2: Cost/CIR Breakdown for Base Case with Standard Assumptions

	[×]	[×]	[×]	[×]	[≻]	MeanISP
	ISP1	ISP2	ISP3	ISP4	ISP5	MeanISP
Variable Opex/CIR	£1.33	£1.29	£1.27	£2.41	£2.87	£1.83
Fixed Opex/CIR	£0.04	£0.20	£0.28	£0.14	£0.38	£0.21
Capex/CIR	£0.87	£0.89	£1.11	£1.54	£1.07	£1.10
Total	£2.24	£2.39	£2.65	£4.09	£4.31	£3.14

Our findings indicate the mean cost per CIR is as follows:

Mean Cost per CIR = $\pounds 1.6m/\#CIRs + \pounds 1.83$

where "#CIRs" is the total number of CIRs processed during the initial recovery period, which is assumed to be 12 months, except where stated otherwise.

At the Base Case volume of 100,000 CIRs per ISP per month, this equates to a cost of ± 3.14 per CIR.

However, Ofcom has been directed to set the price for CIRs based on the costs of an efficient operator. We believe that the total costs of a theoretical efficient operator would be as follows:

Theoretical Efficient Operator Cost per CIR = $\pounds 1.32m/\#CIRs + \pounds 1.27$

At a volume of 100,000 CIRs per ISP per month, this equates to a cost of $\pounds 2.36$ per CIR.

The most efficient real operator costs are as follows:

Actual Lowest Cost Operator Cost per CIR = $\pounds 1.32m/\#CIRs + \pounds 1.29$





At a volume of 100,000 CIRs per ISP per month, this equates to a cost of $\pounds 2.39$ per CIR.

1.4 Recommendation

As mentioned above, there is great uncertainty about many of the key operating ratios which relate to the variable costs of processing CIRs. In particular, we do not know the level of customer calls that will be generated by notifications, and ISPs are, we believe, uncertain about the per-call costs which will be associated with these calls.

This contrasts with the situation regarding capex and fixed opex, where we believe there is a much higher degree of certainty about the nature of the task that ISPs face, how they will deal with it (i.e. how they will build systems that meet their obligations), and how much it will cost.

Our recommendation, therefore, is that for the initial period of operation of the scheme Ofcom uses the theoretical efficient operator costs for capex and fixed opex, and the mean cost for variable costs, as follows:

Recommended Cost per CIR = $\pounds 1.32m/\#CIRs + \pounds 1.83$

At a volume of 100,000 CIRs per ISP per month, this equates to a cost of £2.93 per CIR. However, as discussed above, this is dependent on a number of currently unknown operational ratios, such as the Notification Ratio. If new data concerning these ratios becomes available, we would adjust our recommendation to reflect this. Establishing better operational ratios may be one of Ofcom's key tasks in setting the tariff.



2 Scope of Work

Copyright owners (COs), such as record labels and film studios, want to limit illegal downloading of their material via the Internet and thereby safeguard their revenue streams. It is currently possible for COs to identify IP addresses related to an alleged copyright infringement, but they cannot identify the person using that IP address at that time. The Digital Economy Act 2010 (the Act) introduces a new policy intended to reduce levels of copyright infringement online by introducing a scheme in which Qualifying ISPs will be obliged to identify the alleged infringer in a controlled manner.

Under the scheme, copyright owners will generate "copyright infringement reports" (CIRs), each of which include an IP address and a timestamp. ISPs which are subject to the provisions of the Act will be required to:

- identify the subscriber to which it had assigned the relevant IP address at the time cited in the CIR;
- maintain a database of the CIRs processed and the subscribers to whom they relate;
- send warning notifications to the relevant subscriber;
- handle questions/complaints from the subscriber, following receipt of the letter (Note: this is not a provision of the Act but this activity is expected);
- provide an "infringement list" (listing subscribers who have received three letters) to a copyright owner, on request, comprising specific information from the database.

At this stage, it is hard to provide context in terms of an ISP's expected total volumes and total costs (gross of any contribution from copyright owners). This study was based upon a number of volume scenarios agreed in advance with Ofcom.

Under the policy, the ISPs will have to carry out an administrative function and incur relevant costs. The costs of this activity will be shared between copyright owners and ISPs. Ofcom will need to set a price per CIR which is the amount paid by copyright owners to ISPs, for each CIR, to cover some of the costs of processing the CIR.

The objective of this project is to provide Ofcom with data and a model which will inform Ofcom's decision-making regarding the price per CIR that it will set. In particular, it allows Ofcom to determine a price based on the costs that an efficient operator would incur, or one based on some form of average costs across the ISPs who are subject to duties under the scheme.

A further objective of the study is to determine whether there are classes of ISPs which are structurally different from each other, and therefore might incur different



costs, since the cost recovery framework specified by the draft Statutory Instrument allows for different prices to be charged by different classes of ISPs.

Data has been collected from the large fixed ISPs which appear likely to be subject to the Act. Ofcom also asked us to collect some data from a sample of other ISPs, as a point of comparison. These included mobile ISPs and small fixed ISPs, whose cost structure may be very different.

This study shows where the "break-points" are within the range of possible CIR volumes, i.e. where cost and processes change significantly with increasing volumes, and identifies the costs for volumes between each of these break-points.

There may be a "soft launch", possibly covering a period in early 2011. This study mainly concerns the first period under the determined price, which may be part or all of the year from April 2011 to March 2012. Thus, the project concentrates on the "first period under the determined price" but looks briefly at the "soft launch", in both cases with no prejudice as to their exact times or durations.

Currently, the ratio between CIRs and Notifications (the "Notification Ratio", or NR) is not known. However, this ratio is a significant determinant of the overall cost of processing per CIR. Similarly, the volume of other activities within the process (such as handling subscriber enquiries) and their relationship with the number of CIRs is currently unknown. This uncertainty is handled via a model, where the parameters relating to the ratios between the number of CIRs and the numbers of these activities can be varied.

On 30 March 2010 the Department for Business Innovation and Skills published a consultation document entitled *Online Infringement of Copyright (Initial Obligations) Cost-Sharing*, which contained a draft Statutory Instrument (hereafter referred to as "the draft SI"). The draft SI sets out how various aspects of the scheme will run. In particular, it specifies, in broad terms, how the price per CIR should be determined. It says that the price should be no more than the efficient costs. During the final stages of this project, the Government closed its consultation, retaining the approach of using efficient costs. This report nonetheless analyses both efficient and average costs.

Finally, the project gives some understanding of the ways in which operations may be automated and the related lead times.



3 Research Methodology

3.1 Participating ISPs

At the outset of the project, it was expected that there would be seven "Qualifying ISPs" which would be subject to the Act. These were:

- BT
- 02
- Orange
- Post Office Internet
- Sky
- TalkTalk
- Virgin Media

Data has been collected from five of these (BT, O2, Sky, TalkTalk and Virgin), known later in the report as ISP1, ISP2, etc. to ISP5 (and not always using the same pseudonym). Orange and T-Mobile have been merged into "Everything Everywhere" whilst the project has been going on and, although they have both been helpful in providing useful background material, it has been impossible for them to give quantitative responses that they consider to be reliable because of fundamental shifts in their business model. There was no data from Post Office Internet, a Virtual ISP (VISP), because of its reliance on its network provider to give the data, which they have not done. However, during the project, administrative cleansing of Post Office Internet's customer base has resulted in it falling below the expected threshold for being a Qualifying ISP.

BWCS also contacted three mobile operators. These were:

- Hutchison 3G
- T-Mobile
- Vodafone

Of these, two (ISP6 and ISP7) responded with data of sufficient depth and breadth to be analysed (these were H3G and T-Mobile) and one (Vodafone) provided data, but not in sufficient detail to be used.

BWCS also had initial meetings set up with a few smaller fixed ISPs. Only one (ISP8) provided a complete set of data and even then only for the low volume/manual processing scenario, since they did not ever anticipate dealing with sufficient CIRs for automation to be a sensible decision. This was Demon (a trading style of Thus Ltd., a subsidiary of Cable & Wireless Worldwide plc).





3.2 ISP Contact Method and Timescales

A questionnaire (reproduced at Appendix 6.1) was developed jointly between BWCS and Ofcom and finalised on 17th June 2010. The questionnaire set out background information, an explanation of allowable costs and the assumptions that were to be made in preparing responses. It then went on to ask about the nature of the ISP and for details of costs likely to be incurred in CIR processing under certain scenarios.

Questions were designed to be fairly open, in order that ISPs could express their responses in terms of their own understanding, rather than being constrained by the approach of the researchers.

Initial contact was made by Ofcom with the person at each ISP who normally dealt with regulatory affairs, copying in BWCS. Sometimes the regulatory affairs person remained as the contact person, although in about half of cases this role was delegated, either from the outset or after an initial meeting. Typically delegates had an engineering background. Once contact had been established, meetings were arranged between BWCS and the contact person (or persons).

Within a fortnight of finalising the questionnaire, initial meetings had been held with six of the Qualifying ISPs, one smaller fixed ISP and two of the mobile ISPs. The initial meeting with the third mobile ISP took place some time later. With one exception, these initial meetings were attended by someone from Ofcom and always by one or more people from BWCS. Data collection was progressed by means of telephone, e-mail and follow-up meetings which were, with one exception, not attended by Ofcom.

As responses were received and patterns started to emerge, the data supplied by ISPs were then transferred by BWCS onto a standardised template. This version of the ISPs' data was then iterated with each ISP until the final version of the data was "signed off" by the ISP. This process was substantially complete by the first week of September 2010.

3.3 Volume and Operational Scenarios

In order for ISPs to give meaningful quantitative responses, it was necessary for them to be given reasonable assumptions for certain key variables and ratios.

Foremost is the monthly volume of CIRs to be processed. At the start of the project, Ofcom were in possession of public and confidential reports which suggested that volumes may vary between 1,000 and 300,000 CIRs per month for an ISP, or up to 1.5 million CIRs per month across the whole industry.



Furthermore, a decision was needed on whether to ask ISPs to respond on the basis of their anticipated share of that overall total, presumably based on their market share of subscribers, or on the basis of the same volume for each ISP.

It was decided to adopt the latter approach, so that results from different ISPs would be more comparable. The Base Case was set to be 100,000 CIRs per ISP per month, which very loosely corresponds to a total market volume of CIRs which is towards, but not at, the high end of forecast outcomes.

To explore the variation of cost/CIR with volume, responses were also requested for a High Case and a Low Case. The monthly volume of CIRs per ISP for the High Case was 200,000 per month, which was chosen because it was at the high end of market forecasts, but not the highest. For the Low Case, the figure of 10,000 CIRs per ISP per month was used to examine the effect of quite a drastic reduction from the Base Case, but still high enough that it was likely that solutions would be automated.

Next, it was necessary to give some guidance on the "Notification Ratio" (NR), or the proportion of CIRs which result in a notification being sent. Loosely based on a report by NERA (*The Costs and Benefits to ISPs of Proposed Measures to Curb Illegal File Sharing*, published in December 2009) and in the absence of any hard evidence, it was decided to set this at 40%, i.e. for every 10 CIRs received by the ISP, four notifications would be sent to subscribers.

ISPs were then asked to make explicit any other assumptions needed to complete their response. This will be reported more fully below but all responded with assumptions about what proportion of notifications would be third notifications (the proportion of third notifications, or PTN) and what proportion of notifications would generate a call-in by the subscriber. The total set of ISP assumptions regarding operational ratios will be examined below.



4 Raw Data Received from ISPs and Treatment of that Data

This chapter discusses the solutions each of the ISPs proposes to process CIRs and identify infringers. It comments on the types of costs that they expect to incur and on their size. In contrast to the following chapter, we have left the data largely unaltered and have not attempted to standardise it. We focus on the ISPs' own assumptions and their views of likely costs.

The ISPs' responses to questionnaires are given at Appendix 6.2 of the confidential version of this report. The "data trails" from questionnaire responses to final numbers have also been supplied to Ofcom. These data are not given in the public version for reasons of confidentiality.

Full responses for the Base, Lower and Higher Cases were received from four of the six ISPs expected to be Qualifying ISPs [\gg] and a full response for the Base Case alone from another [\gg]. Only one of these [\gg] explicitly included its business customers. Furthermore, two ISPs [\gg] limited their response to just their main "ownbrand" consumer ISP. No responses were received that related to WiFi hotspot access. A partial response for the Base, Lower and Higher Cases was received from a mobile operator [\gg], but the data were not complete enough to include in the model.

The questionnaire also asked about how the ISPs would process CIRs prior to having fully automated solutions in place. We received full responses from three Qualifying ISPs [>] and one smaller fixed ISP [>]. We also received a response from another mobile operator [>] describing a largely manual solution dealing with approximately half the CIR volume of the Base Case. These are mainly discussed in Appendix 6.3.

4.1 Allowable and Non-Allowable Costs

The Online Infringement of Copyright (Initial Obligations) (Sharing of Costs)Order,² which has been published as a draft throughout the duration of this project, and in a final version in late September 2010 gives guidelines for the costs which Ofcom must exclude in setting the tariff:

"(5) Relevant costs must exclude [emphasis added]-

(a) costs payable under a Court order;

(b) costs caused by the failure of a qualifying Internet service provider to maintain accurate subscriber records; and

² http://www.bis.gov.uk/assets/biscore/business-sectors/docs/o/10-1199-online-infringement-of-copyright-costs-order-draft.pdf





(c) costs of economic opportunities lost as a result of compliance with obligations under the copyright infringement provisions."

The questionnaire also asked ISPs to quote costs that would be incurred exclusively for online infringement work. Where costs would be shared between this and other work, the basis of cost allocation should be given.

Where ISPs have submitted cost items which would appear to fall into any of the above exclusions, these are identified.

4.2 Recovery Period

Ofcom will need to exercise its discretion to decide how capital expenditure ("capex") should be recovered via a price for each CIR. The draft SI states that the price per CIR should be the same for all CIRs within a particular period. However, Ofcom has discretion as to over how many accounting periods the capex should be recovered.

Ofcom asked us to make the simplifying assumption that there would be only one period for the recovery of capex, but that the number of months in that period could be varied. Since the price must be the same for all CIRs, this effectively means that the total capex should be divided by the total volume of CIRs in the recovery period, in order to come up with the amount of capex recovered from each CIR.

So, the capex rate per CIR will vary with the total volume in the recovery period. This in turn is a function of: (i) the volume of CIRs assumed per month (e.g. 100,000 in the Base Case) and (ii) the number of months in the recovery period.

Therefore the importance of setting a recovery period is that it is one of the factors that determine the amount of capex recovered from each CIR. Clearly, the shorter the recovery period, the more capex per CIR will be included in the cost per CIR over that period.

As mentioned in the Scope of Work section, there was an initial expectation that the "first period under the determined charge" would be the twelve months from April 2011 to March 2012 but that was not certain.

The model supplied to Ofcom allows for the duration of that period to be set to any number of whole months.

For the rest of this document, unless stated otherwise, we assume that period to be twelve months.



4.3 Definitions

Based on observation of data submitted, we have divided costs into three categories:

- "Capex and Pre-Launch Costs", being the capital expenditure and other oneoff costs incurred by the ISP before or during the "first period under the determined charge";
- "Fixed Opex", being operational expenditure per month which does not vary directly with the volume of CIRs per month;
- "Variable Opex", being the operational expenditure for which a clear relationship can be established between the costs and the volume of CIRs per month.

4.4 Capex and Pre-Launch Costs

For simplicity, we use the term "capex" to refer to the capital expenditure and other one-off costs incurred by the ISP before or during the "first period under the determined charge". It is assumed that capex will be recovered by a fixed charge per CIR over the recovery period.

This typically consists of expenditure related to:

- development of systems to receive and process CIRs
- development of systems to manage the infringement list and allow COs to interrogate it
- developing Customer Relationship Management (CRM) systems and processes to inform customer service representatives in discussion with subscribers
- developing websites to allow subscribers to see what information is held about them
- the hardware, initial software licences and testing necessary to enable the above
- development and delivery of training necessary to enable the above.

A full list of capex and pre-launch items submitted is given in Appendix 6.4.

We have not undertaken a detailed audit of the development work and costings provided by the ISPs. We have, however, accepted their explanations of the development work required, and the associated costings, for the following reasons:

• There is a high degree of consistency in the cost estimates provided by the ISPs, once certain discretionary variables are standardised (see the next section).



- Some ISPs provided detailed technical explanations of the work involved, and there is sufficient similarity between these explanations to assure us that they are developing broadly similar systems to do the same job.
- BWCS's experience in costing similar IT projects leads us to believe that the cost drivers provided by the ISPs are reasonable.

The only exception to the above is that we have disallowed two cost items which we would expect Ofcom to disallow, following the guidance of the draft SI. The first is a claim for £1m for "slippage of other projects", which we expect Ofcom would find to be a cost not attributable to the relevant activities. This was submitted by [\gg].

The other (from [%]) concerns £1.7m for the development of an IP address matching system whose use would be shared between CIR processing and RIPA work. 95% of the total development cost has been allocated to CIR processing and 5% to RIPA on the basis of the expected number of requests from each source. However, the same amount of capex is claimed for all three volume scenarios, even though the proportion of requests for each activity would obviously change. Cost allocation is subjective to some degree, and whilst allocation on the basis of future usage is not unreasonable, there are other reasonable possibilities. For instance, if the start date for CIR processing is delayed beyond the timescale for which RIPA requirements come into force, there may be a case for development costs being charged exclusively to RIPA with minimal later additional cost for CIR processing. Alternatively, one might argue that, even though future usage will be dominated by CIR processing, the actual development would have to be carried out either for CIR processing or RIPA or both, and so on that basis, the development costs would be shared equally between the two activities. For the purpose of this analysis, we have taken that last view and adjusted the capex claim down to £0.9m.

The capex claims of all ISPs are shown in the following table:

Table 4-1: Capex Claims by ISP

	[⊁]	[×]	[×]	[⊁]	[×]
As submitted	£1,042,000	£1,072,500	£1,280,000	£3,135,775	£1,850,000
As amended	£1,042,000	£1,072,500	£1,280,000	£1,330,512	£1,850,000

The basic statistics of the capex claims of all major fixed ISPs that will develop an automated solution are given in the following table:

Table 4-2: Summary of Capex Claims

Minimum	Mean	Median	Maximum
£1,042,000	£1,315,002	£1,280,000	£1,850,000

Of the five submissions, after amendments, four form a cluster in the ± 1 m- ± 1.3 m range.



The highest amended capex, $\pounds 1.85$ m, is by the only ISP that has explicitly included its business customers. Its capex includes $\pounds 250,000$ specifically to include business customers and a group of consumers not served by its mainstream solution. Although deducting that $\pounds 250,000$ does not quite bring it into the cluster, it is not very much above the rest.

In all cases, respondents have responded that capex is fixed once the decision to automate has been made and therefore the element of capex per CIR is inversely proportional to the volume of CIRs. Further, two large ISPs ([%]) have explicitly stated that capex would remain unchanged even if the volume of CIRs exceeded double the High Case scenario. However, one ISP ([%]) has stated that additional capex would be needed for volumes above the Higher Case.

Finally, we note that some ISPs include training of customer service agents as a oneoff pre-launch cost whereas others treat it as recurring fixed opex. Three ISPs claimed one-off training costs of £12,500, £100,000 and £176,000; one claimed a recurring £100,000 per annum and one claimed nothing for customer service training. We note that in general there is no correlation between the amount claimed for customer service training and the ISP's expectation of the number of customer callins.

4.5 Fixed Opex

For simplicity, we use the term "fixed opex" to refer to recurring expenditure which is not directly related to CIR volumes. It is assumed that fixed opex will be recovered by a fixed charge per CIR over the Recovery Period and beyond.

This typically consists of expenditure related to:

- staff costs
- system support costs
- costs of annual QA assessment
- costs of enquiries, including Subject Access Requests³ and general enquiries, which are not directly related to CIRs or Notifications
- general management.

A full list of submissions in this category is given in Appendix 6.4.

The fixed opex per month claims of all ISPs are given in the following table:

Table 4-3: Fixed Opex per Month Claims by ISP

³ Requests for data held about an individual made under the Data Protection Act





[≻]	[⊁]	[⊁]	[⊁]	[×]
£4,167	£14,366	£20,500	£27,646	£37,500

One ISP ([\gg]) has submitted fixed opex which includes nothing except system support, estimated at 5% per annum of system development costs. This ISP has been invited to submit additional costs claimed by others, but declined to do so on the basis that, given the uncertainty about CIR volumes, this was "good enough for now". Therefore this should not be considered an example of efficient operation but rather as a case where legitimate costs have not been claimed. This ISP is not included in the statistics below.

For the remaining fixed ISPs that will develop an automated solution, the basic statistics of their fixed opex claims are given in the following table:

Table 4-4: Summary of Fixed Opex per Month Claims

Minimum	Mean	Median	Maximum
£14,366	£25,003	£24,073	£37,500

The maximum fixed opex submitted includes an element of just over $\pounds 8,000$ per month ($\pounds 100,000$ per year) on a rolling training programme for customer service staff. As noted at the end of the previous section, other ISPs had claimed the same order of magnitude as a one-off cost. The ISP that claimed the highest fixed opex claimed capex at the lower end of the range.

For three of the five respondents, fixed opex was indeed stated to be fixed once the decision to automate was made. In one case, fixed opex varied very slowly with CIR volumes (an increase of 40% on a volume increase of 2,000%). The fifth ISP responded only for the Base Case. When asked, they said that they currently have no view on fixed opex for the other cases. It is reasonable to assume that, as a close first approximation, fixed opex really is fixed.

4.6 Total Fixed Costs

There is a certain degree of correlation between higher capex and lower fixed opex. It may therefore be instructive to look at the total of these over the recovery period, assumed to be twelve months. We believe the ISP represented here as ISP1 has under-reported fixed opex.

Figure 4-1: Total Fixed Cost Claims in Recovery Period by ISP



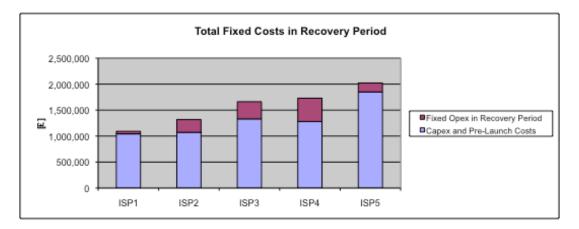


Table 4-5: Total Fixed Cost Claims in Recovery Period by ISP

	[≻] ISP1	[≫] ISP2	[≫] ISP3	[≫] ISP4	[≫] ISP5
Capex and Pre-Launch Costs	£1,042,000	£1,072,500	£1,330,512	£1,280,000	£1,850,000
Fixed Opex in Recovery Period	£50,000	£245,996	£331,750	£450,000	£172,392
Total Fixed Costs in Recovery Period	£1,092,000	£1,318,496	£1,662,262	£1,730,000	£2,022,392
Fixed Costs per CIR (Base Case)	£0.91	£1.10	£1.39	£1.44	£1.69

The basic statistics, excluding the ISP we believe to have under-reported its fixed opex, are:

Table 4-6: Summary of Fixed Costs Claims in Recovery Period

	Minimum	Mean	Median	Maximum
Total Fixed Costs in Recovery Period (Capex				
+ Fixed Opex)	£1,318,496	£1,683,287	£1,696,131	£2,022,392
Fixed Costs per CIR	£1.10	£1.40	£1.41	£1.69

If we take the average capex for all five ISPs and the average fixed opex for just four, the average total fixed cost is $\pounds 1.62m$ or $\pounds 1.35$ per CIR (made up of $\pounds 1.10$ for the capex element and 25p for fixed opex) in the Base Case.

Ofcom may therefore like to consider these figures as indicative of the capex and fixed opex elements of overall cost when setting the tariff, bearing in mind of course that the figure will be different if a different volume of CIRs or recovery period is used. The spreadsheet to calculate this is included in the model.

Up to this point, analysis has been based on each ISP processing the same number of CIRs per month. However, it is assumed, in the absence of evidence to the contrary,



that the actual number of infringements detected on each ISP's network will be proportional to the number of subscribers on that network. Thus, we would expect approximately eight times as many detected alleged infringements on BT, TalkTalk and Virgin as we would on O2.

It is entirely possible that COs may choose to contract with ISPs on the basis of each ISP processing the same volume of CIRs. However, it seems more likely that COs and ISPs contract on the basis that the larger the ISP's subscriber base, the more CIRs it will receive. So we could expect to see the big three each processing eight times as many CIRs as O2 and hence receiving eight times as much of the total fixed cost element of the processing fee. If we take the total fixed cost of each ISP to be the same, then setting a single tariff such that the large ISPs recover their agreed share of costs means that a smaller ISP will substantially under-recover its costs. Conversely, setting a single tariff based on the smaller ISP's volume will mean that the larger ISPs substantially over-recover.

On the other hand, if a different price were applied to each ISP, there is a risk that the COs may wish to send a disproportionate number of CIRs to the biggest (and hence cheapest) ISP. During the 'bidding process' for CO volumes, this would further lower the cost per CIR (and hence the price) for the largest ISPs, while raising it for the smaller players. Ultimately, the effect could be felt by consumers, with infringers on the very largest ISPs being targeted at the expense of those on the next tier of (still relatively large) ISPs.

Differential pricing could be introduced by Ofcom if the case can be made that major fixed ISPs of different sizes are actually structurally different. However, we did not find any evidence to support the view that there are structural differences between the major fixed ISPs, despite their varying sizes, and so we believe that Ofcom would therefore be obliged to apply a single CIR price across all of them.

This issue applies only to capex and fixed opex, not to variable costs. Nevertheless, the choice of a single tariff for all CIRs/ ISPs raises the risk of significant over/ under recovery of fixed costs by some ISPs.

4.7 Variable Opex and Key Operational Ratios

The costs associated with certain activities are dependent on the volume of CIRs per month and thus, in some cases, the volume of notifications. The questionnaire contained the assumption that 40% of CIRs would give rise to a notification, but ISPs were asked to consider other operational ratios and costs based on experience.

These variable costs are considered under three headings: Communication, Call-Handling and Other.

4.7.1 Communication Costs



The Draft Initial Obligations Code (DIOC)⁴ states that ISPs should send Notifications to customers on receipt of certain CIRs related to that customer. In summary, the sending of each notification is followed by a grace period in which no notification will be sent regarding new CIRs related to that customer.

After the conclusion of our research, we understand Ofcom will publish a further draft version of the Online Copyright Infringement Initial Obligations Code. Under that draft of the Code, Third Notifications do not have to be sent by recorded delivery, and email notifications will not be permitted. However, the assumption behind the research in this report was the position outlined in the DIOC, i.e. that recorded delivery would be required for Third Notifications. Thus, Ofcom should note that the costs per Third Notification should be adjusted in the light of its position in the final version of the Code.

The significance of the Third Notification is that it leads to the subscriber being identified (via a code – the subscriber's name is known only to the ISP at this stage) in the Infringement List and opens the possibility for COs to initiate legal action.

Thus an important assumption is the Proportion of Third Notifications (PTN), since that determines how many of the notifications will be relatively expensive to send, (if sent by recorded delivery) and ISPs were invited to make an estimate of this based on experience of similar schemes.

The relevant inputs from ISPs are shown in the following table:

Table 4-7: ISPs' Assumptions on Communications Costs

	[≫] ISP1	[⊁] ISP2	[≫] ISP3	[≫] ISP4	[≫] ISP5
Proportion Third Notifications [% of all notifications]	11%	12%	12%	17%	33%
Cost per Third Notification	£1.11	£1.10	£1.40	£1.15	£1.20
Cost per Other Notification	£0.73	£0.35	£0.48	£0.27	£0.00

Most ISPs have chosen to use normal mail to send non-third notifications, but one has chosen to send them by e-mail, which is allowable under the draft version of the DIOC. The ISP has assumed that these non-third notifications incur no costs. The reason given by the same ISP for assuming PTN of 33%, the theoretical maximum, is that in practice they may not have valid e-mail addresses for some customers and would therefore have to send a letter. For this to be true, every customer receiving a first notification will end up with a third one – implying that the first and second



⁴ This can be found at: http://stakeholders.ofcom.org.uk/binaries/consultations/copyright-infringement/summary/condoc.pdf

notifications have no dissuasive effect. This seems unlikely and would call the scheme generally into question.

The costs of third notifications fall in the relatively tight band between £1.10 and £1.40, but the costs of other notifications vary quite widely. Those at the low end are purely incremental costs of stationery and postage, whereas the most expensive uses a third party for sending customer letters and includes the full overheads of that third party. It is not clear why that same ISP has a relatively low value for sending Third Notifications.

Of the two mobile operators who responded on this point, one [%] would send all notifications by SMS (since it would not be bound by the DIOC) and the other [%] would send all notifications to pre-pay customers, over half its customer base, by SMS and also claims its cost of sending a letter is £10 (which has not been taken into account in any of this analysis).

The costs associated with sending letters to customers are, or should be, well known within each organisation and variation of those costs is largely a matter of business practice, on which Ofcom may take a view from the perspective of efficiency.

However, all ISPs have made the point that there have not been past schemes which are sufficiently similar to come up with an accurate estimate for PTN, which is a known unknown and will probably affect all ISPs equally. The 2008 "MoU trial", for instance, is not considered directly comparable because at no stage was there the threat of legal action and individual ISPs adopted inconsistent approaches to notifications (some sending only one notification per subscriber over the whole trial, others up to weekly ones).

The mean estimate of PTN is 17% and the median 12% (this includes the ISP that assumes a PTN of 33%).

The mean estimate of cost per third notification is $\pounds 1.19$.

The mean estimate of other notifications is 46p (this excludes the ISP that submitted a zero cost for other notifications).

4.7.2 Call Handling Costs

All ISPs have assumed that a proportion of customers who receive a notification will call the ISP for further explanation. Some ISPs have gone further and assumed that this call-in rate will vary according to which notification it is. For simplicity, we have reduced this to a call-in rate for third notifications and a call-in rate for other notifications.

The rates assumed by ISPs are shown in the following table, together with the ISPs' assumptions about the cost of handling those calls.

 Table 4-8: ISPs' Assumptions on Call Handling Costs

	[×]	[≻]	[×]	[≻]	[≻]
	ISP1	ISP2	ISP3	ISP4	ISP5
Call-ins per Third Notification [%]	10%	15%	85%	40%	90%
Cost of Third Notification Call-in	£5	£5	£6	£10	£15
Call-ins per Other Notification [%]	10%	10%	85%	24%	50%
Cost of Other Notification Call-in	£5	£5	£6	£10	£15

Note the extreme variation in ISPs' assumptions about the call-in rate – between 10% and 90% of notifications are expected to generate a call. One ISP [>] has assumed that 50% of all CIRs, as opposed to notifications, would generate a call-in, of which some would be related to notifications but others would be general enquiries generated by publicity, Subject Access Requests or enquiries related to the customer's status regarding the Infringement List. As noted before, some other ISPs have taken these costs into account in their fixed opex submissions.

There is also considerable variation in the anticipated costs of call-handling. To some extent these differences are a result of business decisions (call centres in the UK rather than abroad, a policy of giving customers a full explanation instead of closing the call as quickly as possible, and so on), on which Ofcom may take a view on what constitutes efficiency. However, call duration is to some extent beyond the ISPs' control and will impact costs. In general, ISPs have commented that they have no previous experience of schemes such as this, and consequently no evidence on which to base a response.

A summary of ISPs' assumptions about call handling is shown in the following table.

Table 4-9: Summary of ISPs' Assumptions on Call Handling Costs

	Minimum	Mean	Median	Maximum
Call-ins per Third Notification [%]	10%	48%	40%	90%
Cost of Third Notification Call-in	£5	£8	£6	£15
Call-ins per Other Notification [%]	10%	36%	24%	85%
Cost of Other Notification Call-in	£5	£8	£6	£15

4.7.3 Other Variable Costs

In addition to the above variable costs, which are reasonably necessary for the ISP to take a view on in order to provide a complete response, two ISPs identified additional variable costs.

The first ISP [\gg] has assumed that a proportion (10%) of customers receiving a notification will attempt to cancel their account with the ISP. These customers will be dealt with by a "save team" at a cost of £15 per save attempt. While we understand





the business reasons for an ISP to engage in this activity, we do not believe that such costs are admissible in this case, since we believe they should be classified as "costs of economic opportunities lost as a result of compliance with obligations under the copyright infringement provisions", which are excluded under the Draft SI.

The same ISP then goes on to assume that some proportion of customers referred to the save team are in fact lost and that the cost to the ISP of that loss is the average lifetime value of a typical customer. Again, we would consider it unlikely that such a cost would be admissible for the same reason.

A second ISP [>] has assumed that a proportion (2.5%) of customers receiving a notification will issue a "complaint", i.e. an escalation beyond normal customer service, that will take £34 to resolve. Since this ISP does not state that the cost of dealing with the complaint is related directly to saving the customer, we have included this cost in our calculations.

In our opinion, it makes more sense to deal with the costs of escalation/complaint as a variable cost than a fixed cost, since such instances are indeed more likely to increase with an increasing number of notifications.

The second ISP [>] has assumed that 12% of attempts to match IP addresses to customer accounts will fail and that £6 will be spent in an attempt to match them manually. The 12% is derived from an actual system test. However, the ISP was unable to say how successful manual intervention would be because they had not actually tried it. Other ISPs were asked their view. The extremes of estimates of "match failures" were 2% and 20%, both from different departments of the same ISP [>], which eventually settled on "less than 10%" although that was dependent on a pre-launch activity cost to reconcile data so that the situation is less likely to arise. Several ISPs have commented that if the systems cannot find the match, it is highly unlikely that a manual investigation would be able to. Some ISPs had included an (ill-defined) amount in fixed opex to deal with match failures.

The reason commonly given for failure to match is "dirty data". One might argue that this cost is not allowable because it is a cost "caused by the failure of a qualifying internet service provider to maintain accurate subscriber records".

On the other hand, the more pragmatic questions are: (i) whether allowing such a cost would be cost-effective in materially improving identification of alleged infringers and (ii) whether COs would be willing to pay extra for that. On the first question, it is unlikely that an answer can be given until systems are actually in place and manual intervention has been tried. Hence we simply do not know whether a match rate of, say, 90% would be improved to 91% or 99% (or not at all, as has been suggested by two ISPs). On the second question, the only estimate of cost comes to 75p per CIR, including supervision costs, which is material. COs may not be prepared to pay for that. Until there is evidence that manual intervention will make a material difference, we assume that the cost will not be allowed.

It appears that there is a relationship between the quality of ISPs' records and systems and the amount of money they need to spend in correcting failures. Our understanding is that Ofcom will expect ISPs to meet a certain minimum level of quality. Our understanding is also that Ofcom will not permit ISPs that fail to meet this minimum level to recover the costs of improving their systems so as to meet the minimum standard.

Finally, one ISP [\Join] has taken a very different approach to Quality Control to the others. The DIOC requires ISPs to undertake a quality audit before their system goes live and annually thereafter. Several ISPs have assumed an annual cost of £10k for this, with one assuming a somewhat larger pre-launch cost to comply in the first place, with £10k per annum after that. The ISP that differs treats quality control as a variable issue, assuming that 2% of all CIRs are subject to a "governance check" at £12 each. Although the absolute cost (£24k per month for Base Case volumes) is high, an on-going quality control process is certainly likely to be more robust than a once per year check. Hence we have included this ISP's Quality Control costs in our calculation. Several other ISPs have commented that they cannot give an accurate estimate of the cost of an annual audit until Ofcom have specified exactly what is being audited.

4.8 Lead Times

ISPs have replied unanimously that systems development will only be started once the following two conditions are in place:

- all relevant legislation and the Obligations Code are finalised and stable;
- COs have committed to whatever payment they will be required to make.

One ISP [\gg] has taken the last point further and said it will not start development until it has actually received payment for capex items from the COs. The sentiment was echoed by other ISPs who did not put this in writing.

Once these conditions have been met, ISPs anticipate a lead time of 6-12 months before systems are operational.

Typically, this is composed of the actual development time and a delay caused by the fact that, for certain complex and ever-changing systems (e.g. CRM), the pipeline for development is frozen 3-6 months ahead. Nothing but the most extreme circumstances would allow that waiting time to be overridden.



4.9 General Observations on Fixed, Variable and Total Costs and Summary

It is ultimately for Ofcom to decide which costs are allowable and which are not. In anticipation of its decisions, we present the following summary of the ISPs' costs on their own assumptions. The costs submitted by ISPs have all been allowed except:

- £1m of capex for "slippage of other projects";
- £0.8m of capex for a system shared with other activities;
- variable opex for saving customers and lost future business (i.e. churn);
- variable opex for manual intervention in the event of failure of systems to match an IP address with a customer.

Under those assumptions, the total costs per CIR (assuming a 12 month recovery period) for different CIR volumes are shown in the following chart and table:



Figure 4-2: Cost/CIR Based on ISPs' Own Assumptions

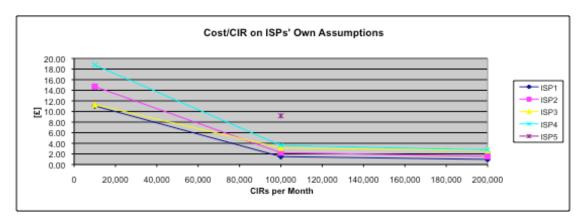
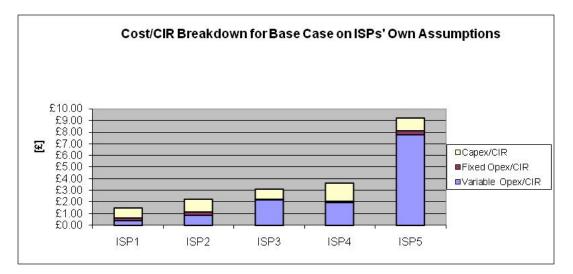


Table 4-10: Cost/CIR Based on ISPs' Own Assumptions

	CIRs per Month	10,000	100,000	200,000
[×]	ISP1	£11.04	£1.49	£0.95
[×]	ISP2	£14.70	£2.23	£1.54
[×]	ISP3	£11.30	£3.11	£2.65
[×]	ISP4	£19.26	£4.09	£3.25
[×]	ISP5		£9.18	

The breakdown of costs per CIR for the Base Case is shown for different ISPs in the following chart and table:

Figure 4-3: Cost/CIR Breakdown for Base Case on ISPs' own Assumptions







	[×]	[×]	[⊁]	[×]	[≻]
	ISP1	ISP2	ISP3	ISP4	ISP5
Variable Opex/CIR	£0.39	£0.85	£2.20	£2.41	£7.74
Fixed Opex/CIR	£0.20	£0.28	£0.04	£0.14	£0.38
Capex/CIR	£0.89	£1.11	£0.87	£1.54	£1.07
Total	£1.49	£2.23	£3.11	£4.09	£9.18

The disparity between the variable costs per CIR for the different ISPs is immediately apparent, ranging from 39p to ± 7.74 , a factor of over twenty.

This disparity is partly explained by different costs ISPs have given for carrying out the various activities, but these differences vary by a factor of three at most and for some costs only by a few percent. The other reason is the wide differences assumed for the operational variables - the probability of certain events taking place.

ISP5 is particularly expensive because of its assumptions about call-in rate and the costs of call-handling, in comparison to others. This applies to some extent also to ISP3 for the same reasons. ISP4, which has fairly average call-handling assumptions, is higher because of its approach to quality control.

Put alternatively, ISP1 is particularly cheap because of its low assumptions about callin rates and the costs of call-handling, in comparison to others.

Overall, we can see that the contribution of fixed opex to the overall cost is very low and we have noted before that the combined total of capex and fixed opex is fairly standard. **What really matter are the assumptions behind variable opex.** In the following chapter, we discuss these in more detail and contrast them.



5 Analysis and Discussion

5.1 Discussion of Critical Parameters and Sensitivity Analysis

This chapter discusses the critical assumptions and estimates that impact on the final price. In contrast to the previous chapter, it also looks at the costs that result from applying a standard set of assumptions to the data provided by ISPs.

The assumptions behind variable opex make a huge difference to the total cost per CIR. ISPs can make some sort of estimate of the cost of responding to various events based on experience. But it is very difficult for them to make reliable estimates of the probability of those events occurring – the key operational ratios. Because of their lack of experience of a similar scheme these probabilities will only start to become known over time, but not until after the scheme has been in operation for several months.

The most important assumption is the proportion of CIRs that lead to a notification being sent (the Notification Ratio). This was agreed to be set at 40% at the start of this exercise. The impact of this assumption will be reviewed below. There are reasons to argue that the ratio may be much higher, or indeed much lower, than 40%.

5.1.1 Communication Costs

The contribution that communication costs make to the cost per CIR depends on four elements:

- 1. The proportion of CIRs that lead to a notification (assumed to be 40% in the Base Case).
- 2. Given the total number of notifications, how many of them relate to third notifications (PTN)?
- 3. What is the cost of a third notification?
- 4. What is the cost of other notifications?

The percentages at 1 and 2 above must be multiplied together and then applied to the types of communication costs, in order to calculate their contribution to the cost per CIR. (This is because we are dealing with a cost per CIR rather than a cost per notification). As 1 and 2 are combined, this means that uncertainty in both of them is amplified when applied to the cost per CIR.



For convenience, the inputs from ISPs are repeated in the following tables together with the basic statistics.

Table 5-1: ISPs' Assumptions on Communication Costs

	[≫] ISP1	[≻] ISP2	[≻] ISP3	[≫] ISP4	[≻] ISP5
Proportion Third Notifications [% of all notifications]	11%	12%	12%	17%	33%
Cost per Third Notification	£1.11	£1.10	£1.40	£1.15	£1.20
Cost per Other Notification	£0.73	£0.35	£0.48	£0.27	£0.00

Table 5-2: Summary of ISPs' Assumptions on Communication Costs

	Minimum	Mean	Median	Maximum
Proportion Third Notifications [% of all]	11%	17%	12%	33%
Cost per Third Notification	1.10	1.19	1.15	1.40
Cost per Other Notification	0.27	0.46	0.42	0.73

The zero cost of one ISP sending notifications by e-mail has not been included in the statistics.

The PTN is important, not only for communication costs, but also for call-in costs (see next section) which are significant too, and may vary depending on whether it is a first/ second notification or a third notification.

Since we do not know what the real PTN will be, all we can do is look at ISPs' estimates. From this point on, we will assume PTN to be 17%, the mean of their estimates.

Estimating an allowable cost per Third Notification is somewhat easier since all estimates are relatively close and so, again, we will use the average, $\pounds 1.19$.

The average cost of sending an Other Notification is 46p, excluding the ISP that used e-mail, which would reflect inclusion of some overheads on top of stationery and postage, and this figure will be used.

Putting these figures together leads to an average communication cost per CIR of 23p (assuming an NR of 40%)

Varying PTN between the minimum and maximum values put forward by ISPs, whilst keeping costs the same, generates an 8p range of cost from 19p per CIR to 27p per CIR.



BWCS Turning Technology into Business Varying costs of an Other Notification between the minimum and maximum values put forward by ISPs, whilst keeping PTN at 17%, generates a 16p range of cost from 16p per CIR to 32p per CIR.

Thus, the communication cost per CIR is sensitive to the assumptions made. We can measure this sensitivity relative to the total average fixed cost per CIR or "base cost". The range of outcomes from varying the PTN assumption equates to about 6% of the base cost, whereas the range from varying the value of Other Notification costs relates to about 11% of the base cost.

We understand the revised draft of the Initial Obligations Code will remove the need for Third Notifications to be sent by recorded delivery (as well as no longer permitting notification by e-mail). Thus, PTN would no longer have any impact on communication costs (although it might still be expected to have an impact on callins).

5.1.2 Call Handling Costs

Again, data are repeated here for convenience.

Table 5-3: ISPs' Assumptions On Call Handling Costs

	[⊁]	[×]	[≻]	[≻]	[×]
	ISP1	ISP2	ISP3	ISP4	ISP5
Call-ins per Third Notification [%]	10%	15%	85%	40%	90%
Cost of Third Notification Call-in	£5	£5	£6	£10	£15
Call-ins per Other Notification [%]	10%	10%	85%	24%	50%
Cost of Other Notification Call-in	£5	£5	£6	£10	£15

Table 5-4: Summary of ISPs' Assumptions On Call Handling Costs

	Minimum	Mean	Median	Maximum
Call-ins per Third Notification [%]	10%	48%	40%	90%
Cost of Third Notification Call-in	£5	£8	£6	£15
Call-ins per Other Notification [%]	10%	36%	24%	85%
Cost of Other Notification Call-in	£5	£8	£6	£15

ISPs have assumed that the cost of call-handling is the same for both types of call.

The two main reasons why ISPs' estimates of call-handling costs differ from each other appear to be:

• a business decision to use UK call-centres rather than outsource more cheaply abroad



their assumptions about average call duration ([≫] have assumed 15-30 minutes; [≫] assumed 10-15 minutes).

We do not have a view on whether off-shoring, which is widely perceived to give cheaper but poorer quality service, is considered "efficient". Also, we have no way of knowing what the actual call durations will be. Again, we have chosen to use the average cost of $\pounds 8$.

Also, in the absence of any other evidence, it is suggested that we use the average call-in rates.

This gives a call-handling cost per CIR of $\pounds 1.23$, almost as high as the total fixed cost per CIR of $\pounds 1.35$.

If minimum assumptions are used, then the call-handling cost per CIR is just 20p and if maximum assumptions are used, it is ± 5.15 (although no single ISP is anticipating all maxima together).

Clearly this is a significant cost element with a significant sensitivity. Reducing the allowable cost per call-in in the name of efficiency would reduce the overall cost somewhat, but by far the biggest determinant is the call-in rate which is simply unknowable at this point. For the purposes of setting a tariff we will use the averages, but would suggest the position is reviewed when actual data are available.

5.1.3 Complaint/Escalation Costs

The input we have in this area is:

• 2.5% of recipients of notifications need to be dealt with at a unit cost of £34. This equates to 34p per CIR.

We have argued above that, in principle, it seems right that some variable cost element should be included for this activity. We will only know the frequency of complaints once the scheme has been operational for a while.

We have included this cost in our analysis.

5.1.4 Quality Control Costs

One ISP has suggested sampling 2% of CIRs for a "governance check" at £11.80 each. This equates to 24p per CIR.

Some other ISPs were asked their view of this approach. The only one which has replied at the time of writing [>] said this is something they would do if required to, but they had no view on costs or whether that sampling rate is appropriate.



We have included a provision for quality checking.

5.1.5 Notification Ratio

As mentioned, a Notification Ratio (NR) of 40% has been assumed for the whole of this project.

Three factors are important in determining the Notification Ratio. The first is the strategy of COs regarding detection and reporting of infringements. If the COs wish to maximise the number of households receiving a notification, this will result in NR close to 100% and PTN close to 0%. If on the other hand they wish to collect as much evidence as possible against very heavy infringers, this will result in NR probably in the range 3-6% and PTN in the range 20-25%. We recommend that Ofcom discuss this issue with the COs prior to making a final determination on costs.

The second factor is the total volume of CIRs submitted per month to ISPs. As this rises, ceteris paribus, NR will decline. This is an important point, since, if the price paid by COs for CIR processing reflects the cost of processing, the price should fall with committed volumes.

The third important factor in determining the Notification Ratio is the concentration of infringers within the overall subscriber population. As fewer subscribers are assumed to be responsible for more infringements, then, ceteris paribus, the NR will fall. This is probably an "unknowable unknown" at this point, but Ofcom should review it after the first period of operation of the scheme.

So, whilst a notification ratio of 40% is entirely possible, it is another unknown at this point. The following chart and table show how variable opex per CIR, using the standardised figures in the earlier part of this section, will vary with NR.



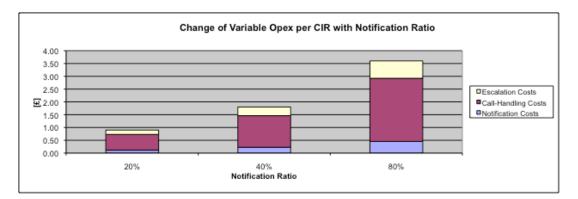


Figure 5-1: Change of Variable Opex per CIR with Notification Ratio

35

Table 5-5: Change of Variable Opex per CIR with Notification Ratio

Notification Ratio	20%	40%	80%
Communication Costs	£0.11	£0.23	£0.45
Call-Handling Costs	£0.62	£1.23	£2.47
Escalation Costs	£0.17	£0.34	£0.68
Total Variable Opex per CIR	£0.90	£1.80	£3.60

5.2 Analysis Using Standardised Assumptions

We have modelled an ISP we have called MeanISP, which uses mean capex (after allowing for the excluded items), mean fixed opex (excluding the ISP which underreported this) and mean costs and assumptions for variable opex activities.

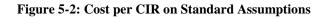
The costs shown in the following tables and charts for the other ISPs are their own reported capex (after allowing for the excluded items), own fixed opex (for all ISPs) and their own costs but standard assumptions for variable opex activities.

The main effect of this standardisation is that the costs of ISPs which had assumed a high call-in rate have come down and those which had assumed low call-in rates have gone up.

The first chart and table show how costs per CIR vary with CIR volume.







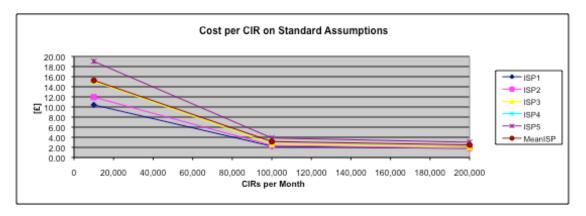


Table 5-6: Cost per CIR on Standard Assumptions

	CIRs/Month	10,000	100,000	200,000
[≻]	ISP1	£10.43	£2.24	£1.79
[≻]	ISP2	£11.94	£2.39	£1.85
[≻]	ISP3	£15.12	£2.65	£1.96
[≻]	ISP4	£19.26	£4.09	£3.25
[≻]	ISP5		£4.31	
MeanISP	MeanISP	£14.19	£3.14	£2.21

The following chart and table show the breakdown of cost per CIR for the Base Case.

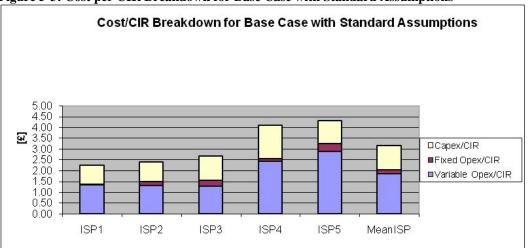


Figure 5-3: Cost per CIR Breakdown for Base Case with Standard Assumptions





	[⊁]	[≻]	[≻]	[≻]	[≻]	MeanISP
	ISP1	ISP2	ISP3	ISP4	ISP5	MeanISP
Variable Opex/CIR	£1.33	£1.29	£1.27	£2.41	£2.87	£1.83
Fixed Opex/CIR	£0.04	£0.20	£0.28	£0.14	£0.38	£0.21
Capex/CIR	£0.87	£0.89	£1.11	£1.54	£1.07	£1.10
Total	£2.24	£2.39	£2.65	£4.09	£4.31	£3.14

Table 5-7: Cost per CIR Breakdown for Base Case with Standard Assumptions

5.3 Conclusions

We have examined the data received from the ISPs and, as described in earlier sections, have done the following:

- Disallowed those cost items which we believe are not admissible under the framework
- Applied standardised assumptions to the ISPs' data
 - Some of these standardised assumptions were agreed with Ofcom at the beginning of the project, including the NR of 40% and the CIR volumes in the Base, Low and High Case
 - Others not agreed in advance have been based on taking the average of ISPs' own assumptions: we have not been able to source any evidence to do otherwise, though Ofcom may wish to consider these key ratios in its consultation on the implementation of the Costs Order.

This yields a range of costs per CIR between £2.24 and £4.31, with a mean of £3.14

We have established that capex and fixed opex are effectively independent of volumes once the decision to automate has been taken, and that in the Base Case of 100,000 CIRs per ISP per month, the largest per-CIR cost component is variable opex.

5.3.1 CIR Costs Based on Mean Values

Should Ofcom wish to base its decision on mean values, our findings indicate the mean cost per CIR is as follows:

Mean Cost per CIR = $\pounds 1.6m/\#CIRs + \pounds 1.83$

At a volume of 100,000 CIRs per ISP per month, this equates to a cost of \pounds 3.14 per CIR.

5.3.2 CIR Costs Based on an Efficient Operator





Ofcom has been directed to set the price for CIRs based on the costs of an efficient operator.

To arrive at an appropriate benchmark for an efficient operator, we have asked ISPs for information on costs, and received a range of estimates for different cost elements. Based on this, there are two possible benchmarks:

- **Theoretical efficient operator**. Construct the costs of a theoretical ISP based on lowest cost in each cost category. This is a theoretical operator which does not correspond to any real ISP. It takes the best elements (lowest cost) from each ISP and combines them. (This approach is only valid if there is no substitution between costs categories, for example for higher fixed investment to result in lower operating costs)
- Actual lowest cost operator. This looks at total costs for real operators and chooses the cheapest. While some of the individual elements may not be the lowest cost/ most efficient ones, the overall costs of processing are the lowest/ most efficient.

The choice of approach may be at Ofcom's discretion, following consultation. We set out both approaches below, starting with the theoretical efficient operator.

In our view, efficiency can be broken down into two elements:

- Efficient fixed costs (i.e. capex and fixed opex)
- Efficient variable costs (i.e. variable opex).

In the area of fixed costs, we believe it is sensible to look at capex and fixed opex together. As mentioned in previous sections, there are some activities common to all ISPs which are classified differently. For example, some ISPs include the training of customer service agents as a one-off pre-launch cost, while others treat it as recurring fixed opex.

The totals of capex, pre-launch costs and fixed opex in the recovery period for each ISP are shown in the following table:

Table 5-8: Total of Capex and Fixed Opex in Recovery Period by ISP

	[≫] ISP1	[≫] ISP2	[≫] ISP3	[≫] ISP4	[≫] ISP5
Sum of Capex and Fixed Opex	£1.09m	£1.32m	£1.66m	£1.73m	£2.02m
Per CIR (base case)	£0.91	£1.10	£1.39	£1.45	£1.68

The lowest total fixed costs in the recovery period estimated by an ISP were £1.09m, equivalent to £0.91 per CIR in the Base Case.



However, we are not confident that this ISP [>] has included all relevant costs in fixed opex. It only submitted one cost item in fixed opex – system support – and declined to submit costs for other items which other ISPs included, such as staff costs and general management.

We therefore believe that the total fixed costs of an efficient operator in this case would be the next highest costs submitted by an ISP: i.e. $\pm 1.32m$, or ± 1.10 per CIR in the Base Case.

As mentioned in earlier sections, variable costs are more important in the total cost of processing CIRs, and also subject to the greatest uncertainty, since many key operational ratios are unknown at this stage.

However, based on the information we have available, we believe the efficient operator variable cost for CIRs should be the lowest variable costs cited by an ISP and calculated by application of the standardised operational ratios: namely $\pounds 1.27$ per CIR.

This gives total theoretical efficient operator costs as follows:

Efficient Operator Cost per CIR = $\pounds 1.32m/\#CIRs + \pounds 1.27$

At a volume of 100,000 CIRs per ISP per month, this equates to a cost of $\pounds 2.36$ per CIR.

Considering the actual lowest cost operator, the ISP with the most efficient fixed costs also has one of the lowest variable costs. Its variable costs are only $\pounds 0.02$ more than the most efficient variable cost above. This ISP represents the most efficient real operator and has the following costs:

Efficient Operator Cost per CIR = $\pounds 1.32m/\#CIRs + \pounds 1.29$

At a volume of 100,000 CIRs per ISP per month, this equates to a cost of $\pounds 2.39$ per CIR.

5.3.3 BWCS Recommendations on CIR Cost Determination

As mentioned above, there is great uncertainty about many of the key operating ratios which relate to the variable costs of processing CIRs. In particular, we do not know the level of customer calls that will be generated by notifications, and ISPs are, we believe, uncertain about the per-call costs which will be associated with these calls.

This contrasts with the situation regarding capex and fixed opex, where we believe there is a much higher degree of certainty about the nature of the task that ISPs face, how they will deal with it (i.e. how they will build systems that meet their obligations), and how much it will cost.



Our recommendation, therefore, is that for the initial period of operation of the scheme Ofcom should use the efficient operator costs for capex and fixed opex, and the mean cost for variable costs, as follows:

Recommended Cost per CIR = $\pounds 1.32m/\#CIRs + \pounds 1.83$

At a volume of 100,000 CIRs per ISP per month, this equates to a cost of $\pounds 2.93$ per CIR.

However, as discussed above, this is dependent on a number of currently unknown operational ratios, such as the Notification Ratio. If new data concerning these ratios becomes available, we would adjust our recommendation to reflect this. Establishing better operational ratios may be one of Ofcom's key tasks in setting the tariff.



6 Appendices

6.1 ISP Questionnaire

1. Introduction

This questionnaire and data collection are part of a project being carried out for Ofcom to identify the approaches taken or being planned by ISPs, and in particular their associated costs, to fulfil certain obligations under the Digital Economy Act 2010 related to processing of Copyright Infringement Reports (CIRs) sent by Digital Rights Owners (DROs) and the resulting notifications sent to alleged infringers.

This project takes no view on the allocation of costs between the various players, the recovery of capex or the nature or value of fees to be charged by ISPs. One purpose of the project is to inform future consideration of those and other issues.

In order to make data collection possible, certain assumptions needed to be made on topics which are not yet settled. These are listed in the Assumptions section.

The costs, both opex and capex, to be reported are those costs wholly and exclusively incurred in order to fulfil the ISP's obligations under the Act. In the case of shared costs, for example when a systems upgrade includes addition of functionality to fulfil those obligations and also to achieve other ends, then both the marginal cost of fulfilling the obligations should be reported and also the *pro rata* share of the total shared cost. In addition to planned future spend, actual, historic costs (capex only) may be included if the products of such investment were intended for and will be used to support future fulfilment of the obligations. Again historic costs (if there are any) should be provided on an incremental basis. Costs should also include staff costs, with explicit discussion of how overheads are dealt with. Ideally, costs should be matched against the process and activity steps identified in the Assumptions section.

The "Initial Obligations Code" is currently under development and is expected to come into force at the end of 2010.

It is expected that ISPs will start delivering the relevant services in early 2011. Hence, most of this questionnaire is concerned with relevant costs expected to be incurred between now and March 2013and costs incurred historically. These will be considered for three volume scenarios.

However, in recognition that (a) some ISPs already have in place a semi-automated approach to dealing with this issue at relatively low volumes and (b) not all ISPs will have new systems and processes in place by the start date, the questionnaire will also explore current capabilities and how these might be used in the early months of the scheme.



2. Assumptions

2.1 Ratio of CIRs to Notifications

This ratio is currently unknown but is likely to be less than one notification per CIR. For present purposes, we assume there will be four notifications issued for each ten CIRs received.

There is no assumption of the proportion of notifications which will be sent by e-mail, paper or other means, since this is likely to vary significantly between ISPs, and the ISP is invited to supply its own volume and cost assumptions in this regard.

2.2 Activity and Process Assumptions

We assume the ISP will undertake the following:

- receive CIRs from DROs in a standard electronic format;
- authenticate CIRs, confirm receipt and log those which are valid;
- identify the alleged infringer and store that identity together with details of the alleged infringement on a database (the "Infringement List");
- inform the DRO if the CIR is invalid (e.g. too late, wrong format, information missing,...) or if the subscriber cannot be identified;
- decide, on the basis of pre-defined rules, whether to send a notification and, if so, the medium for sending it;
- maintain the Infringement List by adding and removing alleged infringers based on pre-defined rules including their historic record of alleged infringements;
- receive requests from DROs for a list of "their" alleged infringers and respond to such requests;
- bill the DRO;
- deal with responses from alleged infringers who have received a notification;
- deal with customers, whether alleged infringers or not, requesting to know if they are on the Infringement List or not and, if so, their alleged infringements;
- prepare, and submit to Ofcom, quarterly summaries of CIRs received and subscriber notifications sent;
- undertake a Quality Assurance review to Ofcom's satisfaction of all relevant processes and systems prior to providing the relevant services and annually thereafter.

2.3 Volume Assumptions

	Base Case	Higher	Lower
CIRs/month	100,000	200,000	10,000
Notification Letters/month	40,000	80,000	4,000



3. General Background Questions

Name of ISP:

Type of ISP (e.g. fixed, mobile, fixed wireless and combinations of these):

Scope of service (e.g. geographic limitations):

Number of ISP subscribers (broken down by Type of ISP, if applicable):

Turnover (broken down by Type of ISP, if applicable):

Are there groups of subscribers for which you anticipate that identifying them based on an IP address would present particular difficulties? If so, please identify those groups, the difficulties faced and the likelihood of being able to find a practical solution and on what timescale.

Do you have any interest in there being a consolidated body sitting between ISPs and DROs carrying out much of the processing work that would otherwise be done by ISPs?

4. Cost of Providing Relevant Services

4.1 Overall Approach

How will you be meeting your obligations under the Act assuming the volumes given in the Base Case?

- A. Manually;
- B. Using in-house systems and processes currently in use or reviving those previously in use;
- C. Developing new processes and systems;
- D. Using a third party (please specify below);
- E. We will not because we do not believe we will be obliged to do so;
- F. Other (please explain below).

How long will it take you to establish systems and processes required to deliver the volumes envisaged in the Base Case?

When do you anticipate starting the investment process?

4.2 Additional Assumptions

What assumptions are you making in addition to those stated in the Assumptions Section above?



4.3 Details of Costs

Please supply a schedule of costs related to your solution, identifying costs as opex or capex, the time when they will be (or have been) incurred and supporting these with evidence, e.g. invoices, business cases approved or submitted, supplier quotations, documented costs of similar implementations in the past, etc., as far as possible.

4.4 Sensitivity Analysis

4.4.1 Variance for Higher Case

Would your solution be materially different for the volumes given for the Higher Case? If so, please outline the major differences and specify the volume threshold at which the solution would materially change.

Would the lead time until services commence be materially different for the volumes given in the Higher Case? If so, please indicate the impact this would have.

What would be the cost impact of servicing the volumes given in the Higher Case? Please identify cost changes as opex/capex and when they would be incurred. Please make clear how the solution for the Base Case scales up for the Higher Case unless the solution is materially different.

Does your Base Case solution scale to even higher volumes than in the Higher Case and if so, at what higher volume would the solution materially change?

4.4.2 Variance for Lower Case

Would your solution be materially different for the volumes given for the Lower Case? If so, please outline the major differences and specify the volume threshold at which the solution would materially change.

Would lead time until services commence be materially different for the volumes given in the Lower Case? If so, please indicate the impact this would have.

What would be the cost impact of servicing the volumes given in the Lower Case? Please identify cost changes as opex/capex and when they would be incurred. Please make clear how the solution for the Base Case scales down for the Lower Case unless the solution is materially different.

If the solution for the Lower Case is unchanged from the Base Case, what level of lower volume would trigger a change to a materially different solution?





5. Initial Period

5.1 Overall Approach

Immediately after the Code comes into force, how will you be meeting your obligations under the Act?

- A. By the systems and processes identified in Section 4 above;
- B. Using in-house systems and processes currently in use or reviving those previously in use;
- C. Developing new processes and systems;
- D. Using a third party (please specify below);
- E. We will not because we do not believe we will be obliged to do so;
- F. Other (please explain below).

Unless you will already have in place systems and processes that can handle the volumes given in the Base Case by the time the Code comes into force, how will you deal with CIR processing and what is the maximum volume of CIRs per month that you will be able to process using whatever systems and processes you will have in place at that time?

How will your capacity to handle CIR volumes grow (if at all) prior to achieving your Base Case solution?

5.2 Additional Assumptions

What assumptions are you making regarding the initial period in addition to those stated in the Assumptions Section above?

5.3 Details of Costs

Please supply a schedule of costs related to your solution, identifying costs as opex or capex, the time when they will be (or have been) incurred and supporting these with evidence, e.g. invoices, business cases approved or submitted, supplier quotations, documented costs of similar implementations in the past, etc., as far as possible.



6.2 ISP Responses

Not all ISPs answered all questions. Where there is no response given for a particular ISP, this means they did not answer that question.

Answers have been reproduced completely as given, with no attempt to correct spelling or grammar.

This Appendix begins with Section 3 of the Questionnaire (there being no questions in Sections 1 and 2).

Additional information received from ISPs is presented at the end of this Appendix.

[×]



6.3 Costs Prior to Full Automation

Of com asked BWCS to explore how ISPs might meet their obligations to process CIRs before full automation -i.e. by using either manual processing or some semiautomated approach. In particular, Of com was interested to understand the ISPs' views about the upper limits of such pre-automation approached, in terms of the monthly volumes of CIRs that could feasibly be processed.

Five ISPs responded to our questions in detail in this area. Of these five, three were major fixed ISPs, one was a small fixed ISP and one a mobile ISP.

Their views on the maximum feasible number of CIRs than can be processed per month are shown in the table below.

	[≫] ISP1	[≫] ISP2	[≫] ISP3	[≫] ISP4	[≫] ISP5
Maximum volume of CIRs per month that can be processed pre-	20.055	5 000	F 000	F 000	1 060
automation	39,055	5,000	5,000	5,000	1,060

The breakdown of costs for processing before full automation are shown as in the table below, using the ISPs' own assumptions about:

- Percentage of Third Notifications (PTN)
- Costs per Third Notification and per Other Notification
- Call-ins per Third Notification and per Other Notification
- Costs per call-in.

These costs assume that each ISP is processing the maximum number of CIRs which it claimed were feasible pre-full automation.

	[⊁] ISP1	[≻] ISP2	[⊁] ISP3	[⊁] ISP4	[≻] ISP5
Variable Opex/CIR	£1.92	£0.39	£0.16	£0.15	£-
Fixed Opex/CIR	£9.55	£2.18	£5.00	£3.93	£2.14
Capex/CIR	£-	£8.71	£-	£-	£0.43
Total Cost/CIR	£11.46	£11.28	£5.16	£4.08	£2.57

As can be seen from the table, three of the ISPs assumed no capex at all in this scenario. One assumed a modest amount of capex, whilst another assumed a more substantial amount - i.e. its solution was a semi-automated solution.

ISP5 assumed no variable opex in this scenario – i.e. it was assuming that all notifications would be sent electronically. Another ISP (ISP5) assumed that all first and second notifications would be sent electronically.





Two ISPs assumed call handling costs in line with their automated scenarios, whereas all of the others assume that, in the manual scenario, there will be a team of people who deal with everything, including call-handling, as part of a fixed cost day job.

The above data was then analysed using the same standard assumptions used in the full automation analysis concerning:

- Percentage of Third Notifications (PTN)
- Costs per Third Notification and per Other Notification
- Call-ins per Third Notification and per Other Notification
- Costs per call-in.

The results are presented in the following table.

	[≫] ISP1	[≻] ISP2	[≻] ISP3	[≫] ISP4	[≻] ISP5
Variable Opex/CIR	£2.41	£1.29	£0.42	£0.52	£0.34
Fixed Opex/CIR	£9.55	£2.18	£5.00	£3.93	£2.14
Capex/CIR	£-	£8.71	£-	£-	£0.43
Total Cost/CIR	£11.95	£12.18	£5.42	£4.45	£2.91

In summary, the costs of processing CIRs pre-full automation vary between $\pounds 2.91$ per CIR and $\pounds 12.18$ per CIR.



6.4 Full list of Capex, Pre-Launch and Fixed Opex Items

[×]		[×]	[×]	[×]
ISP1	ISP2	ISP3	ISP4	ISP5
 Design of project compliant solution Development of application and system Platform development and new hardware Interfacing to existing customer systems ADSL and business customers Automated system software (licences) Automated system training 	 Project team costs System Development for IP address matching IT development for managing CIL Slippage of other projects Website development Changes to T's & C's Training design Training front line agents Legal costs, support and compliance QA Assessment 	 CIR messaging and IP Mapping CIR case management CIR customer management System Integration Costs Project Management / Analyst Costs Training costs (customer service) Marketing costs (letters / website) Initial QA assessment cost 	 Development of system to manage CIR analysis Interface for IP address matching System development to look up customer details Create a web portal that will be used by advisors to deal with customer queries, and Rights Holders to submit CIRs Authentication system change to provide advisor login and role based access. Development of existing comms system to add new templates and preferences for sending notifications. Development of existing documents system to support notification 	 Network IP Logs CIR Repository Copyright Owner management CIR Processing Customer Portal Create customer experience

List of all Capex and Pre-Launch Items submitted



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[×]	[×]	[×]	[×]	[×]
ISP1	ISP2	ISP3	ISP4	ISP5
			 letters Develop CIL report capability that will be set to DROs. integration and end to end testing Equipment costs Operational Deployment End to End testing 	

List of Fixed Opex Items Claimed

[×]	[×]	[×]	[×]	[×]
ISP1	ISP2	ISP3	ISP4	ISP5
 System Support Costs Billing cost (raising charge to COs) Legal costs Annual QA assessment cost Staff support cost (to fulfil 3rd notifications) Staff support costs (to support CIR process) 	1st & 2nd line Support for automated solution	 Copyright Owner liaison CIR processing - Management and oversight General Management General Enquiries and SARs Project implementation (customer services) 	 Internal support (Legal, compliance, etc.) Supervision of staff Application ad hoc development, maintenance & fault fixing 	 Non-notification-driven Call-ins Financial reconciliation Data Protection Compliance Management costs to oversee Annual QA assessment



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